Tanzania

Demographic and Health Survey

2010

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To be a preferable source of official statistics in Tanzania

NBS Mission

To facilitate informed decision-making process, through provision of relevant, timely and reliable user-driven statistical information, coordinating statistical activities and promoting the adherence to statistical methodologies and standards

United Republic of Tanzania

Tanzania Demographic and Health Survey 2010

National Bureau of Statistics
Dar es Salaam, Tanzania

ICF Macro
Calverton, Maryland, USA

April 2011

The 2010 Tanzania Demographic and Health Survey (2010 TDHS) was implemented by the National Bureau of Statistics (NBS) from December 19, 2009 to May 23, 2010. Funding for the survey was provided by the Ministry of Health and Social Welfare (MoHSW), Tanzania Food and Nutrition Centre (TFNC), Department for International Development (DFID), World Health Organization (WHO)/Zanzibar), United Nations Fund for Population Activities (UNFPA), United Nations Children's Fund (UNICEF), World Food Programme (WFP), United Nations Development Programme (UNDP), and Irish Aid. ICF Macro provided technical assistance for the survey through its MEASURE DHS programme. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development or the Government of Tanzania.

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Recommended citation: National Bureau of Statistics (NBS) [Tanzania] and ICF Macro. 2011. Tanzania Demographic and Health Survey 2010. Dar es Salaam, Tanzania: NBS and ICF Macro.

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FOREWORD

The 2010 Tanzania Demographic and Health Survey (TDHS) is successful because of collaboration among government ministries, organisations, departments and individuals. The National Bureau of Statistics (NBS) wishes to extend its sincere gratitude to the Poverty Eradication Department in the Ministry of Finance and to the Ministry of Health and Social Welfare (MoHSW) for partial financing of the local costs of the survey through the pooled fund. Also, we would like to thank the MEASURE Demographic and Health Surveys programme of ICF Macro in Calverton, Maryland, U.S.A., for the provision of technical assistance, with funding from the United States Agency for International Development (USAID). Our sincere gratitude is also extended to all organizations that contributed to the questionnaire contents or to the training of the field staff. These organizations include the Reproductive and Child Health Section and the Policy and Planning Department of the MoHSW; the Tanzania Commission for AIDS (TACAIDS); the Ministry of Community Development, Gender and Children; and the Tanzania Food and Nutrition Centre (TFNC), as well as other development partners and stakeholders.

We wish to express our appreciation for the financial support provided by the development partners, and in particular, the Department for International Development (DFID), USAID, the World Health Organisation (WHO), the World Food Programme (WFP), the United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), the United Nations Development Programme (UNDP), Irish Aid, One UN Fund through Joint Programme 2 and 5 (through MoHWS – Zanzibar), and others who contributed to the successful implementation of the survey.

Likewise, a considerable number of individuals contributed significantly to the success of this survey. We would like to thank Aldegunda Komba, Ahmed Makbel, Mlemba Abassy, Sylivia Meku, Deogratius Malamsha, Stephano G. Cosmas, Elinzuu Nicodemo, Israel Mwakapalala, Prisca Mkongwe and Joshua Mwaisemba from the NBS; Amour Bakari and Mbwana O. Mbwana from the Office of Chief Government Statistician (OCGS); Dr. Elias Kwesi, Josbert Rubona, and Clement Kihinga from MoHSW; Dr. Sabas Kimboka, Dr. Vincent Assey, and Michael Maganga from TFNC; Rashid K. Khamis from MoHSW – Zanzibar; Edith Mbatia from UNICEF; and Rosemary Komanga from the Ministry of Community Development, Gender and Children.

We are even more grateful to the interviewers and supervisors who worked tirelessly to ensure that the data collected was of good quality, and to the survey respondents who generously contributed part of their time to enable the survey teams to gather crucial information for our country.

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SUMMARY OF FINDINGS

The 2010 Tanzania Demographic and Health Survey (TDHS) is the eighth in a series of Demographic and Health Surveys conducted in Tanzania. The 2010 TDHS is a nationally representative survey of 10,300 households selected from 475 sample points throughout Tanzania. All women age 15-49 in these households and all men age 15-49 in a subsample of one-third of the households were individually interviewed. The sample was designed to produce separate estimates on key indicators for the national level, for urban and rural areas, and for seven zones. For selected indicators, estimates can be calculated at the regional level.

The survey collected information on fertility levels and preferences, marriage, sexual activity, awareness and use of family planning methods, maternal and child health, breastfeeding practices, nutritional and anaemia status of women and young children, childhood mortality, use of bed nets and antimalarials, awareness and behaviour regarding HIV/AIDS and other sexually transmitted infections (STIs), female genital cutting (FGC), and adult and maternal mortality. This survey also included an important module on domestic violence.

The National Bureau of Statistics (NBS) conducted the survey, which took place in the field from 19 December 2010 to 23 May 2011. Funding for the survey was provided by the Tanzanian government through the Ministry of Health and Social Welfare (MoHSW), Tanzania Food and Nutrition Centre (TFNC), Department for International Development (DFID), World Health Organization (WHO)/Zanzibar), United Nations Fund for Population Activities (UNFPA), United Nations Children's Fund (UNICEF), World Food Programme (WFP), United Nations Development Programme (UNDP), and Irish Aid. ICF Macro provided technical assistance for the survey through its MEASURE DHS programme.

FERTILITY

Fertility Levels and Trends. The total fertility rate (TFR) in Tanzania is 5.4 children per woman. This means that, at current fertility levels, the average Tanzanian woman will have given birth to 5.4 children by the end of her lifetime. The 2010 TDHS estimate of fertility is lower than the rate estimated by the 2004-05 TDHS (5.7 births per woman), which was similar to the rates established in the 1996 TDHS (5.8 births) and in the 1999 Tanzania Reproductive and Child Health Survey (TRCHS) (5.6 births). At the current level, evidence suggests that fertility in Tanzania may have started to decline.

Fertility Differentials. The TFR differs widely within Tanzania. The TFR in Mainland is 5.4, while in Zanzibar it is 5.1 births per woman. In Mainland, the TFR ranges from 3.9 in the Eastern zone to 7.1 in the Western zone. Fertility is negatively associated with the educational attainment of the mother. Women with secondary or higher education have four fewer children than women with no education (3.0 children per woman with education and 7.0 children per woman without education, respectively).

Initiation of Childbearing. Twenty-three percent of women age 15-19 have begun childbearing: 17 percent are already mothers, and 6 percent are pregnant with their first child. The percentage of women age 15-19 who have begun childbearing has declined from that in the 2004-05 TDHS (26 percent).

The median age at first birth is age 19.5, which means that half of women give birth for the first time before age 20. The largest variation in age at first birth is by the level of a woman's education, which ranges from 18.7 years among women with no education to 23.0 years among women with at least some secondary education.

Fertility Preferences. Although two-thirds of currently married women say that they want more children, 44 percent of those currently married also say that they want to wait for two or more years before having their next child. Over time, the desire to space births among currently married women has increased slightly, from 36 percent in the 1999 TRCHS to 42 percent in the 2004-05 TDHS. However, the desire to limit

births has hardly changed (32 percent in 2004-05 and 31 percent in 2010).

Unplanned Fertility. While most births in Tanzania are wanted at the time of pregnancy (73 percent), 23 percent are mistimed and 4 percent are unwanted. The proportion of births that are mistimed increased from 18 percent in 2004-05, while the proportion of unwanted births has changed little.

FAMILY PLANNING

Knowledge of Contraception. Knowledge of contraception is almost universal in Tanzania. There has been a gradual increase since the early 1990s, when knowledge of any contraception was 74 percent for all women in the 1991-92 TDHS. The most commonly known methods among both men and women are the birth control pill, injectables, and male condoms.

Use of Contraception. Thirty-four percent of currently married women are using a method of contraception, including 27 percent who are using a modern method. Injectables are the leading method, used by 11 percent of married women. The pill and traditional methods are also common, each used by 7 percent of currently married women.

Current contraceptive use is higher among sexually active unmarried women than among married women (51 and 34 percent, respectively), primarily due to the use of male condoms and injectables (16 percent and 15 percent, respectively).

Trends in Contraceptive Use. The percentage of married women using a modern method of contraception has changed significantly since the 1991-92 TDHS. The increase is partly the result of a small shift from traditional to modern methods. Modern method use increased from 7 percent in 1991-92 to 27 percent in 2010. The most notable change in the mix of modern methods used by married women has been a gradual increase in the proportion using injectables (less than 1 percent in 1991-92 compared with 6 percent in 1999 and 11 percent in 2010.

Differentials in Contraceptive Use. There are significant variations in contraceptive use by background characteristics. Married women in urban areas are much more likely than their rural counterparts to use a family planning method (46 and 31 percent, respectively). Current use of any method increases greatly with education, from 22 percent of married women with no education to 52 percent of married women with at least secondary education. Women in the Lake and Western zones are least likely to use contraception (18 and 20 percent, respectively).

Source of Modern Methods. Government and parastatal facilities are the most common sources of contraceptives, serving as the point of distribution for two-thirds of modern method users. Among these facilities, dispensaries are the most commonly used source of modern methods (36 percent). More than half of pill users and users of injectables obtain their contraceptives from a dispensary. Public and private district hospitals are the primary source for female sterilisation (65 percent and 14 percent, respectively). Private pharmacies and shops are the most important sources for male condoms (81 percent).

Unmet Need for Family Planning and Future Use. Twenty-five percent of currently married women have an unmet need for family planning: 16 percent have an unmet need for spacing, and 9 percent have an unmet need for limiting. The level of unmet need has not changed from that in the 2004-05 TDHS. The total demand for family planning among currently married women is 54 percent, of which more than half (58 percent) is satisfied. The demand for spacing purposes is one and a half times as high as the demand for limiting purposes 37 and 23 percent, respectively).

Among currently married nonusers, 54 percent intend to use in the future. More than half of women who are not using family planning visited a health facility in the past 12 months: although 20 percent discussed family planning with staff, 32 percent did not talk about family planning during the visit. This data indicates missed opportunities to increase acceptance and use.

CHILD HEALTH

Childhood Mortality. The 2010 TDHS estimate of the infant mortality rate for the five years preceding the survey is 51 deaths per 1,000 live births. The overall under-5 mortality rate for the period is 81 per 1,000. The 2010 TDHS data indicate a continuing rapid decline in childhood mortality. Infant mortality has been cut almost in half, dropping from 96 deaths per 1,000 births in

the 1996-2000 period to 51 deaths per 1000 births in 2010. At this pace, in 2015, Tanzania will reach the goal set for the infant mortality rate of 38 deaths per 1,000 live births.

Shorter birth intervals are strongly associated with higher mortality, both during and after infancy. Under-5 mortality for births that occur four or more years apart is almost half the mortality that occurs for births two years apart (74 and 136 deaths per 1,000 live births).

Childhood Vaccination Coverage. The 2010 TDHS shows that, according to vaccination cards or mother's report, 75 percent of children age 12-23 months are fully immunised. Childhood immunisation has increased from the level measured in the 2004-05 TDHS (71 percent). With the exception of polio 0 and measles, more than 80 percent of the reported vaccinations were received by age 12 months, as recommended. Only 3 percent of children have not received any vaccinations at all.

Childhood Illness and Treatment. According to mothers' reports, 4 percent of children under age 5 showed symptoms of acute respiratory infection (ARI), 23 percent had fever, and 15 percent had diarrhoea in the two weeks preceding the survey. Among children with diarrhoea, 53 percent were taken to a health care provider. Sixty-three percent of children with diarrhoea were given oral rehydration salt therapy, recommended home fluids, or increased fluids. Although 18 percent of mothers said they gave their sick child more liquid than usual to drink, four in ten mothers said they reduced or completely stopped fluid intake.

NUTRITION

Breastfeeding Practices and Complementary Feeding. Almost all children in Tanzania (97 percent) are breastfed. Placing the child to the breast during the first day is also very common (94 percent). However, only 49 percent of children are breastfed within the first hour after birth. These figures show little change since the 1996 TDHS.

The median duration of breastfeeding in Tanzania (21 months) has not changed much in the past decade. Although WHO recommends exclusive breastfeeding for six months, half of children under age 3 in Tanzania are exclusively breastfed for only 2.4 months. Complementary feeding in Tanzania starts early. Fourteen percent of children age 2 to 3 months receive liquids other than breast milk, and one-third receive complementary foods. Half of children less than 6 months are exclusively breastfed. This is an increase from 32 percent in the 1999 TRCHS and from 41 percent in the 2004-05 TDHS. More than 9 in 10 children age 6 to 9 months are fed complementary foods. Foods made from grains constitute the majority of their diet.

Intake of Vitamin A. Sixty-two percent of the youngest children age 6-35 months ate fruits and vegetables rich in vitamin A during the day and night before the interview. Sixty-one percent of the youngest children age 6-59 months who are living with their mother received a vitamin A supplement in the six months before the survey, a substantial increase from 46 percent in 2004-05.

Prevalence of Anaemia. Anaemia contributes to several serious health problems for women and children. The 2010 TDHS tested the haemoglobin level of children age 6-59 months and women age 15-49 years. The data show that there has been a decline in the prevalence of any anaemia among children (72 percent in 2004-05 down to 59 percent in 2010). Twenty-seven percent of children have mild anaemia, 29 percent have moderate anaemia, and 2 percent have severe anaemia.

Anaemia is less prevalent among women than among children. Forty percent of women have some level of anaemia, with 29 percent being mildly anaemic, 10 percent moderately anaemic, and 1 percent severely anaemic.

Nutritional Status of Children. The 2010 TDHS measured three anthropometric indicators of nutritional status in children: height-for-age, weight-for-height, and weight-for-age. At the national level, 42 percent of children under 5 have low height-for-age or are stunted, 5 percent have low weight-for-height or are wasted, and 16 percent have low weight-for-age, which reflects both chronic and acute undernutrition. These results reflect a mix in progress in nutritional status from the 2004-05 TDHS when these indicators were measured at 38, 3, and 22 percent, respectively. The children in the Central and Southern Highlands zone are particularly disadvantaged—at least half are stunted, which reflects long-term undernutrition in the area.

Nutritional Status of Women. A body mass index (BMI) of less than 18.5 is considered undernourished. In the 2010 TDHS, 11 percent of women were found to fall below this cutoff point. Twenty-two percent of Tanzanian women weigh more than they should: 15 percent are overweight and 6 percent are obese.

MATERNAL HEALTH

Antenatal Care. Almost all women (96 percent) who gave birth in the five years preceding the survey received antenatal care (ANC) from a health professional at least once. Only 43 percent of women received the recommended 4+ ANC visits, and only 15 percent received their first ANC visit during the first trimester of pregnancy. Nurses and midwives are the attendants that provide most ANC (80 percent).

During an antenatal visit, about two-thirds of women had their blood pressure measured, more than half had a blood sample taken, and less than half had a urine sample taken. Half of women (53 percent) were informed of the signs of pregnancy complications, and 48 percent) received at least two tetanus toxoid injections during pregnancy.

Care during Childbirth. A skilled attendant at birth with the proper equipment and environment can reduce the incidence and severity of obstetric and newborn complications. In the 2010 TDHS, 50 percent of births occurred in health facilities, compared with 44 percent in the 1999 TRCHS. Nearly all institutional births take place in public sector facilities.

Half of births (51 percent) were assisted by health professionals. Nurses and midwives are the most common birth attendants, assisting in 42 percent of births. Doctors or AMOs attend 5 percent of births. Fifteen percent of births were assisted by trained or traditional birth attendants, and 30 percent of births were attended by relatives or other untrained people. Five percent of births are delivered by caesarean section, higher than the percentage observed in the 2004-05 TDHS.

Care after Childbirth. Postnatal care is important, both for the mother and the child, to treat complications arising from the delivery and to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days (6 weeks) following the delivery. The 2010 TDHS results show that two-thirds of women whose birth occurred in the past five years did not receive a postnatal checkup (65 percent). In total, 31 percent were examined within two days of delivery, as recommended.

Female Genital Cutting (FGC). Fifteen percent of women in Tanzania are circumcised. The 2003-04 Tanzania HIV/AIDS Indicator Survey (THIS) and the 1996 TDHS measured the prevalence of FGC at 18 percent. Younger women in the 2010 TDHS are less likely to be circumcised, especially those age 15-19. Female genital cutting is common in the Northern and Central zones (more than 40 percent). It is much less common (less than 10 percent) in the rest of the country. More than 70 percent of women in Manyara region have been circumcised.

Almost all women and men (approximately nine in ten) say that they favour the discontinuation of the practice of FGC. Even among women who are circumcised themselves, 77 percent believe that FGC should be discontinued.

ADULT MORTALITY

Adult Mortality. The 10-year mortality rate among women (5.1 deaths per 1,000 years of exposure) is similar to that among men (5.0 deaths per 1,000 years of exposure). The age-specific rates among women age 15-39 increase with increasing age. Female mortality exceeds male mortality in the age group 20-34, which is when most women bear children. In the age group 35-44, male mortality exceeds female mortality by increasing margins as age advances.

Maternal Mortality. The 2010 TDHS included questions on survival of siblings to measure adult and maternal mortality. The estimate of the maternal mortality ratio (MMR) for the 10-year period preceding the survey is estimated as 454 maternal deaths per 100,000 live births. In other words, for every 1,000 live births in Tanzania during this period, about four to five women died of pregnancy-related causes. The 95 percent confidence intervals indicate that the true maternal mortality ratio from the 2010 TDHS ranges from 353 to 556 deaths per 100,000 live births.

MALARIA

Nets. Three in four households own at least one mosquito net, but only 64 percent own an insecticide-treated net (ITN), and 54 percent own at least one long-lasting insecticide net (LLIN). Although urban households are much more likely to own at least one net than rural households, rural households are more likely than urban households to have LLINs (57 percent compared with 44 percent).

Seventy-two percent of children under age 5 slept under a net the night before the interview, 64 percent slept under an ITN, and 24 percent slept under an LLIN.

Net use is most common for children under 1 year, and decreases slightly with each year up to age 5. There is no difference in net use by sex of the child. Although urban children have more access to any net than rural children, rural children are more likely than urban children to sleep under an LLIN (26 and 17 percent, respectively). Use of a mosquito net among pregnant women is similar; 68 percent of pregnant women slept under a net the night before the survey, 57 percent slept under an ITN, and 25 percent slept under an LLIN.

Antimalarials. Two in three pregnant women (66 percent) reported receiving at least one dose of SP/Fansidar during an antenatal care visit. However, only 27 percent of pregnant women received complete intermittent preventative treatment or 2+ doses of SP/Fansidar during ANC visits.

Two in three children with fever in the two weeks before the survey received advice or treatment from a health facility or provider, 59 percent received an antimalarial drug, and 41 percent of these children received the medication on the day the fever started or the day after. In Mainland, artemisinin-based combination therapy (ACT) is currently the recommended first-line antimalarial drug, given to 38 percent of children with fever. In Zanzibar, the first line malaria treatment is amodiaquine (9 percent).

HIV/AIDS AND OTHER STIS

Awareness of AIDS. Knowledge of AIDS is widespread, with 99 percent of respondents having heard of AIDS. At least 95 percent of all respondents, regardless of background characteristics, have heard of the epidemic. An in-depth understanding of AIDS, however, is less common. Comprehensive knowledge of HIV/AIDS is defined as (1) knowing that both consistent condom use and limiting sex to one uninfected partner are HIV prevention methods, (2) being aware that a healthy-looking person can have HIV, and (3) rejecting the two most common local misconceptions—that HIV/AIDS can be transmitted through mosquito bites and by sharing food with someone who has AIDS. Less than half of the respondents have comprehensive knowledge of HIV/AIDS transmission and prevention methods: 48 percent of women and 46 percent of men. Comprehensive knowledge is lowest among young people age 15-24 (43 percent).

HIV Testing and Counselling. In Tanzania, 59 percent of women age 15-49 and 43 percent of men age 15-49 have ever been tested for HIV, and 55 percent of women and 40 percent of men have been tested at some time and have received the results of their HIV test. Three in ten women and 25 percent of men were tested for HIV in the year preceding the survey and received the results of their test. These figures are much higher than those recorded in the 2004-05 TDHS (6 percent of women and 7 percent of men) and in the 2007-08 THMIS (19 percent of women and 19 percent of men), suggesting that Tanzanians are increasingly aware of opportunities for testing and learning their HIV status.

Overall, 64 percent of women who gave birth in the two years preceding the survey received HIV counselling during antenatal care, and almost all of these women also received post-test counselling (63 percent). Over half of the women (55 percent) had pretest counselling and then an HIV test, after which they received the test results.

Self-Reporting of Sexually Transmitted Infections. Three percent each of women and men in Tanzania reported having had an STI in the past 12 months. Five percent of women and 3 percent of men reported having had an abnormal genital discharge, and 3 percent each of women and men reported having had a genital sore or ulcer in the 12 months before the survey. In all, 7 percent of women and 6 percent of men reported having an STI, an abnormal discharge, or a genital sore. These numbers, however, may be underestimates because respondents may be embarrassed or ashamed to admit to having STIs.

HIV-Related Behavioural Indicators. Among those who reported having sex in the 12 months preceding the survey, 21 percent of men and 4 percent of women reported having had more than one sexual partner. Among those who had multiple sexual partners in the past year, 24 percent of men and 27 percent of women reported using a condom the last time they had sexual intercourse.

Paid sex is considered a special category of higher-risk sex. Fifteen percent of men had commercial sex in the year before the survey. Six in ten men reported condom use during the most recent time they paid for sex.

Six in ten never-married young women and 52 percent of never-married young men say that they have never had sex. For women and men, abstinence rates are considerably higher in Zanzibar than in the Mainland (93 percent compared with 58 percent for women and 81 percent compared with 50 percent for men). One in three of never-married women and 37 percent of never-married men had sex in the past 12 months. About half of these women and men (49 and 54 percent, respectively) reported using a condom during their last sexual intercourse.

TANZANIA


N
UGANDA
Lake Victoria
KENYA
RWANDA
Kagera
Mara
Lake
Mwanza
Arusha
BURUNDI
Shinyanga
Kilimanjaro
Northern
Western
Manyara
Kigoma
Tanga
Tabora
Singida
Dodoma
Central
Lake Tanganyika
Dar Es Salaam
Eastern
Pwani
Rukwa
DEM. REP OF CONGO
Southern Highlands
Morogoro
Mbeya
Iringa
Indian Ocean
Lindi
Southern
Ruvuma
Mtwara
Lake Nyasa
MALAWI
MOZAMBIQUE
0
125
250
500 Kilometers
Pemba North
Pemba South
Unguja North
Unguja South
Town West

INTRODUCTION 1

1.1 GEOGRAPHY, HISTORY, AND THE ECONOMY

Geography

The United Republic of Tanzania is the largest country in East Africa, covering 940,000 square kilometres, 60,000 of which are inland water. Tanzania lies south of the equator and shares borders with eight countries: Kenya and Uganda to the north; Rwanda, Burundi, the Democratic Republic of Congo, and Zambia to the west; and Malawi and Mozambique to the south.

Tanzania has an abundance of inland water, with several lakes and rivers. Lake Tanganyika runs along the western border and is Africa's deepest and longest freshwater lake and the world's second deepest lake. Lake Victoria, the world's second largest lake, drains into the Nile River, which flows to the Mediterranean Sea. The Rufiji River is Tanzania's largest river, and it drains into the Indian Ocean south of Dar es Salaam. Although there are many rivers, only the Rufiji and the Kagera, which empties into Lake Victoria, are navigable by anything larger than a canoe.

One of Tanzania's most distinctive geological features is the Great Rift Valley, which was caused by geological faulting throughout eastern Africa and is associated with volcanic activity in the northeastern regions of the country. Two branches of the Great Rift Valley run through Tanzania. The western branch holds Lakes Tanganyika, Rukwa, and Nyasa, while the eastern branch, which ends in northern Tanzania, includes Lakes Natron, Manyara, and Eyasi.

Except for a narrow belt of 900 square kilometres along the coast, most of Tanzania lies 200 metres or more above sea level, and much of the country is higher than 1,000 metres. In the north, Mount Kilimanjaro rises to 5,895 metres—the highest point in Africa.

The main climatic feature for most of the country is the long dry spell from May to October, followed by a period of rainfall between November and April. The main rainy season is from March to May, along the coast and around Mount Kilimanjaro, with short periods of rain arriving between October and December. In the western part of the country, around Lake Victoria, rainfall is well distributed throughout the year, with the peak period falling between March and May.

History

Tanzania (formerly Tanganyika) became independent of British colonial rule in December 1961. One year later, on 9 December 1962, it became a republic, severing all links with the British crown except for its membership in the Commonwealth. The offshore island of Zanzibar became independent on 12 January 1964, after the overthrow of the rule of the sultanate. On 26 April 1964, Tanganyika and Zanzibar joined to form the United Republic of Tanzania.

Tanzania is currently operating under a multiparty democratic system of government, with the president and the national assembly members being elected every five years. Tanzania's president can hold office for a maximum of two five-year terms. For administrative purposes, mainland Tanzania is divided into 21 regions, and Zanzibar is divided into 5 regions. Each region is subdivided into several districts.

Economy

Tanzania has a mixed economy. Agriculture, comprised of crop growing, animal husbandry, forestry, fishery, and hunting, played a key role in past years. In the current economy, activities in the

service industry account for 42 percent of the gross domestic product (GDP). In 2009 the agricultural sector grew by 3.2 percent compared with growth of 4.6 percent in 2008 (National Bureau of Statistics, 2009).

During the same period, the growth rate of crops decreased from 5.1 percent to 3.4 percent and that of livestock decreased from 2.6 percent in 2008 to 2.3 percent in 2009. Drought during the 2008-2009 planting season caused these decreases in growth, particularly in the northern part of Tanzania, where there was inadequate pasture and water for livestock.

In 2009, the GDP grew by 6.0 percent, which compared poorly with 7.4 percent growth in 2008. The slowdown in growth for 2009 was attributed to the impact of the global financial crisis as well as the drought in 2008-2009, which affected agricultural production, hydro power generation, and industrial production. They all contribute significantly to total GDP (Ministry of Finance and Economic Affairs, 2009).

The 2009 GDP at current prices is Tshs. 28,212,646 million, which is equivalent to Tshs. 15,721,301 million at 2001 constant prices. With an estimated population on the Tanzania Mainland of 40.7 million in 2009, the per capita income is Tshs. 693,185 at current prices, compared with Tshs. 628,259 in 2008, indicating an increase of 10.3 percent.

1.2 POPULATION

Tanzania has undertaken four population and housing censuses since achieving independence in 1961. The first census, conducted in 1967, reported a total population of 12.3 million, whereas according to the 2002 census, the population has increased to 34.4 million (see Table 1.1). The 2010 projected population is 43 million (NBS, 2010). Although the population of Tanzania has tripled in the past four decades, the country is still sparsely populated. Despite the scarcity of population, density is high in some parts of the country and has been increasing over time. In 1967, the average population density was 14 persons per square kilometre; by 2002, it had increased to 39 persons per square kilometre.

Table 1.1 Basic demographic indicators

Selected demographic indicators from various sources, Tanzania 1967-2002

	Census year			
Indicators	1967	1978	1988	2002
Population (millions)	12.3	17.5	23.1	34.4
Intercensal growth rate (percent)	2.6	3.2	2.8	2.9
Sex ratio	95.2	96.2	94.2	96.0
Crude birth rate (CBR)	47	49	46	43
Total fertility rate (TFR)	6.6	6.9	6.5	6.3
Crude death rate (CDR)	24	19	15	14
Infant mortality rate (IMR)	155	137	115	95
Percent urban	6.4	13.8	18.3	23.1
Density (pop./km^2)	14	20	26	39
Life expectancy at birth (years)	42	44	50	51

[1] Reported rates. See the 1999 NDHS final report for information on data quality.
Sources: Bureau of Statistics, 1967; 1978; 1988; National Bureau of Statistics, 2002

The high population growth rate in Tanzania has been brought about by high fertility and declining mortality levels. According to the 2002 census, the life expectancy at birth is 51 years. The population of Tanzania has continued to be predominantly rural despite the increase in proportion of urban residents over time, from 6 percent in 1967 to 23 percent in 2002. The 2010 projection of the proportion of urban residents is 26 percent (NBS, 2010).

1.3 POPULATION, FAMILY PLANNING, AND HIV POLICIES AND PROGRAMMES

National Population Policy

The government of the United Republic of Tanzania adopted the National Population Policy in 1992. Since then, developments have taken place, nationally and internationally, that have a direct bearing on population and development. The government revised the National Population Policy in

2006 to accommodate these developments (Ministry of Planning, Economy and Empowerment, 2006).

The key objectives of the revised policy are to provide a framework and guidelines for integration of population variables in the development process. Specific issues addressed in the guidelines include (1) determining priorities in population and development programmes, (2) strengthening the preparation and implementation of socioeconomic development planning, and (3) coordinating and influencing other policies, strategies, and programmes that ensure sustainable development. Guidelines for promoting gender equality and the empowerment of women are also included (Ministry of Planning, Economy, and Empowerment, 2006**)**.

The 1992 National Population Policy achieved the following:

- Increased awareness at all levels of the interrelationships among population, resources, environment, and development
- Declines in fertility and infant and child mortality rates and increased life expectancy at birth
- Awareness of HIV and AIDS among 95 percent of men and women over age 15 (Ministry of Health and Social Welfare [Tanzania], 2008; Ministry of Health and Social Welfare [Zanzibar], 2008).
- Integration of family life education into secondary school and teacher training college curricula
- Accelerated elimination of female genital mutilation (FGM) and other harmful traditional practices, as a result of the National Plan of Action 2001–2025
- More nongovernmental organisations (NGOs) and faith-based organisations with the capacity to engage in population-related activities, including advocacy and social mobilisation, service delivery, and capacity building

Goals of the Policy

The overriding concern of the revised 2006 National Population Policy has been to improve the standard of living and quality of life of the population. The main goal of the policy is to direct development of other policies, strategies, and programmes that ensure sustainable development of the people.

Specific goals of this policy focus on:

- Attainment of gender equity, equality, women's empowerment, social justice, and development for all individuals
- Sustainable development and eradication of poverty
- Harmonious interrelationships among population, resource utilisation, and the environment
- Increased and improved availability and accessibility of good quality social services

Reproductive and Child Health Strategic Plan (2008-2015)

The main goal of this strategic plan is to reduce maternal, neonatal, and child morbidity and mortality and to attain Millennium Development Goals number 4 (to reduce child mortality by two-thirds from the rate in 1990) and number 5 (to reduce maternal mortality by three-quarters from the rate in 1990). The target date for achievement of these goals is 2015.

Broad objectives:

- To provide skilled attendance to women and children during pregnancy, childbirth, postnatal and neonatal periods, and childhood by all levels of the health care delivery system

- To strengthen the capacity of individuals, families, communities, and organisations to improve maternal, newborn, and child health

Operational targets to be achieved by the end of 2015:

- To reduce maternal mortality from 578 deaths to 193 deaths per 100,000 live births
- To reduce neonatal mortality from 32 deaths to 29 deaths per 1,000 live births
- To reduce under-5 mortality from 112 deaths to 54 deaths per 1,000 live births
- To increase coverage of emergency obstetric care from 64 percent to 100 percent of hospitals and basic comprehensive emergency obstetric care services from 5 percent to 70 percent of health centres and dispensaries
- To increase modern contraceptive prevalence among women age 15-49 from 20 percent to 60 percent
- To increase provision of services that will prevent HIV transmission from mother to child to at least 80 percent of pregnant women, their babies, and their families
- To increase the proportion of health facilities offering essential newborn care to 75 percent
- To reduce the prevalence of stunting among children under age 5 from 38 percent to 22 percent and to reduce the prevalence of underweight among children under age 5 from 22 percent to 14 percent
- To increase coverage of children under age 5 sleeping under ITNs from 47 percent to 80 percent
- To increase the number of health facilities providing adolescent-friendly reproductive health services from 10 percent to 80 percent
- To increase immunization coverage of DTP-HB3 and measles vaccine to above 90 percent in 90 percent of the districts

Strategies:

To achieve the targets set for 2015, the following strategies have been launched:

- Advocacy and resource mobilization
- Health system strengthening and capacity development
- Community mobilization
- Promotion of reproductive and child health behavioural change
- Fostering of partnership and coordination

The Ministry of Health and Social Welfare (MoHSW) will mobilize resources and advocate for the reduction of maternal, newborn, and child deaths. MoHSW is also responsible for the overall technical leadership, guidance, and coordination of the implementation and monitoring of the strategic plan. The goal is to accelerate the reduction of maternal, newborn, and child deaths and thereby reach the relevant Millennium Development Goals.

The National Policy on HIV/AIDS

In response to the HIV/AIDS pandemic, the government of Tanzania has progressed in nearly all areas of HIV/AIDS prevention, care, and treatment. Progress has also been made in impact

mitigation through communication and advocacy and in community participation through multi-sectoral response.

HIV/AIDS is included in the development agenda of the National Strategy for Poverty Eradication, commonly referred to by its Kiswahili acronym, MKUKUTA, and the National Development Vision of 2025. The policy emphasizes mainstreaming HIV/AIDS patients in all sectors. The development of the national guideline on prevention and control of HIV/AIDS in the public sector is an effort by the government to show its commitment to fight the epidemic and improve the well-being of the people (Prime Minister's Office, 2001).

In November 2001, the National Policy on HIV/AIDS was adopted with the goal of providing a framework for leadership and coordination of the national multisectoral response to the HIV/AIDS epidemic (Prime Minister's Office, 2001). It also provides a framework for strengthening the capacity of institutions, communities, and individuals in all sectors to stop the spread of the epidemic. This includes formulation by all sectors of appropriate interventions to prevent the transmission of HIV/AIDS and other sexual transmitted infections, to protect and support vulnerable groups, and to mitigate the social and economic impact of HIV/AIDS.

The National Policy on HIV/AIDS and the National Multisectoral Strategic Framework are tools that guide the implementation of national multisectoral responses. The Tanzania Commission for AIDS (TACAIDS) provides strategic leadership and coordination of multisectoral responses, including monitoring and evaluation, research, resource mobilisation, and advocacy.

1.4 OBJECTIVES AND ORGANISATION OF THE SURVEY

The 2010 Tanzania Demographic and Health Survey (TDHS) is the eighth in a series of national sample surveys conducted in Tanzania to measure levels, patterns, and trends in demographic and health indicators. The first TDHS, conducted in 1991-92, was followed by the 1994 Tanzania Knowledge, Attitudes, and Practices Survey (TKAPS), the 1996 TDHS, the 1999 Tanzania Reproductive and Child Health Survey (TRCHS), the 2003-04 Tanzania HIV/AIDS Indicator Survey (THIS), the 2004-05 TDHS, and the 2007-08 Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS).

The principal objective of the 2010 TDHS is to collect data on household characteristics, fertility levels and preferences, awareness and use of family planning methods, childhood and adult mortality, maternal and child health, breastfeeding practices, antenatal care, childhood immunisation and diseases, nutritional status of young children and women, malaria prevention and treatment, women's status, female circumcision, sexual activity, knowledge and behaviour regarding HIV/AIDS, and prevalence of domestic violence.

The 2010 TDHS was implemented by the National Bureau of Statistics (NBS) and the Office of the Chief Government Statistician - Zanzibar (OCGS); in collaboration with the MoHSW. A Task Force team composed of members from the ministry was formed to oversee all technical issues related to the survey.

Funding for the survey was provided by the Tanzania government through the MoHSW, Tanzania Food and Nutrition Centre (TFNC), Department for International Development (DFID), World Health Organization (WHO)/Zanzibar, United Nations Fund for Population Activities (UNFPA), United Nations Children's Fund (UNICEF), World Food Programme (WFP), United Nations Development Programme (UNDP), and Irish Aid. ICF Macro provided technical assistance for the survey through the MEASURE DHS programme. The United States Agency for International Development (USAID) funded the technical assistance.

Sample Design

The 2010 TDHS sample was designed to provide estimates for the entire country, for urban and rural areas in the Mainland, and for Zanzibar. For specific indicators such as contraceptive use, the sample design allowed the estimation of indicators for each of the then 26 regions.

To estimate geographic differentials for certain demographic indicators, the regions of mainland Tanzania were collapsed into seven geographic zones. Although these are not official administrative zones, this classification is used by the Reproductive and Child Health Section of the MoHSW. Zones were used in each geographic area in order to have a relatively large number of cases and a reduced sampling error. It should be noted that the zones, which are defined below, differ slightly from the zones used in the 1991-92 and 1996 TDHS reports but are the same as those in the 2004-05 TDHS and the 2007-08 THMIS.

Western: Tabora, Shinyanga, Kigoma
Northern: Kilimanjaro, Tanga, Arusha, Manyara
Central: Dodoma, Singida
Southern Highlands: Mbeya, Iringa, Rukwa
Lake: Kagera, Mwanza, Mara
Eastern: Dar es Salaam, Pwani, Morogoro
Southern: Lindi, Mtwara, Ruvuma
Zanzibar: Unguja North, Unguja South, Town West, Pemba North, Pemba South

A representative probability sample of 10,300 households was selected for the 2010 TDHS. The sample was selected in two stages. In the first stage, 475 clusters were selected from a list of enumeration areas in the 2002 Population and Housing Census. Twenty-five sample points were selected in Dar es Salaam, and 18 were selected in each of the other twenty regions in mainland Tanzania. In Zanzibar, 18 clusters were selected in each region for a total of 90 sample points.

In the second stage, a complete household listing was carried out in all selected clusters between July and August 2009. Households were then systematically selected for participation in the survey. Twenty-two households were selected from each of the clusters in all regions, except for Dar es Salaam where 16 households were selected.

All women age 15-49 who were either permanent residents in the households included in the 2010 TDHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. In a subsample of one-third of all the households selected for the survey, all men age 15-49 were eligible to be interviewed if they were either permanent residents or visitors present in the household on the night before the survey.

Tables pertaining to the sample implementation are presented in Appendix A.

Questionnaires

Three questionnaires were used for the 2010 TDHS: the Household Questionnaire, the Women's Questionnaire, and the Men's Questionnaire. The content of these questionnaires was based on the model questionnaires developed by the MEASURE DHS programme. To reflect relevant issues in population and health in Tanzania, the questionnaires were adapted. Contributions were solicited from various stakeholders representing government ministries and agencies, nongovernmental organisations, and international donors. The final drafts of the questionnaires were discussed at a stakeholders' meeting organised by the NBS. The adapted questionnaires were translated from English into Kiswahili and pretested from 23 July 2009 to 5 August 2009. The final versions of the English questionnaires are attached in Appendix E.

The Household Questionnaire was used to list all the usual members and visitors in the selected households. Some basic information was collected on the characteristics of each person

listed, including age, sex, education, and relationship to the head of the household. For children under age 18, survival status of the parents was determined. The main purpose of the Household Questionnaire was to identify women and men who were eligible for the individual interview. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, materials used for the floor of the house, ownership of various durable goods, and ownership and use of mosquito nets. Another use of the Household Questionnaire was to identify the woman who was eligible to be interviewed with the domestic violence module.

The Household Questionnaire was also used to record height, weight, and haemoglobin measurements of women age 15-49 and children under age 5, household use of cooking salt fortified with iodine, response to requests for blood samples to measure vitamin A and iron in women and children, and whether salt and urine samples were provided.

The Women's Questionnaire was used to collect information from all women age 15-49. These women were asked questions on the following topics:

- Background characteristics (e.g., education, residential history, media exposure)
- Birth history and childhood mortality
- Pregnancy, delivery, and postnatal care
- Knowledge and use of family planning methods
- Infant feeding practices, including patterns of breastfeeding
- Fertility preferences
- Episodes of childhood illness and responses to illness, with a focus on treatment of fevers in the two weeks prior to the survey
- Vaccinations and childhood illnesses
- Marriage and sexual activity
- Husband's background and women's work status
- Knowledge, attitudes, and behaviour related to HIV/AIDS and other sexually transmitted infections (STIs)
- Domestic violence
- Female genital cutting
- Adult mortality, including maternal mortality
- Fistula of the reproductive and urinary tracts
- Other health issues, including knowledge of tuberculosis and medical injections

The Men's Questionnaire was administered to all men age 15-49 living in every third household in the 2010 TDHS sample. The Men's Questionnaire collected much of the same information as the Women's Questionnaire, but it was shorter because it did not contain a detailed reproductive history, questions on maternal and child health or nutrition, questions about fistula, or questions about siblings for the calculation of maternal mortality.

Biomarker Testing

Height and Weight Measurement

The 2010 TDHS survey included height and weight measurements of women age 15-49 and children under age 5. Weight measurements were obtained using lightweight, SECA mother-infant scales with a digital screen, designed and manufactured under the guidance of UNICEF. Height measurements were carried out using a measuring board by Shorr Productions. Children younger than 24 months were measured while lying down, and the height of older children was measured while they were standing.

Anaemia Testing

All children age 6-59 months and women age 15-49 were also eligible for anaemia testing. Individuals eligible for anaemia testing and the parents/guardians of eligible children were advised about the objectives, potential risks, voluntary nature, and confidentiality of the anaemia testing procedures as part of the informed consent process. Parents or guardians of never-married adolescents age 15-17 were asked for permission to test each adolescent before consent of the adolescent was sought. After obtaining informed consent, blood samples were collected with a microcuvette from a drop of blood taken from a finger prick (or a heel prick in the case of very young children or those with small fingers). Haemoglobin analysis was carried out on site using a battery-operated portable HemoCue analyzer, which produces a result in less than one minute. Results were given to the woman and to the child's parent or guardian, both verbally and in writing.

The parents or guardians of children who had anaemia requiring treatment (under 7 g/dl) were provided with a written referral to a health facility for treatment. Women with severe anaemia (haemoglobin less than 7g/dl for non-pregnant women or less than 9 g/dl for pregnant women) were also provided with a written referral form. Results of the anaemia test were recorded in the Household Questionnaire.

In addition to the rapid test conducted at the homes of respondents using the HemoCue methodology, the 2010 TDHS included testing for transferrin receptor (TfR), a measure of iron-deficiency. TfR testing helps to identify the contribution that iron-deficiency makes to anaemia levels, as opposed to malaria and parasites. TfR tests involved the collection of dried blood spot (DBS) samples on filter papers from both children age 6-59 months and women age 15-49. The DBS samples were taken immediately after the blood drop for the anaemia testing was collected. Filter papers were labelled with bar code identification stickers and dried in special drying boxes. The samples were then stored in ziplock bags with desiccants and sent to NBS headquarters to be registered along with the completed questionnaires from the same cluster, after which they were sent to the Tanzania Food and Nutrition Centre (TFNC) laboratory. Testing was done at the National Public Health Laboratory under TFNC oversight.

Vitamin A Testing

The same DBS samples were also tested to determine a measure of vitamin A deficiency based on the level of retinol binding protein (RBP). RBP provides a proxy indicator of retinol. This test utilises ELISA testing methodology. To adjust the RBP levels for the influence of infection, a test for C-reactive protein was conducted on a 15 percent subsample. In order to establish an adjustment factor to correct for the incomplete elution of RBP from filter paper cards, a study was implemented that involved taking both venous blood samples and DBS samples from a small group of about 50 individuals. Comparison of results from the two samples for the same individuals was used to calculate the correction factor that was applied to all DBS retinol binding protein measurements.

Iodine Testing

The 2010 TDHS included several tests related to iodine. First, in all households, interviewers asked for a teaspoon of salt. The salt was tested for iodine using a simple rapid test kit. Salt that turned any shade of purple after being diluted with a drop of the test solution was considered to be iodised.

Second, in every third household, TDHS field teams asked for a slightly larger sample of household salt that was put into a screw-capped plastic container, appropriately labelled and transported to the TFNC lab, where it was then tested for iodine content.

Third, interviewing teams requested that women respondents provide a urine sample for subsequent testing for iodine levels. Women who consented were provided with a small plastic cup in

which to urinate. While in the field the urine was transferred from the plastic cup via a vacuum method into small tubes with tightly fitted caps for transport to the TFNC laboratory, where samples were tested for iodine.

Pretest

All elements of the survey were pretested prior to the survey. Eleven women and five men participated in the pretest training conducted in Morogoro from 23 July 23 to 5 August 2009. Trainers were staff from NBS, the Zanzibar OCGS, and ICF Macro. Pretest fieldwork was conducted 2-5 August 2009, in Bigwa and Saba Saba wards.

A total of 102 Household Questionnaires, 98 Women's Questionnaires, and 52 Men's Questionnaires were completed.

Training of Field Staff

Field staff training took place between 9 November 2009 and 5 December 2009. A total of 59 female nurses, 15 male nurses, 17 field editors, and 14 supervisors were trained. Supervisors and editors were also given specialized training to enable them to perform their duties. Trainers were from the NBS, the MoHSW, the Ministry of Community Development, Gender, and Children, the Tanzania Food and Nutrition Centre, and ICF Macro. Staff from the Methods, Standards, and Coordination Department and the Information Technology and Marketing Department of the NBS also participated in the training.

The training was conducted following the DHS training procedures, including classroom presentations, mock interviews, field practice, and tests. Towards the end of the classroom training, the trainees were assigned to 14 teams, as if for the main data collection. The teams visited two health clinics in Hedaru (rural) and Same (urban) to practice the procedures learned in the classroom. Permission to test women and children at the clinics was granted by the medical officer in charge of the facility as well as by the women themselves.

Field practice in interviews, anthropometric measurements, and biomarkers was also carried out at this time. During this period, field editors and team supervisors took additional training in methods of field editing, data quality control procedures, and fieldwork coordination.

Fieldwork

Data collection began on 19 December 2009 and was completed on 23 May 2010. Data were collected by 14 teams, 11 in Mainland and 3 in Zanzibar. Each team consists of four female interviewers, one male interviewer, a supervisor, a field editor, and a driver. The field editor and supervisor were responsible for reviewing all questionnaires for completeness, quality, and consistency before the team's departure from the cluster. Fieldwork supervision was also coordinated at NBS headquarters and at the Office of the Chief Government Statistician—Zanzibar. Seven NBS senior staff formed the Quality Control team. They periodically visited teams to review their work and monitor data quality. Quality control personnel also independently re-interviewed certain households after the team had left a cluster. Close contact between NBS headquarters and the data collection teams was maintained using cell phones. ICF Macro staff participated in field supervision of interviews and biomarker collection.

Data Processing

The processing of the 2010 TDHS data began shortly after the fieldwork commenced. Completed questionnaires were returned to the NBS head office in Dar es Salaam, where they were entered and edited by data processing personnel who were specially trained for this task. Data processing included office editing, coding of open-ended questions, data entry, and editing of

computer-identified errors. The data were processed by a team of 10 data entry clerks, 3 data editors, 2 data entry supervisors, and 2 programmers. One staff member was assigned to receive and check the blood samples received from the field. Data entry and editing were accomplished using the CSPro software. Field teams were advised of problems detected during the data entry to improve performance with the use of field check tables. The process of office editing and data processing was initiated on 25 January 2010 and completed on 15 June 2010.

The DBS, urine, and salt samples received from the field were logged in at NBS, checked, and delivered to TFNC to be tested. The processing of DBS samples for the vitamin A testing was handled by three laboratory technicians, while anaemia testing was handled by three laboratory technicians, and iodine testing was done by four laboratory technicians. The samples were logged into the CSPro Test Tracking System (CHTTS) database, and each was given a laboratory number.

Response Rates

Table 1.2 shows household and individual response rates for the 2010 TDHS. Response rates are important because a high rate of nonresponse may affect the results. A total of 10,300 households were selected for the sample, of which 9,741 were found to be occupied during data collection. The shortfall occurred mainly because structures were vacant or destroyed. Of the 9,741 existing households, 9,623 were successfully interviewed, yielding a household response rate of 99 percent.

In the interviewed households, 10,522 women were identified for individual interview; complete interviews were conducted with 10,139 women, yielding a response rate of 96 percent. Of the 2,770 eligible men identified in the subsample of households selected, 91 percent were successfully interviewed.

The principal reason for nonresponse among eligible women and men was the failure to find them at home despite repeated visits to the household. The lower response rate for men reflects the more frequent and longer absences of men from households.

Table 1.2 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Tanzania 2010

Result	Mainland			Zanzibar	Total
	Urban	Rural	Total		
Household interviews					
Households selected	1,908	6,412	8,320	1,980	10,300
Households occupied	1,762	6,070	7,832	1,909	9,741
Households interviewed	1,720	6,000	7,720	1,903	9,623
Household response rate[1]	97.6	98.8	98.6	99.7	98.8
Interviews with women age 15-49					
Number of eligible women	1,967	6,088	8,055	2,467	10,522
Number of eligible women interviewed	1,884	5,859	7,743	2,396	10,139
Eligible women response rate[2]	95.8	96.2	96.1	97.1	96.4
Household interviews for male survey					
Households selected	605	2,040	2,645	630	3,275
Households occupied	555	1,918	2,473	599	3,072
Households interviewed	544	1,902	2,446	598	3,044
Household response rate[1]	98.0	99.2	98.9	99.8	99.1
Interviews with men age 15-49					
Number of eligible men	528	1,641	2,169	601	2,770
Number of eligible men interviewed	466	1,498	1,964	563	2,527
Eligible men response rate[2]	88.3	91.3	90.5	93.7	91.2

[1] Households interviewed/households occupied
[2] Respondents interviewed/eligible respondents

HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

2

Chapter 2 summarises demographic and socioeconomic characteristics of the population in the households sampled in the 2010 TDHS. Also examined are environmental conditions, such as housing facilities, and household characteristics. This information facilitates interpretation of key demographic, socioeconomic, and health indices and also assists in the assessment of the representativeness of the survey.

For the 2010 TDHS, a household was defined as a person or a group of persons, related or unrelated, who live together and share a common source of food. The Household Questionnaire (see Appendix E) was used to collect information on all usual residents and visitors who spent the night preceding the interview in the household. This method of data collection allows the analysis of either de jure (usual residents) or de facto (those present at the time of the survey) populations.

2.1 POPULATION BY AGE AND SEX

Age and sex are important demographic variables that are the primary basis for demographic classification in vital statistics, censuses, and surveys. They are also very important variables in the study of mortality, fertility, and marriage. The distribution of the de facto household population in the 2010 TDHS is shown in Table 2.1 by five-year age groups, according to sex and residence. Because of relatively high levels of fertility in the past, Tanzania has the majority of its population in young age groups.

Table 2.1 Household population by age, sex, and residence

Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Tanzania 2010

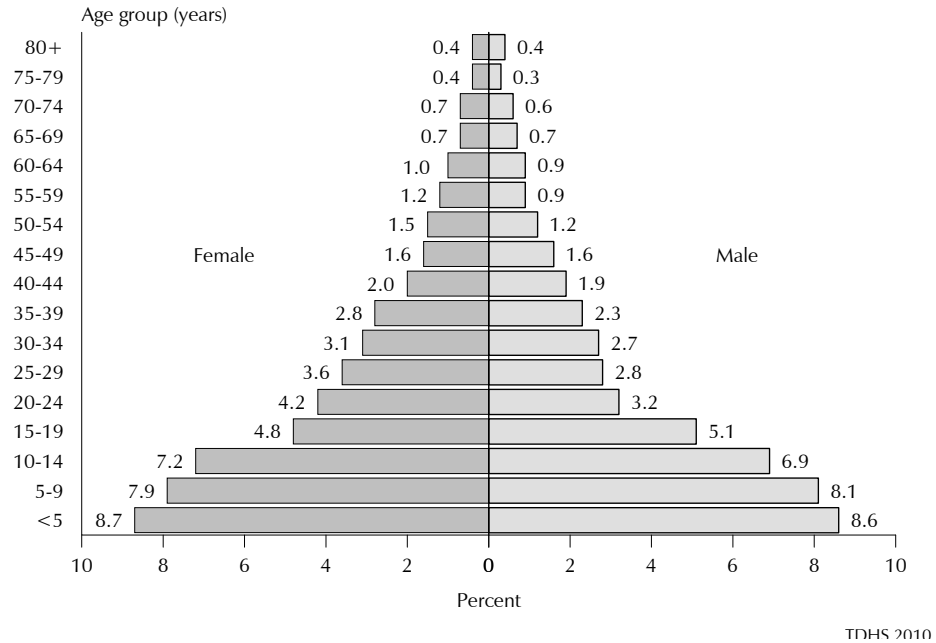
	Urban			Rural			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	15.1	14.4	14.7	18.6	17.5	18.0	17.8	16.8	17.3
5-9	13.1	12.5	12.8	17.8	16.0	16.9	16.7	15.2	16.0
10-14	12.2	12.8	12.5	14.9	14.2	14.5	14.3	13.8	14.1
15-19	11.6	11.6	11.6	10.2	8.6	9.4	10.5	9.3	9.9
20-24	8.7	11.5	10.2	6.1	7.0	6.6	6.7	8.0	7.4
25-29	7.8	9.2	8.5	5.2	6.3	5.8	5.8	7.0	6.4
30-34	7.9	7.7	7.8	5.1	5.4	5.2	5.7	5.9	5.8
35-39	6.4	5.2	5.8	4.3	5.5	5.0	4.8	5.4	5.1
40-44	4.8	4.1	4.4	3.7	3.7	3.7	4.0	3.8	3.9
45-49	3.6	2.8	3.2	3.1	3.1	3.1	3.2	3.1	3.2
50-54	2.6	2.2	2.4	2.4	3.1	2.8	2.4	2.9	2.7
55-59	1.9	2.6	2.3	1.9	2.3	2.1	1.9	2.4	2.2
60-64	1.8	1.2	1.5	1.8	2.2	2.0	1.8	1.9	1.9
65-69	1.2	0.6	0.9	1.4	1.6	1.5	1.4	1.4	1.4
70-74	0.6	0.6	0.6	1.4	1.6	1.5	1.2	1.3	1.3
75-79	0.4	0.5	0.5	0.8	0.9	0.8	0.7	0.8	0.8
80 +	0.4	0.5	0.5	1.1	1.0	1.0	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,988	5,608	10,596	17,349	18,507	35,858	22,337	24,115	46,454

Table 2.1 indicates that less than half (47 percent) of the population is under age 15, and most of the other half (49 percent) is age 15 to 64, while the remaining 4 percent is age 65 or older. With only about half of the population in the economically productive age range (15-64), a substantial burden is placed on these people to support older and younger members of the population. The age

dependency ratio,[1] an indicator of the economic responsibility of adults in their productive years, is 107 in Tanzania, indicating that there are 107 dependents for every 100 persons in the productive age group (15-64). This figure is higher than that found in the 1999 Tanzania Reproductive Health and Child Survey (TRCHS) and in the 2004-05 TDHS (both 104 per 100).

Figure 2.1 illustrates the age structure of the household population in a population pyramid. The wide base of the pyramid reflects the young age structure of the Tanzanian population and indicates high fertility. This pattern is similar to but smoother than the ones observed in the 1996 TDHS, the 1999 TRCHS, and the 2002 Population and Housing Census. Nevertheless, the drop off from age 10-14 to 15-19 is implausibly sharp and is indicative of some age displacement, presumably to reduce interviewers' workloads.

Figure 2.1 Population Pyramid



2.2 HOUSEHOLD COMPOSITION

Information about the composition of households by sex of the head of the household and size of the household is presented in Table 2.2. These characteristics are important because they are associated with household welfare.

Table 2.2 shows that one-quarter of Tanzanian households are headed by women. Female-headed households are typically poorer than male-headed households. The average household size is 5.0 persons, with the average household size being lower in the Mainland (4.9) than in Zanzibar (5.6). Over 55 percent of households in Tanzania have a household size of 3 to 6 members.

Urban households are smaller than those in rural areas. In Mainland urban, 26 percent of households have 6 or more members compared with 39 percent in Mainland rural and 49 percent in Zanzibar. On the other hand, the proportion of single-person households is higher in Mainland urban households (14 percent) than in Mainland rural households (7 percent) or in Zanzibar (6 percent). Economic resources are often limited in larger households. Where the household size is large, crowding can lead to health problems.

[1] Dependency ratio is calculated as a ratio of the number of dependents (age 0-14 and age 65and over) to the total population age 15-64.

Table 2.2 Household composition

Percent distribution of households by sex of head of household and by household size, mean size of household, and percentage of households with orphans and foster children under 18, according to residence, Tanzania 2010

Characteristic	Mainland			Zanzibar	Total
	Urban	Rural	Total		
Household headship					
Male	76.6	75.2	75.6	76.8	75.6
Female	23.4	24.8	24.4	23.2	24.4
Total	100.0	100.0	100.0	100.0	100.0
Number of usual members					
1	13.5	7.0	8.7	5.6	8.6
2	12.4	9.6	10.3	7.7	10.3
3	17.4	13.2	14.3	12.1	14.3
4	17.7	15.9	16.3	12.5	16.2
5	12.7	15.4	14.7	13.1	14.7
6	8.9	12.3	11.4	13.5	11.5
7	7.8	9.9	9.4	10.4	9.4
8	3.9	6.1	5.5	8.6	5.6
9+	5.7	10.5	9.3	16.6	9.5
Total	100.0	100.0	100.0	100.0	100.0
Mean size of households	4.2	5.2	4.9	5.6	5.0
Percentage of households with orphans and foster children under 18					
Foster children[1]	26.0	26.1	26.1	29.5	26.2
Double orphans	3.1	2.4	2.6	0.8	2.5
Single orphans[2]	13.0	13.3	13.2	10.1	13.1
Foster and/or orphan children	30.1	31.7	31.3	32.4	31.3
Number of households	2,417	6,959	9,377	246	9,623

Note: Table is based on de jure household members, i.e., usual residents.
[1] Foster children are those under age 18 living in households with neither their mother nor their father present.
[2] Includes children with one dead parent and an unknown survival status of the other parent.

2.3 CHILDREN'S LIVING ARRANGEMENTS AND PARENTAL SURVIVAL

Table 2.3 presents data on the prevalence of orphanhood in Tanzania. The table shows that 59 percent of children under age 18 are living with both parents, 18 percent live with their mothers but not their fathers; 6 percent live with their fathers but not their mothers; and 16 percent live with neither of their natural parents.

Not surprisingly, the proportion of children living with both parents decreases with age. That is, younger children are more likely than older children to live with both natural parents. Among children under age 18, urban children are more likely not to live with either parent than rural children (20 and 15 percent, respectively). Table 2.3 shows that 10 percent of children under age 18 have lost at least one of their natural parents, and 1 percent has lost both natural parents.

Table 2.3 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead, according to background characteristics, Tanzania 2010

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/mother				
Age														
0-4	71.8	18.0	1.6	1.7	0.2	5.5	0.2	0.4	0.1	0.4	100.0	6.2	2.6	8,081
<2	76.7	20.1	1.0	0.5	0.1	1.4	0.1	0.1	0.0	0.2	100.0	1.6	1.2	3,263
2-4	68.5	16.6	2.1	2.6	0.2	8.3	0.2	0.7	0.2	0.6	100.0	9.4	3.6	4,818
5-9	59.0	13.8	3.9	5.2	1.0	13.0	1.0	1.7	0.6	0.9	100.0	16.2	8.2	7,494
10-14	51.6	11.8	6.3	6.4	1.9	14.2	1.6	3.2	2.1	0.8	100.0	21.2	15.4	6,610
15-17	42.6	9.7	7.8	5.7	1.9	18.3	2.9	5.1	4.3	1.8	100.0	30.6	22.1	2,994
Sex														
Male	60.1	14.0	4.4	4.8	1.2	10.5	1.0	2.0	1.1	0.9	100.0	14.6	9.8	12,570
Female	58.3	14.3	4.2	4.1	1.0	12.6	1.3	2.1	1.4	0.8	100.0	17.4	10.1	12,609
Residence														
Urban	53.4	16.4	3.9	4.5	1.0	13.6	1.8	2.4	2.2	0.9	100.0	19.9	11.5	5,016
Rural	60.7	13.6	4.4	4.4	1.1	11.0	1.0	2.0	1.1	0.8	100.0	15.0	9.6	20,164
Mainland/Zanzibar														
Mainland	59.0	14.3	4.3	4.5	1.1	11.5	1.1	2.1	1.3	0.8	100.0	16.0	10.1	24,474
Urban	52.8	16.6	4.0	4.5	1.1	13.5	1.8	2.5	2.2	0.9	100.0	20.1	11.8	4,756
Rural	60.5	13.7	4.4	4.5	1.1	11.0	1.0	2.0	1.1	0.8	100.0	15.0	9.7	19,718
Zanzibar	68.1	9.4	2.6	2.7	0.2	13.7	1.0	1.6	0.3	0.5	100.0	16.5	5.6	705
Unguja	64.1	10.5	2.5	3.0	0.3	15.5	1.2	1.9	0.5	0.6	100.0	19.0	6.4	416
Pemba	74.0	7.8	2.6	2.4	0.0	11.0	0.7	1.1	0.1	0.3	100.0	12.9	4.6	289
Zone														
Western	64.2	12.4	3.5	4.5	1.1	10.5	0.9	1.7	0.7	0.6	100.0	13.8	7.9	4,721
Northern	61.9	12.5	4.6	3.5	1.1	11.2	1.6	1.8	1.0	0.8	100.0	15.6	10.1	3,688
Central	62.2	16.5	3.4	2.5	1.2	10.4	1.0	1.3	0.8	0.7	100.0	13.5	7.8	2,402
Southern Highlands	62.0	11.5	5.0	4.8	0.7	8.9	1.0	2.6	2.7	0.8	100.0	15.1	12.0	3,489
Lake	53.7	15.0	5.0	5.6	1.4	13.4	0.8	2.7	1.3	1.2	100.0	18.1	11.3	5,153
Eastern	54.5	16.6	4.5	4.2	0.9	12.5	1.6	2.4	1.9	1.0	100.0	18.3	11.4	2,959
Southern	52.2	18.5	3.6	5.8	1.6	13.7	1.2	1.8	0.8	0.7	100.0	17.5	9.2	2,062
Region														
Dodoma	58.3	19.0	3.8	2.9	1.4	10.2	1.1	1.6	1.0	0.9	100.0	13.9	9.0	1,502
Arusha	62.3	14.1	6.4	3.1	2.9	7.7	0.8	1.7	0.5	0.6	100.0	10.6	12.3	1,021
Kilimanjaro	52.9	12.9	4.9	3.1	0.8	18.2	2.3	2.2	1.4	1.1	100.0	24.1	11.7	864
Tanga	59.1	14.9	4.1	4.3	0.2	10.8	2.3	1.9	1.4	1.0	100.0	16.4	10.0	1,136
Morogoro	58.9	17.5	4.4	4.2	1.2	10.0	0.9	0.9	1.2	0.9	100.0	12.9	8.6	1,149
Pwani	52.0	19.1	2.8	3.8	0.6	14.9	2.2	2.1	1.0	1.4	100.0	20.3	8.8	662
Dar es Salaam	51.6	14.2	5.6	4.3	0.8	13.7	1.9	4.1	3.0	0.8	100.0	22.7	15.6	1,148
Lindi	50.9	27.9	1.9	3.7	0.6	11.5	1.1	1.0	0.7	0.7	100.0	14.3	5.3	410
Mtwara	46.5	19.4	3.9	7.3	1.7	17.2	1.3	2.3	0.1	0.2	100.0	20.9	9.4	815
Ruvuma	58.5	13.0	4.2	5.4	2.1	11.3	1.1	1.7	1.6	1.1	100.0	15.7	11.0	837
Iringa	53.8	16.8	6.7	2.5	0.6	8.4	1.8	3.6	4.2	1.5	100.0	18.1	17.3	1,040
Mbeya	61.7	11.2	4.7	6.9	0.5	9.1	0.6	2.2	2.3	0.8	100.0	14.3	10.3	1,615
Singida	68.8	12.4	2.7	1.8	0.9	10.9	1.0	0.7	0.4	0.5	100.0	13.0	5.9	901
Tabora	63.9	11.2	2.0	6.1	1.3	10.1	1.3	2.3	1.1	0.7	100.0	14.8	7.9	1,215
Rukwa	72.9	5.6	3.6	3.8	1.1	9.0	0.7	1.9	1.4	0.1	100.0	12.9	8.6	833
Kigoma	65.1	16.6	5.4	2.1	0.7	7.6	0.3	1.0	0.9	0.3	100.0	9.8	8.2	1,217
Shinyanga	63.8	10.7	3.3	5.0	1.2	12.2	1.0	1.7	0.5	0.6	100.0	15.4	7.7	2,288
Kagera	57.8	11.5	5.8	6.4	1.9	10.1	1.0	3.0	1.0	1.7	100.0	15.1	12.8	1,607
Mwanza	49.5	17.3	4.1	5.6	1.4	16.8	0.9	2.5	1.1	0.9	100.0	21.2	10.1	2,410
Mara	56.9	15.0	5.8	4.4	0.7	10.9	0.4	2.8	2.0	1.1	100.0	16.1	12.0	1,135
Manyara	77.7	5.6	2.5	3.2	0.0	8.2	0.8	1.1	0.5	0.3	100.0	10.7	5.0	668
Unguja North	66.1	7.6	3.5	2.0	0.8	16.5	1.3	1.6	0.2	0.3	100.0	19.6	7.4	106
Unguja South	54.0	15.0	3.0	3.3	0.0	21.0	1.5	1.1	0.0	1.2	100.0	23.5	5.9	64
Town West	65.8	10.6	2.0	3.3	0.1	13.7	1.0	2.2	0.7	0.6	100.0	17.6	6.1	246
Pemba North	74.9	8.2	2.4	1.2	0.1	11.5	0.5	0.7	0.2	0.3	100.0	12.9	3.9	142
Pemba South	73.1	7.3	2.8	3.6	0.0	10.4	1.0	1.5	0.1	0.3	100.0	12.9	5.3	147
Wealth quintile														
Lowest	58.4	18.0	6.0	3.0	1.1	10.3	0.8	1.2	0.7	0.5	100.0	12.9	9.9	5,058
Second	60.8	14.1	4.7	3.9	1.7	10.0	0.9	2.2	0.8	0.8	100.0	13.9	10.3	5,640
Middle	61.4	12.5	4.4	5.6	0.8	10.9	0.8	1.8	1.1	0.8	100.0	14.5	9.0	5,721
Fourth	59.5	13.6	3.0	4.3	0.8	12.0	1.4	2.2	2.3	0.9	100.0	17.9	9.9	4,935
Highest	54.4	12.1	2.9	5.6	0.9	15.9	2.1	3.3	1.7	1.1	100.0	22.9	10.9	3,825
Total <15	61.5	14.7	3.8	4.3	1.0	10.6	0.9	1.7	0.9	0.7	100.0	14.1	8.3	22,185
Total <18	59.2	14.1	4.3	4.4	1.1	11.5	1.1	2.1	1.3	0.8	100.0	16.0	9.9	25,179

Note: Table is based on de jure members, i.e., usual residents. Total includes one child with missing information on sex

2.4 EDUCATION OF THE HOUSEHOLD POPULATION

Education is a key determinant of the lifestyle and status an individual enjoys in a society. Studies have consistently shown that educational attainment has a strong effect on reproductive behaviour, contraceptive use, fertility, infant and child mortality, morbidity, and attitudes and awareness related to family health and hygiene. Results from the 2010 TDHS show educational attainment among household members and school attendance among youth.

It is worth noting that analysing education indicators for Tanzania is challenging, given the differences in the formal education system between the Mainland and Zanzibar, as well as changes in the different systems over time. For the analysis presented here, all education indicators have been calculated using the following assumptions: the official age for entry into the primary level is age 7; the official primary level of schooling consists of seven grades; those children with at least some post-primary training are assumed to have completed the primary level; and the number of years assumed for completion of secondary school is six.

2.4.1 Educational Attainment

Tables 2.4.1 and 2.4.2 present data for each sex on educational attainment of household members age 6 and older. The results confirm that there is a gap in educational attainment between males and females. Although the majority of the household population age 6 and older has some education, 27 percent of females have never attended school; this compares with 18 percent of males. The median number of years of schooling for females is 3.6 years, which is 1 year less than that for males (4.6 years).

Urban residents are more likely than rural residents to have attended school and to have remained in school for a longer time. The median number of years of schooling for females and males in urban areas is almost the same (6.2 years and 6.4 years, respectively), compared with just 2.8 years and 3.7 years for rural females and males, respectively.

Educational attainment also differs significantly among regions. For example, the highest proportion of the population who have never been to school is found in Tabora (42 percent for females and 34 percent for males) and Dodoma (40 percent for females and 33 percent for males). On the other hand, regions with the lowest proportion of household members who have never attended school are Kilimanjaro (10 percent for females and 4 percent for males) and Dar es Salaam (11 percent for females and 4 percent for males). In Zanzibar, North Pemba has the highest proportion of population with no education (39 percent of females and 29 percent of males). This is an improvement from the 2004-05 TDHS where the percentages are 47 for females and 37 for males, respectively.

The most substantial variation in educational attainment is across the wealth quintiles. Only 7 percent of females in the wealthiest households have never been to school, compared with 46 percent of females from the poorest households. The wealth disparity in education is less evident among males; 33 percent of males in the poorest households have never been to school, compared with 4 percent of males in the wealthiest households.

Table 2.4.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median grade completed, according to background characteristics, Tanzania 2010

Background characteristic	No education	Some primary	Completed primary	Some secondary	Completed secondary	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age										
6-9	35.1	64.6	0.0	0.0	0.0	0.0	0.3	100.0	2,863	0.0
10-14	7.5	82.4	5.9	3.9	0.0	0.0	0.3	100.0	3,337	3.6
15-19	9.3	20.3	36.7	33.4	0.2	0.0	0.0	100.0	2,241	6.5
20-24	19.1	14.0	46.9	17.8	1.3	0.6	0.2	100.0	1,933	6.4
25-29	20.4	13.7	54.3	10.7	0.2	0.5	0.0	100.0	1,676	6.3
30-34	19.4	12.8	57.9	8.3	1.3	0.2	0.1	100.0	1,424	6.3
35-39	25.1	11.2	56.8	6.0	0.3	0.6	0.0	100.0	1,313	6.2
40-44	18.4	9.3	65.0	6.3	0.3	0.6	0.2	100.0	920	6.3
45-49	34.4	17.2	41.1	5.8	0.6	0.5	0.3	100.0	742	4.8
50-54	53.7	19.7	20.3	4.8	0.5	0.3	0.6	100.0	706	0.0
55-59	56.5	26.6	11.9	4.2	0.0	0.2	0.5	100.0	578	0.0
60-64	73.0	20.1	4.7	1.2	0.0	0.0	1.0	100.0	470	0.0
65+	79.7	17.3	1.4	0.5	0.0	0.0	1.1	100.0	1,050	0.0
Residence										
Urban	12.2	29.5	34.9	21.3	1.1	0.8	0.3	100.0	4,672	6.2
Rural	31.0	36.2	27.0	5.3	0.1	0.1	0.3	100.0	14,589	2.8
Mainland/Zanzibar										
Mainland	26.5	34.7	29.5	8.4	0.3	0.2	0.3	100.0	18,694	3.6
..Urban	12.1	29.4	36.1	20.2	1.1	0.8	0.3	100.0	4,442	6.2
..Rural	31.1	36.3	27.4	4.8	0.1	0.1	0.3	100.0	14,252	2.8
Zanzibar	23.6	32.7	8.2	34.0	1.0	0.3	0.2	100.0	567	4.8
..Unguja	18.1	32.6	9.5	37.8	1.3	0.5	0.3	100.0	360	5.9
..Pemba	33.3	33.0	6.0	27.3	0.5	0.0	0.0	100.0	208	3.0
Zone										
Western	35.2	33.4	25.6	5.3	0.2	0.0	0.3	100.0	3,263	2.4
Northern	22.7	32.4	33.3	10.7	0.3	0.2	0.4	100.0	2,979	4.8
Central	34.0	34.4	26.2	5.1	0.1	0.0	0.2	100.0	1,698	2.4
Southern Highlands	24.3	37.1	30.2	7.7	0.2	0.2	0.4	100.0	2,667	3.7
Lake	26.6	39.4	26.3	6.9	0.3	0.0	0.4	100.0	3,569	3.1
Eastern	19.6	29.1	33.3	15.9	1.0	1.1	0.1	100.0	2,674	6.0
Southern	23.9	36.3	32.9	6.7	0.1	0.0	0.1	100.0	1,844	3.8
Region										
Dodoma	39.6	32.8	22.3	5.2	0.1	0.0	0.0	100.0	1,067	1.4
Arusha	27.3	28.6	33.2	10.1	0.2	0.1	0.4	100.0	746	4.7
Kilimanjaro	9.9	36.7	36.7	15.3	0.8	0.7	0.0	100.0	828	6.1
Tanga	25.5	32.4	32.5	9.2	0.0	0.0	0.4	100.0	951	4.0
Morogoro	24.2	34.3	32.8	8.4	0.2	0.0	0.2	100.0	889	3.9
Pwani	31.9	35.2	26.4	6.5	0.0	0.0	0.0	100.0	532	2.4
Dar es Salaam	11.2	22.9	36.6	25.2	1.9	2.3	0.0	100.0	1,253	6.4
Lindi	35.6	34.8	27.6	2.0	0.0	0.0	0.0	100.0	362	2.2
Mtwara	27.0	35.6	30.8	6.5	0.0	0.0	0.1	100.0	819	3.5
Ruvuma	13.6	38.0	38.3	9.4	0.3	0.1	0.1	100.0	664	5.6
Iringa	16.3	37.7	34.4	10.8	0.1	0.5	0.2	100.0	881	5.0
Mbeya	25.5	36.1	30.0	7.7	0.2	0.0	0.5	100.0	1,247	3.8
Singida	24.5	37.2	32.9	5.0	0.0	0.0	0.5	100.0	631	3.7
Tabora	41.8	29.3	23.2	5.2	0.1	0.0	0.3	100.0	848	1.3
Rukwa	34.4	38.3	24.1	2.6	0.0	0.0	0.5	100.0	540	1.5
Kigoma	31.0	33.6	28.9	6.2	0.1	0.0	0.2	100.0	869	3.2
Shinyanga	33.9	35.6	25.0	4.8	0.4	0.0	0.4	100.0	1,545	2.4
Kagera	28.4	40.3	24.1	6.5	0.0	0.0	0.7	100.0	1,144	2.8
Mwanza	27.7	39.1	24.4	8.0	0.6	0.0	0.2	100.0	1,661	3.0
Mara	21.6	38.9	34.0	5.3	0.0	0.1	0.1	100.0	765	3.8
Manyara	32.7	30.8	29.1	6.3	0.1	0.2	0.9	100.0	454	3.1
Unguja North	31.8	34.4	6.4	26.4	0.7	0.1	0.3	100.0	87	3.1
Unguja South	17.1	35.6	11.5	35.4	0.3	0.0	0.0	100.0	55	5.7
Town West	12.9	31.1	10.2	43.0	1.8	0.7	0.4	100.0	218	6.5
Pemba North	38.7	32.3	4.0	24.5	0.5	0.0	0.0	100.0	100	1.8
Pemba South	28.2	33.6	7.9	29.9	0.4	0.0	0.0	100.0	108	3.8
Wealth quintile										
Lowest	46.2	32.4	19.7	1.4	0.0	0.0	0.2	100.0	3,565	0.1
Second	37.1	36.3	23.9	2.3	0.0	0.0	0.3	100.0	4,062	1.7
Middle	25.7	39.6	29.7	4.8	0.0	0.0	0.2	100.0	4,004	3.3
Fourth	17.1	36.1	35.4	11.0	0.1	0.0	0.3	100.0	3,796	5.2
Highest	6.9	28.2	35.4	26.5	1.6	1.1	0.2	100.0	3,834	6.4
Total	26.5	34.6	28.9	9.2	0.3	0.2	0.3	100.0	19,261	3.6

Note: Total includes 7 women with age information missing
[1] Completed at least grade 7 at the primary level
[2] Completed grade 6 at the secondary level

Table 2.4.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median grade completed, according to background characteristics, Tanzania 2010

Background characteristic	No education	Some primary	Completed primary	Some secondary	Completed secondary	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age										
6-9	42.0	57.7	0.0	0.0	0.0	0.0	0.3	100.0	2,940	0.0
10-14	8.0	84.9	3.1	3.8	0.0	0.0	0.2	100.0	3,202	3.2
15-19	6.6	27.4	32.6	33.1	0.2	0.0	0.1	100.0	2,354	6.4
20-24	10.5	13.4	44.8	28.0	2.4	0.7	0.2	100.0	1,495	6.6
25-29	13.5	14.0	54.1	14.7	2.1	1.4	0.3	100.0	1,296	6.4
30-34	13.0	13.2	58.9	11.8	1.6	1.3	0.1	100.0	1,271	6.4
35-39	10.8	12.8	63.9	10.0	1.2	1.2	0.1	100.0	1,076	6.4
40-44	11.7	12.6	64.1	8.5	1.7	1.1	0.3	100.0	886	6.4
45-49	11.1	9.4	66.3	8.4	1.9	2.9	0.0	100.0	724	6.5
50-54	19.1	19.3	47.1	11.0	1.3	1.8	0.4	100.0	547	6.3
55-59	29.5	30.1	29.8	8.2	1.2	0.8	0.4	100.0	427	3.6
60-64	26.6	41.2	24.4	7.3	0.0	0.4	0.3	100.0	400	3.4
65+	46.8	37.3	11.7	3.1	0.1	0.9	0.2	100.0	940	1.2
Residence										
Urban	7.8	29.2	33.7	24.3	2.7	2.2	0.1	100.0	4,112	6.4
Rural	21.6	40.7	29.2	7.8	0.2	0.2	0.2	100.0	13,450	3.7
Mainland/Zanzibar										
Mainland	18.4	38.0	30.9	11.0	0.8	0.6	0.2	100.0	17,057	4.6
Urban	7.7	28.9	34.9	23.4	2.7	2.2	0.1	100.0	3,912	6.4
Rural	21.6	40.7	29.7	7.4	0.2	0.2	0.2	100.0	13,145	3.7
Zanzibar	17.4	39.0	7.8	33.6	1.0	0.9	0.2	100.0	505	4.9
Unguja	12.2	37.8	8.5	38.7	1.1	1.4	0.3	100.0	317	6.0
Pemba	26.2	41.1	6.6	25.1	0.7	0.1	0.1	100.0	188	3.1
Zone										
Western	27.1	38.8	25.8	7.3	0.5	0.3	0.3	100.0	3,000	3.2
Northern	15.6	37.5	32.9	12.6	0.6	0.5	0.3	100.0	2,815	5.4
Central	27.0	37.1	29.5	5.7	0.3	0.2	0.1	100.0	1,517	3.3
Southern Highlands	14.8	39.4	33.1	10.9	1.0	0.7	0.2	100.0	2,339	5.1
Lake	18.4	41.8	27.2	11.7	0.2	0.5	0.3	100.0	3,204	3.9
Eastern	11.8	31.2	35.5	17.3	2.2	2.0	0.0	100.0	2,572	6.2
Southern	14.6	39.4	35.4	9.5	0.9	0.0	0.2	100.0	1,610	5.0
Region										
Dodoma	33.2	37.7	24.2	4.5	0.2	0.2	0.2	100.0	920	2.3
Arusha	19.9	35.9	33.0	10.6	0.3	0.1	0.1	100.0	743	4.7
Kilimanjaro	4.3	38.7	35.9	18.8	0.9	1.1	0.3	100.0	705	6.2
Tanga	16.7	40.7	30.6	10.7	1.0	0.1	0.1	100.0	878	4.7
Morogoro	17.9	36.3	34.6	9.3	1.2	0.7	0.0	100.0	956	4.9
Pwani	18.9	40.0	28.4	12.2	0.0	0.3	0.2	100.0	487	4.0
Dar es Salaam	3.7	23.0	39.3	26.2	4.1	3.8	0.0	100.0	1,129	6.6
Lindi	23.4	41.1	29.8	5.1	0.2	0.0	0.4	100.0	321	3.4
Mtwara	16.2	39.2	33.7	9.7	0.9	0.0	0.3	100.0	659	4.6
Ruvuma	8.5	38.7	40.1	11.4	1.3	0.0	0.0	100.0	629	6.1
Iringa	10.7	35.9	36.5	15.5	0.3	1.2	0.0	100.0	787	6.1
Mbeya	15.1	39.7	32.8	9.5	1.8	0.6	0.5	100.0	1,011	5.0
Singida	17.5	36.3	37.8	7.6	0.6	0.2	0.0	100.0	597	5.2
Tabora	34.2	34.6	24.0	6.2	0.2	0.3	0.5	100.0	839	2.4
Rukwa	20.1	43.7	28.7	6.7	0.5	0.3	0.0	100.0	541	3.4
Kigoma	21.8	44.3	23.1	10.0	0.4	0.2	0.3	100.0	751	3.5
Shinyanga	25.7	38.4	28.3	6.5	0.6	0.3	0.3	100.0	1,410	3.5
Kagera	22.5	41.7	23.4	11.1	0.2	0.5	0.6	100.0	1,069	3.2
Mwanza	18.5	40.4	27.8	12.3	0.1	0.8	0.1	100.0	1,484	4.0
Mara	11.6	44.9	32.0	11.2	0.3	0.0	0.0	100.0	651	4.7
Manyara	23.2	32.6	32.6	10.0	0.2	0.6	0.8	100.0	488	4.4
Unguja North	24.2	44.6	5.5	25.5	0.1	0.0	0.2	100.0	71	3.4
Unguja South	10.9	37.8	13.5	36.5	0.8	0.5	0.0	100.0	49	6.1
Town West	8.3	35.4	8.3	44.0	1.5	2.1	0.3	100.0	197	6.6
Pemba North	29.1	42.2	5.0	23.1	0.6	0.1	0.0	100.0	94	2.6
Pemba South	23.3	40.0	8.3	27.1	0.8	0.2	0.2	100.0	94	3.8
Wealth quintile										
Lowest	32.5	41.6	22.8	2.9	0.0	0.0	0.2	100.0	3,206	2.1
Second	26.9	41.0	27.8	3.9	0.0	0.0	0.2	100.0	3,582	3.0
Middle	17.9	42.4	31.8	7.5	0.1	0.1	0.3	100.0	3,912	4.0
Fourth	11.2	38.7	35.1	14.3	0.4	0.1	0.1	100.0	3,496	6.0
Highest	3.8	25.5	33.1	30.6	3.7	3.1	0.2	100.0	3,365	6.7
Total	18.4	38.0	30.3	11.7	0.8	0.6	0.2	100.0	17,562	4.6

Note: Total includes 5 men with age information missing
[1] Completed at least grade 7 at the primary level
[2] Completed grade 6 at the secondary level

2.4.2 School Attendance Rates

Table 2.5 presents for primary school and for secondary school the net and gross attendance ratio (NAR and GAR) for the school year that started in 2009. The presentation is by urban-rural residence, region, and wealth quintile. The NAR for primary school is the percentage of the primary school-age (7-13 years) population that attends primary school. The NAR for secondary school is the percentage of the secondary school-age (14-19 years) population that attends secondary school. By definition, the NAR cannot exceed 100 percent. The GAR for primary school is the total number of primary school students, of any age, expressed as a percentage of the official primary school-age population. The GAR for secondary school is the total number of secondary school students, of any age, expressed as a percentage of the official secondary school-age population. If there are significant numbers of over-age and under-age students at a given level of schooling, the GAR can exceed 100 percent. Persons are considered to be currently attending school if they attended formal academic school at any point during the given school year.

The gender parity index (GPI) measures the sex-related differences in school attendance rates and is calculated by dividing the GAR for females by the GAR for males. A GPI of 1 indicates parity, or equality, between the participation rates for males and females. A GPI of less than 1 indicates a gender disparity in favour of males, i.e., a higher proportion of males than females attend that level of schooling. A GPI greater than 1 indicates a gender disparity in favour of females.

As illustrated in Table 2.5, 80 percent of primary school-age children (age 7-13) in Tanzania attend primary school. Females age 7-13 are slightly more likely than males to attend primary school (81 and 78 percent, respectively). There is a sizable urban-rural difference in the NAR: 88 percent of children in urban areas attend primary school, compared with 78 percent in rural areas. School-age children from the wealthiest households are also far more likely to attend primary school than children from the least wealthy households (90 percent and 68 percent, respectively).

In Tanzania, a substantial proportion of primary school pupils fall outside the official age range for primary schooling. Whereas the primary school NAR is 80 percent, the GAR is 99, indicating that for every 80 pupils age 7-13, there are 19 primary school pupils who are either younger than age 7 or older than age 13. The GAR for males (100) slightly exceeds that for females (98), producing a GPI of 0.98.

Regional differences in Mainland Tanzania in both NAR and GAR are substantial. The primary school NAR ranges from 91 percent in Kilimanjaro and Ruvuma to 66 percent in Tabora. For primary school, the highest GAR (110 percent) is in Pwani and Iringa regions, and the lowest is in Tabora and Dodoma regions (85 percent).

The NAR and GAR are relatively low at the secondary school level. Table 2.5 indicates that only one in four secondary school-age adolescents in Tanzania actually attends secondary school, and one in three youth of any age attends secondary school. While there is a small difference between the NAR for secondary school-age females and males (25 percent and 26 percent, respectively), the secondary school GPI is 0.85, indicating a higher proportion of males than females attends the secondary level (GAR of 34 for males and 29 for females). Secondary school-age youth in urban areas, however, are much more likely than their counterparts in rural areas to attend secondary school (44 percent and 19 percent, respectively).

The most striking difference in the secondary school NAR is across wealth quintiles. The secondary school NAR in the wealthiest households (49 percent) is more than five times that in the poorest households (9 percent).

Table 2.5 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling; and the gender parity index (GPI), according to background characteristics, Tanzania 2010

Background characteristic	Net attendance ratio				Gross attendance ratio			
	Male	Female	Total	Gender Parity Index	Male	Female	Total	Gender Parity Index
	PRIMARY SCHOOL							
Residence								
Urban	89.6	87.1	88.2	0.97	110.6	102.6	106.2	0.93
Rural	75.6	79.6	77.6	1.05	97.8	96.8	97.3	0.99
Region								
Dodoma	63.5	71.7	67.7	1.13	84.6	85.8	85.2	1.01
Arusha	83.4	85.2	84.3	1.02	108.0	101.0	104.7	0.94
Kilimanjaro	89.7	92.9	91.3	1.04	107.7	108.2	108.0	1.00
Tanga	84.4	82.4	83.4	0.98	110.4	97.6	103.9	0.88
Morogoro	80.8	80.0	80.4	0.99	100.2	97.6	99.0	0.97
Pwani	84.9	87.9	86.6	1.04	119.3	102.5	110.3	0.86
Dar es Salaam	91.1	83.3	86.9	0.92	109.5	98.2	103.3	0.90
Lindi	71.3	75.9	73.4	1.06	90.3	100.1	94.8	1.11
Mtwara	80.6	83.4	82.2	1.03	102.1	102.8	102.5	1.01
Ruvuma	91.4	90.7	91.0	0.99	109.4	104.1	106.6	0.95
Iringa	90.8	89.1	89.9	0.98	110.1	110.4	110.3	1.00
Mbeya	82.2	83.3	82.8	1.01	109.7	99.0	103.6	0.90
Singida	75.5	84.1	79.7	1.11	91.4	96.0	93.7	1.05
Tabora	61.8	70.1	65.7	1.13	82.0	87.6	84.6	1.07
Rukwa	75.5	73.7	74.6	0.98	96.3	89.3	92.9	0.93
Kigoma	76.2	79.3	77.7	1.04	101.6	94.3	98.0	0.93
Shinyanga	70.9	76.6	73.7	1.08	97.1	94.0	95.5	0.97
Kagera	73.7	77.8	75.7	1.06	92.5	101.9	97.0	1.10
Mwanza	73.4	76.3	74.8	1.04	94.4	96.8	95.6	1.03
Mara	84.4	89.5	87.1	1.06	110.7	102.8	106.5	0.93
Manyara	79.3	78.3	78.9	0.99	95.0	92.4	93.8	0.97
Unguja North	71.3	89.3	80.7	1.25	99.7	112.6	106.4	1.13
Unguja South	90.3	94.7	92.6	1.05	112.0	107.5	109.7	0.96
Town West	90.5	92.3	91.5	1.02	108.1	101.0	104.4	0.93
Pemba North	78.2	76.1	77.2	0.97	106.1	95.4	101.1	0.90
Pemba South	75.6	82.9	79.1	1.10	98.1	100.7	99.3	1.03
Wealth quintile								
Lowest	67.0	68.0	67.5	1.01	87.9	84.6	86.4	0.96
Second	72.7	75.7	74.3	1.04	93.4	93.1	93.3	1.00
Middle	79.8	85.7	82.7	1.07	104.0	103.5	103.8	1.00
Fourth	85.3	87.2	86.3	1.02	110.0	105.0	107.4	0.95
Highest	91.3	89.5	90.3	0.98	109.5	103.3	106.1	0.94
Total	78.1	81.2	79.7	1.04	100.1	98.0	99.0	0.98

Continued...

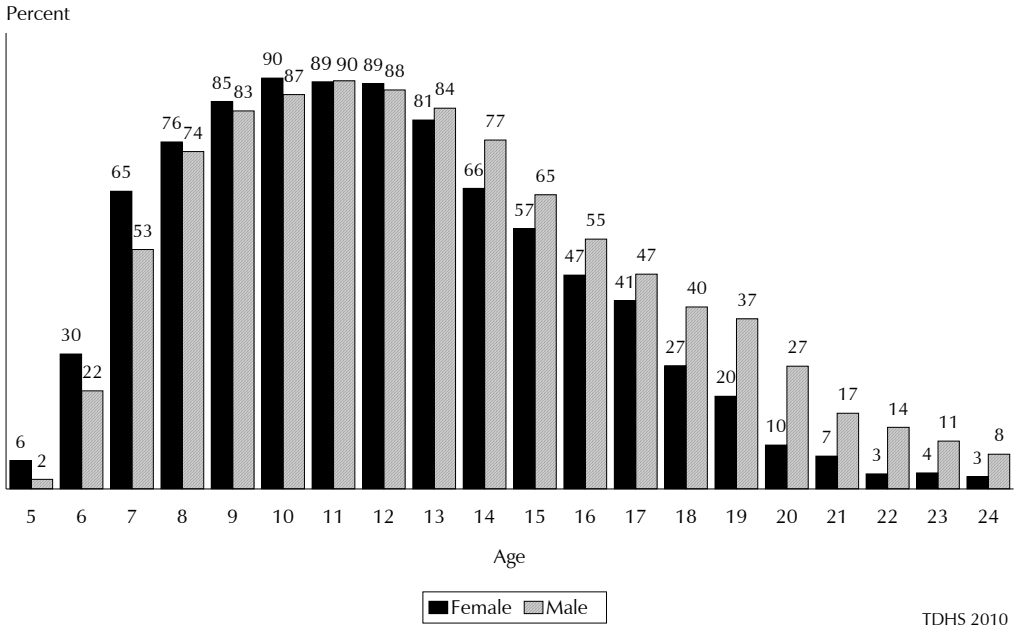
Table 2.5—*Continued*

Background characteristic	Net attendance ratio				Gross attendance ratio			
	Male	Female	Total	Gender Parity Index	Male	Female	Total	Gender Parity Index
	SECONDARY SCHOOL							
Residence								
Urban	44.7	43.2	43.9	0.97	59.9	54.2	56.9	0.91
Rural	20.0	17.7	18.9	0.88	26.4	19.7	23.2	0.75
Region								
Dodoma	10.6	21.6	15.8	2.04	16.6	25.1	20.6	1.51
Arusha	19.1	36.5	27.7	1.91	26.2	38.7	32.4	1.48
Kilimanjaro	45.9	58.0	51.7	1.26	54.1	68.0	60.8	1.26
Tanga	24.4	27.9	26.2	1.14	33.4	32.7	33.0	0.98
Morogoro	21.5	29.1	24.8	1.36	28.2	31.5	29.7	1.12
Pwani	26.1	19.1	23.3	0.73	33.1	24.1	29.4	0.73
Dar es Salaam	45.5	39.1	41.9	0.86	69.4	53.6	60.5	0.77
Lindi	17.1	4.6	11.1	0.27	17.1	4.6	11.1	0.27
Mtwara	27.2	25.6	26.5	0.94	34.0	28.1	31.2	0.83
Ruvuma	29.6	27.8	28.8	0.94	35.9	31.0	33.6	0.86
Iringa	36.5	31.3	34.2	0.86	48.3	38.2	43.9	0.79
Mbeya	18.5	19.7	19.1	1.06	26.0	21.7	23.8	0.83
Singida	20.7	22.9	21.7	1.11	23.2	25.2	24.0	1.09
Tabora	15.2	13.6	14.4	0.89	17.3	15.0	16.1	0.87
Rukwa	17.9	7.8	12.9	0.44	22.3	7.8	15.1	0.35
Kigoma	28.1	15.8	22.2	0.56	35.6	23.0	29.5	0.65
Shinyanga	15.5	12.8	14.1	0.83	20.1	13.3	16.5	0.66
Kagera	23.9	20.7	22.3	0.87	30.0	24.1	27.4	0.80
Mwanza	29.8	20.2	25.0	0.68	39.5	25.0	32.3	0.63
Mara	23.6	16.8	20.2	0.71	40.5	21.2	30.8	0.52
Manyara	31.7	20.6	26.2	0.65	44.4	22.0	33.3	0.49
Unguja North	25.2	43.1	34.6	1.71	37.1	47.2	42.4	1.27
Unguja South	37.2	45.5	41.2	1.23	43.0	50.4	46.6	1.17
Town West	54.0	61.8	57.8	1.14	68.8	83.4	75.9	1.21
Pemba North	35.6	49.7	42.6	1.39	50.1	58.5	54.2	1.17
Pemba South	39.8	46.0	43.0	1.16	55.0	52.8	53.9	0.96
Wealth quintile								
Lowest	10.0	6.9	8.6	0.69	13.3	7.1	10.5	0.54
Second	11.2	8.9	10.1	0.80	13.7	9.9	11.9	0.72
Middle	20.3	18.4	19.4	0.91	25.7	20.4	23.3	0.79
Fourth	34.2	31.8	33.1	0.93	46.2	36.7	41.5	0.79
Highest	52.5	45.8	48.8	0.87	71.4	57.3	63.6	0.80
Total	25.9	24.7	25.3	0.95	34.3	29.2	31.8	0.85

[1] The NAR for primary school is the percentage of the primary-school age (7-13 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school age (14-19 years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent.
[2] The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.
[3] The Gender Parity Index for primary school is the ratio of the primary school NAR(GAR) for females to the NAR(GAR) for males. The Gender Parity Index for secondary school is the ratio of the secondary school NAR(GAR) for females to the NAR(GAR) for males.

Figure 2.2 illustrates age-specific attendance rates (i.e., the percentage of persons of a given age who attend school, regardless of the level attended: primary, secondary, or higher). The figure shows that at age 5-12, the proportion of female youth attending school is higher than male youth, and at age 13 and older the pattern reverses: the proportion of male youth attending school is higher than the proportion of female youth. For example by age 20, 27 percent of males are attending school compared with only 10 percent of females. Attendance rates peak around age 11, with nearly 9 in 10 males and females attending school at that age.

Figure 2.2 Age-Specific Attendance Rates of the De Facto Population Age 5 to 24



2.5 HOUSEHOLD ENVIRONMENT

The physical characteristics of households are important determinants of the health status of household members, especially children. They can also be used as indicators of the socioeconomic status of households. The 2010 TDHS respondents were asked about their household environment, including questions about access to electricity; source of drinking water; type of sanitation facility; type of flooring, walls, and roof; and number of rooms in the dwelling. The results are presented in Table 2.6.

2.5.1 Drinking Water

Increasing access to improved drinking water is one of the Millennium Development Goals that Tanzania along with other nations worldwide has adopted (United Nations General Assembly, 2002). Table 2.6 includes a number of indicators that are useful in monitoring household access to improved drinking water (WHO and UNICEF, 2004). The source of drinking water is an indicator of whether it is suitable for drinking. Sources that are likely to provide water suitable for drinking are identified as improved sources in Table 2.6. These include a piped source within the dwelling, yard, or plot; a public tap, tube well, or borehole; a protected well; and a spring or rainwater.[2] Lack of ready access to a water source may limit the quantity of suitable drinking water that is available to a household. Even if the water is obtained from an improved source, if the water must be fetched from a source that is not immediately accessible to the household, it may be contaminated during transport or storage. Another factor in considering the accessibility to a water source is the fact that the burden of fetching water often falls disproportionately on female members of the household. Finally, home water treatment can be effective in improving the quality of household drinking water.

[2] The categorisation into improved and non-improved categories follows that proposed by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (WHO and UNICEF 2004).

Table 2.6 Household drinking water

Percent distribution of households and de jure population by source, time to collect, and person who usually collects drinking water; and percentage of households and the de jure population by treatment of drinking water, according to residence, Tanzania 2010

	Households					Population				
	Mainland					Mainland				
Characteristic	Urban	Rural	Total	Zanzibar	Total	Urban	Rural	Total	Zanzibar	Total
Source of drinking water										
Improved source	80.0	47.9	56.2	79.5	56.8	81.2	46.0	53.8	79.6	54.5
Piped water into dwelling/ yard/plot	20.1	3.0	7.4	31.1	8.0	20.9	2.8	6.8	33.6	7.6
Shared tap/standpipe	25.4	4.6	10.0	9.4	10.0	24.5	3.9	8.5	8.4	8.5
Public tap/standpipe	12.4	15.4	14.6	33.6	15.1	12.1	13.8	13.4	32.3	13.9
Tube well or borehole	6.2	1.1	2.4	1.0	2.3	5.6	0.9	1.9	1.1	1.9
Protected dug well	9.9	13.9	12.8	4.1	12.6	11.9	15.5	14.7	4.0	14.4
Protected spring	4.9	9.0	8.0	0.2	7.8	5.3	8.2	7.5	0.2	7.3
Rainwater	0.9	1.0	1.0	0.0	0.9	1.0	0.9	0.9	0.0	0.9
Non-improved source	20.0	52.1	43.8	20.5	43.2	18.8	54.0	46.2	20.4	45.5
Unprotected dug well	9.2	26.9	22.3	18.9	22.2	9.7	29.2	24.9	19.0	24.7
Tanker truck/cart with small tank	5.1	1.1	2.1	1.6	2.1	4.4	0.9	1.6	1.3	1.6
Surface water	3.3	24.0	18.7	0.1	18.2	3.3	23.9	19.3	0.1	18.8
Bottled water	2.5	0.0	0.7	0.0	0.7	1.4	0.0	0.3	0.0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Provider of water										
Authority	29.1	13.7	17.6	63.2	18.8	29.1	12.5	16.1	64.3	17.5
CBO/NGO	2.2	3.0	2.8	0.2	2.7	2.4	2.6	2.6	0.3	2.5
Private operator	1.2	1.2	1.2	1.2	1.2	1.4	1.2	1.2	1.3	1.2
No provider	67.4	81.6	78.0	35.3	76.9	67.0	83.4	79.8	34.1	78.4
Missing/don't know	0.1	0.5	0.4	0.0	0.4	0.1	0.4	0.3	0.1	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)										
Water on premises	19.4	4.8	8.5	28.3	9.0	19.7	5.2	8.4	31.1	9.1
Less than 30 minutes	54.5	43.2	46.1	52.8	46.3	52.8	41.3	43.9	50.1	44.0
30 minutes or longer	25.7	51.9	45.2	18.8	44.5	27.0	53.4	47.6	18.7	46.7
Don't know/missing	0.4	0.1	0.2	0.0	0.2	0.5	0.1	0.2	0.0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Water treatment prior to drinking										
Boiled	47.2	24.2	30.1	22.1	29.9	49.4	24.3	29.8	21.2	29.6
Bleach/chlorine	4.8	1.5	2.4	2.1	2.4	5.0	1.6	2.4	2.3	2.4
Strained through cloth	11.6	8.5	9.3	0.3	9.0	13.0	10.0	10.7	0.2	10.4
Ceramic, sand or other filter	0.9	0.4	0.5	0.0	0.5	1.1	0.4	0.6	0.0	0.6
Solar disinfection	0.2	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1
Other	6.6	5.4	5.7	4.2	5.6	6.9	5.2	5.6	4.5	5.5
No treatment	43.5	66.0	60.2	73.1	60.5	40.3	64.6	59.3	73.6	59.7
Percentage using an appropriate treatment method	52.9	30.7	36.5	23.8	36.1	55.9	32.3	37.5	23.1	37.1
Number	2,417	6,959	9,377	246	9,623	10,239	36,097	46,336	1,391	47,728

[1] Because the quality of bottled water is not known, households using bottled water for drinking are classified as using an improved or non-improved source according to their water source for cooking and washing.
[2] Respondents may report multiple treatment methods so the sum of treatment may exceed 100 percent.
[3] Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting.

The source of drinking water is important because waterborne diseases, including diarrhoea and dysentery, are prevalent in Tanzania. Sources of water expected to be relatively free of these diseases are piped water, protected wells, and protected springs. Other sources such as unprotected wells, rivers or streams, and ponds, lakes, or dams are more likely to carry disease-causing agents. Table 2.6 indicates that a majority of Tanzanian households have access to clean water sources (33 percent from piped water, 13 percent from a protected well, and 8 percent from a spring). Households in Zanzibar are more likely than those on the Mainland to have access to clean water. For example, 74 percent of households in Zanzibar use piped water compared with 32 percent in the Mainland.

Respondents to the household interview were also asked who provides drinking water at their main source. The results in Table 2.6 show that two in ten households say that the water is provided by the water authority. Households in Zanzibar are more likely than those in Mainland Tanzania to obtain water from an authority (63 percent compared with 18 percent). Urban households are more likely than rural households to say that their drinking water is provided by the authority.

For 9 percent of households in Mainland and 28 percent in Zanzibar, the source of water is on their premises. Overall, 46 percent of Tanzanian households are less than 30 minutes from a water source and 45 percent take 30 minutes or longer to obtain drinking water.

2.5.2 Household Sanitation Facilities

Ensuring adequate sanitation facilities is another Millennium Development Goal that Tanzania shares with other countries. A household is classified as having an improved toilet if the toilet is used only by members of one household (i.e., it is not shared) and if the facility used by the household separates the waste from human contact (WHO/UNICEF, 2004).

Table 2.7 shows that 13 percent of households in Tanzania use improved toilet facilities that are not shared with other households. In Mainland urban areas, 22 percent of households have improved toilet facilities compared with 9 percent in rural areas. The most common type of non-improved toilet facility is an open pit latrine or one without slabs, used by 71 percent of households in rural areas and 50 percent of households in urban areas. Overall, 14 percent of households have no toilet facility. Most of these households are in rural areas (18 percent).

Table 2.7 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Tanzania 2010

	Households					Population				
	Mainland					Mainland				
Type of toilet/latrine facility	Urban	Rural	Total	Zanzibar	Total	Urban	Rural	Total	Zanzibar	Total
Improved, not shared facility										
Flush/pour flush to piped sewer system	0.9	0.0	0.2	1.8	0.3	1.1	0.0	0.2	2.0	0.3
Flush/pour flush to septic tank	4.2	0.1	1.1	1.5	1.1	5.2	0.1	1.2	1.8	1.2
Flush/pour flush to pit latrine	10.2	1.5	3.8	14.4	4.0	12.9	1.5	4.0	15.5	4.4
Ventilated improved pit (VIP) latrine	1.9	0.6	0.9	4.0	1.0	2.7	0.7	1.1	4.6	1.2
Pit latrine with slab	4.4	6.3	5.8	28.8	6.4	5.1	5.7	5.6	28.3	6.2
Non-improved facility										
Any facility shared with other households	24.4	2.0	7.8	7.4	7.8	19.7	1.3	5.4	5.3	5.4
Flush/pour flush not to sewer/septic tank/pit latrine	2.1	0.1	0.6	2.3	0.7	1.8	0.2	0.5	2.3	0.6
Pit latrine without slab/open pit	49.8	71.4	65.8	14.3	64.5	49.4	70.9	66.1	15.5	64.6
No facility/bush/field	2.0	17.8	13.7	24.9	14.0	1.9	19.5	15.6	24.2	15.9
Other	0.0	0.2	0.1	0.7	0.1	0.0	0.2	0.1	0.5	0.1
Missing	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Shared/not shared										
Not shared	42.7	80.2	70.6	89.9	71.1	52.6	84.1	77.2	92.7	77.6
Shared with 1 household	12.9	12.6	12.7	5.5	12.5	12.1	10.2	10.6	4.4	10.5
Shared with 2-4 households	28.2	6.1	11.8	4.1	11.6	22.7	5.0	8.9	2.5	8.7
Shared with 5+ households	16.1	1.0	4.9	0.5	4.8	12.5	0.6	3.2	0.3	3.1
Missing	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,417	6,959	9,377	246	9,623	10,239	36,097	46,336	1,391	47,728

Seven in ten households in Tanzania do not share their toilet facility, 13 percent share with another household, 12 percent share with two to four households, and 5 percent share the facility with five or more households. Although the likelihood of sharing a sanitation facility with one other household in urban and rural households of Mainland Tanzania is the same, urban households are much more likely than rural households to share the facility with two or more households. For example, 28 percent of urban households share the toilet facility with two to four households compared with 6 percent of rural households.

2.5.3 Housing Characteristics

Table 2.8 presents information on characteristics of the dwellings in which households live. In addition to reflecting the household's socioeconomic situation, these characteristics also show the environmental conditions in which the household lives. For example, use of biomass fuels exposes the household members to indoor pollution, which has a direct bearing on their health and welfare.

Table 2.8 Household characteristics

Percent distribution of households and de jure population by housing characteristics and percentage using solid fuel for cooking; according to residence, Tanzania 2010

	Households					Population				
	Mainland					Mainland				
Housing characteristic	Urban	Rural	Total	Zanzibar	Total	Urban	Rural	Total	Zanzibar	Total
Electricity										
Yes	45.4	3.4	14.2	35.3	14.8	45.4	3.0	13.2	38.0	13.1
No	54.5	96.6	85.7	64.7	85.2	54.4	97.0	86.7	62.0	86.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Flooring material										
Earth, sand, dung	23.1	83.9	68.2	35.6	67.4	24.3	84.2	69.7	33.4	69.9
Cement	70.7	15.2	29.5	61.2	30.3	69.4	14.9	28.1	62.9	28.0
Other	6.1	0.8	2.2	3.2	2.2	6.3	0.9	2.1	3.6	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Main wall material										
Grass	0.1	0.8	0.6	0.4	0.6	0.1	0.7	0.6	0.3	0.6
Poles and mud	7.8	32.7	26.3	34.3	26.5	7.9	31.0	26.1	33.9	26.1
Sun-dried bricks	20.1	31.9	28.8	1.2	28.1	20.8	34.5	30.3	1.0	30.6
Baked bricks	23.2	24.3	24.0	0.4	23.4	24.2	24.4	24.1	0.3	23.7
Wood, timer	0.2	1.9	1.5	0.1	1.4	0.2	1.8	1.5	0.2	1.4
Cement blocks	46.7	3.8	14.8	48.0	15.7	44.8	3.3	13.6	50.0	13.6
Stones	1.2	0.2	0.5	15.4	0.8	1.2	0.1	0.5	14.2	0.8
Other	0.7	4.4	3.5	0.2	3.4	0.8	4.1	3.4	0.1	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Main roof material										
Grass/thatch/mud	6.5	49.0	38.1	23.5	37.7	7.4	48.7	38.9	20.6	39.0
Iron sheets	88.0	50.5	60.1	75.2	60.5	86.2	50.7	59.3	78.5	59.1
Tiles	1.8	0.2	0.6	0.9	0.6	1.9	0.2	0.6	0.5	0.6
Concrete	2.8	0.0	0.7	0.2	0.7	3.2	0.0	0.7	0.2	0.7
Asbestos	0.8	0.2	0.4	0.2	0.4	1.3	0.2	0.4	0.2	0.5
Other	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping										
1 room	40.8	25.7	29.6	18.4	29.3	24.7	16.0	22.3	8.7	17.7
2 rooms	29.1	40.1	37.3	33.2	37.2	30.8	37.6	36.5	28.6	35.9
3 rooms	19.1	21.8	21.1	32.9	21.4	26.7	25.6	24.1	39.2	26.3
4 rooms	7.4	7.9	7.8	11.5	7.9	11.4	11.6	10.1	16.6	11.7
5+ rooms	3.6	4.4	4.2	4.0	4.2	6.3	9.3	6.9	6.8	8.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel										
Electricity	3.8	0.2	1.1	0.4	1.1	3.9	0.1	1.0	0.3	0.9
LPG/natural gas/biogas	0.9	0.0	0.3	0.4	0.3	1.0	0.0	0.2	0.4	0.2
Paraffin/Kerosene	9.4	0.4	2.7	1.1	2.7	5.7	0.1	1.9	0.4	1.3
Charcoal	62.2	6.3	20.7	25.6	20.8	64.6	4.5	19.0	26.0	18.1
Wood	20.7	92.4	73.9	71.0	73.9	23.6	94.8	77.1	72.6	78.9
Straw/shrubs/grass	0.3	0.3	0.3	0.0	0.3	0.5	0.3	0.3	0.0	0.3
No food cooked in household	2.7	0.3	0.9	1.5	0.9	0.7	0.1	0.5	0.3	0.2
Other	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using solid fuel for cooking[1]	83.1	99.0	94.9	96.7	95.0	88.7	99.6	96.3	98.6	97.2
Number of households	2,417	6,959	9,377	246	9,623	10,239	36,097	74,959	1,391	47,728

Note: Total may not sum to 100.0 percent because of missing cases
LPG = Liquid petroleum gas
[1] Includes charcoal, wood, and straw/shrubs/grass.

Only 15 percent of households in Tanzania have electricity, with a very large disparity between urban and rural households in Mainland Tanzania (45 percent and 3 percent, respectively).

Two in three households in Tanzania (67 percent) live in dwellings with floors made of earth, sand, or dung. The next most common type of flooring material is cement, accounting for 30 percent of households. Most urban households in Mainland Tanzania have floors made of cement (71 percent), while in rural areas the main flooring materials are earth, sand, or dung (84 percent).

Good-quality walls ensure that household members are protected from harsh weather conditions and, therefore, exposure to hazardous factors. There are three main types of materials used to construct walls in Tanzania: sun-dried bricks (28 percent), poles and mud (27 percent), and baked bricks (23 percent). Cement blocks are mainly used in the urban areas of Mainland and Zanzibar (47 percent and 48 percent, respectively).

Overall, six in ten households use iron sheets for roofing material. The remaining households mainly use grass, thatch, or mud. In Mainland Tanzania, almost nine in ten urban households use iron sheets, while in rural areas half of households use grass, thatch, or mud and the other half use iron sheets.

The number of rooms used for sleeping is an indicator of the extent of crowding. Overcrowding increases the risk of contracting diseases. Overall, 29 percent of Tanzanian households use one room for sleeping, 37 percent use two rooms, and 34 percent use three or more rooms for sleeping. Almost half of households in Zanzibar have three or more rooms for sleeping.

Cooking and heating with solid fuels can lead to high levels of indoor smoke, a complex mix of health-damaging pollutants that could increase the risk of contracting diseases. Solid fuels are defined as charcoal, wood, straw, shrubs, and grass. In the 2010 TDHS, households were asked about their primary source of fuel for cooking. The results show that 95 percent of households use solid fuel for cooking, with wood being the major source of solid fuel (74 percent of households). There are large differentials in cooking fuel between urban and rural areas in the Mainland. Whereas 92 percent of households in the rural areas use wood for cooking, the main source of cooking fuel in the urban areas is charcoal (62 percent).

2.5.4 Household Possessions

The availability of durable consumer goods is a good indicator of a household's socio-economic status. Moreover, particular goods have specific benefits. For instance, having access to a radio or a television exposes household members to innovative ideas; a refrigerator prolongs the wholesomeness of foods; and a means of transportation allows greater access to many services away from the local area. Table 2.9 shows the availability of selected consumer goods by urban-rural residence.

Nationally, the most commonly owned items are a radio (60 percent of households), a mobile telephone (46 percent), and a bicycle (43 percent). Additionally, 13 percent of households own a television, 6 percent of households own a refrigerator, and 3 percent own a motorcycle or scooter. All of these figures are higher than those recorded in the 2007-08 THMIS (TACAIDS, ZAC, NBS, OCGS, and Macro International Inc, 2008). In the Mainland, urban households are more likely than rural households to own each of the items, with the exception of bicycles, which are owned by 47 percent in rural areas compared with 34 percent in urban areas.

Ownership of agricultural land is common in Tanzania, with about three in four households possessing land. Not surprisingly, rural households in the Mainland are much more likely than urban households to own agricultural land (87 percent and 38 percent, respectively).

Table 2.9 Household durable goods

Percentage of households and de jure population possessing various household effects, means of transportation, and agricultural land, by residence, Tanzania 2010

	Households					Population				
	Mainland					Mainland				
Possession	Urban	Rural	Total	Zanzibar	Total	Urban	Rural	Total	Zanzibar	Total
Radio	74.1	55.1	60.0	71.7	60.3	76.1	58.9	61.7	73.3	63.0
Television	39.9	3.3	12.7	29.0	13.1	41.8	3.3	12.2	31.5	12.4
Mobile telephone	77.5	34.2	45.4	69.8	46.0	79.9	39.3	47.3	74.0	49.0
Non-mobile telephone	3.4	0.2	1.0	3.1	1.1	5.3	0.3	1.3	3.5	1.4
Refrigerator	19.4	0.7	5.5	22.1	6.0	23.0	0.6	5.6	24.4	6.1
Bicycle	33.0	46.6	43.1	51.3	43.3	38.9	55.4	48.5	57.0	51.9
Motorcycle/scooter	4.8	2.2	2.9	9.9	3.1	6.5	3.1	3.5	10.8	4.0
Car/truck	5.3	0.6	1.8	3.9	1.8	7.3	0.8	2.1	4.6	2.3
Ownership of agricultural land	38.6	87.8	75.1	48.2	74.4	41.8	90.3	77.7	50.9	78.7
Number	2,417	6,959	9,377	246	9,623	10,239	36,097	74,959	1,391	47,728

2.6 WEALTH INDEX

The wealth index, which is used as a background characteristic in many tables, has been tested in a number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein et al., 2000). It is an indicator of the level of wealth that is consistent with expenditure and income measures (Rutstein, 1999). The wealth index was constructed using household asset data and principal components analysis. Asset information was collected in the 2010 TDHS Household Questionnaire and covers information on household ownership of a number of consumer items, ranging from a television to a bicycle or car, as well as information on dwelling characteristics, such as source of drinking water, type of sanitation facilities, and type of materials used in dwelling construction.

Each asset was assigned a weight (factor score) generated through principal component analysis, and the resulting asset scores were standardized in relation to a standard normal distribution with a mean of 0 and standard deviation of 1 (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household. Individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles from lowest to highest or one to five.

Table 2.10 shows the distribution of the de jure household population by five wealth levels (quintiles) based on the wealth index and by residence. This distribution indicates the degree to which wealth is evenly (or unevenly) distributed by geographic areas. The distribution of households by quintiles is not exactly 20 percent due to the fact that members of the households, not households themselves, were divided into quintiles.

Wealth is more prevalent in urban areas, with 64 percent of the population falling in the highest wealth quintile. In contrast, the rural population is less wealthy, with 24 percent in the lowest quintile and only 5 percent in the highest quintile. Regions with the highest proportion of the population in the highest quintile are Dar es Salaam and Town West.

Also included in Table 2.10 is the Gini Coefficient, which indicates the level of concentration of wealth, 0 being an equal distribution and 1 a totally unequal distribution. The Gini coefficient is calculated as a ratio of the areas on the Lorenz curve diagram. This ratio is expressed as a percentage, or as the numerical equivalent of that percentage, which is always a number between 0 and 100. The overall Gini Coefficient is 50; 22 in the urban areas and 41 in the rural areas, indicating that urban population is more evenly distributed in terms of wealth than rural population. The lowest Gini-coefficients are found in Dar es Salaam and Town West (11 and 12, respectively) and the highest (56) is found in Shinyanga.

Table 2.10 Wealth quintiles

Percent distribution of the jure population by wealth quintiles, and the Gini coefficient, according to residence and region, Tanzania 2010

Residence/region	Wealth quintile					Total	Number of population	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	3.0	2.4	6.6	24.3	63.6	100.0	10,779	21.5
Rural	23.6	27.1	26.4	18.3	4.6	100.0	36,949	41.3
Mainland/Zanzibar								
Mainland	19.4	21.8	22.2	19.4	17.2	100.0	46,336	50.2
Urban	3.2	2.5	6.9	24.7	62.7	100.0	10,239	22.1
Rural	24.0	27.3	26.5	17.9	4.3	100.0	36,097	41.1
Zanzibar	4.9	10.9	13.0	28.3	42.9	100.0	1,391	33.9
Unguja	2.2	4.7	8.5	28.1	56.5	100.0	860	24.7
Pemba	9.2	20.9	20.3	28.7	21.0	100.0	532	39.9
Zone								
Western	22.0	34.0	23.4	11.1	9.6	100.0	8,440	51.9
Northern	16.7	17.1	19.8	24.3	22.1	100.0	7,259	46.4
Central	36.1	24.9	22.3	12.3	4.4	100.0	4,278	45.6
Southern Highlands	12.3	18.7	28.0	25.9	15.2	100.0	6,506	44.8
Lake	18.5	23.4	25.6	21.4	11.2	100.0	9,046	45.0
Eastern	10.8	9.9	12.5	21.8	45.0	100.0	6,480	37.4
Southern	28.2	22.5	22.2	17.0	10.2	100.0	4,328	44.9
Region								
Dodoma	37.7	25.7	21.0	12.4	3.2	100.0	2,663	44.4
Arusha	23.1	11.0	18.4	27.9	19.7	100.0	1,916	47.3
Kilimanjaro	1.1	8.1	21.9	38.9	30.0	100.0	1,835	33.8
Tanga	15.9	24.8	20.2	14.5	24.6	100.0	2,289	47.1
Morogoro	17.9	14.9	23.4	27.2	16.6	100.0	2,310	43.0
Pwani	21.4	22.4	16.9	23.6	15.6	100.0	1,324	46.0
Dar es Salaam	0.1	0.1	1.6	16.6	81.6	100.0	2,846	10.7
Lindi	40.6	29.7	18.7	7.5	3.6	100.0	883	47.7
Mtwara	35.5	22.2	19.8	10.5	11.9	100.0	1,792	47.2
Ruvuma	13.6	18.8	26.6	29.1	11.9	100.0	1,653	38.6
Iringa	7.6	11.1	30.4	29.1	21.8	100.0	2,091	35.8
Mbeya	7.7	18.7	31.9	27.4	14.3	100.0	2,966	46.1
Singida	33.3	23.5	24.5	12.2	6.4	100.0	1,615	47.7
Tabora	31.0	35.3	17.9	6.1	9.8	100.0	2,239	52.5
Rukwa	28.2	29.7	16.5	18.1	7.4	100.0	1,450	49.8
Kigoma	14.9	24.1	35.2	18.5	7.4	100.0	2,199	40.9
Shinyanga	20.8	38.7	20.0	9.9	10.6	100.0	4,001	55.9
Kagera	15.2	28.5	29.1	19.8	7.4	100.0	2,873	35.2
Mwanza	20.8	22.1	22.2	19.7	15.2	100.0	4,222	50.6
Mara	18.3	18.5	27.9	27.2	8.1	100.0	1,952	42.1
Manyara	31.5	26.0	18.0	15.1	9.4	100.0	1,219	52.8
Unguja North	7.3	13.1	21.6	45.9	12.1	100.0	209	29.5
Unguja South	2.8	9.1	15.3	46.9	26.0	100.0	133	30.0
Town West	0.0	0.2	1.4	16.1	82.4	100.0	517	12.4
Pemba North	13.0	27.1	20.2	24.5	15.1	100.0	263	41.7
Pemba South	5.6	14.7	20.3	32.7	26.7	100.0	269	37.0
Total	19.0	21.5	21.9	19.7	17.9	100.0	47,728	49.8

2.7 BIRTH REGISTRATION

Birth registration is the formal inscription of the facts of the birth into an official log kept at the registrar's office. A birth certificate is issued at the time of registration or later as proof of the registration of the birth. Birth registration is basic to ensuring a child's legal status and, thus, basic rights and access to services (United Nations General Assembly, 2002). Table 2.11 presents the percentage of children under age 5 whose births were officially registered.

Sixteen percent of children in Tanzania under age 5 have been registered with civil authorities, of whom about half (8 percent) received a birth certificate. Birth registration seems to have remained at the same level in the past 5 years; the coverage for children under 2 years is the same as for children age 2-4. However, registration coverage differs by urban-rural residence, regions, and wealth quintile. Forty-four percent of children in urban areas are registered compared with only 10 percent in rural areas. Registration in Zanzibar is much more widespread than in Mainland Tanzania (79 percent and 15 percent, respectively). Across regions in Mainland, the proportion of births that are registered ranges from 59 percent in Dar es Salaam to 5 percent or lower in Lindi, Tabora, Shinyanga, and Manyara.

Table 2.11 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Tanzania 2010

Background characteristic	Percentage of children whose births are registered			Number of children
	Had a birth certificate	Did not have a birth certificate	Total registered	
Age				
<2	6.0	10.4	16.3	3,263
2-4	8.9	7.3	16.2	4,818
Sex				
Male	7.7	8.9	16.6	4,016
Female	7.7	8.2	15.9	4,065
Residence				
Urban	24.7	19.5	44.2	1,542
Rural	3.7	6.0	9.7	6,539
Mainland/Zanzibar				
Mainland	6.2	8.4	14.6	7,874
Urban	22.1	19.8	41.9	1,471
Rural	2.6	5.7	8.3	6,403
Zanzibar	63.0	15.7	78.7	207
Unguja	71.1	17.2	88.4	122
Pemba	51.3	13.5	64.7	85
Zone				
Western	2.5	2.3	4.8	1,690
Northern	9.0	12.6	21.6	1,037
Central	2.0	4.5	6.5	794
Southern Highlands	7.8	8.9	16.7	1,104
Lake	4.4	5.3	9.7	1,695
Eastern	17.3	26.4	43.7	910
Southern	3.5	3.8	7.3	643
Region				
Dodoma	0.6	5.3	5.9	490
Arusha	16.6	8.6	25.3	296
Kilimanjaro	10.3	29.9	40.2	206
Tanga	6.2	11.4	17.6	331
Morogoro	8.1	21.8	29.9	330
Pwani	9.9	28.8	38.7	210
Dar es Salaam	29.6	29.2	58.8	371
Lindi	3.0	1.6	4.6	138
Mtwara	5.2	1.7	6.9	240
Ruvuma	2.2	6.9	9.1	265
Iringa	10.7	12.0	22.7	311
Mbeya	8.7	9.4	18.1	517
Singida	4.3	3.2	7.5	304
Tabora	3.6	1.1	4.7	455
Rukwa	2.9	4.3	7.2	276
Kigoma	2.1	5.5	7.7	409
Shinyanga	2.1	1.3	3.5	825
Kagera	3.8	2.8	6.7	490
Mwanza	5.6	6.0	11.5	805
Mara	2.7	7.0	9.7	400
Manyara	1.3	2.8	4.1	204
Unguja North	55.4	20.6	76.0	33
Unguja South	66.1	21.7	87.9	20
Town West	79.8	14.4	94.3	70
Pemba North	52.1	10.4	62.6	44
Pemba South	50.4	16.7	67.0	41
Wealth quintile				
Lowest	1.0	3.4	4.4	1,720
Second	1.6	4.5	6.0	1,915
Middle	3.0	6.7	9.7	1,843
Fourth	10.3	12.5	22.8	1,536
Highest	34.0	21.8	55.8	1,067
Total	7.7	8.5	16.3	8,081

2.8 HOUSEHOLD FOOD SECURITY

The 2010 TDHS also included several questions to gauge household food security. Questions were asked about the number of meals the household usually takes each day, the number of days in the week preceding the survey in which the household consumed meat, the number of days in the week preceding the survey in which the household consumed fish, and how often the household had problems satisfying food needs in the year before the survey. Results are shown in Table 2.12.

Fifty-seven percent of households usually have at least three meals per day, although a sizeable proportion (41 percent) has only two meals per day. While the national average is similar to that in the Mainland and Zanzibar, in Mainland, urban households are far more likely than those in rural areas to have three or more meals a day (78 percent and 49 percent, respectively).

Table 2.12 Household food security

Percent distribution of households by usual number of meals per day, number of days that meat was consumed, during the last week, number of days that fish was consumed during the last week, and frequency of problems satisfying food needs in the past year according to residence, Tanzania 2010

	Mainland				
Food security characteristic	Urban	Rural	Total	Zanzibar	Total
Usual number of meals per day					
1 meal	2.0	3.1	2.8	2.2	2.8
2 meals	19.6	47.8	40.5	37.8	40.5
3+ meals	78.3	49.0	56.6	60.0	56.7
Total	100.0	100.0	100.0	100.0	100.0
Number of days consumed meat in the past week					
0	32.6	60.3	53.2	79.0	53.8
1	21.1	18.9	19.4	10.0	19.2
2	21.9	12.5	14.9	6.9	14.7
3	12.3	5.6	7.3	2.6	7.2
4	5.2	1.5	2.4	0.8	2.4
5	2.2	0.7	1.1	0.3	1.1
6	0.9	0.1	0.3	0.2	0.3
7	3.9	0.4	1.3	0.2	1.3
Total	100.0	100.0	100.0	100.0	100.0
Number of days consumed fish in the past week					
0	22.6	51.1	43.8	5.7	42.8
1	20.1	14.0	15.6	3.9	15.3
2	19.8	12.9	14.7	7.6	14.5
3	14.9	8.5	10.1	11.1	10.2
4	8.2	4.1	5.1	10.4	5.3
5	6.1	3.0	3.8	11.2	4.0
6	3.5	2.2	2.5	11.7	2.8
7	4.8	4.1	4.3	38.4	5.2
Total	100.0	100.0	100.0	100.0	100.0
Frequency of problems satisfying food needs in past year					
Never	55.5	36.0	41.0	53.6	41.4
Seldom	16.9	19.6	18.9	17.9	18.9
Sometimes	12.7	17.9	16.6	19.0	16.6
Often	14.6	24.1	21.7	9.4	21.4
Always	0.2	2.1	1.6	0.2	1.6
Total	100.0	100.0	100.0	100.0	100.0
Number of households	2,417	6,959	9,377	246	9,623

[1] Note: Totals may not add to 100 because of a small number of missing cases

Meat consumption is not common in Tanzania. More than half of the households interviewed (54 percent) reported that they had consumed no meat in the previous week, 19 percent ate meat once, and 15 percent ate it twice. Only 12 percent of households had meat three or more times in the past week. Consumption of meat varies significantly by urban-rural residence. In Mainland, 60 percent of rural households did not consume meat in the week preceding the survey compared with 33 percent in the urban areas. Households in Zanzibar are less likely than those in the Mainland to eat meat; 79 percent did not consume meat in the week preceding the survey. However, fish is more common in the diet in Zanzibar, with 83 percent of households in Zanzibar consuming fish 3 to 7 times a week compared with only 26 percent of households in Mainland Tanzania.

When respondents were asked how often they had problems in meeting the food needs of the household in the 12 months before the survey, 41 percent reported never having a problem, 21 percent said they often have a problem, and 2 percent reported always having a problem meeting their food needs. In Mainland, urban households are less likely than rural households to report having a problem in securing food. For example, 56 percent of households in urban areas say they never had a problem satisfying the need for food in the past year compared with 36 percent of households in rural areas. Similarly, 24 percent of rural households say they often had a problem compared with 15 percent of urban households.

CHARACTERISTICS OF RESPONDENTS 3

The objective of this chapter is to provide a descriptive summary of the demographic and socioeconomic profile of respondents in the 2010 TDHS. This basic information on the characteristics of the women and men interviewed in the survey is essential to interpret findings presented later in the report and can provide an approximate indication of the representativeness of the survey.

The chapter begins by describing basic background characteristics, including age, marital status, residential characteristics, and educational levels. Next, more detailed information on education, literacy, and exposure to mass media are provided.

3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1 presents the distributions of interviewed women age 15-49 and men age 15-49 by key background characteristics—age, marital status, and residence. Other characteristics presented are the distribution of these populations by zone, region, education level, and wealth.

A total of 10,139 women and 2,527 men were interviewed. For both sexes, the proportion in each age group decreases with increasing age, reflecting, in part, the young age structure of the population of Tanzania. About 6 in 10 women and 5 in 10 men are currently married, and an additional 5 percent of women and 4 percent of men are in 'informal' unions. The proportion never married is 25 percent for women and 41 percent for men. The sex difference can be attributed to the relatively older age of men at first marriage. Twelve percent of women and 7 percent of men are divorced, separated, or widowed.

Twenty-nine percent of women and 27 percent of men live in urban areas. There are no marked differences between sexes by region. Ninety-seven percent of the nationally representative sample is from the Mainland. Nine percent of women and eight percent of men reside in the Dar es Salaam region. A sizable proportion of respondents also live in Mwanza (8 percent of women, 11 percent of men) and Shinyanga (8 percent of women, 7 percent of men) regions. These three regions are the largest in population size, according to the 2002 Population Census.

About half of all respondents have completed primary education but have not gone on to attain higher education. Fifteen percent of women and 18 percent of men have gone to primary school but have not completed it. About one-fifth of respondents (16 percent of women and 23 percent of men) have at least some secondary education. Women are more disadvantaged in terms of educational attainment than men, with about twice as many women as men having no education.

Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Tanzania 2010

Background characteristic	Women			Men		
	Weighted percent	Weighted	Unweighted	Weighted percent	Weighted	Unweighted
Age						
15-19	21.4	2,172	2,221	25.5	645	671
20-24	18.8	1,909	1,860	16.4	414	435
25-29	16.5	1,668	1,613	13.6	343	328
30-34	14.0	1,422	1,389	13.9	352	329
35-39	12.7	1,290	1,249	11.9	300	303
40-44	9.2	938	983	10.7	270	252
45-49	7.3	740	824	8.1	204	209
Marital status						
Never married	25.1	2,540	2,718	41.4	1,046	1,124
Married	58.3	5,909	5,917	48.6	1,229	1,188
Living together	5.0	503	393	3.5	88	69
Divorced/separated	8.8	892	856	5.5	138	125
Widowed	2.9	296	255	1.0	26	21
Residence						
Urban	28.5	2,892	2,591	27.4	693	624
Rural	71.5	7,247	7,548	72.6	1,834	1,903
Mainland/Zanzibar						
Mainland	96.8	9,813	7,743	97.0	2,452	1,964
Urban	27.2	2,758	1,884	26.2	662	466
Rural	69.6	7,055	5,859	70.8	1,790	1,498
Zanzibar	3.2	326	2,396	3.0	75	563
Unguja	2.1	212	1,457	2.1	53	372
Pemba	1.1	115	939	0.9	22	191
Zone						
Western	17.0	1,728	1,355	14.7	371	301
Northern	15.1	1,530	1,347	13.8	350	304
Central	8.0	812	709	8.2	208	187
Southern Highlands	13.5	1,370	1,009	14.0	355	277
Lake	17.8	1,809	1,249	20.6	521	350
Eastern	15.9	1,608	1,087	16.3	413	288
Southern	9.4	955	987	9.3	236	257
Region						
Dodoma	4.9	495	319	4.8	122	80
Arusha	4.0	401	359	3.4	87	82
Kilimanjaro	4.1	411	330	3.6	92	63
Tanga	4.9	498	329	4.9	124	85
Morogoro	4.7	481	335	5.8	146	107
Pwani	2.6	261	308	2.3	59	68
Dar es Salaam	8.5	866	444	8.2	207	113
Lindi	2.0	198	294	1.8	47	73
Mtwara	4.0	407	338	3.4	87	77
Ruvuma	3.5	350	355	4.0	102	107
Iringa	4.8	490	345	5.5	140	96
Mbeya	6.1	623	345	5.7	143	87
Singida	3.1	317	390	3.4	86	107
Tabora	4.4	447	477	4.2	105	116
Rukwa	2.5	257	319	2.8	72	94
Kigoma	4.6	462	363	3.8	96	80
Shinyanga	8.1	819	515	6.7	169	105
Kagera	5.8	590	361	6.4	161	97
Mwanza	8.3	844	471	10.9	276	155
Mara	3.7	376	417	3.3	83	98
Manyara	2.2	220	329	1.9	47	74
Unguja North	0.5	50	475	0.4	11	111
Unguja South	0.3	30	417	0.4	9	124
Town West	1.3	131	565	1.3	33	137
Pemba North	0.5	56	458	0.4	10	82
Pemba South	0.6	59	481	0.5	12	109
Education						
No education	19.1	1,940	1,912	9.5	239	228
Primary incomplete	14.6	1,482	1,529	18.2	460	483
Primary complete	50.0	5,071	4,338	49.4	1,249	1,058
Secondary+	16.2	1,646	2,360	22.9	578	758
Wealth quintile						
Lowest	16.6	1,681	1,608	15.9	401	386
Second	19.2	1,947	1,891	17.7	447	445
Middle	19.7	1,997	1,911	19.4	490	481
Fourth	20.8	2,112	2,295	22.6	572	588
Highest	23.7	2,403	2,434	24.4	618	627
Total 15-49	100.0	10,139	10,139	100.0	2,527	2,527

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

3.2 EDUCATION

3.2.1 Educational Attainment

Education provides people with the knowledge and skills that can lead to a better quality of life. Education correlates with the health of mothers and their children, and with reproductive behaviour. Tables 3.2.1 and 3.2.2 provide an overview of the relationship between the respondents' level of education and other background characteristics.

Fifty percent of women and 49 percent of men have completed primary school only. The proportion for men is slightly lower than in the 2004-05 TDHS (52 percent) (NBS and ORC Macro, 2005). Increasing age is generally associated with lower levels of education, particularly for women. The most disadvantaged are women age 45-49, an age group in which 36 percent have had no education.

Educational differentials are also found by residence. The rural-urban differentials, as expected, show wide variations. Only 8 percent of urban women, compared with 24 percent of rural women, lack education. Three percent of urban men have had no education; this compares with 12 percent of rural men. About one-third (32 percent) of urban women and 42 percent of urban men have attended secondary education compared with 10 percent of women and 16 percent of men in rural areas. The urban-rural gap in education may, in part, reflect the predominantly urban locations of secondary and tertiary learning institutions.

There are significant differentials across regions. Whereas 37 percent of women and 45 percent of men in Dar es Salaam have attended at least some secondary education, only 3 percent of women and 9 percent of men in Lindi have had the same level of education. In Zanzibar, women and men have more education than in other regions; 57 percent of women and 65 percent of men have had some secondary education.

The median years of schooling, indicating the number of years spent in school by half the population, shows no great variation among regions. Differences are found in a few regions, namely Dodoma, Lindi, Tabora, and Pemba North, where high proportions of women have no education. As expected, for both women and men, educational attainment increases with wealth.

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median grade completed, according to background characteristics, Tanzania 2010

Background characteristic	Highest level of schooling				Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Secondary+[2]			
Age							
15-24	13.8	17.0	41.7	27.5	100.0	6.4	4,081
15-19	8.3	20.3	36.9	34.5	100.0	6.5	2,172
20-24	20.0	13.3	47.1	19.5	100.0	6.4	1,909
25-29	20.6	14.3	53.5	11.6	100.0	6.3	1,668
30-34	18.6	12.4	59.7	9.4	100.0	6.3	1,422
35-39	24.8	11.9	56.9	6.5	100.0	6.2	1,290
40-44	19.7	9.8	63.7	6.8	100.0	6.3	938
45-49	35.8	17.2	40.2	6.8	100.0	4.6	740
Residence							
Urban	7.7	9.3	50.8	32.2	100.0	6.7	2,892
Rural	23.7	16.7	49.7	9.9	100.0	6.2	7,247
Mainland/Zanzibar							
Mainland	19.2	14.6	51.3	14.9	100.0	6.3	9,813
Urban	7.8	9.2	52.5	30.5	100.0	6.6	2,758
Rural	23.7	16.7	50.8	8.8	100.0	6.2	7,055
Zanzibar	15.7	15.1	12.6	56.7	100.0	7.7	326
Unguja	10.1	13.7	14.3	61.9	100.0	8.2	212
Pemba	25.9	17.6	9.3	47.1	100.0	6.5	115
Zone							
Western	29.0	17.1	44.5	9.4	100.0	6.1	1,728
Northern	16.0	8.3	57.1	18.6	100.0	6.5	1,530
Central	23.7	16.0	51.0	9.4	100.0	6.2	812
Southern Highlands	16.8	15.3	53.5	14.3	100.0	6.3	1,370
Lake	19.4	20.5	48.2	12.0	100.0	6.2	1,809
Eastern	14.0	9.6	50.7	25.7	100.0	6.5	1,608
Southern	15.2	15.3	57.9	11.6	100.0	6.3	955
Region							
Dodoma	29.5	16.1	44.7	9.7	100.0	6.1	495
Arusha	19.9	6.2	56.8	17.1	100.0	6.4	401
Kilimanjaro	2.8	6.2	63.3	27.6	100.0	6.7	411
Tanga	19.6	11.5	53.1	15.8	100.0	6.4	498
Morogoro	20.1	12.7	53.7	13.6	100.0	6.3	481
Pwani	26.2	12.1	51.5	10.2	100.0	6.2	261
Dar es Salaam	6.9	7.2	48.7	37.2	100.0	6.8	866
Lindi	29.1	21.4	46.3	3.1	100.0	5.9	198
Mtwara	15.5	17.8	54.7	12.0	100.0	6.3	407
Ruvuma	6.9	8.9	68.3	15.9	100.0	6.5	350
Iringa	9.6	15.3	57.2	18.0	100.0	6.4	490
Mbeya	18.7	12.7	53.2	15.5	100.0	6.4	623
Singida	14.5	15.7	60.8	8.9	100.0	6.3	317
Tabora	39.7	13.5	38.4	8.4	100.0	5.2	447
Rukwa	26.3	21.9	47.5	4.3	100.0	6.0	257
Kigoma	21.4	16.2	50.5	11.9	100.0	6.2	462
Shinyanga	27.6	19.5	44.4	8.6	100.0	6.1	819
Kagera	22.7	21.2	44.9	11.2	100.0	6.1	590
Mwanza	20.0	23.6	42.3	14.1	100.0	6.2	844
Mara	12.7	12.3	66.5	8.5	100.0	6.4	376
Manyara	25.3	9.0	54.9	10.9	100.0	6.3	220
Unguja North	26.9	18.4	10.5	44.1	100.0	6.4	50
Unguja South	5.4	18.2	15.1	61.4	100.0	8.0	30
Town West	4.7	10.8	15.6	68.9	100.0	8.5	131
Pemba North	32.5	19.1	6.7	41.7	100.0	5.7	56
Pemba South	19.7	16.3	11.8	52.3	100.0	7.1	59
Wealth quintile							
Lowest	39.4	19.1	38.9	2.6	100.0	3.6	1,681
Second	29.8	19.8	45.9	4.4	100.0	6.0	1,947
Middle	19.3	16.7	55.1	8.9	100.0	6.3	1,997
Fourth	10.8	13.4	58.2	17.6	100.0	6.4	2,112
Highest	3.5	6.5	49.7	40.3	100.0	6.8	2,403
Total	19.1	14.6	50.0	16.2	100.0	6.3	10,139

[1] Completed at least grade 7 at the primary level
[2] Completed grade 6 at the secondary level

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median grade completed, according to background characteristics, Tanzania 2010

Background characteristic	Highest level of schooling				Total	Median years completed	Number of men
	No education	Some primary	Completed primary[1]	Secondary+[2]			
Age							
15-24	6.7	22.6	34.0	36.6	100.0	6.5	1,058
15-19	4.9	26.5	29.5	39.1	100.0	6.5	645
20-24	9.6	16.6	41.1	32.7	100.0	6.6	414
25-29	11.2	18.1	52.6	18.1	100.0	6.4	343
30-34	13.7	16.4	57.2	12.6	100.0	6.4	352
35-39	11.2	12.8	62.9	13.1	100.0	6.4	300
40-44	11.9	14.6	66.7	6.8	100.0	6.4	270
45-49	7.4	11.3	68.1	13.2	100.0	6.5	204
Residence							
Urban	2.9	9.3	45.5	42.3	100.0	6.9	693
Rural	11.9	21.6	50.9	15.6	100.0	6.3	1,834
Mainland/Zanzibar							
Mainland	9.6	18.2	50.6	21.6	100.0	6.4	2,452
Urban	3.0	9.2	47.0	40.8	100.0	6.8	662
Rural	12.0	21.6	51.9	14.5	100.0	6.3	1,790
Zanzibar	5.4	17.6	11.8	65.1	100.0	8.1	75
Unguja	3.0	17.1	12.1	67.8	100.0	8.2	53
Pemba	11.3	18.8	11.1	58.9	100.0	7.5	22
Zone							
Western	9.9	22.9	48.1	19.2	100.0	6.4	371
Northern	8.8	15.1	56.8	19.3	100.0	6.5	350
Central	17.2	17.4	54.1	11.4	100.0	6.3	208
Southern Highlands	5.6	16.9	55.0	22.5	100.0	6.5	355
Lake	13.5	21.2	44.0	21.2	100.0	6.3	521
Eastern	6.5	12.0	49.1	32.4	100.0	6.7	413
Southern	6.2	22.7	52.5	18.6	100.0	6.4	236
Region							
Dodoma	22.9	20.0	45.3	11.8	100.0	6.2	122
Arusha	18.9	11.0	61.2	8.9	100.0	6.4	87
Kilimanjaro	1.7	12.6	50.7	35.0	100.0	6.8	92
Tanga	5.5	21.7	57.2	15.6	100.0	6.4	124
Morogoro	9.4	16.1	53.2	21.3	100.0	6.5	146
Pwani	19.2	20.5	44.2	16.0	100.0	6.2	59
Dar es Salaam	0.8	6.7	47.6	44.9	100.0	7.0	207
Lindi	18.0	30.2	42.6	9.2	100.0	6.0	47
Mtwara	5.2	25.8	45.3	23.7	100.0	6.4	87
Ruvuma	1.6	16.7	63.2	18.5	100.0	6.5	102
Iringa	4.0	15.0	52.8	28.2	100.0	6.6	140
Mbeya	6.1	14.9	59.0	20.0	100.0	6.5	143
Singida	9.0	13.6	66.5	10.9	100.0	6.4	86
Tabora	15.1	28.0	43.0	13.8	100.0	6.2	105
Rukwa	7.8	24.4	51.5	16.3	100.0	6.3	72
Kigoma	0.9	23.3	42.8	33.0	100.0	6.6	96
Shinyanga	11.7	19.4	54.3	14.6	100.0	6.4	169
Kagera	19.4	18.8	41.2	20.6	100.0	6.3	161
Mwanza	14.0	21.7	42.7	21.5	100.0	6.3	276
Mara	0.4	24.4	53.9	21.3	100.0	6.4	83
Manyara	12.5	10.5	59.6	17.4	100.0	6.4	47
Unguja North	10.1	28.9	13.4	47.7	100.0	6.8	11
Unguja South	3.0	12.0	14.0	71.1	100.0	8.1	9
Town West	0.6	14.5	11.2	73.7	100.0	8.6	33
Pemba North	14.0	21.6	11.1	53.3	100.0	7.0	10
Pemba South	9.1	16.5	11.1	63.3	100.0	8.0	12
Wealth quintile							
Lowest	25.6	27.2	39.8	7.4	100.0	5.3	401
Second	15.5	26.1	49.7	8.7	100.0	6.2	447
Middle	5.8	23.5	58.9	11.8	100.0	6.3	490
Fourth	5.9	13.2	55.0	26.0	100.0	6.6	572
Highest	0.8	7.2	42.8	49.2	100.0	7.5	618
Total 15-49	9.5	18.2	49.4	22.9	100.0	6.5	2,527

[1] Completed grade 7 at the primary level
[2] Completed grade 6 at the secondary level

3.2.2 Literacy

The ability to read and write is an important personal asset, which allows women and men increased opportunities in life. Knowing the distribution of the literate population can help program managers, especially those who work in health and family planning, determine how to reach women and men with their messages. In the 2010 TDHS, information on ability to read was collected from each individual who had not received post-primary training or a secondary education. The respondents were asked to read from a card containing the following sentences in Kiswahili and English: 'Parents love their children. Farming is hard work. The child is reading a book. Children work hard at school'.

A person was defined as literate if he or she had post-primary education or training, or secondary or higher education, or was able to read all or part of a sentence in Kiswahili, English, or both.

Tables 3.3.1 and 3.3.2 show that 72 percent of women and 82 percent of men are literate. These rates have not changed much since the 2004-05 TDHS, when 67 percent of the women and 80 percent of the men were literate. The illiteracy rate, expressed as the proportion of those who cannot read at all, is highest (40 percent) among women age 45-49 and among men age 30-39 (21 percent). There is no uniform pattern to the association between age and literacy rate for women and men.

Literacy rates for women and men in urban areas are 88 percent and 94 percent, respectively, compared with 66 percent and 78 percent in rural areas. Women in Kilimanjaro, Unguja South, and Town West have the highest literacy rates in the country (90 percent or higher). For men, the literacy rate is 90 percent or higher in Kilimanjaro, Dar es Salaam, Iringa, Kigoma, Unguja South, and Town West. For women and men, the literacy rates increase directly with wealth.

Table 3.3.1 Literacy: Women

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Tanzania 2010

Background characteristic	Post-primary, secondary school, or higher	No schooling or primary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	Blind/ visually impaired	Missing	Total	Percentage literate	Number
Age									
15-19	35.1	45.1	3.8	15.8	0.0	0.2	100.0	84.0	2,172
20-24	20.5	44.9	6.1	28.3	0.0	0.3	100.0	71.5	1,909
25-29	13.0	51.7	5.5	29.4	0.0	0.4	100.0	70.1	1,668
30-34	10.5	59.0	4.1	26.0	0.1	0.3	100.0	73.6	1,422
35-39	8.1	49.6	5.3	36.5	0.1	0.4	100.0	63.0	1,290
40-44	7.7	56.6	6.4	29.0	0.2	0.1	100.0	70.7	938
45-49	8.6	42.7	8.7	39.7	0.1	0.2	100.0	60.0	740
Residence									
Urban	34.8	48.6	4.1	12.1	0.0	0.4	100.0	87.5	2,892
Rural	10.4	49.9	5.8	33.5	0.1	0.3	100.0	66.1	7,247
Mainland/Zanzibar									
Mainland	16.1	50.5	5.3	27.7	0.1	0.3	100.0	71.9	9,813
Urban	33.2	50.0	4.1	12.3	0.0	0.4	100.0	87.3	2,758
Rural	9.3	50.8	5.8	33.7	0.1	0.3	100.0	65.9	7,055
Zanzibar	56.8	20.0	4.6	18.4	0.0	0.2	100.0	81.4	326
Unguja	62.0	21.7	4.3	11.7	0.0	0.3	100.0	88.0	212
Pemba	47.3	16.8	5.1	30.8	0.0	0.1	100.0	69.1	115
Zone									
Western	10.1	45.2	6.7	37.8	0.0	0.1	100.0	62.0	1,728
Northern	20.4	48.5	8.2	22.4	0.1	0.4	100.0	77.1	1,530
Central	9.7	51.6	5.7	32.7	0.0	0.2	100.0	67.0	812
Southern Highlands	15.2	54.7	3.9	25.2	0.1	0.7	100.0	73.9	1,370
Lake	12.9	51.3	4.3	31.2	0.0	0.3	100.0	68.6	1,809
Eastern	28.1	50.2	2.9	18.6	0.1	0.1	100.0	81.2	1,608
Southern	12.0	55.7	5.9	26.1	0.1	0.1	100.0	73.7	955

Continued

Table 3.3.1—*Continued*

Background characteristic	Post-primary, secondary school. or higher	No schooling or primary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	Blind/ visually impaired	Missing	Total	Percentage literate	Number
Region									
Dodoma	10.0	45.3	6.7	37.8	0.0	0.2	100.0	62.0	495
Arusha	18.8	47.5	8.4	23.7	0.0	1.6	100.0	74.7	401
Kilimanjaro	32.0	53.6	5.0	9.2	0.2	0.0	100.0	90.6	411
Tanga	16.4	47.7	6.0	29.9	0.0	0.0	100.0	70.1	498
Morogoro	15.3	55.1	2.9	26.0	0.3	0.4	100.0	73.3	481
Pwani	10.5	57.5	2.1	29.9	0.0	0.0	100.0	70.1	261
Dar es Salaam	40.4	45.3	3.3	11.0	0.0	0.0	100.0	89.0	866
Lindi	3.5	46.5	11.8	37.6	0.6	0.0	100.0	61.8	198
Mtwara	12.2	53.9	5.8	28.1	0.0	0.0	100.0	71.9	407
Ruvuma	16.6	63.0	2.8	17.3	0.0	0.3	100.0	82.4	350
Iringa	19.9	56.8	6.1	17.2	0.0	0.0	100.0	82.8	490
Mbeya	16.0	53.4	2.8	25.9	0.3	1.6	100.0	72.2	623
Singida	9.3	61.4	4.2	24.9	0.0	0.2	100.0	74.9	317
Tabora	9.4	38.9	7.9	43.8	0.0	0.0	100.0	56.2	447
Rukwa	4.5	53.7	2.6	39.1	0.0	0.0	100.0	60.8	257
Kigoma	12.1	54.9	4.8	27.8	0.0	0.5	100.0	71.7	462
Shinyanga	9.4	43.1	7.2	40.3	0.0	0.0	100.0	59.7	819
Kagera	11.9	54.2	1.6	31.7	0.0	0.7	100.0	67.6	590
Mwanza	15.6	45.6	5.8	32.8	0.0	0.1	100.0	67.0	844
Mara	8.5	59.6	5.3	26.6	0.0	0.0	100.0	73.4	376
Manyara	10.9	42.6	18.6	27.9	0.0	0.0	100.0	72.1	220
Unguja North	44.5	22.1	5.8	27.2	0.0	0.4	100.0	72.4	50
Unguja South	61.4	24.3	4.6	9.5	0.0	0.2	100.0	90.3	30
Town West	68.9	21.0	3.7	6.2	0.0	0.2	100.0	93.6	131
Pemba North	41.7	17.0	5.1	36.2	0.0	0.0	100.0	63.8	56
Pemba South	52.5	16.5	5.1	25.7	0.0	0.2	100.0	74.1	59
Wealth quintile									
Lowest	2.8	38.4	6.9	51.6	0.0	0.2	100.0	48.1	1,681
Second	4.5	47.3	7.0	41.1	0.0	0.1	100.0	58.8	1,947
Middle	9.6	55.1	5.8	29.0	0.2	0.3	100.0	70.5	1,997
Fourth	18.6	58.7	4.7	17.6	0.0	0.4	100.0	82.0	2,112
Highest	43.4	46.5	3.0	6.8	0.0	0.4	100.0	92.8	2,403
Total	17.4	49.6	5.3	27.4	0.1	0.3	100.0	72.2	10,139

[1] Refers to women who attended secondary school or higher and women who can read a whole sentence or part of a sentence

Table 3.3.2 Literacy: Men

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Tanzania 2010

Background characteristic	Post-primary, secondary school, or higher	No schooling or primary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	Missing	Total	Percentage literate	Number
Age								
15-19	39.2	40.0	5.4	15.4	0.0	100.0	84.6	645
20-24	34.8	38.7	7.2	18.8	0.5	100.0	80.7	414
25-29	19.0	57.2	5.8	17.8	0.0	100.0	82.0	343
30-34	15.2	58.1	6.2	20.5	0.0	100.0	79.5	352
35-39	15.1	57.6	6.3	20.6	0.4	100.0	79.0	300
40-44	12.6	60.4	10.1	16.8	0.0	100.0	83.2	270
45-49	17.5	62.8	4.7	13.6	1.4	100.0	85.0	204
Residence								
Urban	46.7	43.8	3.6	5.5	0.4	100.0	94.1	693
Rural	16.7	53.4	7.5	22.2	0.2	100.0	77.6	1,834
Mainland/Zanzibar								
Mainland	23.7	51.7	6.4	17.9	0.3	100.0	81.8	2,452
Urban	45.5	44.8	3.6	5.7	0.4	100.0	93.9	662
Rural	15.6	54.3	7.5	22.4	0.2	100.0	77.4	1,790
Zanzibar	65.5	19.5	5.5	9.3	0.2	100.0	90.5	75
Unguja	68.0	20.6	3.8	7.2	0.3	100.0	92.4	53
Pemba	59.5	16.9	9.6	14.0	0.0	100.0	86.0	22
Zone								
Western	21.4	49.1	10.2	19.4	0.0	100.0	80.6	371
Northern	23.0	54.2	6.7	16.1	0.0	100.0	83.9	350
Central	11.4	62.4	3.0	21.6	1.6	100.0	76.8	208
Southern Highlands	24.3	54.5	7.9	12.7	0.4	100.0	86.7	355
Lake	21.7	47.4	5.0	25.9	0.0	100.0	74.1	521
Eastern	37.0	48.1	5.2	9.3	0.3	100.0	90.4	413
Southern	19.3	54.2	6.3	20.2	0.0	100.0	79.8	236

Continued .

Table 3.3.2 Literacy: Men

Background characteristic	Post-primary, secondary school, or higher	No schooling or primary school: Can read a whole sentence	No schooling or primary school: Can read part of a sentence	No schooling or primary school: Cannot read at all	Missing	Total	Percentage literate	Number
Region								
Dodoma	11.8	57.4	3.6	27.2	0.0	100.0	72.8	122
Arusha	13.5	53.5	7.4	25.6	0.0	100.0	74.4	87
Kilimanjaro	42.7	51.5	1.1	4.7	0.0	100.0	95.3	92
Tanga	16.8	57.8	8.0	17.3	0.0	100.0	82.7	124
Morogoro	24.5	55.1	5.4	14.0	0.9	100.0	85.1	146
Pwani	18.9	55.1	9.1	17.0	0.0	100.0	83.0	59
Dar es Salaam	51.1	41.2	4.0	3.8	0.0	100.0	96.2	207
Lindi	9.2	50.6	6.6	33.5	0.0	100.0	66.5	47
Mtwara	23.7	49.6	4.8	21.9	0.0	100.0	78.1	87
Ruvuma	20.2	59.9	7.4	12.5	0.0	100.0	87.5	102
Iringa	31.4	54.5	5.0	9.2	0.0	100.0	90.8	140
Mbeya	20.8	55.6	9.5	13.0	1.0	100.0	86.0	143
Singida	10.9	69.5	2.1	13.7	3.9	100.0	82.4	86
Tabora	15.6	55.8	6.2	22.4	0.0	100.0	77.6	105
Rukwa	17.4	52.2	10.5	19.0	0.0	100.0	80.1	72
Kigoma	33.0	46.2	13.4	7.4	0.0	100.0	92.6	96
Shinyanga	18.3	46.5	10.8	24.3	0.0	100.0	75.7	169
Kagera	20.6	42.0	6.5	30.9	0.0	100.0	69.1	161
Mwanza	22.3	45.5	4.7	27.5	0.0	100.0	72.5	276
Mara	22.3	64.2	3.1	10.5	0.0	100.0	89.5	83
Manyara	18.5	51.4	12.7	17.4	0.0	100.0	82.6	47
Unguja North	48.9	22.3	6.7	21.3	0.9	100.0	77.8	11
Unguja South	71.1	22.1	1.6	4.5	0.7	100.0	94.7	9
Town West	73.7	19.6	3.5	3.2	0.0	100.0	96.8	33
Pemba North	54.6	13.9	14.3	17.2	0.0	100.0	82.8	10
Pemba South	63.3	19.2	5.9	11.5	0.0	100.0	88.5	12
Wealth quintile								
Lowest	7.4	43.9	9.7	38.9	0.0	100.0	60.9	401
Second	9.2	52.8	10.9	27.1	0.0	100.0	72.9	447
Middle	12.0	64.8	6.3	16.4	0.5	100.0	83.1	490
Fourth	28.1	54.4	5.3	11.8	0.5	100.0	87.7	572
Highest	55.0	39.3	2.2	3.3	0.2	100.0	96.5	618
Total 15-49	24.9	50.8	6.4	17.6	0.2	100.0	82.1	2,527

[1] Refers to men who attended secondary school or higher and men who can read a whole sentence or part of a sentence

3.3 ACCESS TO MASS MEDIA

The 2010 TDHS collected information on the exposure of respondents to various common print and electronic media. Respondents were asked how often they read a newspaper, listen to the radio, or watch television in a week. This information helps determine the media channels to use in disseminating health information to targeted audiences.

Findings of the survey, given in Tables 3.4.1 and 3.4.2, indicate that 9 percent of women and 20 percent of men are exposed to all three media types. These figures indicate that there have been no significant changes in mass media exposure over the last five years since the 2004-05 TDHS showed that 9 percent of women and 16 percent of men had weekly exposure to the three types of media. On the other hand, the 2010 TDHS shows that 36 percent of women and 19 percent of men are not exposed to any type of media.

Fifty-eight percent of women and 77 percent of men listen to the radio, the most common type of mass media in Tanzania, at least once a week. One-fifth (19 percent) of women read a newspaper, and 24 percent watch television once a week. The corresponding rates for men are 30 and 40 percent, respectively. As expected, women and men living in urban areas are more likely than those living in rural areas to be exposed to mass media. Almost a quarter (23 percent) of urban women are exposed to all forms of media as are 44 percent of urban men. The corresponding proportions for rural dwellers are 3 percent for women and 11 percent for men. The most popular form of media for urban respondents is the radio: 73 percent of women and 86 percent of men listen to the radio at least once a week. Newspapers are the least popular media. Geographically, exposure to all forms of media is highest in the Eastern zone. There is a positive relationship between exposure to mass media and the respondent's level of education and wealth.

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Tanzania 2010

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	All three media at least once a week	No media at least once a week	Number
Age						
15-19	26.3	31.8	60.3	12.4	29.9	2,172
20-24	19.0	28.4	58.7	9.6	33.1	1,909
25-29	15.2	22.2	56.8	6.7	37.2	1,668
30-34	19.4	22.0	59.6	8.1	35.0	1,422
35-39	13.2	15.5	54.0	5.6	43.0	1,290
40-44	17.0	18.0	57.0	8.4	37.6	938
45-49	14.8	14.0	50.4	5.5	46.1	740
Residence						
Urban	34.4	57.6	72.7	22.5	14.7	2,892
Rural	12.5	10.0	51.5	3.0	44.5	7,247
Mainland/Zanzibar						
Mainland	18.9	23.1	57.1	8.6	36.4	9,813
Urban	35.0	57.4	72.6	22.7	14.7	2,758
Rural	12.6	9.7	51.1	3.0	44.9	7,055
Zanzibar	15.0	37.2	69.7	8.9	22.7	326
Unguja	16.8	46.0	76.4	11.9	16.8	212
Pemba	11.5	21.0	57.4	3.5	33.8	115
Zone						
Western	10.4	16.8	53.4	3.2	40.3	1,728
Northern	15.7	25.8	59.4	8.3	34.8	1,530
Central	15.1	6.7	48.9	3.4	47.2	812
Southern Highlands	25.9	21.8	63.7	10.9	30.1	1,370
Lake	11.7	16.3	47.1	4.3	47.6	1,809
Eastern	36.9	50.1	72.4	22.6	16.2	1,608
Southern	15.8	13.5	51.2	4.3	44.7	955
Region						
Dodoma	11.6	4.9	42.9	1.8	53.8	495
Arusha	21.4	25.2	59.0	10.3	35.7	401
Kilimanjaro	17.8	33.8	72.8	10.2	18.8	411
Tanga	11.8	26.8	55.3	7.3	39.2	498
Morogoro	27.8	25.2	68.1	12.9	27.0	481
Pwani	23.0	23.2	75.4	11.3	22.4	261
Dar es Salaam	46.1	72.0	73.9	31.4	8.4	866
Lindi	15.9	8.5	49.6	3.8	42.9	198
Mtwara	20.3	13.3	48.3	4.4	46.8	407
Ruvuma	10.7	16.5	55.5	4.4	43.1	350
Iringa	13.3	19.7	66.3	6.5	32.0	490
Mbeya	35.7	28.5	66.1	17.0	25.4	623
Singida	20.6	9.5	58.3	5.9	37.0	317
Tabora	8.8	17.3	51.2	2.8	44.2	447
Rukwa	26.1	9.6	52.9	4.3	37.9	257
Kigoma	17.0	18.4	50.9	4.3	37.6	462
Shinyanga	7.5	15.6	55.9	2.8	39.6	819
Kagera	10.4	19.3	57.8	3.6	35.5	590
Mwanza	13.7	16.9	41.1	5.7	54.4	844
Mara	9.6	10.5	43.5	2.3	51.6	376
Manyara	10.1	9.1	44.1	3.0	53.5	220
Unguja North	5.1	11.2	68.1	1.9	30.0	50
Unguja South	17.4	33.1	89.6	5.6	8.6	30
Town West	21.3	62.4	76.6	17.2	13.6	131
Pemba North	6.8	13.6	53.0	1.6	41.4	56
Pemba South	15.9	28.1	61.5	5.3	26.6	59
Education						
No education	0.6	5.6	35.6	0.1	62.3	1,940
Primary incomplete	10.6	12.0	50.3	2.6	43.8	1,482
Primary complete	20.6	23.1	62.1	7.8	31.3	5,071
Secondary+	42.1	56.5	75.9	26.5	12.3	1,646
Wealth quintile						
Lowest	5.8	3.1	27.1	0.5	69.3	1,681
Second	8.2	4.1	42.9	0.8	53.8	1,947
Middle	14.3	9.0	56.7	3.1	39.3	1,997
Fourth	21.4	17.0	70.1	6.4	23.6	2,112
Highest	37.8	71.4	80.2	27.0	6.4	2,403
Total	18.8	23.6	57.5	8.6	36.0	10,139

Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Tanzania 2010

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media at least once a week	No media at least once a week	Number
Age						
15-19	26.3	38.8	72.2	16.1	21.2	645
20-24	29.7	45.9	77.6	20.7	17.2	414
25-29	34.2	40.7	75.7	23.8	19.1	343
30-34	30.9	41.8	81.0	20.1	15.0	352
35-39	31.6	39.2	76.4	20.8	18.9	300
40-44	27.1	29.9	76.7	16.2	20.3	270
45-49	34.3	36.2	81.2	23.9	18.0	204
Residence						
Urban	55.0	74.9	85.9	43.6	5.2	693
Rural	20.5	26.1	72.9	10.6	23.9	1,834
Mainland/Zanzibar						
Mainland	29.4	38.7	76.3	19.0	19.0	2,452
Urban	54.2	74.5	85.6	42.8	5.4	662
Rural	20.2	25.4	72.8	10.3	24.1	1,790
Zanzibar	48.2	66.5	84.0	40.4	9.7	75
Unguja	59.7	77.9	93.9	53.1	2.2	53
Pemba	20.8	39.3	60.5	10.0	27.4	22
Zone						
Western	20.4	32.3	66.9	13.6	28.9	371
Northern	31.4	44.4	69.9	22.0	25.0	350
Central	21.1	20.9	68.8	8.4	28.0	208
Southern Highlands	32.6	45.2	77.1	21.6	15.5	355
Lake	13.1	27.5	81.2	7.7	16.7	521
Eastern	53.9	61.1	85.7	39.8	7.3	413
Southern	35.9	31.6	78.3	17.2	17.8	236
Region						
Dodoma	21.3	14.5	59.1	5.8	38.5	122
Arusha	15.5	23.9	47.4	5.4	45.1	87
Kilimanjaro	43.5	67.7	83.6	37.6	12.4	92
Tanga	40.9	52.1	80.9	27.9	13.1	124
Morogoro	38.6	37.8	82.7	25.6	13.2	146
Pwani	36.1	40.6	86.2	18.7	9.0	59
Dar es Salaam	69.8	83.3	87.7	55.9	2.6	207
Lindi	21.3	25.5	67.7	7.8	24.2	47
Mtwara	24.4	26.5	69.3	9.8	25.3	87
Ruvuma	52.4	38.8	90.8	27.9	8.5	102
Iringa	43.0	57.1	90.9	33.8	6.7	140
Mbeya	26.6	42.0	66.8	14.2	19.8	143
Singida	20.8	29.9	82.7	12.3	13.1	86
Tabora	21.9	34.1	70.6	15.0	28.5	105
Rukwa	24.4	28.5	70.5	12.4	24.2	72
Kigoma	40.4	55.2	79.0	23.2	11.5	96
Shinyanga	8.2	18.1	57.7	7.4	39.0	169
Kagera	20.4	39.0	80.4	9.4	15.9	161
Mwanza	10.5	23.7	79.4	8.6	18.8	276
Mara	7.8	18.0	88.5	1.3	11.5	83
Manyara	12.6	16.8	55.8	7.0	43.3	47
Unguja North	32.9	61.9	92.7	26.6	1.8	11
Unguja South	37.4	62.0	89.9	31.3	5.0	9
Town West	74.8	87.7	95.3	68.1	1.6	33
Pemba North	12.6	24.2	58.0	3.2	34.5	10
Pemba South	27.2	51.2	62.5	15.4	21.7	12
Education						
No education	1.1	13.9	48.6	0.9	48.7	239
Primary incomplete	13.0	27.0	66.8	7.1	28.5	460
Primary complete	30.5	36.2	80.1	18.0	15.5	1,249
Secondary+	54.2	67.1	88.0	41.0	5.6	578
Wealth quintile						
Lowest	7.3	13.4	49.6	3.7	46.3	401
Second	14.2	14.8	64.9	3.1	33.2	447
Middle	22.5	26.4	83.8	11.1	12.4	490
Fourth	32.6	41.7	84.1	18.0	10.6	572
Highest	59.4	82.6	89.5	50.3	3.0	618
Total 15-49	29.9	39.5	76.5	19.7	18.8	2,527

3.4 EMPLOYMENT

3.4.1 Employment Status

Like education, employment can also be a source of empowerment for both women and men. It may be particularly empowering for women if it puts them in control of income. Respondents were asked a number of questions to elicit their employment status at the time of the survey, the continuity of their employment in the 12 months preceding the survey, and, if employed, details about their employment.

Tables 3.5.1 and 3.5.2 present information relating to the employment status of women and men. A person is classified as employed if she or he is currently working or has worked at any time during the 12-month period preceding the survey. Seventy-eight percent of women are currently employed and 3 percent worked in the 12 months preceding the survey, putting the level of employment among women at 80 percent. Among men, 84 percent are currently employed, and 1 percent worked in the last 12 months, resulting in a level of employment of 85 percent.

For both sexes, the proportion employed is lowest at age 15-19. The proportion increases gradually with age. The low participation rate at young ages is expected because part of the labour force at those ages consists of students at secondary and higher learning institutions, who therefore are not available for work. Teenage boys are slightly more likely to be working than teenage girls. This pattern was the reverse in the 2004-05 TDHS, when teenage girls were much more likely than teenage boys to be working.

Women and men who are divorced, separated, or widowed are more likely to be currently employed (90 and 98 percent, respectively) than never married women and men (51 and 63 percent, respectively). Employment varies by residence; rural respondents are more likely than those in the urban areas to be employed. For example, 85 percent of women in the rural areas were employed in the 12 months preceding the survey compared with 69 percent in the urban areas. Women and men with the most education and from the wealthiest households are the least likely to be employed.

Figure 3.1 is a summary of data in Tables 3.5.1 and 3.5.2. One in five women (20 percent) and 15 percent of men were not employed during the 12 months preceding the survey. In the 2004-05 TDHS this rate was 17 percent for both women and men.

Table 3.5.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Tanzania 2010

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of women
Age						
15-19	48.7	3.2	48.1	0.0	100.0	2,172
20-24	77.4	3.8	18.7	0.1	100.0	1,909
25-29	83.6	2.7	13.8	0.0	100.0	1,668
30-34	87.6	2.5	9.9	0.0	100.0	1,422
35-39	90.5	1.5	8.0	0.0	100.0	1,290
40-44	89.9	1.7	8.4	0.0	100.0	938
45-49	92.2	1.7	6.1	0.0	100.0	740
Marital status						
Never married	50.9	2.9	46.2	0.1	100.0	2,540
Married or living together	86.0	2.7	11.4	0.0	100.0	6,412
Divorced/separated/widowed	89.7	2.2	8.1	0.0	100.0	1,188
Number of living children						
0	52.4	3.0	44.6	0.1	100.0	2,665
1-2	82.4	3.4	14.2	0.0	100.0	3,080
3-4	88.4	2.1	9.5	0.0	100.0	2,346
5+	90.9	1.7	7.3	0.0	100.0	2,048
Residence						
Urban	66.2	2.9	30.8	0.1	100.0	2,892
Rural	82.2	2.6	15.3	0.0	100.0	7,247
Mainland/Zanzibar						
Mainland	78.3	2.7	19.0	0.0	100.0	9,813
Urban	66.9	3.0	30.0	0.1	100.0	2,758
Rural	82.7	2.6	14.7	0.0	100.0	7,055
Zanzibar	56.8	1.7	41.5	0.0	100.0	326
Unguja	60.7	2.6	36.7	0.0	100.0	212
Pemba	49.5	0.2	50.3	0.0	100.0	115
Zone						
Western	84.6	4.0	11.4	0.0	100.0	1,728
Northern	56.1	2.2	41.6	0.0	100.0	1,530
Central	93.9	2.3	3.9	0.0	100.0	812
Southern Highlands	85.2	1.1	13.5	0.1	100.0	1,370
Lake	82.8	3.5	13.7	0.0	100.0	1,809
Eastern	73.7	2.6	23.7	0.0	100.0	1,608
Southern	78.4	2.4	19.2	0.0	100.0	955
Region						
Dodoma	94.7	2.3	3.0	0.0	100.0	495
Arusha	37.9	1.8	60.2	0.1	100.0	401
Kilimanjaro	71.6	2.3	26.0	0.0	100.0	411
Tanga	70.9	3.0	26.0	0.0	100.0	498
Morogoro	82.0	2.9	15.1	0.0	100.0	481
Pwani	77.6	2.4	20.1	0.0	100.0	261
Dar es Salaam	68.0	2.5	29.5	0.0	100.0	866
Lindi	82.9	1.7	15.4	0.0	100.0	198
Mtwara	78.4	0.8	20.8	0.0	100.0	407
Ruvuma	75.8	4.6	19.6	0.0	100.0	350
Iringa	83.3	2.6	14.1	0.0	100.0	490
Mbeya	85.6	0.0	14.1	0.2	100.0	623
Singida	92.5	2.2	5.3	0.0	100.0	317
Tabora	89.3	2.7	8.0	0.0	100.0	447
Rukwa	88.0	1.0	11.0	0.0	100.0	257
Kigoma	74.5	7.6	18.0	0.0	100.0	462
Shinyanga	87.7	2.6	9.6	0.0	100.0	819
Kagera	78.2	5.6	16.1	0.0	100.0	590
Mwanza	82.3	2.3	15.4	0.0	100.0	844
Mara	91.3	2.8	5.9	0.0	100.0	376
Manyara	26.5	1.1	72.3	0.0	100.0	220
Unguja North	66.3	4.6	29.1	0.0	100.0	50
Unguja South	78.8	2.1	19.1	0.0	100.0	30
Town West	54.4	1.9	43.7	0.0	100.0	131
Pemba North	50.3	0.2	49.5	0.0	100.0	56
Pemba South	48.7	0.2	51.1	0.0	100.0	59
Education						
No education	86.5	2.3	11.2	0.0	100.0	1,940
Primary incomplete	76.5	2.5	21.0	0.0	100.0	1,482
Primary complete	84.0	3.0	13.0	0.0	100.0	5,071
Secondary+	48.3	2.3	49.3	0.1	100.0	1,646
Wealth quintile						
Lowest	85.4	1.9	12.7	0.0	100.0	1,681
Second	85.5	2.7	11.9	0.0	100.0	1,947
Middle	81.6	2.8	15.5	0.0	100.0	1,997
Fourth	74.9	2.6	22.5	0.0	100.0	2,112
Highest	64.8	3.1	32.0	0.1	100.0	2,403
Total	77.6	2.7	19.7	0.0	100.0	10,139

[1] *Currently employed* is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

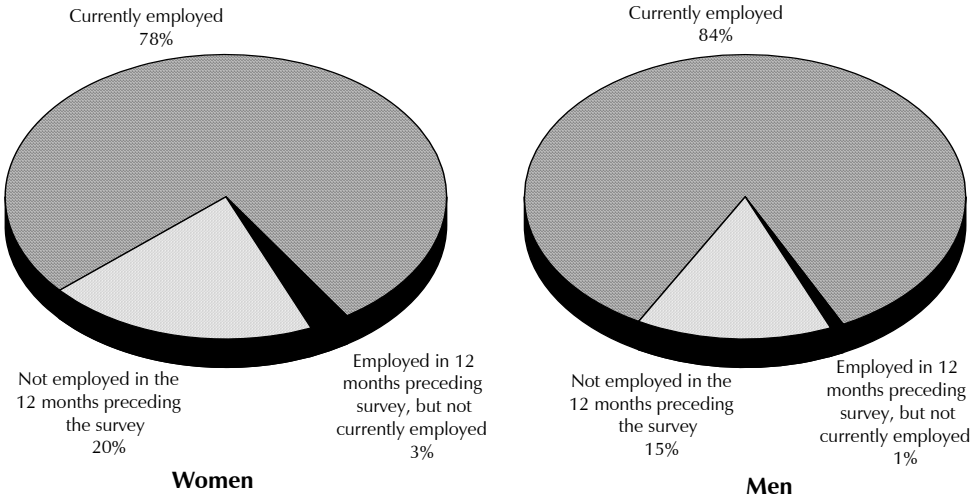
Table 3.5.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Tanzania 2010

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Total	Number of men
Age					
15-19	52.5	3.0	44.5	100.0	645
20-24	80.6	2.5	16.9	100.0	414
25-29	97.0	0.9	2.1	100.0	343
30-34	99.7	0.0	0.3	100.0	352
35-39	98.9	0.0	1.0	100.0	300
40-44	98.1	1.1	0.8	100.0	270
45-49	100.0	0.0	0.0	100.0	204
Marital status					
Never married	62.8	2.8	34.5	100.0	1,046
Married or living together	99.1	0.5	0.5	100.0	1,317
Divorced/separated/widowed	97.7	0.4	1.9	100.0	164
Number of living children					
0	65.4	2.7	31.9	100.0	1,146
1-2	99.4	0.4	0.2	100.0	556
3-4	99.0	0.7	0.3	100.0	429
5+	99.5	0.0	0.5	100.0	396
Residence					
Urban	78.9	1.3	19.8	100.0	693
Rural	85.9	1.5	12.7	100.0	1,834
Mainland/Zanzibar					
Mainland	84.3	1.3	14.4	100.0	2,452
Urban	79.3	1.0	19.6	100.0	662
Rural	86.1	1.4	12.5	100.0	1,790
Zanzibar	73.0	4.8	22.2	100.0	75
Unguja	76.6	6.3	17.2	100.0	53
Pemba	64.6	1.2	34.1	100.0	22
Zone					
Western	85.6	0.5	13.9	100.0	371
Northern	78.2	2.2	19.6	100.0	350
Central	99.0	1.0	0.0	100.0	208
Southern Highlands	87.7	0.7	11.6	100.0	355
Lake	78.2	0.7	21.1	100.0	521
Eastern	84.0	0.6	15.4	100.0	413
Southern	87.1	5.1	7.9	100.0	236
Region					
Dodoma	98.9	1.1	0.0	100.0	122
Arusha	80.6	3.3	16.1	100.0	87
Kilimanjaro	71.5	1.0	27.5	100.0	92
Tanga	82.0	3.1	14.9	100.0	124
Morogoro	87.4	0.0	12.6	100.0	146
Pwani	81.3	0.0	18.7	100.0	59
Dar es Salaam	82.4	1.2	16.4	100.0	207
Lindi	90.4	4.5	5.1	100.0	47
Mtwara	80.4	3.7	15.9	100.0	87
Ruvuma	91.2	6.5	2.3	100.0	102
Iringa	93.3	1.2	5.5	100.0	140
Mbeya	83.6	0.0	16.4	100.0	143
Singida	99.1	0.9	0.0	100.0	86
Tabora	87.2	0.0	12.8	100.0	105
Rukwa	85.0	1.0	14.0	100.0	72
Kigoma	82.3	1.9	15.8	100.0	96
Shinyanga	86.5	0.0	13.5	100.0	169
Kagera	78.3	2.4	19.4	100.0	161
Mwanza	79.4	0.0	20.6	100.0	276
Mara	74.0	0.0	26.0	100.0	83
Manyara	77.0	0.0	23.0	100.0	47
Unguja North	77.1	4.5	18.4	100.0	11
Unguja South	93.4	4.2	2.5	100.0	9
Town West	71.8	7.4	20.8	100.0	33
Pemba North	52.3	1.1	46.7	100.0	10
Pemba South	74.4	1.4	24.2	100.0	12
Education					
No education	95.5	1.5	2.9	100.0	239
Primary incomplete	81.2	1.7	17.1	100.0	460
Primary complete	96.2	0.7	3.1	100.0	1,249
Secondary+	54.8	2.7	42.5	100.0	578
Wealth quintile					
Lowest	88.8	1.4	9.8	100.0	401
Second	88.2	1.7	10.0	100.0	447
Middle	85.8	1.4	12.8	100.0	490
Fourth	79.8	1.2	19.0	100.0	572
Highest	80.1	1.4	18.5	100.0	618
Total 15-49	83.9	1.4	14.6	100.0	2,527

[1] Currently employed is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Figure 3.1 Employment Status of Women and Men



Note: Totals may not add to 100 percent because of rounding.

TDHS 2010

3.4.2 Occupation

Respondents who are currently employed or who were employed during the year preceding the survey were asked to state their principal occupation. Tables 3.6.1 and 3.6.2 show the findings for women and men, respectively.

Tanzania, like many developing countries, is an agrarian economy. The agricultural sector remains the main employer, with 69 percent of women and 62 percent of men engaged in agricultural occupations. These figures are lower than those in the 2004-05 TDHS, when 78 percent of women and 71 percent of men were employed in agricultural occupations. Unskilled manual labour is an emerging sector, with 17 percent of women and 13 percent of men employed in this sector. Professional, technical, and managerial occupations engage only 3 percent of women and 5 percent of men.

Analysis by age suggests little association with occupational categories, with the exception of the professional, technical, and managerial occupations, the proportions of which generally increase with age. As expected, those women and men with at least some secondary education are most likely to be employed in a professional, technical, or managerial job. Women in the wealthiest quintile are most likely to be engaged in an unskilled manual occupation (38 percent), while men in the highest quintile are most likely to have a skilled manual occupation (30 percent).

Residence has a close association with the type of occupation. The majority of rural women and men are engaged in agriculture, while urban dwellers are mostly found in skilled and unskilled occupations. Residents of Zanzibar have more varied occupations than those who live in the Mainland. Zanzibar respondents are more likely than those in the Mainland to be employed in professional, technical, and managerial occupations. In Zanzibar, 8 percent of women and men work as professionals, technical workers, or managers compared with 2 percent of women and 4 percent of men in the Mainland.

Table 3.6.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Tanzania 2010

Background characteristic	Profes-sional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agri-culture	Missing	Total	Number of women
Age										
15-19	0.8	0.0	2.6	6.2	10.1	5.2	73.4	1.8	100.0	1,127
20-24	1.7	0.3	3.2	7.8	17.8	4.7	64.4	0.1	100.0	1,550
25-29	3.2	0.8	3.6	6.3	17.3	2.7	66.1	0.1	100.0	1,438
30-34	4.0	0.5	4.9	5.2	20.3	2.9	61.9	0.2	100.0	1,282
35-39	2.5	0.4	3.5	2.3	14.9	1.7	74.7	0.1	100.0	1,186
40-44	1.6	0.5	4.1	2.9	20.7	1.6	68.4	0.3	100.0	859
45-49	3.3	1.0	1.6	1.6	13.8	2.0	76.6	0.0	100.0	695
Marital status										
Never married	4.4	0.6	3.7	9.5	17.1	8.6	54.3	1.7	100.0	1,365
Married or living together	2.2	0.4	3.4	4.2	15.2	1.5	73.1	0.1	100.0	5,681
Divorced/separated/widowed	1.4	0.8	3.4	4.1	23.0	4.8	62.3	0.2	100.0	1,092
Number of living children										
0	3.7	0.8	3.2	9.7	15.1	7.0	59.0	1.6	100.0	1,476
1-2	3.4	0.8	4.9	6.8	20.5	3.9	59.6	0.2	100.0	2,642
3-4	2.0	0.1	3.6	2.6	17.1	1.4	73.1	0.1	100.0	2,122
5+	0.7	0.2	1.6	1.6	11.7	0.9	83.2	0.0	100.0	1,897
Residence										
Urban	6.9	1.8	8.8	12.8	41.0	9.2	19.0	0.5	100.0	1,998
Rural	1.0	0.0	1.7	2.5	8.6	1.1	84.6	0.3	100.0	6,140
Mainland/Zanzibar										
Mainland	2.3	0.5	3.4	4.8	16.1	3.1	69.4	0.4	100.0	7,947
Urban	6.7	1.8	8.7	12.8	40.7	9.2	19.5	0.6	100.0	1,927
Rural	0.9	0.0	1.7	2.3	8.2	1.1	85.3	0.3	100.0	6,020
Zanzibar	7.7	1.0	5.6	13.8	35.7	4.2	31.9	0.2	100.0	191
Unguja	8.6	1.0	6.9	15.3	44.6	5.3	18.2	0.0	100.0	134
Pemba	5.3	1.0	2.5	10.3	14.8	1.5	64.1	0.4	100.0	57
Zone										
Western	0.9	0.0	2.4	3.9	8.4	0.5	83.5	0.5	100.0	1,530
Northern	3.9	0.6	7.7	7.2	35.7	7.5	37.1	0.3	100.0	893
Central	0.9	0.4	1.2	1.0	5.4	1.1	89.1	0.9	100.0	780
Southern Highlands	2.2	0.0	3.2	5.3	14.0	2.2	72.4	0.7	100.0	1,183
Lake	1.7	0.5	1.9	4.9	8.8	1.4	80.8	0.0	100.0	1,562
Eastern	5.0	1.7	6.4	8.5	35.6	8.4	34.1	0.3	100.0	1,227
Southern	2.0	0.1	1.4	1.3	6.6	1.3	87.0	0.2	100.0	772
Region										
Dodoma	0.6	0.6	0.6	0.0	3.8	1.3	92.7	0.3	100.0	480
Arusha	4.7	2.2	12.6	14.4	44.2	12.0	9.2	0.7	100.0	159
Kilimanjaro	6.1	0.0	5.9	5.9	35.2	6.6	40.2	0.0	100.0	304
Tanga	1.7	0.4	6.4	4.8	32.8	5.8	47.8	0.4	100.0	369
Morogoro	2.0	0.3	1.9	6.9	15.5	4.2	69.2	0.0	100.0	409
Pwani	2.2	0.8	5.3	4.7	30.0	2.6	54.4	0.0	100.0	208
Dar es Salaam	8.0	2.9	9.7	10.9	51.0	13.1	3.6	0.7	100.0	610
Lindi	0.5	0.0	0.5	1.0	3.8	0.9	92.9	0.4	100.0	167
Mtwara	1.6	0.0	1.4	0.3	3.2	1.4	92.0	0.0	100.0	323
Ruvuma	3.4	0.3	1.9	2.6	12.1	1.6	77.8	0.4	100.0	281
Iringa	2.8	0.0	2.1	6.4	15.6	4.5	68.6	0.0	100.0	421
Mbeya	2.4	0.0	3.6	4.8	14.6	1.3	71.9	1.5	100.0	533
Singida	1.3	0.0	2.2	2.6	7.9	0.8	83.4	1.7	100.0	300
Tabora	1.2	0.0	0.6	3.3	2.5	0.8	89.8	1.8	100.0	411
Rukwa	0.7	0.0	4.3	4.4	9.3	0.3	80.9	0.0	100.0	228
Kigoma	0.5	0.0	2.1	5.6	20.7	0.2	71.0	0.0	100.0	379
Shinyanga	1.0	0.0	3.4	3.4	5.4	0.5	86.3	0.0	100.0	741
Kagera	0.2	0.3	1.0	3.3	9.5	1.2	84.5	0.0	100.0	495
Mwanza	2.9	0.8	2.2	6.9	9.5	1.9	75.7	0.0	100.0	714
Mara	1.1	0.0	2.7	2.9	6.4	0.9	86.0	0.0	100.0	353
Manyara	4.7	0.0	11.6	9.1	34.0	10.5	30.1	0.0	100.0	61
Unguja North	4.1	0.0	3.2	16.5	31.6	1.4	43.3	0.0	100.0	36
Unguja South	4.2	0.3	4.8	24.9	37.4	4.0	24.2	0.3	100.0	24
Town West	12.3	1.7	9.5	11.5	53.4	7.6	4.1	0.0	100.0	74
Pemba North	6.1	1.0	1.6	8.1	12.8	0.0	69.9	0.5	100.0	28
Pemba South	4.6	0.9	3.3	12.5	16.8	3.0	58.4	0.4	100.0	29
Education										
No education	0.0	0.0	0.6	0.9	9.6	1.5	87.4	0.0	100.0	1,722
Primary incomplete	0.1	0.0	1.1	2.5	14.2	3.1	77.9	1.0	100.0	1,172
Primary complete	0.8	0.2	3.8	6.5	18.4	3.6	66.7	0.1	100.0	4,411
Secondary+	19.9	3.7	11.1	9.4	24.6	3.8	25.9	1.5	100.0	833
Wealth quintile										
Lowest	0.1	0.0	0.2	1.0	4.2	0.3	93.5	0.5	100.0	1,466
Second	0.0	0.0	0.5	0.8	5.8	0.6	92.2	0.2	100.0	1,716
Middle	0.4	0.0	1.2	1.6	9.5	0.6	86.7	0.0	100.0	1,686
Fourth	1.1	0.1	4.9	8.2	25.1	2.8	57.3	0.5	100.0	1,637
Highest	10.6	2.3	10.4	13.5	37.8	11.3	13.5	0.7	100.0	1,632
Total	2.5	0.5	3.5	5.0	16.6	3.1	68.5	0.4	100.0	8,138

Table 3.6.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Tanzania 2010

Background characteristic	Profes-sional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agri-culture	Missing	Total	Number of men
Age										
15-19	0.6	0.0	2.9	6.0	16.3	1.4	70.1	2.7	100.0	358
20-24	2.0	0.0	3.7	14.0	17.3	0.7	61.8	0.5	100.0	344
25-29	5.5	0.3	3.6	17.3	12.3	0.5	59.8	0.7	100.0	336
30-34	4.7	0.1	6.4	13.2	16.3	1.7	57.6	0.0	100.0	351
35-39	6.7	0.5	6.9	15.3	10.5	0.9	58.1	1.1	100.0	296
40-44	4.6	0.0	5.3	14.2	10.3	1.7	64.0	0.0	100.0	268
45-49	10.3	1.5	6.2	10.0	6.3	0.1	65.6	0.0	100.0	204
Marital status										
Never married	3.0	0.1	3.9	12.6	16.7	1.7	60.0	1.9	100.0	686
Married or living together	5.2	0.3	5.6	12.0	11.5	0.6	64.5	0.3	100.0	1,311
Divorced/separated/widowed	5.5	0.9	2.6	21.1	14.4	1.5	54.0	0.0	100.0	161
Number of living children										
0	3.3	0.1	3.8	13.1	16.7	1.5	59.8	1.7	100.0	781
1-2	4.2	0.0	4.4	16.1	16.2	0.8	57.9	0.4	100.0	555
3-4	6.8	0.4	6.9	12.5	9.8	1.4	61.7	0.5	100.0	428
5+	5.0	0.7	5.3	8.3	6.7	0.0	74.1	0.0	100.0	394
Residence										
Urban	10.8	0.9	11.5	28.6	25.1	2.9	18.2	2.0	100.0	556
Rural	2.3	0.1	2.5	7.4	9.3	0.4	77.6	0.4	100.0	1,601
Mainland/Zanzibar										
Mainland	4.4	0.3	4.6	12.6	13.2	1.0	63.2	0.8	100.0	2,099
Urban	10.9	0.8	10.8	28.5	25.4	2.9	18.6	2.1	100.0	532
Rural	2.2	0.1	2.4	7.2	9.0	0.3	78.3	0.4	100.0	1,567
Zanzibar	7.9	0.8	15.3	22.4	20.6	2.4	30.4	0.2	100.0	58
Unguja	7.9	1.1	17.3	25.1	22.0	3.2	23.4	0.0	100.0	44
Pemba	7.8	0.0	9.4	14.2	16.6	0.0	51.2	0.8	100.0	15
Zone										
Western	4.0	0.9	2.9	8.3	9.5	0.4	73.2	0.8	100.0	319
Northern	5.1	0.0	5.6	18.1	14.5	1.9	54.3	0.4	100.0	281
Central	0.7	0.0	1.0	2.9	6.9	1.4	85.5	1.5	100.0	208
Southern Highlands	1.8	0.0	2.5	13.7	15.1	0.0	65.1	1.8	100.0	314
Lake	5.8	0.2	5.6	8.5	12.5	0.0	67.4	0.0	100.0	411
Eastern	8.6	0.5	9.5	24.1	22.3	3.3	31.4	0.3	100.0	349
Southern	2.1	0.0	2.0	9.0	6.4	0.0	78.9	1.6	100.0	217
Region										
Dodoma	1.2	0.0	1.1	3.3	10.6	2.4	81.3	0.0	100.0	122
Arusha	4.2	0.0	6.8	24.3	18.3	5.7	40.7	0.0	100.0	73
Kilimanjaro	8.7	0.0	6.5	22.6	15.5	0.0	46.7	0.0	100.0	67
Tanga	4.5	0.0	4.0	14.4	15.9	1.2	58.8	1.2	100.0	105
Morogoro	5.0	0.0	4.5	16.5	10.4	1.0	61.7	0.9	100.0	128
Pwani	0.0	0.0	17.9	19.6	22.8	0.0	39.7	0.0	100.0	48
Dar es Salaam	13.6	0.9	10.9	31.0	31.0	5.8	6.8	0.0	100.0	173
Lindi	0.0	0.0	1.7	2.8	7.4	0.0	81.8	6.3	100.0	44
Mtwara	2.0	0.0	4.0	10.5	6.2	0.0	77.3	0.0	100.0	73
Ruvuma	3.2	0.0	0.6	10.6	6.1	0.0	78.7	0.7	100.0	100
Iringa	1.9	0.0	1.0	18.7	13.0	0.0	64.6	0.9	100.0	132
Mbeya	1.8	0.0	2.5	10.6	22.6	0.0	58.6	3.8	100.0	120
Singida	0.0	0.0	0.8	2.2	1.7	0.0	91.6	3.6	100.0	86
Tabora	5.0	0.0	1.5	4.7	6.7	0.0	80.8	1.4	100.0	92
Rukwa	1.8	0.0	5.8	9.0	4.9	0.0	78.6	0.0	100.0	62
Kigoma	4.1	1.4	3.3	13.8	17.4	1.4	57.1	1.4	100.0	81
Shinyanga	3.4	1.2	3.6	7.5	7.0	0.0	77.3	0.0	100.0	147
Kagera	4.1	0.0	3.3	10.1	18.2	0.0	64.3	0.0	100.0	130
Mwanza	7.5	0.4	6.7	8.2	8.5	0.0	68.7	0.0	100.0	219
Mara	3.2	0.0	6.8	5.9	14.8	0.0	69.4	0.0	100.0	62
Manyara	2.1	0.0	6.3	8.1	1.2	0.0	82.2	0.0	100.0	37
Unguja North	1.4	0.0	6.7	17.4	33.2	3.7	37.6	0.0	100.0	9
Unguja South	3.6	0.0	8.0	9.9	24.1	1.5	52.9	0.0	100.0	9
Town West	11.6	1.8	24.1	33.0	17.3	3.7	8.5	0.0	100.0	26
Pemba North	6.0	0.0	8.7	9.8	5.5	0.0	67.8	2.2	100.0	5
Pemba South	8.8	0.0	9.9	16.6	22.8	0.0	42.0	0.0	100.0	9
Education										
No education	0.9	0.0	0.9	6.6	8.0	0.7	82.9	0.0	100.0	232
Primary incomplete	0.8	0.3	1.4	6.8	16.1	0.9	72.5	1.3	100.0	382
Primary complete	2.0	0.3	6.4	13.5	13.0	1.1	63.3	0.5	100.0	1,211
Secondary+	20.7	0.5	5.9	21.8	15.5	1.0	32.6	2.0	100.0	333
Wealth quintile										
Lowest	0.0	0.0	0.5	3.1	3.6	0.9	91.9	0.0	100.0	361
Second	0.9	0.0	1.1	4.3	7.8	0.0	85.6	0.3	100.0	402
Middle	0.4	0.2	1.3	5.7	10.4	0.3	80.9	0.8	100.0	427
Fourth	4.5	0.0	5.9	16.1	18.4	0.4	53.1	1.5	100.0	464
Highest	14.1	1.0	12.9	29.8	22.7	3.1	15.2	1.2	100.0	503
Total 15-49	4.5	0.3	4.8	12.9	13.4	1.0	62.3	0.8	100.0	2,157

Table 3.7 presents information on women's employment status, including type of earnings and type of employer, and also the continuity of employment. The table takes into account whether women are involved in agricultural or nonagricultural occupations because all of the employment variables shown in the table are strongly influenced by the sector in which a woman is employed.

The data show that in the agricultural sector the majority of women who work are not paid (72 percent), 42 percent are employed by a family member, 57 percent are self-employed, and 82 percent work seasonally. Among women employed in nonagricultural work, 87 percent earn only cash income, and 7 percent receive payment in cash and in kind. In the nonagricultural sector, 63 percent of women are self-employed, and 74 percent work all year.

Table 3.7 Type of employment: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Tanzania 2010

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	8.7	86.7	33.0
Cash and in-kind	16.5	6.8	13.4
In-kind only	2.3	0.8	1.8
Not paid	72.3	5.6	51.5
Missing	0.2	0.2	0.2
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	41.9	11.1	32.3
Employed by nonfamily member	1.6	25.5	9.0
Self-employed	56.5	63.4	58.6
Missing	0.0	0.1	0.1
Total	100.0	100.0	100.0
Continuity of employment			
All year	14.7	74.0	33.3
Seasonal	81.8	15.6	61.0
Occasional	3.5	10.4	5.6
Missing	0.0	0.0	0.1
Total	100.0	100.0	100.0
Number of women employed during the last 12 months	5,574	2,533	8,138

Note: Total includes 26 unweighted women with information missing on their type of employment.

3.5 ADULT HEALTH ISSUES

3.5.1 Health Insurance Coverage

Health care financing is very challenging in most of the developing countries, including Tanzania, because of limited resources available to support the health systems. Unfortunately, there have been increasing needs and demands on these systems. These demands result from growth in the communicable and noncommunicable disease burden as well as emerging and re-emerging diseases. Furthermore, the costs for health interventions are going up. Over time, the health sector has registered an increase in public health per capita spending, from US$5.80 in 2008 to US$11.00 in 2009. The increase in financial resources in the health sector in absolute terms was largely due to additional donor support, particularly from the Global Health Initiative. However, this donor support often has allowed little flexibility to determine how the money is to be spent.

To overcome the existing problems related to health care financing, the Government of Tanzania came up with a number of strategies, including cost-sharing and prepayment schemes such as National Health Insurance (NHI) and the Community Health Fund (CHF). These strategies enhance complementary financing without increasing direct funding from the government. New efforts have demonstrated great potential for adding revenue to the health sector, which in turn results in the promotion of access to health care services. The government has placed health financing at the top of the health systems agenda.

In the 2010 TDHS women and men age 15-49 were asked if they were covered by any health insurance and, if so, which type. The choices were the following: mutual health organization or community-based insurance, employer-based insurance, social security, and privately purchased commercial insurance.

Tanzania has a limited number of social security options, and most of them target the employed population. Few companies provide private health insurance to individuals. Unfortunately, because of high unemployment rates and low wages for employed persons, the majority of the people may not be able to afford insurance policies. Community-based insurance, still in its infancy in most districts in the country, is expected to grow to eventually reach universal coverage.

Tables 3.8.1 and 3.8.2 show that less than 1 percent of respondents report having health insurance through social security, 4 percent of women and 3 percent of men are covered by health insurance through their employers, and 2 percent of women and 3 percent of men have mutual health organization or community-based insurance. In total, 94 percent of women and 93 percent of men do not have health insurance. This implies that the health insurance system in the country is almost non-existent.

There are notable differentials in health insurance coverage across background characteristics. No clear pattern exists across age groups. However, older women and men and those who live in urban areas are more likely to be covered by health insurance than other respondents. Very few people in Zanzibar have health insurance.

The highest proportion of women who are covered by health insurance live in the Northern and Central zones (9 percent). For men, the highest coverage is in the Central zone (15 percent). In Mainland, coverage of health insurance for women varies from 20 percent in Kilimanjaro to 2 percent in Manyara. The corresponding proportions for men are 23 percent for Kilimanjaro to 0 percent in Lindi.

As expected, health insurance coverage increases with the respondent's level of education and wealth. For example, only 2 percent of women with no education are covered by any type of health insurance compared with about 18 percent of women with secondary or higher education. Women in the lowest wealth quintile are the least likely to be covered by any health insurance (1 percent), while women in the highest wealth quintile are the most likely to have health insurance (16 percent). The same pattern is observed among men. Health insurance coverage ranges from 3 percent for men in the lowest quintile to 15 percent for men in the highest quintile.

Table 3.8.1 Health insurance coverage: Women

Percentage of women age 15-49 with specific types of health insurance coverage, according to background characteristics, Tanzania 2010

Background characteristic	Social security	Employer-based insurance	Mutual health organization/ community based insurance	Other privately purchased commercial insurance	None	Number
Age						
15-19	0.4	4.1	2.9	0.1	92.4	2,172
20-24	0.5	2.5	1.4	0.2	95.3	1,909
25-29	0.4	3.8	1.4	0.0	94.4	1,668
30-34	0.3	2.7	3.1	0.0	93.9	1,422
35-39	0.5	4.0	2.7	0.1	92.7	1,290
40-44	0.8	4.3	1.6	0.4	92.9	938
45-49	0.8	6.3	1.4	0.0	91.5	740
Residence						
Urban	0.3	8.7	1.5	0.3	89.3	2,892
Rural	0.6	1.7	2.4	0.1	95.2	7,247
Mainland/Zanzibar						
Mainland	0.5	3.8	2.2	0.1	93.3	9,813
Urban	0.3	9.1	1.5	0.3	88.8	2,758
Rural	0.6	1.8	2.5	0.1	95.1	7,055
Zanzibar	0.0	0.3	0.0	0.0	99.7	326
Unguja	0.0	0.5	0.0	0.0	99.5	212
Pemba	0.0	0.0	0.0	0.0	100.0	115
Zone						
Western	0.0	2.8	2.2	0.1	94.9	1,728
Northern	2.2	4.2	2.1	0.1	91.2	1,530
Central	0.3	1.3	6.9	0.0	91.4	812
Southern Highlands	0.5	4.8	1.2	0.1	93.3	1,370
Lake	0.1	2.9	2.2	0.0	94.9	1,809
Eastern	0.0	6.3	1.4	0.4	92.0	1,608
Southern	0.4	3.4	1.3	0.0	94.9	955
Region						
Dodoma	0.0	1.2	6.0	0.0	92.8	495
Arusha	0.0	3.8	0.6	0.3	95.4	401
Kilimanjaro	6.1	6.9	6.4	0.2	80.4	411
Tanga	1.7	3.5	0.6	0.0	93.9	498
Morogoro	0.0	7.2	3.4	0.0	89.4	481
Pwani	0.0	2.7	1.1	0.3	95.9	261
Dar es Salaam	0.0	6.9	0.3	0.6	92.2	866
Lindi	0.0	1.1	1.6	0.0	97.2	198
Mtwara	0.6	3.1	1.4	0.0	94.9	407
Ruvuma	0.3	5.0	1.0	0.0	93.6	350
Iringa	0.8	6.0	1.1	0.0	92.2	490
Mbeya	0.6	5.1	1.5	0.3	92.5	623
Singida	0.8	1.6	8.4	0.0	89.3	317
Tabora	0.0	1.2	4.1	0.0	94.6	447
Rukwa	0.0	1.9	0.7	0.0	97.5	257
Kigoma	0.0	2.2	3.7	0.0	94.2	462
Shinyanga	0.0	4.0	0.4	0.3	95.4	819
Kagera	0.0	2.9	2.3	0.0	94.8	590
Mwanza	0.2	3.2	2.9	0.0	93.7	844
Mara	0.0	2.0	0.6	0.0	97.4	376
Manyara	0.5	1.6	0.2	0.0	97.7	220
Unguja North	0.0	0.0	0.0	0.0	100.0	50
Unguja South	0.0	0.5	0.0	0.0	99.5	30
Town West	0.0	0.7	0.0	0.0	99.3	131
Pemba North	0.0	0.0	0.0	0.0	100.0	56
Pemba South	0.0	0.0	0.0	0.0	100.0	59
Education						
No education	0.3	0.2	1.3	0.0	98.3	1,940
Primary incomplete	0.1	0.4	1.2	0.0	98.3	1,482
Primary complete	0.6	2.6	2.5	0.1	94.2	5,071
Secondary+	0.7	14.2	2.9	0.6	81.5	1,646
Wealth quintile						
Lowest	0.1	0.0	0.9	0.0	98.9	1,681
Second	0.2	0.2	1.3	0.0	98.3	1,947
Middle	0.4	0.6	2.5	0.1	96.4	1,997
Fourth	1.2	2.3	3.6	0.1	92.8	2,112
Highest	0.5	12.9	2.1	0.4	84.1	2,403
Total	0.5	3.7	2.1	0.1	93.5	10,139

Table 3.8 2 Health insurance coverage: Men

Percentage of men age 15-49 with specific types of health insurance coverage, according to background characteristics, Tanzania 2010

Background characteristic	Social security	Employer-based insurance	Mutual health organization/ community-based insurance	Other privately purchased commercial insurance	None	Number
Age						
15-19	0.5	4.6	2.2	0.3	92.3	645
20-24	0.0	2.5	1.5	0.4	95.6	414
25-29	0.0	3.8	4.0	0.0	92.3	343
30-34	0.9	1.3	3.2	0.0	94.9	352
35-39	0.8	0.7	2.1	1.3	95.2	300
40-44	0.0	2.6	2.6	1.1	93.7	270
45-49	1.7	5.7	4.2	0.0	87.6	204
Residence						
Urban	0.7	6.5	2.6	0.2	89.9	693
Rural	0.4	1.8	2.7	0.5	94.6	1,834
Mainland/Zanzibar						
Mainland	0.5	3.2	2.7	0.4	93.1	2,452
Urban	0.7	6.8	2.7	0.2	89.5	662
Rural	0.4	1.9	2.8	0.5	94.5	1,790
Zanzibar	0.0	0.5	0.0	0.0	99.5	75
Unguja	0.0	0.7	0.0	0.0	99.3	53
Pemba	0.0	0.0	0.0	0.0	100.0	22
Zone						
Western	0.2	2.3	2.6	0.0	94.8	371
Northern	2.4	5.8	1.4	1.7	88.7	350
Central	0.0	2.4	12.7	0.0	84.9	208
Southern Highlands	0.6	2.4	1.2	0.8	95.1	355
Lake	0.0	1.9	2.0	0.0	96.1	521
Eastern	0.0	4.0	1.6	0.3	94.0	413
Southern	0.5	4.0	2.2	0.0	93.3	236
Region						
Dodoma	0.0	1.4	13.2	0.0	85.4	122
Arusha	1.2	1.0	2.6	0.0	95.2	87
Kilimanjaro	6.4	12.3	1.1	3.1	77.1	92
Tanga	1.2	4.4	1.2	2.6	90.5	124
Morogoro	0.0	5.1	2.1	0.9	90.7	146
Pwani	0.0	1.3	0.0	0.0	98.7	59
Dar es Salaam	0.0	3.9	1.7	0.0	95.0	207
Lindi	0.0	0.0	0.0	0.0	100.0	47
Mtwara	0.0	1.7	1.3	0.0	97.0	87
Ruvuma	1.1	7.9	4.0	0.0	87.0	102
Iringa	0.0	5.0	0.7	0.0	94.3	140
Mbeya	1.4	0.0	1.8	1.4	95.4	143
Singida	0.0	3.8	12.0	0.0	84.2	86
Tabora	0.0	0.9	1.0	0.0	98.2	105
Rukwa	0.0	2.2	1.1	1.1	95.7	72
Kigoma	1.0	3.6	6.5	0.0	88.9	96
Shinyanga	0.0	2.5	1.4	0.0	96.1	169
Kagera	0.0	3.8	1.0	0.0	95.2	161
Mwanza	0.0	1.4	2.8	0.0	95.7	276
Mara	0.0	0.0	1.0	0.0	99.0	83
Manyara	0.0	5.5	0.0	0.0	94.5	47
Unguja North	0.0	0.0	0.0	0.0	100.0	11
Unguja South	0.0	1.7	0.0	0.0	98.3	9
Town West	0.0	0.7	0.0	0.0	99.3	33
Pemba North	0.0	0.0	0.0	0.0	100.0	10
Pemba South	0.0	0.0	0.0	0.0	100.0	12
Education						
No education	0.0	0.0	2.4	0.0	97.6	239
Primary incomplete	0.5	0.9	0.8	0.6	97.2	460
Primary complete	0.7	1.1	2.9	0.3	95.0	1,249
Secondary+	0.2	10.6	3.7	0.6	84.8	578
Wealth quintile						
Lowest	0.2	0.0	2.7	0.4	96.6	401
Second	0.0	0.0	1.6	0.2	98.2	447
Middle	0.9	0.3	2.6	0.5	95.7	490
Fourth	0.5	3.0	2.3	0.4	93.8	572
Highest	0.7	9.8	3.8	0.5	85.2	618
Total	0.5	3.1	2.7	0.4	93.3	2,527

3.5.2 Tobacco Use

Tobacco use and smoking are addictions, which can cause a wide variety of diseases and can lead to death. Smoking is a known risk factor for cardiovascular disease; it causes lung cancer and other forms of cancer and contributes to the severity of pneumonia, emphysema, and chronic bronchitis. It may also have an impact on individuals who are exposed to passive smoking; for example, inhaling second-hand smoke may adversely affect children's growth and cause childhood illnesses, especially respiratory diseases. Because smoking is an acquired behaviour, all morbidity and mortality caused by smoking is preventable.

In the 2010 TDHS, women and men age 15-49 were asked if they currently smoke cigarettes, and if so, how many cigarettes they smoked in the past 24 hours. Those who were not smoking were asked if they smoke or use any other forms of tobacco, such as a pipe, chewing tobacco, or snuff.

Overall, Table 3.9.1 shows use of tobacco is rare among women in Tanzania; a little more than 1 percent of woman report using tobacco. Tobacco use is more common among rural women, women with no education, and poor women.

Table 3.9.2 shows that 21 percent of men age 15–49 use tobacco; 19 percent smoke cigarettes, 4 percent use other types of tobacco, and less than 1 percent smoke pipes. Cigarette smoking increases with age, from 1 percent of men age 15–19 to 31 percent of men age 45–49. Tobacco use is more popular in the Mainland than in Zanzibar. In the Mainland, cigarette smoking among men is most common in the Southern zone (31 percent) and least common in the Southern Highlands (12 percent). Men with no education and men in the lowest wealth quintile are most likely to use tobacco products. Three in ten men with no education smoke cigarettes, and 6 percent use other types of tobacco. Twenty-seven percent of men in the poorest wealth quintile smoke cigarettes, and 11 percent use other types of tobacco.

Among men who smoke cigarettes, 5 percent did not smoke any cigarettes in the last 24 hours, 22 percent smoked 1 to 2 cigarettes, 43 percent smoked 3 to 5 cigarettes, 15 percent smoked 6 to 9 cigarettes, and 14 percent smoked 10 or more cigarettes in the 24 hours before the survey. Although there are differentials across sub-groups of men, there is no clear and uniform pattern.

Table 3.9.1 Use of tobacco: Women

Percentage of women age 15-49 who smoke cigarettes or a pipe or use other tobacco products, according to background characteristics, Tanzania 2010

Background characteristic	Cigarettes	Pipe	Other tobacco	Does not use tobacco	Number of women
Age					
15-19	0.2	0.1	0.1	99.6	2,172
20-24	0.1	0.1	0.3	99.5	1,909
25-29	0.1	0.1	0.6	99.1	1,668
30-34	0.2	0.3	0.2	99.3	1,422
35-39	0.8	0.4	1.7	97.2	1,290
40-44	0.6	0.5	2.2	96.9	938
45-49	1.3	0.5	2.8	95.5	740
Residence					
Urban	0.2	0.1	0.1	99.6	2,892
Rural	0.4	0.3	1.1	98.2	7,247
Mainland/Zanzibar					
Mainland	0.4	0.2	0.8	98.6	9,813
Urban	0.3	0.1	0.1	99.6	2,758
Rural	0.4	0.3	1.1	98.2	7,055
Zanzibar	0.1	0.0	1.0	99.0	326
Unguja	0.0	0.0	0.0	100.0	212
Pemba	0.2	0.0	2.6	97.2	115
Zone					
Western	0.5	0.1	0.8	98.7	1,728
Northern	0.3	0.2	1.2	98.3	1,530
Central	0.0	0.2	0.4	99.1	812
Southern Highlands	0.3	0.1	0.3	99.4	1,370
Lake	0.5	0.7	1.5	97.3	1,809
Eastern	0.1	0.0	0.4	99.5	1,608
Southern	0.8	0.4	0.9	98.2	955
Zanzibar	0.1	0.0	1.0	99.0	326
Education					
No education	0.6	0.4	2.5	96.5	1,940
Primary incomplete	0.5	0.3	1.3	98.1	1,482
Primary complete	0.3	0.2	0.3	99.2	5,071
Secondary+	0.2	0.1	0.0	99.7	1,646
Maternity status					
Pregnant	0.2	0.0	0.9	98.9	969
Breastfeeding (not pregnant)	0.1	0.1	0.9	98.8	2,819
Neither	0.5	0.3	0.8	98.5	6,351
Wealth quintile					
Lowest	0.5	0.3	2.7	96.7	1,681
Second	0.7	0.2	1.1	98.0	1,947
Middle	0.3	0.5	0.6	98.6	1,997
Fourth	0.2	0.2	0.1	99.5	2,112
Highest	0.2	0.0	0.2	99.7	2,403
Total	0.4	0.2	0.8	98.6	10,139

Table 3.9.2 Use of tobacco: Men

Percentage of men age 15-49 who smoke cigarettes or a pipe or use other tobacco products and the percent distribution of cigarette smokers by number of cigarettes smoked in preceding 24 hours, according to background characteristics, Tanzania 2010

Background characteristic	Cigarettes	Pipe	Other tobacco	Does not use tobacco	Number of men	Number of cigarettes in the past 24 hours						Total	Number of cigarette smokers
						0	1-2	3-5	6-9	10+	Don't know/ missing		
Age													
15-19	1.4	0.0	0.6	98.4	645	*	*	*	*	*	*	100.0	9
20-24	13.3	0.0	1.2	85.9	414	9.1	27.1	44.1	6.4	6.9	6.4	100.0	55
25-29	27.7	0.0	4.7	71.4	343	4.4	16.0	41.5	19.2	15.7	3.2	100.0	95
30-34	26.3	0.0	4.4	72.3	352	4.5	35.7	41.7	11.0	6.8	0.3	100.0	92
35-39	30.0	1.0	6.7	65.2	300	0.9	20.3	42.6	15.8	20.4	0.0	100.0	90
40-44	28.5	0.0	7.2	68.7	270	5.4	17.6	44.9	16.5	15.4	0.3	100.0	77
45-49	30.9	0.4	9.9	65.3	204	4.0	12.6	48.3	17.2	15.2	2.7	100.0	63
Residence													
Urban	19.2	0.0	1.7	80.6	693	2.6	21.9	43.8	14.7	11.8	5.2	100.0	133
Rural	19.0	0.2	4.8	78.7	1,834	5.9	21.4	43.0	14.4	14.1	1.2	100.0	349
Mainland/Zanzibar													
Mainland	19.3	0.1	4.0	79.0	2,452	5.0	21.7	43.5	14.4	13.3	2.0	100.0	472
Urban	19.3	0.0	1.8	80.5	662	2.6	22.5	44.5	14.5	11.5	4.4	100.0	128
Rural	19.2	0.2	4.9	78.5	1,790	5.9	21.4	43.1	14.4	14.0	1.2	100.0	344
Zanzibar	12.6	0.0	2.0	86.5	75	4.8	12.8	29.6	19.1	19.8	13.9	100.0	9
Unguja	14.8	0.0	2.3	84.4	53	5.8	14.3	19.2	21.6	22.3	16.8	100.0	8
Pemba	7.3	0.0	1.1	91.5	22	*	*	*	*	*	*	100.0	2
Zone													
Western	20.4	0.0	2.5	78.8	371	0.4	21.2	32.9	26.6	11.2	7.8	100.0	76
Northern	24.0	0.0	8.4	71.3	350	1.2	9.1	50.5	12.1	27.1	0.0	100.0	84
Central	19.0	0.0	2.4	78.8	208	(11.3)	(37.7)	(33.8)	(17.2)	(0.0)	(0.0)	100.0	39
Southern Highlands	12.4	0.6	3.3	86.0	355	(14.3)	(17.2)	(35.1)	(10.3)	(23.1)	(0.0)	100.0	44
Lake	15.2	0.3	3.8	83.5	521	2.1	19.4	45.6	14.5	16.9	1.5	100.0	79
Eastern	18.5	0.0	1.2	81.2	413	2.6	20.0	55.8	11.7	6.7	3.3	100.0	76
Southern	31.3	0.0	7.9	66.9	236	10.9	34.9	41.6	8.3	4.4	0.0	100.0	74
Education													
No education	29.7	0.0	6.4	65.9	239	4.0	29.8	32.2	20.0	10.0	4.0	100.0	71
Primary incomplete	25.6	0.2	7.7	72.6	460	7.9	22.9	48.4	10.9	8.8	1.0	100.0	118
Primary complete	20.1	0.2	3.7	78.1	1,249	3.3	19.2	44.7	14.2	17.1	1.5	100.0	251
Secondary+	7.3	0.0	0.6	92.5	578	8.4	17.5	39.0	17.0	10.6	7.6	100.0	42
Wealth quintile													
Lowest	26.6	0.2	10.8	68.5	401	9.7	30.3	40.4	10.1	9.5	0.0	100.0	107
Second	21.6	0.0	5.3	76.1	447	7.4	17.8	45.6	14.8	11.8	2.5	100.0	96
Middle	17.7	0.0	2.7	80.9	490	1.0	24.3	36.7	20.8	15.9	1.4	100.0	87
Fourth	15.9	0.5	1.3	83.3	572	2.9	18.5	38.9	18.5	21.2	0.0	100.0	91
Highest	16.3	0.0	2.1	83.4	618	3.1	16.2	53.5	9.8	10.2	7.3	100.0	101
Total 15-49	19.1	0.1	4.0	79.3	2,527	5.0	21.5	43.2	14.5	13.5	2.3	100.0	482

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

FERTILITY LEVELS, TRENDS, AND DIFFERENTIALS 4

Chapter 4 looks at a number of fertility indicators including levels, patterns, and trends in both current and cumulative fertility; the length of birth intervals; and the age at which women initiate childbearing. Information on current and cumulative fertility is essential in monitoring population growth. Birth intervals are important because short intervals are strongly associated with childhood mortality. The age at which childbearing begins can also have a major impact on the health and well-being of both the mother and the child.

Data on fertility were collected in several ways. First, each woman was asked the number of sons and daughters who live with her, the number who live elsewhere, and the number who were born alive and later died. Next, a complete history of all the woman's births was obtained, including the name, sex, month and year of birth, age, and survival status for each of the births. For living children, a question was asked about whether the child was living in the household or away. For dead children, the age at death was recorded. Finally, information was collected on whether a woman was pregnant at the time of the survey.

4.1 CURRENT FERTILITY

The level of current fertility is one of the most important topics in this report because of its direct relevance to population policies and programs. Current fertility can be measured using the age-specific fertility rate (ASFR), the total fertility rate (TFR), the general fertility rate (GFR), and the crude birth rate (CBR). The ASFR provides the age pattern of fertility, while the TFR refers to the number of live births that a woman would have had if she were subject to the current ASFRs throughout her reproductive years (15-49 years). The GFR is expressed as the number of live births per 1,000 women of reproductive age, and the CBR is expressed as the number of live births per 1,000 members of the population. The measures of fertility presented in this chapter refer to the period three years prior to the survey. This time period generates a sufficient number of births to provide robust, current estimates.

Table 4.1 shows that the TFR for Tanzania for the three-year period preceding the survey is 5.4 children per woman. This means that a Tanzanian woman who is at the beginning of her childbearing years would give birth to between five and six children by the end of her reproductive period if fertility levels remained constant over the childbearing years. The TFR in Mainland rural areas exceeds by more than 2 births per woman the TFR in urban areas (6.1 and 3.7 births per woman, respectively). The TFR in Zanzibar is 5.1.

Table 4.1 Current fertility

Age-specific and total rate, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Tanzania 2010

Age group	Mainland			Zanzibar	Total
	Urban	Rural	Total		
15-19	72	139	119	46	116
20-24	188	297	262	192	260
25-29	182	279	250	241	249
30-34	163	222	206	235	207
35-39	90	181	160	194	161
40-44	41	79	71	95	72
45-49	5	26	22	21	22
TFR	3.7	6.1	5.4	5.1	5.4
GFR	135	210	189	157	188
CBR	35.0	39.0	38.1	35.9	38.1

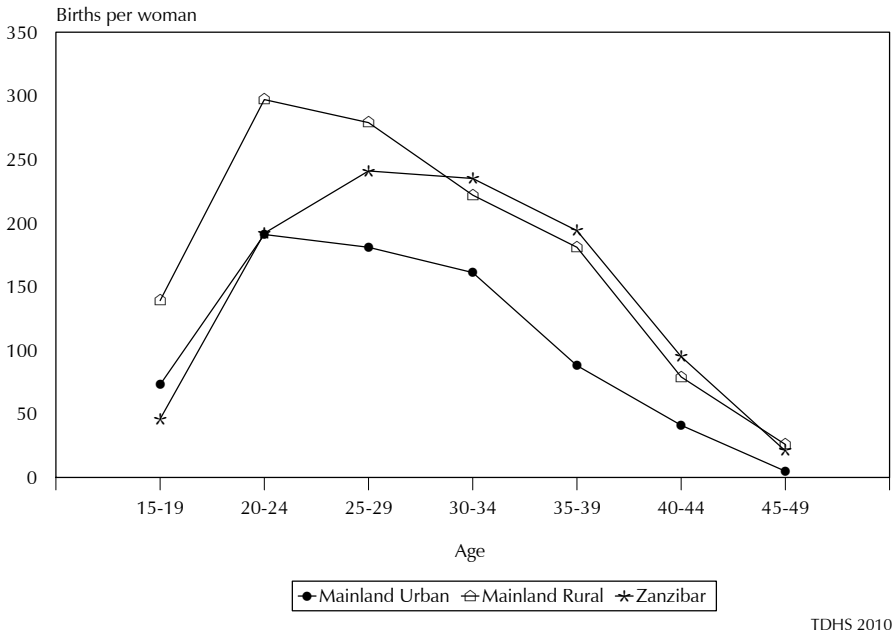
Notes: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview.
TFR: Total fertility rate expressed per woman
GFR: General fertility rate, expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population

The CBR in Tanzania is 38.1 births per 1,000 population. As is the case with other fertility measures, there is a clear differential in GFR by urban-rural residence. The GFR in Tanzania is 188 live births per 1,000 women of reproductive age. The rate is higher in Mainland rural areas (210) than

in Mainland urban areas (135). In Zanzibar, the GFR is 157 live births per 1,000 women of reproductive age.

Figure 4.1 presents the age-specific fertility rate for urban and rural areas in the Mainland and for Zanzibar. Fertility in Tanzania peaks at age 20-24 in both rural and urban areas of Mainland. For all of Tanzania, the age-specific fertility rates rise from 116 births per 1,000 women age 15-19 to 260 births among women age 20-24 and then fall gradually to 22 births among women age 45-49 (Table 4.1). In Zanzibar fertility peaks among women age 25-29 and remains high among women in their thirties. A substantial proportion of women continue to bear children in their late reproductive years.

Figure 4.1 Age-Specific Fertility Rates by Residence



4.2 Fertility Differentials by Background Characteristics

Fertility is known to vary by residence, educational background, and other socioeconomic characteristics of a woman. Table 4.2 shows several indicators of fertility: total fertility rate, percentage of women age 15-49 who are currently pregnant, and mean number of births to women age 40-49. The mean number of births to women age 40-49 is an indicator of cumulative fertility; reflecting the fertility performance of older women who are nearing the end of their reproductive years. If fertility levels remain stable over time, the two fertility measures, TFR and children ever born, tend to be very similar.

Table 4.2 shows differentials in two measures of current fertility, the TFR and the percentage of currently pregnant women. There are variations in the TFR by urban-rural residence, zone, education, and wealth quintile. Women in rural areas have 2.4 more children than their counterparts in urban areas (6.1 and 3.7 children per woman respectively). Fertility is highest in the Western zone where there is a TFR of 7.1 births per woman and lowest in the Eastern zone where there are 3.9 births per woman. The TFR decreases gradually with an increasing level of education; that is, the better educated women have fewer children and a lower TFR than less educated women. Women with no education have on average 7.0 children compared with 3.0 children for women who have a secondary education or higher. Fertility varies widely according to household wealth. Women in the highest wealth quintile have 3.8 fewer children than women in the lowest quintile (3.2 and 7.0 births per woman, respectively).

Table 4.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, Tanzania 2010

Background characteristic	Total fertility rate[1]	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	3.7	6.3	4.7
Rural	6.1	10.8	6.3
Mainland/Zanzibar			
Mainland	5.4	9.6	5.9
Urban	3.7	6.4	4.6
Rural	6.1	10.9	6.3
Zanzibar	5.1	7.7	6.8
Unguja	4.6	6.1	6.1
Pemba	6.4	10.8	7.8
Zone			
Western	7.1	12.9	6.8
Northern	4.6	7.8	5.4
Central	6.5	9.0	6.6
Southern Highlands	5.4	8.7	6.3
Lake	6.3	12.7	7.0
Eastern	3.9	6.1	4.7
Southern	4.4	8.7	5.1
Education			
No education	7.0	12.7	6.8
Primary incomplete	6.0	10.3	6.3
Primary complete	5.5	10.0	5.7
Secondary+	3.0	3.7	4.1
Wealth quintile			
Lowest	7.0	10.7	6.7
Second	6.8	12.6	6.6
Middle	6.1	11.6	6.4
Fourth	4.7	8.2	5.7
Highest	3.2	5.8	4.2
Total	5.4	9.6	6.0

Note: Total fertility rates are for the period 1 to 36 months prior to interview.

The percentage of women currently pregnant is a useful measure of current fertility, although not all women who are pregnant are likely to be captured because they may not be aware that they are pregnant or may be reluctant to disclose a pregnancy in the early stages. Ten percent of women reported that they were pregnant at the time of the survey. Rural women were more likely to be pregnant (11 percent) than urban women (6 percent). The highest proportion of pregnant women is in the Western and Lake zones (13 percent each), while the lowest proportion is in the Eastern Zone (6 percent). The percentage of women currently pregnant decreases with increasing level of education, from 13 percent among women with no education to 4 percent among those with at least some secondary education. Likewise, there are more currently pregnant women in the three lowest wealth quintiles (11-13 percent) than in the two highest wealth quintiles (6 and 8 percent).

Table 4.2 also presents an assessment of trends in the various subgroups by comparing current fertility with a measure of completed fertility: the mean number of children ever born to women age 40-49. Women age 40-49 have given birth to an average of 6.0 children. Comparing this cumulative fertility rate with the TFR indicates that although there has been a slight decline in fertility over time

among women in most groups, there has been little or no decline among women with no education, women living in the Western and Central zones, and women in the two lowest wealth quintiles.

4.3 FERTILITY TRENDS

Table 4.3 uses information from the retrospective birth histories obtained from the 2010 TDHS respondents to examine trends in age-specific fertility rates for successive five-year periods before the survey. To calculate these rates, births were classified according to the period of time in which the birth occurred and the mother's age at the time of birth. Because birth histories have not been collected for women age 50 and over, the rates for older age groups become progressively more truncated for periods more distant from the survey date. For example, rates cannot be calculated for women age 45-49 for the period 5-9 years or more prior to the survey because women in that age group would have been 50 years or older at the time of the survey.

Table 4.3 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Tanzania 2010

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	128	148	138	147
20-24	257	259	272	280
25-29	242	249	260	283
30-34	217	211	250	[252]
35-39	160	170	[203]	-
40-44	71	[116]	-	-
45-49	[23]	-	-	-

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of interview.

The results in Table 4.3 show that fertility is slightly higher in the 15-19 year period preceding the survey, indicating a slight decline in fertility is taking place. The decline is most apparent between the periods 10-14 years and 15-19 years preceding the survey.

Another way to examine fertility trends is to compare current estimates with earlier surveys. The availability of TFR and age-specific fertility rates (ASFR) obtained from the three previous TDHS surveys (1991-92, 1996, and 2004-05), the 1999 Tanzania Reproductive and Child Health Survey (TRCHS), the 2002 Population and Housing Census, and the 2010 TDHS offers an opportunity to assess fertility trends over a 19-year period. These trends are shown in Table 4.4 and Figure 4.2. The data indicate a slow decline in fertility. In almost all TDHS surveys, fertility peaks at age 20-24, after which it declines slowly.

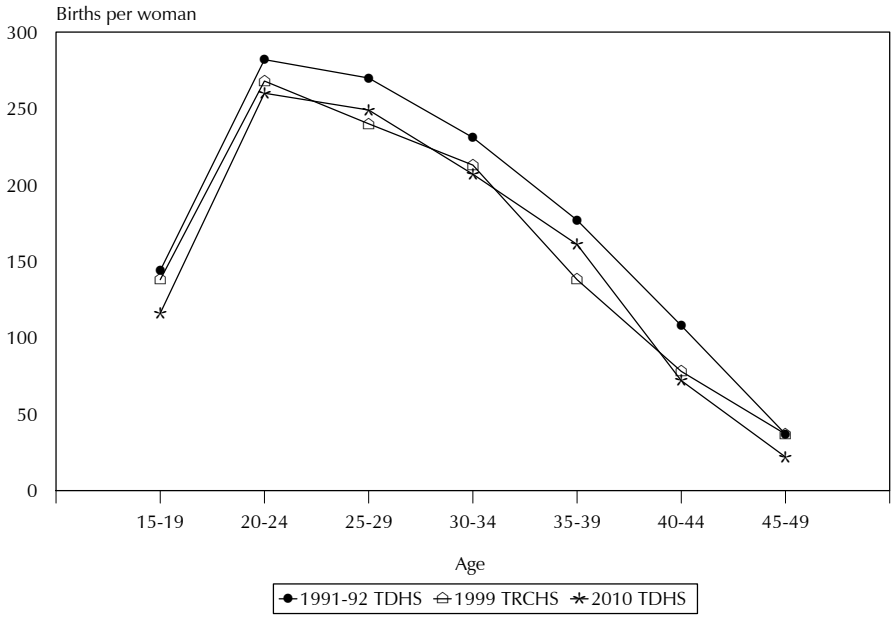
Table 4.4 Trends in fertility rates

Age-specific fertility rates (per 1,000 women) and total fertility rates from selected surveys and censuses

Age group	1991-92 TDHS	1996 TDHS	1999 TRCHS	2002 census[1]	2004-05 TDHS	2010 TDHS
15-19	144	135	138	113	132	116
20-24	282	260	268	290	274	260
25-29	270	255	240	287	254	249
30-34	231	217	213	248	218	207
35-39	177	167	138	185	156	161
40-44	108	87	78	96	79	72
45-49	37	42	37	34	18	22
TFR	6.3	5.8	5.6	6.3	5.7	5.4

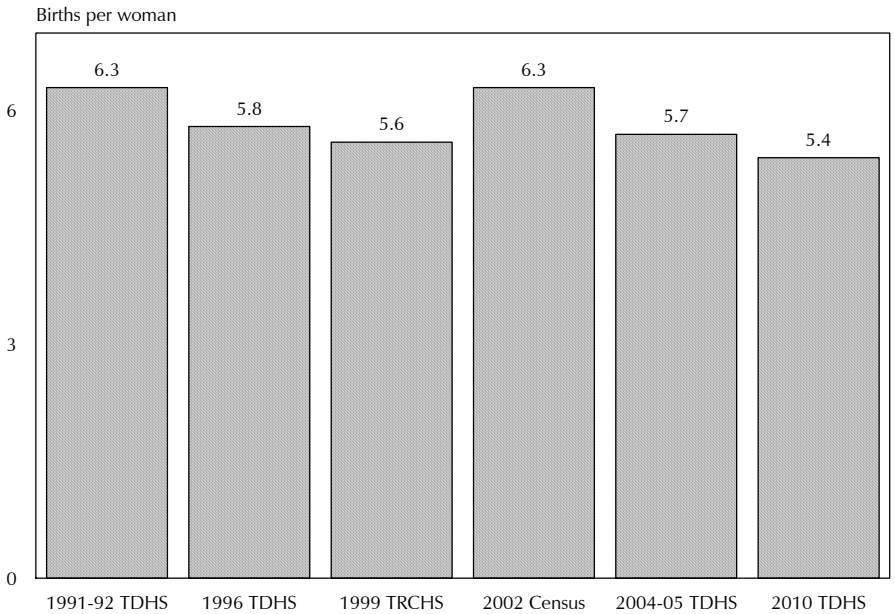
Note: Rates refer to the three-year period preceding the survey, except for the 2002 census, which uses a period that varies with the age groups used to make the correction.
[1] Census rates are based on indirect adjustments.

Figure 4.2 Trends in Age-Specific Fertility Rates, 1991, 1999, and 2010



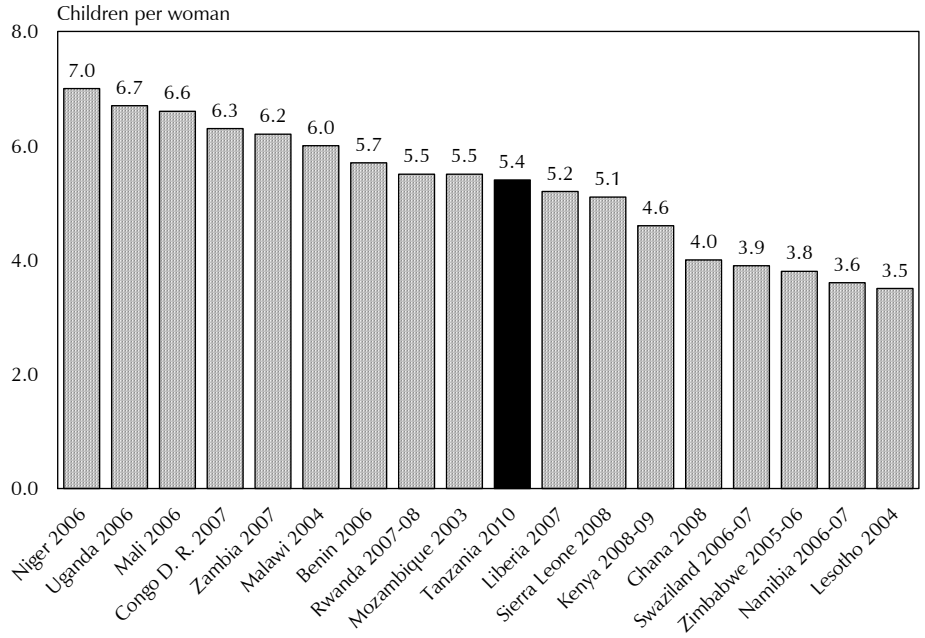
The TFR for the 2010 TDHS is 5.4 per woman, which is about one child less than the 1991-92 fertility level of 6.3 children per woman (Figure 4.3).

Figure 4.3 Trends in Fertility Rates



As shown in Figure 4.4, compared with other sub-Saharan countries that have participated in the DHS programme, the TFR in Tanzania is in the middle, slightly lower than the TFR in Rwanda and Mozambique (5.5 each) and higher than that of Liberia (5.2), Sierra Leone (5.1), and Kenya (4.6).

Figure 4.4 **Total Fertility Rates in Selected Sub-Saharan Countries**



Source: Macro International Inc, 2011. MEASURE DHS STATcompiler. http://www.measuredhs.com, January 21 2011.

4.4 CHILDREN EVER BORN AND LIVING

Table 4.5 presents the distribution of all women and currently married women by number of children ever born, according to five-year age groups. The table also shows the mean number of children ever born and the mean number of living children. Data on the number of children ever born reflect the accumulation of births to women over their entire reproductive lifespan and therefore have limited reference to current fertility levels, particularly when a country has experienced a decline in fertility. However, the information on children ever born is useful for observing how average family size varies across age groups and also for observing the level of primary infertility.

The results show that 83 percent of women age 15-19 have never given birth. This proportion declines to 7 percent for women age 25-29 and to 4 percent or lower for women age 30 and older. On average, Tanzanian women attain a parity of 6.4 children per woman at the end of their childbearing years. This number is relatively higher than the TFR of 5.4 per woman, a discrepancy that is attributable to the decrease in fertility.

As expected, women age 40 years or older have much higher parities, with substantial proportions having 10 or more births each by the end of their childbearing years. For example, 37 percent of women age 45-49 have given birth to eight or more children.

The same pattern is shown by currently married women, except that the mean number of children ever born is higher for currently married women (3.8 children) than for all women (2.9 children). The difference in the mean number of children ever born between all women and currently married women is due to a substantial proportion of young, unmarried women in the former category who exhibit lower fertility.

Table 4.5 Children ever born and living

Percent distribution of all women and currently married women by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Tanzania 2010

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	82.8	14.7	2.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,172	0.20	0.19
20-24	25.7	30.3	28.0	12.7	2.7	0.6	0.0	0.0	0.0	0.0	0.0	100.0	1,909	1.38	1.28
25-29	7.2	15.5	24.4	24.7	17.5	7.1	3.0	0.6	0.1	0.0	0.0	100.0	1,668	2.67	2.42
30-34	3.9	8.4	15.8	19.9	20.4	15.0	10.1	4.4	1.5	0.5	0.2	100.0	1,422	3.66	3.27
35-39	3.0	4.7	7.6	10.5	15.5	17.5	13.7	11.7	8.5	4.2	3.1	100.0	1,290	5.03	4.34
40-44	2.1	4.9	5.8	11.0	10.1	14.0	13.3	12.7	9.8	8.3	8.0	100.0	938	5.66	4.87
45-49	3.1	2.7	4.7	7.4	10.4	10.0	9.2	15.3	11.3	11.4	14.6	100.0	740	6.35	5.28
Total	25.1	13.8	13.9	12.1	9.9	7.6	5.6	4.5	3.0	2.2	2.2	100.0	10,139	2.88	2.53
CURRENTLY MARRIED WOMEN															
15-19	40.2	48.5	10.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	399	0.72	0.68
20-24	7.6	33.4	36.6	17.3	4.2	0.9	0.0	0.0	0.0	0.0	0.0	100.0	1,210	1.80	1.67
25-29	3.8	13.7	25.1	26.5	18.8	8.1	3.4	0.7	0.1	0.0	0.0	100.0	1,338	2.85	2.59
30-34	3.0	6.2	15.1	19.7	21.1	16.7	11.0	4.5	1.9	0.6	0.2	100.0	1,137	3.84	3.45
35-39	2.1	3.7	6.3	10.2	16.0	17.4	14.0	12.6	9.5	4.7	3.5	100.0	1,036	5.24	4.53
40-44	1.5	4.4	4.4	10.7	8.5	13.8	13.0	13.8	11.2	9.6	9.1	100.0	741	5.94	5.12
45-49	1.2	2.6	4.6	6.8	10.5	9.7	8.8	14.7	12.5	12.3	16.2	100.0	550	6.61	5.56
Total	5.9	14.6	17.4	15.8	12.9	10.0	7.2	5.8	4.3	3.0	3.0	100.0	6,412	3.76	3.31

4.5 BIRTH INTERVALS

A birth interval is defined as the length of time between two live births. The study of birth intervals is important in understanding the health status of young children. Research has shown that short birth intervals are closely associated with poor health of children, especially during infancy. Children born too close to a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and death at a young age. Longer birth intervals, on the other hand, improve the health status of both mother and child.

The study of birth intervals is done using two measures, namely, median birth interval and proportion of non-first births that occur with an interval of 24 months or more after the previous birth. Table 4.6 presents the distribution of second and higher-order births in the five years preceding the survey by the number of months since the previous birth, according to background characteristics. The table also presents the median number of months since the preceding birth.

The data in Table 4.6 show that the median birth interval is 34 months, implying that half of non-first births to women in Tanzania occur within three years after a previous birth. About 5 percent of births are less than 18 months apart, and 16 percent have an interval of less than two years. Four in ten births occur 24-35 months after the previous birth, and 45 percent are at least three years apart.

Table 4.6 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Tanzania 2010

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Age									
15-19	10.2	28.6	47.1	9.4	4.6	0.0	100.0	57	26.3
20-29	5.4	14.3	44.1	20.1	8.7	7.4	100.0	2,951	31.5
30-39	3.6	8.8	37.5	20.1	11.2	18.9	100.0	2,762	36.0
40-49	3.8	5.5	29.5	21.6	13.4	26.2	100.0	703	40.9
Birth order									
2-3	4.0	11.6	37.9	19.9	10.6	15.9	100.0	2,874	34.6
4-6	4.4	10.5	40.5	19.7	9.9	15.0	100.0	2,478	34.0
7+	6.0	11.2	42.9	21.8	9.8	8.3	100.0	1,119	32.2
Sex of preceding birth									
Male	4.5	11.5	40.1	19.6	9.7	14.6	100.0	3,242	33.8
Female	4.5	10.8	39.4	20.7	10.7	14.0	100.0	3,229	34.0
Survival of preceding birth									
Living	3.0	10.7	40.6	20.9	10.3	14.5	100.0	5,923	34.4
Dead	20.9	16.0	30.3	11.7	9.3	11.9	100.0	548	27.2
Residence									
Urban	2.6	8.7	27.2	18.7	14.7	28.1	100.0	1,154	43.0
Rural	4.9	11.6	42.5	20.5	9.2	11.3	100.0	5,317	32.9
Mainland/Zanzibar									
Mainland	4.4	11.0	39.8	20.2	10.3	14.3	100.0	6,292	34.0
Urban	2.4	8.4	26.8	18.4	15.2	28.8	100.0	1,091	43.7
Rural	4.8	11.5	42.5	20.6	9.2	11.3	100.0	5,200	32.9
Zanzibar	7.3	15.5	38.9	18.8	7.6	12.0	100.0	180	32.2
Unguja	5.4	11.1	35.8	21.2	9.6	17.0	100.0	103	35.0
Pemba	9.8	21.5	43.0	15.5	5.0	5.2	100.0	77	28.4
Zone									
Western	5.7	13.8	48.9	19.2	5.4	7.0	100.0	1,377	30.3
Northern	3.9	9.7	30.8	22.1	11.4	22.0	100.0	801	37.9
Central	3.8	10.4	42.8	22.9	10.8	9.3	100.0	622	34.3
Southern Highlands	5.1	9.9	38.7	19.7	13.3	13.3	100.0	903	34.8
Lake	5.2	15.8	46.6	18.6	6.5	7.3	100.0	1,409	30.2
Eastern	2.5	5.3	27.5	20.1	15.2	29.4	100.0	697	43.9
Southern	1.5	2.3	24.9	22.1	19.6	29.6	100.0	484	47.5
Education									
No education	4.6	11.5	45.0	21.0	8.2	9.8	100.0	1,746	32.4
Primary incomplete	4.6	13.8	44.2	18.2	8.0	11.2	100.0	980	31.5
Primary complete	4.5	10.3	36.8	20.4	11.4	16.5	100.0	3,465	35.4
Secondary+	4.1	9.1	27.9	18.3	15.5	25.1	100.0	280	41.2
Wealth quintile									
Lowest	4.4	8.6	45.9	21.7	9.8	9.7	100.0	1,455	33.0
Second	5.5	13.7	43.6	19.0	8.2	9.9	100.0	1,580	31.9
Middle	4.9	14.7	42.5	19.8	6.9	11.2	100.0	1,506	31.5
Fourth	3.1	9.1	34.6	21.2	13.6	18.4	100.0	1,177	37.1
Highest	3.8	6.7	22.5	18.8	16.3	31.9	100.0	754	47.3
Total	4.5	11.1	39.8	20.2	10.2	14.3	100.0	6,472	33.9

Note: First-order births are excluded. The interval for multiple births is the number of months since a preceding pregnancy ended in a live birth.

The median birth interval increases with age, ranging from 26.3 months for births to women age 15-19 years to 40.9 months for births to women age 40-49 years. The longer birth interval among older women may be attributed to a decrease in fecundity as women grow older. There are no significant differences in the median birth interval by the child's sex and birth order. However, the median birth interval is 7 months shorter if the previous child has died instead of survived. The median interval for births to urban women is 10 months longer than for rural women (43.0 and 32.9 months, respectively). The median birth interval ranges from a low of 30 months in Lake and Western zones to 48 months in the Southern zone. The median number of months since the preceding birth is longest among non-first births to women with at least some secondary education (41.2 months) compared with the interval among women with less education (35 months or shorter). Women in the highest wealth quintile have the longest median birth interval (47.3 months) compared with women in the lower wealth quintiles (37 months or less).

4.6 AGE AT FIRST BIRTH

The age at which childbearing commences is an important determinant of the overall level of fertility as well as the health and welfare of the mother and the child. In some societies, postponement of first births due to an increase in age at marriage has contributed to overall fertility decline. Table 4.7 shows the percentage of women who have given birth by specific ages, according to age at the time of the survey.

Table 4.7 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Tanzania 2010

	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
Current age	15	18	20	22	25			
15-19	1.0	na	na	na	na	82.8	2,172	na
20-24	3.3	28.3	55.8	na	na	25.7	1,909	19.5
25-29	3.6	26.9	55.5	75.4	88.1	7.2	1,668	19.6
30-34	2.7	28.3	56.7	75.7	89.1	3.9	1,422	19.5
35-39	3.5	29.6	55.8	75.2	88.3	3.0	1,290	19.5
40-44	3.9	27.2	58.1	75.9	89.2	2.1	938	19.5
45-49	5.2	31.5	56.6	73.7	86.0	3.1	740	19.4
20-49	3.5	28.4	56.2	na	na	9.4	7,967	19.5
25-49	3.6	28.4	56.4	75.3	88.3	4.3	6,058	19.5

na = Not applicable
a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

Overall, 4 percent of women age 25-49 have given birth by age 15, and 56 percent of women have become mothers by age 20. Whereas only 1 percent of women age 15-19 gave birth by age 15, the corresponding proportion for women age 45-49 is 5 percent. In general, there are small variations in the median age at first birth across age cohorts.

Table 4.8 presents the median age at first birth across age cohorts for key subgroups of women. The summary measures are presented for women age 25-49 to ensure that half of the women have already had a birth.

The median age at first birth in urban areas is only slightly higher (0.5 months) than that in rural areas. The median age at first birth ranges from 20.3 years in the Northern zone to 19 years in the Lake and Southern Highlands zones. In Zanzibar, the median age at first birth is 20.5 years.

Table 4.8 Median age at first birth

Median age at first birth among women age 20-49 years, according to background characteristics, Tanzania 2010

Background characteristic	Age						Women age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49	
Residence							
Urban	a	20.2	20.0	19.6	20.0	19.3	19.9
Rural	19.1	19.4	19.3	19.5	19.3	19.5	19.4
Mainland/Zanzibar							
Mainland	19.5	19.6	19.5	19.5	19.5	19.5	19.5
Urban	a	20.1	19.9	19.6	20.0	19.3	19.9
Rural	19.0	19.4	19.3	19.5	19.4	19.5	19.4
Zanzibar	a	22.4	21.1	19.7	18.9	19.4	20.5
Unguja	a	23.1	21.2	20.6	19.6	19.3	21.1
Pemba	a	21.2	20.8	18.6	18.4	19.5	19.6
Zone							
Western	18.9	19.0	18.9	19.0	19.5	20.1	19.2
Northern	a	20.3	20.0	20.4	20.5	20.4	20.3
Central	18.9	19.7	19.9	19.5	19.6	19.2	19.6
Southern Highlands	19.8	19.4	19.2	20.0	19.1	19.4	19.5
Lake	19.2	19.4	19.1	19.1	18.7	19.1	19.1
Eastern	a	20.5	19.7	19.2	20.0	18.8	19.7
Southern	18.8	18.8	19.4	19.0	19.1	19.6	19.1
Education							
No education	18.0	18.4	19.2	19.0	18.4	18.7	18.8
Primary incomplete	18.5	18.9	18.7	18.5	18.2	18.7	18.7
Primary complete	19.5	19.7	19.5	19.5	19.7	20.2	19.7
Secondary+	a	23.4	22.7	22.5	23.5	23.0	23.0
Wealth quintile							
Lowest	19.0	19.0	19.4	19.1	19.5	19.8	19.3
Second	18.8	19.2	19.2	19.1	19.1	19.2	19.2
Middle	19.1	19.3	19.4	19.9	19.3	19.4	19.4
Fourth	19.6	19.4	19.1	19.2	19.2	19.0	19.2
Highest	a	21.5	20.7	20.2	20.9	20.5	20.8
Total	19.5	19.6	19.5	19.5	19.5	19.4	19.5

a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

Women's level of education is positively related to age at first birth; women with at least some secondary education begin childbearing more than four years after women with no education (23.0 and 18.8 years, respectively). Similarly, women in the highest wealth quintile (20.8 years) delay the onset of childbearing by about one and a half years relative to women in the lower wealth quintiles (19.2 to 19.4 years).

4.7 TEENAGE PREGNANCY AND MOTHERHOOD

Teenage pregnancy is a major health concern because of its association with higher morbidity and mortality for both the mother and child. Childbearing during the teenage years frequently has adverse social consequences, particularly for educational attainment, because women who become mothers in their teens are more likely to curtail their education.

Using information from the 2010 TDHS, Table 4.9 shows that 23 percent of women age 15-19 have started childbearing; 17 percent have had a live birth; and 6 percent are pregnant with their first child. While only 5 percent of women age 15 have started childbearing, 44 percent of women are either mothers or are pregnant with their first child by age 19.

Table 4.9 Teenage pregnancy and motherhood

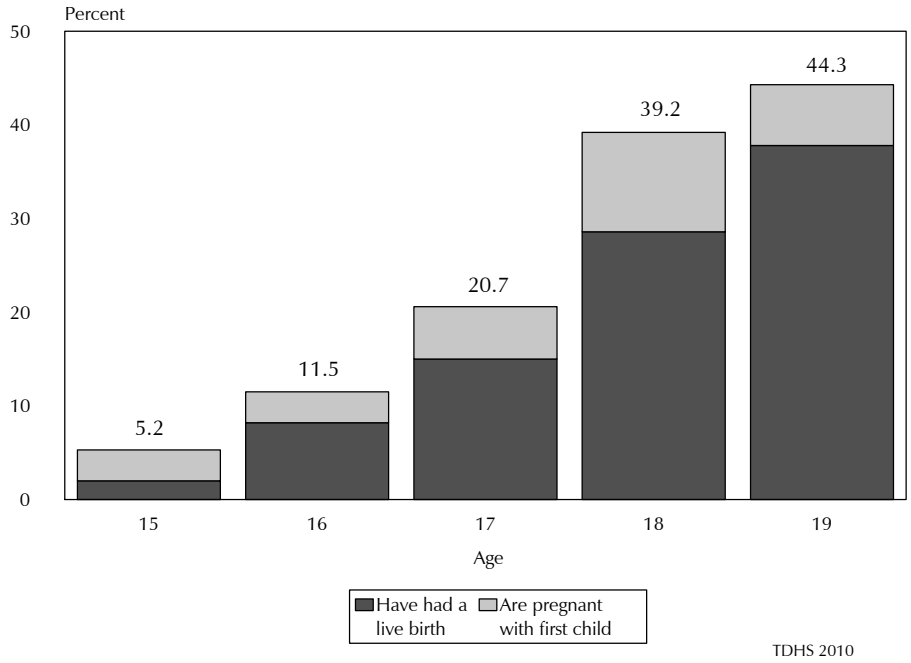
Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child and percentage who have begun childbearing, by background characteristics, Tanzania 2010

Background characteristic	Percentage who: Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	2.0	3.3	5.2	467
16	8.2	3.3	11.5	483
17	15.0	5.6	20.7	446
18	28.6	10.6	39.2	391
19	37.8	6.5	44.3	385
Residence				
Urban	12.4	2.2	14.6	643
Rural	19.2	7.1	26.3	1,529
Mainland/Zanzibar				
Mainland	17.6	5.8	23.5	2,093
Urban	12.9	2.2	15.1	613
Rural	19.6	7.3	26.9	1,480
Zanzibar	4.4	1.5	6.0	79
Unguja	5.5	1.4	6.9	48
Pemba	2.7	1.8	4.5	31
Zone				
Western	20.1	9.4	29.5	414
Northern	13.4	2.9	16.3	327
Central	18.5	1.5	20.0	154
Southern Highlands	16.4	4.5	20.9	273
Lake	20.3	8.5	28.8	445
Eastern	14.7	3.6	18.4	322
Southern	19.7	5.9	25.5	158
Education				
No education	41.9	10.0	51.9	180
Primary incomplete	18.5	6.5	25.0	441
Primary complete	22.4	8.3	30.8	802
Secondary+	4.8	1.2	6.0	749
Wealth quintile				
Lowest	19.7	8.3	28.1	266
Second	21.7	8.3	30.0	394
Middle	18.1	9.5	27.5	432
Fourth	19.1	3.1	22.2	491
Highest	10.7	2.0	12.7	589
Total	17.2	5.7	22.8	2,172

Teenagers in rural areas are more likely to start childbearing than their urban counterparts (26 and 15 percent, respectively). The percentage of women age 15-19 who have begun childbearing ranges from 16 percent in the Northern zone to 30 percent in the Western zone. Only 6 percent of women age 15-19 have begun childbearing in Zanzibar.

There is a strong inverse relationship between early childbearing and education; teenagers with less education are much more likely to start childbearing than better-educated women. Fifty-two percent of teenagers who had no education had begun childbearing compared with only 6 percent of women who attended secondary education. Teenagers in the lowest wealth quintile are more than twice as likely to start childbearing early compared with women in the highest wealth quintile (28 percent and 13 percent, respectively).

Figure 4.5 Adolescent Childbearing



FERTILITY REGULATION 5

This chapter presents the 2010 TDHS results on contraceptive knowledge, attitudes, and behaviour. Although the focus is on women, some results from the men's survey will also be presented because men play an important role in the realisation of reproductive goals. Comparisons are also made, where feasible, with findings from previous surveys to evaluate trends occurring in Tanzania over the last decade.

5.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Acquiring knowledge about fertility control is an important step towards gaining access to and then using a suitable contraceptive method in a timely and effective manner. Information on knowledge of contraception was collected in two ways. Respondents were asked to name ways or methods couples can use to prevent or delay pregnancy. If the respondent failed to mention a particular method spontaneously, the interviewer described the method and asked whether the respondent recognised it. Using this approach, information was collected for 12 modern family planning methods: female and male sterilisation, the pill, the IUD, injectables, implants, male and female condoms, the diaphragm, foam/jelly, lactational amenorrhea method (LAM), and emergency contraception. Information was also collected on two traditional methods: periodic abstinence or rhythm and withdrawal. Any other traditional or 'folk' method mentioned spontaneously by the respondent was recorded in the questionnaire. Both prompted and unprompted knowledge are combined in this report.

Table 5.1 shows that knowledge of at least one method of contraception is universal among both women and men in Tanzania regardless of marital status and sexual experience. Men are slightly more likely than women to have heard of a modern method (99 and 98 percent, respectively) and a traditional method (68 and 67 percent, respectively).

The mean number of methods known is a rough indicator of the breadth of knowledge of family planning methods. All women know an average of 8.1 contraceptive methods compared with 7.2 methods known among all men. Currently married women and men are more likely than sexually active unmarried women and men to know about family planning methods. Modern methods are more widely known than traditional methods. More than nine in ten women have heard about the pill, injectables, and the male condom. The diaphragm and foam/jelly are the least-known modern methods among women. The most well-known contraceptive methods among men are the male condom and the pill.

Table 5.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who know any contraceptive method, by specific method, Tanzania 2010

	Women			Men		
Method	All women	Currently married women	Sexually active unmarried women[1]	All men	Currently married men	Sexually active unmarried men[1]
Any method	98.0	98.9	98.5	99.3	99.7	100.0
Any modern method	97.9	98.9	98.5	99.1	99.5	100.0
Female sterilisation	83.4	87.5	84.6	74.0	84.2	71.7
Male sterilisation	37.2	40.3	35.4	40.0	45.4	39.4
Pill	96.1	98.0	97.4	90.6	96.0	87.3
IUD	72.5	79.3	75.8	51.0	62.3	48.0
Injectables	94.5	97.5	95.3	84.7	92.3	83.9
Implants	81.8	88.0	84.7	54.5	67.3	52.9
Male condom	94.5	95.6	96.9	98.6	99.0	100.0
Female condom	72.5	74.6	78.9	73.4	78.8	77.9
Diaphragm	8.3	9.0	5.8	na	na	na
Foam/jelly	9.3	10.6	9.5	na	na	na
Lactational amenorrhoea (LAM)	32.8	37.2	29.3	22.7	26.1	24.7
Emergency contraception	11.8	12.3	15.6	11.9	14.8	15.4
Any traditional method	67.1	71.3	70.7	68.1	76.6	77.7
Rhythm	54.3	55.3	59.3	51.9	58.0	59.2
Withdrawal	49.9	56.5	56.5	57.0	66.6	66.9
Folk method	11.3	14.2	9.6	6.3	8.6	5.9
Mean number of methods known by respondents 15-49	8.1	8.6	8.3	7.2	8.0	7.3
Number of respondents	10,139	6,412	742	2,527	1,317	244

na = Not available

[1] Had last sexual intercourse within 30 days preceding the survey

5.2 CURRENT USE OF CONTRACEPTIVE METHODS

The level of current use of contraceptive methods is one of the indicators most frequently used to assess the success of family planning programme activities and one of the determinants of fertility. This section focuses on the levels, trends, and differentials in current use for family planning.

Table 5.2 shows that 29 percent of all women, 34 percent of currently married women, and 51 percent of sexually active unmarried women age 15-49 are using a contraceptive method. A majority of women who are using a contraceptive method use a modern method (24 percent). Five percent of women use traditional methods. The most commonly used modern methods are injectables (9 percent), the pill (5 percent), and male condoms (4 percent).

One in three currently married women (34 percent) is currently using some method of contraception; 27 percent use a modern method and 7 percent use traditional methods. The most commonly used methods among currently married women are injectables (11 percent), the pill (7 percent), and female sterilisation (4 percent). The use of modern contraceptive methods among currently married women varies by age, gradually rising from 12 percent among women age 15-19, peaking at 32 percent among women age 30 to 34, and dropping to 22 percent among women age 45-49. Most of the women who are sterilised are age 40 or older, while younger women are more likely to use other non-permanent methods of contraception such as injectables and pills.

The high level of current use of any contraception among sexually active unmarried women (51 percent) is driven by the high prevalence of condoms and injectables (16 percent and 15 percent, respectively).

Table 5.2 Current use of contraception by age

Percent distribution of all women, currently married women, and sexually active unmarried women age 15-49 by contraceptive method currently used, according to age, Tanzania 2010

			Modern method							Any tradi-tional method	Traditional method					
Age	Any method	Any modern method	Female sterili-sation	Pill	IUD	Inject-ables	Im-plants	Male con-dom	LAM		Rhythm	With-drawal	Folk method	Not currently using	Total	Number of women
ALL WOMEN																
15-19	10.7	9.4	0.0	1.0	0.0	2.1	0.2	6.1	0.1	1.2	0.7	0.3	0.2	89.3	100.0	2,172
20-24	29.2	24.0	0.1	5.5	0.2	9.3	2.1	6.0	0.9	5.2	2.5	2.1	0.7	70.8	100.0	1,909
25-29	35.9	29.8	0.1	6.7	0.5	14.0	2.6	4.3	1.6	6.1	2.9	2.5	0.6	64.1	100.0	1,668
30-34	38.8	30.6	1.2	7.9	1.0	12.8	3.2	3.0	1.2	8.2	4.3	2.9	1.0	61.2	100.0	1,422
35-39	35.5	29.5	5.0	7.5	0.4	9.4	2.0	3.0	2.0	6.0	2.6	2.8	0.5	64.5	100.0	1,290
40-44	36.7	29.0	8.6	6.6	0.9	7.5	2.3	2.4	0.7	7.7	3.7	2.4	1.6	63.3	100.0	938
45-49	23.7	19.6	11.7	1.7	0.4	4.2	0.4	0.9	0.3	4.2	2.8	0.9	0.5	76.3	100.0	740
Total	28.8	23.6	2.5	5.1	0.4	8.5	1.8	4.2	1.0	5.2	2.6	1.9	0.7	71.2	100.0	10,139
CURRENTLY MARRIED WOMEN																
15-19	14.9	12.0	0.0	1.5	0.0	5.0	0.9	4.4	0.1	2.9	1.3	1.2	0.4	85.1	100.0	399
20-24	29.6	23.9	0.1	6.6	0.3	10.6	1.8	3.1	1.4	5.7	1.7	2.9	1.1	70.4	100.0	1,210
25-29	36.9	29.7	0.2	7.3	0.6	14.6	2.9	2.5	1.6	7.3	3.5	3.1	0.7	63.1	100.0	1,338
30-34	40.7	32.0	1.2	9.0	1.3	13.3	3.2	2.3	1.4	8.7	4.2	3.6	0.9	59.3	100.0	1,137
35-39	37.0	30.0	5.9	8.0	0.5	9.9	2.0	1.6	2.1	7.0	2.9	3.5	0.6	63.0	100.0	1,036
40-44	39.7	30.6	9.8	7.1	0.4	8.0	2.5	2.1	0.6	9.1	4.3	3.0	1.8	60.3	100.0	741
45-49	27.3	21.8	13.8	2.0	0.4	4.2	0.6	0.4	0.4	5.5	3.6	1.2	0.7	72.7	100.0	550
Total	34.4	27.4	3.5	6.7	0.6	10.6	2.3	2.3	1.3	7.0	3.1	2.9	0.9	65.6	100.0	6,412
SEXUALLY ACTIVE UNMARRIED WOMEN[1]																
15-19	39.7	34.5	0.0	7.0	0.0	8.0	0.0	19.5	0.0	5.2	2.8	0.6	1.8	60.3	100.0	170
20-24	57.6	47.9	0.0	9.3	0.0	17.0	4.6	17.1	0.0	9.7	9.0	0.7	0.0	42.4	100.0	186
25-49	52.0	47.6	4.2	8.2	0.7	16.5	3.2	13.5	1.4	4.4	2.7	0.0	1.7	48.0	100.0	387
Total	50.6	44.7	2.2	8.2	0.4	14.7	2.8	15.8	0.7	5.9	4.3	0.3	1.3	49.4	100.0	742

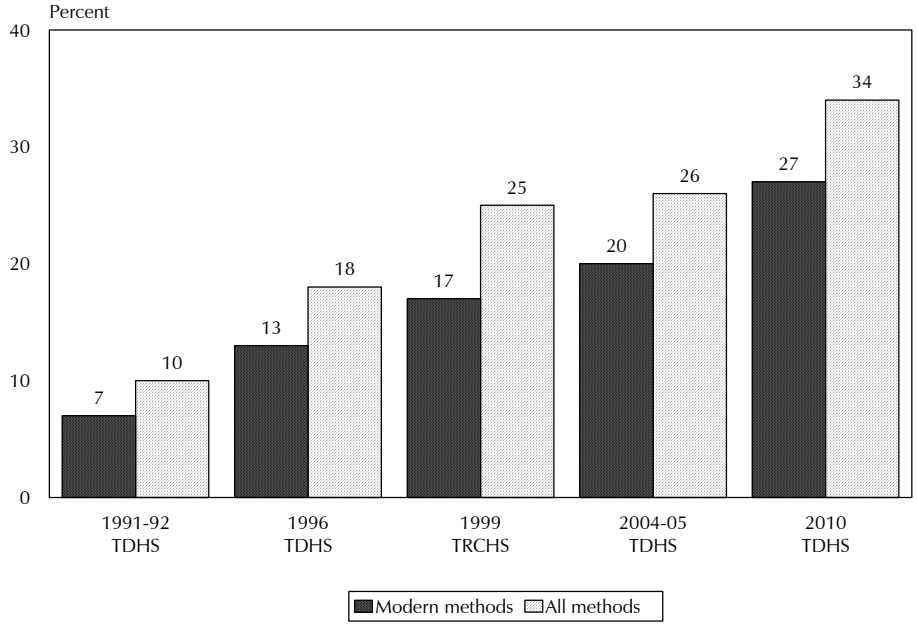
Note: If more than one method is used, only the most effective method is considered in this tabulation.
LAM = Lactational amenorrhoea method
[1] Women who have had sexual intercourse within 30 days preceding the survey

5.2.1 Trends in Contraceptive Use

Between 1991 and 2010, five nationally representative surveys have measured contraceptive use among currently married women. Figure 5.1 shows that, during the last 19 years, there has been a gradual and steady increase of contraceptive use among currently married women, from 10 percent in the 1991-92 TDHS to 34 percent in 2010. Moreover, use of modern methods of contraception increased by 20 percentage points, from 7 percent in 1991-92 to 27 percent in 2010.

The contraceptive prevalence rate has increased significantly, from 26 percent of married women in 2004-05 to 34 percent in 2010. Use of modern methods increased from 20 to 27 percent of married women in the same time period. By specific method, use of injectables has increased the most between the two surveys—from 8 percent of married women in 2004-05 to 11 percent in 2010. Current use of modern contraceptive methods among all women has increased from 18 percent in 2004-05 to 24 percent in 2010.

Figure 5.1 **Contraceptive Use among Currently Married Women Tanzania 1991-2010**



5.2.2 Current Use of Contraception by Background Characteristics

Table 5.3 shows a substantial variation by background characteristics in the current use of contraceptive methods. Currently married women in urban areas are one and a half times as likely as their rural counterparts to use a contraceptive method (46 and 31 percent, respectively). Urban women are also more likely than rural women to use a modern method (34 percent and 25 percent, respectively). Married women in Mainland Tanzania are almost twice as likely as women in Zanzibar to use a contraceptive method (35 and 18 percent, respectively).

In Mainland, contraceptive use varies significantly by region, ranging from 65 percent in Kilimanjaro to 12 percent in Mara. In Zanzibar, the corresponding proportion is 33 percent in Unguja South and 7 percent in Pemba North. Women in Lindi are most likely to rely on the pill (22 percent), while injectables are most popular among women in Kilimanjaro and Tanga regions (25 and 23 percent, respectively). Female sterilisation is most popular among women in Ruvuma region (9 percent), while implants are most popular among currently married women in Mbeya (6 percent). The IUD is most popular in Arusha region (4 percent).

Use of any contraceptive method among currently married women increases with the woman's education, from 22 percent among women with no education to 52 percent of women with at least some secondary school. Contraceptive use also increases rapidly as the number of living children increases, peaking at 41 percent for women with 3 to 4 children. Use of any contraceptive method also increases with the wealth quintile, from 23 percent of women in the lowest quintile to 51 percent of women in the highest quintile.

Table 5.3 Current use of contraception by background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Tanzania 2010

Background characteristic	Any method	Any modern method	Modern method: Female sterilisation	Male sterilisation	Pill	IUD	Injectables	Implants	Male condom	LAM	Any traditional method	Traditional method: Rhythm	Withdrawal	Folk method	Not currently using	Total	Number of women
Residence																	
Urban	45.9	34.1	3.9	0.0	8.6	0.8	14.3	2.5	3.2	0.7	11.9	6.7	4.4	0.8	54.1	100.0	1,585
Rural	30.5	25.2	3.4	0.1	6.1	0.5	9.4	2.2	2.1	1.5	5.4	2.0	2.5	0.9	69.5	100.0	4,827
Mainland/Zanzibar																	
Mainland	34.8	27.8	3.6	0.0	6.8	0.6	10.8	2.3	2.4	1.3	7.0	3.1	2.9	0.9	65.2	100.0	6,232
Urban	46.8	34.9	4.0	0.0	8.7	0.8	14.7	2.6	3.4	0.7	11.9	6.7	4.4	0.8	53.2	100.0	1,516
Rural	31.0	25.5	3.5	0.1	6.2	0.5	9.5	2.2	2.1	1.5	5.4	2.0	2.5	0.9	69.0	100.0	4,715
Zanzibar	18.4	12.4	1.0	0.0	4.0	0.2	5.6	1.0	0.6	0.1	6.0	3.0	2.8	0.2	81.6	100.0	180
Unguja	23.6	14.9	1.5	0.0	5.0	0.3	6.3	0.7	0.9	0.2	8.7	4.5	3.9	0.3	76.4	100.0	115
Pemba	9.2	8.1	0.0	0.0	2.3	0.0	4.3	1.4	0.0	0.0	1.1	0.4	0.7	0.0	90.8	100.0	64
Zone																	
Western	20.1	14.6	3.0	0.1	2.6	0.5	5.4	0.3	1.9	0.7	5.5	1.8	2.6	1.1	79.9	100.0	1,175
Northern	48.8	38.7	4.0	0.0	9.0	1.1	18.8	2.1	2.0	1.7	10.1	4.9	4.7	0.5	51.2	100.0	939
Central	28.8	26.7	2.8	0.0	4.8	0.9	14.2	2.5	0.9	0.6	2.1	1.0	1.1	0.0	71.2	100.0	556
Southern Highlands	45.6	33.6	2.9	0.0	6.2	0.8	12.0	3.7	3.9	4.2	11.9	5.5	4.7	1.7	54.4	100.0	895
Lake	18.1	15.5	5.3	0.1	3.0	0.3	2.7	1.5	1.5	1.0	2.6	0.7	0.7	1.2	81.9	100.0	1,101
Eastern	47.5	35.1	1.7	0.0	9.9	0.1	15.2	3.6	3.9	0.6	12.5	6.8	5.1	0.6	52.5	100.0	917
Southern	41.9	39.5	5.5	0.0	16.0	0.4	11.6	3.6	2.4	0.0	2.4	0.8	0.8	0.7	58.1	100.0	648
Region																	
Dodoma	29.4	27.1	0.4	0.0	5.2	1.1	17.1	2.4	0.8	0.0	2.3	1.6	0.6	0.0	70.6	100.0	334
Arusha	40.3	34.8	2.8	0.0	12.3	3.5	13.0	1.6	1.7	0.0	5.4	3.4	2.1	0.0	59.7	100.0	240
Kilimanjaro	64.8	50.3	4.8	0.0	11.9	0.5	24.7	2.7	4.1	1.7	14.5	9.9	3.9	0.6	35.2	100.0	228
Tanga	53.7	41.1	4.6	0.0	6.3	0.4	22.9	2.2	1.5	3.1	12.5	3.9	7.8	0.9	46.3	100.0	324
Morogoro	46.7	39.9	1.7	0.0	12.2	0.0	16.2	4.8	4.1	0.9	6.8	4.0	2.9	0.0	53.3	100.0	301
Pwani	41.6	38.3	1.2	0.0	13.7	0.0	18.8	3.0	1.6	0.0	3.3	0.5	1.9	0.8	58.4	100.0	168
Dar es Salaam	50.4	30.7	2.0	0.0	6.9	0.3	13.3	3.0	4.6	0.6	19.7	11.0	7.7	1.0	49.6	100.0	448
Lindi	40.5	38.5	3.7	0.0	22.3	0.6	7.1	3.3	1.6	0.0	2.0	1.5	0.0	0.5	59.5	100.0	134
Mtwara	38.0	36.8	3.6	0.0	19.4	0.4	10.6	2.4	0.4	0.0	1.2	0.0	0.4	0.8	62.0	100.0	277
Ruvuma	47.3	43.2	8.8	0.0	8.5	0.3	15.2	5.2	5.2	0.0	4.0	1.5	1.8	0.8	52.7	100.0	236
Iringa	45.2	35.2	3.7	0.0	7.1	1.4	16.0	2.2	4.9	0.0	9.9	4.1	3.2	2.6	54.8	100.0	277
Mbeya	48.5	36.9	2.5	0.0	5.4	0.4	12.3	5.8	4.6	6.0	11.7	4.5	6.1	1.1	51.5	100.0	426
Singida	27.8	26.1	6.6	0.0	4.2	0.5	9.8	2.6	0.9	1.5	1.7	0.0	1.7	0.0	72.2	100.0	221
Tabora	24.5	18.6	3.1	0.0	3.8	1.1	6.1	0.0	2.9	1.7	6.0	2.2	1.6	2.2	75.5	100.0	312
Rukwa	39.4	24.2	2.7	0.0	6.8	0.9	5.4	1.3	0.9	6.2	15.3	9.7	3.8	1.7	60.6	100.0	192
Kigoma	25.2	14.4	1.9	0.3	4.7	0.3	5.3	0.0	1.6	0.3	10.7	3.4	6.7	0.6	74.8	100.0	288
Shinyanga	15.1	12.5	3.5	0.0	0.9	0.3	5.1	0.7	1.6	0.4	2.6	0.7	1.1	0.8	84.9	100.0	575
Kagera	26.2	24.4	7.0	0.4	5.2	0.8	4.5	3.4	3.0	0.0	1.8	0.0	1.8	0.0	73.8	100.0	372
Mwanza	15.2	11.7	5.2	0.0	2.4	0.0	1.2	0.5	0.3	2.1	3.5	1.2	0.3	2.0	84.8	100.0	474
Mara	11.9	9.6	3.0	0.0	1.0	0.0	2.8	0.3	1.8	0.7	2.3	0.6	0.0	1.6	88.1	100.0	255
Manyara	27.4	21.6	3.1	0.0	5.1	0.0	10.1	1.6	0.4	1.4	5.8	2.0	3.4	0.4	72.6	100.0	147
Unguja North	11.4	7.4	0.1	0.0	1.2	0.0	4.8	0.4	0.9	0.0	4.0	0.8	3.2	0.0	88.6	100.0	29
Unguja South	33.1	28.1	0.7	0.0	9.8	0.5	14.8	1.1	1.2	0.0	5.0	2.5	1.6	0.9	66.9	100.0	17
Town West	26.3	14.7	2.3	0.0	5.3	0.4	4.8	0.7	0.8	0.3	11.6	6.5	4.8	0.3	73.7	100.0	69
Pemba North	7.1	6.6	0.0	0.0	2.6	0.0	3.4	0.6	0.0	0.0	0.5	0.5	0.0	0.0	92.9	100.0	31
Pemba South	11.1	9.4	0.0	0.0	2.0	0.0	5.3	2.2	0.0	0.0	1.7	0.3	1.4	0.0	88.9	100.0	33
Education																	
No education	22.0	17.6	2.6	0.0	4.2	0.2	6.4	1.0	1.1	2.3	4.4	1.2	1.9	1.2	78.0	100.0	1,524
Primary incomplete	27.6	22.3	3.2	0.0	4.1	0.8	9.9	1.5	1.7	1.1	5.3	1.8	2.6	0.9	72.4	100.0	866
Primary complete	38.9	31.7	4.2	0.1	8.3	0.6	12.0	2.8	2.9	1.0	7.2	3.1	3.2	0.8	61.1	100.0	3,529
Secondary+	51.8	35.3	2.3	0.0	8.6	1.2	15.1	3.8	3.8	0.5	16.5	11.8	4.4	0.3	48.2	100.0	492
Number of living children																	
0	5.2	3.2	0.0	0.0	0.8	0.0	0.4	0.0	2.0	0.0	2.0	0.9	1.1	0.0	94.8	100.0	451
1-2	33.7	26.9	0.8	0.0	6.9	0.6	12.4	1.9	3.5	0.9	6.7	3.3	2.7	0.7	66.3	100.0	2,282
3-4	40.6	32.8	2.8	0.1	9.1	0.7	13.1	3.9	1.7	1.4	7.8	3.7	3.1	0.9	59.4	100.0	1,935
5+	35.9	28.2	8.9	0.0	5.5	0.6	8.2	1.6	1.5	1.9	7.7	2.9	3.4	1.4	64.1	100.0	1,744
Wealth quintile																	
Lowest	22.9	19.2	1.8	0.0	5.2	0.6	8.2	1.1	0.8	1.5	3.7	1.2	1.6	0.8	77.1	100.0	1,165
Second	26.7	21.9	3.6	0.1	5.9	0.3	7.1	1.8	1.0	2.1	4.8	0.9	2.7	1.2	73.3	100.0	1,344
Middle	28.6	23.2	2.5	0.0	5.5	0.4	8.6	2.1	2.6	1.3	5.4	2.4	2.5	0.5	71.4	100.0	1,333
Fourth	42.6	34.6	4.8	0.1	7.6	0.8	13.8	3.3	3.7	0.6	8.0	3.9	3.1	1.0	57.4	100.0	1,301
Highest	50.6	37.7	4.8	0.0	9.4	0.8	15.4	2.8	3.5	0.9	12.9	7.4	4.7	0.9	49.4	100.0	1,269
Total	34.4	27.4	3.5	0.0	6.7	0.6	10.6	2.3	2.3	1.3	7.0	3.1	2.9	0.9	65.6	100.0	6,412

Note: If more than one method is used, only the most effective method is considered in this tabulation.
LAM = Lactational amenorrhoea method

5.2.3 Current Use of Socially Marketed Pill Brands

Female respondents who reported using an oral contraceptive pill at the time of the survey were asked what brand of the pill they were using. If the brand was one of the socially marketed pills, the brand name was recorded.

Table 5.4 shows that, among the socially marketed pills, Lo Femanal and Microgynon are the most favoured brands (51 percent and 30 percent, respectively). Other noted brand names, Safe Plan and Macroval, were used by 4 percent and 3 percent of women, respectively. Urban pill users are more likely than rural users to use Microgynon (37 percent compared with 26 percent), while rural woman are more likely than urban women to use Lo Femanal (55 percent compared with 43 percent). There is no uniform pattern in use of brand name pills by the woman's education and wealth quintile.

Table 5.4 Use of socially marketed pills by brand

Percentage of pill users age 15-49 using social marketing brands, by background characteristics, Tanzania 2010

Background characteristic	Percentage of pill users by pill brand					Total	Number of users
	Micro-Gynon	Lofemanal	Safe Plan	Macroval	Other		
Residence							
Urban	37.0	42.5	4.9	1.5	14.1	100.0	157
Rural	26.3	55.4	3.1	3.8	11.4	100.0	334
Mainland/Zanzibar							
Mainland	29.3	51.5	3.7	3.1	12.4	100.0	484
Urban	36.7	42.4	5.0	1.6	14.4	100.0	153
Rural	25.9	55.7	3.1	3.8	11.5	100.0	331
Zanzibar	(62.9)	(37.1)	(0.0)	(0.0)	(0.0)	100.0	7
Unguja	*	*	*	*	*	100.0	5
Pemba	*	*	*	*	*		1
Zone							
Western	*	*	*	*	*	100.0	26
Northern	37.1	40.3	3.8	7.1	11.7	100.0	100
Central	(9.1)	(43.4)	(7.5)	(0.0)	(40.0)	100.0	28
Southern Highlands	(21.9)	(49.9)	(9.3)	(1.8)	(17.1)	100.0	63
Lake	*	*	*	*	*	100.0	36
Eastern	35.7	48.8	3.1	0.8	11.6	100.0	101
Southern	29.0	62.5	0.0	3.5	5.1	100.0	130
Education							
No education	30.8	53.1	2.1	0.0	14.1	100.0	67
Primary incomplete	28.1	59.1	0.0	2.6	10.1	100.0	43
Primary complete	27.9	49.9	4.5	4.2	13.5	100.0	330
Secondary+	41.8	51.4	3.5	0.0	3.2	100.0	50
Wealth quintile							
Lowest	28.7	49.9	2.5	6.3	12.6	100.0	72
Second	31.9	60.5	0.0	1.0	6.5	100.0	90
Middle	21.5	59.6	3.9	4.4	10.6	100.0	91
Fourth	30.8	45.2	5.6	1.6	16.8	100.0	109
Highest	33.7	44.9	5.1	3.0	13.3	100.0	130
Total	29.7	51.3	3.7	3.1	12.2	100.0	491

Note: Table excludes pill users who do not know the brand name. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

5.2.4 Current Use of Socially Marketed Condom Brands

Female respondents who reported using a condom at the time of the survey were asked what brand of condom they were using. If the brand was one of the socially marketed condoms, the brand name was recorded.

Table 5.5 shows show that two in three women (65 percent) are using the socially marketed condom *Salama*, 57 percent in urban and 71 percent in rural areas. Another condom brand, *Dome*, is used by 16 percent of women, *MSD* is used by 8 percent, and *Familia* condoms are used by 5 percent. *Rough Rider* and other socially marketed condoms are each used by 3 percent of women.

Table 5.5 Use of socially marketed condoms by brand

Percentage of condom users age 15-49 using socially marketed brands of condoms, by background characteristics, Tanzania 2010

Background characteristic	Percentage of condom users by brand							Number of condom users
	Salama	MSD	Dume	Rough Rider	Familia	Other	Total	
Residence								
Urban	56.8	3.0	22.4	5.9	7.3	4.5	100.0	172
Rural	70.8	11.2	12.0	0.4	3.7	1.9	100.0	240
Mainland/Zanzibar								
Mainland	64.9	7.8	16.4	2.7	5.2	3.0	100.0	411
Urban	56.6	3.1	22.5	5.9	7.4	4.6	100.0	171
Rural	70.8	11.2	12.0	0.4	3.7	1.9	100.0	240
Zanzibar	*	*	*	*	*	*	100.0	1
Unguja	*	*	*	*	*	*	100.0	1
Pemba	*	*	*	*	*	*	100.0	0
Zone								
Western	(60.4)	(6.3)	(28.8)	(0.0)	(4.5)	(0.0)	100.0	55
Northern	(57.2)	(17.3)	(5.5)	(10.9)	(4.1)	(5.0)	100.0	53
Central	*	*	*	*	*	*	100.0	19
Southern Highlands	73.0	9.2	11.3	0.0	6.6	0.0	100.0	79
Lake	(62.5)	(12.6)	(13.6)	(2.3)	(4.1)	(5.0)	100.0	67
Eastern	64.0	1.5	20.7	3.5	4.1	6.2	100.0	103
Southern	(67.1)	(6.0)	(16.2)	(0.0)	(10.6)	(0.0)	100.0	34
Education								
No education	*	*	*	*	*	*	100.0	21
Primary incomplete	(75.7)	(13.0)	(11.3)	(0.0)	(0.0)	(0.0)	100.0	34
Primary complete	64.5	7.8	19.0	2.5	4.0	2.2	100.0	211
Secondary+	61.8	5.6	14.6	3.8	8.9	5.3	100.0	147
Wealth quintile								
Lowest	*	*	*	*	*	*	100.0	19
Second	(73.7)	(11.0)	(12.8)	(0.0)	(2.4)	(0.0)	100.0	40
Middle	72.3	11.5	11.2	1.4	3.7	0.0	100.0	64
Fourth	62.7	9.0	21.6	1.9	2.8	2.0	100.0	120
Highest	58.9	5.2	16.6	4.6	8.8	5.9	100.0	169
Total	65.0	7.8	16.3	2.7	5.2	3.0	100.0	412

Note: Table excludes condom users who do not know the brand name. Condom use is based on women's reports. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

5.3 KNOWLEDGE OF FERTILE PERIOD

The successful use of natural family planning methods depends largely on an understanding of when during the menstrual cycle a woman is most likely to conceive. An elementary knowledge of reproductive physiology provides background for the successful practice of coitus-associated methods such as withdrawal. Such knowledge is especially critical for the practice of periodic abstinence/ rhythm (the calendar method).

The 2010 TDHS respondents were asked about their knowledge of a woman's fertile period. Table 5.6 provides the results for all women users and nonusers of periodic abstinence, as well as for all men. Overall, only one-fifth (20 percent) of women and 14 percent of men reported the correct timing of the fertile period, that is, halfway through the woman's menstrual cycle. These findings show a marked decline compared with the 2004-05 TDHS results when 26 percent of women reported the correct timing of the fertile period. Furthermore, only one in three users of periodic abstinence (33 percent) knows the correct timing of the fertile period.

Table 5.6 Knowledge of fertile period

Percent distribution of women and men age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method (women only), Tanzania 2010

Perceived fertile period	Users of rhythm method	Nonusers of rhythm method	All women	All men
Just before her menstrual period begins	5.9	6.7	6.6	12.2
During her menstrual period	0.5	1.2	1.2	4.0
Right after her menstrual period has ended	49.6	42.4	42.6	37.5
Halfway between two menstrual periods	33.1	19.1	19.5	13.5
Other	0.5	0.2	0.2	0.3
No specific time	7.1	10.8	10.7	11.1
Don't know	3.0	19.4	18.9	21.0
Missing	0.3	0.2	0.2	0.2
Total	100.0	100.0	100.0	100.0
Number of women/men	263	9,876	10,139	2,527

5.4 SOURCE OF SUPPLY

Information on where women obtain their contraceptive methods is important for family planning programme managers. All current users of modern contraceptive methods were asked the most recent source of their method. The results are shown in Table 5.7.

Table 5.7 Source of modern contraception methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Tanzania 2010

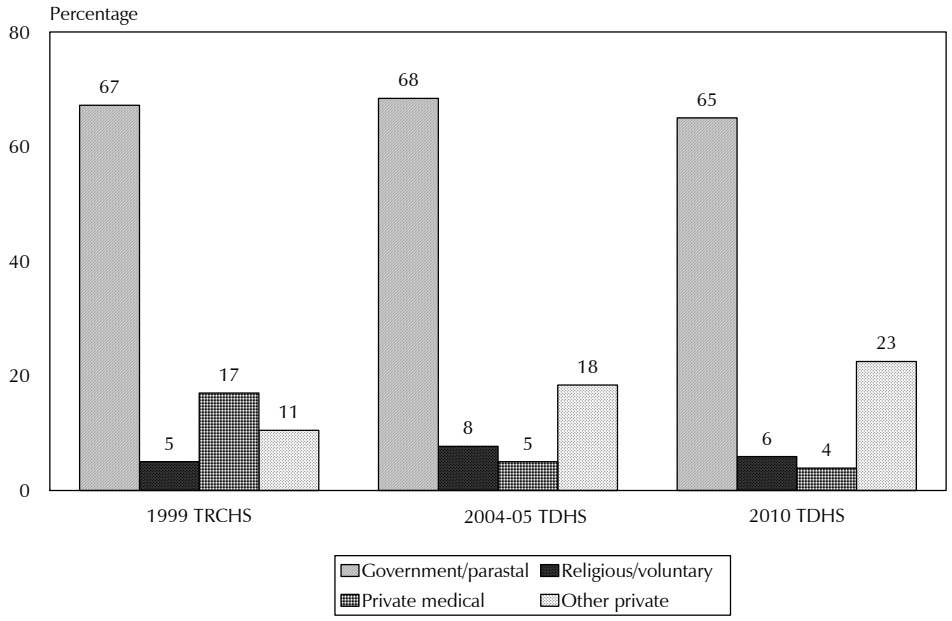
Source	Female sterili-sation	Pill	Inject-ables	Implants	Male condom	Total[1]
Governmental/parastatal	65.1	73.5	78.5	91.5	16.8	65.2
Referral/special hospital	5.5	0.6	0.4	3.8	0.0	1.3
Regional hospital	16.2	1.1	1.0	4.7	0.4	2.9
District hospital	30.6	7.0	5.0	15.9	1.2	8.3
Health centre	12.8	12.2	20.9	26.3	4.6	15.7
Dispensary	0.0	50.3	50.8	40.9	8.7	35.8
Village health post	0.0	1.0	0.1	0.0	1.5	0.5
CBD worker	0.0	1.3	0.4	0.0	0.4	0.5
Religious/voluntary	23.1	4.1	5.2	2.3	0.6	5.9
Referral/special hospital	7.8	0.0	0.1	0.0	0.0	0.9
District hospital	13.5	1.4	2.7	0.0	0.0	3.0
Health centre	1.7	1.3	1.1	0.9	0.0	1.0
Dispensary	0.0	1.4	1.2	1.4	0.6	1.0
Private medical	4.0	2.6	6.5	4.6	0.0	3.9
District hospital	3.4	0.5	0.3	2.9	0.0	0.8
Health centre	0.6	0.6	1.7	0.6	0.0	1.0
Dispensary	0.0	1.5	4.5	1.1	0.0	2.1
Other private	0.0	19.3	7.5	1.0	80.6	22.5
Pharmacy	0.0	14.9	5.7	0.0	22.3	9.7
NGO	0.0	0.2	0.1	1.0	1.2	0.5
VCT centre	0.0	0.0	0.0	0.0	0.5	0.1
Shop/kiosk	0.0	3.8	1.5	0.0	51.5	11.1
Friend/relative/neighbour	0.0	0.4	0.2	0.0	5.1	1.1
Other	5.4	0.0	0.3	0.0	0.7	0.9
Missing	2.5	0.5	1.9	0.6	1.3	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	253	521	860	184	430	2,296

Note: Total includes two women whose partners were sterilised, 44 women who used IUDs, and one woman who used the female condom.
[1] Total includes other modern methods but excludes lactational amenorrhea method (LAM).

The table shows that the government/parastatal sector, or the public sector, is the major source of modern contraception methods in Tanzania, providing modern contraceptives to 65 percent of users. Six percent of users of modern contraception obtain their method from the religious/voluntary sector, 4 percent from the private medical sector, and 23 percent from a private source. The public sector is the source most commonly reported by users of implants (92 percent), injectables (79 percent), the pill (74 percent), and female sterilisation (65 percent). Eight in ten (81 percent) male condom users obtain their condoms from the private sector, specifically pharmacies (22 percent) and shops or kiosks (52 percent).

The dominance of the public sector has not changed since 1999 (67 percent) and the 2004-05 TDHS (68 percent) as shown in Figure 5.2.

Figure 5.2 **Sources of Contraception among Women, Tanzania, 1999-2010**



5.5 INFORMED CHOICE

Informed choice is an important aspect of the delivery of family planning services. It is required that all family planning providers inform method users of the potential side effects and what they should do if they encounter such side effects. This information is to assist the user in coping with side effects and thus to decrease discontinuation of temporary methods. Contraceptive users should also be informed of the choices they have with respect to other methods. Table 5.8 shows the percentage of current users of modern methods who were informed about side effects or problems of the method used and informed of other methods they could use at the time they first began using the method. These are broken down by method type, initial source, and background characteristics.

A majority of users were given information about each of the three issues considered to be essential parts of informed choice; 57 percent were informed about potential side effects of their method, 57 percent of women were told what to do if they experienced side effects, and 77 percent of the users were given information about other contraception method options. These percentages are lower than those recorded in the 2004-05 TDHS, when 71 percent of women were informed about potential side effects of their method, 69 percent were told what to do if they experienced side effects, and 79 percent were informed of other choices of contraception methods.

Table 5.8 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the five years preceding the survey, the percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods that they could use, by method; by initial source of method, Tanzania 2010

	Among women who started last episode of modern contraceptive method within five years preceding the survey:			
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if side effects were experienced	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women
Method				
Female sterilisation	59.0	55.3	68.1	130
Pill	49.6	51.0	79.8	481
IUD	(81.1)	(82.8)	(79.5)	42
Injectables	56.1	55.9	83.0	797
Implants	72.9	69.3	89.6	180
Initial source of method[1]				
Governmental/parastatal	58.6	58.0	86.1	1,301
Referral/special hospital	(66.7)	(66.7)	(86.3)	25
Regional hospital	76.0	70.0	79.2	43
District hospital	65.8	63.5	80.5	149
Health centre	62.4	64.6	88.5	319
Dispensary	54.5	53.4	86.8	759
Village health post	*	*	*	3
CBD worker	*	*	*	4
Religious/voluntary	74.7	78.1	79.1	95
Referral/special hospital	*	*	*	6
District hospital	(76.2)	(83.0)	(83.1)	49
Health centre	77.7	71.6	83.0	18
Dispensary	70.3	71.7	71.7	21
Private medical	60.6	55.6	75.0	75
District hospital	*	*	*	16
Health centre	*	*	*	15
Dispensary	(46.6)	(40.2)	(59.6)	43
Other private	31.4	33.1	47.0	131
Pharmacy	29.6	36.9	46.8	91
NGO/shop/kiosk	(35.8)	(27.6)	(53.5)	36
Friend/relative/neighbour	*	*	*	5
Total	56.9	56.6	81.5	1,630

Note: Table includes users of only the methods listed individually. Total includes 28 women with information missing on initial source of method. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Source at start of current episode of use

5.6 FUTURE USE OF CONTRACEPTION

Intention to use a method of contraception is an important indicator of the potential demand for family planning services. Currently married women who were not using contraceptives at the time of the survey were asked about their intention to use family planning in the future. The results are shown in Table 5.9.

More than half (54 percent) of currently married female nonusers intend to use family planning in the future, but 39 percent do not intend to use it. This reflects a slight decrease from the 2004-05 TDHS data, in which 56 percent of currently married women reported intent to use a method in the future. Women with at least one living child are significantly more likely than women with no children to say that they intend to use a method.

Table 5.9 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Tanzania 2010

Intent to use in the future	Number of living children[1]					Total
	0	1	2	3	4+	
Intends to use	43.7	57.1	63.3	56.5	50.1	54.4
Don't know	11.2	7.5	5.4	6.0	4.7	5.9
Does not intend to use	43.7	34.9	29.3	36.6	44.3	38.6
Missing	1.4	0.5	2.0	0.9	0.9	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	276	738	789	669	1,737	4,209

[1] Includes current pregnancy

5.7 EXPOSURE TO FAMILY PLANNING MESSAGES

The mass media and interpersonal communication can be a major source of family planning messages. Information about public exposure to messages through a particular type of media allows policymakers to ensure the use of the most effective means of communication for various target groups in the population. To assess the effectiveness of electronic, print, and local sources on the dissemination of family planning information, respondents in the 2010 TDHS were asked if during the six months preceding the survey they had heard or seen family planning messages on the radio or television; read a family planning message in a newspaper, magazine, poster, or billboard; heard a family planning message at a community event or a live drama; or heard from a doctor/nurse or other health worker. The results are shown in Tables 5.10.1 and 5.10.2.

Three-quarters of women were exposed to a family planning message from some source. Among women, radio is the most common mass media source of family planning messages (49 percent). Other common mass media sources include billboards (35 percent) and posters (34 percent). About one in five women mentioned newspapers/magazines (21 percent), live dramas (20 percent), television (19 percent), and community events (19 percent). For interpersonal sources of family planning messages, the most common sources are doctors/nurses (50 percent) followed by other health workers (43 percent).

Men's exposure to family planning messages follows the same pattern as women's exposure, except that men are more likely than women to have been exposed to a message from every mass media source. However, men are less likely than women to have interpersonal contact with the source of information. This is attributed to the fact that women are more likely than men to meet health service providers.

Exposure to family planning messages is found to be significantly higher in urban areas than in rural areas for all sources of messages. The widest urban-rural gap for women is in television (46 percent and 9 percent, respectively).

Twenty-four percent of women and 22 percent of men were not exposed to family planning messages from any source during the six months preceding the survey. There are significant differences in exposure by background characteristics. Rural residents, respondents with less education, and those in the lowest wealth quintile are the least likely to be exposed to family planning messages. There is considerable variation by region.

Table 5.10.1 Exposure to family planning messages: Women

Percentage of women age 15-49 who heard or saw a family planning message in the mass media or from a community source in the past six months, according to background characteristics, Tanzania 2010

Background characteristic	Radio	Tele-vision	News-paper/ magazine	Poster	Billboard	Com-munity event	Drama	Doctor/ nurse	Health worker	None of these sources	Number of women
Age											
15-19	42.6	21.0	23.0	32.4	32.2	17.5	21.8	26.6	22.8	35.4	2,172
20-24	50.4	23.3	23.8	35.8	36.5	19.0	22.4	54.6	44.8	20.4	1,909
25-29	52.6	19.3	21.2	36.7	39.0	18.5	20.4	61.7	51.6	18.0	1,668
30-34	53.9	19.7	22.3	37.6	40.6	18.7	20.8	62.8	54.2	17.4	1,422
35-39	46.9	14.6	16.9	31.3	32.6	18.8	16.4	56.6	47.4	22.7	1,290
40-44	49.8	16.0	18.1	32.9	32.9	17.1	16.4	51.0	44.4	23.0	938
45-49	45.2	15.3	16.0	31.4	29.0	21.3	18.4	43.7	40.2	32.6	740
Residence											
Urban	61.7	45.8	38.3	54.2	56.5	26.5	38.6	54.9	50.0	13.1	2,892
Rural	43.5	8.7	14.1	26.4	26.7	15.3	12.7	48.1	39.5	28.7	7,247
Mainland/Zanzibar											
Mainland	48.8	19.2	21.3	34.6	35.5	18.5	20.0	50.5	42.7	23.9	9,813
Urban	62.4	46.3	39.3	55.3	57.6	26.9	39.1	55.8	50.8	12.1	2,758
Rural	43.5	8.6	14.3	26.6	26.8	15.2	12.6	48.4	39.6	28.5	7,055
Zanzibar	44.8	23.3	12.2	25.3	27.5	18.6	23.0	38.1	35.3	33.4	326
Unguja	49.1	28.7	14.7	28.1	29.1	17.1	27.2	32.0	28.3	32.9	212
Pemba	36.8	13.3	7.7	20.0	24.6	21.4	15.1	49.1	48.1	34.4	115
Zone											
Western	50.6	12.3	18.8	33.9	25.7	27.4	11.3	51.4	37.6	25.7	1,728
Northern	49.7	21.0	20.2	27.3	33.0	15.1	20.0	50.0	50.7	25.7	1,530
Central	46.1	8.3	10.1	11.7	13.5	5.4	9.0	54.6	53.1	27.0	812
Southern Highlands	42.6	13.7	14.2	31.3	33.7	15.4	13.3	45.2	32.2	28.6	1,370
Lake	42.4	12.9	15.6	28.7	31.2	13.1	14.8	41.5	26.0	28.8	1,809
Eastern	59.0	39.7	40.6	61.8	64.2	28.3	44.0	60.0	60.2	11.0	1,608
Southern	50.5	23.2	25.7	37.4	37.9	17.3	24.3	54.4	47.7	20.9	955
Region											
Dodoma	44.9	7.6	7.6	11.3	13.1	4.2	8.7	57.7	57.2	24.3	495
Arusha	47.0	21.5	24.0	28.2	29.1	18.4	22.5	54.6	58.9	25.3	401
Kilimanjaro	62.6	29.8	23.9	28.8	45.2	11.3	18.4	48.4	45.0	16.8	411
Tanga	44.2	18.8	16.3	28.6	30.9	16.9	24.8	49.7	50.0	30.1	498
Morogoro	55.4	15.4	24.8	45.7	49.7	16.3	30.8	60.1	60.5	17.6	481
Pwani	48.1	11.7	14.3	45.4	47.4	11.5	22.1	64.1	66.3	13.3	261
Dar es Salaam	64.3	61.6	57.3	75.7	77.3	40.1	58.0	58.7	58.1	6.6	866
Lindi	53.7	21.9	26.1	25.6	29.0	20.6	24.3	60.7	54.0	20.8	198
Mtwara	54.4	33.8	35.5	32.2	36.0	25.0	26.6	59.8	52.4	20.2	407
Ruvuma	44.2	11.5	14.1	50.1	45.1	6.3	21.7	44.5	38.7	21.8	350
Iringa	55.5	17.1	17.3	50.3	38.6	16.4	25.2	44.2	37.1	18.8	490
Mbeya	41.0	14.5	15.7	24.9	35.8	14.4	8.2	45.7	30.1	32.5	623
Singida	48.0	9.3	14.0	12.2	14.0	7.2	9.6	49.6	46.8	31.3	317
Tabora	48.6	12.4	16.5	35.6	26.8	28.3	12.9	55.4	49.4	26.4	447
Rukwa	21.9	5.4	4.6	10.6	19.2	15.7	2.6	46.2	28.0	38.1	257
Kigoma	43.0	13.8	16.2	32.2	29.4	17.8	16.9	46.0	26.7	29.5	462
Shinyanga	56.1	11.5	21.5	34.0	23.0	32.3	7.3	52.2	37.4	23.2	819
Kagera	48.2	13.5	15.1	37.0	24.6	22.1	15.9	52.5	23.3	25.1	590
Mwanza	38.5	14.0	15.5	24.9	28.9	9.5	14.9	30.9	25.2	34.7	844
Mara	42.2	9.3	16.8	24.3	46.7	7.1	12.6	48.0	32.0	21.4	376
Manyara	42.8	8.4	15.3	19.8	21.8	11.7	7.6	45.4	47.7	33.4	220
Unguja North	44.6	7.4	5.4	15.4	13.8	8.4	20.7	26.8	19.7	40.9	50
Unguja South	54.4	23.7	15.6	31.2	29.2	15.8	24.1	42.0	42.3	28.6	30
Town West	49.5	38.1	18.0	32.3	35.0	20.7	30.4	31.8	28.3	30.8	131
Pemba North	26.9	6.4	2.8	17.2	17.7	24.5	7.8	45.1	45.7	39.1	56
Pemba South	46.1	19.8	12.3	22.6	31.1	18.5	22.0	52.9	50.3	30.0	59
Education											
No education	30.6	4.7	2.9	16.6	8.6	13.8	8.1	44.0	36.1	39.4	1,940
Primary incomplete	39.8	10.6	10.6	25.6	21.0	14.9	11.7	44.3	34.5	33.7	1,482
Primary complete	53.7	19.2	23.4	36.8	41.5	18.0	19.7	56.2	48.0	19.0	5,071
Secondary+	62.7	44.7	44.5	55.2	60.1	28.8	43.2	43.3	40.1	13.9	1,646
Wealth quintile											
Lowest	28.5	4.5	9.0	19.2	16.4	13.0	8.4	44.6	36.9	39.9	1,681
Second	38.9	5.1	10.3	22.4	20.2	15.9	7.7	47.0	36.6	32.6	1,947
Middle	45.9	7.8	14.8	25.9	27.8	13.9	12.7	49.3	39.3	26.5	1,997
Fourth	56.6	14.9	21.9	37.9	41.2	17.2	21.7	53.2	46.3	17.2	2,112
Highest	66.2	54.5	42.5	58.4	61.4	29.4	43.1	54.3	50.5	10.8	2,403
Total 15-49	48.7	19.3	21.0	34.3	35.2	18.5	20.1	50.1	42.5	24.2	10,139

Table 5.10.2 Exposure to family planning messages: men

Percentage of men age 15-49 who heard or saw a family planning message in the mass media or from a community source in the past six months, according to background characteristics, Tanzania 2010

Background characteristic	Radio	Tele-vision	News-paper/ magazine	Poster	Billboard	Com-munity event	Drama	Doctor/ nurse	Health worker	None of these sources	Number of men
Age											
15-19	47.6	25.2	24.1	39.8	28.3	16.5	26.6	20.9	21.0	30.9	645
20-24	64.1	34.6	27.3	46.1	31.8	17.6	25.3	22.7	25.6	21.3	414
25-29	63.0	35.9	27.2	48.3	40.4	23.0	27.1	34.3	36.6	20.6	343
30-34	67.5	39.3	34.3	53.8	34.5	19.6	30.6	35.3	32.3	19.2	352
35-39	66.4	32.9	33.1	51.4	38.6	22.6	26.5	37.9	38.8	19.6	300
40-44	66.4	26.1	32.4	51.2	39.0	21.4	27.4	35.8	37.2	16.3	270
45-49	68.5	33.5	38.2	53.8	43.9	33.4	34.9	51.7	45.3	17.8	204
Residence											
Urban	74.0	59.1	50.3	67.9	50.6	32.4	50.4	44.7	42.0	11.1	693
Rural	56.2	21.5	21.7	40.0	29.1	16.1	19.2	26.0	27.2	26.5	1,834
Mainland/Zanzibar											
Mainland	61.3	31.8	29.8	48.4	35.0	20.6	27.7	31.3	31.4	22.0	2,452
Urban	74.7	59.8	51.4	69.8	51.2	32.9	51.5	45.9	42.8	10.5	662
Rural	56.4	21.4	21.8	40.5	29.0	16.0	18.9	25.9	27.1	26.2	1,790
Zanzibar	53.0	33.5	21.5	22.7	34.9	22.3	29.1	25.2	26.9	33.3	75
Unguja	60.7	39.6	24.3	24.3	39.9	23.4	29.8	25.6	29.4	25.4	53
Pemba	34.6	19.1	14.6	18.9	22.9	19.6	27.5	24.3	21.1	52.2	22
Zone											
Western	44.9	22.4	17.6	29.5	31.3	13.1	17.8	19.3	18.4	42.9	371
Northern	58.8	37.3	35.6	51.4	40.7	22.1	36.7	41.5	42.3	25.7	350
Central	57.9	14.6	10.4	9.2	6.3	4.7	8.0	26.4	35.4	28.8	208
Southern Highlands	72.8	38.4	34.4	60.0	50.0	29.8	29.1	43.1	46.1	9.6	355
Lake	55.7	23.3	20.3	55.5	17.8	13.7	13.3	19.6	20.9	18.8	521
Eastern	77.1	53.1	53.1	72.2	59.1	35.5	59.0	50.8	38.4	7.7	413
Southern	61.7	24.8	30.7	33.7	31.0	19.0	22.4	13.1	20.4	28.4	236
Region											
Dodoma	57.0	16.4	8.2	6.0	4.8	3.4	4.8	26.2	40.0	28.3	122
Arusha	47.9	26.3	24.6	24.5	19.2	18.2	16.7	23.3	21.2	41.6	87
Kilimanjaro	68.7	53.9	49.7	73.8	58.3	30.1	51.2	51.9	51.6	16.5	92
Tanga	62.8	37.0	42.2	67.1	52.0	23.9	45.4	54.0	57.0	16.7	124
Morogoro	72.4	37.8	44.9	55.9	56.8	37.1	43.0	47.4	25.8	14.7	146
Pwani	67.7	37.6	37.3	75.8	66.6	26.6	44.1	36.0	9.6	8.2	59
Dar es Salaam	83.1	68.4	63.3	82.7	58.6	36.9	74.7	57.4	55.4	2.5	207
Lindi	49.8	17.4	17.3	15.0	11.9	11.9	10.4	9.8	7.1	41.0	47
Mtwara	49.6	21.9	19.4	21.9	17.2	12.7	17.2	11.2	12.4	44.8	87
Ruvuma	77.3	30.6	46.5	52.2	51.4	27.6	32.2	16.2	33.4	8.7	102
Iringa	79.4	41.0	40.5	58.7	55.3	24.2	41.4	23.8	27.0	7.2	140
Mbeya	70.1	40.8	35.4	68.4	52.1	38.7	21.0	61.1	67.5	6.3	143
Singida	59.3	12.1	13.5	13.8	8.5	6.6	12.5	26.6	28.9	29.6	86
Tabora	60.4	36.9	27.4	33.2	44.9	19.8	30.6	28.4	27.6	31.2	105
Rukwa	65.3	28.8	20.6	45.9	35.4	22.6	21.3	44.9	40.7	20.7	72
Kigoma	55.9	24.3	25.3	64.5	55.5	27.5	27.8	39.1	36.4	11.4	96
Shinyanga	28.9	12.2	7.1	7.4	9.0	0.8	4.2	2.5	2.5	68.0	169
Kagera	63.6	29.0	23.6	58.2	50.4	24.6	26.2	26.0	20.0	9.1	161
Mwanza	54.2	20.7	19.3	47.6	3.8	8.1	9.7	18.1	21.3	25.3	276
Mara	45.4	21.2	17.5	76.2	1.3	11.4	0.0	12.1	21.4	16.1	83
Manyara	49.6	26.3	11.1	16.0	16.8	8.6	22.2	21.7	24.4	37.5	47
Unguja North	44.9	28.8	23.4	19.5	37.6	23.7	30.9	28.9	27.7	39.2	11
Unguja South	62.6	11.9	10.8	8.3	36.7	6.6	10.8	20.8	21.9	32.4	9
Town West	65.5	50.7	28.4	30.2	41.6	27.9	34.6	25.8	32.0	18.8	33
Pemba North	36.6	12.4	10.6	16.1	21.5	15.9	23.6	15.2	11.9	58.3	10
Pemba South	32.9	24.3	17.7	21.1	24.0	22.5	30.5	31.4	28.4	47.3	12
Education											
No education	36.1	12.4	5.3	22.1	19.7	8.4	11.2	14.7	17.3	44.4	239
Primary incomplete	52.4	21.4	11.3	33.5	22.7	13.7	17.5	19.5	21.8	30.2	460
Primary complete	64.1	29.6	31.0	50.0	36.1	19.9	24.7	34.4	33.6	20.5	1,249
Secondary+	71.9	53.1	51.1	64.4	48.7	32.7	49.3	40.1	39.2	10.9	578
Wealth quintile											
Lowest	34.6	9.1	8.8	25.6	16.2	8.8	7.5	17.0	20.0	44.4	401
Second	47.6	13.4	14.1	31.0	22.1	13.7	15.0	18.5	19.7	38.0	447
Middle	66.6	20.9	24.1	45.9	33.4	16.5	21.3	31.0	34.2	15.4	490
Fourth	70.6	33.9	33.6	53.2	41.8	22.7	30.8	35.7	32.7	15.2	572
Highest	74.9	66.6	54.7	70.3	51.5	34.6	52.4	45.3	43.1	8.8	618
Total 15-49	61.1	31.8	29.6	47.7	35.0	20.6	27.8	31.1	31.2	22.3	2,527

5.8 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

In the 2010 TDHS, women who were not using contraception were asked whether a family planning worker had visited and talked to them in the past 12 months. They were also asked whether they had attended a health facility during the past year, and if so, whether a staff person at that facility spoke to them about family planning methods. This information, presented in Table 5.11, is important for determining whether family planning initiatives in Tanzania are reaching nonusers of family planning.

Only 4 percent of nonusers reported being visited by a family planning service provider at home who engaged them in a discussion of family planning. More than half of the nonusing women had visited a health facility in the past 12 months, but only 20 percent discussed family planning with a provider at the facility while 32 percent did not. This indicates missed opportunities for increasing family planning acceptance and use. In total, 78 percent of women neither discussed family planning with a fieldworker nor discussed family planning at a health facility.

Surprisingly, lack of contact with family planning providers is higher for the best educated and the wealthiest women. Variation in contact with health service providers by residence is minimal.

Table 5.11 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, the percentage who during the last 12 months were visited by a fieldworker who discussed family planning, the percentage who visited a health facility and discussed family planning, the percentage who visited a health facility but did not discuss family planning, and the percentage who neither discussed family planning with a fieldworker nor discussed family planning at a health facility, by background characteristics, Tanzania 2010

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who neither discussed family planning with fieldworker nor discussed it at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	2.6	6.3	22.8	91.3	1,940
20-24	4.3	28.0	33.5	69.6	1,351
25-29	4.2	28.7	39.3	68.6	1,070
30-34	3.8	27.7	38.8	70.8	870
35-39	4.2	24.8	33.8	73.0	832
40-44	3.8	16.9	28.7	81.3	593
45-49	3.6	9.0	31.6	88.7	565
Residence					
Urban	4.5	13.7	34.5	82.7	1,867
Rural	3.4	21.5	30.6	76.7	5,355
Mainland/Zanzibar					
Mainland	3.6	19.8	31.9	78.0	6,933
Urban	4.4	13.7	35.0	82.7	1,754
Rural	3.3	21.8	30.8	76.4	5,180
Zanzibar	5.0	12.6	25.5	84.0	289
Unguja	6.5	16.1	30.8	79.9	180
Pemba	2.4	6.8	16.7	90.9	108
Zone					
Western	2.9	28.4	34.4	70.0	1,434
Northern	5.5	10.6	30.5	85.8	950
Central	4.1	27.8	36.0	70.4	607
Southern Highlands	2.6	12.0	27.3	86.0	858
Lake	3.7	21.4	27.5	76.2	1,512
Eastern	3.4	14.4	42.6	83.9	979
Southern	3.4	21.1	24.0	76.2	592

Continued

Table 5.11—*Continued*

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who neither discussed family planning with fieldworker nor discussed it at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Region					
Dodoma	4.5	31.3	35.6	66.7	359
Arusha	3.6	4.0	29.0	93.2	276
Kilimanjaro	5.8	8.0	32.2	87.5	227
Tanga	9.4	23.0	28.2	71.3	276
Morogoro	3.6	18.3	41.0	81.1	295
Pwani	3.3	22.6	44.6	76.6	170
Dar es Salaam	3.2	9.5	42.8	88.0	514
Lindi	1.5	18.9	28.8	80.0	121
Mtwara	4.4	19.9	14.0	76.7	266
Ruvuma	3.3	24.1	34.2	73.3	206
Iringa	2.7	13.8	36.5	84.1	326
Mbeya	3.4	4.6	18.5	92.7	363
Singida	3.5	22.9	36.6	75.6	248
Tabora	3.9	27.2	30.3	70.5	342
Rukwa	0.8	24.4	28.1	75.2	169
Kigoma	4.1	12.7	45.0	83.9	377
Shinyanga	1.8	37.2	30.7	62.4	716
Kagera	3.0	25.2	27.9	72.9	466
Mwanza	4.4	14.8	27.1	82.6	721
Mara	3.1	30.7	27.6	66.9	325
Manyara	1.7	4.7	34.6	95.0	171
Unguja North	3.4	16.9	34.4	81.4	47
Unguja South	11.4	16.4	24.0	79.5	24
Town West	6.8	15.7	30.7	79.3	109
Pemba North	1.3	5.9	18.3	92.8	53
Pemba South	3.5	7.6	15.2	89.1	55
Education					
No education	2.1	22.4	32.0	76.5	1,544
Primary incomplete	3.2	20.1	26.1	77.9	1,167
Primary complete	3.8	22.1	34.3	76.0	3,330
Secondary+	5.7	7.6	29.2	87.3	1,181
Wealth quintile					
Lowest	3.4	23.5	31.2	74.5	1,337
Second	3.3	25.1	29.7	73.3	1,499
Middle	2.7	20.2	32.9	78.5	1,508
Fourth	4.6	17.7	29.1	79.5	1,370
Highest	4.3	11.2	34.9	85.2	1,508
Total	3.7	19.5	31.6	78.3	7,222

5.9 SPOUSAL DISCUSSION ABOUT FAMILY PLANNING

Although discussion between couples about contraceptive use is not a precondition for adoption of contraception, its absence may be an impediment to use. Interspousal communication is thus an important intermediate step along the path to eventual adoption and especially continuation of contraceptive use. Lack of discussion may reflect a lack of personal interest, hostility to the subject, or customary reticence in talking about sex-related matters. To explore this subject, married women interviewed in the 2010 TDHS survey were asked whether their husband/spouse knew that they were currently using a contraceptive method.

Table 5.12 presents information on knowledge of contraceptive use. Nine in ten women (88 percent) say that their husband/partner knows that they use a contraceptive method. Few husbands (8 percent) lack knowledge of their wives' use of contraception. These figures indicate a high level of openness and discussion among couples on the contraceptive method being used by the woman.

Table 5.12 Husband's/partner's knowledge of women's use of contraception

Among currently married women age 15-49 who are using a method, percent distribution by whether they report that their husbands/partners know about their use, according to background characteristics, Tanzania 2010

Background characteristic	Knows[1]	Does not know	Don't know/ missing	Total	Number of women
Age					
15-19	91.7	3.2	5.1	100.0	59
20-24	87.9	8.6	3.5	100.0	359
25-29	86.7	7.9	5.3	100.0	494
30-34	90.1	7.2	2.7	100.0	463
35-39	88.2	9.0	2.8	100.0	383
40-44	88.4	8.3	3.2	100.0	294
45-49	83.8	9.4	6.8	100.0	150
Residence					
Urban	89.6	5.1	5.2	100.0	728
Rural	87.3	9.6	3.2	100.0	1,474
Mainland/Zanzibar					
Mainland	88.1	8.1	3.8	100.0	2,169
Urban	89.7	5.1	5.2	100.0	710
Rural	87.4	9.5	3.1	100.0	1,460
Zanzibar	83.4	7.7	8.9	100.0	33
Unguja	87.8	6.7	5.5	100.0	27
Pemba	(63.1)	(12.4)	(24.6)	(100.0)	6
Zone					
Western	83.8	4.9	11.3	100.0	236
Northern	89.3	8.9	1.8	100.0	459
Central	83.6	14.6	1.8	100.0	160
Southern Highlands	85.3	11.7	3.0	100.0	408
Lake	89.0	8.0	3.0	100.0	200
Eastern	89.9	6.0	4.1	100.0	436
Southern	93.2	3.8	3.0	100.0	272
Region					
Dodoma	80.1	18.5	1.4	100.0	98
Arusha	90.4	8.7	1.0	100.0	97
Kilimanjaro	97.2	1.9	0.9	100.0	148
Tanga	83.9	14.6	1.5	100.0	174
Morogoro	92.7	3.7	3.5	100.0	141
Pwani	88.2	9.8	2.0	100.0	70
Dar es Salaam	88.7	6.2	5.1	100.0	226
Lindi	96.2	1.4	2.5	100.0	54
Mtwara	97.3	2.7	0.0	100.0	106
Ruvuma	87.9	6.0	6.1	100.0	112
Iringa	93.0	6.3	0.7	100.0	125
Mbeya	82.6	13.4	4.1	100.0	207
Singida	89.2	8.5	2.3	100.0	62
Tabora	90.1	4.6	5.4	100.0	77
Rukwa	80.2	16.0	3.8	100.0	76
Kigoma	80.0	3.1	16.9	100.0	72
Shinyanga	81.3	6.7	11.9	100.0	87
Kagera	89.1	10.9	0.0	100.0	97
Mwanza	(86.5)	(5.0)	(8.5)	(100.0)	72
Mara	(94.3)	(5.7)	(0.0)	(100.0)	30
Manyara	81.5	10.4	8.1	100.0	40
Unguja North	(96.3)	(3.7)	(0.0)	(100.0)	3
Unguja South	86.5	5.8	7.8	100.0	6
Town West	86.7	7.5	5.8	100.0	18
Pemba North	59.6	18.5	21.9	100.0	2
Pemba South	(65.1)	(8.7)	(26.2)	(100.0)	4
Education					
No education	79.1	16.2	4.7	100.0	335
Primary incomplete	87.7	6.3	5.9	100.0	239
Primary complete	90.0	7.0	3.0	100.0	1,373
Secondary+	89.8	5.0	5.2	100.0	255
Wealth quintile					
Lowest	86.3	11.1	2.5	100.0	267
Second	80.4	13.7	5.9	100.0	359
Middle	88.4	9.3	2.3	100.0	381
Fourth	90.2	5.8	3.9	100.0	555
Highest	90.9	5.0	4.1	100.0	642
Total	88.1	8.1	3.9	100.0	2,202

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes women who report use of male sterilisation, male condoms, or withdrawal

A husband's knowledge about his wife's use of a contraceptive method does not vary much by the wife's background characteristics. Less educated women and women in the two lowest wealth quintiles are less likely than other women to say that their husband knows about their use of contraceptive methods.

5.10 EXPOSURE TO FAMILY PLANNING DRAMAS

Beginning in 1993, then Radio Tanzania Dar es Salaam (currently TBC-National Service), the national radio station, started airing two radio soap operas carrying family planning messages. These programmes, Twende na Wakati and Zinduka, have improved over time, and other radio dramas carrying reproductive health messages, including messages about family planning, HIV/AIDS, and maternal and child health, have been developed and aired. Both Twende na Wakati and Zinduka are broadcast twice a week, with a repeat broadcast to ensure maximum reach.

The findings presented in Tables 5.13.1, 5.13.2, 5.14.1, 5.14.2, and 5.15 show that, in general, more men than women listen to these radio dramas. In the six months preceding the survey, 24 percent of women and 29 percent of men listened to Zinduka. During the same period, 25 percent of women and 32 percent of men listened to Twende na Wakati. Moreover, 24 percent of women and 15 percent of men listened to other radio dramas during the six months before the survey.

A gradual decline in exposure to both Twende na Wakati and Zinduka since 1999 is shown in Figure 5.3. Whereas 30 percent of women and 43 percent of men listened to Zinduka in 1999, the corresponding figures in 2004-05 are 33 percent for women and 47 percent for men, and in 2010 they are 24 percent for women and 29 percent for men. For Twende na Wakati, 35 percent of women and 56 percent of men listened to the programme in 2004-05, and in 2010 these figures have declined to 25 percent for women and 32 percent for men.

Twende na Wakati listeners were asked how often they listened to the programme. About one in four women (24 percent) and 20 percent of men listen twice a week; 35 percent of women and 29 percent of men listen once a week.

The Zinduka radio drama includes messages calling on listeners to take action. Listeners, asked to name the actions they took, reported continued use of a family planning method (10 percent), talking to partners (8 percent), or beginning to us a family planning method (6 percent). Among men, the actions taken included continued use of a family planning method (4 percent), talking to partners (18 percent), or beginning to use a family planning method (9 percent).

In general, respondents living in urban areas, those with more education, and those living in wealthier households are more likely to have listened to these reproductive health dramas than their counterparts. The differentials for women, however, are much greater than for men.

Table 5.13.1 Zinduka family planning message: Women

Percentage of women who listened to Zinduka in the six months preceding the survey, and of those, the percentage who did anything or took any action related to family planning, by selected background characteristics, Tanzania 2010

Background characteristic	Listened to Zinduka			Number of women	Action taken							Number of women who listened to Zinduka
	Spon-taneous	Probed	Total		Talked to partner	Talked to a health worker	Talked to someone else	Visited a clinic for family planning	Began using a modern method	Continued using a modern method	Other	
Age												
15-19	8.1	9.3	17.4	2,172	2.5	0.3	4.3	0.4	6.0	1.4	1.5	378
20-24	10.8	13.4	24.1	1,909	8.2	2.2	2.9	2.4	5.7	8.2	0.9	461
25-29	13.9	11.9	25.8	1,668	11.2	3.6	1.5	2.8	7.6	13.1	0.7	431
30-34	15.9	12.6	28.5	1,422	9.7	3.7	4.0	4.0	6.8	12.6	1.5	406
35-39	13.3	12.2	25.5	1,290	10.8	1.9	4.0	3.6	9.0	14.9	1.8	329
40-44	11.7	10.6	22.3	938	10.4	1.3	5.3	2.5	3.2	9.8	3.5	209
45-49	10.9	11.7	22.7	740	1.7	1.3	10.9	2.1	4.1	8.3	2.0	168
Residence												
Urban	19.5	20.7	40.2	2,892	8.5	3.0	3.8	1.6	9.1	10.2	1.8	1,163
Rural	8.8	8.0	16.8	7,247	7.9	1.4	4.2	3.5	3.8	9.5	1.1	1,218
Mainland/Zanzibar												
Mainland	12.0	11.7	23.7	9,813	8.3	2.2	4.0	2.6	6.5	10.0	1.5	2,322
Urban	19.7	21.1	40.8	2,758	8.7	3.1	3.8	1.6	9.4	10.4	1.8	1,125
Rural	8.9	8.0	17.0	7,055	8.0	1.4	4.2	3.5	3.8	9.5	1.1	1,197
Zanzibar	9.2	8.8	18.0	326	3.2	1.5	3.0	2.3	1.0	4.9	2.1	59
Unguja	13.5	11.5	24.9	212	2.6	1.6	2.4	2.5	0.9	5.4	2.4	53
Pemba	1.4	4.0	5.4	115	(8.2)	(0.0)	(8.3)	(0.0)	(2.0)	(0.0)	(0.0)	6
Zone												
Western	7.2	4.2	11.5	1,728	18.7	8.0	1.0	6.9	14.9	3.1	0.3	198
Northern	12.2	9.6	21.8	1,530	12.3	1.4	5.5	2.5	2.2	14.5	1.6	333
Central	21.3	7.7	29.0	812	7.4	1.5	6.4	2.4	3.9	18.5	0.0	236
Southern Highlands	9.8	15.6	25.3	1,370	2.6	1.8	1.3	3.7	3.5	10.3	0.0	347
Lake	8.8	4.7	13.5	1,809	13.8	0.4	7.0	0.7	2.0	7.8	8.7	243
Eastern	19.0	27.0	46.0	1,608	7.4	2.7	4.5	2.1	10.5	8.1	0.8	740
Southern	9.5	14.1	23.5	955	0.0	0.2	1.1	1.0	4.8	8.3	0.5	225
Region												
Dodoma	21.4	8.5	29.9	495	9.6	1.3	5.1	2.0	5.7	23.3	0.0	148
Arusha	15.9	1.7	17.6	401	8.0	2.7	4.6	1.3	3.3	7.8	0.0	71
Kilimanjaro	11.4	14.6	26.0	411	14.8	0.0	11.2	1.9	0.0	17.7	2.6	107
Tanga	12.4	16.1	28.5	498	13.7	2.0	2.1	3.9	2.7	13.6	1.9	142
Morogoro	23.8	15.2	39.0	481	4.6	3.6	0.6	2.6	2.2	4.8	0.0	188
Pwani	19.1	15.9	35.0	261	2.4	1.5	2.5	0.0	8.2	24.9	2.6	91
Dar es Salaam	16.4	36.8	53.2	866	9.6	2.6	6.5	2.2	14.2	6.1	0.7	461
Lindi	16.1	12.0	28.0	198	0.0	0.9	0.0	1.2	1.3	2.4	0.0	55
Mtwara	13.3	8.8	22.1	407	0.0	0.0	2.6	0.0	3.4	1.3	1.1	90
Ruvuma	1.2	21.4	22.5	350	0.0	0.0	0.0	2.0	8.9	20.4	0.0	79
Iringa	3.6	18.2	21.7	490	0.0	0.0	1.8	4.5	3.0	22.9	0.0	106
Mbeya	16.8	16.5	33.3	623	3.5	2.9	1.3	3.9	3.9	5.0	0.0	207
Singida	21.1	6.4	27.6	317	3.7	2.0	8.7	3.0	0.9	10.5	0.0	88
Tabora	7.8	5.0	12.8	447	15.5	4.6	1.7	12.2	16.0	0.0	0.0	57
Rukwa	4.5	8.5	13.0	257	(5.5)	(0.0)	(0.0)	(0.0)	(2.5)	(2.4)	(0.0)	33
Kigoma	14.5	5.8	20.3	462	26.9	12.8	1.1	4.0	20.4	4.9	0.6	94
Shinyanga	2.8	3.0	5.8	819	(6.2)	(2.8)	(0.0)	(6.2)	(2.8)	(3.3)	(0.0)	47
Kagera	1.2	9.2	10.3	590	(10.0)	(0.0)	(0.0)	(3.0)	(2.0)	(11.6)	7.0)	61
Mwanza	12.5	2.7	15.2	844	14.0	0.0	9.0	0.0	1.6	7.1	12.7	128
Mara	12.3	2.1	14.4	376	17.8	1.7	10.1	0.0	3.0	5.3	1.2	54
Manyara	6.1	0.0	6.1	220	0.0	0.0	0.0	0.0	9.4	33.2	0.0	13
Unguja North	7.4	5.7	13.0	50	0.0	1.6	1.9	0.6	7.1	1.8	1.7	7
Unguja South	14.3	10.4	24.7	30	1.1	2.0	2.7	0.0	0.0	4.6	0.9	7
Town West	15.6	13.9	29.6	131	3.3	1.6	2.4	3.4	0.0	6.2	2.8	39
Pemba North	0.2	1.9	2.2	56	7.5	0.0	9.7	0.0	0.0	0.0	0.0	1
Pemba South	2.4	5.9	8.4	59	(8.4)	(0.0)	(7.9)	(0.0)	(2.5)	(0.0)	(0.0)	5
Education												
No education	5.8	4.8	10.5	1,940	4.0	1.9	1.2	1.5	4.7	10.6	2.5	204
Primary incomplete	8.0	8.3	16.3	1,482	4.7	1.4	2.8	3.5	2.5	7.2	0.9	242
Primary complete	13.0	12.8	25.8	5,071	9.7	2.7	4.3	2.9	7.2	10.8	1.4	1,310
Secondary+	18.9	19.1	38.0	1,646	7.7	1.6	4.7	1.8	6.7	8.6	1.6	625
Number of living children												
0	10.6	11.8	22.3	2,665	2.5	0.0	3.6	0.3	4.2	1.3	1.6	595
1-2	13.6	14.2	27.9	3,080	9.3	2.7	3.4	2.5	6.8	12.0	0.6	858
3-4	12.5	12.1	24.6	2,346	11.6	4.0	3.5	4.2	8.3	16.2	1.6	578
5+	10.1	6.9	17.1	2,048	9.4	1.8	6.9	4.1	5.9	8.6	3.1	350
Wealth quintile												
Lowest	6.4	3.4	9.8	1,681	5.0	1.0	3.3	1.6	4.5	10.3	3.1	165
Second	6.1	6.6	12.7	1,947	8.0	2.3	1.2	4.7	3.6	8.7	1.8	247
Middle	10.5	7.6	18.1	1,997	8.4	0.5	4.4	1.9	4.8	8.3	0.3	361
Fourth	15.1	12.9	28.0	2,112	8.7	3.6	3.6	3.6	5.9	9.3	0.8	592
Highest	18.7	23.6	42.3	2,403	8.4	2.2	4.8	1.9	8.2	10.9	1.9	1,016
Total	11.9	11.6	23.5	10,139	8.2	2.2	4.0	2.6	6.4	9.8	1.5	2,381

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.13.2 Zinduka family planning message: Men

Percentage of men who listened to Zinduka in the six months preceding the survey, and of those, the percentage who did anything or took any action related to family planning, by selected background characteristics, Tanzania 2010

Background characteristic	Listened to Zinduka			Number of men	Action taken							Number of men who listened to Zinduka
	Spon-taneous	Probed	Total		Talked to partner	Talked to a health worker	Talked to someone else	Visited a clinic for family planning	Began using a modern method	Continued using a modern method	Other	
Age												
15-19	6.0	11.3	17.4	645	0.1	0.0	2.3	0.0	2.9	0.0	1.6	112
20-24	7.5	17.0	24.5	414	2.3	0.0	0.9	0.0	6.7	1.4	1.1	101
25-29	12.2	17.6	29.8	343	20.5	5.1	2.7	0.0	9.1	6.5	0.0	102
30-34	10.6	26.0	36.6	352	19.6	0.0	0.0	1.1	11.1	7.9	1.1	129
35-39	10.9	26.3	37.2	300	28.0	3.4	3.2	3.4	15.3	3.5	1.2	112
40-44	10.0	26.9	36.9	270	26.3	5.1	2.9	2.7	10.9	7.9	1.3	100
45-49	15.8	25.1	41.0	204	27.6	4.4	4.1	1.4	7.6	0.0	2.0	84
Residence												
Urban	11.4	30.7	42.1	693	17.8	0.4	2.1	1.7	9.4	4.9	1.3	292
Rural	8.8	15.5	24.4	1,834	17.3	3.7	2.3	0.9	9.1	3.5	1.1	447
Mainland/Zanzibar												
Mainland	9.8	19.2	29.0	2,452	17.7	2.5	2.2	1.2	9.5	4.2	1.2	712
Urban	11.9	30.5	42.4	662	18.2	0.4	2.1	1.7	9.6	5.1	1.2	281
Rural	9.0	15.1	24.1	1,790	17.4	3.9	2.3	0.9	9.4	3.6	1.1	431
Zanzibar	2.0	34.9	36.9	75	11.0	0.3	1.0	0.8	2.1	0.0	1.4	28
Unguja	2.4	46.7	49.1	53	9.2	0.0	1.1	0.0	1.9	0.0	1.5	26
Pemba	(1.0)	(6.9)	(7.9)	22	*	*	*	*	*	*	*	2
Zone												
Western	1.7	17.8	19.5	371	25.3	1.6	1.3	0.0	24.5	2.9	0.0	72
Northern	21.8	12.6	34.4	350	12.9	5.8	4.8	1.2	9.4	5.7	5.1	120
Central	18.3	16.6	34.9	208	34.8	8.6	0.0	3.5	7.2	2.0	1.1	73
Southern Highlands	10.6	22.9	33.5	355	10.1	1.2	1.0	1.2	3.0	0.0	1.1	119
Lake	4.3	6.1	10.4	521	(11.6)	(0.0)	(0.0)	(0.0)	(2.9)	(5.9)	(0.0)	54
Eastern	7.8	39.7	47.6	413	18.6	1.0	2.5	1.1	11.5	6.3	0.0	196
Southern	11.2	21.4	32.6	236	15.9	0.0	4.1	1.4	7.0	5.3	0.0	77
Region												
Dodoma	14.0	17.8	31.8	122	(37.5)	(10.1)	(0.0)	(0.0)	(4.1)	(3.7)	(0.0)	39
Arusha	3.6	28.8	32.4	87	(20.8)	(0.0)	(3.4)	(0.0)	8.0)	(0.0)	(11.8)	28
Kilimanjaro	28.3	8.6	36.9	92	(10.1)	(8.5)	(7.2)	(4.3)	(10.5)	(4.1)	(0.0)	34
Tanga	37.1	4.0	41.1	124	(12.3)	(6.8)	(3.4)	(0.0)	(10.9)	(9.4)	(5.6)	51
Morogoro	14.4	34.8	49.2	146	(19.0)	(1.9)	(0.5)	(0.0)	(4.4)	(8.5)	(0.0)	72
Pwani	12.6	48.3	60.9	59	(13.0)	(1.7)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	36
Dar es Salaam	1.8	40.8	42.6	207	20.5	0.0	5.2	2.5	21.9	7.0	0.0	88
Lindi	10.2	6.4	16.6	47	*	*	*	*	*	*	*	8
Mtwara	17.0	5.0	22.1	87	*	*	*	*	*	*	*	19
Ruvuma	6.6	42.3	48.9	102	22.1	0.0	1.3	2.1	2.8	0.0	0.0	50
Iringa	3.4	32.4	35.9	140	(4.5)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	50
Mbeya	13.2	20.7	33.8	143	(17.6)	(3.0)	(2.4)	(3.0)	(5.7)	(0.0)	(2.7)	49
Singida	24.3	14.9	39.2	86	(31.8)	(6.8)	(0.0)	(7.6)	(10.8	(0.0)	(2.3)	34
Tabora	0.0	33.9	33.9	105	(17.9)	(0.0)	(2.6)	(0.0)	(25.9)	(2.6)	(0.0)	36
Rukwa	19.6	8.7	28.2	72	(6.3)	(0.0)	(0.0)	(0.0)	(3.9)	(0.0)	(0.0)	20
Kigoma	6.6	11.0	17.5	96	*	*	*	*	*	*	*	17
Shinyanga	0.0	11.7	11.7	169	*	*	*	*	*	*	*	20
Kagera	13.6	10.2	23.8	161	*	*	*	*	*	*	*	38
Mwanza	0.0	4.3	4.3	276	*	*	*	*	*	*	*	12
Mara	0.8	3.8	4.5	83	*	*	*	*	*	*	*	4
Manyara	3.0	12.7	15.7	47	*	*	*	*	*	*	*	7
Unguja North	0.7	45.4	46.1	11	10.9	0.0	0.0	0.0	0.0	0.0	2.4	5
Unguja South	4.1	48.8	52.9	9	2.0	0.0	1.2	0.0	0.0	0.0	0.0	5
Town West	2.5	46.6	49.1	33	10.7	0.0	1.4	0.0	3.0	0.0	1.6	16
Pemba North	0.0	1.2	1.2	10	*	*	*	*	*	*	*	0
Pemba South	1.8	11.4	13.1	12	*	*	*	*	*	*	*	2
Education												
No education	5.5	9.3	14.8	239	((14.4)	(4.0)	(0.0)	(0.0)	(7.8)	(12.4)	(3.7)	35
Primary incomplete	6.6	10.1	16.7	460	18.3	0.0	1.9	0.0	3.7	0.0	0.0	77
Primary complete	10.2	22.4	32.5	1,249	20.1	3.1	2.3	1.6	9.1	3.3	1.1	406
Secondary+	12.2	25.9	38.1	578	12.8	1.8	2.3	1.0	11.4	5.5	1.2	220
Number of living children												
0	10.3	21.5	31.8	694	14.4	2.3	2.3	1.0	7.4	2.8	0.9	221
1-2	11.3	20.3	31.5	836	18.6	2.5	1.6	2.0	12.0	4.7	1.2	264
3-4	7.4	18.9	26.3	564	21.6	1.7	3.6	1.0	9.6	6.5	0.6	149
5+	7.8	16.7	24.5	433	15.2	3.4	1.5	0.1	5.5	1.5	2.4	106
Wealth quintile												
Lowest	4.4	9.2	13.6	401	15.2	5.6	2.9	0.0	6.2	11.4	2.4	55
Second	6.2	12.5	18.7	447	24.7	3.6	2.6	1.7	9.7	0.0	2.0	84
Middle	10.2	19.1	29.3	490	15.8	2.6	2.1	0.0	8.0	1.0	0.0	144
Fourth	13.8	21.1	34.9	572	19.2	1.1	1.1	1.9	8.0	5.8	2.1	200
Highest	10.9	30.9	41.7	618	15.3	2.3	2.8	1.5	11.3	4.2	0.6	258
Total	9.5	19.7	29.2	2,527	17.5	2.4	2.2	1.2	9.2	4.1	1.2	739

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.14.1 Twende na Wakati: Women

Percentage of women who listened to Twende na Wakati in the six months preceding the survey, and of those, the percent distribution by the frequency of listening to the programme, by selected background characteristics, Tanzania 2010

Background characteristic	Listened to Twende na Wakati			Number of women	Frequency of listening					Number of women who listened to Twende na Wakati
	Spon-taneous	Probed	Total		Twice a week	Once a week	Once or twice a month	Rarely	Other/ missing	
Age										
15-19	8.7	10.2	18.9	2,172	22.7	38.7	11.1	24.0	3.5	410
20-24	11.5	14.3	25.7	1,909	21.4	33.9	10.1	31.0	3.6	491
25-29	13.8	14.7	28.5	1,668	25.3	32.7	11.8	27.1	3.2	475
30-34	15.2	13.8	28.9	1,422	24.3	37.8	11.4	22.9	3.6	412
35-39	12.9	14.0	26.9	1,290	26.8	32.3	14.1	24.9	1.9	347
40-44	11.6	12.8	24.5	938	26.9	34.0	11.4	23.4	4.4	229
45-49	12.2	12.1	24.3	740	21.3	41.0	10.9	23.5	3.2	180
Residence										
Urban	17.4	21.1	38.5	2,892	21.6	33.8	9.1	30.6	4.8	1,113
Rural	9.9	9.9	19.7	7,247	25.9	36.6	13.4	22.0	2.1	1,430
Mainland/Zanzibar										
Mainland	12.0	13.1	25.1	9,813	24.2	35.6	11.4	25.4	3.4	2,466
Urban	17.4	21.4	38.8	2,758	21.8	34.1	8.9	30.2	4.9	1,071
Rural	9.9	9.8	19.8	7,055	26.0	36.7	13.3	21.8	2.2	1,395
Zanzibar	11.3	12.5	23.7	326	19.8	28.0	14.0	36.3	1.8	77
Unguja	16.5	17.1	33.6	212	20.7	29.4	12.9	35.6	1.4	71
Pemba	1.5	4.0	5.6	115	9.6	12.5	26.2	45.0	6.7	6
Zone										
Western	6.7	5.1	11.8	1,728	18.5	35.7	6.7	32.6	6.5	203
Northern	12.6	9.3	22.0	1,530	36.9	26.8	4.8	29.0	2.6	336
Central	22.4	10.0	32.3	812	15.9	54.6	14.5	11.5	3.5	262
Southern Highlands	9.2	19.8	29.0	1,370	22.0	36.9	13.7	26.0	1.5	398
Lake	11.3	5.6	16.9	1,809	20.1	33.5	22.1	21.6	2.7	307
Eastern	16.6	27.1	43.8	1,608	20.6	32.9	6.5	35.0	5.0	704
Southern	9.7	17.1	26.9	955	38.6	35.6	17.8	7.1	0.9	257
Region										
Dodoma	23.3	10.6	33.9	495	12.1	56.8	18.1	11.3	1.7	168
Arusha	15.6	2.8	18.4	401	26.0	23.9	6.2	36.4	7.5	74
Kilimanjaro	13.0	14.3	27.2	411	36.0	21.4	6.6	35.9	0.0	112
Tanga	13.4	14.5	27.9	498	43.8	33.0	2.6	19.0	1.5	139
Morogoro	19.7	17.4	37.1	481	36.0	34.7	7.1	19.7	2.6	179
Pwani	20.7	16.4	37.1	261	22.1	57.2	0.8	17.6	2.3	97
Dar es Salaam	13.7	35.8	49.5	866	13.8	26.6	7.6	45.3	6.7	428
Lindi	16.7	11.9	28.6	198	40.3	30.0	20.5	7.1	2.1	57
Mtwara	13.8	11.6	25.4	407	51.3	29.8	13.1	4.6	1.1	104
Ruvuma	1.0	26.5	27.5	350	23.8	45.1	21.4	9.7	0.0	96
Iringa	2.1	31.0	33.1	490	21.4	42.2	21.4	15.0	0.0	162
Mbeya	16.6	15.9	32.6	623	22.2	33.1	9.3	33.9	1.5	203
Singida	20.9	8.9	29.9	317	22.6	50.7	8.2	11.8	6.7	95
Tabora	4.9	6.9	11.8	447	12.9	32.2	10.4	32.4	12.2	53
Rukwa	4.7	7.8	12.6	257	(23.7)	(33.9)	(2.6)	(31.2)	(8.6)	32
Kigoma	17.0	5.7	22.7	462	24.3	43.6	2.4	24.8	4.8	105
Shinyanga	1.8	3.8	5.6	819	(11.8)	(21.6)	(12.2)	(50.7)	(3.7)	45
Kagera	2.2	10.7	12.9	590	(39.5)	(42.4)	(0.0)	(16.1)	(2.0	76
Mwanza	16.1	3.6	19.7	844	11.0	27.9	31.3	26.2	3.6	166
Mara	15.0	2.1	17.1	376	20.7	37.5	24.4	16.1	1.3	64
Manyara	4.8	0.3	5.1	220	*	*	*	*	*	11
Unguja North	12.9	16.1	29.0	50	33.9	32.0	11.5	21.9	0.6	15
Unguja South	19.7	18.8	38.5	30	17.2	38.4	7.1	36.8	0.6	12
Town West	17.2	17.0	34.2	131	17.3	26.2	14.9	39.7	1.9	45
Pemba North	0.2	1.9	2.2	56	*	*	*	*	*	1
Pemba South	2.7	6.0	8.8	59	(11.8)	(13.2)	(30.1)	(39.2)	(5.7)	5
Education										
No education	6.4	5.5	11.9	1,940	22.1	35.6	15.4	25.0	1.9	231
Primary incomplete	8.7	9.9	18.6	1,482	22.8	34.3	16.5	25.0	1.4	276
Primary complete	13.3	14.4	27.7	5,071	25.4	35.7	10.7	24.8	3.3	1,405
Secondary+	17.5	20.8	38.3	1,646	22.2	34.9	9.8	28.5	4.6	631
Number of living children										
0	10.7	13.0	23.8	2,665	24.6	35.4	8.6	28.4	3.0	634
1-2	13.8	15.5	29.3	3,080	21.6	34.6	11.0	28.2	4.6	902
3-4	12.4	13.9	26.3	2,346	26.9	34.9	12.7	23.1	2.4	617
5+	10.6	8.5	19.1	2,048	24.4	37.6	15.4	20.3	2.3	390
Wealth quintile										
Lowest	7.4	4.8	12.2	1,681	23.2	34.2	16.0	24.7	1.9	205
Second	7.0	7.5	14.5	1,947	28.1	30.4	14.3	24.4	2.8	282
Middle	11.7	9.6	21.3	1,997	27.9	39.6	10.8	18.6	3.0	425
Fourth	15.8	15.5	31.2	2,112	23.8	37.5	13.0	23.5	2.2	660
Highest	16.2	24.2	40.5	2,403	21.5	33.7	9.0	31.1	4.7	972
Total	12.0	13.1	25.1	10,139	24.0	35.4	11.5	25.8	3.3	2,543

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.14.2 Twende na Wakati: Men

Percentage of men who listened to Twende na Wakati in the six months preceding the survey, and of those, the percent distribution by the frequency of listening to the programme, by selected background characteristics, Tanzania 2010

Background characteristic	Listened to Twende na Wakati			Number of men	Frequency of listening					Number of men who listened to Twende na Wakati
	Spon-taneous	Probed	Total		Twice a week	Once a week	Once or twice a month	Rarely	Other/ missing	
Age										
15-19	5.2	17.4	22.6	645	17.1	25.9	7.2	48.7	1.2	146
20-24	8.2	17.0	25.2	414	23.8	29.8	6.6	37.4	2.4	104
25-29	10.6	20.9	31.5	343	19.0	31.9	6.4	35.7	6.9	108
30-34	10.5	30.1	40.6	352	15.7	25.9	13.0	42.9	2.5	143
35-39	12.2	25.4	37.5	300	17.2	36.5	14.8	29.2	2.3	112
40-44	12.1	24.8	36.9	270	31.4	28.0	5.6	34.2	0.7	100
45-49	14.1	32.8	46.9	204	23.1	28.3	5.8	38.0	4.9	96
Residence										
Urban	11.4	31.0	42.4	693	12.5	26.5	8.1	51.1	1.9	294
Rural	8.7	19.4	28.1	1,834	25.0	30.8	9.1	31.6	3.5	515
Mainland/Zanzibar										
Mainland	9.7	22.1	31.7	2,452	20.9	29.5	8.9	37.7	3.0	778
Urban	11.9	30.8	42.7	662	12.6	27.2	7.9	50.3	1.9	282
Rural	8.9	18.8	27.7	1,790	25.7	30.8	9.4	30.6	3.6	496
Zanzibar	1.9	38.9	40.8	75	7.7	22.2	6.0	63.7	0.4	30
Unguja	2.2	51.2	53.4	53	6.8	20.5	6.5	66.3	0.0	28
Pemba	1.1	9.6	10.7	22	19.4	43.2	0.0	32.7	4.6	2
Zone										
Western	4.7	17.6	22.3	371	32.8	34.6	6.5	21.5	4.6	83
Northern	24.8	14.9	39.8	350	34.0	25.8	3.6	32.5	4.2	139
Central	13.9	21.8	35.7	208	11.8	23.7	12.0	48.0	4.5	74
Southern Highlands	12.3	28.3	40.5	355	9.7	44.1	7.0	39.2	0.0	144
Lake	2.9	6.9	9.8	521	(29.9)	(10.1)	(5.4)	(39.6)	(15.0)	51
Eastern	4.5	44.6	49.1	413	10.9	21.9	16.7	49.8	0.7	203
Southern	11.4	24.7	36.1	236	33.5	40.7	3.5	20.8	1.5	85
Region										
Dodoma	8.8	21.4	30.2	122	(7.9)	(25.0)	(6.5)	(60.5)	(0.0)	37
Arusha	4.1	31.8	35.9	87	(29.4)	(27.2)	(0.0)	(40.5)	(3.0)	31
Kilimanjaro	27.6	9.2	36.8	92	*	*	*	*	*	34
Tanga	46.3	8.3	54.5	124	(37.5)	(23.2)	(5.4)	(33.9)	(0.0)	68
Morogoro	5.1	41.2	46.4	146	(15.4)	(22.9)	(16.7)	(42.9)	(2.0)	68
Pwani	10.1	54.8	65.0	59	(10.2)	(21.2)	(17.2)	(51.4)	(0.0)	38
Dar es Salaam	2.4	44.1	46.5	207	8.0	21.4	16.5	54.0	0.0	96
Lindi	14.3	7.7	22.0	47	*	*	*	*	*	10
Mtwara	21.1	4.5	25.6	87	*	*	*	*	*	22
Ruvuma	1.9	49.6	51.5	102	25.8	45.1	2.9	26.2	0.0	53
Iringa	4.4	51.0	55.4	140	16.5	57.3	4.6	21.6	0.0	77
Mbeya	19.2	16.0	35.2	143	(0.0)	(31.2)	(7.7)	(61.1)	(0.0)	51
Singida	21.1	22.3	43.4	86	(15.6)	(22.4)	(17.4)	(35.7)	(8.9)	37
Tabora	0.0	36.1	36.1	105	(26.5)	(40.2)	(8.6)	(24.7)	(0.0)	38
Rukwa	13.7	8.5	22.2	72	*	*	*	*	*	16
Kigoma	18.0	9.4	27.5	96	*	*	*	*	*	26
Shinyanga	0.0	10.7	10.7	169	*	*	*	*	*	18
Kagera	8.0	13.4	21.4	161	*	*	*	*	*	34
Mwanza	0.5	3.7	4.3	276	*	*	*	*	*	12
Mara	0.8	4.7	5.4	83	*	*	*	*	*	5
Manyara	1.5	12.7	14.2	47	*	*	*	*	*	7
Unguja North	0.0	61.5	61.5	11	12.4	35.6	5.3	46.7	0.0	7
Unguja South	4.1	47.3	51.4	9	1.4	15.0	4.7	78.8	0.0	5
Town West	2.5	48.7	51.2	33	5.9	15.8	7.5	70.8	0.0	17
Pemba North	0.0	2.5	2.5	10	*	*	*	*	*	0
Pemba South	2.0	15.2	17.2	12	*	*	*	*	*	2
Education										
No education	2.8	12.6	15.5	239	21.2	38.3	3.8	28.0	8.7	37
Primary incomplete	7.5	15.6	23.2	460	28.1	29.1	6.0	35.3	1.6	107
Primary complete	11.8	24.1	35.9	1,249	21.3	30.9	11.3	32.8	3.6	448
Secondary+	8.6	29.0	37.5	578	14.7	24.2	5.6	54.4	1.1	217
Number of living children										
0	9.8	21.9	31.8	694	16.3	26.7	9.1	45.2	2.7	221
1-2	11.2	23.2	34.4	836	20.9	28.3	8.4	37.7	4.7	287
3-4	7.5	24.1	31.6	564	21.2	33.2	7.4	37.1	1.0	178
5+	8.0	20.3	28.3	433	25.7	29.9	10.7	31.7	1.9	122
Wealth quintile										
Lowest	4.5	12.3	16.8	401	35.5	19.7	11.6	26.6	6.6	67
Second	5.9	14.8	20.7	447	25.9	33.6	8.1	28.0	4.4	92
Middle	10.4	22.7	33.1	490	25.5	35.3	7.2	30.2	1.8	162
Fourth	13.2	25.1	38.3	572	23.4	31.0	8.5	33.5	3.6	219
Highest	11.0	32.3	43.3	618	9.3	25.0	9.4	54.9	1.5	268
Total	9.4	22.6	32.0	2,527	20.4	29.2	8.7	38.7	2.9	809

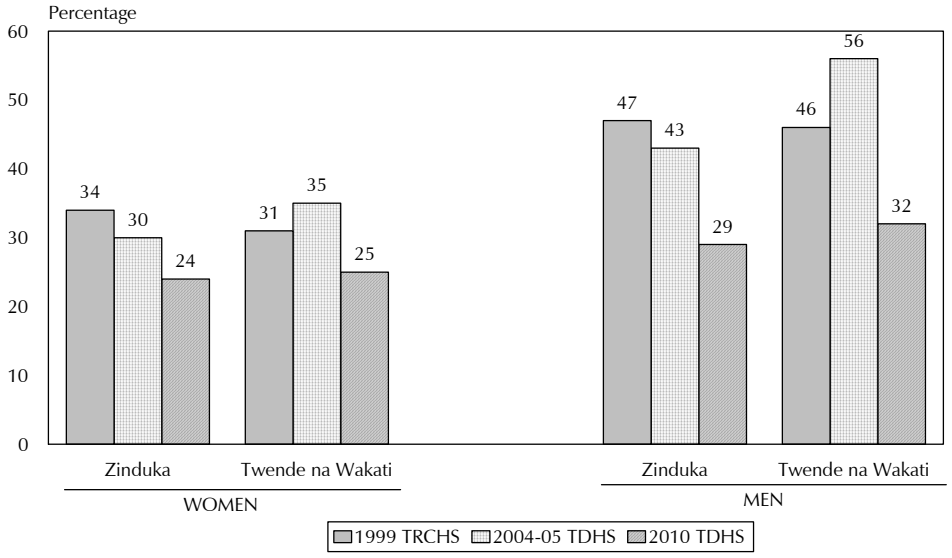
Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.15 Exposure to family planning dramas

Percentage of all women and all men who listened to specific family planning and health programmes on the radio, during six months preceding the survey, by selected background characteristics, Tanzania 2010

Background characteristic	Women				Men			
	Zinduka	Twende na Wakati	Other	Number of women	Zinduka	Twende na Wakati	Other	Number of men
Age								
15-19	17.4	18.9	21.2	2,172	17.4	22.6	13.1	645
20-24	24.1	25.7	25.4	1,909	24.5	25.2	15.5	414
25-29	25.8	28.5	25.7	1,668	29.8	31.5	15.8	343
30-34	28.5	28.9	26.7	1,422	36.6	40.6	16.1	352
35-39	25.5	26.9	24.2	1,290	37.2	37.5	14.8	300
40-44	22.3	24.5	22.4	938	36.9	36.9	17.3	270
45-49	22.7	24.3	21.6	740	41.0	46.9	14.7	204
Residence								
Urban	40.2	38.5	36.7	2,892	42.1	42.4	17.7	693
Rural	16.8	19.7	19.0	7,247	24.4	28.1	14.0	1,834
Mainland/Zanzibar								
Mainland	23.7	25.1	24.3	9,813	29.0	31.7	15.2	2,452
Urban	40.8	38.8	37.3	2,758	42.4	42.7	18.1	662
Rural	17.0	19.8	19.2	7,055	24.1	27.7	14.1	1,790
Zanzibar	18.0	23.7	17.6	326	36.9	40.8	10.8	75
Unguja	24.9	33.6	24.6	212	49.1	53.4	13.4	53
Pemba	5.4	5.6	4.8	115	7.9	10.7	4.4	22
Zone								
Western	11.5	11.8	14.1	1,728	19.5	22.3	5.6	371
Northern	21.8	22.0	15.3	1,530	34.4	39.8	8.9	350
Central	29.0	32.3	35.8	812	34.9	35.7	6.9	208
Southern Highlands	25.3	29.0	22.9	1,370	33.5	40.5	20.4	355
Lake	13.5	16.9	19.7	1,809	10.4	9.8	17.7	521
Eastern	46.0	43.8	48.3	1,608	47.6	49.1	19.4	413
Southern	23.5	26.9	17.1	955	32.6	36.1	25.9	236
Region								
Dodoma	29.9	33.9	37.0	495	31.8	30.2	4.7	122
Arusha	17.6	18.4	23.1	401	32.4	35.9	9.4	87
Kilimanjaro	26.0	27.2	14.9	411	36.9	36.8	13.3	92
Tanga	28.5	27.9	10.0	498	41.1	54.5	4.0	124
Morogoro	39.0	37.1	58.1	481	49.2	46.4	20.9	146
Pwani	35.0	37.1	70.6	261	60.9	65.0	26.9	59
Dar es Salaam	53.2	49.5	36.1	866	42.6	46.5	16.2	207
Lindi	28.0	28.6	6.3	198	16.6	22.0	18.9	47
Mtwara	22.1	25.4	17.5	407	22.1	25.6	15.3	87
Ruvuma	22.5	27.5	22.7	350	48.9	51.5	38.3	102
Iringa	21.7	33.1	12.0	490	35.9	55.4	28.5	140
Mbeya	33.3	32.6	36.2	623	33.8	35.2	12.7	143
Singida	27.6	29.9	33.9	317	39.2	43.4	10.0	86
Tabora	12.8	11.8	11.9	447	33.9	36.1	4.3	105
Rukwa	13.0	12.6	11.5	257	28.2	22.2	20.0	72
Kigoma	20.3	22.7	12.1	462	17.5	27.5	9.8	96
Shinyanga	5.8	5.6	16.5	819	11.7	10.7	4.1	169
Kagera	10.3	12.9	11.4	590	23.8	21.4	21.3	161
Mwanza	15.2	19.7	24.2	844	4.3	4.3	19.3	276
Mara	14.4	17.1	22.6	376	4.5	5.4	5.5	83
Manyara	6.1	5.1	14.1	220	15.7	14.2	12.6	47
Unguja North	13.0	29.0	20.0	50	46.1	61.5	2.5	11
Unguja South	24.7	38.5	22.4	30	52.9	51.4	6.1	9
Town West	29.6	34.2	26.8	131	49.1	51.2	19.1	33
Pemba North	2.2	2.2	2.4	56	1.2	2.5	2.9	10
Pemba South	8.4	8.8	7.1	59	13.1	17.2	5.6	12
Education								
No education	10.5	11.9	12.6	1,940	14.8	15.5	9.0	239
Primary incomplete	16.3	18.6	16.7	1,482	16.7	23.2	8.5	460
Primary complete	25.8	27.7	26.1	5,071	32.5	35.9	16.2	1,249
Secondary+	38.0	38.3	37.7	1,646	38.1	37.5	20.1	578
Wealth quintile								
Lowest	9.8	12.2	11.1	1,681	13.6	16.8	7.6	401
Second	12.7	14.5	14.6	1,947	18.7	20.7	9.8	447
Middle	18.1	21.3	21.5	1,997	29.3	33.1	13.0	490
Fourth	28.0	31.2	30.5	2,112	34.9	38.3	24.1	572
Highest	42.3	40.5	37.2	2,403	41.7	43.3	16.9	618
Total	23.5	25.1	24.0	10,139	29.2	32.0	15.0	2,527

Figure 5.3 **Trend of Twende na Wakati and Zinduka Radio Drama Listenership, Tanzania, 1999-2010**



OTHER PROXIMATE DETERMINANTS OF FERTILITY 6

Chapter 6 addresses the principal factors, other than contraception, which affect a woman's risk of becoming pregnant. These factors include marriage, polygyny, sexual activity, postpartum amenorrhoea, abstinence from sexual activity, and onset of menopause. Direct measures of when exposure to pregnancy begins and the level of exposure are also given.

6.1 CURRENT MARITAL STATUS

Marriage is a primary indication of the regular exposure of women to the risk of pregnancy and therefore is important for the understanding of fertility. Populations in which age at first marriage is low tend to have early childbearing and high fertility.

Table 6.1 presents the percent distribution of women by marital status, according to age. The term 'married' refers to legal or formal marriage, while the term 'living together' designates an informal union in which a man and a woman live together, even if a formal civil or religious ceremony has not occurred. In later tables that do not list 'living together' as a separate category, these women are included in the 'currently married' group. Respondents who are currently married, widowed, divorced, or separated are referred to as 'ever married.' To measure trends, data from the 2010 TDHS are compared with data from the 2004-05 TDHS.

Table 6.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Tanzania 2010

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
				WOMEN					
15-19	80.3	16.8	1.6	0.9	0.3	0.1	100.0	18.4	2,172
20-24	27.7	58.3	5.0	5.1	3.1	0.8	100.0	63.3	1,909
25-29	8.0	73.8	6.5	6.5	3.7	1.6	100.0	80.3	1,668
30-34	4.6	72.8	7.2	6.5	6.0	3.0	100.0	80.0	1,422
35-39	2.8	74.9	5.4	7.0	4.8	5.1	100.0	80.3	1,290
40-44	2.5	74.1	5.0	7.3	4.0	7.1	100.0	79.1	938
45-49	1.3	68.1	6.2	9.0	4.9	10.5	100.0	74.3	740
Total	25.1	58.3	5.0	5.3	3.4	2.9	100.0	63.3	10,139
				MEN					
15-19	95.5	2.5	1.7	0.0	0.3	0.0	100.0	4.2	645
20-24	72.4	20.4	1.6	1.1	4.2	0.2	100.0	22.0	414
25-29	23.6	64.4	5.9	2.4	3.4	0.3	100.0	70.3	343
30-34	10.8	72.6	6.9	2.4	6.9	0.4	100.0	79.5	352
35-39	2.6	85.1	3.9	1.6	6.2	0.6	100.0	89.0	300
40-44	0.8	84.1	3.2	2.4	5.3	4.3	100.0	87.3	270
45-49	0.9	83.4	2.8	2.0	6.6	4.3	100.0	86.2	204
Total	41.4	48.6	3.5	1.4	4.0	1.0	100.0	52.1	2,528

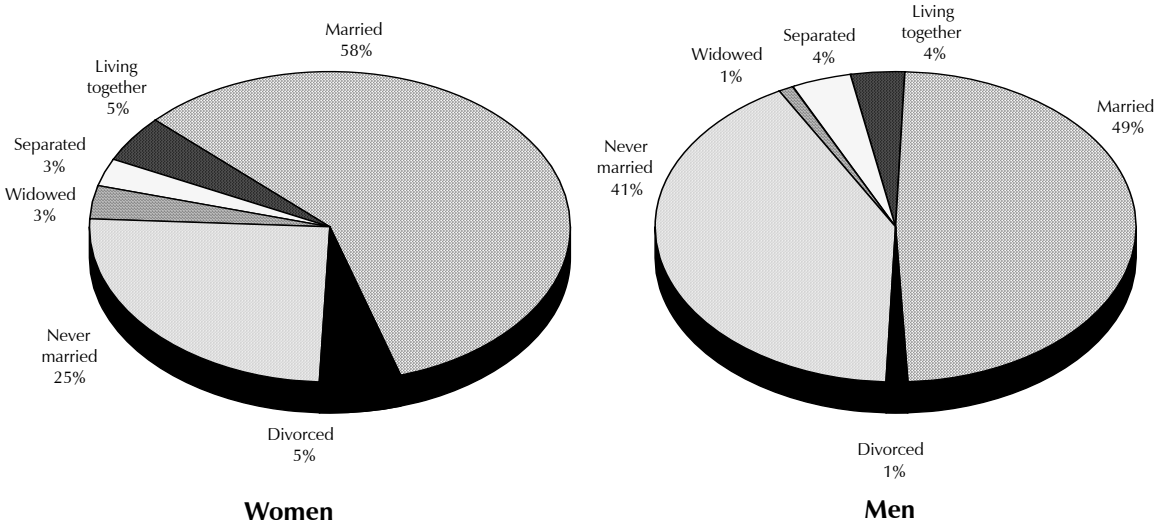
One in four women age 15-49 has never married, while 58 percent are currently married. Five percent each are living together or divorced, and 3 percent each are separated or widowed. Almost 20 percent of women age 15-19 are married or living together, whereas 1 percent are either divorced or separated. The proportion of women who are currently married or living together increases with age, from 18 percent at age 15-19 to 80 percent in the 25-29, 30-34, and 35-39 age groups, before decreasing to 74 percent for women age 45-49. As expected, the proportion of women who are divorced, separated, or widowed increases with age. By age 45-49, 24 percent of women are widowed, divorced, or separated.

The proportion of women age 15-19 and 20-24 who have never been married has increased from 72 and 24 percent, respectively, in the 2004-05 TDHS to 80 and 28 percent, respectively, in the 2010 TDHS (NBS and ORC Macro, 2005).

More than half of men age 15-49 are currently married (49 percent) or living together (4 percent). Four in ten men have never been married. Men are much less likely than women to be divorced, separated, or widowed (6 percent compared with 12 percent).

Figure 6.1 shows that men are more likely than women to stay single (41 percent compared with 25 percent). This difference is largely explained by the tendency of men to marry at later ages. For example, 63 percent of women between the ages of 20 and 24 are in union, compared with only 22 percent of men of the same age.

Figure 6.1 Marital Status of Respondents



Note: Totals may not add to 100 percent because of rounding. TDHS 2010

6.2 POLYGYNY

Polygyny (having more than one wife) is common in Africa and has implications for the frequency of sexual activity and fertility. Polygyny was measured by asking all currently married female respondents whether their husbands or partners had other wives, and if so, how many. Male respondents were also asked whether they had more than one wife, and if so, how many. Table 6.2 shows that 21 percent of currently married women are in polygynous unions, representing a slight decrease from the figure presented in the 2004-05 TDHS (23 percent).

Table 6.2 Number of cowives and wives

Percent distribution of currently married women by number of cowives, and percent distribution of currently married men by number of wives, according to background characteristics, Tanzania 2010

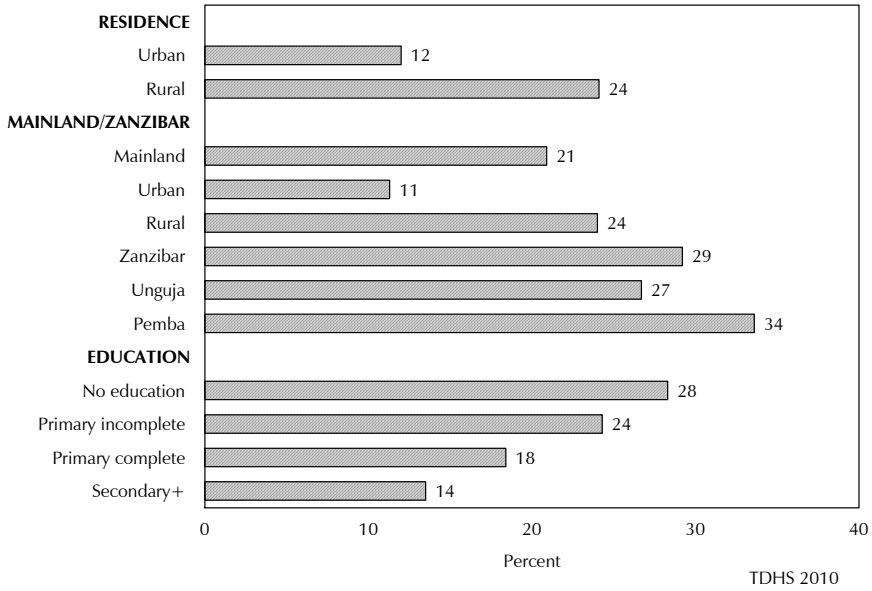
Background characteristic	Women						Men			
	Number of cowives					Number of women	Number of wives			Number of men
	0	1	2+	Missing	Total		1	2+	Total	
Age										
15-19	83.6	12.9	2.1	1.4	100.0	399	*	*	100.0	27
20-24	85.4	11.2	1.8	1.6	100.0	1,210	98.6	1.4	100.0	91
25-29	79.4	16.1	2.6	1.9	100.0	1,338	93.3	6.7	100.0	241
30-34	78.1	15.7	4.2	2.0	100.0	1,137	91.6	8.4	100.0	280
35-39	71.3	20.7	7.2	0.8	100.0	1,036	92.2	7.8	100.0	267
40-44	73.0	20.2	5.7	1.1	100.0	741	85.2	14.8	100.0	236
45-49	65.7	23.9	9.2	1.2	100.0	550	82.3	17.7	100.0	176
Residence										
Urban	84.2	10.3	1.7	3.8	100.0	1,585	92.4	7.6	100.0	321
Rural	75.1	18.9	5.2	0.7	100.0	4,827	89.6	10.4	100.0	996
Mainland/Zanzibar										
Mainland	77.5	16.5	4.4	1.5	100.0	6,232	90.5	9.5	100.0	1,287
Urban	84.8	9.7	1.6	3.9	100.0	1,516	92.9	7.1	100.0	309
Rural	75.2	18.7	5.3	0.8	100.0	4,715	89.7	10.3	100.0	977
Zanzibar	70.4	25.7	3.5	0.4	100.0	180	81.3	18.7	100.0	30
Unguja	72.9	23.7	3.0	0.4	100.0	115	80.7	19.3	100.0	21
Pemba	66.0	29.2	4.4	0.4	100.0	64	82.5	17.5	100.0	9
Zone										
Western	66.9	26.2	5.9	1.0	100.0	1,175	90.9	9.1	100.0	214
Northern	80.1	14.4	4.7	0.8	100.0	939	88.3	11.7	100.0	179
Central	77.2	17.7	4.6	0.5	100.0	556	92.2	7.8	100.0	122
Southern Highlands	78.9	15.3	5.2	0.5	100.0	895	86.8	13.2	100.0	178
Lake	76.4	17.0	5.8	0.9	100.0	1,101	88.0	12.0	100.0	263
Eastern	85.1	7.8	1.0	6.1	100.0	917	94.5	5.5	100.0	197
Southern	82.7	14.5	2.4	0.4	100.0	648	95.1	4.9	100.0	133
Region										
Dodoma	74.4	19.2	6.4	0.0	100.0	334	(93.7)	(6.3)	100.0	71
Arusha	78.3	13.6	6.8	1.3	100.0	240	(88.5)	(11.5)	100.0	47
Kilimanjaro	94.0	5.1	0.0	0.9	100.0	228	(100.0)	(0.0)	100.0	38
Tanga	73.1	21.9	4.2	0.8	100.0	324	(79.7)	(20.3)	100.0	69
Morogoro	85.8	8.7	0.3	5.1	100.0	301	(97.7)	(2.3)	100.0	76
Pwani	83.5	11.1	4.9	0.5	100.0	168	(91.0)	(9.0)	100.0	31
Dar es Salaam	85.2	5.9	0.0	8.9	100.0	448	(93.1)	(6.9)	100.0	90
Lindi	83.8	14.5	1.7	0.0	100.0	134	(95.8)	(4.2)	100.0	28
Mtwara	79.4	17.4	3.2	0.0	100.0	277	(92.9)	(7.1)	100.0	44
Ruvuma	86.0	11.1	1.9	1.0	100.0	236	96.3	3.7	100.0	60
Iringa	82.0	12.6	4.0	1.4	100.0	277	(81.8)	(18.2)	100.0	64
Mbeya	75.4	17.0	7.6	0.0	100.0	426	(90.1)	(9.9)	100.0	69
Singida	81.6	15.4	1.8	1.1	100.0	221	90.1	9.9	100.0	50
Tabora	65.2	28.2	5.9	0.7	100.0	312	88.0	12.0	100.0	59
Rukwa	82.2	15.6	1.7	0.5	100.0	192	88.8	11.2	100.0	46
Kigoma	72.1	22.2	3.8	1.9	100.0	288	(95.8)	(4.2)	100.0	55
Shinyanga	65.2	27.2	6.9	0.7	100.0	575	(90.0)	(10.0)	100.0	100
Kagera	84.9	8.7	4.5	1.8	100.0	372	(95.7)	(4.3)	100.0	81
Mwanza	75.8	18.4	5.2	0.7	100.0	474	(89.5)	(10.5)	100.0	140
Mara	65.2	26.3	8.5	0.0	100.0	255	(68.1)	(31.9)	100.0	42
Manyara	77.0	13.6	9.5	0.0	100.0	147	(93.9)	(6.1)	100.0	26
Unguja North	73.1	24.0	2.9	0.0	100.0	29	(87.9)	(12.1)	100.0	5
Unguja South	67.6	28.1	3.1	1.3	100.0	17	(78.2)	(21.8)	100.0	3
Town West	74.1	22.5	3.0	0.4	100.0	69	78.8	21.2	100.0	13
Pemba North	66.9	29.4	3.4	0.3	100.0	31	(88.5)	(11.5)	100.0	3
Pemba South	65.1	29.1	5.3	0.4	100.0	33	79.1	20.9	100.0	6
Education										
No education	70.3	20.9	7.4	1.3	100.0	1,524	88.0	12.0	100.0	161
Primary incomplete	73.2	19.7	4.6	2.6	100.0	866	91.7	8.3	100.0	200
Primary complete	80.5	15.0	3.4	1.1	100.0	3,529	90.1	9.9	100.0	809
Secondary+	83.8	12.2	1.3	2.8	100.0	492	91.9	8.1	100.0	148
Wealth quintile										
Lowest	75.0	18.1	5.6	1.3	100.0	1,165	90.5	9.5	100.0	238
Second	72.4	22.1	4.7	0.8	100.0	1,344	92.2	7.8	100.0	276
Middle	75.6	17.8	6.0	0.5	100.0	1,333	83.8	16.2	100.0	231
Fourth	79.3	15.6	3.5	1.5	100.0	1,301	91.4	8.6	100.0	297
Highest	84.4	10.1	2.1	3.5	100.0	1,269	92.4	7.6	100.0	275
Total	77.3	16.8	4.4	1.5	100.0	6,412	90.3	9.7	100.0	1,317

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Overall, older women are much more likely than younger women to be in polygynous unions. For example, only 15 percent of currently married women age 15-19 are in polygynous unions compared with 33 percent of older women age 45-49. Polygyny among women is more common in rural areas (24 percent) than in urban areas (12 percent). Furthermore, women with less education and wealth are more likely than other women to be in polygynous unions. This is the same pattern as seen in the 2004-05 TDHS. Regional differences are marked: for example, 35 percent of married women in Mara region are in polygynous unions, compared with only 5 percent of women in Kilimanjaro. Polygyny is most prevalent in the Western zone (32 percent) and least prevalent in the Eastern zone (9 percent).

Data on polygynous unions among currently married men are also shown in Table 6.2. As in the 2004-05 TDHS, about one in ten men age 15-49 is in a polygynous union. This proportion varies by background characteristics. Similar to women, older men, men living in rural areas, and men with no education are more likely to be in polygynous unions than other men. Men in Zanzibar are more likely to be in polygynous unions than men in the Mainland (19 and 10 percent, respectively).

Figure 6.2 **Percentage of Currently Married Women Whose Husbands Have at Least One Other Wife**



6.3 AGE AT FIRST MARRIAGE

In Tanzania, marriage is closely associated with fertility because, for most women, it is the beginning of their exposure to the risk of conception. The duration of exposure to the risk of pregnancy depends primarily on the age at which women first marry. Women who marry earlier, on average, have their first child earlier and give birth to more children, contributing to higher fertility rates.

As shown in Table 6.3, the median age at first marriage for women age 25-49 is 18.8 years, representing a slight increase from the median reported in the 2004-05 TDHS (18.6 years). The median age at first marriage for women in Tanzania increases from 18.5 years among women currently age 45-49 to 19.2 years among women age 20-24, indicating a shift towards later marriage.

The proportion of women who marry by age 15 has apparently declined; it is 13 percent among women age 45-49 compared with only 3 percent among women age 15-19. Men, on average, marry five to six years later than women. Table 6.3 shows that the median age at first marriage for men age 25-49 is 24.3 years compared with 18.8 years for women of the same age group. The median age at first marriage for men age 25-49 does not differ much from that in the 2004-05 TDHS (24.2 years).

Table 6.3 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Tanzania 2010

Current age	Percentage first married by exact age: 15	18	20	22	25	Percentage never married	Number	Median age at first marriage
				WOMEN				
15-19	2.8	na	na	na	na	80.3	2,172	a
20-24	6.6	36.9	57.5	na	na	27.7	1,909	19.2
25-29	6.9	38.6	62.3	77.1	86.8	8.0	1,668	18.9
30-34	6.2	37.3	59.5	74.4	85.9	4.6	1,422	19.1
35-39	8.9	42.4	64.6	78.5	87.2	2.8	1,290	18.6
40-44	9.0	40.9	65.0	78.1	89.1	2.5	938	18.6
45-49	13.0	44.7	64.8	78.8	90.4	1.3	740	18.5
20-49	7.8	39.4	61.6	na	na	10.0	7,967	18.9
25-49	8.2	40.2	62.9	77.1	87.5	4.4	6,058	18.8
				MEN				
15-19	0.0	na	na	na	na	95.5	645	a
20-24	0.2	1.3	7.1	na	na	72.4	414	a
25-29	0.0	4.7	15.9	36.6	60.1	23.6	343	23.8
30-34	0.9	3.8	13.7	32.8	58.1	10.8	352	23.9
35-39	0.5	5.4	11.6	23.5	53.9	2.6	300	24.6
40-44	0.7	5.0	16.5	26.7	57.7	0.8	270	24.3
45-49	0.5	3.4	10.4	25.7	50.8	0.9	204	24.9
20-49	0.5	3.8	12.4	na	na	22.9	1,882	a
25-49	0.5	4.5	13.9	29.7	56.6	8.9	1,469	24.3

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner
na = Not applicable because of censoring
a = Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group

Table 6.4 shows the median age at first marriage for women age 20-49 and age 25-49 and for men age 30-49, by background characteristics. Because of the small number of married respondents interviewed, data for women age 15-19 and for men age 15-29 have been omitted.

Women age 25-49 living in urban areas marry more than a year after their rural counterparts (19.8 years compared with 18.5 years). The urban-rural gap for men age 30-49 is greater; men living in urban areas marry 2.4 years later than men in rural areas (26.2 and 23.8 years). As was the case in the 2004-05 TDHS, for both women and men, the median age at first marriage increases with increased levels of education and wealth.

Table 6.4 Median age at first marriage

Median age at first marriage among women age 20-49 by current age, among men age 25-49 and men age 30-49, by background characteristics, Tanzania 2010

Background characteristic	Current age						Women age 20-49	Women age 25-49	Men age 25-49	Men age 30-49
	20-24	25-29	30-34	35-39	40-44	45-49				
Residence										
Urban	a	20.5	20.1	19.4	19.3	18.7	a	19.8	a	26.2
Rural	18.5	18.5	18.7	18.5	18.5	18.5	18.5	18.5	23.6	23.8
Mainland/Zanzibar										
Mainland	19.1	18.9	19.1	18.6	18.7	18.5	18.9	18.8	24.2	24.3
Urban	a	20.5	20.0	19.4	19.3	18.7	a	19.8	a	26.2
Rural	18.4	18.5	18.7	18.5	18.5	18.5	18.5	18.5	23.6	23.8
Zanzibar	a	21.0	19.6	18.6	17.6	17.7	19.6	18.9	a	26.3
Unguja	a	21.6	19.8	19.4	17.8	17.3	a	19.4	a	26.9
Pemba	a	19.5	19.2	17.5	17.3	18.1	18.8	18.2	a	25.3
Zone										
Western	18.0	18.0	17.8	17.9	18.5	19.3	18.1	18.1	23.7	23.5
Northern	a	19.8	19.8	19.6	19.9	20.2	19.8	19.8	a	25.7
Central	18.1	18.5	19.1	18.2	18.1	18.1	18.4	18.5	23.6	24.2
Southern Highlands	19.9	18.7	19.5	18.9	18.3	18.4	19.0	18.8	23.5	24.0
Lake	18.8	18.7	18.6	18.4	17.8	17.7	18.5	18.4	23.7	23.6
Eastern	a	20.9	20.2	18.5	20.1	18.0	20.0	19.7	a	26.2
Southern	18.8	18.5	18.7	19.2	18.2	18.9	18.7	18.6	22.9	23.2
Education										
No education	17.1	17.3	18.3	18.1	17.7	17.5	17.6	17.7	23.2	23.8
Primary incomplete	17.9	18.0	18.1	17.3	17.5	17.4	17.8	17.8	23.5	23.9
Primary complete	19.1	19.1	19.3	18.8	18.8	19.5	19.0	19.0	24.0	24.1
Secondary+	a	23.2	23.6	22.8	23.0	22.6	a	23.1	a	26.9
Wealth quintile										
Lowest	18.0	18.0	18.5	18.4	18.3	18.6	18.2	18.3	23.5	23.7
Second	18.3	18.5	18.5	18.2	18.3	17.9	18.3	18.3	23.4	23.6
Middle	18.5	18.4	18.7	18.9	18.2	18.6	18.6	18.6	23.4	24.0
Fourth	19.8	18.6	19.0	18.5	18.6	18.0	18.9	18.6	24.1	24.4
Highest	a	21.4	20.6	19.5	20.2	19.4	a	20.5	a	26.4
Total	19.2	18.9	19.1	18.6	18.6	18.5	18.9	18.8	24.3	24.4

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/ partner.
a = Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group

6.4 AGE AT FIRST SEXUAL INTERCOURSE

Although age at first marriage is often used as a proxy for first exposure to intercourse, the two events do not necessarily occur at the same time. In the 2010 TDHS, women and men were asked how old they were when they first had sexual intercourse.

Table 6.5 shows that the median age at first intercourse for women age 25-49 is 17.4 years. Fifteen percent of women age 25-49 have had sex by age 15, and almost 6 in 10 have had sex by age 18. More than half of women age 15-19 have never had sexual intercourse (55 percent). However, this proportion falls significantly, to 9 percent, among women age 20-24, and by age 30-34 almost all women have been sexually active. The median age at first intercourse has remained roughly the same over the various age groups of women. The proportion of women age 15-19 that had first sexual intercourse by age 15 (11 percent) is identical to that reported in the 2004-05 TDHS.

Table 6.5 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific ages, percentage who never had sexual intercourse, and median age at first intercourse, according to current age, Tanzania 2010

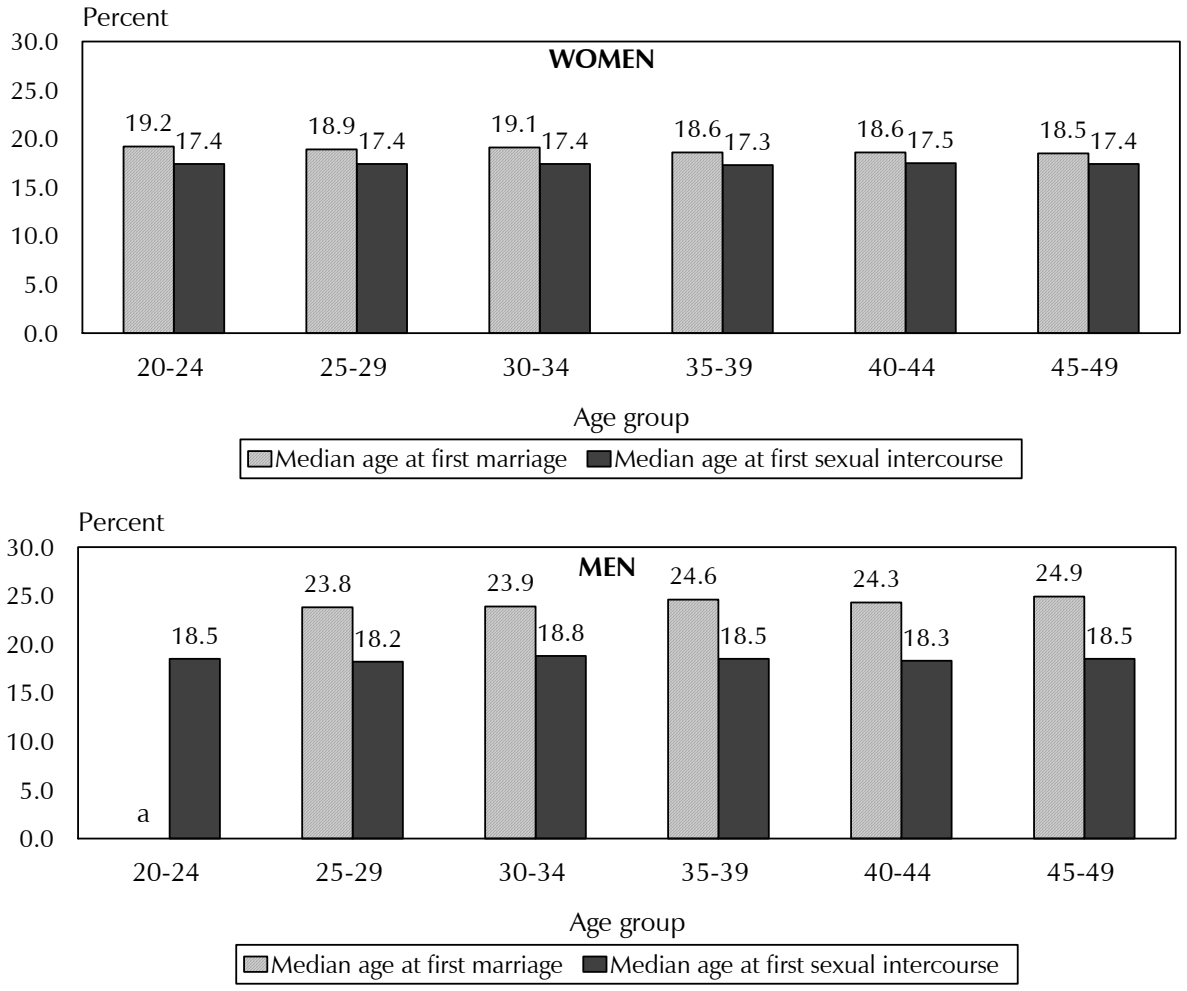
Current age	Percentage who had first sexual intercourse by exact age: 15	18	20	22	25	Percentage who never had sexual intercourse	Number	Median age at first intercourse
				WOMEN				
15-19	11.3	na	na	na	na	54.6	2,172	a
20-24	14.6	57.5	79.2	na	na	9.3	1,909	17.4
25-29	13.7	58.8	79.8	89.4	93.3	1.3	1,668	17.4
30-34	14.4	58.1	79.4	89.9	93.7	0.4	1,422	17.4
35-39	15.4	58.1	80.1	88.7	92.9	0.5	1,290	17.3
40-44	15.2	57.1	77.5	87.0	92.9	0.3	938	17.5
45-49	17.9	58.0	76.1	87.6	92.0	0.6	740	17.4
20-49	14.9	58.0	79.0	na	na	2.7	7,967	17.4
25-49	15.0	58.1	79.0	88.8	93.1	0.7	6,058	17.4
15-24	12.8	a	a	a	a	33.4	4,081	18.1
				MEN				
15-19	7.8	na	na	na	na	62.7	645	a
20-24	5.5	40.4	74.1	na	na	16.2	414	18.5
25-29	7.2	46.7	73.4	84.8	93.2	2.1	343	18.2
30-34	3.8	34.8	64.6	84.9	92.3	0.9	352	18.8
35-39	5.6	38.4	68.1	80.7	92.6	0.2	300	18.5
40-44	3.9	43.4	72.7	85.6	93.1	0.0	270	18.3
45-49	3.6	40.1	63.1	80.6	87.2	0.7	204	18.5
20-49	5.1	40.6	69.8	na	na	4.2	1,882	18.5
25-49	5.0	40.6	68.6	83.6	92.0	0.8	1,469	18.5
15-24	6.9	a	a	a	a	44.5	1,058	19.7

na = Not applicable because of censoring
a = Omitted because less than 50 percent of the respondents had intercourse for the first time before reaching the beginning of the age group

As is the case with age at first marriage, men tend to initiate sexual activity later in life than women. The median age at first sex for men age 25-49 is 18.5 years, about one year later than women (17.4 years). Almost two-thirds (63 percent) of men age 15-19 have never had sex. As with women, the median age at first intercourse for men is almost the same across the various age groups.

Figure 6.3 shows that the median age at which women and men initiate sexual activity occurs prior to the age of first marriage and that the median age of men at first sex and first marriage is older than that of women.

Figure 6.3 Age at First Marriage and Age at First Sexual Intercourse



a = Not calculable

TDHS 2010

Differentials in age at first sex are shown in Table 6.6. Urban women have their first sexual experience at slightly older ages than their rural counterparts, but among men, there is no difference. The median age of first sexual intercourse among women varies by education level and wealth quintile; the median age of first sexual intercourse among women with at least some secondary education is more than three years later than for those with no education. The wealthiest women initiate sexual activity nearly two years later than poorer women. Median age at first intercourse for women age 20-49 in Zanzibar is higher by almost two years than for women in Mainland. The median age of first sex among men varies little by level of education or wealth.

Table 6.6 Median age at first intercourse

Median age at first sexual intercourse among women by current age, among women age 25-49 and age 20-49, and among men age 25-49, by background characteristics, Tanzania 2010

Background characteristic	Current age						Women age 20-49	Women age 25-49	Men age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49			
Residence									
Urban	18.2	17.9	17.8	17.4	18.2	17.5	17.9	17.8	18.5
Rural	17.1	17.2	17.2	17.3	17.4	17.4	17.2	17.3	18.5
Mainland/Zanzibar									
Mainland	17.3	17.4	17.4	17.3	17.5	17.4	17.4	17.4	18.4
Urban	18.1	17.8	17.8	17.3	18.2	17.5	17.8	17.7	18.5
Rural	17.0	17.2	17.2	17.3	17.4	17.3	17.2	17.3	18.4
Zanzibar	a	20.1	19.3	18.0	17.5	17.7	19.2	18.7	23.4
Unguja	a	20.5	19.3	18.6	17.6	17.2	19.5	18.9	22.5
Pemba	a	19.5	19.3	17.5	17.4	18.1	18.8	18.3	a
Zone									
Western	16.9	16.8	16.8	17.2	17.8	18.3	17.1	17.2	17.8
Northern	18.6	18.5	18.4	18.6	19.0	18.5	18.6	18.6	18.6
Central	17.0	17.5	18.1	17.3	17.1	17.6	17.4	17.5	18.3
Southern Highlands	18.2	18.1	18.2	18.3	18.0	18.1	18.2	18.1	18.8
Lake	16.9	16.7	17.0	16.8	16.7	17.1	16.9	16.8	18.5
Eastern	17.5	17.6	17.4	16.7	17.9	16.7	17.4	17.4	18.5
Southern	16.0	16.2	16.1	16.0	16.2	16.1	16.1	16.1	18.2
Education									
No education	16.0	16.2	16.4	16.8	16.6	16.9	16.4	16.5	18.2
Primary incomplete	16.4	16.6	16.7	16.6	17.0	16.6	16.6	16.7	18.4
Primary complete	17.5	17.6	17.6	17.5	17.7	17.9	17.6	17.6	18.5
Secondary+	20.0	19.7	19.2	19.8	20.1	20.4	19.8	19.7	18.7
Wealth quintile									
Lowest	16.6	16.5	16.7	16.7	17.3	17.1	16.8	16.8	18.3
Second	16.8	16.9	16.6	16.9	16.9	17.3	16.9	16.9	18.3
Middle	17.3	17.1	17.7	18.0	17.3	17.5	17.5	17.5	18.5
Fourth	17.6	17.5	17.3	17.0	17.6	17.0	17.4	17.3	18.5
Highest	18.5	18.5	18.2	18.4	19.0	19.1	18.5	18.5	18.7
Total	17.4	17.4	17.4	17.3	17.5	17.4	17.4	17.4	18.5

a = Omitted because less than 50 percent of the women had intercourse for the first time before reaching the beginning of the age group

6.5 RECENT SEXUAL ACTIVITY

In the absence of contraception, the probability of pregnancy is related to the frequency of intercourse. Thus, information on sexual activity can be used to refine measures of exposure to pregnancy. Survey results for women are shown in Table 6.7.1.

In the four weeks before the survey, 58 percent of women age 15-49 years were sexually active, 21 percent had been sexually active in the previous year but not in the previous month, and 8 percent had had sexual intercourse one or more years before the survey. Fourteen percent of women reported that they had never had sex. The proportion of women having sex in the four weeks preceding the survey is identical to that reported in the 2004-05 TDHS.

Table 6.7.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Tanzania 2010

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years ago	Missing	Never had sexual intercourse	Total	Number of women
Age							
15-19	21.4	19.1	5.0	0.0	54.6	100.0	2,172
20-24	59.0	26.3	5.4	0.0	9.3	100.0	1,909
25-29	70.9	21.2	6.5	0.1	1.3	100.0	1,668
30-34	72.4	19.6	7.6	0.0	0.4	100.0	1,422
35-39	70.9	20.2	8.1	0.3	0.5	100.0	1,290
40-44	69.0	19.6	11.1	0.0	0.3	100.0	938
45-49	64.6	16.4	18.2	0.2	0.6	100.0	740
Marital status							
Never married	13.4	22.7	8.7	0.0	55.2	100.0	2,540
Married or living together	79.6	17.2	3.2	0.0	0.0	100.0	6,412
Divorced/separated/widowed	34.0	36.2	29.5	0.3	0.0	100.0	1,188
Marital duration[2]							
Married only once							
0-4 years	75.6	21.7	2.7	0.0	0.0	100.0	1,340
5-9 years	79.6	18.6	1.7	0.1	0.0	100.0	1,215
10-14 years	80.3	16.9	2.8	0.0	0.0	100.0	874
15-19 years	81.4	14.1	4.3	0.2	0.0	100.0	703
20-24 years	79.6	17.4	3.1	0.0	0.0	100.0	587
25+ years	79.3	14.7	6.0	0.0	0.0	100.0	451
Married more than once	82.3	14.0	3.6	0.0	0.0	100.0	1,241
Residence							
Urban	53.0	22.3	7.8	0.1	16.8	100.0	2,892
Rural	59.5	20.3	7.5	0.0	12.7	100.0	7,247
Mainland/Zanzibar							
Mainland	57.9	21.2	7.7	0.1	13.2	100.0	9,813
Urban	53.3	22.8	7.9	0.1	15.9	100.0	2,758
Rural	59.7	20.5	7.6	0.0	12.1	100.0	7,055
Zanzibar	48.5	11.6	6.0	0.1	33.8	100.0	326
Unguja	48.8	12.6	6.5	0.0	32.1	100.0	212
Pemba	48.0	9.7	5.0	0.4	36.8	100.0	115
Zone							
Western	57.5	22.3	6.6	0.1	13.5	100.0	1,728
Northern	54.7	19.8	7.5	0.1	18.0	100.0	1,530
Central	58.2	21.4	7.4	0.0	13.0	100.0	812
Southern Highlands	56.3	20.6	8.3	0.1	14.7	100.0	1,370
Lake	62.9	18.9	5.7	0.1	12.3	100.0	1,809
Eastern	55.3	24.8	8.6	0.0	11.3	100.0	1,608
Southern	61.1	20.0	11.2	0.0	7.7	100.0	955
Region							
Dodoma	57.5	23.4	7.9	0.0	11.2	100.0	495
Arusha	47.0	24.6	10.4	0.0	18.0	100.0	401
Kilimanjaro	49.0	19.7	8.8	0.0	22.5	100.0	411
Tanga	64.6	16.6	3.9	0.2	14.7	100.0	498
Morogoro	60.0	24.4	7.0	0.0	8.6	100.0	481
Pwani	57.3	26.1	5.7	0.0	11.0	100.0	261
Dar es Salaam	52.1	24.5	10.4	0.0	12.9	100.0	866
Lindi	61.5	25.0	10.1	0.0	3.5	100.0	198
Mtwara	60.0	19.0	11.4	0.0	9.6	100.0	407
Ruvuma	62.1	18.4	11.6	0.0	7.8	100.0	350
Iringa	49.7	19.7	14.6	0.0	16.0	100.0	490
Mbeya	58.4	21.5	4.6	0.2	15.2	100.0	623
Singida	59.2	18.4	6.7	0.0	15.8	100.0	317
Tabora	60.8	25.6	6.1	0.2	7.3	100.0	447
Rukwa	63.5	20.0	5.4	0.0	11.1	100.0	257
Kigoma	54.6	17.0	7.9	0.0	20.5	100.0	462
Shinyanga	57.4	23.5	6.2	0.0	12.9	100.0	819
Kagera	61.5	15.7	7.8	0.4	14.7	100.0	590
Mwanza	64.2	17.7	5.3	0.0	12.8	100.0	844
Mara	62.2	26.7	3.6	0.0	7.5	100.0	376
Manyara	56.7	18.4	7.9	0.0	16.9	100.0	220
Unguja North	47.3	15.0	6.2	0.0	31.5	100.0	50
Unguja South	56.3	13.4	6.5	0.0	23.8	100.0	30
Town West	47.6	11.6	6.6	0.0	34.2	100.0	131
Pemba North	45.6	11.0	5.8	0.8	36.9	100.0	56
Pemba South	50.4	8.5	4.3	0.0	36.8	100.0	59

Continued...

Table 6.7.1—*Continued*

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years ago	Missing	Never had sexual intercourse	Total	Number of women
Education							
No education	65.6	22.2	9.2	0.0	3.0	100.0	1,940
Primary incomplete	56.8	17.4	6.8	0.1	18.9	100.0	1,482
Primary complete	63.2	20.8	7.4	0.1	8.5	100.0	5,071
Secondary+	31.8	22.5	7.2	0.0	38.6	100.0	1,646
Wealth quintile							
Lowest	60.9	20.5	9.5	0.1	9.0	100.0	1,681
Second	58.5	23.1	7.4	0.0	11.0	100.0	1,947
Middle	59.9	19.5	7.7	0.1	12.8	100.0	1,997
Fourth	59.0	20.0	6.7	0.0	14.2	100.0	2,112
Highest	51.6	21.1	7.1	0.0	20.1	100.0	2,403
Total	57.6	20.8	7.6	0.1	13.8	100.0	10,139

[1] Excludes women who had sexual intercourse within the past 4 weeks
[2] Excludes women who are not currently married

Not surprisingly, the proportion of women who were sexually active in the four weeks before the survey increases with age, peaking at 72 percent for women age 30-34. Women age 15-19 are the least likely to have been sexually active (21 percent). Slightly more than half (55 percent) of women age 15-19 have never had sex, which accounts for why sexual intercourse in the four weeks before the survey is much less common among the youngest age group.

As expected, women who are currently married or living with a man are more likely to have been sexually active (80 percent) in the four weeks before the survey than women who have never married (13 percent) or who were formerly married (34 percent). The proportion of women who have been sexually active in the past four weeks is remarkably high and stable (more than three-quarters) irrespective of the duration of marriage. These data are similar to data reported by the 2004-05 TDHS.

Women in urban areas are slightly less likely to have been sexually active in the four weeks preceding the survey (53 percent) than women in rural areas (60 percent). In the Mainland, the proportion of women who are sexually active is highest in Tanga (65 percent) and lowest in Arusha (47 percent). In Zanzibar, the proportion is highest in Unguja South (56 percent) and lowest in Pemba North (46 percent).

Levels of sexual activity among men, as shown in Table 6.7.2, are comparable to those of women, although men are slightly less likely to have had sex in the past year and slightly more likely to have never had sex. Fifty-four percent of men age 15-49 had sexual intercourse in the four weeks before the survey, 20 percent had sexual intercourse in the past year (but not in the previous four weeks), 7 percent had sex one or more years ago, and 19 percent have never had sexual intercourse. Men's sexual activity increases with age. Among men age 45-49, 84 percent had sex in the month preceding the interview compared with 16 percent of men age 15-19.

As is the case with women, men who are currently married or living with a woman are most likely to have had sex in the four weeks before the survey (85 percent) compared with men who have never married (18 percent) and men who were formerly married (36 percent). More than 80 percent of married men had sex in the four weeks before the survey regardless of how long they have been married.

Table 6.7.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Tanzania 2010

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years ago	Missing	Never had sexual intercourse	Total	Number of men
Age							
15-19	15.5	12.9	8.9	0.0	62.7	100.0	645
20-24	38.2	32.3	13.3	0.0	16.2	100.0	414
25-29	67.4	24.5	5.8	0.2	2.1	100.0	343
30-34	75.5	19.0	4.5	0.1	0.9	100.0	352
35-39	77.7	18.1	4.0	0.0	0.2	100.0	300
40-44	77.6	17.2	5.2	0.0	0.0	100.0	270
45-49	83.5	11.5	4.2	0.0	0.7	100.0	204
Marital status							
Never married	17.8	23.2	12.8	0.0	46.2	100.0	1,046
Married or living together	85.4	13.0	1.6	0.1	0.0	100.0	1,317
Divorced/separated/widowed	35.5	47.3	17.3	0.0	0.0	100.0	164
Marital duration[2]							
0-4 years	83.2	16.2	0.6	0.0	0.0	100.0	301
5-9 years	84.8	13.9	1.3	0.0	0.0	100.0	241
10-14 years	80.8	17.0	2.0	0.2	0.0	100.0	230
15-19 years	86.9	13.1	0.0	0.0	0.0	100.0	130
20-24 years	85.7	10.3	4.0	0.0	0.0	100.0	108
25+ years	(99.7)	(0.3)	(0.0)	(0.0)	(0.0)	100.0	23
Married more than once	89.8	7.6	2.4	0.2	0.0	100.0	284
Residence							
Urban	47.3	23.4	8.6	0.0	20.7	100.0	693
Rural	56.7	18.0	6.7	0.1	18.5	100.0	1,834
Mainland/Zanzibar							
Mainland	54.5	19.8	7.2	0.0	18.4	100.0	2,452
Urban	47.7	23.9	8.5	0.0	19.9	100.0	662
Rural	57.0	18.2	6.8	0.1	17.9	100.0	1,790
Zanzibar	42.4	9.3	7.0	0.0	41.4	100.0	75
Unguja	43.1	12.5	9.4	0.0	35.1	100.0	53
Pemba	40.8	1.6	1.2	0.0	56.4	100.0	22
Zone							
Western	58.1	19.5	5.2	0.0	17.1	100.0	371
Northern	48.9	22.1	7.6	0.1	21.3	100.0	350
Central	62.0	21.0	3.4	0.0	13.7	100.0	208
Southern Highlands	50.2	16.3	8.9	0.0	24.6	100.0	355
Lake	55.2	17.0	7.5	0.0	20.3	100.0	521
Eastern	49.8	24.3	8.5	0.1	17.3	100.0	413
Southern	63.8	18.9	8.1	0.0	9.2	100.0	236
Region							
Dodoma	65.9	16.2	3.3	0.0	14.7	100.0	122
Arusha	47.6	31.0	8.0	0.0	13.5	100.0	87
Kilimanjaro	38.4	16.4	2.3	0.0	42.9	100.0	92
Tanga	56.5	21.5	10.3	0.0	11.8	100.0	124
Morogoro	54.1	24.4	9.1	0.0	12.4	100.0	146
Pwani	55.3	15.2	6.2	1.0	22.3	100.0	59
Dar es Salaam	45.1	26.8	8.7	0.0	19.3	100.0	207
Lindi	64.9	17.6	6.8	0.0	10.7	100.0	47
Mtwara	66.1	20.3	7.5	0.0	6.1	100.0	87
Ruvuma	61.3	18.4	9.3	0.0	11.1	100.0	102
Iringa	44.9	14.5	14.0	0.0	26.6	100.0	140
Mbeya	47.4	20.0	5.5	0.0	27.1	100.0	143
Singida	56.5	27.8	3.5	0.0	12.3	100.0	86
Tabora	58.1	21.0	5.1	0.0	15.7	100.0	105
Rukwa	65.8	12.7	5.7	0.0	15.8	100.0	72
Kigoma	53.8	16.4	6.9	0.0	22.9	100.0	96
Shinyanga	60.6	20.3	4.4	0.0	14.7	100.0	169
Kagera	55.8	14.4	6.4	0.0	23.4	100.0	161
Mwanza	53.3	19.0	8.0	0.0	19.7	100.0	276
Mara	60.4	15.3	8.3	0.0	16.1	100.0	83
Manyara	51.8	18.7	9.9	0.8	18.8	100.0	47
Unguja North	49.2	4.2	4.2	0.0	42.3	100.0	11
Unguja South	37.7	21.4	5.1	0.0	35.8	100.0	9
Town West	42.4	12.8	12.4	0.0	32.4	100.0	33
Pemba North	32.9	1.5	0.0	0.0	65.6	100.0	10
Pemba South	47.1	1.6	2.1	0.0	49.2	100.0	12

Continued...

Table 6.7.2—*Continued*

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years ago	Missing	Never had sexual intercourse	Total	Number of women
Education							
No education	60.2	24.8	7.8	0.0	7.2	100.0	239
Primary incomplete	48.3	16.1	9.0	0.1	26.6	100.0	460
Primary complete	65.1	19.4	5.8	0.0	9.7	100.0	1,249
Secondary+	32.6	20.1	8.8	0.0	38.5	100.0	578
Wealth quintile							
Lowest	58.4	20.1	6.4	0.1	15.0	100.0	401
Second	60.5	18.7	5.5	0.1	15.1	100.0	447
Middle	55.6	15.1	6.4	0.0	22.9	100.0	490
Fourth	54.2	17.2	8.8	0.0	19.9	100.0	572
Highest	45.5	25.2	8.2	0.0	21.0	100.0	618
Total	54.1	19.5	7.2	0.0	19.1	100.0	2,527

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes women who had sexual intercourse within the 4 weeks preceding the interview
[2] Excludes women who are not currently married

Substantial variations in sexual activity are also observed across regions. The proportion of men on the Mainland who had sex in the four weeks preceding the survey ranges from 38 percent in Kilimanjaro to 66 percent in Dodoma, Mtwara, and Rukwa. In Zanzibar, the proportion ranges from 33 percent in Pemba North to 49 percent in Unguja North.

Recent sexual activity is more common among men living in poor households. For example, 58 percent of men in the lowest wealth quintile had sexual intercourse in the four weeks before the survey compared with 46 percent of men in the highest wealth quintile.

6.6 POSTPARTUM AMENORRHOEA, ABSTINENCE, AND INSUSCEPTIBILITY

Postpartum amenorrhoea refers to the interval between childbirth and the return of menstruation. The length and intensity of breastfeeding influence the duration of amenorrhoea, which offers protection from conception. Postpartum abstinence refers to the period between childbirth and the time when a woman resumes sexual activity. Delaying the resumption of sexual relations can also prolong protection. Women are considered to be insusceptible to pregnancy if they are not exposed to the risk of conception, either because their menstrual period has not resumed since giving birth or because they are abstaining from intercourse after childbirth.

As shown in Table 6.8, the median duration of amenorrhoea among women who gave birth in the three years preceding the survey is 9.8 months. The median duration of postpartum abstinence is much shorter—less than 4 months. Examining these two factors together shows that the median duration of postpartum insusceptibility to pregnancy is 11.4 months. During the first two months after childbirth, almost all women (99 percent) are insusceptible to pregnancy. Both amenorrhoea and abstinence play important roles in insusceptibility. From two months to the end of the third month after birth, 95 percent of women are still insusceptible to conception, but the percentage of women receiving protection from postpartum abstinence drops to 60 percent. By 12 to 13 months after birth, 40 percent of women remain amenorrhoeic, and 49 percent are insusceptible to pregnancy, but only 19 percent are abstaining from sexual relations.

A comparison of the 2004-05 TDHS data with the 2010 TDHS data indicates that there has been a decrease in the median duration of postpartum amenorrhoea (11.5 months to 9.8 months, respectively). In contrast, the median duration of postpartum abstinence is nearly identical between the two surveys (3.9 and 3.8 months, respectively). Overall, the median duration of insusceptibility has declined from 13 months in the 2004-05 TDHS to 11.4 months in the 2010 TDHS.

Table 6.8 Postpartum amenorrhoea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Tanzania 2010

Months since birth	Percentage of births for which the mother is: Amenorrhoeic	Abstaining	Insusceptible[1]	Number of births
< 2	96.7	89.5	98.7	251
2-3	85.2	60.4	95.3	305
4-5	75.1	39.8	80.2	307
6-7	68.5	30.5	77.1	260
8-9	50.9	26.1	58.4	261
10-11	49.6	19.9	54.4	312
12-13	39.8	18.7	48.6	286
14-15	27.1	11.0	32.7	279
16-17	27.8	12.7	35.5	278
18-19	16.6	11.0	23.8	315
20-21	9.9	7.0	14.3	241
22-23	4.4	6.2	9.3	249
24-25	4.4	4.0	7.3	257
26-27	2.3	0.3	2.6	260
28-29	0.8	1.9	2.5	292
30-31	0.8	1.8	2.6	230
32-33	2.1	2.3	4.4	241
34-35	0.2	3.6	3.8	275
Total	32.3	19.7	37.3	4,898
Median	9.8	3.8	11.4	na
Mean	11.5	7.2	13.3	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 6.9 shows that the median duration of postpartum amenorrhoea is substantially longer among women age 30-49 (12.1 months) than among women age 15-29 (8.9 months). The duration of postpartum abstinence and postpartum insusceptibility is also longer among older women. The median length of postpartum abstinence for older women is 4.2 months compared with 3.6 months for the younger age group. The median length for postpartum insusceptibility for older women is 13 months whereas that of younger women is 10.4 months.

Rural women have a much longer period of postpartum amenorrhoea than urban women (11.1 and 6.2 months, respectively) and a longer median period of postpartum insusceptibility than urban women (12.5 and 7.8 months, respectively). However, there is no difference in the median length of postpartum abstinence between urban and rural women (3.8 months for both groups).

In the Mainland, there are considerable regional variations in postpartum amenorrhoea, abstinence, and insusceptibility. The median duration of postpartum amenorrhoea ranges from 4.2 months in Tanga to 13.3 months in Mtwara, and postpartum abstinence ranges from 0.7 months in Kagera to 16.4 months in Mtwara. Insusceptibility ranges from 7.2 months in Dar es Salaam to 16.4 months in Mtwara. As was reported in the 2004-05 TDHS, postpartum insusceptibility lasts longer among women with less education and women with less wealth.

Table 6.9 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Tanzania 2010

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	8.9	3.6	10.4
30-49	12.1	4.2	13.0
Residence			
Urban	6.2	3.8	7.8
Rural	11.1	3.8	12.5
Mainland/Zanzibar			
Mainland	9.8	3.9	11.5
Urban	6.2	4.0	7.8
Rural	11.2	3.9	12.5
Zanzibar	7.6	2.1	8.4
Unguja	6.4	2.2	7.5
Pemba	10.3	2.0	11.1
Zone			
Western	10.5	4.2	11.3
Northern	6.8	4.0	10.2
Central	11.0	4.7	11.5
Southern Highlands	11.3	4.7	13.5
Lake	11.1	1.8	11.7
Eastern	6.5	6.0	8.9
Southern	12.8	13.3	14.4
Region			
Dodoma	11.5	4.4	15.8
Arusha	6.3	5.6	7.3
Kilimanjaro	5.8	4.7	9.5
Tanga	4.2	2.6	8.1
Morogoro	6.1	6.2	12.2
Pwani	12.6	7.4	13.6
Dar es Salaam	5.8	5.5	7.2
Lindi	10.5	15.2	16.0
Mtwara	13.3	16.4	16.4
Ruvuma	12.3	8.4	13.4
Iringa	4.7	5.8	13.5
Mbeya	12.9	6.4	13.5
Singida	11.0	5.1	11.0
Tabora	11.3	7.2	12.0
Rukwa	10.1	2.0	10.4
Kigoma	7.9	2.2	7.9
Shinyanga	11.8	5.3	12.3
Kagera	12.5	0.7	13.7
Mwanza	11.2	2.1	11.6
Mara	8.8	2.7	8.9
Manyara	8.7	4.2	11.5
Unguja North	5.7	2.7	6.3
Unguja South	5.0	2.3	7.0
Town West	7.1	2.0	7.9
Pemba North	9.7	1.9	10.8
Pemba South	10.7	2.1	11.3
Education			
No education	12.3	3.2	13.9
Primary incomplete	10.5	3.7	12.2
Primary complete	9.2	4.4	10.3
Secondary+	6.7	3.4	9.4
Wealth quintile			
Lowest	13.3	4.0	15.1
Second	10.2	4.4	11.4
Middle	11.1	3.4	12.4
Fourth	7.6	3.5	9.0
Highest	5.5	4.1	7.4
Total	9.8	3.8	11.4

Note: Medians are based on the status at the time of the survey (current status)

[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

6.7 MENOPAUSE

Another factor influencing the risk of pregnancy among women is menopause. In the context of the available survey data, women are considered menopausal if they are neither pregnant nor postpartum amenorrhoeic and if they have not had a menstrual period in the six months preceding the survey (Table 6.10). As expected, the proportion of women who are menopausal increases with age, ranging from 2 percent of women age 30-34 to 37 percent of women age 48-49. Less than 3 percent each of women age 30-34 and 35-39 and only 6 to 9 percent of women age 40-43 are menopausal. A large increase is observed among women at age 44-45 (19 percent). Overall, the proportion of women age 30-49 who are menopausal is the same as that reported in the 2004-05 TDHS.

Table 6.10 Menopause

Percentage of women age 30-49 who are menopausal, by age, Tanzania 2010

Age	Percentage menopausal[1]	Number of women
30-34	2.2	1,422
35-39	2.8	1,290
40-41	5.8	461
42-43	9.0	326
44-45	18.5	326
46-47	31.1	275
48-49	37.1	290
Total	8.6	4,390

[1] Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey

FERTILITY PREFERENCES 7

Information on fertility preferences provides family planning programmes with an understanding of the potential 'demand' for fertility control in a given population. In the 2010 TDHS, women and men were asked a series of questions to ascertain their fertility preferences, including the desire to have another child, the length of time they would like to wait before having another child, and what they would consider to be the ideal number of children. Interpretation of responses to these questions is subject to some degree of error because respondents' reported preferences are, in most cases, hypothetical and thus subject to change and rationalisation. Nonetheless, these data have been shown to be useful in assessing future fertility trends. In combination with data on contraceptive use, they also allow estimation of the need for family planning, both for spacing and limiting of births.

7.1 DESIRE FOR MORE CHILDREN

Table 7.1 and Figure 7.1 present data concerning future reproductive preferences among married women and men. The inclusion of women who are currently pregnant complicates the measurement of views on future childbearing. For these women, the question about desiring more children was rephrased to refer to desiring another child after the one that she was currently expecting. To take into account the way in which the preference variable is defined for pregnant women, the results are classified by number of living children, with the current pregnancy categorised as equivalent to a living child.

Table 7.1 Fertility preferences by number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Tanzania 2010

Desire for children	Number of living children[1]							Total 15-49
	0	1	2	3	4	5	6+	
WOMEN								
Have another soon[2]	90.9	33.5	22.9	18.3	13.9	9.7	5.8	21.3
Have another later[3]	3.2	58.9	61.9	53.8	44.9	32.9	15.7	43.5
Have another, undecided when	2.0	2.4	1.5	1.1	0.7	0.7	0.7	1.2
Undecided	0.0	0.6	0.2	2.4	3.7	2.1	2.1	1.7
Want no more	0.7	3.0	10.2	19.7	32.5	44.8	62.7	26.4
Sterilised[4]	0.0	0.4	1.1	2.8	2.9	7.1	9.2	3.6
Declared infecund	2.8	1.0	1.7	1.7	1.5	2.7	3.6	2.1
Missing	0.3	0.2	0.6	0.1	0.0	0.0	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	299	1,043	1,252	1,111	866	684	1,157	6,412
MEN[5]								
Have another soon[2]	84.1	23.6	23.9	16.8	15.5	13.6	7.0	19.6
Have another later[3]	7.0	67.3	56.0	46.6	35.5	30.8	19.6	41.5
Have another, undecided when	1.8	1.1	0.9	0.4	2.3	3.4	3.4	1.8
Undecided	0.0	2.7	3.5	2.7	3.2	1.0	4.1	2.9
Want no more	0.0	1.1	9.0	24.3	34.5	33.9	37.4	21.7
Sterilised[4]	0.0	0.0	0.0	0.9	0.9	2.6	1.3	0.8
Declared infecund	3.0	0.0	0.6	1.5	2.1	2.4	0.4	1.1
Missing	4.1	4.2	6.1	6.8	6.0	12.3	26.9	10.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	56	229	227	214	189	138	264	1,317

[1] The number of living children includes current pregnancy for women
[2] Wants next birth within two years
[3] Wants to delay next birth for two or more years
[4] Includes both female and male sterilisation
[5] The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Although two-thirds of currently married women say that they want more children, 44 percent say they want to wait for two years or more before having their next child. These women can be considered potential contraceptive users for the purpose of spacing.

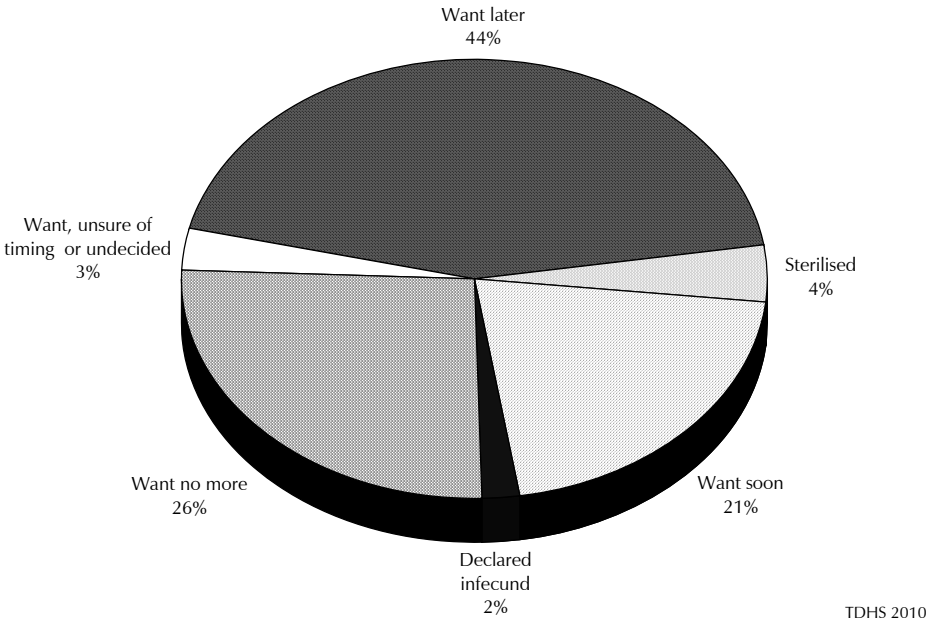
Twenty-one percent of women say they want another child soon, while 1 percent want another child but are undecided about the timing of the next birth. Two percent are unsure of whether they want another child. Overall, 30 percent of married women want no more children, including 4 percent who have been sterilised. Two percent of women consider themselves to be infecund.

The desire for more children is related to the number of living children women already have. Almost all currently married women with no children want to have a child, with nine in ten expressing the desire to have a child soon. As the number of living children increases, the desire to have another child decreases. A majority of women with at least one child say that they want to delay their next birth or stop childbearing altogether. Nevertheless, a significant proportion of women with 5 or 6 children want to have another child (43 and 22 percent, respectively).

The data indicate that, over time, the desire to space births among currently married women has increased gradually. According to the 1999 TRCHS (NBS and Macro International, 2000), 36 percent of women wanted to wait at least two years before having another child compared with 42 percent in the 2004-05 TDHS (NBS and ORC Macro, 2005) and 44 percent in the 2010 TDHS. However, the desire to limit births has changed little, rising from 29 percent in 1999 to 30 percent in 2004-05 and 30 percent in 2010.

Overall, men's fertility preferences are similar to those of women. However, the proportion of men who want no more children is somewhat smaller than the proportion of women (23 and 30 percent, respectively).

Figure 7.1 **Desire for More Children among Currently Married Women**



7.2 DESIRE TO LIMIT CHILDBEARING BY BACKGROUND CHARACTERISTICS

Tables 7.2.1 and 7.2.2 present the percentages of currently married women and men who want no more children (or are sterilised), by number of living children. They provide information about variations in the potential demand for fertility control among women and men.

Table 7.2.1 shows that the desire to limit childbearing among currently married women is the same in urban areas as in rural areas (30 percent) but varies dramatically with the number of living children. For example, urban women with five children are one and a half times more likely than rural women to say that they want to stop childbearing (72 and 48 percent, respectively).

Currently married women living in Mainland Tanzania are more likely than those living in Zanzibar to stop childbearing (30 and 22 percent, respectively). There is also significant zonal variation in the desire to limit childbearing, ranging from 20 percent in the Western zone to 38 percent in the Northern zone. There is no uniform pattern in desire to limit childbearing by the woman's education and wealth. Among women with four or more living children, those who completed primary school are the most likely to want to limit childbearing. A positive association between the desire to limit childbearing and wealth is apparent only after women have three or more children.

Table 7.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Tanzania 2010

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	1.2	4.2	17.8	35.9	50.1	72.0	84.4	30.1
Rural	0.5	3.0	8.1	17.4	32.0	47.6	70.3	29.9
Mainland/Zanzibar								
Mainland	0.7	3.4	11.5	22.8	35.8	52.6	73.0	30.2
Urban	1.3	4.2	18.0	37.0	51.2	74.0	87.2	30.2
Rural	0.5	3.0	8.2	17.5	32.5	48.3	71.3	30.2
Zanzibar	0.0	3.6	3.6	9.2	20.5	30.4	47.5	22.3
Unguja	0.0	3.6	5.4	10.2	26.6	38.3	51.3	22.5
Pemba	0.0	3.7	0.0	6.6	7.9	17.6	43.8	22.1
Zone								
Western	0.0	2.5	2.7	11.6	19.3	24.7	57.8	20.2
Northern	0.0	1.5	17.9	29.3	49.9	67.9	79.5	37.5
Central	0.0	11.2	14.1	16.8	23.8	39.6	73.1	32.8
Southern Highlands	2.5	4.1	14.2	27.1	48.6	52.0	74.0	34.3
Lake	0.0	4.0	6.4	11.8	29.3	63.5	82.8	32.7
Eastern	2.1	2.6	14.2	33.3	30.4	57.2	63.2	24.4
Southern	0.0	3.2	14.2	26.6	52.3	76.5	86.4	33.9
Education								
No education	0.0	2.9	9.5	11.5	17.1	39.2	68.2	27.4
Primary incomplete	2.3	5.0	10.9	21.5	31.0	47.3	74.5	30.2
Primary complete	0.7	3.6	9.5	25.3	41.0	59.0	73.3	31.4
Secondary+	0.0	2.0	28.7	39.5	73.2	48.5	69.9	27.3
Wealth quintile								
Lowest	0.0	4.3	10.4	14.4	22.3	39.9	67.2	28.0
Second	0.0	2.2	4.8	14.0	24.4	43.4	67.5	26.8
Middle	0.0	3.1	6.2	17.2	33.6	51.2	73.7	32.0
Fourth	2.1	4.5	8.6	23.4	44.2	57.7	75.8	31.0
Highest	1.4	3.2	22.0	42.7	59.5	76.8	84.8	32.0
Total	0.7	3.4	11.3	22.5	35.4	51.9	71.8	30.0

Note: Women who have been sterilised are considered to want no more children.
[1] The number of living children includes the current pregnancy.

The data for currently married men (Table 7.2.2) are similar to those for women, but in nearly every instance, the percentage of men who want no more children is less than that of currently married women. For example, 65 percent of married women with 6 or more children want no more children, but only 34 percent of married men feel the same. Similarly, 22 percent of women in Zanzibar want to limit childbearing compared with 7 percent of men.

Table 7.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Tanzania 2010

Background characteristic	Number of living children[1]						Total
	1	2	3	4	5	6+	
Residence							
Urban	1.1	10.8	36.2	40.8	57.9	37.3	23.0
Rural	1.2	8.2	21.7	33.8	32.5	38.9	22.3
Mainland/Zanzibar							
Mainland	1.2	9.2	25.9	36.1	37.2	39.2	22.9
Urban	1.1	11.2	37.5	43.1	62.0	38.1	23.7
Rural	1.2	8.4	22.1	34.0	32.9	39.4	22.6
Zanzibar	0.0	0.0	1.2	4.0	4.4	18.7	5.6
Unguja	0.0	0.0	2.0	5.4	6.3	26.2	7.5
Pemba	0.0	0.0	0.0	0.0	0.0	4.5	1.2
Zone							
Western	0.0	0.0	21.9	12.4	41.6	31.5	16.9
Northern	0.0	10.1	25.0	52.8	46.1	23.5	23.5
Central	5.5	0.0	18.6	21.9	32.9	54.6	25.0
Southern Highlands	0.0	3.9	9.0	60.6	56.3	40.9	24.5
Lake	0.0	7.1	7.7	24.4	23.7	34.3	17.6
Eastern	4.6	23.1	56.8	32.6	48.1	76.1	34.5
Southern	0.0	7.5	28.7	46.9	42.0	28.4	20.9
Education							
No education	5.9	11.2	28.7	16.8	30.2	25.1	19.5
Primary incomplete	0.0	6.4	24.7	38.6	31.6	8.0	16.1
Primary complete	1.3	7.9	20.3	37.3	36.2	46.8	24.5
Secondary+	0.0	12.7	53.2	39.1	63.4	34.5	23.4
Wealth quintile							
Lowest	2.6	11.9	29.9	21.5	37.2	33.0	22.9
Second	0.0	0.0	12.3	14.1	34.7	47.3	17.9
Middle	0.0	6.3	18.2	26.0	29.1	46.3	21.9
Fourth	1.8	17.7	27.0	46.9	33.7	25.3	23.2
Highest	1.4	7.8	38.9	54.7	50.3	40.9	26.6
Total	1.1	9.0	25.2	35.4	36.5	38.6	22.5

Note: Men who have been sterilised or who state in response to the question about desire for children that their wife has been sterilised are considered to want no more children.
[1] The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

7.3 NEED FOR FAMILY PLANNING SERVICES

Women who say either that they do not want any more children or that they want to wait two or more years before having another child and who say they are not using contraception, are considered to have an unmet need for family planning. Women who are using family planning methods are said to have a met need for family planning. Women with unmet need and met need together constitute the total demand for family planning, which can be categorised based on whether the need is for spacing or limiting births.

Table 7.3 presents estimates for unmet need, met need, and total demand for family planning among currently married Tanzanian women. Twenty-five percent of currently married women have an unmet need for family planning: 16 percent have an unmet need for spacing, and 10 percent have an unmet need for limiting. The total demand for family planning among currently married women is 60 percent, and more than half of that demand (58 percent) is satisfied. The demand for spacing purposes is one and a half times as high as the demand for limiting purposes (37 and 23 percent, respectively).

Table 7.3 Need for family planning

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Tanzania 2010

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
Age											
15-19	15.3	0.7	16.0	14.4	0.5	14.9	29.7	1.1	30.9	48.2	399
20-24	23.6	0.8	24.4	27.8	1.8	29.6	51.5	2.6	54.1	54.8	1,210
25-29	21.4	2.4	23.8	32.2	4.7	36.9	53.6	7.1	60.7	60.8	1,338
30-34	16.7	5.0	21.7	24.7	16.0	40.7	41.4	21.0	62.5	65.2	1,137
35-39	13.9	14.2	28.1	16.1	20.9	37.0	29.9	35.1	65.0	56.8	1,036
40-44	5.4	24.4	29.8	6.7	33.0	39.7	12.1	57.5	69.5	57.1	741
45-49	2.1	32.1	34.2	1.4	25.9	27.3	3.5	58.0	61.4	44.4	550
Residence											
Urban	11.3	8.2	19.5	29.1	16.8	45.9	40.4	25.1	65.5	70.2	1,585
Rural	17.4	9.9	27.2	18.0	12.5	30.5	35.4	22.4	57.8	52.9	4,827
Mainland/Zanzibar											
Mainland	15.7	9.4	25.1	20.9	13.9	34.8	36.6	23.2	59.9	58.1	6,232
Urban	10.9	8.0	18.9	29.6	17.2	46.8	40.5	25.2	65.7	71.2	1,516
Rural	17.2	9.8	27.0	18.2	12.8	31.0	35.4	22.6	58.0	53.4	4,715
Zanzibar	22.6	12.2	34.7	13.8	4.6	18.4	36.4	16.8	53.1	34.7	180
Unguja	21.0	10.8	31.7	17.1	6.4	23.6	38.1	17.2	55.3	42.6	115
Pemba	25.5	14.6	40.1	7.8	1.4	9.2	33.3	16.0	49.3	18.6	64
Zone											
Western	18.5	7.4	25.9	12.8	7.3	20.1	31.3	14.7	46.0	43.7	1,175
Northern	13.9	8.6	22.5	27.6	21.2	48.8	41.5	29.8	71.3	68.4	939
Central	20.2	14.7	34.8	18.7	10.1	28.8	38.8	24.7	63.6	45.2	556
Southern Highlands	11.2	8.7	19.8	27.2	18.4	45.6	38.3	27.1	65.4	69.7	895
Lake	20.5	12.7	33.3	7.3	10.8	18.1	27.8	23.6	51.4	35.3	1,101
Eastern	11.2	6.3	17.5	33.5	14.0	47.5	44.7	20.3	65.0	73.1	917
Southern	13.8	9.2	23.0	24.8	17.1	41.9	38.6	26.3	64.9	64.6	648
Region											
Dodoma	18.7	14.0	32.8	22.2	7.2	29.4	40.9	21.2	62.1	47.3	334
Arusha	23.5	13.5	37.0	19.5	20.8	40.3	43.0	34.3	77.3	52.1	240
Kilimanjaro	8.1	7.8	15.8	33.2	31.6	64.8	41.3	39.4	80.6	80.4	228
Tanga	7.3	3.7	10.9	34.9	18.8	53.7	42.1	22.4	64.6	83.1	324
Morogoro	15.2	7.4	22.6	33.0	13.7	46.7	48.2	21.1	69.3	67.4	301
Pwani	13.1	6.2	19.3	34.0	7.6	41.6	47.1	13.8	60.9	68.3	168
Dar es Salaam	7.8	5.6	13.4	33.7	16.7	50.4	41.5	22.3	63.7	79.0	448
Lindi	16.9	6.8	23.7	29.6	11.0	40.5	46.5	17.8	64.3	63.1	134
Mtwara	12.4	11.5	23.9	24.8	13.3	38.0	37.1	24.8	61.9	61.4	277
Ruvuma	13.6	7.8	21.4	22.2	25.0	47.3	35.8	32.9	68.7	68.8	236
Iringa	14.9	11.4	26.3	24.3	20.9	45.2	39.2	32.3	71.5	63.2	277
Mbeya	7.5	7.9	15.4	29.7	18.8	48.5	37.2	26.7	63.9	76.0	426
Singida	22.3	15.6	38.0	13.4	14.4	27.8	35.7	30.1	65.8	42.3	221
Tabora	12.4	6.3	18.8	16.3	8.2	24.5	28.8	14.5	43.3	56.7	312
Rukwa	13.9	6.6	20.5	25.6	13.9	39.4	39.5	20.5	59.9	65.8	192
Kigoma	31.5	9.7	41.2	18.6	6.6	25.2	50.1	16.3	66.4	37.9	288
Shinyanga	15.3	6.8	22.1	8.0	7.1	15.1	23.3	13.9	37.2	40.6	575
Kagera	12.9	13.6	26.6	11.3	14.9	26.2	24.2	28.6	52.8	49.7	372
Mwanza	25.2	12.8	38.0	5.2	9.9	15.2	30.4	22.8	53.2	28.5	474
Mara	23.0	11.2	34.2	5.4	6.5	11.9	28.3	17.7	46.1	25.7	255
Manyara	22.0	12.8	34.8	16.3	11.1	27.4	38.3	23.9	62.2	44.0	147
Unguja North	27.0	8.1	35.1	9.3	2.2	11.4	36.3	10.2	46.5	24.6	29
Unguja South	14.7	8.1	22.8	26.5	6.5	33.1	41.2	14.6	55.9	59.2	17
Town West	20.0	12.6	32.6	18.1	8.2	26.3	38.1	20.8	58.9	44.7	69
Pemba North	28.3	13.6	41.9	6.3	0.8	7.1	34.7	14.3	49.0	14.5	31
Pemba South	22.8	15.6	38.4	9.2	2.0	11.1	31.9	17.6	49.5	22.5	33
Education											
No education	18.6	11.4	30.0	14.1	7.9	22.0	32.7	19.3	52.0	42.3	1,524
Primary incomplete	16.3	9.6	25.9	15.3	12.3	27.6	31.6	21.8	53.5	51.6	866
Primary complete	15.1	9.3	24.4	23.3	15.6	38.9	38.4	24.9	63.3	61.5	3,529
Secondary+	12.3	4.6	16.9	32.4	19.4	51.8	44.7	24.0	68.7	75.4	492
Wealth quintile											
Lowest	18.5	12.3	30.8	15.2	7.7	22.9	33.7	20.1	53.8	42.6	1,165
Second	17.9	9.4	27.3	16.8	9.9	26.7	34.8	19.2	54.0	49.4	1,344
Middle	18.5	10.5	29.0	16.2	12.4	28.6	34.6	22.9	57.5	49.7	1,333
Fourth	15.1	8.4	23.5	25.7	16.9	42.6	40.8	25.3	66.1	64.5	1,301
Highest	9.4	6.9	16.3	29.7	20.8	50.6	39.1	27.7	66.8	75.6	1,269
Currently married women	15.9	9.5	25.3	20.7	13.6	34.4	36.6	23.1	59.7	57.5	6,412
Unmarried women	4.2	2.0	6.2	13.2	6.0	19.2	17.4	8.0	25.4	75.5	3,727
All women	11.6	6.7	18.3	18.0	10.8	28.8	29.6	17.5	47.1	61.1	10,139

Note: Figures in parentheses are based on 25 to 49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

[1] Unmet need for spacing: Includes women who are fecund and not using family planning and who say they want to wait two or more years for their next birth, or who say they are unsure whether they want another child, or who want another child but are unsure when to have the child. In addition, unmet need for spacing includes pregnant women whose current pregnancy was mistimed, or whose last pregnancy was unwanted but who now say they want more children. Unmet need for spacing also includes amenorrhoeic women whose last birth was mistimed, or whose last birth was unwanted but who now say they want more children. Unmet need for limiting includes women who are fecund and not using family planning and who say they do not want another child. In addition, unmet need for limiting includes pregnant women whose current pregnancy was unwanted but who now say they do not want more children or who are undecided whether they want another child. Unmet need for limiting also includes amenorrhoeic women whose last birth was unwanted but who now say they do not want more children or who are undecided about whether they want another child.

[2] Using for spacing is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for limiting is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

Unmet need does not vary much by age except for the youngest and oldest women, who have the lowest percentage of unmet need. Up to age 34, most unmet need for family planning is for spacing purposes. After age 40, most unmet need for family planning is for limiting childbearing. Total unmet need for family planning is higher in Zanzibar (35 percent) than in Mainland Tanzania (25 percent). At regional levels in Mainland, unmet need is highest in Kigoma (41 percent) and lowest in Tanga (11 percent).

There are notable differences in the percentage of demand satisfied by the woman's characteristics. As expected, a high percentage of demand is satisfied among urban women, those living in wealthier households, and those with more education. There has been no significant change in unmet need since the 2004-05 TDHS, but there has been a slight increase in the total demand for family planning among currently married women (50 percent in the 2004-05 TDHS and 60 percent in the 2010 TDHS). In this same interval, the percentage of demand satisfied has increased from 56 to 58 percent.

7.4 IDEAL NUMBER OF CHILDREN

This section discusses responses of women and men to inquiries about what they consider to be the ideal number of children. Respondents who had no children were asked how many children they would like to have if they could choose the number of children to have over their entire life. Those who had living children were asked about the number of children they would choose if they could start their childbearing again. Responses provide an indicator of future fertility, while the information supplied by the latter group also provides a measure of unwanted fertility.

Table 7.4 shows the distribution of respondents by ideal number of children and mean ideal number of children. In general, a large proportion of Tanzanians, regardless of their number of living children, consider five or more children to be ideal. The mean ideal number of children is 4.9 for all women and 5.3 for currently married women. Three in four women consider four or more children to be ideal. Only 8 percent of women think two or fewer children are ideal. Among all women, the mean ideal number of children increases with the number of living children they have, from 4.0 for women with no children to 6.8 for women with six or more children.

Tanzanian men, on average, want similar numbers of children as Tanzanian women. Married men want to have 5.3 children compared with 4.8 children for all men. An exception is that currently married men with six or more children want more children than the number wanted by married women (7.6 versus 6.9 children, respectively).

From the 1991-92 TDHS through the 2004-05 TDHS, there was a gradual decline in preferred family size by more than one child (from 6.1 to 5.0 children for women and 6.5 to 5.3 children for men). As shown in Figure 7.2, this downward trend has continued to 2010 for women, from 5.0 to 4.9, and for men, from 5.3 to 4.8.

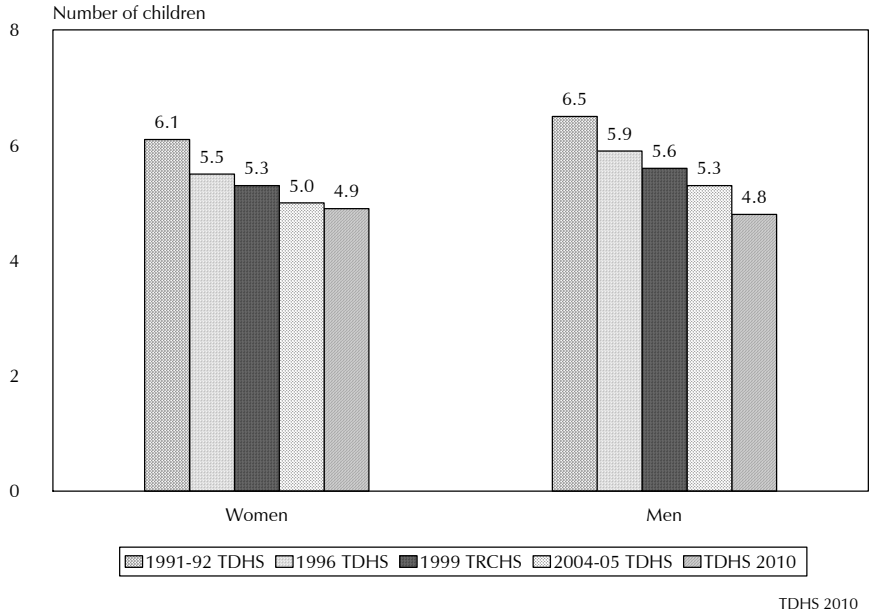
Table 7.4 Ideal number of children

Percent distribution of women and men 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to number of living children, Tanzania 2010

Ideal number of children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
WOMEN								
0	0.7	0.1	0.1	0.0	0.0	0.2	0.2	0.2
1	1.2	1.2	0.3	0.1	0.3	0.0	0.2	0.6
2	15.7	11.9	6.4	2.4	1.3	0.6	1.6	7.3
3	26.4	29.1	17.0	9.9	4.6	5.7	3.8	16.3
4	26.4	28.0	40.3	33.7	23.8	16.2	13.4	27.0
5	14.0	14.5	17.9	24.2	20.7	20.4	11.0	16.8
6+	13.8	14.1	16.7	28.8	47.0	55.0	65.7	29.9
Non-numeric responses	1.9	1.0	1.3	1.0	2.4	1.9	4.2	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,439	1,571	1,590	1,324	1,058	812	1,343	10,139
Mean ideal number children for:[2]								
All women	4.0	4.1	4.4	5.0	5.5	5.9	6.8	4.9
Number	2,393	1,555	1,570	1,312	1,033	796	1,287	9,947
Currently married women	4.6	4.3	4.5	5.0	5.6	6.0	6.9	5.3
Number	294	1,033	1,236	1,101	843	670	1,104	6,281
MEN[3]								
0	0.3	0.0	0.0	0.0	0.0	0.4	0.2	0.2
1	0.7	0.0	0.5	0.0	0.0	0.4	0.3	0.4
2	11.5	11.9	3.4	1.2	6.3	1.0	2.5	7.7
3	30.3	26.9	20.8	18.1	9.2	7.0	5.3	22.0
4	25.0	29.6	35.0	34.4	19.8	14.7	19.3	25.9
5	16.1	14.6	19.5	23.0	22.7	19.3	14.1	17.4
6+	13.7	14.8	18.7	21.5	40.4	54.1	50.9	23.5
Non-numeric responses	2.6	2.2	2.0	1.8	1.5	3.1	7.4	2.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,105	297	270	237	204	142	273	2,527
Mean ideal number children for:[2]								
All men	4.1	4.1	4.5	4.8	5.3	5.8	7.5	4.8
Number	1,076	291	264	233	201	137	253	2,455
Currently married men	4.3	4.1	4.6	4.9	5.2	5.7	7.6	5.3
Number	54	223	222	210	187	134	244	1,273

[1] The number of living children includes current pregnancy for women.
[2] Means are calculated excluding respondents who gave non-numeric responses.
[3] The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Figure 7.2 Trends in Mean Ideal Family Size among Women and Men, 1991-2010



TDHS 2010

7.5 MEAN IDEAL NUMBER OF CHILDREN BY BACKGROUND CHARACTERISTICS

There are significant variations in mean ideal number of children by background characteristics among all women age 15-49 (Table 7.5). The older the respondent, the more children they consider ideal; women age 15-19 think the ideal family size is more than four children (4.1) while women age 45-49 think it is 6.3. Rural women want one child more than urban women (5.2 and 4.0 children, respectively). Women in Zanzibar also want a larger family size than women in the Mainland (6.6 and 4.8 children, respectively). Variations are also observed across zones in the Mainland, ranging from 4.1 children in the Eastern zone to 5.8 children in the Western zone.

The ideal number of children declines as level of education and wealth quintile increase. For example, the mean ideal number of children among women who have completed primary school is 4.7 children compared with 6.0 children among women with no education. Similarly, women in households in the lowest wealth quintile want 5.7 children compared with 3.8 children by women in the highest wealth quintile, a difference of more than 1 child. These patterns are similar to those in the 2004-05 TDHS, but with smaller differences.

Table 7.5 Mean ideal number of children

Mean ideal number of children for all women age 15-49 by background characteristics, Tanzania 2010

Background characteristic	Mean	Number of women[1]
Age		
15-19	4.1	2,129
20-24	4.4	1,891
25-29	4.7	1,658
30-34	5.0	1,395
35-39	5.5	1,258
40-44	5.7	904
45-49	6.3	712
Residence		
Urban	4.0	2,845
Rural	5.2	7,101
Mainland/Zanzibar		
Mainland	4.8	9,627
Urban	3.9	2,714
Rural	5.2	6,914
Zanzibar	6.6	319
Unguja	5.8	205
Pemba	8.0	114
Zone		
Western	5.8	1,714
Northern	4.2	1,487
Central	5.3	792
Southern Highlands	4.7	1,354
Lake	5.1	1,789
Eastern	4.1	1,540
Southern	4.3	951
Education		
No education	6.0	1,872
Primary incomplete	5.2	1,453
Primary complete	4.7	4,990
Secondary+	3.7	1,632
Wealth quintile		
Lowest	5.7	1,631
Second	5.5	1,900
Middle	5.2	1,964
Fourth	4.6	2,087
Highest	3.8	2,364
Total	4.9	9,947

[1] Number of women who gave a numeric response

7.6 FERTILITY PLANNING STATUS

There are two ways to look at the issue of unwanted fertility. In the first, a woman's responses to questions about children born in the five years preceding the survey (including any current pregnancy) are used to determine whether the pregnancy was planned (wanted then), mistimed (wanted, but at a later time), or unwanted (not wanted at all). Care has to be exercised in interpreting the results because an unwanted conception may have become a cherished child, leading to the rationalisation of the responses to the question. Nevertheless, these results provide some insight into the degree to which couples are able to control fertility.

Table 7.6 shows the percent distribution of births (including current pregnancy) in the five years preceding the survey by fertility planning status, according to birth order and mother's age at birth. The data show that nearly three out of every four (74 percent) births in the five years preceding the survey were wanted at the time, 22 percent were wanted later, and 4 percent were unwanted. The proportion of births wanted at the time of conception generally declines with increasing birth order and the age of the mother.

Comparison with data from the 2004-05 TDHS shows that there have been small changes in fertility planning status. In 2004-05, 76 percent of births were wanted at the time of conception, 18 percent of births were wanted later, and 5 percent were unwanted.

Table 7.6 Fertility planning status

Percent distribution of births to women 15-49 in the five years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Tanzania 2010

Birth order and mother's age at birth	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
Birth order						
1	79.1	19.7	0.6	0.7	100.0	1,896
2	76.6	22.2	0.5	0.8	100.0	1,767
3	75.9	22.3	1.4	0.4	100.0	1,475
4+	68.9	23.1	7.4	0.5	100.0	4,007
Mother's age at birth						
<20	71.7	26.6	0.6	1.0	100.0	1,445
20-24	77.1	21.8	0.6	0.5	100.0	2,606
25-29	75.4	22.9	1.1	0.6	100.0	2,123
30-34	71.8	22.7	5.0	0.5	100.0	1,642
35-39	69.5	16.6	13.4	0.5	100.0	968
40-44	65.7	12.8	21.5	0.0	100.0	318
45-49	65.2	13.3	21.6	0.0	100.0	43
Total	73.6	22.1	3.7	0.6	100.0	9,145

7.7 WANTED FERTILITY RATES

Table 7.7 shows the total wanted fertility rates and total actual fertility rates for the three years preceding the survey, by selected background characteristics. The wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. For this purpose, unwanted births are defined as those that exceed the number considered ideal by the respondent. Women who did not report a numeric ideal family size were assumed to want all their births. The rate represents the level of fertility that would have prevailed in the three years preceding the survey if all unwanted births were prevented. A comparison of the total wanted fertility and actual total fertility rate suggests the potential demographic impact of the elimination of unwanted births.

The total wanted fertility rate is 4.8 births per woman, 0.6 births fewer than the total fertility rate of 5.4 births per woman. The total wanted fertility rate has not changed significantly since the 2004-05 TDHS (4.9).

Urban women are closer to achieving their wanted fertility than rural women. The difference between the wanted and actual fertility rates is 0.8 in rural areas and 0.4 in urban areas. The gap between the wanted and actual fertility rate is greater in Mainland than in Zanzibar. In Mainland, the difference between wanted and actual fertility rates is largest in the Lake zone (1.2) and smallest in the Eastern Zone (0.3). Education and wealth have an inverse relationship with wanted fertility rates and with the gap between wanted and actual fertility rates.

Table 7.7 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Tanzania 2010

Background characteristic	Total wanted fertility rates	Total fertility rate
Residence		
Urban	3.3	3.7
Rural	5.3	6.1
Mainland/Zanzibar		
Mainland	4.7	5.4
Urban	3.3	3.7
Rural	5.3	6.1
Zanzibar	4.8	5.1
Unguja	4.1	4.6
Pemba	6.2	6.4
Zone		
Western	6.3	7.1
Northern	3.8	4.6
Central	5.7	6.5
Southern Highlands	4.7	5.4
Lake	5.1	6.3
Eastern	3.6	3.9
Southern	4.0	4.4
Education		
No education	6.3	7.0
Primary incomplete	5.2	6.0
Primary complete	4.7	5.5
Secondary+	2.7	3.0
Wealth quintile		
Lowest	6.1	7.0
Second	5.9	6.8
Middle	5.4	6.1
Fourth	4.1	4.7
Highest	3.0	3.2
Total	4.7	5.4

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 4.2.

INFANT AND CHILD MORTALITY 8

This chapter presents levels, trends, and differentials in perinatal, neonatal, postneonatal, infant, and child mortality in Tanzania. The information enhances understanding of population trends and will assist in the planning and evaluation of health policies and programs. Estimates of infant and child mortality rates can be used to develop population projections. Information on child mortality also serves the need of the health sector to identify population groups that are at high risk. The analysis in this report provides an opportunity to evaluate the performance of programs of the Ministry of Health and Social Welfare aimed at reducing infant and child mortality. Furthermore, infant and under-5 mortality rates are used to assess the National Strategy for Growth and Reduction of Poverty (NSGRP) because they reflect socioeconomic development and quality of life (Vice President's Office, 2005).

The data for mortality estimation were collected in the birth history section of the Woman's Questionnaire. The birth history section begins with questions about the respondent's experience with childbearing (i.e., the number of sons and daughters living with the mother, the number who live elsewhere, and the number who have died). These questions are followed by a retrospective birth history in which each respondent is asked to list each of her births, starting with the first birth. For each birth, data were obtained on sex, month and year of birth, survivorship status, and current age, or if the child is dead, age at death. This information is used to directly estimate mortality rates. In this report the age-specific mortality rates are categorised and defined as follows:

- Neonatal mortality (NN): the probability of dying within the first month of life
- Postneonatal mortality (PNN): the probability of dying after the first month of life but before the first birthday (the difference between infant and neonatal mortality)
- Infant mortality ($_1q_0$): the probability of dying before the first birthday
- Child mortality ($_4q_1$): the probability of dying between the first and the fifth birthday
- Under-5 mortality ($_5q_0$): the probability of dying between birth and the fifth birthday.

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

8.1 LEVELS AND TRENDS IN INFANT AND CHILD MORTALITY

Table 8.1 shows neonatal, postneonatal, infant, child, and under-5 mortality rates for successive five-year periods before the survey. For the five years preceding the survey (approximately calendar years 2006-2010), the infant mortality rate is 51 per 1,000 live births, the child mortality rate is 32 per 1,000 children, and the under-5 mortality rate for the period is 81 per 1,000 live births. This implies that one out of 20 Tanzanian children born dies before the first birthday, while one out of 12 Tanzanian children dies before the fifth birthday. During the same period, neonatal mortality was 26 deaths per 1,000 live births, while postneonatal mortality was 25 deaths per 1,000 live births.

Data in Table 8.1 show a rapid decline in child mortality. Infant mortality estimates decline from 71 in the 5- to 9-year period preceding the survey (approximately 2001-2005) to 51 per 1,000 live births during the 2006-2010 period. The 2010 TDHS estimate for the 5- to 9-year period preceding the survey is almost identical to the 2004-05 TDHS rate of 68 deaths per 1,000 births for the same period (i.e., 0 to 4 years preceding the 2004-05 survey). Thus, results of the two surveys indicate a significant decrease in infant and child mortality rates in recent years. The largest decline is shown by the postneonatal mortality rate, which dropped from 36 deaths per 1,000 live births in the 2004-05 TDHS to 25 deaths per 1,000 live births in the 2010 TDHS.

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Tanzania 2010

Years preceding the survey	Approximate calendar year	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
0-4	2006 - 2010	26	25	51	32	81
5-9	2001 - 2005	30	41	71	37	106
10-14	1996 - 2000	33	62	96	53	143

[1] Computed as the difference between the infant and neonatal mortality rates

Table 8.2 confirms the decline in infant and under-5 mortality rates. The under-5 mortality rate declined by 41 percent from 137 deaths per 1,000 live births in 1992-1996 to 81 deaths in 2006-2010. Over the same period, the infant mortality rate declined by 42 percent, from 88 to 51 deaths per 1,000 live births.

Table 8.2 Trends in early childhood mortality rates

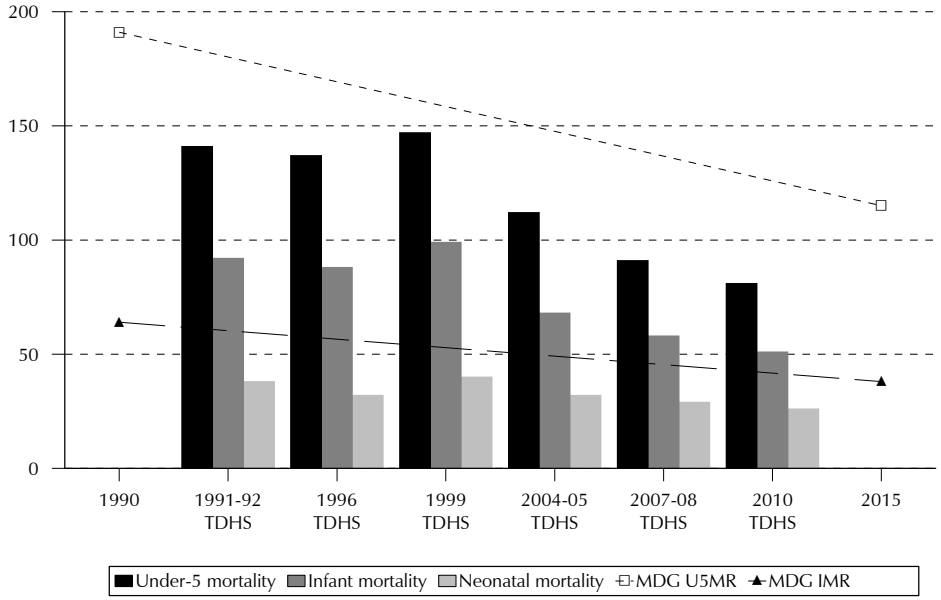
Infant and under-5 mortality rates, Tanzania, 1996-2010

Survey year	Approximate calendar period	Infant mortality ($_1q_0$)	Under-5 mortality ($_5q_0$)
1996	1992 -1996	88	137
2004-05	2000 - 2004	68	112
2007-08	2003 - 2007	58	91
2010	2006 -2010	51	81

Sources: BOS, 1997; NBS, 2005; TACAIDS et al., 2008.

Figure 8.1 shows the trends and levels of under-5, infant and neonatal mortality rates from 1990 to 2010. Progress has been made towards achieving the Millennium Development Goals (MDGs) in infant and under-5 mortality rates. If the pace of decline in mortality levels is sustained at this rate, Tanzania will be able to reach the MDG goals in infant and under-5 mortality rate indicators. The decline in childhood mortality can be attributed to continued improvement in the health sector, especially in the areas of maternal and child health, with specific reference to immunisation and malaria prevention initiatives.

Figure 8.1 **Trends in Under-5, Infant, and Neonatal Mortality, 1990-2015**



8.2 DATA QUALITY

Because of the decline in infant and child mortality, a thorough review of the 2010 TDHS data was conducted. The quality of mortality estimates that are calculated from retrospective birth histories depends upon the completeness with which births and deaths are reported and recorded.

One factor that affects childhood mortality estimates is the quality of reporting of age at death, which may distort the age pattern of mortality. If age at death is misreported, it will bias the estimates, especially if the net effect of the age misreporting results in transference from one age bracket to another. For example, a net transfer of deaths from an age of under 1 month to a higher age will affect the estimates of neonatal and postneonatal mortality. To minimise errors in reporting age at death, interviewers were instructed to record age at death in days if the death took place in the month following the birth, in months if the child died before age 2, and in years if the child was at least age 2. They also were asked to probe for deaths reported at age 1 to determine a more precise age at death in terms of months. Despite the emphasis during interviewer training and fieldwork monitoring on probing for accurate age at death, Appendix Table C.6 shows that for the five years preceding the survey, the number of reported deaths at age 6 months is twice the number reported at 5 months. However, the number of reported deaths at age 12 months or one year of age is not much higher than that reported at 5 months or 7 months, indicating that there is no heaping in the reporting of age at death at 12 months (1 year). Of course, the misreporting of age at death at around age 1 has no effect on estimates of overall under-5 mortality rates.

Another potential data quality problem is the selective omission from the birth histories of births that did not survive, which can lead to underestimation of mortality rates. When selective omission of childhood deaths occurs, it is usually most severe for deaths occurring early in infancy. One way such omissions can be detected is by examining the proportion of neonatal deaths to infant deaths. Generally, if there is substantial underreporting of deaths, the result is an abnormally low ratio of neonatal deaths to infant deaths. The proportion of infant deaths occurring in the first month of life is 55 percent in the period 0 to 4 years preceding the survey (Appendix Table C.6). Furthermore, it appears that early neonatal deaths among births that occurred the first month of life have not been underreported; 72 percent of neonatal deaths were early neonatal deaths (Appendix Table C.5). The proportion is slightly lower for deaths occurring 10 to 19 years before the survey, which is not surprising given the greater likelihood of recall errors.

Displacement of birth dates may cause a distortion of mortality trends. This can occur if an interviewer knowingly records a death as occurring in a different year, which would happen if an interviewer is trying to cut down on their overall work, because live births occurring during the five years preceding the interview are the subject of a lengthy set of additional questions. In the 2010 TDHS questionnaires, the cut off year for these questions was 2005. Appendix Table C.4 shows some year-of-birth transference for deceased children from 2005 to earlier years. However, this should have little effect on the estimated mortality rates for the standard five-year DHS mortality period, the calculation of which, unlike the questionnaire, does not conform to calendar years.

8.3 SOCIOECONOMIC DIFFERENTIALS IN INFANT AND CHILD MORTALITY

Mortality differentials by place of residence, region, education of the mother, and household wealth are presented in Table 8.3. For a sufficient number of births to study mortality differentials across population subgroups, period-specific rates are presented for the 10-year period preceding the survey (approximately 2001 to 2010).

Table 8.3 Early childhood mortality rates by socioeconomic characteristics

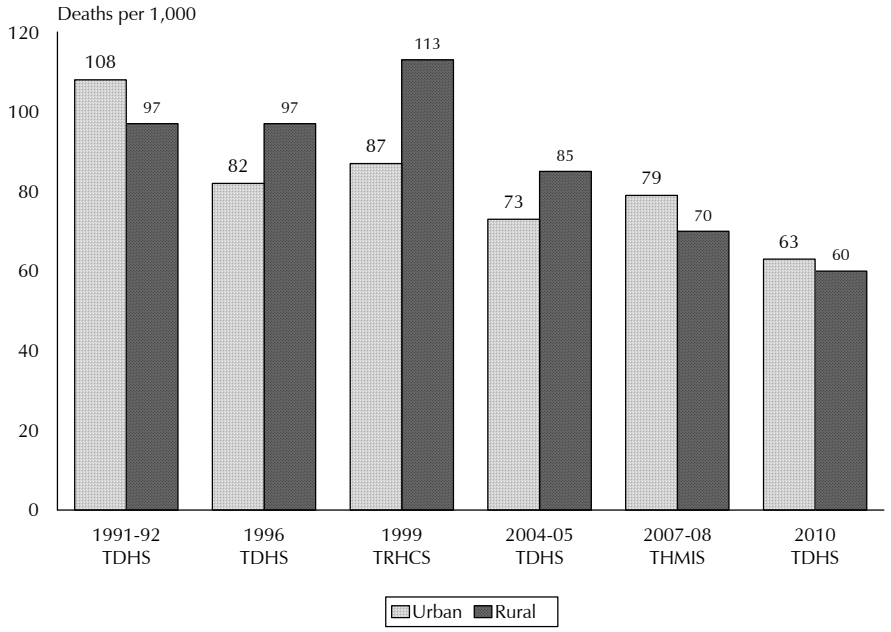
Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristic, Tanzania 2010

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Residence					
Urban	31	32	63	34	94
Rural	27	33	60	34	92
Mainland/Zanzibar					
Mainland	28	33	60	35	93
Urban	31	32	63	35	96
Rural	27	33	60	35	92
Zanzibar	29	25	54	20	73
Unguja	33	20	53	13	65
Pemba	25	31	56	29	84
Zone					
Western	25	31	56	45	98
Northern	22	19	40	18	58
Central	26	32	57	28	84
Southern Highlands	38	32	70	35	102
Lake	21	43	64	48	109
Eastern	38	32	70	26	94
Southern	31	37	68	28	94
Mother's education					
No education	25	38	63	36	97
Primary incomplete	29	38	67	35	100
Primary complete	28	30	58	34	90
Secondary+	35	16	52	23	73
Wealth quintile					
Lowest	21	40	61	45	103
Second	26	33	59	35	92
Middle	31	28	59	34	91
Fourth	26	35	60	29	88
Highest	39	24	63	23	84

[1] Computed as the difference between the infant and neonatal mortality rates

Infant mortality is expected to be higher among children living in rural areas than among children living in urban areas. However, Figure 8.2 shows that the rates in the 2007-08 THMIS and the 2010 TDHS are contrary to expectations. In the 2010 TDHS, the infant mortality rate in urban areas is only slightly higher than in rural areas (63 and 60 deaths per 1,000 live births, respectively). Examination of the sampling errors surrounding these estimates shows that the true rates overlap (Appendix Tables B.3 and B.4).

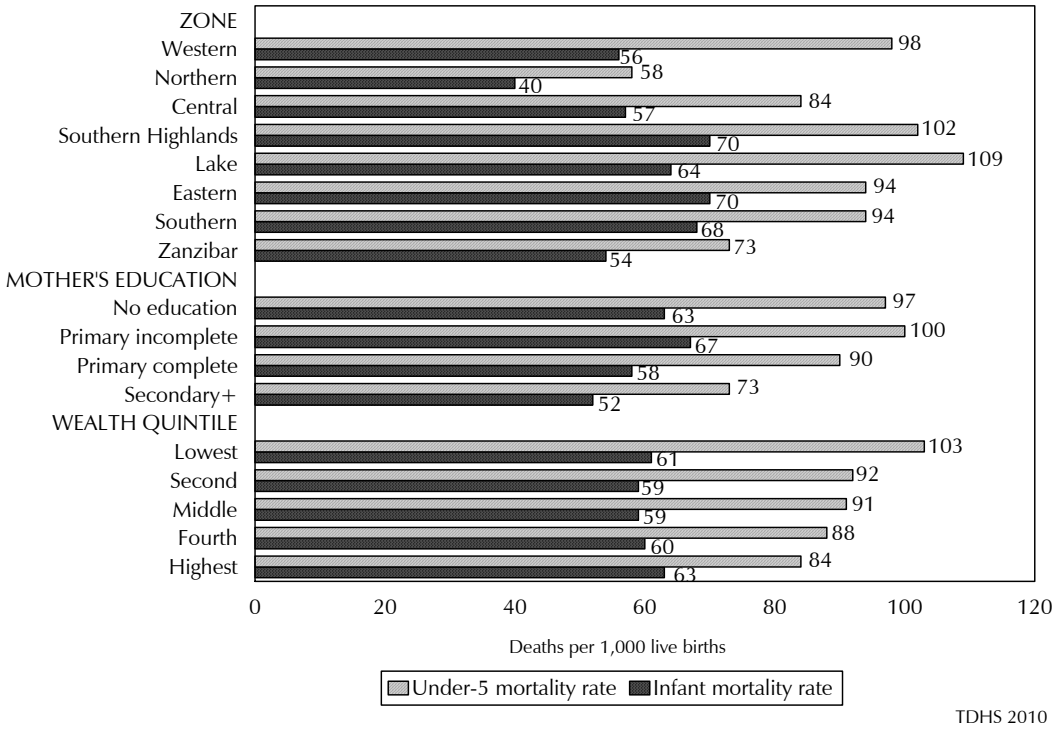
Figure 8.2 **Trends in Infant Mortality Rates by Residence, 1991-2010**



Infant mortality ranges from a low of 40 in the Northern zone to a high of 70 in the Eastern and Southern Highlands zones. A similar pattern is observed for the under-5 mortality rate; the highest rates are 109 and 102 deaths per 1,000 live births in the Lake and Southern Highlands zones, while the lowest rate is 58 deaths per 1,000 live births in the Northern zone.

Many studies have documented that a mother's level of education is positively associated with child survival. Education exposes mothers to information about better nutrition, use of contraceptives to space births, and knowledge about the prevention and treatment of childhood illnesses. Table 8.3 and Figure 8.3 show that infant mortality ranges from a high of 67 among children born to women who have not completed primary school to a low of 52 among those whose mothers have at least some secondary education. The association between child mortality and wealth quintile is not so clear, though under-5 mortality declines gradually with increasing wealth.

Figure 8.3 Socioeconomic Differentials in Infant and Under-5 Mortality Rates



8.4 Demographic Differentials in Infant and Child Mortality

The demographic characteristics of both mother and child have been found to play an important role in the survival probability of children. Table 8.4 presents early childhood mortality rates by demographic characteristics (i.e., sex of child, mother's age at birth, birth order, previous birth interval, and birth size).

Childhood mortality shows the usual pattern of higher mortality rates for male children. This is true for all rates except postnatal mortality, where the mortality rate for female children is slightly higher than that for male children, although the difference is not significant (Table 8.4 and Figure 8.4). Mortality for births to mothers under age 20 and mothers age 35 years and older is higher than for women age 20-39. The same pattern is observed in previous surveys. First births and 7 and higher-order births have a higher risk of dying before age 5 than births of order 2-6.

The spacing of births is another factor that has a significant impact on a child's chances of survival. Generally, shorter birth intervals are associated with higher mortality, both during and after infancy. The 2010 TDHS data confirm this pattern. All childhood mortality rates show a strong relationship with the length of previous birth interval. For example, infant mortality is much higher among children born fewer than two years after a preceding sibling compared with that of children born four or more years after a previous child (86 deaths per 1,000 live births and 44 deaths per 1,000 live births, respectively).

Studies have shown that a child's weight at birth is an important indicator of his or her chances of survival. Because only half of mothers had information on their child's weight at birth, they were asked instead whether their child was very large, larger than average, average, smaller than average, or very small at birth. This has been found to be a good proxy for children's weight. Children reported to be small or very small are nearly three times as likely to die by age 1 as children reported to be average or larger (117 deaths against 42 deaths per 1,000 live births). The variation in neonatal mortality is particularly marked; small babies at birth are more than three times as likely to die in the first month of life (69 compared with 20 deaths per 1,000 births).

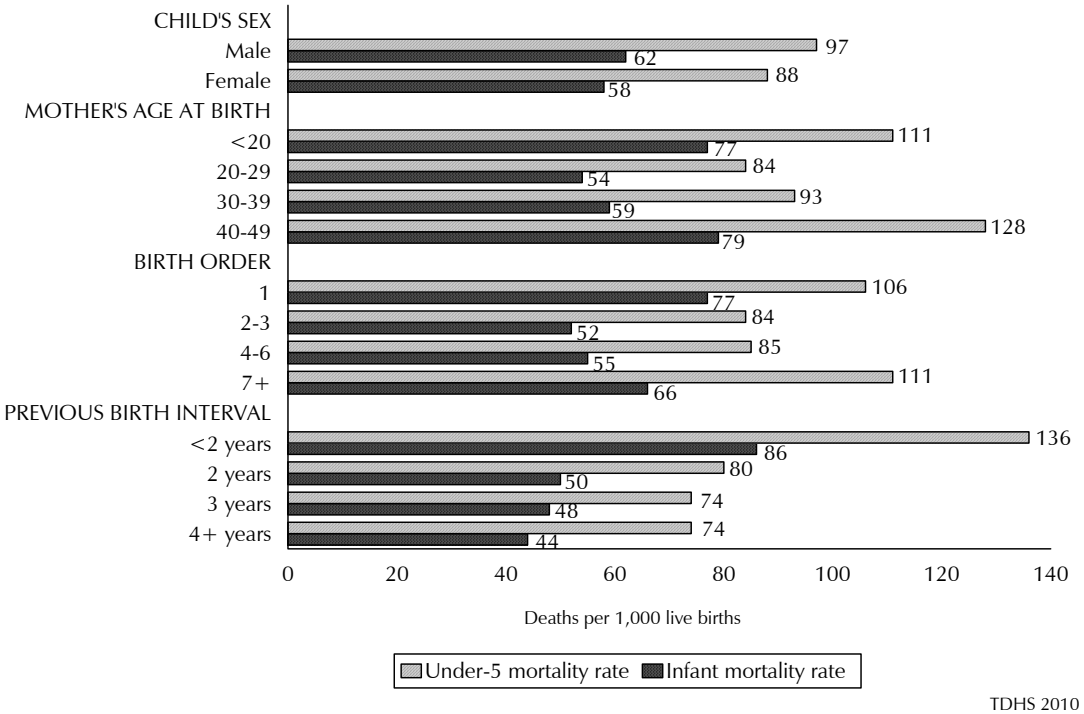
Table 8.4 Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by demographic characteristics, Tanzania 2010

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Child's sex					
Male	31	31	62	37	97
Female	25	33	58	32	88
Mother's age at birth					
<20	41	36	77	36	111
20-29	22	32	54	32	84
30-39	29	30	59	36	93
40-49	38	41	79	54	128
Birth order					
1	45	32	77	32	106
2-3	22	30	52	33	84
4-6	22	33	55	32	85
7+	28	38	66	48	111
Previous birth interval[2]					
<2 years	36	50	86	55	136
2 years	18	32	50	32	80
3 years	22	26	48	27	74
4+ years	19	26	44	32	74
Birth size[3]					
Small/very small	69	48	117	na	na
Average or larger	20	22	42	na	na

[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births
[3] Rates for the five-year period before the survey

Figure 8.4 Demographic Differentials in Infant and Under-5 Mortality



TDHS 2010

8.5 PERINATAL MORTALITY

Table 8.5 presents the number of stillbirths and early neonatal deaths, and the perinatal mortality rate, for the five-year period preceding the survey. The 2010 TDHS asked women to report any pregnancy loss that occurred in the five years preceding the survey. For each pregnancy that did not end in a live birth, the duration of pregnancy was recorded. Pregnancy losses occurring after seven completed months of gestation (stillbirths) plus deaths to live births within the first seven days of life (early neonatal deaths) constitute the perinatal deaths. The distinction between a stillbirth and an early neonatal death may be a fine one, often depending on observing and sometimes remembering faint signs of life after delivery. The causes of stillbirths and early neonatal deaths are closely linked, and examining just one or the other can understate the true level of mortality around delivery. In this report, perinatal deaths include pregnancy losses of at least seven months' gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths). The perinatal mortality rate is the sum of stillbirths and early neonatal deaths divided by the sum of all stillbirths and live births.

Table 8.5 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Tanzania 2010

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months duration
Mother's age at birth				
<20	23	31	41	1,310
20-29	68	70	32	4,293
30-39	41	49	38	2,386
40-49	12	6	54	330
Previous pregnancy interval in months[4]				
First pregnancy	37	54	56	1,612
<15	10	9	60	315
15-26	34	18	28	1,868
27-38	18	29	21	2,232
39+	44	46	39	2,292
Residence				
Urban	39	45	49	1,698
Rural	105	111	33	6,621
Mainland/Zanzibar				
Mainland	139	149	36	8,094
Urban	37	41	48	1,620
Rural	102	107	32	6,475
Zanzibar	4	7	50	225
Unguja	3	5	61	133
Pemba	1	2	34	91
Zone				
Western	31	21	29	1,754
Northern	10	18	27	1,041
Central	10	9	24	771
Southern Highlands	22	25	41	1,150
Lake	40	23	36	1,750
Eastern	19	40	60	982
Southern	7	13	31	645
Mother's education				
No education	37	40	36	2,127
Primary incomplete	19	21	32	1,235
Primary complete	81	77	36	4,433
Secondary+	7	17	47	523
Wealth quintile				
Lowest	25	29	31	1,753
Second	30	25	28	1,959
Middle	38	38	41	1,874
Fourth	23	29	34	1,549
Highest	27	35	53	1,184
Total	143	156	36	8,319

[1] Stillbirths are foetal deaths in pregnancies lasting seven or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1,000.
[4] Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months.

Table 8.5 indicates a perinatal mortality rate of 36 per 1,000 pregnancies of seven or more months of gestation. Because the rate is subject to a high degree of sampling variation, differences by background characteristics should be interpreted with caution. The perinatal mortality rate is higher among young mothers (less than 20 years of age) and among older mothers (age 40-49 years) and among births that occur fewer than 15 months after the previous birth. Unexpectedly, the perinatal mortality rate is higher in urban than in rural areas. The rate is lower in Mainland Tanzania than in Zanzibar (36 and 50 per 1,000 pregnancies of seven or more months of gestation). There is a marked variation in perinatal mortality reported by zone; it ranges between 24 in the Central zone to 60 in the Eastern zone. Perinatal mortality has no uniform association with the mother's education and wealth status.

8.6 HIGH-RISK FERTILITY BEHAVIOUR

Findings from scientific studies have confirmed a strong relationship between a child's chance of dying and certain fertility behaviours. Typically, the probability of dying in early childhood is much greater for children born to mothers who are young or old, born after a short birth interval, or born to women who have had multiple births. Very young mothers may experience difficult pregnancies and deliveries because of their physical immaturity. Older women may also experience age-related problems during pregnancies and delivery. In this analysis, a mother is considered to be 'too young' if she is less than age 18 and 'old' if she is more than age 34 at the time of delivery. A 'short birth interval' is a birth occurring within 24 months of a previous birth.

The first column in Table 8.6 shows the percentage of children born in the five years prior to the survey that fall into different categories: 56 percent of births have higher mortality risks that are avoidable; 36 percent fall in a single high-risk category, and 20 percent are in a multiple high-risk category. Only 29 percent of births were not in any high-risk category.

The second column shows risk ratios for births in various high-risk categories relative to births with no high-risk characteristics. In general, risk ratios are higher for children in multiple high-risk categories (1.21) than for those in a single high-risk category (1.11). The highest risk (relative risk of 1.5) is associated with (1) births that occur to women older than age 34, with a birth interval of less than 24 months and with a birth order of 3 or higher and (2) births with a birth interval of less than 24 months and with a birth order of 3 or higher.

The last column in Table 8.6 looks to the future and addresses the question of how many currently married women have the potential for having a high-risk birth. The results were obtained by simulating the risk category into which a birth to a currently married woman would fall if she were to become pregnant at the time of the survey. Although this column is based on an assumption that does not take into consideration the protection provided by family planning, postpartum insusceptibility, and prolonged abstinence, it provides an insight into the magnitude of high-risk fertility behaviour. In general, 74 percent of currently married women have the potential for having a high-risk birth, with 31 percent falling into a single high-risk category and 43 percent into a multiple high-risk category.

Table 8.6 High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Tanzania 2010

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high-risk category	29.1	1.00	21.9[a]
Unavoidable risk category			
First-order births between ages 18 and 34 years	15.0	1.31	4.4
Single high-risk category			
Mother's age <18	5.9	1.14	0.8
Mother's age >34	0.5	1.48	3.8
Birth interval <24 months	5.3	1.47	9.7
Birth order >3	24.4	1.01	16.5
Subtotal	36.2	1.11	30.8
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.2	*	0.6
Age >34 and birth interval <24 months	0.0	*	0.1
Age >34 and birth order >3	12.7	1.04	25.0
Age >34 and birth interval <24 months and birth order >3	1.4	1.53	5.5
Birth interval <24 months and birth order >3	5.5	1.52	11.7
Subtotal	19.8	1.21	42.9
In any avoidable high-risk category	55.9	1.15	73.7
Total	100.0	na	100.0
Number of births/women	8,176	na	6,412

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category age <18 and birth order >3
[a] Includes sterilised women

MATERNAL HEALTH 9

This chapter presents findings from several areas of importance to maternal health, including information on the provision of antenatal, delivery, and postnatal care. These services support a key health policy objective in Tanzania, namely, the reduction of maternal morbidity and mortality. Therefore, the survey results provide an opportunity to identify critical issues affecting the health status of women in Tanzania. This information will assist policymakers, planners, and other collaborators in the health sector to formulate appropriate strategies and interventions to improve reproductive health care.

9.1 ANTENATAL CARE

Early and regular checkups by trained medical providers are very important in assessing the physical status of women during pregnancy. This assessment allows intervention to occur in a timely manner if any problems are detected. The 2010 TDHS obtained information from women on both coverage of antenatal care (ANC) and coverage of key elements of the care received for the last birth during the five-year period before the survey.

9.1.1 Coverage of Antenatal Care

Table 9.1 shows the percentage of women who had a live birth in the five years preceding the survey by the source of antenatal care. To obtain the information on source of ANC, interviewers recorded all persons a woman had consulted for antenatal care. However, for cases where more than one person was seen, only the provider with the highest qualifications was considered in the table.

Ninety-six percent of women who gave birth in the five years preceding the survey received ANC from a skilled provider at least once. As expected, nurses and midwives are more likely than other health professionals to provide ANC (80 percent). Women also go to MCH aides (8 percent), doctors (4 percent), and clinical officers (5 percent) for ANC services. Two percent of women receive some kind of antenatal care from people who are not medical professionals, such as village health workers. Almost no women received ANC from a traditional birth attendant (trained or untrained).

The 2010 TDHS findings show no great variation in antenatal care from medically qualified professionals by woman's age at birth or birth order. Urban women are more likely to have ANC than rural women (99 and 95 percent, respectively). Coverage of ANC in Zanzibar is higher than that in Mainland Tanzania (99 percent compared with 96 percent). In Mainland, more than nine out of ten womenin every region reported that they received care from a health care professional at least, except Mwanza and Mara. In Kilimanjaro and in Dar es Salaam, coverage of ANC is 100 percent.

Although the differences are quite small, educated mothers are more likely to receive antenatal care from medical professionals than mothers with less education. There is also a positive relationship between increasing wealth quintile and the receipt of ANC from a health professional.

The percentage of women who received ANC from a skilled provider according to the 2010 TDHS, is slightly higher than that reported in the 2004-05 TDHS (96 and 94 percent, respectively).

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey, by antenatal care (ANC) provider during pregnancy for the most recent birth, and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Tanzania 2010

Background characteristic	Doctor/ AMO	Clinical officer/ assistant clinical officer	Nurse/ midwife	MCH aide	Trained TBA/ TBA	Village health worker/ other	No one	Missing	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
Age at birth											
<20	3.9	5.2	79.8	6.3	0.0	2.8	2.1	0.0	100.0	95.2	749
20-34	3.6	4.9	79.5	8.1	0.0	1.8	1.8	0.3	100.0	96.0	3,794
35-49	2.5	4.1	79.2	10.1	0.2	2.0	1.8	0.2	100.0	95.9	975
Birth order											
1	4.8	5.6	80.7	5.6	0.0	1.6	1.5	0.2	100.0	96.7	1,054
2-3	4.4	5.9	78.7	7.2	0.0	2.3	1.4	0.2	100.0	96.0	1,959
4-5	2.2	3.8	79.9	9.7	0.0	1.6	2.3	0.5	100.0	95.7	1,277
6+	2.2	3.4	79.2	10.4	0.1	2.2	2.3	0.1	100.0	95.2	1,229
Residence											
Urban	7.8	6.0	81.8	3.1	0.1	0.3	1.0	0.1	100.0	98.6	1,273
Rural	2.1	4.4	78.8	9.7	0.0	2.5	2.1	0.3	100.0	95.1	4,246
Mainland/Zanzibar											
Mainland	3.2	4.9	80.0	7.7	0.0	2.0	1.8	0.3	100.0	95.8	5,378
Urban	7.4	6.2	82.3	2.6	0.1	0.3	1.0	0.1	100.0	98.5	1,222
Rural	2.0	4.5	79.3	9.2	0.0	2.6	2.1	0.3	100.0	95.0	4,156
Zanzibar	11.4	0.5	59.4	28.1	0.1	0.0	0.4	0.2	100.0	99.4	141
Unguja	17.9	0.6	72.8	8.5	0.1	0.0	0.0	0.0	100.0	99.8	89
Pemba	0.3	0.2	36.4	61.7	0.0	0.0	0.9	0.5	100.0	98.6	52
Zone											
Western	2.1	4.3	78.4	10.5	0.1	0.7	3.4	0.4	100.0	95.4	1,042
Northern	2.3	1.8	81.2	12.0	0.0	0.2	2.4	0.1	100.0	97.3	782
Central	1.4	3.8	87.4	5.1	0.0	0.0	2.1	0.1	100.0	97.7	503
Southern Highlands	2.4	2.9	84.6	5.3	0.0	1.2	3.4	0.2	100.0	95.3	761
Lake	6.1	5.5	65.7	13.1	0.1	8.7	0.6	0.3	100.0	90.3	1,031
Eastern	5.9	11.7	80.9	0.8	0.0	0.2	0.2	0.3	100.0	99.3	744
Southern	0.4	4.1	94.6	0.3	0.0	0.2	0.2	0.3	100.0	99.3	514
Region											
Dodoma	0.5	2.3	87.7	7.3	0.0	0.0	2.2	0.0	100.0	97.8	316
Arusha	4.6	2.2	81.9	5.4	0.0	0.5	5.0	0.5	100.0	94.1	232
Kilimanjaro	1.4	1.6	83.1	13.9	0.0	0.0	0.0	0.0	100.0	100.0	162
Tanga	2.0	2.1	77.7	17.3	0.0	0.0	0.8	0.0	100.0	99.2	255
Morogoro	3.7	9.6	83.0	2.1	0.0	0.5	0.7	0.4	100.0	98.3	262
Pwani	2.4	3.2	94.0	0.0	0.0	0.0	0.0	0.5	100.0	99.5	149
Dar es Salaam	9.2	17.1	73.5	0.2	0.0	0.0	0.0	0.0	100.0	100.0	333
Lindi	0.8	4.2	94.6	0.0	0.0	0.0	0.0	0.4	100.0	99.6	121
Mtwara	0.0	1.7	96.6	0.7	0.0	0.4	0.0	0.5	100.0	99.0	197
Ruvuma	0.5	6.5	92.5	0.0	0.0	0.0	0.5	0.0	100.0	99.5	196
Iringa	3.7	3.2	89.8	0.6	0.0	0.0	2.7	0.0	100.0	97.3	237
Mbeya	2.4	3.6	84.4	2.5	0.0	2.0	4.6	0.4	100.0	92.9	347
Singida	3.0	6.1	86.9	1.5	0.0	0.0	2.1	0.4	100.0	97.5	187
Tabora	0.5	6.3	84.3	1.7	0.0	0.0	7.1	0.0	100.0	92.9	289
Rukwa	0.7	1.1	78.1	17.2	0.0	1.2	1.7	0.0	100.0	97.1	177
Kigoma	5.6	7.5	48.4	35.8	0.0	1.2	0.0	1.6	100.0	97.2	262
Shinyanga	1.2	1.4	91.0	2.2	0.3	0.8	3.0	0.0	100.0	95.8	492
Kagera	0.0	9.7	68.3	20.2	0.0	0.6	0.3	0.8	100.0	98.3	323
Mwanza	9.7	4.2	64.4	7.5	0.0	13.7	0.4	0.0	100.0	85.9	480
Mara	7.0	1.9	64.5	14.8	0.4	9.6	1.5	0.3	100.0	88.2	229
Manyara	0.0	0.4	84.5	11.3	0.0	0.3	3.5	0.0	100.0	96.2	134
Unguja North	14.6	0.0	75.7	9.1	0.5	0.0	0.2	0.0	100.0	99.3	23
Unguja South	9.7	0.4	66.7	23.2	0.0	0.0	0.0	0.0	100.0	100.0	14
Town West	21.5	0.9	73.2	4.4	0.0	0.0	0.0	0.0	100.0	100.0	53
Pemba North	0.0	0.0	28.7	70.4	0.0	0.0	0.9	0.0	100.0	99.1	26
Pemba South	0.6	0.5	44.4	52.8	0.0	0.0	0.9	0.9	100.0	98.2	26
Education											
No education	1.7	3.3	78.8	9.8	0.0	2.2	3.7	0.6	100.0	93.5	1,313
Primary incomplete	2.2	5.7	78.5	9.5	0.0	2.3	1.5	0.3	100.0	95.9	777
Primary complete	3.4	5.0	80.6	7.6	0.1	1.9	1.2	0.1	100.0	96.7	3,015
Secondary+	11.6	6.1	75.0	5.1	0.0	1.0	1.2	0.0	100.0	97.8	414
Wealth quintile											
Lowest	1.9	4.7	77.2	10.4	0.0	2.5	3.1	0.3	100.0	94.1	1,087
Second	2.6	3.1	79.5	9.3	0.1	3.2	1.9	0.4	100.0	94.5	1,222
Middle	1.9	5.4	78.4	9.9	0.0	2.0	2.0	0.4	100.0	95.6	1,175
Fourth	4.1	4.6	81.3	7.0	0.0	1.6	1.2	0.1	100.0	97.1	1,111
Highest	7.7	6.6	81.2	3.5	0.1	0.3	0.7	0.0	100.0	98.9	924
Total	3.5	4.8	79.5	8.2	0.0	2.0	1.8	0.3	100.0	95.9	5,519

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation. AMO=assistant medical officer

[1] Skilled provider includes doctor/AMO, clinical officer, assistant clinical officer, nurse/midwife, and MCH aide.

9.1.2 Number of ANC Visits, Timing of First Visit, and Source Where ANC Was Received

Antenatal care can be most effective in avoiding adverse pregnancy outcomes when it is sought early in the pregnancy and continues through to delivery. Under normal circumstances, WHO recommends that a pregnant woman without complications have at least four ANC visits to provide sufficient care. It is possible during these visits to detect reproductive health risk factors. In the event of any complication, more frequent visits are advisable and admission to a hospital may become necessary. Table 9.2 presents data on the number of antenatal visits made by pregnant women and the stage of pregnancy at the first visit.

Forty-three percent of women whose last birth occurred in the five years before the survey made four or more ANC visits (Figure 9.1). This is a sharp decline from the percentage recorded in the 2004-05 TDHS (62 percent). Women in Mainland (43 percent) are slightly less likely than women in Zanzibar (49 percent) to make four or more ANC visits. In Mainland, there is marked variation between urban and rural areas (55 percent compared with 39 percent).

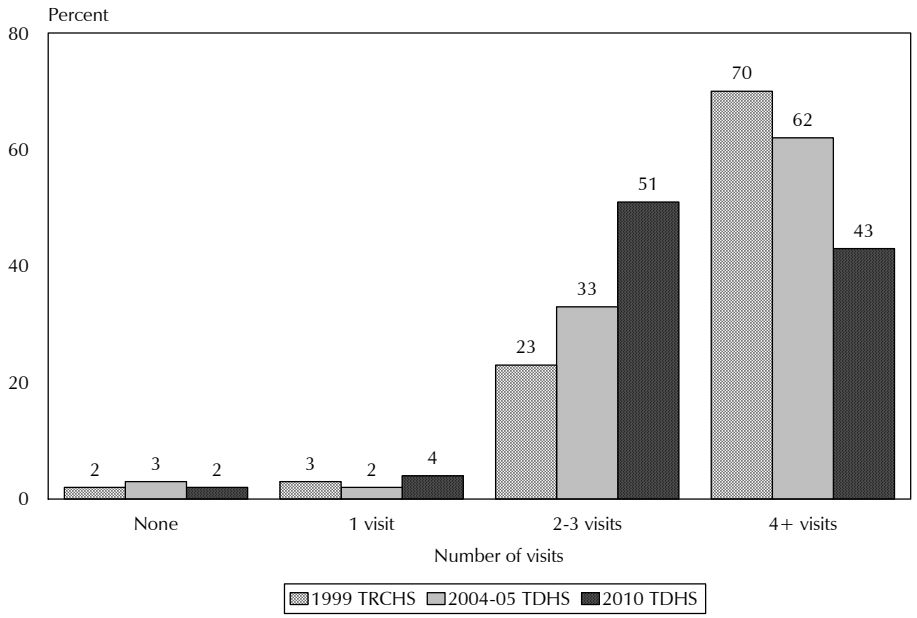
The majority of Tanzanian women did not make the recommended number of ANC visits, and only 15 percent made their first ANC visit before the fourth month of pregnancy. Nearly one-third of women did not seek ANC until their sixth month of pregnancy. The median number of months that women are pregnant at their first visit is 5.4. There is little urban-rural variation in terms of when the first ANC visit occurred.

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Tanzania 2010

	Mainland				
Number and timing of ANC visits	Urban	Rural	Total	Zanzibar	Total
Number of ANC visits					
None	1.1	2.3	2.0	0.5	2.0
1	2.9	3.8	3.6	1.8	3.6
2-3	40.8	54.5	51.4	48.0	51.3
4+	54.8	39.1	42.7	48.9	42.8
Don't know/missing	0.4	0.3	0.3	0.7	0.3
Total	100.0	100.0	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit					
No antenatal care	1.1	2.3	2.0	0.5	2.0
<4	19.1	13.8	15.0	17.1	15.1
4-5	49.0	49.9	49.7	49.0	49.7
6-7	29.6	31.0	30.7	31.9	30.7
8+	1.2	2.9	2.5	1.3	2.5
Don't know/missing	0.0	0.1	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0
Number of women	1,222	4,156	5,378	141	5,519
Median months pregnant at first visit (for those with ANC)	5.2	5.5	5.4	5.3	5.4
Number of women with ANC	1,208	4,056	5,264	140	5,404

Figure 9.1 Trends in Number of Antenatal Care Visits



9.1.3 Components of Antenatal Care

The types of services received during antenatal care visits are essential for assessing the quality of the care. Selected items of care were included in the questionnaire to measure the level of the care received. Pregnancy complications are potential causes of maternal and child morbidity and mortality. Therefore, ensuring that pregnant women receive information on the signs of complications and test them for complications should be routine components of all antenatal care visits. In the 2010 TDHS, respondents were asked whether they had received each of the following services at least once during antenatal care: information on signs of pregnancy complications, blood pressure measurement, and urine and blood sample collection.

Information on iron supplements and antimalarial drugs was collected and reported for the most recent birth in the five years preceding the survey, regardless of whether the respondent received ANC. Table 9.3 shows that 59 percent of women who gave birth during the five years preceding the survey received iron supplementation, and two-thirds of women took an antimalarial drug. Neither iron supplementation nor antimalarial use varies much by age at birth or birth order, but differences are observed by education level, wealth quintile, and residence. For example, 65 percent of urban women and 57 percent of rural women received iron supplementation, and 77 percent of urban women and 65 percent of rural women took antimalarial drugs. There are wide variations across regions: women in Zanzibar are much more likely than women in Mainland to take iron supplements during pregnancy (80 percent compared with 58 percent). In Mainland, iron supplementation ranges from 39 percent in Shinyanga to 77 percent in Dodoma and Mtwara. The corresponding range for antimalarial drug use is 54 percent of women in Tabora to 85 percent of women in Tanga.

Some caution should be exercised in considering the information on the content of ANC care. First, the information depends on the woman's understanding of the questions (e.g., her understanding of what blood pressure measurement involves). It also depends on her recall of events during antenatal visits that may have taken place several years before the interview. Nonetheless, the results are useful in providing insights into the content of the care Tanzanian women receive during pregnancy.

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Tanzania 2010

Background characteristic	Among women with a live birth in the last five years, the percentage who during the pregnancy of their last birth:		Number of women with a live birth in the last five years	Among women who received antenatal care for their most recent birth in the last five years, the percentage with selected services:				Number of women with ANC for their most recent birth
	Took iron tablets or syrup	Took antimalarial drugs		Informed of signs of pregnancy complications	Blood pressure measured	Urine sample taken	Blood sample taken	
Age at birth								
<20	57.8	61.8	749	50.1	66.5	52.5	77.7	734
20-34	59.5	69.8	3,794	53.5	68.6	51.5	76.7	3,719
35-49	57.8	64.2	975	52.4	68.0	52.1	75.2	956
Birth order								
1	61.3	68.6	1,054	59.1	72.4	62.1	83.3	1,036
2-3	60.1	69.4	1,959	53.9	69.8	53.7	77.4	1,931
4-5	57.3	67.4	1,277	49.9	66.9	44.9	74.6	1,243
6+	56.8	64.6	1,229	48.9	63.4	46.8	71.4	1,199
Residence								
Urban	65.2	76.7	1,273	73.0	92.0	83.2	95.4	1,259
Rural	57.1	65.0	4,246	46.7	61.0	42.2	70.8	4,150
Mainland/Zanzibar								
Mainland	58.4	67.3	5,378	52.5	67.5	50.8	76.2	5,269
Urban	64.7	76.7	1,222	73.0	91.7	82.6	95.3	1,208
Rural	56.5	64.6	4,156	46.4	60.3	41.3	70.5	4,061
Zanzibar	79.8	82.1	141	66.3	92.9	88.8	91.2	140
Unguja	81.1	82.6	89	71.5	97.8	97.4	98.1	89
Pemba	77.7	81.4	52	57.4	84.2	73.9	79.2	51
Zone								
Western	49.0	58.4	1,042	52.8	61.4	56.7	77.1	1,006
Northern	58.3	76.0	782	53.1	79.9	65.4	85.1	763
Central	74.5	62.2	503	50.3	63.7	37.4	70.5	492
Southern Highlands	54.6	62.8	761	51.5	61.2	34.3	66.9	734
Lake	51.2	67.0	1,031	39.1	57.2	32.4	67.8	1,021
Eastern	66.3	74.7	744	73.9	87.2	76.5	91.3	741
Southern	70.4	74.0	514	50.4	66.3	53.2	74.7	512
Region								
Dodoma	76.7	57.4	316	48.2	62.9	35.8	72.4	309
Arusha	50.4	69.3	232	47.4	85.9	74.7	86.8	220
Kilimanjaro	65.5	79.7	162	65.4	86.7	72.3	95.7	162
Tanga	60.7	85.1	255	61.3	74.5	56.2	81.9	252
Morogoro	59.7	72.3	262	68.1	74.1	60.1	79.5	259
Pwani	69.3	75.3	149	71.6	83.6	68.5	92.2	149
Dar es Salaam	70.1	76.4	333	79.5	98.9	92.9	100.0	333
Lindi	73.1	72.0	121	48.5	73.0	58.6	78.6	121
Mtwara	77.1	78.6	197	45.0	58.9	45.6	64.8	196
Ruvuma	62.1	70.7	196	57.1	69.5	57.5	82.3	195
Iringa	65.1	70.3	237	74.2	83.7	50.4	81.0	231
Mbeya	49.9	58.6	347	44.2	58.1	32.4	69.4	329
Singida	70.9	70.2	187	53.7	65.2	40.0	67.4	183
Tabora	48.2	53.7	289	59.0	65.3	67.8	84.0	268
Rukwa	49.9	61.0	177	35.2	37.1	16.4	43.5	174
Kigoma	68.8	62.5	262	55.7	68.3	59.2	76.0	261
Shinyanga	38.9	58.9	492	47.7	55.5	49.0	73.7	477
Kagera	62.2	81.3	323	62.5	63.6	31.8	73.9	319
Mwanza	43.4	56.4	480	27.3	55.0	33.4	66.2	478
Mara	51.7	68.8	229	30.9	52.7	31.2	62.3	224
Manyara	59.1	65.8	134	31.1	71.6	58.9	74.9	129
Unguja North	87.9	88.6	23	72.6	94.4	94.8	96.3	22
Unguja South	90.4	91.9	14	72.0	99.0	98.8	99.5	14
Town West	75.7	77.5	53	70.9	99.0	98.1	98.6	53
Pemba North	72.8	83.7	26	48.7	85.3	73.3	79.5	26
Pemba South	82.7	79.1	26	66.4	83.1	74.5	78.9	25
Education								
No education	53.5	56.8	1,313	42.6	58.6	44.8	70.7	1,258
Primary incomplete	58.0	65.2	777	46.7	61.2	42.7	73.9	765
Primary complete	60.5	71.9	3,015	55.9	71.3	53.3	77.5	2,977
Secondary+	66.2	76.0	414	73.7	88.5	78.6	92.9	409
Wealth quintile								
Lowest	58.0	60.3	1,087	40.8	58.9	37.4	65.6	1,053
Second	52.5	61.2	1,222	45.6	57.8	38.1	70.5	1,194
Middle	56.1	66.1	1,175	48.0	62.3	43.5	70.6	1,148
Fourth	65.9	75.0	1,111	59.9	75.0	60.4	83.8	1,097
Highest	63.7	78.4	924	73.8	91.7	86.0	95.9	917
Total	58.9	67.7	5,519	52.9	68.2	51.8	76.6	5,409

Table 9.3 shows that 68 percent of women report their blood pressure was measured, 77 percent say a blood sample was taken, just over half (53 percent) reported being informed about pregnancy complications, and 52 percent gave a urine sample. There are substantial variations by background characteristics. In general, women with lower birth order, living in urban areas, having higher levels of educational attainment, and come from wealthier households are more likely than other women to have received each component of ANC. In Mainland Tanzania, the proportion of women who were told about pregnancy complications ranges from 27 percent in Mwanza to 80 percent in Dar es Salaam.

9.2 TETANUS TOXOID INJECTIONS

Neonatal tetanus is a leading cause of neonatal death in developing countries, where a high proportion of deliveries are conducted at home or in places where hygienic conditions may be poor. Tetanus toxoid vaccinations are given to pregnant women to prevent neonatal tetanus. A baby is considered protected if the mother receives two doses of tetanus toxoid during pregnancy, with the second dose received at least two weeks before delivery. However, if a woman was vaccinated during a previous pregnancy, she only requires one dose for the current pregnancy. Five doses are considered adequate to provide lifetime protection. To assess the status of tetanus vaccination coverage, women who gave birth during the five years before the survey were asked if they had received tetanus toxoid injections during the pregnancy for their most recent birth, and if so, how many. Women who did not receive two or more tetanus toxoid vaccinations during this pregnancy were then asked about tetanus toxoid vaccinations they may have received prior to this pregnancy. The results are presented in Table 9.4.

Forty-eight percent of mothers with a birth in the five years preceding the survey received two or more injections during their pregnancy for their most recent birth. Younger mothers and women pregnant with their first birth are more likely than other women or those with more than one birth to receive two or more doses of tetanus toxoid vaccine. Urban women are also more likely than rural women to receive two or more doses of tetanus toxoid during pregnancy.

Pregnant women in the Mainland are substantially more likely than those in Zanzibar to receive two or more doses of tetanus toxoid (48 and 36 percent, respectively). In Mainland Tanzania, the proportion of pregnant women who receive two doses of tetanus toxoid varies from 23 percent in Kagera to 71 percent in Arusha. As expected, the proportion of pregnant women with two or more doses of tetanus toxoid increases with education and wealth.

The percentage of women who received two or more doses of tetanus toxoid during their last pregnancy was lower in the 2010 TDHS (48 percent) than in the 2004-05 TDHS (56 percent). Nevertheless, the percentage of women whose last birth was protected against neonatal tetanus was high (88 percent). This is the case because this indicator takes into account women who received doses of tetanus toxoid during prior pregnancies or at other points in their lives. The percentage of mothers whose last birth was protected against tetanus toxoid varies by age at birth and birth order, but in the opposite direction of what was observed for those receiving two or more injections during the pregnancy of their most recent birth. Specifically, older women and those with more than one birth are more likely to have their last birth be protected from neonatal tetanus than younger women (less than age 20) or those with one birth.

Table 9.4 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections (TTI) during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Tanzania 2010

Background characteristic	Percentage receiving two or more injections during last pregnancy	Percentage whose last birth was protected against neonatal tetanus[1]	Number of mothers
Age at birth			
<20	64.2	79.5	749
20-34	47.6	89.2	3,794
35-49	34.9	91.2	975
Birth order			
1	70.3	81.1	1,054
2-3	52.7	89.4	1,959
4-5	38.0	90.1	1,277
6+	30.1	90.7	1,229
Residence			
Urban	60.3	91.2	1,273
Rural	43.8	87.4	4,246
Mainland/Zanzibar			
Mainland	47.9	88.2	5,378
Urban	61.1	91.2	1,222
Rural	44.0	87.3	4,156
Zanzibar	35.5	89.5	141
Unguja	39.1	92.2	89
Pemba	29.2	85.0	52
Zone			
Western	48.4	87.4	1,042
Northern	63.6	90.4	782
Central	35.2	87.3	503
Southern Highlands	44.2	86.9	761
Lake	34.5	88.2	1,031
Eastern	59.7	88.2	744
Southern	51.0	89.3	514
Region			
Dodoma	39.8	89.5	316
Arusha	71.3	85.3	232
Kilimanjaro	69.9	97.5	162
Tanga	58.0	92.4	255
Morogoro	57.2	88.8	262
Pwani	52.8	88.8	149
Dar es Salaam	64.8	87.5	333
Lindi	49.9	82.6	121
Mtwara	57.4	92.1	197
Ruvuma	45.2	90.7	196
Iringa	44.0	93.5	237
Mbeya	42.5	81.9	347
Singida	27.4	83.6	187
Tabora	49.3	79.7	289
Rukwa	47.6	88.1	177
Kigoma	38.8	91.5	262
Shinyanga	53.0	89.7	492
Kagera	22.9	92.5	323
Mwanza	41.6	83.8	480
Mara	36.0	91.1	229
Manyara	53.2	86.6	134
Unguja North	24.1	89.6	23
Unguja South	49.2	93.8	14
Town West	42.9	92.8	53
Pemba North	33.7	87.8	26
Pemba South	24.5	82.1	26
Education			
No education	45.8	83.0	1,313
Primary incomplete	46.7	85.6	777
Primary complete	46.3	90.9	3,015
Secondary+	64.7	90.2	414
Wealth quintile			
Lowest	44.1	85.2	1,087
Second	41.8	86.1	1,222
Middle	43.7	88.8	1,175
Fourth	50.4	90.8	1,111
Highest	60.9	90.9	924
Total	47.6	88.2	5,519

[1] Includes mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections prior to the last birth.

9.3 PLACE OF DELIVERY

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause the death or serious illness of the mother and/or the newborn baby. Thus, another important component of efforts to reduce health risks to mothers and children is increasing the proportion of babies that are delivered in facilities. The 2010 TDHS obtained information on the place of delivery. Table 9.5 presents this information for all live births in the five years preceding the survey.

Table 9.5 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Tanzania 2010

Background characteristic	Health facility			Home	Other/ missing	Total	Percentage delivered in a health facility	Number of births
	Public sector	Voluntary/ religious sector	Private sector					
Mother's age at birth								
<20	47.6	6.5	1.7	42.4	1.8	100.0	55.8	1,288
20-34	40.1	8.1	1.7	48.5	1.6	100.0	50.0	5,693
35-49	38.3	5.6	1.1	52.7	2.3	100.0	45.0	1,195
Birth order								
1	56.0	8.8	2.6	31.4	1.3	100.0	67.3	1,687
2-3	42.4	8.4	2.4	45.5	1.3	100.0	53.3	2,892
4-5	35.8	6.9	0.3	54.8	2.2	100.0	43.0	1,880
6+	29.6	5.4	0.8	61.7	2.4	100.0	35.9	1,717
Residence								
Urban	67.6	10.2	4.6	16.8	0.7	100.0	82.4	1,660
Rural	34.2	6.8	0.9	56.1	2.0	100.0	41.9	6,516
Mainland/Zanzibar								
Mainland	40.8	7.7	1.6	48.1	1.8	100.0	50.2	7,955
Urban	67.8	10.6	4.7	16.3	0.7	100.0	83.0	1,583
Rural	34.2	7.0	0.9	56.0	2.0	100.0	42.0	6,373
Zanzibar	47.2	0.6	1.4	50.4	0.5	100.0	49.2	221
Unguja	57.7	1.0	2.3	38.8	0.2	100.0	61.0	131
Pemba	32.0	0.0	0.0	67.1	1.0	100.0	32.0	90
Zone								
Western	30.2	3.1	3.2	62.8	0.8	100.0	36.5	1,723
Northern	39.5	9.2	1.8	47.7	1.9	100.0	50.5	1,030
Central	39.3	6.4	0.4	51.4	2.5	100.0	46.1	761
Southern Highlands	42.9	6.7	0.7	46.8	2.9	100.0	50.3	1,128
Lake	33.4	11.2	0.7	52.8	2.0	100.0	45.2	1,710
Eastern	64.3	7.0	3.3	23.9	1.5	100.0	74.7	964
Southern	54.5	12.9	0.2	31.3	1.1	100.0	67.6	638
Region								
Dodoma	38.3	6.8	0.0	51.9	3.1	100.0	45.1	463
Arusha	38.3	7.1	0.9	52.0	1.7	100.0	46.2	299
Kilimanjaro	57.6	25.3	3.8	11.9	1.5	100.0	86.7	190
Tanga	36.6	2.6	2.2	56.3	2.4	100.0	41.3	341
Morogoro	48.1	9.1	0.8	39.4	2.6	100.0	58.0	356
Pwani	61.9	8.7	2.5	25.1	1.8	100.0	73.1	206
Dar es Salaam	79.9	4.3	6.0	9.4	0.3	100.0	90.2	402
Lindi	47.4	3.5	0.8	45.6	2.6	100.0	51.7	152
Mtwara	53.8	4.8	0.0	41.1	0.3	100.0	58.6	237
Ruvuma	59.6	26.3	0.0	13.2	0.9	100.0	85.9	249
Iringa	65.1	15.3	0.0	19.3	0.3	100.0	80.4	324
Mbeya	37.5	4.1	1.5	51.3	5.6	100.0	43.1	516
Singida	41.0	5.7	1.1	50.6	1.7	100.0	47.7	299
Tabora	40.8	3.5	1.4	53.5	0.9	100.0	45.7	454
Rukwa	27.9	1.6	0.0	69.6	0.9	100.0	29.5	289
Kigoma	25.3	7.6	0.4	64.9	1.8	100.0	33.3	433
Shinyanga	27.0	0.6	5.6	66.7	0.2	100.0	33.1	837
Kagera	34.2	18.8	0.8	42.0	4.2	100.0	53.8	512
Mwanza	36.4	8.6	0.9	53.3	0.9	100.0	45.9	792
Mara	26.4	6.6	0.3	65.3	1.4	100.0	33.3	407
Manyara	29.1	8.2	0.7	60.5	1.5	100.0	38.0	200
Unguja North	40.4	0.0	0.0	59.6	0.0	100.0	40.4	35
Unguja South	61.5	0.0	0.4	36.8	1.2	100.0	62.0	18
Town West	64.8	1.6	3.8	29.8	0.0	100.0	70.2	77
Pemba North	23.6	0.0	0.0	75.6	0.9	100.0	23.6	45
Pemba South	40.5	0.0	0.0	58.5	1.0	100.0	40.5	45

Continued...

Table 9.5—*Continued*

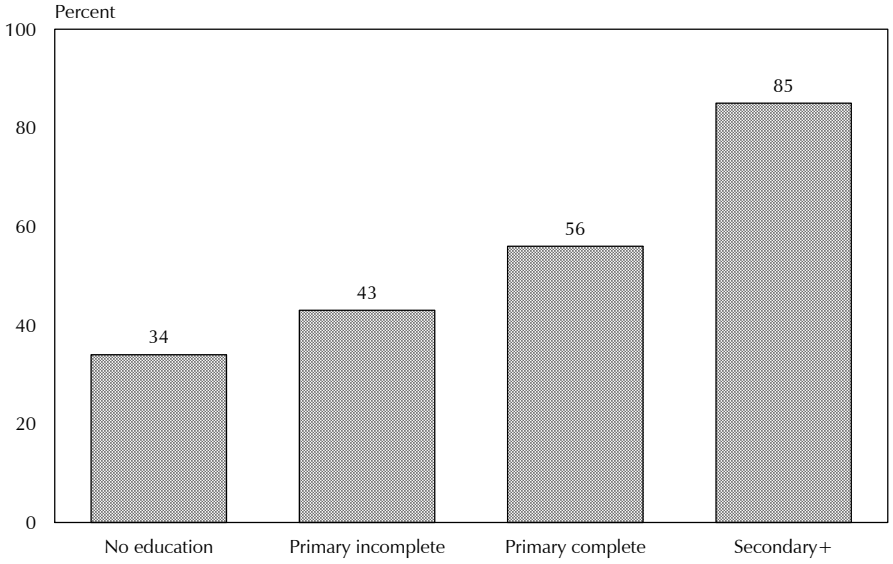
Background characteristic	Health facility: Public sector	Health facility: Voluntary/ religious sector	Health facility: Private sector	Home	Other/ missing	Total	Percentage delivered in a health facility	Number of births
Education								
No education	27.7	5.0	1.1	64.0	2.2	100.0	33.8	2,090
Primary incomplete	35.3	6.3	1.1	56.0	1.3	100.0	42.7	1,217
Primary complete	46.0	8.4	1.6	42.2	1.8	100.0	56.0	4,352
Secondary+	66.6	12.7	5.3	15.3	0.1	100.0	84.6	516
Antenatal care visits								
None	10.3	2.3	2.3	80.3	4.8	100.0	14.9	110
1-3	40.3	6.9	1.1	50.2	1.6	100.0	48.2	3,028
4+	50.5	10.0	2.9	35.8	0.8	100.0	63.3	2,364
Wealth quintile								
Lowest	28.3	4.5	0.3	65.5	1.4	100.0	33.1	1,728
Second	28.6	6.2	1.3	61.7	2.1	100.0	36.2	1,929
Middle	36.8	8.3	0.7	51.6	2.7	100.0	45.8	1,836
Fourth	50.8	10.4	1.3	36.4	1.1	100.0	62.5	1,526
Highest	74.6	9.0	6.0	9.5	0.9	100.0	89.6	1,157
Total	41.0	7.5	1.6	48.1	1.7	100.0	50.2	8,176

Note: Total includes 22 unweighted live births with missing information on place of delivery
[1] Includes only the most recent birth in the five years preceding the survey

Fifty percent of births in Tanzania are delivered at a health facility, and 48 percent are delivered at home. Compared with the proportions observed in the 2004-05 TDHS, there is a slight increase in facility deliveries (47 percent to 50 percent) and decrease in home deliveries (53 percent to 48 percent).

The proportion of births that take place at health facilities varies according to the child's characteristics. Births to younger women, low-order births, and births in urban areas are much more likely than other births to take place in a health facility. About half of the births in the Mainland and Zanzibar are delivered in a health facility. There are marked variations among regions in Mainland, ranging from 30 percent in Rukwa to 90 percent in Dar es Salaam. In Zanzibar, the proportion of births that take place at health facilities varies from 24 percent in Pemba North to 70 percent in Town West. As expected, births to mothers with at least some secondary education and births to wealthier women are more likely than other births to take place in health facilities (Figure 9.2).

Figure 9.2 **Percentage of Births Delivered at a Health Facility, by Mother's Education**



TDHS 2010

9.4 ASSISTANCE DURING DELIVERY

The type of assistance a woman receives during childbirth has important health consequences for both mother and child. Therefore, besides collecting information on the place of delivery, the 2010 TDHS collected data on the type of personnel who assisted during delivery. Table 9.6 shows the percent distribution of births in the five years preceding the survey by type of assistance during delivery, according to background characteristics. It should be noted that interviewers were instructed to record all persons attending the delivery. However, if more than one person was in attendance, only the provider with the highest qualifications is considered.

Half (51 percent) of births are assisted by health professionals (doctors, clinical officers, nurses, midwives, and MCH aides). Trained and traditional birth attendants assist 15 percent of deliveries, and relatives or other untrained people assist 29 percent of births. Three percent of births are delivered without assistance. These findings are very similar to those reported in the 2004-05 TDHS.

Births among younger women (less than age 20) are more likely than those of older women (age 35-49) to be assisted by health professionals (57 and 46 percent, respectively). Births in urban areas are twice as likely to be assisted by health professionals as rural births (83 and 42 percent, respectively). Assistance by a health professional is slightly less common in Mainland Tanzania than in Zanzibar (51 and 54 percent, respectively). In Mainland, children born to women living in the Eastern zone (76 percent) are more likely to receive professional assistance during delivery than children in other zones (38-67 percent). Regional differences in delivery assistance are also significant, ranging from 25 in Pemba North and 30 percent in Mara and Rukwa to 91 percent in Dar es Salaam.

As expected, a mother's education is also associated with the type of delivery assistance. The percentage of births assisted by a health professional increases from 34 percent of births to women with no education to 86 percent of births to women with some secondary education or higher. Similarly, births to women in the highest wealth quintile are more likely to be assisted by medically trained caregivers (90 percent) than births to women in the lower quintiles (63 percent or lower).

Table 9.6 also shows data on the prevalence of births by caesarean section. Overall, deliveries by caesarean section are not common in Tanzania (5 percent); the proportion is slightly higher than the proportion reported in the 2004-05 TDHS (3 percent). Access to caesarean section is not uniform. Caesarean section deliveries are more common among women living in urban areas (10 percent), Dar es Salaam (13 percent), Kilimanjaro (11 percent), or Iringa (10 percent), women with at least some secondary education (15 percent), and women in the wealthiest households (12 percent) than among other women.

Table 9.6 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage of births delivered by caesarean-section, according to background characteristics, Tanzania 2010

Background characteristic	Person providing assistance during delivery										Percentage delivered by a skilled provider[1]	Percentage delivered by C-section	Number of births
	Doctor/ AMO	Clinical officer/ assistant clinical officer	Nurse/ midwife	MCH aide	Trained TBA/ TBA	Relative/ friend	Other	No one	Don't know/ missing	Total			
Mother's age at birth													
<20	4.3	2.0	48.3	1.9	13.4	26.7	0.5	1.2	1.7	100.0	56.5	3.7	1,288
20-34	5.1	2.1	41.4	1.8	14.9	29.5	0.8	3.3	1.2	100.0	50.3	4.7	5,693
35-49	4.8	1.1	38.7	0.9	15.2	30.3	1.8	6.2	0.9	100.0	45.6	3.9	1,195
Birth order													
1	7.9	2.9	55.1	1.7	10.2	20.0	0.4	0.1	1.6	100.0	67.6	8.0	1,687
2-3	5.1	2.3	44.9	1.3	14.5	28.2	0.4	2.5	0.9	100.0	53.5	5.0	2,892
4-5	3.1	1.4	36.5	2.5	16.5	33.5	1.1	3.7	1.7	100.0	43.4	2.4	1,880
6+	3.7	0.9	30.6	1.5	17.4	34.9	2.2	7.8	0.9	100.0	36.7	2.4	1,717
Place of delivery													
Health facility	9.7	3.7	82.1	3.1	0.4	0.0	0.0	0.0	1.0	100.0	98.6	8.9	4,100
Elsewhere	0.1	0.1	1.7	0.3	29.3	59.0	1.9	6.9	0.6	100.0	2.2	0.0	4,034
Residence													
Urban	10.4	3.0	69.1	0.6	7.3	7.9	0.1	1.1	0.7	100.0	83.0	9.6	1,660
Rural	3.5	1.6	35.2	2.0	16.6	34.6	1.2	4.0	1.4	100.0	42.3	3.2	6,516
Mainland/Zanzibar													
Mainland	4.9	1.9	42.0	1.7	14.0	29.8	1.0	3.5	1.3	100.0	50.5	4.5	7,955
Urban	10.4	3.1	69.2	0.6	6.7	8.1	0.1	1.1	0.7	100.0	83.3	9.7	1,583
Rural	3.5	1.7	35.2	2.0	15.8	35.2	1.2	4.1	1.4	100.0	42.3	3.2	6,373
Zanzibar	5.9	0.7	45.5	1.5	40.5	4.9	0.1	0.1	0.7	100.0	53.7	4.7	221
Unguja	9.0	0.8	56.4	1.4	26.8	5.1	0.2	0.1	0.3	100.0	67.5	6.4	131
Pemba	1.5	0.6	29.8	1.7	60.5	4.5	0.0	0.0	1.3	100.0	33.6	2.3	90
Zone													
Western	2.9	1.9	30.8	1.9	10.9	44.1	1.0	6.1	0.5	100.0	37.5	2.8	1,723
Northern	5.7	1.6	42.6	1.9	17.2	28.0	1.3	0.7	0.9	100.0	51.8	5.3	1,030
Central	4.1	0.8	38.5	3.5	24.8	24.4	0.2	2.9	0.7	100.0	46.9	2.8	761
Southern Highlands	4.4	1.5	43.8	0.7	13.8	28.8	2.9	2.9	1.3	100.0	50.3	5.3	1,128
Lake	4.6	2.1	34.7	2.5	8.7	38.0	0.4	6.2	2.7	100.0	43.9	2.6	1,710
Eastern	9.7	4.2	61.9	0.3	12.7	9.4	0.2	0.1	1.5	100.0	76.2	9.0	964
Southern	4.5	1.0	61.3	0.1	20.4	11.2	0.3	0.7	0.4	100.0	66.9	6.2	638
Region													
Dodoma	3.9	0.6	35.5	5.8	31.9	20.5	0.0	1.0	0.7	100.0	45.9	2.8	463
Arusha	5.5	1.3	39.9	0.5	21.0	28.8	1.7	0.0	1.3	100.0	47.2	5.1	299
Kilimanjaro	11.6	2.8	68.1	3.6	2.6	6.7	0.0	3.9	0.7	100.0	86.1	11.0	190
Tanga	5.3	1.5	34.5	3.3	23.9	30.6	0.0	0.0	0.9	100.0	44.5	4.7	341
Morogoro	4.3	3.9	52.1	0.4	23.0	13.3	0.0	0.0	3.0	100.0	60.6	5.8	356
Pwani	6.9	4.0	62.8	0.3	13.1	12.0	0.3	0.3	0.3	100.0	74.0	5.8	206
Dar es Salaam	15.9	4.6	70.1	0.3	3.3	4.5	0.4	0.0	0.8	100.0	91.0	13.4	402
Lindi	1.0	1.4	49.3	0.4	23.8	19.1	0.3	3.0	1.6	100.0	52.1	3.4	152
Mtwara	3.8	0.0	55.7	0.0	27.3	12.4	0.7	0.0	0.0	100.0	59.5	5.8	237
Ruvuma	7.3	1.6	74.0	0.0	11.7	5.3	0.0	0.0	0.0	100.0	83.0	8.2	249
Iringa	9.6	0.0	70.8	0.5	5.5	11.5	0.3	1.0	0.9	100.0	80.8	9.7	324
Mbeya	2.1	1.5	39.0	0.3	9.4	35.1	5.4	5.1	2.2	100.0	42.9	2.5	516
Singida	4.3	1.1	43.0	0.0	13.9	30.5	0.4	5.9	0.8	100.0	48.5	2.8	299
Tabora	3.7	0.8	41.6	0.3	4.2	41.9	0.5	6.2	0.9	100.0	46.4	4.8	454
Rukwa	2.8	3.0	22.0	1.7	31.1	36.8	1.4	1.1	0.0	100.0	29.5	5.2	289
Kigoma	3.4	1.3	22.9	5.8	25.7	36.8	1.2	2.2	0.6	100.0	33.5	2.0	433
Shinyanga	2.1	2.7	29.1	0.7	6.9	49.2	1.1	8.0	0.2	100.0	34.7	2.1	837
Kagera	2.7	4.4	41.5	5.7	12.0	31.9	0.7	1.1	0.0	100.0	54.3	2.7	512
Mwanza	6.8	1.4	35.1	0.8	3.4	41.1	0.4	6.6	4.4	100.0	44.1	3.5	792
Mara	2.6	0.6	25.3	1.9	15.1	39.8	0.0	12.0	2.7	100.0	30.4	0.6	407
Manyara	1.2	1.2	36.1	0.0	13.9	42.7	4.2	0.0	0.7	100.0	38.5	1.4	200
Unguja North	6.1	0.5	36.1	1.9	42.8	12.3	0.0	0.4	0.0	100.0	44.6	3.7	35
Unguja South	6.7	0.8	61.3	2.1	22.2	4.6	0.0	0.0	2.2	100.0	71.0	5.7	18
Town West	10.8	1.0	64.5	1.0	20.5	1.9	0.4	0.0	0.0	100.0	77.2	7.8	77
Pemba North	0.3	0.3	23.6	0.8	73.2	1.2	0.0	0.0	0.6	100.0	25.1	0.6	45
Pemba South	2.7	0.9	36.0	2.7	47.8	8.0	0.0	0.0	1.9	100.0	42.3	4.2	45
Education													
No education	2.4	1.4	28.4	1.9	16.4	42.4	2.0	3.5	1.7	100.0	34.1	2.2	2,090
Primary incomplete	3.9	2.4	34.8	2.1	16.6	34.3	0.2	4.2	1.4	100.0	43.2	3.5	1,217
Primary complete	5.1	1.9	47.8	1.6	14.2	24.2	0.7	3.4	1.1	100.0	56.3	4.6	4,352
Secondary+	16.1	3.2	66.6	0.5	7.0	5.4	0.2	1.1	0.1	100.0	86.3	14.7	516
Wealth quintile													
Lowest	1.9	1.1	28.1	1.9	19.3	40.6	1.4	4.1	1.6	100.0	33.0	1.8	1,728
Second	3.0	1.6	29.3	1.9	17.2	40.1	1.0	4.4	1.4	100.0	35.8	2.3	1,929
Middle	3.5	1.9	38.8	2.7	15.5	30.7	1.3	4.2	1.4	100.0	47.0	3.5	1,836
Fourth	6.5	1.9	54.2	0.8	13.2	19.1	0.4	2.9	1.0	100.0	63.3	5.7	1,526
Highest	12.9	3.5	73.3	0.6	4.3	4.6	0.2	0.1	0.4	100.0	90.4	12.0	1,157
Total	4.9	1.9	42.1	1.7	14.7	29.1	0.9	3.4	1.3	100.0	50.6	4.5	8,176

Note: Total includes 34 unweighted live births with missing information on place of delivery. If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

[1] Skilled provider includes doctor/AMO, clinical officer, assistant clinical officer, nurse/midwife, and MCH aide.

9.5 POSTNATAL CARE

Postnatal care is important, both for the mother and the child, to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days (6 weeks) following the delivery. The timing of postnatal care is important. The first two days after delivery are critical because most maternal and neonatal deaths occur during this period. Table 9.7 measures postnatal care for births that occurred in the five years preceding the survey. If a woman had more than one live birth in the preceding five years, only the most recent birth is considered.

The data show that in Tanzania, 65 percent of women whose last live birth occurred in the preceding five years did not receive a postnatal check up; 18 percent were examined within 4 hours of delivery, 7 percent within 4-23 hours, 5 percent within 24-48 hours, and 4 percent within 3-41 days of delivering. In total, 31 percent of births were examined within 2 days, as recommended.

There is a great variation in postnatal checkup by place of residence. Urban women are almost two times as likely as rural women to receive a postnatal checkup less than 4 hours after birth. Coverage of postnatal checkup within 4 hours after birth varies from 9 percent in the Lake zone to 34 percent in the Southern zone. The wealthiest women and most educated women are considerably more likely to receive timely postnatal care than poorer or less educated women.

Table 9.7 Timing of first postnatal checkup

Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution of the mother's first postnatal check-up for the last live birth by time after delivery, according to background characteristics, Tanzania 2010

Background characteristic	Time after delivery of mother's first postnatal checkup							
	Less than 4 hours	4-23 hours	2 days	3-41 days	Don't know/ missing	No postnatal checkup[1]	Total	Number of women
Age at birth								
<20	19.1	9.1	6.5	2.9	1.0	61.4	100.0	749
20-34	18.9	6.8	5.3	4.4	0.3	64.4	100.0	3,794
35-49	16.1	6.3	5.2	4.3	0.1	67.9	100.0	975
Birth order								
1	22.2	10.2	7.3	3.7	1.0	55.5	100.0	1,054
2-3	21.0	6.5	6.4	4.4	0.2	61.4	100.0	1,959
4-5	15.5	6.2	3.5	4.8	0.1	70.0	100.0	1,277
6+	14.2	5.8	4.2	3.6	0.2	72.0	100.0	1,229
Residence								
Urban	27.2	9.4	8.6	6.2	0.4	48.2	100.0	1,273
Rural	15.8	6.3	4.5	3.6	0.3	69.5	100.0	4,246
Mainland/Zanzibar								
Mainland	18.3	7.0	5.5	4.2	0.3	64.6	100.0	5,378
Urban	26.8	9.6	8.8	6.2	0.4	48.3	100.0	1,222
Rural	15.8	6.3	4.6	3.6	0.3	69.5	100.0	4,156
Zanzibar	25.9	5.1	1.4	3.4	0.4	63.8	100.0	141
Unguja	33.5	3.0	1.7	5.1	0.2	56.5	100.0	89
Pemba	12.8	8.6	1.1	0.4	0.7	76.3	100.0	52
Zone								
Western	12.8	8.2	4.8	3.2	0.1	70.9	100.0	1,042
Northern	17.6	10.6	6.8	3.1	0.3	61.6	100.0	782
Central	23.6	6.4	2.5	2.1	0.3	65.0	100.0	503
Southern Highlands	19.4	6.4	9.7	5.3	0.9	58.4	100.0	761
Lake	8.8	4.1	2.5	2.8	0.0	81.8	100.0	1,031
Eastern	24.1	8.0	6.2	5.6	0.4	55.6	100.0	744
Southern	33.7	5.3	7.1	8.9	0.6	44.4	100.0	514

Continued...

Table 9.7—*Continued*

Background characteristic	Time after delivery of mother's first postnatal checkup: Less than 4 hours	4-23 hours	2 days	3-41 days	Don't know/ missing	No postnatal checkup[1]	Total	Number of women
Region								
Dodoma	24.1	6.4	2.8	0.0	0.5	66.2	100.0	316
Arusha	19.4	8.2	3.2	2.0	0.4	66.7	100.0	232
Kilimanjaro	17.1	20.7	6.1	4.5	0.0	51.7	100.0	162
Tanga	14.6	8.6	12.8	4.3	0.5	59.1	100.0	255
Morogoro	17.4	5.6	3.5	8.2	0.6	64.6	100.0	262
Pwani	19.9	15.3	7.7	3.3	1.1	52.6	100.0	149
Dar es Salaam	31.2	6.7	7.7	4.6	0.0	49.8	100.0	333
Lindi	33.0	4.0	5.1	2.6	0.0	55.3	100.0	121
Mtwara	36.9	2.2	5.9	11.7	1.1	42.2	100.0	197
Ruvuma	30.9	9.3	9.5	10.0	0.5	39.8	100.0	196
Iringa	29.8	7.9	21.2	10.8	2.3	28.1	100.0	237
Mbeya	16.1	6.0	5.3	3.5	0.0	69.0	100.0	347
Singida	22.9	6.5	1.8	5.8	0.0	63.1	100.0	187
Tabora	21.3	6.5	4.2	5.3	0.0	62.6	100.0	289
Rukwa	12.0	5.0	2.8	1.4	0.7	78.0	100.0	177
Kigoma	8.6	3.9	7.1	3.8	0.0	76.6	100.0	262
Shinyanga	10.1	11.4	3.9	1.7	0.2	72.7	100.0	492
Kagera	12.1	4.5	5.2	4.6	0.0	73.5	100.0	323
Mwanza	6.3	3.4	1.1	1.4	0.0	87.7	100.0	480
Mara	9.2	5.1	1.7	3.1	0.0	80.9	100.0	229
Manyara	20.8	6.6	2.1	0.9	0.0	69.5	100.0	134
Unguja North	17.7	2.8	0.0	1.5	0.5	77.5	100.0	23
Unguja South	42.3	3.8	2.7	3.8	0.5	47.0	100.0	14
Town West	38.0	2.8	2.1	7.0	0.0	50.1	100.0	53
Pemba North	9.2	5.1	0.7	0.4	0.4	84.1	100.0	26
Pemba South	16.5	12.2	1.4	0.4	1.0	68.3	100.0	26
Education								
No education	13.6	4.1	2.3	2.9	0.1	77.0	100.0	1,313
Primary incomplete	14.5	5.4	4.2	3.1	0.8	71.9	100.0	777
Primary complete	19.8	8.1	6.5	4.9	0.2	60.5	100.0	3,015
Secondary+	31.2	11.2	10.2	5.0	0.8	41.7	100.0	414
Wealth quintile								
Lowest	13.0	4.1	3.3	3.0	0.1	76.5	100.0	1,087
Second	12.8	4.8	3.4	2.7	0.3	76.0	100.0	1,222
Middle	17.1	5.9	6.5	3.5	0.3	66.8	100.0	1,175
Fourth	20.8	11.0	5.9	7.0	0.3	55.1	100.0	1,111
Highest	31.2	9.8	8.8	5.0	0.8	44.3	100.0	924
Total	18.4	7.0	5.4	4.2	0.3	64.6	100.0	5,519

[1] Includes women who received a checkup after 41 days

The skill level of the provider that performs the first postnatal checkup also has important implications for maternal and neonatal health. For women who had a postnatal health check within 41 days of their last birth, Table 9.8 shows that 23 percent of women received postnatal care from a nurse or midwife and 6 percent from a doctor. Small percentages of women received postnatal care from a clinical officer or assistant clinical officer (2 percent), a traditional birth attendant (2 percent), or an MCH aide (1 percent). Less than 1 percent of women received their first postnatal checkup from a village health worker or relative or friend.

There is considerable variation by background characteristics in the type of provider who provided the postnatal check. Although across all background characteristics nurses or midwives were the most likely to provide postnatal care, 10 percent of first births received their first postnatal check from a doctor or assistant medical officer (AMO), as did 13 percent of women in urban areas, 11 percent of women living in the Eastern zone, 18 percent of women in Kilimanjaro and Dar es Salaam, 18 percent of women with at least some secondary education, and 16 percent of women in the highest wealth quintile.

Table 9.8 Type of provider of first postnatal checkup

Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution by type of provider of the mother's first postnatal health check for the last live birth, according to background characteristics, Tanzania 2010

Background characteristic	Type of health provider of mother's first postnatal checkup										
	Doctor/AMO	Clinical officer/ assistant clinical officer	Nurse/ midwife	MCH aide	Trained TBA/ TBA	Village health worker	Relative/ friend	Other	No postnatal checkup[1]	Total	Number of women
Age at birth											
<20	5.1	2.5	27.6	0.6	2.5	0.1	0.2	0.0	61.4	100.0	749
20-34	6.9	2.2	22.1	1.0	2.4	0.2	0.2	0.5	64.4	100.0	3,794
35-49	4.7	2.4	22.0	0.5	1.7	0.3	0.2	0.2	67.9	100.0	975
Birth order											
1	9.9	2.5	29.5	0.4	2.0	0.0	0.2	0.0	55.5	100.0	1,054
2-3	7.4	3.3	23.4	1.0	2.6	0.3	0.2	0.4	61.4	100.0	1,959
4-5	4.0	1.1	20.7	0.9	2.2	0.3	0.1	0.7	70.0	100.0	1,277
6+	3.7	1.9	18.3	1.0	2.1	0.3	0.4	0.2	72.0	100.0	1,229
Residence											
Urban	13.3	4.8	31.8	0.6	0.9	0.0	0.0	0.4	48.2	100.0	1,273
Rural	4.2	1.5	20.1	0.9	2.7	0.3	0.3	0.3	69.5	100.0	4,246
Mainland/Zanzibar											
Mainland	6.3	2.3	22.8	0.9	2.2	0.2	0.2	0.4	64.6	100.0	5,378
Urban	13.3	5.0	31.6	0.6	0.8	0.0	0.0	0.4	48.3	100.0	1,222
Rural	4.2	1.6	20.2	0.9	2.7	0.3	0.3	0.4	69.5	100.0	4,156
Zanzibar	8.0	0.7	22.6	0.9	3.4	0.4	0.1	0.0	63.8	100.0	141
Unguja	9.5	0.8	28.0	1.4	2.9	0.7	0.2	0.0	56.5	100.0	89
Pemba	5.4	0.7	13.3	0.2	4.1	0.0	0.0	0.0	76.3	100.0	52
Zone											
Western	5.0	1.5	18.0	1.7	1.5	0.0	0.0	1.4	70.9	100.0	1,042
Northern	8.9	3.5	21.4	1.1	2.7	0.2	0.3	0.2	61.6	100.0	782
Central	4.9	1.2	25.8	0.4	2.3	0.0	0.0	0.4	65.0	100.0	503
Southern Highlands	5.1	1.6	31.7	0.1	2.2	0.2	0.8	0.0	58.4	100.0	761
Lake	3.4	0.5	11.5	1.2	1.5	0.0	0.0	0.1	81.8	100.0	1,031
Eastern	11.4	6.9	23.1	0.1	2.2	0.0	0.4	0.2	55.6	100.0	744
Southern	6.0	1.6	41.0	0.7	4.7	1.7	0.1	0.0	44.4	100.0	514
Region											
Dodoma	4.7	0.5	24.9	0.7	2.5	0.0	0.0	0.6	66.2	100.0	316
Arusha	7.4	0.6	22.6	0.5	1.8	0.5	0.0	0.0	66.7	100.0	232
Kilimanjaro	18.4	4.6	21.2	0.6	3.0	0.5	0.0	0.0	51.7	100.0	162
Tanga	7.4	6.5	18.4	2.6	4.4	0.0	1.1	0.5	59.1	100.0	255
Morogoro	4.9	5.5	19.6	0.0	4.2	0.0	1.2	0.0	64.6	100.0	262
Pwani	8.6	6.1	28.6	0.5	2.4	0.0	0.0	1.1	52.6	100.0	149
Dar es Salaam	17.8	8.5	23.4	0.0	0.5	0.0	0.0	0.0	49.8	100.0	333
Lindi	2.5	2.6	28.6	0.5	6.4	3.7	0.5	0.0	55.3	100.0	121
Mtwara	9.6	1.0	38.9	0.6	5.7	2.1	0.0	0.0	42.2	100.0	197
Ruvuma	4.4	1.5	50.7	0.9	2.6	0.0	0.0	0.0	39.8	100.0	196
Iringa	9.7	1.5	57.0	0.0	2.5	0.6	0.6	0.0	28.1	100.0	237
Mbeya	2.6	1.2	24.9	0.0	1.5	0.0	0.8	0.0	69.0	100.0	347
Singida	5.2	2.3	27.4	0.0	2.0	0.0	0.0	0.0	63.1	100.0	187
Tabora	4.2	1.2	27.7	2.2	2.1	0.0	0.0	0.0	62.6	100.0	289
Rukwa	3.7	2.7	11.1	0.5	3.2	0.0	0.8	0.0	78.0	100.0	177
Kigoma	8.6	1.1	5.8	3.8	0.9	0.0	0.0	3.1	76.6	100.0	262
Shinyanga	3.7	1.8	18.8	0.3	1.4	0.0	0.0	1.3	72.7	100.0	492
Kagera	3.3	0.7	17.3	3.8	1.4	0.0	0.0	0.0	73.5	100.0	323
Mwanza	4.5	0.5	6.7	0.0	0.6	0.0	0.0	0.0	87.7	100.0	480
Mara	1.4	0.4	13.2	0.0	3.6	0.0	0.0	0.5	80.9	100.0	229
Manyara	2.8	1.6	25.4	0.0	0.7	0.0	0.0	0.0	69.5	100.0	134
Unguja North	6.8	1.0	9.0	0.5	4.0	0.5	0.8	0.0	77.5	100.0	23
Unguja South	3.5	1.5	38.1	1.5	6.2	2.2	0.0	0.0	47.0	100.0	14
Town West	12.3	0.5	33.4	1.8	1.7	0.3	0.0	0.0	50.1	100.0	53
Pemba North	2.6	0.5	7.8	0.0	4.9	0.0	0.0	0.0	84.1	100.0	26
Pemba South	8.2	0.9	19.0	0.4	3.2	0.0	0.0	0.0	68.3	100.0	26
Education											
No education	2.5	1.3	14.8	1.2	2.5	0.2	0.2	0.2	77.0	100.0	1,313
Primary incomplete	4.4	1.4	18.9	0.7	2.1	0.4	0.1	0.1	71.9	100.0	777
Primary complete	6.8	2.7	25.6	0.8	2.4	0.2	0.3	0.6	60.5	100.0	3,015
Secondary+	18.0	4.1	34.9	0.2	0.9	0.1	0.0	0.0	41.7	100.0	414
Wealth quintile											
Lowest	2.3	0.8	15.7	1.2	2.5	0.3	0.2	0.4	76.5	100.0	1,087
Second	3.7	1.3	14.9	1.1	2.3	0.3	0.5	0.1	76.0	100.0	1,222
Middle	4.5	1.8	21.5	0.6	3.1	0.3	0.4	1.1	66.8	100.0	1,175
Fourth	7.2	2.7	31.2	0.9	2.6	0.2	0.0	0.1	55.1	100.0	1,111
Highest	15.8	5.5	33.2	0.5	0.5	0.0	0.0	0.1	44.3	100.0	924
Total	6.3	2.3	22.8	0.9	2.3	0.2	0.2	0.4	64.6	100.0	5,519

[1] Includes women who received a checkup after 41 days

9.6 PROBLEMS IN ACCESSING HEALTH CARE

The 2010 TDHS included a series of questions designed to obtain information on the problems women face in obtaining health care for themselves. This information is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and, particularly, at delivery. To obtain this information, women age 15-49 were asked whether each of the following factors would be a big problem or not a big problem for them in obtaining health services: getting permission to go, getting money for treatment, the distance to the health facility, and not wanting to go alone. Table 9.9 shows the percentages of respondents who consider the individual factors to be a big problem, and the percentages reporting at least one of the specified items to be a big problem, according to background characteristics.

Thirty-six percent of women reported at least one issue or circumstance as a big problem. The major perceived barrier to women's access to health services is lack of money (24 percent). Additionally, 19 percent of women cited the distance to a health facility and 11 percent mentioned not wanting to go alone. In contrast, only 2 percent of all women cite obtaining permission as a big problem.

Problems in accessing health care are felt most acutely by rural women; older women; women with a larger family; divorced, separated, or widowed women; women not working for cash, and women with no education or in the lower wealth quintiles. Across regions in the Mainland, women in Manyara are the most likely to think that any of the specified issues are big problems in terms of accessing health care (58 percent) in contrast with women in Morogoro (23 percent).

Table 9.9 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Tanzania 2010

Background characteristic	Problems in accessing health care					Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	
Age						
15-19	1.9	20.3	15.4	10.1	31.4	2,172
20-34	2.8	21.9	19.4	10.4	33.8	4,999
35-49	2.1	30.6	21.5	11.0	41.5	2,968
Number of living children						
0	1.8	19.5	14.8	9.6	30.1	2,665
1-2	2.4	20.7	17.0	9.8	31.3	3,080
3-4	3.1	27.3	20.9	10.8	38.6	2,346
5+	2.3	31.7	26.1	12.5	45.5	2,048
Marital status						
Never married	1.9	21.2	14.1	8.8	30.4	2,540
Married or living together	2.8	22.6	21.1	11.3	35.6	6,412
Divorced/separated/widowed	1.2	38.9	19.5	9.7	46.4	1,188
Employed past 12 months						
Not employed	3.1	22.9	14.2	10.3	29.6	2,001
Employed for cash	2.0	18.9	16.0	8.5	29.1	3,779
Employed not for cash	2.4	29.3	24.1	12.4	43.9	4,343
Residence						
Urban	1.8	14.1	8.5	6.0	20.1	2,892
Rural	2.6	28.1	23.4	12.3	41.7	7,247
Mainland/Zanzibar						
Mainland	2.4	24.6	19.6	10.7	36.3	9,813
Urban	1.9	14.4	8.8	6.2	20.7	2,758
Rural	2.7	28.6	23.8	12.5	42.4	7,055
Zanzibar	0.6	10.2	5.9	3.7	13.6	326
Unguja	0.5	7.4	4.2	2.0	10.8	212
Pemba	0.7	15.4	9.1	7.0	18.9	115
Zone						
Western	2.8	26.9	17.4	12.8	39.9	1,728
Northern	5.8	31.3	24.7	16.2	40.0	1,530
Central	4.0	35.4	23.4	11.4	49.4	812
Southern Highlands	0.6	15.0	18.4	8.5	28.5	1,370
Lake	2.0	27.3	23.0	10.5	40.7	1,809
Eastern	1.4	15.9	15.5	9.5	26.4	1,608
Southern	0.6	23.6	14.1	3.4	32.2	955
Zanzibar	0.6	10.2	5.9	3.7	13.6	326

Continued...

Table 9.9—*Continued*

Background characteristic	Problems in accessing health care					Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	
Region						
Dodoma	3.5	42.1	20.3	8.2	51.9	495
Arusha	13.1	41.4	27.2	19.3	47.7	401
Kilimanjaro	0.5	16.5	13.0	3.5	24.2	411
Tanga	0.8	24.8	25.9	15.9	38.9	498
Morogoro	1.6	17.1	12.4	5.0	23.1	481
Pwani	1.8	24.4	28.3	14.2	42.5	261
Dar es Salaam	1.1	12.6	13.4	10.6	23.3	866
Lindi	0.4	28.3	21.3	7.9	39.7	198
Mtwara	0.9	22.6	16.5	3.3	33.6	407
Ruvuma	0.4	22.1	7.3	0.9	26.2	350
Iringa	0.2	19.8	14.2	4.8	28.0	490
Mbeya	1.0	9.6	21.2	10.4	28.6	623
Singida	4.8	25.0	28.3	16.3	45.3	317
Tabora	3.4	18.0	28.3	22.6	44.6	447
Rukwa	0.4	19.1	19.2	11.3	29.3	257
Kigoma	5.8	34.0	19.2	12.8	43.3	462
Shinyanga	0.8	27.8	10.6	7.4	35.4	819
Kagera	1.7	30.9	25.4	16.7	44.4	590
Mwanza	2.3	18.4	14.8	5.2	31.5	844
Mara	1.5	41.7	37.8	12.7	55.6	376
Manyara	13.7	55.4	39.9	35.4	57.7	220
Unguja North	0.5	11.0	6.6	2.0	15.9	50
Unguja South	1.0	10.5	5.5	4.5	14.4	30
Town West	0.4	5.3	2.9	1.4	7.9	131
Pemba North	0.0	18.0	10.6	7.7	19.8	56
Pemba South	1.4	12.8	7.8	6.2	18.1	59
Education						
No education	3.3	35.7	28.6	14.8	49.9	1,940
Primary incomplete	2.4	26.9	19.4	12.1	38.1	1,482
Primary complete	2.5	22.9	18.4	9.8	34.4	5,071
Secondary+	1.1	11.5	10.1	6.2	19.9	1,646
Wealth quintile						
Lowest	3.5	42.1	30.3	14.6	55.7	1,681
Second	1.9	30.7	24.9	13.9	45.2	1,947
Middle	2.5	26.0	22.6	12.1	40.2	1,997
Fourth	2.7	18.6	14.9	8.0	28.8	2,112
Highest	1.6	9.5	7.6	5.8	15.6	2,403
Total	2.4	24.1	19.2	10.5	35.5	10,139

Note: Total includes 16 women with information missing on employment in past 12 months.

9.7 FISTULA

The TDHS 2010 included a module in which women were asked whether they experienced constant leakage of stool or urine from their vagina. This problem usually occurs after a difficult childbirth, but may occur after sexual assault or after pelvic surgery. Those who had never experienced such leakage were asked whether they had heard of such a problem. Of the 10,139 female respondents, only 51 women (less than 1 percent) reported having experienced a fistula. The small number of women who suffered from a fistula indicates that this is a very rare occurrence in the TDHS sample. However, the majority of women in the sample (67 percent) had heard of the problem.

These findings imply that fistula is not a public health issue of concern. To be able to draw a meaningful conclusion on the occurrence of fistula in the population in a survey setting, a very large sample is required as well as more detailed methods of probing.

CHILD HEALTH 10

This chapter presents findings from several areas of importance relating to child health and survival, including infant birth weight and size at birth, the vaccination status of children, and childhood illnesses and their treatment. The information on birth weight and size is intended to assist monitoring programmes in efforts to decrease neonatal and infant mortality by reducing the incidence of low birth weight.

Immunising children against vaccine-preventable diseases can greatly reduce childhood morbidity and mortality. In the 2010 TDHS, data on child immunisation were collected for all living children born in 2005 or later. Information on vaccination coverage was collected in two ways: from the child's health card and by direct report from the mother. If a health card was presented, the interviewer would copy the immunisation dates directly onto the questionnaire. If the mother was not able to present a card for a child, she was asked to recall the specific vaccines given to her child and the number of times the child had received each vaccine.

Ensuring that children receive prompt and appropriate treatment when they become ill is also important to improving child health. Information on treatment practices and contact with health services for children with three childhood illnesses (acute respiratory infection, fever, and diarrhoea), helps in the assessment of national programmes aimed at reducing mortality. The 2010 TDHS collected data on the prevalence and treatment of acute respiratory infection (ARI), fever, and diarrhoea. The treatment of diarrhoeal disease with oral rehydration therapy (including increased fluid intake) is used to assess programs that recommend such treatment. Because appropriate sanitary practices can help prevent and reduce the severity of diarrhoeal disease, information is also provided on how children's faecal matter is disposed.

10.1 CHILD'S SIZE AT BIRTH

A child's birth weight is an important determinant of infant and child health and mortality. A birth weight of less than 2.5 kilogrammes is considered low. For all births during the five-year period preceding the survey, mothers were asked about their perception of the child's size at birth. Although such information is subjective, it can be a useful proxy for the weight of the child. The mothers were also asked to report the actual weight in kilogrammes (based on either a written record or on their own recall) if the child had been weighed after delivery.

Table 10.1 presents the results. It is not surprising that, with nearly half of deliveries occurring at home, only 53 percent of newborns were weighed at birth. Among births with known birth weight, only 7 percent were classified as having low birth weight (i.e., weighing less than 2.5 kg at birth). According to the respondent's own assessment of her infant's size, the majority of infants (88 percent) are classified as average or larger than average. Fewer than one in ten births was either smaller than average (7 percent) or very small (2 percent).

Although the differences are not large, children born in rural areas are less likely than those born in urban areas to weigh less than 2.5 kg or to be described as very small in size or smaller than average. More surprisingly, there is a negative correlation between the mother's education and wealth quintile and the weight and size of the newborn. Children whose mothers have at least some secondary education or who are in the highest wealth quintile are more likely to weigh less than 2.5 kg or to be described as very small at birth compared with other children. Variations in the children's weight and size at birth are also seen among regions; the prevalence of children born with a weight below 2.5 kg ranges from less than 1 percent in Shinyanga to 12 percent in Lindi, Rukwa, and Mara (see Figure 10.1).

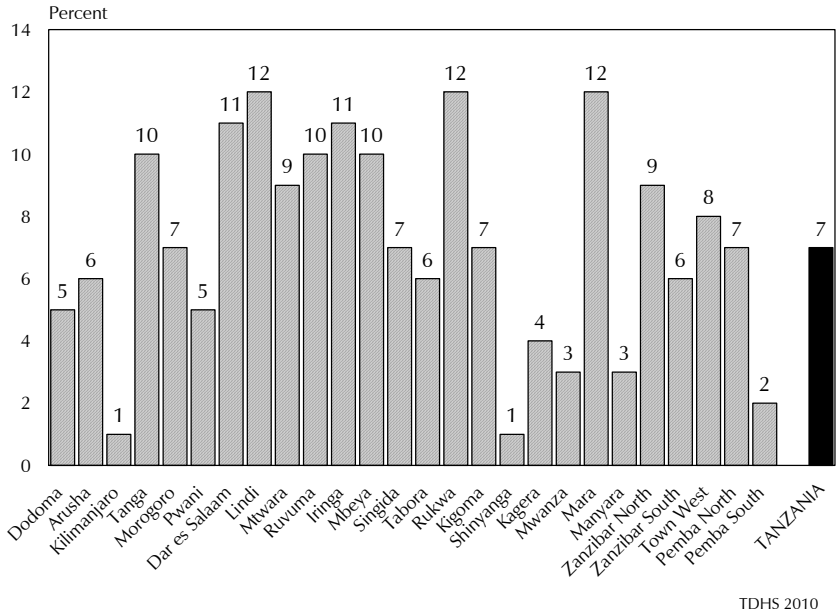
Table 10.1 Child's weight and size at birth

Percent distribution of live births with a reported birth weight in the five years preceding the survey by birth weight; percent distribution of all live births in the five years preceding the survey by mother's estimate of baby's size at birth, and percentage of all births with a reported birth weight, according to background characteristics, Tanzania 2010

Background characteristic	Percent distribution of births with a reported birth weight[1]				Percentage of all births with a reported birth weight[1]	Percent distribution of all live births by size of child at birth					
	Less than 2.5 kg	2.5 kg or more	Total	Number of births		Very small	Smaller than average	Average or larger	Don't know/ missing	Total	Number of births
Mother's age at birth											
<20	8.5	91.5	100.0	732	56.9	2.9	8.5	85.0	3.6	100.0	1,288
20-34	6.7	93.3	100.0	2,990	52.5	1.7	6.3	88.3	3.7	100.0	5,693
35-49	5.7	94.3	100.0	603	50.4	1.4	5.5	89.7	3.4	100.0	1,195
Birth order											
1	9.1	90.9	100.0	1,123	66.6	2.6	9.0	84.6	3.8	100.0	1,687
2-3	6.7	93.3	100.0	1,606	55.5	2.0	6.6	88.5	3.0	100.0	2,892
4-5	6.8	93.2	100.0	891	47.4	1.3	5.7	88.1	4.9	100.0	1,880
6+	3.6	96.4	100.0	705	41.1	1.4	4.9	90.3	3.4	100.0	1,717
Mother's smoking status											
Smokes cigarettes/tobacco	2.5	97.5	100.0	30	32.0	5.8	1.6	91.1	1.4	100.0	95
Does not smoke	6.9	93.1	100.0	4,294	53.2	1.8	6.6	87.9	3.7	100.0	8,077
Residence											
Urban	9.1	90.9	100.0	1,394	84.0	3.7	7.7	87.7	1.0	100.0	1,660
Rural	5.8	94.2	100.0	2,931	45.0	1.4	6.3	88.0	4.3	100.0	6,516
Mainland/Zanzibar											
Mainland	6.9	93.1	100.0	4,212	52.9	1.8	6.5	87.9	3.7	100.0	7,955
Urban	9.1	90.9	100.0	1,333	84.2	3.7	7.7	87.6	1.0	100.0	1,583
Rural	5.8	94.2	100.0	2,879	45.2	1.3	6.2	88.0	4.4	100.0	6,373
Zanzibar	6.9	93.1	100.0	113	51.3	2.6	7.3	88.9	1.1	100.0	221
Unguja	7.7	92.3	100.0	87	66.5	2.7	10.0	87.1	0.1	100.0	131
Pemba	4.0	96.0	100.0	26	29.1	2.6	3.5	91.4	2.6	100.0	90
Zone											
Western	3.9	96.1	100.0	638	37.0	1.3	6.3	91.7	0.7	100.0	1,723
Northern	5.0	95.0	100.0	561	54.5	1.1	4.4	86.4	8.1	100.0	1,030
Central	5.7	94.3	100.0	365	48.0	2.1	6.1	91.1	0.7	100.0	761
Southern Highlands	10.8	89.2	100.0	530	47.0	1.0	6.6	78.5	13.9	100.0	1,128
Lake	5.0	95.0	100.0	870	50.9	2.6	9.7	85.8	1.9	100.0	1,710
Eastern	8.7	91.3	100.0	763	79.1	3.2	4.1	92.2	0.5	100.0	964
Southern	10.1	89.9	100.0	484	75.9	1.2	6.1	92.3	0.5	100.0	638
Region											
Dodoma	5.2	94.8	100.0	217	47.0	2.2	4.4	92.5	0.8	100.0	463
Arusha	5.9	94.1	100.0	156	52.1	0.4	3.0	81.2	15.4	100.0	299
Kilimanjaro	1.2	98.8	100.0	178	93.6	0.0	4.1	93.2	2.7	100.0	190
Tanga	9.5	90.5	100.0	152	44.6	2.2	7.7	89.2	0.9	100.0	341
Morogoro	6.6	93.4	100.0	229	64.3	0.4	4.9	93.4	1.2	100.0	356
Pwani	5.3	94.7	100.0	157	76.3	0.8	1.5	97.5	0.3	100.0	206
Dar es Salaam	11.4	88.6	100.0	377	93.8	6.9	4.6	88.5	0.0	100.0	402
Lindi	12.3	87.7	100.0	83	54.3	1.7	3.4	93.9	1.1	100.0	152
Mtwara	9.4	90.6	100.0	173	72.7	2.1	3.8	94.2	0.0	100.0	237
Ruvuma	9.9	90.1	100.0	229	92.1	0.0	10.0	89.5	0.5	100.0	249
Iringa	10.9	89.1	100.0	275	85.0	1.1	12.1	86.5	0.3	100.0	324
Mbeya	10.2	89.8	100.0	183	35.5	1.3	2.7	78.5	17.5	100.0	516
Singida	6.5	93.5	100.0	148	49.5	1.8	8.8	88.9	0.4	100.0	299
Tabora	5.9	94.1	100.0	224	49.3	0.4	6.7	91.6	1.3	100.0	454
Rukwa	11.9	88.1	100.0	72	24.9	0.5	7.3	69.5	22.7	100.0	289
Kigoma	6.6	93.4	100.0	140	32.2	4.1	9.2	85.6	1.0	100.0	433
Shinyanga	0.9	99.1	100.0	275	32.8	0.3	4.6	95.0	0.2	100.0	837
Kagera	3.8	96.2	100.0	302	58.9	2.3	9.6	87.7	0.5	100.0	512
Mwanza	2.6	97.4	100.0	399	50.3	2.0	9.5	86.3	2.2	100.0	792
Mara	12.4	87.6	100.0	170	41.9	4.3	10.3	82.4	3.0	100.0	407
Manyara	3.0	97.0	100.0	75	37.8	1.3	1.1	83.0	14.7	100.0	200
Unguja North	9.4	90.6	100.0	14	38.4	3.3	12.1	84.3	0.3	100.0	35
Unguja South	6.4	93.6	100.0	13	71.1	1.9	8.3	89.4	0.4	100.0	18
Town West	7.6	92.4	100.0	60	78.2	2.6	9.5	87.9	0.0	100.0	77
Pemba North	6.8	93.2	100.0	10	22.2	3.9	4.9	90.0	1.2	100.0	45
Pemba South	2.2	97.8	100.0	16	36.1	1.3	2.0	92.7	4.0	100.0	45
Mother's education											
No education	6.2	93.8	100.0	745	35.6	1.8	5.6	86.9	5.7	100.0	2,090
Primary incomplete	6.7	93.3	100.0	547	44.9	2.3	6.9	87.3	3.5	100.0	1,217
Primary complete	7.0	93.0	100.0	2,581	59.3	1.4	6.8	88.7	3.1	100.0	4,352
Secondary+	7.5	92.5	100.0	452	87.6	4.1	7.3	87.7	0.8	100.0	516
Wealth quintile											
Lowest	6.3	93.7	100.0	646	37.4	1.7	6.9	86.0	5.3	100.0	1,728
Second	6.3	93.7	100.0	746	38.7	1.0	5.6	89.8	3.6	100.0	1,929
Middle	5.3	94.7	100.0	875	47.6	1.7	6.7	86.0	5.6	100.0	1,836
Fourth	6.7	93.3	100.0	1,003	65.7	1.8	7.1	89.5	1.7	100.0	1,526
Highest	9.1	90.9	100.0	1,055	91.2	3.7	6.5	89.0	0.8	100.0	1,157
Total	6.9	93.1	100.0	4,325	52.9	1.8	6.5	88.0	3.7	100.0	8,176

Note: Total includes four births with information missing on mother's smoking status.
[1] Based on either a written record or the mother's recall

Figure 10.1 Proportion of Children with Low Birth Weight



10.2 VACCINATION COVERAGE

The Tanzania 2007-2015 strategic plans for health have incorporated the recommendations of the Global Immunisation and Vision Strategy (GIVS), such as increasing and sustaining national and district level immunisation coverage, ensuring access to quality vaccines, and strengthening health systems. By 2015, Tanzania aims to raise the level of national immunisation coverage among children to 90 percent, an achievement that would be expected to have profound implications for child survival.

The 2010 TDHS collected information on immunisation coverage for all children born in the five years before the survey. The Government of Tanzania has adopted the World Health Organisation (WHO) guidelines for vaccinating children. The immunisation programme in Tanzania is implemented by the Ministry of Health and Social Welfare through the Expanded Programme on Immunisation (EPI), which was started in 1975 and established throughout the country in 1996. According to those guidelines, to be considered fully vaccinated, a child should receive the following vaccinations: one dose of BCG, three doses each of DPT and polio vaccine, and one dose of measles vaccine. BCG, which protects against tuberculosis, should be given at birth or at first clinic contact. DPT protects against diphtheria, pertussis (whooping cough), and tetanus. DPT and polio vaccine guidelines require three vaccinations at approximately 4, 8, and 12 weeks of age. The measles vaccine should be given at 9 months. It is recommended that children receive the complete schedule of vaccinations before 12 months and that the vaccinations be recorded on a health card given to a parent or caretaker.

In Tanzania, DPT is no longer given to infants as a stand-alone vaccine. Instead, it has been combined with other antigens that protect against hepatitis B (DPT-Hb) or, most recently, hepatitis B and *Haemophilus influenza* (DPT-HB-Hib, also known as pentavalent). Thus, the 2010 TDHS report on DPT coverage includes DPT or DPT-HB or DPT-HB-Hib. In addition, although not part of the standard EPI, a dose of polio vaccine given at birth (polio zero) is included on the vaccination schedule.

Determining differences in vaccination coverage among subgroups of children is useful for program planning and targeting of resources to areas most in need.

10.2.1 Vaccinations by Background Characteristics

Information on vaccination coverage was obtained in two ways—from health cards and from mothers' verbal reports. All mothers were asked to show the interviewer the health cards that recorded the child's immunisation history. If the card was available, the interviewer copied the dates of each vaccination. If a vaccination was not recorded on the card, the mother was asked to recall whether that particular vaccination had been given. If the mother was not able to present a card for a child, she was asked to recall whether the child had received BCG, polio, DPT, DPT-HB or DPT-HB-Hib, and measles vaccines. If she indicated that the child had received the polio or DPT-HB/DPT-HB-Hib vaccines, she was asked about the number of doses that the child received. This information was collected for all children under age 5, although most data presented here are restricted to children age 12-23 months to better reflect children who have reached the age by which they should be fully vaccinated.

Information on vaccination coverage among children age 12-23 months is shown in Table 10.2 by source of information used to determine coverage (i.e., vaccination record or mother's report). The third row of the table shows the proportion of children who were immunised at any age up to the time of the survey, while the last row shows the proportion who were vaccinated by age 12 months, the age at which vaccination coverage should be complete.

At the time of the interview, 75 percent of children age 12-23 months were fully immunised, a modest increase relative to the proportion reported in the 2004-05 TDHS (71 percent) and the 1999 TRCHS (68 percent) (NBS and Macro International Inc., 2000; NBS and ORC Macro, 2005). At least nine of ten children received BCG, DPT/DPT-HB 1 and 2 (or DPT-HB-Hib 1 and 2), and Polio 1 and 2. However, the proportion of children receiving the third dose of DPT/DPT-HB (or DPT-HB-Hib) and polio vaccine is lower (88 and 85 percent, respectively), as is the proportion receiving measles vaccine (85 percent). The decrease in vaccination coverage between the first and third doses of DPT/DPT-HB/DPT-HB-Hib and polio are 8 and 12 percentage points, respectively. Only 3 percent of children have not received any vaccinations at all. With the exception of measles, more than 80 percent of the vaccinations were received by 12 months of age, as recommended. Overall, 66 percent of children were fully vaccinated at 12 months, a small increase from that reported in the 2004-05 TDHS (62 percent).

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report) and percentage vaccinated by 12 months of age, Tanzania 2010

		DPT/DPT-HB/DPT-HB-Hib			Polio					All basic vaccinations[2]	No vaccinations	Number of children
Source of information	BCG	1	2	3	0	1	2	3	Measles			
Vaccinated at any time before survey												
Vaccination card	82.3	82.8	80.7	77.6	46.3	83.7	81.2	77.7	73.0	68.5	0.1	1,327
Mother's report	13.2	13.0	12.1	10.4	7.6	12.9	11.8	7.2	11.5	6.7	2.1	249
Either source	95.5	95.7	92.8	88.0	53.9	96.6	93.0	84.9	84.5	75.2	2.3	1,576
Vaccinated by 12 months of age[3]	94.9	95.2	91.6	86.1	53.8	95.8	91.8	82.4	74.6	66.2	2.7	1,576

[1] Polio 0 is the polio vaccination given at birth.
[2] BCG, measles, and three doses each of DPT/DPT-HB-DPT-HB-Hib and polio vaccine (excluding polio vaccine given at birth)
[3] For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

Table 10.3 and Figure 10.2 show that vaccination status among children age 12-23 months does not differ significantly by the child's sex. The proportion fully vaccinated is lower for children of birth order 6 or higher than for children at lower parities. There is significant variation by residence: 86 percent of urban children are fully immunised compared with 73 percent of rural children. In contrast, vaccination coverage in Zanzibar is slightly higher than that in the Mainland (77 and 75 percent, respectively). Coverage in the Western zone (58 percent) is substantially lower than in other zones, at least in part because of the low coverage of measles vaccination (68 percent).

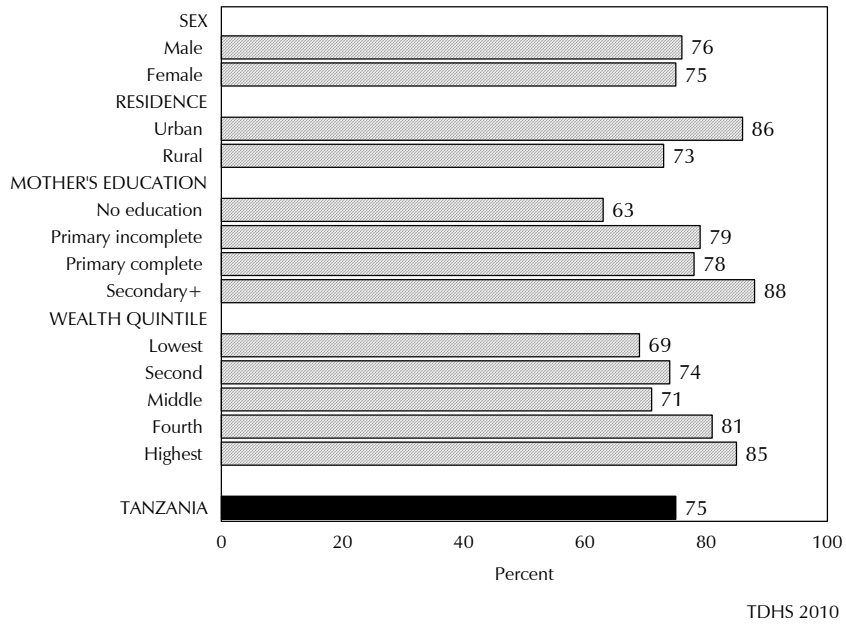
Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Tanzania 2010

Background characteristic	BCG	DPT/DPT-HB/ DPT-HB-Hib 1	DPT/DPT-HB/ DPT-HB-Hib 2	DPT/DPT-HB/ DPT-HB-Hib 3	Polio 0[1]	Polio 1	Polio 2	Polio 3	Measles	All basic vaccinations[2]	No vaccinations	Percentage with a vaccination card seen	Number of children
Sex													
Male	97.0	95.9	93.6	88.2	56.2	96.5	93.1	83.6	86.4	75.8	2.0	83.7	761
Female	94.0	95.6	92.1	87.8	51.8	96.7	92.9	86.2	82.7	74.5	2.5	84.7	815
Birth order													
1	96.5	96.2	94.1	92.1	60.3	98.2	94.8	84.3	86.0	75.4	1.6	81.6	278
2-3	96.2	97.2	95.4	91.2	59.7	96.4	94.8	87.3	87.1	77.9	2.1	84.2	604
4-5	95.5	95.4	92.8	88.5	47.6	97.4	94.0	86.8	85.7	77.5	2.6	87.4	371
6+	93.2	92.9	87.0	78.1	45.0	94.8	87.1	78.8	76.9	67.1	2.9	82.9	323
Residence													
Urban	98.2	98.4	97.9	97.0	84.9	99.5	97.7	90.9	92.9	85.6	0.5	84.8	305
Rural	94.8	95.1	91.6	85.9	46.5	95.9	91.9	83.5	82.5	72.6	2.7	84.1	1,271
Mainland/Zanzibar													
Mainland	95.4	95.7	92.7	87.8	53.9	96.6	93.0	84.9	84.5	75.1	2.3	84.3	1,533
Urban	98.2	98.5	98.2	97.2	85.4	99.6	97.9	91.3	93.6	86.3	0.4	84.9	290
Rural	94.8	95.0	91.5	85.7	46.6	95.9	91.8	83.4	82.3	72.5	2.7	84.1	1,243
Zanzibar	98.1	98.4	95.4	94.6	54.5	98.1	95.2	86.5	85.0	77.2	1.3	82.8	43
Unguja	98.4	98.7	93.8	93.2	69.9	98.0	93.5	88.6	84.0	79.7	1.3	86.0	24
Pemba	97.8	98.1	97.5	96.4	34.6	98.2	97.5	83.8	86.3	74.0	1.2	78.6	19
Zone													
Western	90.4	91.5	85.5	74.9	30.7	94.1	86.9	75.6	68.2	58.2	5.4	83.6	336
Northern	96.4	97.9	96.9	92.1	53.3	98.6	97.7	88.4	87.9	80.2	1.4	84.1	178
Central	98.3	97.3	96.5	95.1	58.3	98.9	97.3	89.5	88.4	79.0	1.1	88.4	134
Southern Highlands	93.0	92.2	87.3	81.9	57.3	91.4	85.3	80.3	84.0	73.9	3.7	82.8	232
Lake	96.4	96.5	94.7	91.4	48.9	97.4	95.0	87.9	89.1	79.8	1.3	82.4	330
Eastern	100.0	100.0	99.1	98.0	82.8	100.0	99.1	91.7	95.2	86.6	0.0	85.2	210
Southern	98.6	99.4	96.7	94.0	72.6	99.4	96.8	88.9	90.1	79.8	0.0	88.4	114
Zanzibar	98.1	98.4	95.4	94.6	54.5	98.1	95.2	86.5	85.0	77.2	1.3	82.8	43
Region													
Dodoma	(100.0)	(97.1)	(97.1)	(95.3)	(70.9)	(100.0)	(97.1)	(91.5)	(84.8)	(77.3)	(0.0)	(92.4)	76
Arusha	(100.0)	(100.0)	(100.0)	(100.0)	(55.9)	(100.0)	(100.0)	(97.0)	(91.4)	(88.4)	(0.0)	(86.7)	45
Kilimanjaro	(96.9))	(96.9)	(96.9)	(96.9)	(90.6)	96.9)	(96.9)	(94.2)	(96.9)	(94.2)	(3.1)	(77.7)	33
Tanga	(93.5))	(100.0)	(97.1)	(85.7)	(37.9)	(100.0)	(97.1)	(80.5)	(84.8)	(71.8)	(0.0)	(92.1)	60
Morogoro	100.0	100.0	97.7	95.4	57.4	100.0	98.3	87.5	92.4	77.6	0.0	95.8)	78
Pwani	(100.0)	(100.0)	(100.0)	(98.2)	(91.4)	(100.0)	(98.2)	(96.4)	(92.2)	(92.2)	(0.0)	(84.7)	34
Dar Es Salaam	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(93.5)	(98.4)	(91.9)	(0.0)	(76.9)	98
Lindi	(94.8)	(100.0)	(89.8)	(83.3)	(65.4)	(97.7)	(90.0)	(80.5)	(83.4)	(65.1)	(0.0)	(76.3)	30
Mtwara	(100.0)	(100.0)	(100.0)	(100.0)	(90.0)	(100.0)	(100.0)	(94.0)	(94.0)	(91.1)	(0.0)	(94.0)	36
Ruvuma	(100.0)	(98.5)	(98.5)	(96.0)	(64.4)	(100.0)	(98.5)	(90.3)	(91.3)	(80.6)	(0.0)	(91.8)	49
Iringa	(97.3)	(97.3)	(97.3)	(93.3)	(86.1)	(93.3)	(93.3)	(93.3)	(93.3)	(93.3)	(2.7)	(86.0)	54
Mbeya	88.5	90.8	83.6	78.3	55.5	88.4	80.7	75.9	83.3	68.5	5.0	82.2	119
Singida	96.1	97.5	95.7	94.8	41.7	97.5	97.5	86.9	93.2	81.3	2.5	83.1	58
Tabora	72.5	73.8	64.1	61.4	30.5	77.5	65.2	61.6	51.0	42.1	20.5	69.2	82
Rukwa	97.9	90.4	85.7	78.5	35.1	95.8	87.0	77.2	77.0	66.9	2.1	81.1	60
Kigoma	98.7	100.0	96.7	79.0	32.4	100.0	94.0	80.0	82.3	66.5	0.0	97.8	78
Shinyanga	95.1	95.9	90.5	79.4	30.0	99.2	93.9	80.2	70.0	62.0	0.8	84.0	175
Kagera	97.1	100.0	100.0	100.0	60.6	100.0	100.0	95.9	97.1	90.1	0.0	84.4	84
Mwanza	95.8	95.6	93.2	87.8	42.0	96.9	93.3	84.2	86.7	74.5	1.2	82.4	169
Mara	97.0	94.4	92.3	90.0	51.2	95.9	93.2	87.4	85.6	80.3	3.0	80.3	77
Manyara	96.5	93.3	93.3	88.6	42.2	96.5	96.5	86.0	81.0	72.0	3.5	74.2	39
Unguja North	98.7	98.7	97.4	96.5	50.4	96.4	96.4	92.4	88.8	83.7	1.3	89.5	7
Unguja South	(97.9)	(100.0)	(100.0)	(97.9	(74.4)	(100.0)	)100.0)	(91.7)	(86.9)	(84.9)	(0.0)	(91.2)	3
Town West	98.3	98.3	90.6	90.6	78.1	98.3	90.6	86.1	81.1	76.5	1.7	83.1	14
Pemba North	98.2	98.8	98.8	96.9	20.3	100.0	98.8	88.5	88.2	78.8	0.0	84.9	11
Pemba South	97.3	97.3	95.8	95.8	53.0	95.8	95.8	77.7	83.9	67.7	2.7	70.5	8
Mother's education													
No education	91.1	91.0	84.4	78.8	44.7	93.4	85.0	76.6	72.9	62.6	4.4	83.0	392
Primary incomplete	97.6	98.0	95.9	90.1	44.0	99.0	96.7	89.3	87.9	79.0	1.0	85.6	228
Primary complete	96.5	97.0	95.2	90.7	57.4	97.2	95.1	86.6	87.8	78.3	1.7	84.9	844
Secondary+	98.6	98.6	98.1	96.3	80.5	98.4	97.8	92.4	93.3	87.7	1.4	80.4	111
Wealth quintile													
Lowest	95.5	95.6	90.6	84.1	43.1	97.1	92.0	81.4	79.9	69.1	2.9	82.1	340
Second	95.0	94.7	91.0	84.1	43.8	95.1	90.7	83.5	82.1	74.0	3.2	86.6	370
Middle	95.1	94.8	91.6	87.3	48.1	95.6	92.4	83.4	79.8	70.8	2.3	83.1	340
Fourth	95.9	96.4	95.2	91.3	58.9	97.2	94.0	88.2	90.9	81.1	1.3	84.7	284
Highest	96.2	98.1	97.7	96.9	87.1	98.9	97.6	90.3	93.8	84.8	1.0	84.6	241
Total	95.5	95.7	92.8	88.0	53.9	96.6	93.0	84.9	84.5	75.2	2.3	84.2	1,576

[1] Polio 0 is the polio vaccination given at birth.
[2] BCG, measles and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

Figure 10.2 Proportion of Children Fully Vaccinated



As expected, full vaccination coverage varies by mother's education, from 63 percent among children of mothers with no education to 88 percent among children of mothers with secondary or higher education. Similarly, children born to mothers in the lowest wealth quintile are considerably less likely to have been fully vaccinated than children born to mothers in the highest wealth quintile (69 and 85 percent, respectively).

10.3 TRENDS IN VACCINATION COVERAGE

Table 10.4 shows the percentage of children age 12-59 months who received specific vaccinations during the first year of life, according to age cohort. The data indicate that the proportion of children fully vaccinated by 12 months of age has increased over the last several years from 60 percent of children age 48-59 months to more than 66 percent of children age 12-23 months. Figure 10.3 confirms the increase in coverage of all vaccines since 2004-05.

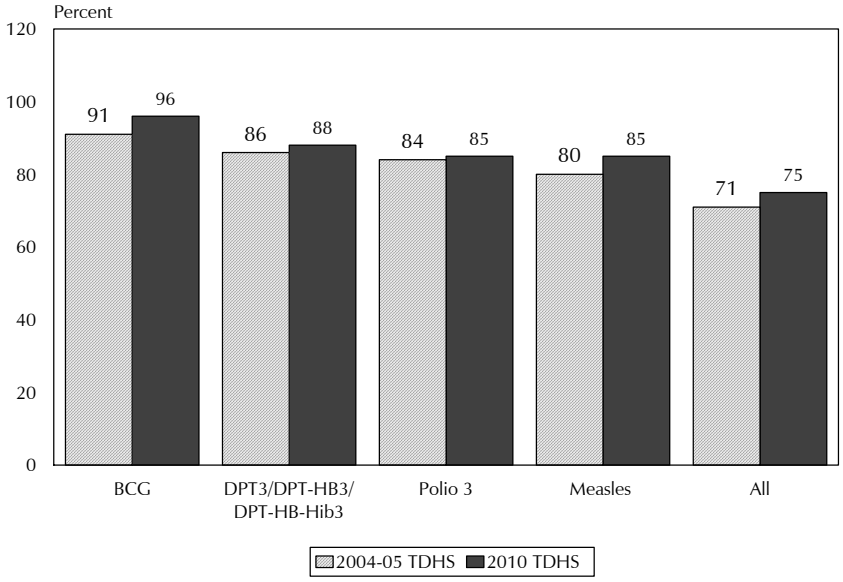
Table 10.4 Vaccinations in first year of life

Percentage of children age 12-59 months at the time of the survey who received specific vaccines by 12 months of age, and percentage with a vaccination card, by current age of child, Tanzania 2010

		DPT/DPT-HB/ DPT-HB-Hib			Polio								
Age in months	BCG	1	2	3	0[1]	1	2	3	Measles	All basic vaccina-tions[2]	No vaccina-tions	Percentage with a vaccination card seen	Number of children
12-23	94.9	95.2	91.6	86.1	53.8	95.8	91.8	82.4	74.6	66.2	2.7	84.2	1,576
24-35	95.9	95.0	91.1	84.5	54.9	95.9	92.2	82.8	72.6	64.3	3.4	74.9	1,450
36-47	94.2	94.0	91.2	84.6	56.2	94.4	90.2	80.4	74.5	65.7	4.5	72.7	1,567
48-59	94.5	92.9	89.5	83.9	53.7	94.5	91.2	79.5	70.3	59.9	4.9	65.6	1,430
Total	94.9	94.4	90.9	84.9	54.7	95.2	91.4	81.3	73.3	64.3	3.8	74.5	6,023

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.
[1] Polio 0 is the polio vaccination given at birth.
[2] BCG, measles and three doses each of DPT/DPT-HB-DPT-HB-Hib and polio vaccine (excluding polio vaccine given at birth)

Figure 10.3 **Vaccination Coverage among Children Age 12-23 Months, 2004-05 and 2010**



10.4 ACUTE RESPIRATORY INFECTION

Acute respiratory infection (ARI) is among the leading causes of morbidity and mortality in Tanzania and throughout the world. Among acute respiratory diseases, pneumonia is the most serious for young children. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths resulting from pneumonia. The prevalence of symptoms of ARI was estimated by asking mothers whether their children under age 5 had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey. It should be borne in mind that these data are subjective (i.e., based on the mother's perception of illness) and not validated by a medical examination.

Table 10.5 shows that, in the two weeks preceding the survey, 4 percent of children experienced symptoms of ARI, a reduction from that reported in the 2004-05 TDHS (8 percent). Prevalence of respiratory illness varies by the child's age, peaking at age 6-11 months (6 percent), stabilizing at age 12-35 months (5 percent), and then falling slowly to 3 percent at 48-59 months. Although smoke from cooking fuel has been linked to respiratory problems (Mishra, Retherford, and Smith, 2002), only small differences were observed in the prevalence of ARI symptoms by type of cooking fuel used in the household.

Seventy-one percent of children who had symptoms of ARI were taken to a health facility, representing a substantial increase from that reported in the 2004-05 TDHS (57 percent). Children in urban areas were more likely to be taken to a health facility than those in rural areas, as were children of more educated mothers and mothers who live in wealthier households (data not shown).

Table 10.5 Prevalence of symptoms of ARI

Among children under age 5, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey, according to background characteristics, Tanzania 2010

Background characteristic	Percentage with symptoms of ARI	Number of children
Age in months		
<6	4.2	843
6-11	5.7	801
12-23	4.6	1,576
24-35	5.2	1,450
36-47	3.6	1,567
48-59	3.3	1,430
Sex		
Male	4.6	3,810
Female	4.1	3,857
Cooking fuel		
Electricity or gas	(3.5)	71
Paraffin/kerosene	6.3	82
Charcoal	5.5	1,342
Wood/straw	4.1	6,166
Residence		
Urban	5.6	1,530
Rural	4.0	6,137
Mainland/Zanzibar		
Mainland	4.3	7,461
Urban	5.5	1,459
Rural	4.0	6,002
Zanzibar	6.7	206
Unguja	7.3	121
Pemba	5.7	85
Zone		
Western	2.6	1,618
Northern	5.1	984
Central	4.3	731
Southern Highlands	3.1	1,050
Lake	5.0	1,582
Eastern	6.6	891
Southern	4.0	605
Zanzibar	6.7	206
Region		
Dodoma	5.5	442
Arusha	4.8	285
Kilimanjaro	10.1	185
Tanga	4.2	319
Morogoro	6.0	329
Pwani	4.9	196
Dar es Salaam	8.0	366
Lindi	3.4	140
Mtwara	4.3	225
Ruvuma	4.1	240
Iringa	3.1	296
Mbeya	3.0	484
Singida	2.4	289
Tabora	1.3	427
Rukwa	3.3	271
Kigoma	8.1	399
Shinyanga	0.6	792
Kagera	8.3	478
Mwanza	3.2	747
Mara	4.4	357
Manyara	2.0	194
Unguja North	9.3	33
Unguja South	1.4	17
Town West	7.9	71
Pemba North	7.7	43
Pemba South	3.6	42
Mother's education		
No education	3.2	1,959
Primary incomplete	3.3	1,136
Primary complete	5.1	4,084
Secondary+	5.3	489
Wealth quintile		
Lowest	3.8	1,618
Second	2.9	1,819
Middle	5.0	1,710
Fourth	5.2	1,444
Highest	5.4	1,076
Total	4.3	7,667

Note: Total includes nine children with information missing on cooking fuel

[1] Symptoms of ARI (cough accompanied by short, rapid breathing, which was chest-related) is considered a proxy for pneumonia.

10.5 DIARRHOEAL DISEASE

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children in Tanzania. Exposure to diarrhoeal disease-causing agents is frequently a result of the use of contaminated water and unhygienic practices in food preparation and disposal of excreta.

10.5.1 Prevalence of Diarrhoea

In the 2010 TDHS, mothers were asked whether any of their children under age 5 had had diarrhoea at any time during the two-week period preceding the survey. If the child had had diarrhoea, the mother was asked about feeding practices during the diarrhoeal episode. In interpreting the findings of the 2010 TDHS survey, it should be borne in mind that prevalence of diarrhoea varies seasonally.

Table 10.6 shows that 15 percent of children under age 5 were reported to have had diarrhoea, and 2 percent had bloody diarrhoea in the two-week period before the survey. As is the case with ARI, children age 6-11 months were more likely than children in other age groups to suffer from diarrhoea. Diarrhoea prevalence among children age 6-11 months (29 percent) is about three times higher than among children less than age 6 months (11 percent) or children age 48-59 months (8 percent). There is no notable difference in diarrhoea prevalence among children by source of household drinking water or toilet facility. Likewise, there are small differences in diarrhoea prevalence by mother's level of education and household wealth. There are, however, strong differences in diarrhoea prevalence by region in the Mainland, with Kigoma showing the highest level (29 percent) and Shinyanga the lowest level (4 percent).

Table 10.6 Prevalence of diarrhoea

Percentage of children under age 5 who had diarrhoea in the two weeks preceding the survey, by background characteristics, Tanzania 2010

Background characteristic	Diarrhoea in the two weeks preceding the survey: All diarrhoea	Diarrhoea with blood	Number of children
Age in months			
<6	10.8	0.9	843
6-11	28.5	2.2	801
12-23	20.7	2.7	1,576
24-35	15.7	3.0	1,450
36-47	7.7	1.2	1,567
48-59	8.1	1.0	1,430
Sex			
Male	15.2	2.3	3,810
Female	13.8	1.5	3,857
Source of drinking water			
Improved	13.6	1.4	1,503
Not improved	17.5	3.1	1,622
Other/missing	13.7	1.6	4,543
Toilet facility			
Improved, not shared	15.3	1.2	744
Non-improved or shared	14.4	1.9	6,922
Residence			
Urban	18.1	1.3	1,530
Rural	13.6	2.0	6,137
Mainland/Zanzibar			
Mainland	14.6	1.9	7,461
Urban	18.6	1.3	1,459
Rural	13.6	2.1	6,002
Zanzibar	11.3	0.3	206
Unguja	10.3	0.4	121
Pemba	12.7	0.1	85
Zone			
Western	11.5	1.7	1,618
Northern	12.0	1.9	984
Central	19.5	1.8	731
Southern Highlands	15.1	1.9	1,050
Lake	17.7	2.5	1,582
Eastern	13.4	1.8	891
Southern	13.4	1.4	605
Region			
Dodoma	21.8	2.0	442
Arusha	12.6	0.3	285
Kilimanjaro	16.0	2.4	185
Tanga	11.0	2.7	319
Morogoro	15.8	4.1	329
Pwani	5.6	0.8	196
Dar es Salaam	15.5	0.2	366
Lindi	19.2	2.5	140
Mtwara	13.7	0.8	225
Ruvuma	9.7	1.2	240
Iringa	15.3	1.9	296
Mbeya	17.6	1.9	484
Singida	15.9	1.5	289
Tabora	10.0	1.4	427
Rukwa	10.4	2.0	271
Kigoma	28.8	5.0	399
Shinyanga	3.6	0.2	792
Kagera	24.0	2.8	478
Mwanza	13.7	2.2	747
Mara	17.7	2.6	357
Manyara	8.8	2.3	194
Unguja North	17.6	1.1	33
Unguja South	10.4	0.4	17
Town West	6.9	0.0	71
Pemba North	8.8	0.0	43
Pemba South	16.6	0.3	42
Mother's education			
No education	13.6	2.0	1,959
Primary incomplete	15.4	2.7	1,136
Primary complete	14.2	1.7	4,084
Secondary+	18.5	0.8	489
Wealth quintile			
Lowest	14.7	2.9	1,618
Second	12.8	1.6	1,819
Middle	14.2	2.1	1,710
Fourth	15.6	1.5	1,444
Highest	15.8	0.8	1,076
Total	14.5	1.9	7,667

Note: Total includes one child with information missing on toilet facility.
[1] See Table 2.7 for definition of categories.
[2] See Table 2.8 for definition of categories.

10.5.2 Treatment of Diarrhoea

Mothers of children who had diarrhoea were asked what they had done to treat the illness. Table 10.7 shows that more than half of the children with diarrhoea (53 percent) were taken to see a health care provider. Oral rehydration salts (ORS) packets or ORS with zinc were given to 44 percent of children with diarrhoea. Treatment with recommended home fluids was also common (30 percent). Overall, almost two-thirds of children with diarrhoea were given some form of oral rehydration therapy (ORT) or increased fluids. Seventeen percent of children did not receive any form of treatment.

Table 10.7 Diarrhoea treatment

Among children under age 5 who had diarrhoea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, the percentage given ORT or increased fluids, and the percentage who were given other treatments, by background characteristics, Tanzania 2010

Background characteristic	Percentage of children with diarrhoea for whom advice or treatment was sought from a health facility or provider[1]	Oral rehydration therapy (ORT)					Other treatments						
		ORS packets or ORS with zinc	Recommended home fluids (RHF)	Either ORS or RHF	Increased fluids	ORT or increased fluids	Pill/ syrup	Zinc	Intravenous solution	Home remedy/ other	Missing	No treatment	Number of children
Age in months													
<6	39.8	33.2	17.0	42.1	15.6	44.7	38.9	0.3	1.3	6.3	0.0	33.8	91
6-11	62.7	46.6	25.8	57.7	13.3	58.9	48.1	5.5	0.4	6.6	0.0	18.2	228
12-23	50.4	46.6	26.3	59.7	18.9	64.3	51.8	5.4	0.0	7.9	0.0	16.1	326
24-35	51.6	40.7	35.9	62.4	21.1	66.0	51.9	2.9	0.5	5.6	0.1	13.6	228
36-47	47.0	42.4	30.4	64.1	22.4	68.3	52.8	1.5	2.1	6.6	2.2	13.0	120
48-59	57.2	48.2	42.0	61.8	17.6	68.8	48.4	11.0	0.0	7.3	4.2	11.4	116
Sex													
Male	53.6	43.1	30.0	58.1	19.7	62.4	48.0	3.9	0.8	7.5	0.5	17.2	579
Female	51.5	45.0	29.0	60.2	16.5	63.3	51.7	5.4	0.2	6.1	1.0	16.0	531
Type of diarrhoea													
Non bloody	51.7	43.9	30.0	59.1	17.2	62.2	46.9	4.7	0.3	6.9	0.3	18.1	925
Bloody	59.0	50.4	27.0	65.5	23.8	70.3	64.0	5.9	1.8	6.1	0.0	10.7	143
Residence													
Urban	56.2	44.3	40.9	65.3	22.3	69.6	48.2	3.7	1.1	5.9	1.7	15.2	276
Rural	51.5	43.9	25.7	57.0	16.8	60.6	50.3	5.0	0.3	7.1	0.4	17.1	833
Mainland/Zanzibar													
Urban	56.1	44.4	41.0	65.4	22.3	69.6	48.4	3.7	1.1	5.5	1.6	15.4	271
Rural	51.4	44.0	25.6	57.1	16.6	60.5	50.6	4.9	0.3	7.0	0.4	17.0	815
Unguja	60.7	39.2	32.5	56.4	38.8	75.3	39.9	10.2	0.0	18.1	2.1	8.6	13
Pemba	50.9	41.0	27.9	49.8	12.6	55.3	32.8	2.3	0.0	12.6	0.0	29.0	11
Zone													
Western	47.2	49.0	30.2	65.6	11.9	66.6	55.9	4.1	0.0	7.8	0.0	11.2	186
Northern	67.2	48.3	51.7	75.7	24.0	78.5	39.6	2.5	0.0	5.5	0.0	13.1	118
Central	52.8	44.0	24.0	56.4	18.8	62.5	44.9	4.9	0.0	1.8	2.1	18.0	142
Southern Highlands	39.5	43.5	40.6	63.2	26.8	66.2	44.6	9.1	1.4	13.6	1.2	15.7	159
Lake	46.9	40.7	18.1	47.8	10.5	49.4	56.5	0.3	1.1	8.4	0.0	21.2	280
Eastern	68.8	42.5	29.7	60.0	28.0	69.4	62.6	7.2	0.3	1.5	2.2	10.9	120
Southern	64.5	42.3	22.6	56.2	16.0	61.1	30.5	10.8	0.0	1.9	0.0	25.8	81
Mother's education													
No education	48.5	43.1	24.1	55.7	18.1	58.9	47.8	5.4	0.0	7.1	0.8	18.8	267
Primary incomplete	50.5	42.2	29.6	57.8	11.0	60.1	45.6	3.8	1.5	10.1	0.0	19.4	175
Primary complete	53.6	44.8	30.2	60.2	19.7	64.1	51.7	4.5	0.5	5.1	0.9	15.0	578
Secondary+	63.1	45.7	41.3	64.7	23.1	71.6	51.4	5.3	0.0	11.0	0.3	15.0	90
Wealth quintile													
Lowest	51.6	40.8	12.9	49.7	18.6	55.5	47.0	3.4	0.0	8.4	0.0	20.2	238
Second	53.6	42.6	27.3	56.9	17.9	60.4	55.1	5.2	0.8	9.5	1.0	13.8	232
Middle	45.2	43.3	27.4	58.3	12.7	60.0	54.4	6.0	0.6	5.2	0.0	17.2	243
Fourth	53.4	54.0	42.5	70.6	15.8	72.5	45.1	3.0	1.0	4.9	0.4	17.8	226
Highest	62.5	38.3	41.6	61.1	29.0	67.5	45.9	6.0	0.0	5.8	2.8	13.1	170
Total	52.6	44.0	29.5	59.1	18.2	62.8	49.8	4.7	0.5	6.8	0.7	16.6	1,109

Note: ORT includes solution prepared from oral rehydration salt (ORS) or ORS with zinc and recommended home fluids (RHF). Total includes 41 children with information missing with regard to the type of diarrhoea.
[1] Excludes pharmacy, NGO, and other

Children whose mothers have no education and are from the poorest households are the least likely to have been given some form of ORT. For example, 56 percent of children in the lowest wealth quintile were given ORT or increased fluids compared with 68 percent of children in the wealthiest households.

There are significant residential and regional differentials in diarrhoea treatment practice. Although children living in urban areas are only slightly more likely than children living in rural areas to be taken to see a health care provider (56 and 52 percent, respectively), they are much more likely to have received some form of ORT or increased fluids (70 and 61 percent, respectively). The difference in treatment with ORT can be attributed to the higher use of recommended home fluids and increased fluids. In Mainland Tanzania, ORT treatment varies from 49 percent in the Lake zone to 79 percent in the Northern zone.

10.5.3 Feeding Practices during Diarrhoea

Mothers are encouraged to continue feeding children normally when they suffer from diarrhoeal illnesses and to increase the fluids children are given. These practices help to reduce the likelihood the child will become dehydrated. They also minimise the adverse consequences of diarrhoea on the child's nutritional status. Mothers were specifically asked whether they gave the child more or less fluid and food than usual when their child had diarrhoea.

Table 10.8 shows that only 18 percent of children with diarrhoea were given more fluids than usual, as recommended. Four in ten children were given the same amount of fluids as usual. However, almost four in ten children were offered less fluid than usual or were given no fluids at all: 20 percent were offered somewhat less, 5 percent were offered much less, and 13 percent of children were offered no fluid at all. These findings suggest that a large proportion of mothers still engage in the dangerous practice of curtailing fluid intake when their children have diarrhoea. Figure 10.4 shows that between the 1999 TRCHS and the 2004-05 TDHS there are small differences in the amount of liquids offered to children with diarrhoea. In the 2010 TDHS, however, children are much less likely to receive sufficient fluid intake during diarrhoea.

Table 10.8 shows that 42 percent of the children with diarrhoea were given somewhat or much less than the usual amount of food, or no food at all, which can exacerbate the child's illness.

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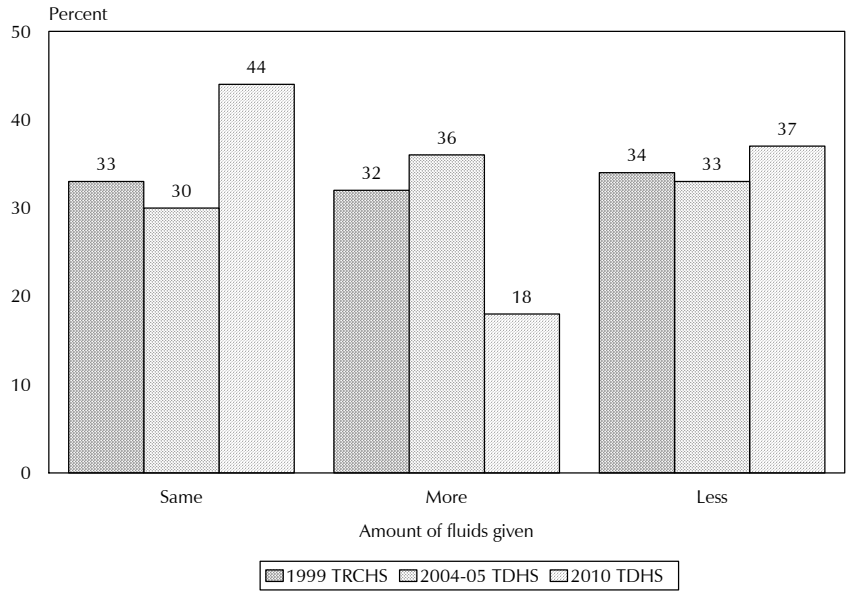
Table 10.8 Feeding practices during diarrhoea

Percent distribution of children under age 5 who had diarrhoea in the two weeks preceding the survey, by amount of liquids and food offered compared with normal practice, the percentage of children given increased fluids and continued feeding during the diarrhoea episode, and the percentage of children who continued feeding and were given ORT and/or increased fluids during the episode of diarrhoea, by background characteristics, Tanzania 2010

Background characteristic	Amount of liquids offered							Amount of food offered								Percentage given increased fluids and continued feeding[1]	Percentage who continued feeding and were given ORT and/or increased fluids	Number of children with diarrhoea
	More	Same as usual	Some-what less	Much less	None	Don't know/ missing	Total	More	Same as usual	Some-what less	Much less	None	Never gave food	Don't know/ missing	Total			
Age in months																		
<6	15.6	22.7	17.7	1.9	42.2	0.0	100.0	1.0	23.4	6.5	7.0	5.2	57.0	0.0	100.0	8.8	21.5	91
6-11	13.3	39.2	30.0	6.5	10.5	0.4	100.0	1.8	38.1	31.1	13.6	8.4	6.9	0.0	100.0	10.3	41.5	228
12-23	18.9	47.4	18.8	6.4	8.0	0.5	100.0	4.2	50.7	29.0	12.8	1.3	1.9	0.0	100.0	15.6	51.4	326
24-35	21.1	46.7	17.3	2.3	12.5	0.0	100.0	7.5	50.1	30.6	10.9	0.8	0.0	0.0	100.0	18.7	59.2	228
36-47	22.4	41.6	17.1	4.9	11.1	3.0	100.0	6.9	48.2	30.0	11.3	1.5	0.0	2.2	100.0	18.2	58.8	120
48-59	17.6	53.8	13.8	3.1	9.4	2.2	100.0	3.2	60.8	24.5	6.4	2.8	0.0	2.2	100.0	16.2	61.2	116
Sex																		
Male	19.7	42.8	20.3	4.9	11.6	0.6	100.0	3.6	46.8	27.6	11.5	3.1	6.8	0.5	100.0	16.6	49.4	579
Female	16.5	44.4	19.6	4.5	14.0	1.0	100.0	5.1	46.2	27.5	10.9	3.2	6.5	0.5	100.0	13.1	51.4	531
Type of diarrhoea																		
Non bloody	17.2	44.7	20.2	5.1	12.4	0.4	100.0	3.7	47.1	27.1	11.7	3.1	7.3	0.0	100.0	13.7	49.1	925
Bloody	23.8	34.6	23.2	3.7	14.7	0.0	100.0	7.3	37.3	35.4	11.1	4.6	4.2	0.0	100.0	21.1	58.9	143
Residence																		
Urban	22.3	49.6	14.7	5.7	6.0	1.7	100.0	6.1	48.5	23.9	12.6	4.4	2.8	1.6	100.0	19.1	55.2	276
Rural	16.8	41.6	21.7	4.4	14.9	0.5	100.0	3.7	45.9	28.8	10.8	2.8	7.9	0.1	100.0	13.5	48.7	833
Mainland/Zanzibar																		
Urban	22.3	49.8	14.6	5.6	6.1	1.6	100.0	6.2	49.0	23.2	12.5	4.5	2.9	1.6	100.0	19.1	55.2	271
Rural	16.6	41.7	21.7	4.2	15.3	0.5	100.0	3.7	46.2	28.6	10.6	2.7	8.1	0.1	100.0	13.4	48.8	815
Unguja	38.8	36.2	19.6	5.4	0.0	0.0	100.0	4.4	26.7	50.5	15.2	3.2	0.0	0.0	100.0	30.2	57.7	13
Pemba	12.6	38.9	29.5	16.3	1.4	1.4	100.0	1.0	37.3	34.3	23.7	2.6	1.1	0.0	100.0	8.9	37.7	11
Zone																		
Western	11.9	51.7	11.7	3.8	19.4	1.5	100.0	3.0	59.3	16.9	10.1	4.9	5.8	0.0	100.0	10.8	52.9	186
Northern	24.0	52.0	18.9	1.4	3.8	0.0	100.0	3.0	53.3	33.0	5.9	3.2	1.6	0.0	100.0	19.6	70.5	118
Central	18.8	34.7	30.5	7.9	7.4	0.6	100.0	0.6	40.7	37.8	12.3	0.7	7.4	0.6	100.0	16.1	52.4	142
Southern Highlands	26.8	42.2	14.5	8.2	7.2	1.2	100.0	8.0	46.3	28.5	11.3	0.0	4.7	1.2	100.0	25.9	57.6	159
Lake	10.5	43.0	19.7	2.7	24.2	0.0	100.0	2.7	43.6	21.1	12.3	6.6	13.7	0.0	100.0	6.0	31.6	280
Eastern	28.0	34.9	22.1	4.5	8.4	2.2	100.0	10.3	33.9	34.3	15.3	1.9	2.2	2.2	100.0	21.9	57.2	120
Southern	16.0	47.8	29.9	4.7	0.9	0.7	100.0	5.8	51.4	32.8	7.8	0.0	2.2	0.0	100.0	13.1	52.7	81
Mother's education																		
No education	18.1	40.4	21.5	6.1	13.7	0.2	100.0	2.7	44.6	32.8	12.0	1.8	6.1	0.0	100.0	14.5	47.5	267
Primary incomplete	11.0	44.4	27.7	2.4	13.4	1.0	100.0	5.5	46.5	24.1	11.4	2.9	9.7	0.0	100.0	8.7	47.7	175
Primary complete	19.7	44.0	17.1	5.4	12.8	1.1	100.0	4.3	48.4	26.2	10.6	3.4	6.2	0.9	100.0	16.0	51.1	578
Secondary+	23.1	49.1	18.9	0.5	8.3	0.2	100.0	6.8	40.2	27.6	13.0	6.6	5.7	0.0	100.0	21.1	59.2	90
Wealth quintile																		
Lowest	18.6	38.4	24.8	5.2	12.6	0.2	100.0	3.8	40.5	34.8	9.5	4.1	7.3	0.0	100.0	14.7	45.2	238
Second	17.9	37.7	22.5	3.4	17.6	0.8	100.0	3.2	44.4	31.0	10.5	2.0	9.0	0.0	100.0	14.3	48.5	232
Middle	12.7	46.7	18.7	3.4	18.0	0.4	100.0	5.4	50.4	22.6	12.3	2.7	6.5	0.0	100.0	9.5	47.8	243
Fourth	15.8	51.6	17.0	8.1	7.2	0.4	100.0	3.0	51.2	20.5	14.6	4.4	5.9	0.4	100.0	14.3	53.9	226
Highest	29.0	43.6	15.7	3.0	6.0	2.7	100.0	6.8	46.2	29.2	8.8	2.6	3.7	2.6	100.0	24.8	59.1	170
Total	18.2	43.6	20.0	4.7	12.7	0.8	100.0	4.3	46.5	27.6	11.3	3.2	6.7	0.5	100.0	14.9	50.4	1,109

Note: Total includes 41 children with information missing with regard to the type of diarrhoea.
[1] Continued feeding practices include children who were given more, the same as usual, or somewhat less food during the diarrhoea episode.

Figure 10.4 **Trends in Feeding Practices during Diarrhoea, 1999-2010**



10.6 KNOWLEDGE OF ORS PACKETS

A simple and effective response to dehydration caused by diarrhoea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy (ORT). ORT may include the use of a solution prepared from commercially produced packets of oral rehydration salts (ORS); a homemade mixture usually prepared from sugar, salt, and water; any kind of thin, nutritious fluids such as rice water, coconut milk, or watery soup; or simply increased fluids. Table 10.9 shows that almost all women with children under age 5 know about ORS packets (95 percent). With the exception of women living in Arusha and Manyara (where 79 percent of women with children under age 5 know of ORS packets), there are only small variations by background characteristics.

Table 10.9 Knowledge of ORS packets

Percentage of mothers age 15-49 who gave birth in the five years preceding the survey who know about ORS packets for treatment of diarrhoea, by background characteristics, Tanzania 2010

Background characteristic	Percentage of women who know about ORS packets	Number of women
Age		
15-19	88.6	373
20-24	96.1	1,348
25-34	95.8	2,392
35-49	95.8	1,405
Residence		
Urban	96.8	1,273
Rural	94.9	4,246
Mainland/Zanzibar		
Urban	96.8	1,222
Rural	94.9	4,156
Unguja	96.6	89
Pemba	95.9	52
Zone		
Western	96.9	1,042
Northern	87.6	782
Central	97.6	503
Southern Highlands	97.7	761
Lake	95.4	1,031
Eastern	97.0	744
Southern	95.8	514
Region		
Dodoma	98.5	316
Arusha	79.4	232
Kilimanjaro	98.1	162
Tanga	92.8	255
Morogoro	98.7	262
Pwani	97.9	149
Dar es Salaam	95.2	333
Lindi	94.5	121
Mtwara	94.5	197
Ruvuma	98.0	196
Iringa	96.0	237
Mbeya	98.4	347
Singida	96.1	187
Tabora	93.4	289
Rukwa	98.7	177
Kigoma	97.3	262
Shinyanga	98.7	492
Kagera	91.9	323
Mwanza	96.5	480
Mara	98.1	229
Manyara	79.0	134
Unguja North	94.0	23
Unguja South	99.0	14
Town West	97.1	53
Pemba North	95.6	26
Pemba South	96.1	26
Education		
No education	91.5	1,313
Primary incomplete	96.4	777
Primary complete	96.6	3,015
Secondary+	97.0	414
Wealth quintile		
Lowest	92.1	1,087
Second	94.8	1,222
Middle	96.0	1,175
Fourth	97.0	1,111
Highest	97.3	924
Total	95.4	5,519

ORS = Oral rehydration salts

10.7 STOOL DISPOSAL

10.7.1 Disposal of Children's Stools

The proper disposal of children's faeces is extremely important in preventing the spread of disease. If faeces are left uncontained, disease may spread by direct contact or through animal contact. Table 10.10 presents information on the disposal of faecal matter of children under age 5, by background characteristics. Three-quarters of children's stools are usually contained, a result comparable to that observed in the 2004-05 TDHS. Children's stools are more likely to be contained in urban than in rural areas (86 and 69 percent, respectively). Regional differentials are also observed. For example, in Mainland Tanzania, whereas 93 percent of children's stools were disposed of safely in Morogoro, only 52 percent were disposed of properly in Mara. There is a positive relationship between containment of children's stools and mother's education and wealth quintile.

Table 10.10 Disposal of children's stools

Percent distribution of youngest children under age five living with the mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Tanzania 2010

Background characteristic	Manner of disposal of children's stools												Percentage of children whose stools are disposed of safely	Number of mothers
	Child used toilet or latrine	Put/ rinsed into toilet or latrine	Buried	Put/ rinsed into drain or ditch	Thrown into garbage	Left in the open	Use disposable diapers	Use washable diapers	Not disposed of	Other	Missing	Total		
Age in months														
<6	1.4	25.8	2.0	6.1	12.3	3.5	0.2	37.5	0.1	9.7	1.3	100.0	29.3	837
6-11	2.6	55.9	5.5	1.9	8.8	5.6	0.2	11.2	0.1	7.8	0.4	100.0	64.0	795
12-23	4.2	67.9	7.0	0.2	6.9	5.0	0.3	2.1	0.0	5.9	0.3	100.0	79.1	1,487
24-35	13.0	68.8	5.5	0.1	5.5	2.4	0.0	0.0	0.3	4.2	0.3	100.0	87.3	995
36-47	43.4	44.3	4.3	0.0	1.7	2.2	0.0	0.0	0.0	3.4	0.6	100.0	92.1	670
48-59	62.3	27.3	2.9	0.0	1.6	2.0	0.0	0.0	0.0	3.0	0.9	100.0	92.5	436
Toilet facility														
Improved, not shared	23.1	60.9	1.7	1.0	3.1	0.3	0.7	7.5	0.0	1.1	0.7	100.0	85.6	570
Non-improved or shared[1]	14.1	52.1	5.4	1.4	7.1	4.2	0.1	8.4	0.1	6.5	0.5	100.0	71.6	4,648
Residence														
Urban	21.7	63.2	1.2	2.5	3.2	0.3	0.5	6.0	0.0	0.8	0.6	100.0	86.1	1,168
Rural	13.2	50.2	6.1	1.0	7.7	4.7	0.0	9.0	0.1	7.4	0.5	100.0	69.4	4,052
Mainland/Zanzibar														
Mainland	15.2	53.4	4.8	1.4	6.2	3.8	0.1	8.5	0.1	6.0	0.6	100.0	73.4	5,087
Urban	21.9	63.3	1.0	2.6	3.1	0.3	0.3	6.1	0.0	0.8	0.7	100.0	86.1	1,120
Rural	13.3	50.6	5.9	1.0	7.0	4.8	0.0	9.2	0.1	7.5	0.5	100.0	69.8	3,966
Zanzibar	12.2	42.4	10.6	0.6	27.1	0.9	2.4	1.8	0.0	1.9	0.2	100.0	65.2	133
Unguja	18.0	52.7	7.2	0.8	11.8	1.4	3.5	2.3	0.0	2.1	0.3	100.0	77.9	82
Pemba	2.8	25.7	16.2	0.2	51.9	0.0	0.7	0.9	0.0	1.5	0.0	100.0	44.7	51
Zone														
Western	7.9	53.3	8.9	1.9	10.9	0.3	0.0	7.4	0.0	8.3	1.1	100.0	70.0	992
Northern	13.7	53.7	0.9	0.4	8.8	3.6	0.0	8.5	0.3	8.7	1.4	100.0	68.3	752
Central	4.8	55.8	3.7	1.4	7.7	8.3	0.0	13.0	0.0	4.9	0.5	100.0	64.2	488
Southern Highlands	20.9	51.9	3.1	0.2	2.7	0.9	0.0	15.8	0.0	4.4	0.0	100.0	75.9	726
Lake	9.4	44.1	8.1	1.5	6.2	11.9	0.0	9.0	0.3	9.2	0.4	100.0	61.6	967
Eastern	24.1	64.9	1.6	3.4	1.8	0.3	0.6	1.4	0.0	1.7	0.1	100.0	90.6	685
Southern	33.4	55.0	4.7	0.2	1.9	0.0	0.0	4.4	0.0	0.5	0.0	100.0	93.1	476

Continued...

Table 10.10—*Continued*

Background characteristic	Manner of disposal of children's stools											Total	Percentage of children whose stools are disposed of safely	Number of mothers
	Child used toilet or latrine	Put/ rinsed into toilet or latrine	Buried	Put/ rinsed into drain or ditch	Thrown into garbage	Left in the open	Use disposable diapers	Use washable diapers	Not disposed of	Other	Missing			
Region														
Dodoma	5.6	50.9	1.9	1.4	8.7	11.1	0.0	16.1	0.0	4.4	0.0	100.0	58.4	304
Arusha	7.3	48.2	1.2	0.0	10.3	7.3	0.0	4.4	0.9	16.2	4.3	100.0	56.7	228
Kilimanjaro	23.4	58.3	0.6	0.0	0.8	0.0	0.0	16.9	0.0	0.0	0.0	100.0	82.3	153
Tanga	16.6	57.6	0.6	1.1	10.4	2.7	0.0	7.2	0.0	3.7	0.0	100.0	74.9	239
Morogoro	27.6	63.8	2.0	2.2	1.1	0.6	0.0	0.5	0.0	2.0	0.0	100.0	93.4	246
Pwani	16.7	68.6	4.0	0.6	5.5	0.5	0.6	0.0	0.0	3.7	0.0	100.0	89.2	145
Dar es Salaam	24.9	64.0	0.0	5.8	0.6	0.0	1.1	2.7	0.0	0.5	0.3	100.0	88.9	293
Lindi	34.5	50.4	7.9	0.0	4.3	0.0	0.0	2.8	0.0	0.0	0.0	100.0	92.8	112
Mtwara	34.7	54.5	6.4	0.5	1.2	0.0	0.0	2.1	0.0	0.7	0.0	100.0	95.7	180
Ruvuma	31.4	58.4	1.0	0.0	1.0	0.0	0.0	7.6	0.0	0.5	0.0	100.0	90.8	185
Iringa	30.9	50.3	0.4	0.7	1.6	0.0	0.0	15.0	0.0	1.3	0.0	100.0	81.5	223
Mbeya	19.9	49.6	6.1	0.0	4.6	0.9	0.0	12.1	0.0	6.8	0.0	100.0	75.6	334
Singida	3.3	64.0	6.6	1.4	6.0	3.6	0.0	7.9	0.0	5.8	1.3	100.0	73.9	184
Tabora	10.9	45.3	9.0	2.3	8.0	0.8	0.0	8.4	0.0	13.6	1.6	100.0	65.2	269
Rukwa	9.6	58.6	0.9	0.0	0.6	2.2	0.0	24.4	0.0	3.7	0.0	100.0	69.1	169
Kigoma	8.2	68.8	5.3	1.0	11.5	0.0	0.0	1.1	0.0	3.7	0.4	100.0	82.4	254
Shinyanga	6.0	49.4	10.7	2.2	12.3	0.3	0.0	10.1	0.0	7.8	1.2	100.0	66.1	469
Kagera	9.9	48.0	8.9	1.1	4.5	2.0	0.0	9.8	0.0	15.0	0.7	100.0	66.8	304
Mwanza	9.7	46.1	7.0	2.2	6.7	14.7	0.0	8.0	0.5	4.7	0.4	100.0	62.8	448
Mara	8.4	34.2	9.1	0.6	7.7	19.9	0.0	9.8	0.4	10.0	0.0	100.0	51.7	215
Manyara	8.3	50.5	1.4	0.5	12.3	3.1	0.0	8.0	0.0	15.3	0.7	100.0	60.1	131
Unguja North	11.7	32.8	11.1	0.5	33.7	3.8	0.0	1.7	0.0	3.6	1.1	100.0	55.6	21
Unguja South	14.4	62.2	5.4	0.0	8.4	0.6	0.6	2.1	0.0	6.2	0.0	100.0	82.0	13
Town West	21.7	59.0	5.9	1.2	3.0	0.5	5.7	2.6	0.0	0.4	0.0	100.0	86.6	48
Pemba North	2.2	19.3	17.9	0.0	57.9	0.0	0.0	1.8	0.0	0.9	0.0	100.0	39.4	26
Pemba South	3.4	32.3	14.5	0.5	45.7	0.0	1.5	0.0	0.0	2.2	0.0	100.0	50.2	25
Education														
No education	12.1	40.7	7.2	1.5	11.4	7.1	0.0	7.5	0.2	11.8	0.5	100.0	59.9	1,244
Primary incomplete	12.0	48.9	6.5	1.3	7.6	4.2	0.1	9.0	0.1	9.4	0.9	100.0	67.4	732
Primary complete	16.9	58.1	4.0	1.2	4.8	2.6	0.1	8.6	0.1	3.1	0.5	100.0	79.0	2,861
Secondary+	17.3	64.0	2.2	2.1	3.6	0.5	1.0	7.8	0.0	1.0	0.5	100.0	83.5	383
Wealth quintile														
Lowest	10.8	41.8	8.4	1.0	11.0	8.5	0.1	7.0	0.3	10.4	0.8	100.0	61.0	1,035
Second	11.8	47.8	7.6	1.6	8.3	4.9	0.0	9.9	0.2	7.9	0.1	100.0	67.2	1,172
Middle	12.2	55.8	5.5	0.9	5.9	3.3	0.0	8.9	0.0	7.1	0.5	100.0	73.5	1,124
Fourth	19.4	59.5	1.7	0.7	5.5	1.2	0.0	8.9	0.0	2.5	0.5	100.0	80.7	1,048
Highest	23.5	62.7	0.5	2.8	1.7	0.1	0.8	6.4	0.0	0.4	1.1	100.0	86.7	840
Total	15.1	53.1	5.0	1.3	6.7	3.7	0.1	8.3	0.1	5.9	0.6	100.0	73.2	5,219

Note: Total includes one child with information missing on toilet facility

[1] Non-shared facilities that are of the following types: flush or pour flush into a piped sewer system/septic tank/pit latrine; ventilated, improved pit (VIP) latrine; and pit latrine with a slab.

CHILDREN'S AND WOMEN'S NUTRITION 11

Good nutrition is a prerequisite for the national development of countries and for the well-being of individuals. Although the problem of poor nutrition affects the entire population, women and children are especially vulnerable because of their unique physiology. Socioeconomic factors in society also are often unfavourable to these two groups.

Adequate nutrition is critical to children's growth and development. The period from birth to age 2 is especially important for optimal growth, health, and development. Unfortunately, this period is often marked by micronutrient deficiencies that interfere with optimal growth. Childhood illnesses, such as diarrhoea and acute respiratory infections (ARI), also are common. Recommended feeding practices discussed in this chapter include early initiation of breastfeeding, exclusive breastfeeding during the first six months of life, continued breastfeeding up to age 2 and beyond, timely introduction of complementary feeding at age 6 months, frequent feeding of solid/semisolid foods, and feeding of diverse food groups to children between ages 6 months and 23 months. A summary indicator that describes the quality of infant and young child feeding practices for this age group is included.

A woman's nutritional status has important implications for her health as well as for the health of her children. Malnutrition in women results in reduced productivity, increased susceptibility to infections, slowed recovery from illness, and a heightened risk of adverse pregnancy outcome. For example, a woman who has a poor nutritional status as indicated by a low body mass index (BMI), short stature, anaemia, or other micronutrient deficiencies has a greater risk of obstructed labour, a baby with low birth weight, low-quality breast milk, death from postpartum haemorrhage, and adverse effects upon both herself and her baby.

11.1 NUTRITIONAL STATUS OF CHILDREN

Nutritional status of children under age 5 is an important outcome measure of children's health. The anthropometric data on height and weight collected in the 2010 TDHS permit the measurement and evaluation of the nutritional status of young children in Tanzania. This evaluation allows identification of subgroups of the child population that are at increased risk of faltered growth, disease, impaired mental development, and death.

11.1.1 Measurement of Nutritional Status among Young Children

The 2010 TDHS collected data on the nutritional status of children by measuring the height and weight of all children under age 5. Data were collected to calculate three indices—weight-for-age, height-for-age, and weight-for-height.

For this report, indicators of the nutritional status of children were calculated using new growth standards published by the World Health Organization (WHO) in 2006. These new growth standards were generated using data collected in the WHO Multicentre Growth Reference Study (WHO, 2006). The findings of the study, whose sample included 8,440 children in six countries (Brazil, Ghana, India, Norway, Oman, and the United States), describe how children should grow under optimal conditions. The WHO Child Growth Standards can therefore be used to assess children all over the world, regardless of ethnicity, social and economic influences, and feeding practices. The new child growth standards replace the previously used NCHS/CDC/WHO reference standards.

It should be noted that the new growth standards are not comparable with the (old) NCHS/CDC/WHO standards. When the new WHO child growth standards are used in place of the previous reference, the following changes are observed:

- The level of stunting is higher.
- The level of wasting in infancy is substantially higher.
- The level of underweight is substantially higher during the first half of infancy (0-6 months) and decreases thereafter.
- The level of overweight/obesity is higher.

The three indices are expressed in standard deviation units from the median in the Multicentre Growth Reference Study.

The height-for-age index provides an indicator of linear growth retardation and cumulative growth deficits in children. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the WHO reference population are considered short for their age (stunted), or chronically malnourished. Children who are below minus three standard deviations (-3 SD) are considered severely stunted. Stunting reflects failure to receive adequate nutrition over a long period of time and is affected by recurrent and chronic illness. Height-for-age, therefore, represents the long-term effects of malnutrition in a population and is not sensitive to recent, short-term changes in dietary intake.

The weight-for-height index measures body mass in relation to body height or length and describes current nutritional status. Children with Z-scores below minus two standard deviations (-2 SD) are considered thin (wasted) or acutely malnourished. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or a recent episode of illness causing loss of weight and the onset of malnutrition. Children with a weight-for-height index below minus three standard deviations (-3 SD) are considered severely wasted.

The weight-for-height index also provides data on overweight and obesity. Children more than two standard deviations (+2 SD) above the median weight-for-height are considered overweight, or obese.

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both chronic and acute malnutrition. Children with weight-for-age below minus two standard deviations are classified as underweight. Children with weight-for-age below minus three standard deviations (-3 SD) are considered severely underweight.

11.1.2 Data Collection

Measurements of height and weight were obtained for all children born in the five years preceding the survey and listed in the Household Questionnaire. Included were children who were not biological offspring of the women interviewed in the survey. Each interviewing team carried a scale and measuring board. The scales were lightweight, bathroom-type scales with a digital screen. They were designed and manufactured under the authority of the United Nations Children's Fund (UNICEF). The measuring boards were specially produced by Shorr Productions for use in survey settings. Children younger than 24 months were measured lying down on the board (recumbent length), and standing height was measured for older children.

A total of 7,959 (weighted) children under age 5 were eligible to be weighed and measured. Data are presented for 94 percent (7,491) of these children: about 4 percent were not measured, 1 percent had invalid values for height and weight, and 1 percent had incomplete information on age.

11.1.3 Measures of Child Nutrition Status

Height-for-age

Table 11.1 and Figure 11.1 present the nutritional status of children under age 5 as measured by height-for-age and various background characteristics. Nationally, 42 percent of children under age 5 are stunted, and the proportion of severely stunted children is 17 percent. Analysis of the indicator by age group shows that stunting is highest (55 percent) in children age 18-23 months and lowest (18 percent) in children under age 6 months. Severe stunting shows a similar pattern, where children age 18-23 months have the highest proportion of severely stunted children (25 percent), and those under age 6-8 months have the lowest proportion (7 percent). A higher proportion (46 percent) of male children is stunted compared with the proportion of female children (39 percent). There is an inverse relationship between the length of the preceding birth interval and the proportion of children who are stunted. The longer the interval, the less likely it is that the child will be stunted. The mother's nutritional status, as measured by her body mass index (BMI), also has an inverse relationship with the level of severe stunting. For example, mothers who are thin (BMI< 18.5) have children with the highest stunting levels (50 percent), while mothers who are overweight/obese (BMI ≥25) have children with the lowest stunting levels (34 percent).

Children in rural areas are more likely to be stunted (45 percent) than those in urban areas (32 percent), and a similar pattern is noted for severe stunting (18 percent for rural and 12 percent for urban areas). At the regional level, four regions have levels of stunting that exceed 50 percent. These are Dodoma (56 percent), Lindi (54 percent), Iringa (52 percent) and Rukwa (50 percent). Dar es Salaam and Town West in Zanzibar have the lowest proportions of stunting (19 and 20 percent, respectively). The mother's level of education generally has an inverse relationship with stunting levels. For example, children of mothers with at least some secondary education have the lowest stunting levels (22 percent), while children whose mothers have no education or only an incomplete primary education have the highest levels of stunting (40 percent to 49 percent). A similar inverse relationship is observed between the household wealth index and the stunting levels for children; that is, children in the lowest household wealth quintile record the highest stunting levels (48 percent) compared with children from the highest wealth quintile (26 percent).

Weight-for-height

Table 11.1 also shows the nutritional status of children under 5 years as measured by weight-for-height. Overall, 5 percent of children are wasted and 1 percent are severely wasted. Analysis of the indicator by age group shows that wasting is highest (11 percent) in children age 6-8 months and lowest (2 percent) in children age 36-47 months. Male children are more likely to be wasted (6 percent) than female children (4 percent). Wasting is not correlated with the length of the preceding birth interval. However, the data show substantial correlation between wasting and birth weight. Babies who are very small at birth are more likely to be wasted (10 percent) than those with average or large sizes (5 percent). The mother's nutritional status has an inverse relationship with wasting levels. The data show that children born to mothers who are thin (BMI< 18.5) are three times more likely to be wasted than those born to mothers who are overweight/obese (BMI ≥ 25). The difference in the wasting levels between Tanzania Mainland and Zanzibar is substantial (5 percent and 12 percent, respectively). In Mainland Tanzania, Arusha has the highest proportion of wasted children (10 percent), while Mbeya has the lowest (1 percent).

Overweight and obesity affect only a small proportion of children in Tanzania. Overall, 5 percent of children below age 5 years are overweight or obese (weight-for-height more than +2 SD). Overweight/obesity among children does not show a linear correlation with age but increases with increasing BMI of the mother. For example, children born to mothers who are overweight or obese (BMI 25 or more) are two times more likely to be overweight/obese than those born to mothers with a BMI less than 18.5. There are no substantial differences between male and female children or between

urban and rural children. Variation by region is minimal. Overweight and obesity do not correlate with the mothers' education level or wealth quintile.

Weight-for-age

As shown in Table 11.1, 16 percent of children under age 5 are underweight (have low weight-for-age), and 4 percent are severely underweight. The proportion of underweight children is highest (21 percent) in the age groups 18 to 23 months and lowest (9 percent) among those under 6 months. Male children (17 percent) are slightly more likely to be underweight than female children (14 percent). The data show a strong correlation between wasting and birth weight. Babies with very small and small sizes at birth as perceived by their mothers are much more likely to also be underweight later in life (40 percent and 26 percent) than those with average or large perceived sizes (15 percent). Children born to mothers who are thin (BMI< 18.5) are three times more likely to be underweight (28 percent) than children born to mothers who are overweight/obese (9 percent).

Rural children are more likely to be underweight (17 percent) than urban children (11 percent). Children living in Zanzibar are more likely to be underweight (20 percent) than those in the Mainland (16 percent). In Mainland Tanzania, Arusha has the highest proportion of underweight children (28 percent), while Mbeya has the lowest proportion (10 percent). The mother's wealth status negatively correlates with the likelihood that a child is underweight. Children born to mothers who are in the lowest wealth quintile are twice as likely (22 percent) to be underweight as children born to mothers in the highest wealth quintile (9 percent).

Table 11.1 Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Tanzania 2010

	Height-for-age			Weight-for-height				Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[1]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months												
<6	7.7	18.3	-0.7	2.2	6.4	15.1	0.3	2.3	8.7	2.1	-0.4	747
6-8	7.0	20.6	-0.9	3.7	10.9	7.0	-0.1	5.1	13.3	1.5	-0.7	365
9-11	8.1	28.1	-1.3	2.0	8.6	9.7	-0.1	4.0	16.8	1.4	-0.8	392
12-17	17.2	43.2	-1.6	2.1	7.0	4.1	-0.1	3.7	16.0	0.9	-0.8	778
18-23	24.8	55.0	-2.1	0.8	7.1	5.0	-0.0	5.7	20.5	1.2	-1.0	754
24-35	21.3	53.0	-2.0	0.9	3.6	3.8	0.1	3.2	16.0	0.4	-1.0	1,434
36-47	18.6	47.7	-1.9	0.6	2.1	2.8	0.0	3.5	16.0	0.1	-1.1	1,571
48-59	13.9	38.9	-1.8	0.7	2.9	2.3	-0.1	3.9	16.8	0.0	-1.2	1,451
Sex												
Male	18.7	45.6	-1.8	1.7	5.6	5.5	0.0	4.2	17.3	0.8	-1.0	3,709
Female	14.4	38.5	-1.6	0.8	4.0	4.6	0.0	3.3	14.3	0.5	-0.9	3,782
Birth interval in months[2]												
First birth[3]	13.6	39.7	-1.6	1.7	4.5	4.7	0.0	3.4	12.9	0.5	-0.9	1,309
<24	19.4	45.4	-1.8	1.1	5.2	5.5	0.1	4.2	17.8	0.4	-1.0	829
24-47	17.3	43.6	-1.7	1.3	4.8	5.4	0.0	4.0	16.1	0.7	-1.0	3,260
48+	13.4	35.8	-1.5	1.3	5.0	4.6	-0.1	3.2	16.2	1.0	-0.9	1,298
Size at birth[2]												
Very small	30.2	61.5	-2.3	3.3	9.6	3.7	-0.5	14.2	39.8	0.0	-1.8	92
Small	22.8	49.5	-2.0	1.4	5.9	3.5	-0.3	8.0	25.5	0.2	-1.3	430
Average or larger	15.1	40.3	-1.6	1.3	4.7	5.2	0.1	3.2	14.5	0.7	-0.9	5,950
Mother's interview status												
Interviewed	16.1	41.6	-1.7	1.3	4.8	5.2	0.0	3.8	15.7	0.7	-0.9	6,696
Not interviewed but in household	20.4	43.1	-1.8	0.6	6.9	6.9	0.1	2.8	16.1	0.9	-0.9	158
Not interviewed, and not in the household[4]	20.0	46.0	-1.8	0.2	3.5	3.5	-0.0	3.8	16.7	0.5	-1.0	637
Mother's nutritional status[5]												
Thin (BMI<18.5)	23.2	49.8	-2.0	2.2	8.5	2.9	-0.4	7.6	27.6	0.2	-1.4	622
Normal (BMI 18.5-24.9)	16.5	42.5	-1.7	1.4	4.7	5.2	0.0	3.8	15.9	0.4	-1.0	4,933
Overweight/obese (BMI ≥25)	10.7	33.7	-1.4	0.8	3.2	6.3	0.3	1.3	8.6	2.0	-0.6	1,158

Continued....

Table 11.1—*Continued*

Background characteristic	Height-for-age: Percentage below -3 SD	Height-for-age: Percentage below -2 SD[1]	Height-for-age: Mean Z-score (SD)	Weight-for-height: Percentage below -3 SD	Weight-for-height: Percentage below -2 SD[1]	Weight-for-height: Percentage above +2 SD	Weight-for-height: Mean Z-score (SD)	Weight-for-age: Percentage below -3 SD	Weight-for-age: Percentage below -2 SD[1]	Weight-for-age: Percentage above +2 SD	Weight-for-age: Mean Z-score (SD)	Number of children
Residence												
Urban	11.6	31.5	-1.3	1.0	4.7	5.8	0.0	2.1	11.3	1.0	-0.7	1,451
Rural	17.7	44.5	-1.8	1.3	4.8	4.9	0.0	4.1	16.9	0.6	-1.0	6,040
Mainland/Zanzibar												
Mainland	16.6	42.3	-1.7	1.1	4.6	5.1	0.0	3.7	15.7	0.7	-0.9	7,292
Urban	11.7	32.1	-1.3	0.7	4.4	6.0	0.1	2.1	11.1	1.0	-0.7	1,383
Rural	17.8	44.7	-1.8	1.2	4.6	4.9	0.0	4.1	16.7	0.6	-1.0	5,909
Zanzibar	12.1	30.2	-1.3	4.5	12.0	3.7	-0.5	4.4	19.9	0.5	-1.1	199
Unguja	10.6	26.7	-1.1	4.8	12.7	2.3	-0.6	3.5	18.9	0.3	-1.0	119
Pemba	14.4	35.5	-1.6	4.0	10.9	5.6	-0.3	5.8	21.4	0.8	-1.1	80
Zone												
Western	13.7	41.8	-1.7	0.5	3.0	5.6	0.1	3.0	11.6	0.7	-0.9	1,584
Northern	18.1	42.6	-1.7	1.5	6.9	3.2	-0.2	5.9	22.4	0.3	-1.1	970
Central	23.4	49.5	-1.9	1.5	6.7	5.2	-0.2	6.7	23.8	0.4	-1.2	759
Southern Highlands	20.4	50.6	-1.9	0.8	2.6	8.6	0.4	2.4	13.3	0.9	-0.9	948
Lake	14.7	38.3	-1.6	1.5	4.5	4.7	0.1	3.6	13.2	0.6	-0.9	1,625
Eastern	12.2	31.3	-1.3	1.6	5.6	4.6	-0.1	1.9	13.3	1.2	-0.8	809
Southern	18.3	46.7	-1.9	0.7	3.8	2.8	-0.1	3.4	18.8	0.7	-1.1	596
Region												
Dodoma	28.4	56.0	-2.1	0.9	5.2	7.0	-0.1	7.6	26.8	0.5	-1.3	469
Arusha	17.7	43.9	-1.7	2.5	9.5	4.4	-0.3	7.6	28.2	0.4	-1.2	261
Kilimanjaro	6.1	27.6	-1.3	0.0	5.3	3.4	-0.1	2.2	11.0	0.4	-0.8	205
Tanga	21.9	49.4	-1.9	1.6	5.5	2.2	-0.2	6.2	24.1	0.0	-1.2	315
Morogoro	18.8	44.4	-1.8	2.3	5.3	5.1	0.1	3.1	16.0	0.5	-0.9	299
Pwani	10.9	31.7	-1.3	0.4	4.2	4.0	-0.2	2.2	11.6	1.0	-0.9	191
Dar es Salaam	6.9	18.8	-0.9	1.7	6.8	4.6	-0.2	0.5	11.8	1.8	-0.6	320
Lindi	20.5	53.5	-2.0	0.9	4.1	2.9	-0.2	6.0	24.3	0.0	-1.3	126
Mtwara	16.4	43.5	-1.8	0.4	2.6	1.8	-0.1	4.1	18.9	1.1	-1.2	226
Ruvuma	19.0	46.2	-1.9	0.7	4.8	3.8	0.1	1.5	15.8	0.7	-1.0	243
Iringa	22.3	51.9	-2.0	0.8	3.5	8.6	0.3	2.4	18.2	1.3	-0.9	291
Mbeya	19.2	49.8	-1.9	0.0	1.2	8.8	0.5	1.8	9.7	1.1	-0.8	404
Singida	15.2	39.0	-1.6	2.5	9.2	2.2	-0.3	5.2	18.9	0.3	-1.1	290
Tabora	14.0	33.0	-1.4	0.7	3.9	5.8	0.0	1.9	11.0	0.6	-0.8	418
Rukwa	20.4	50.4	-2.0	2.0	3.8	8.5	0.3	3.2	13.5	0.0	-0.9	253
Kigoma	17.0	48.2	-1.9	0.0	3.2	4.8	0.1	5.1	15.4	0.9	-1.0	388
Shinyanga	11.9	43.3	-1.7	0.6	2.5	5.9	0.2	2.5	10.1	0.7	-0.8	778
Kagera	16.3	43.6	-1.8	1.9	5.0	3.1	-0.0	5.4	17.1	0.3	-1.0	462
Mwanza	16.3	38.7	-1.7	1.3	3.9	5.0	0.2	3.1	11.4	0.6	-0.8	780
Mara	9.5	31.0	-1.4	1.6	5.0	5.9	0.1	2.6	11.9	1.0	-0.8	383
Manyara	25.4	45.8	-1.8	1.8	7.4	2.9	-0.3	7.3	24.2	0.4	-1.2	189
Unguja North	15.3	40.6	-1.5	5.0	16.4	3.8	-0.6	5.3	27.1	0.5	-1.3	33
Unguja South	9.2	29.1	-1.2	3.6	10.6	5.1	-0.3	4.7	17.1	1.2	-0.9	17
Town West	8.7	19.6	-0.9	5.1	11.5	1.0	-0.6	2.4	15.5	0.0	-0.9	70
Pemba North	15.3	39.3	-1.7	5.8	12.7	7.1	-0.3	7.7	23.9	0.6	-1.1	42
Pemba South	13.5	31.3	-1.5	2.0	8.9	3.9	-0.4	3.6	18.6	0.9	-1.1	38
Mother's education[6]												
No education	20.1	45.3	-1.8	1.5	6.1	4.6	-0.0	6.1	18.8	0.5	-1.1	1,767
Primary incomplete	19.9	48.8	-1.9	1.5	5.4	5.6	-0.0	4.6	18.7	0.5	-1.1	1,014
Primary complete	14.5	40.1	-1.6	1.1	4.2	5.4	0.1	2.6	14.3	0.6	-0.9	3,654
Secondary+	4.9	21.9	-1.0	2.2	4.6	5.3	0.1	1.4	7.2	2.8	-0.5	420
Wealth quintile												
Lowest	20.4	48.4	-1.9	1.7	6.6	5.1	-0.1	6.4	21.5	0.4	-1.2	1,591
Second	19.5	45.1	-1.8	0.9	3.8	4.7	0.0	4.8	17.9	0.4	-1.0	1,786
Middle	16.5	44.3	-1.8	1.3	4.4	5.3	0.1	2.9	14.4	0.5	-1.0	1,698
Fourth	13.7	39.2	-1.6	0.9	4.4	4.4	0.1	2.2	12.8	0.9	-0.9	1,417
Highest	8.9	26.3	-1.1	1.4	4.7	6.0	0.1	1.2	9.3	1.6	-0.6	1,000
Total	16.5	42.0	-1.7	1.2	4.8	5.0	0.0	3.8	15.8	0.7	-0.9	7,491

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used NCHS/CDC/WHO reference. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Total includes children with information missing on size at birth and mother's nutritional status

[1] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median

[2] Excludes children whose mothers were not interviewed

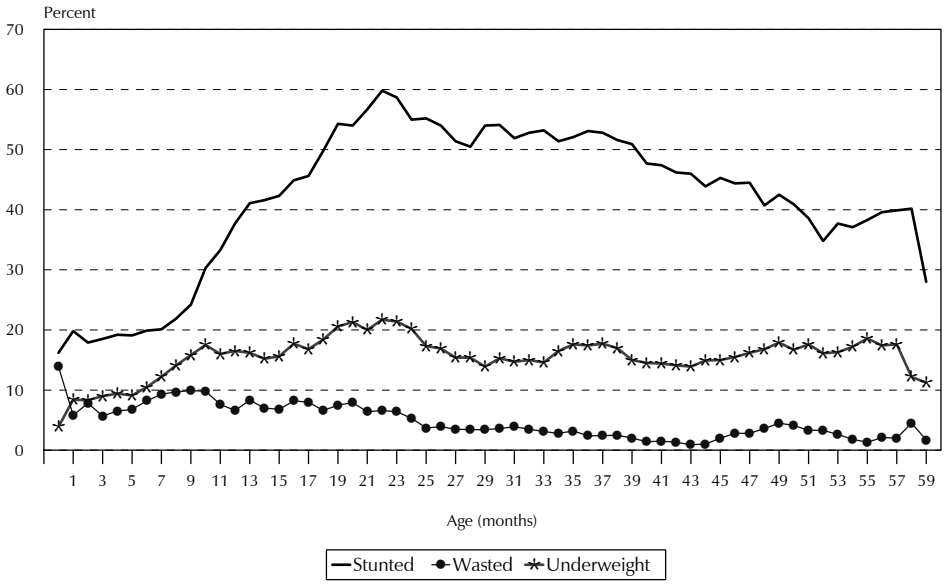
[3] First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

[4] Includes children whose mothers are deceased

[5] Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.10

[6] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

Figure 11.1 Nutritional Status of Children by Age



Note: *Stunting* reflects chronic malnutrition; *wasting* reflects acute malnutrition; *underweight* reflects chronic or acute malnutrition or a combination of both. Plotted values are smoothed by a five-month moving average.

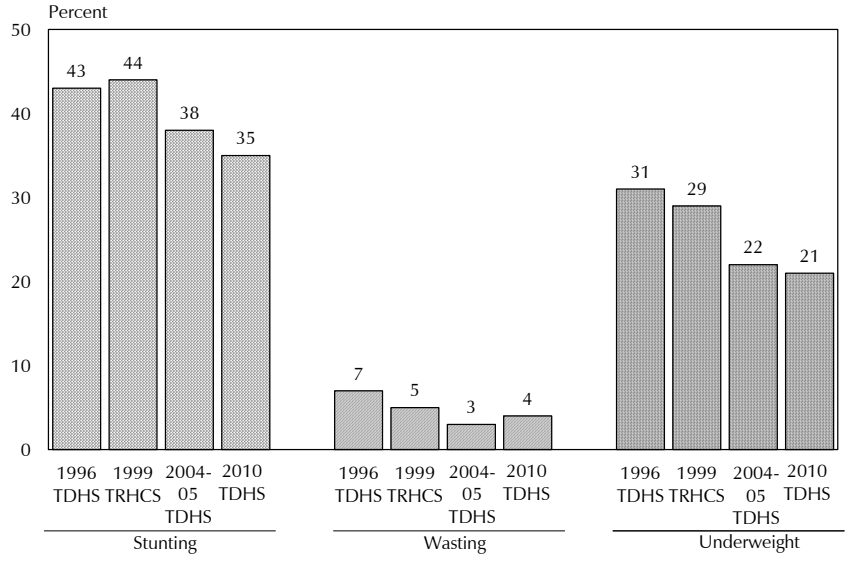
TDHS 2010

11.1.4 Trends in Children's Nutritional Status

Trends in nutritional status of children for the period 1999 to 2010 are shown in Figure 11.2. For the purpose of comparison to assess trends, the data for 2010 were recalculated using the NCHS/CDC/WHO reference population shown in Appendix Table C.7; these data thus will not be comparable to data in Table 11.1.

Figure 11.2 shows a downward trend in stunting and underweight. Stunting declined sharply (6 percentage points) between 1999 and 2004-2005 but only slightly (3 percentage points) between 2004-2005 and 2010 surveys. A similar pattern is observed for underweight, which dropped by 7 and 1 percentage points, respectively. The prevalence of wasting has remained basically the same in Tanzania for the past 10 years.

Figure 11.2 Trends in Nutritional Status of Children Under Age 5



Note: Based on NCHS/CDC/WHO standards

11.2 BREASTFEEDING AND COMPLEMENTARY FEEDING

Infant feeding affects both the mother and the child. Feeding practices affect the child's nutritional status, which in turn affects the risk of death. The duration and intensity of breastfeeding affect the mother's period of postpartum infertility, and hence the length of the birth interval, fertility levels, and iron status.

11.2.1 Initiation of Breastfeeding

Early initiation of breastfeeding is important for both the mother and the child. Early suckling stimulates the release of prolactin, which helps in the production of milk, and oxytocin, which is responsible for the ejection of milk. It also stimulates the contraction of the uterus after childbirth. The first liquid to come from the breast, known as colostrum, is produced in the first few days after delivery and provides natural immunity to the infant. It is recommended that children be fed colostrum immediately after birth and continue to be exclusively breastfed even if the regular breast milk has not yet let down.

The survey collected information on children who were ever breastfed, who were breastfed in the first hour and the first day after birth, and who were fed anything other than breast milk before breast milk was regularly given (also known as pre-lacteal feeding).

Table 11.2 shows that 97 percent of children are breastfed for some period of time, with slight differences by sex. Differentials by assistance at childbirth, background characteristics of the mother, urban or rural residence, or region are small. Infants in Kigoma region, however, are less likely to have been breastfed (86 percent) than infants in other regions (more than 90 percent).

Less than half of children (49 percent) are breastfed within one hour after birth—a notable decline when compared with the 2004-2005 TDHS (59 percent). However, 94 percent of the children are breastfed within one day after birth, which is comparable with the results of the 2004-2005 TDHS (92 percent). Initiation of breastfeeding in the first hour and in the first 24 hours after birth varies by background characteristics.

Breastfeeding within one hour after birth was more common in urban areas (62 percent) than in rural areas (45 percent). There is considerable variation in initiation of breastfeeding within one hour of birth by region. Less than three in ten children in Singida, Rukwa, Mwanza, and Mara were breastfed within one hour after birth. Initiation of breastfeeding within one hour is highest in Manyara and Arusha regions (93 and 83 percent, respectively). Children of mothers assisted at delivery by health professionals are more likely to initiate breastfeeding within one hour after birth (58 percent) than are those whose mothers were assisted by a traditional birth attendant (46 percent), other attendant (35 percent), or no one (23 percent). The likelihood that a child is breastfed in the first hour after birth increases substantially with the mother's educational status and wealth quintile.

The practice of giving prelacteal feeds is discouraged because it limits the frequency of suckling by the infant and exposes the baby to the risk of infection. The data show that 31 percent of infants are given prelacteal feeds. Prelacteal feeding is more common in rural areas (32 percent) than in urban areas (24 percent). It also varies by region. In Mara, 55 percent of children receive prelacteal feeding compared with only 2 percent of children in Iringa.

Children whose mothers were assisted during childbirth by a traditional birth attendant and non-health professional are most likely to receive prelacteal feeds (37 and 40 percent, respectively), while children whose mothers were assisted by a health professional are least likely (24 percent). The practice of prelacteal feeding decreases as wealth quintile increases. More than three in ten children of mothers in the lowest quintile receive prelacteal feeds compared with fewer than three in ten children of mothers in the highest wealth quintile.

Table 11.2 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and for the last children born in the five years preceding the survey ever breastfed, the percentage who started breastfeeding within one hour and within one day of birth and the percentage who received a prelacteal feed, by background characteristics, Tanzania 2010

Background characteristic	Breastfeeding among children born in the past five years		Among last-born children ever breastfed:			
	Percentage ever breastfed	Number of children born in past five years	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	96.1	4,097	48.1	93.7	30.4	2,675
Female	97.8	4,079	49.4	93.4	30.5	2,699
Residence						
Urban	97.0	1,660	61.7	93.7	24.4	1,243
Rural	96.9	6,516	44.8	93.5	32.3	4,131
Mainland/Zanzibar						
Mainland	96.9	7,955	48.7	93.5	30.5	5,236
Urban	97.0	1,583	61.9	93.7	24.0	1,193
Rural	96.9	6,373	44.8	93.4	32.4	4,042
Zanzibar	97.7	221	49.9	94.9	28.5	139
Unguja	96.9	131	54.0	92.8	31.8	87
Pemba	98.7	90	42.9	98.4	22.9	52
Zone						
Western	95.8	1,723	43.3	92.8	47.6	1,003
Northern	98.3	1,030	65.9	94.0	26.4	773
Central	98.3	761	38.5	98.7	27.2	498
Southern Highlands	98.6	1,128	44.3	92.0	20.0	750
Lake	95.2	1,710	32.4	92.3	33.5	984
Eastern	96.4	964	69.4	95.0	21.8	721
Southern	98.2	638	52.3	91.4	28.5	506
Region						
Dodoma	98.5	463	42.8	99.7	30.1	314
Arusha	98.8	299	83.4	94.8	11.6	231
Kilimanjaro	98.3	190	55.2	92.7	29.4	162
Tanga	97.4	341	42.0	91.3	45.9	248
Morogoro	96.5	356	66.3	97.5	21.9	254
Pwani	98.5	206	75.0	97.9	22.8	147
Dar es Salaam	95.2	402	69.1	91.6	21.2	320
Lindi	97.8	152	41.1	85.8	44.3	119
Mtwara	98.9	237	64.8	93.3	33.7	195
Ruvuma	97.8	249	46.5	93.0	13.6	192
Iringa	98.4	324	73.0	98.7	2.2	234
Mbeya	98.6	516	37.9	86.5	24.0	342
Singida	98.0	299	31.2	97.1	22.2	184
Tabora	98.3	454	55.3	92.8	51.6	284
Rukwa	99.0	289	18.2	93.6	36.3	174
Kigoma	86.3	433	44.9	92.0	40.0	234
Shinyanga	99.3	837	35.5	93.3	48.9	486
Kagera	94.4	512	51.7	94.4	20.3	303
Mwanza	97.7	792	24.5	92.5	32.4	468
Mara	91.7	407	22.3	88.8	54.5	214
Manyara	98.9	200	92.9	98.9	12.2	132
Unguja North	97.1	35	33.6	92.3	26.8	22
Unguja South	99.6	18	71.0	92.5	24.1	14
Town West	96.3	77	58.0	93.1	36.0	52
Pemba North	99.2	45	41.9	99.0	26.6	26
Pemba South	98.3	45	44.0	97.8	19.1	25
Mother's education						
No education	97.1	2,090	43.8	92.2	35.9	1,282
Primary incomplete	96.5	1,217	41.8	93.1	34.8	753
Primary complete	96.9	4,352	51.2	94.2	28.1	2,934
Secondary+	97.7	516	59.3	93.8	22.5	406

Continued...

Table 11.2—*Continued*

Background characteristic	Breastfeeding among children born in the past five years: Percentage ever breastfed	Number of children born in past five years	Among last-born children ever breastfed: Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Assistance at delivery						
Health professional[3]	97.1	4,135	58.2	95.0	23.5	2,935
Traditional birth attendant	97.4	1,201	45.8	93.3	37.2	751
Other	96.3	2,518	34.8	91.3	39.6	1,503
No one	97.1	279	23.1	90.7	41.1	174
Place of delivery						
Health facility	97.0	4,100	58.0	94.9	23.7	2,910
At home	96.9	3,935	38.1	92.0	38.9	2,394
Other	92.0	100	31.7	95.7	26.0	66
Wealth quintile						
Lowest	96.6	1,728	42.4	93.8	37.3	1,054
Second	98.3	1,929	42.8	93.2	32.9	1,198
Middle	95.9	1,836	46.2	93.7	31.6	1,138
Fourth	96.8	1,526	53.2	93.2	25.4	1,085
Highest	97.0	1,157	62.0	93.8	23.8	901
Total	96.9	8,176	48.7	93.5	30.5	5,375

Note: Table is based on births in the past five years whether the children are living or dead at the time of interview.
[1] Includes children who started breastfeeding within one hour after birth
[2] Children given something other than breast milk during the first three days of life
[3] Doctor/AMO, clinical officer, assistant clinical officer, nurse/midwife, and MCH aide

11.2.2 Breastfeeding Status by Age

UNICEF and WHO recommend that children be exclusively breastfed (no other liquid, solid food, or plain water) during the first six months of life (World Health Assembly, 2001). Introducing breast milk substitutes to infants before 6 months can contribute to breastfeeding failure. Substitutes, such as formula, other kinds of milk, and porridge, are often watered down and provide too few calories. Furthermore, possible contamination of these substitutes exposes the infant to the risk of illness. After six months, a child requires adequate complementary foods for normal growth. Lack of appropriate complementation may lead to malnutrition and frequent illnesses, which may lead to death. However, even with complementation the child should continue to be breastfed for two years or more.

Table 11.3 shows breastfeeding status by age. In Tanzania, exclusive breastfeeding for the first six months is not widely practised. The data show that only 50 percent of infants under 6 months are exclusively breastfed. This is an improvement compared with the prevalence shown by the 2004-05 TDHS, which was 41 percent. Eighty-one percent of infants under 2 months receive breast milk only, compared with 51 percent of infants age 2-3 months, or 23 percent among those age 4-5 months.

In Tanzania, complementary feeding starts early. Eleven percent of children below 2 months of age, 33 percent of children age 2-3 months, and 64 percent of children age 4-5 months are given complementary foods. Although many children receive complementary foods too early, others receive them too late. All children age 6-9 months should receive complementary foods, but Table 11.3 and Figure 11.3 show that 7 percent of children in this age group did not receive complementary foods the day or night preceding the survey.

Table 11.3 Breastfeeding status by age

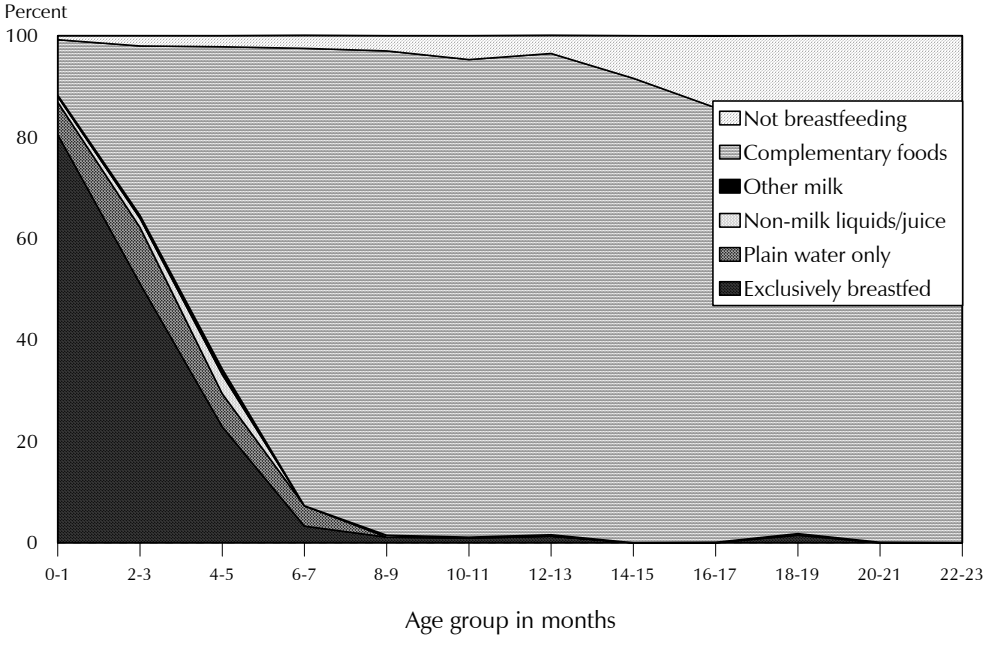
Percent distribution of youngest children under three years who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under three years using a bottle with a nipple, according to age in months, Tanzania 2010

Age in months	Not breast-feeding	Breastfeeding and consuming: Exclusively breastfed	Plain water only	Non-milk liquids/ juice	Other milk	Comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest child under three years	Percentage using a bottle with a nipple[1]	Number of children
0-1	0.8	80.5	6.4	1.1	0.3	10.9	100.0	99.2	245	1.5	245
2-3	2.0	51.1	11.1	1.8	0.6	33.4	100.0	98.0	299	7.4	305
4-5	2.2	22.9	6.5	3.8	1.1	63.5	100.0	97.8	293	5.5	293
6-8	3.3	2.3	2.6	0.2	0.0	91.6	100.0	96.7	387	5.8	391
9-11	3.7	1.2	0.1	0.0	0.0	95.0	100.0	96.3	408	5.5	410
12-17	8.6	0.4	0.0	0.1	0.0	90.8	100.0	91.4	773	3.2	802
18-23	39.5	0.6	0.2	0.0	0.0	59.7	100.0	60.5	714	1.6	774
24-35	89.9	5.5	0.0	0.0	0.0	4.6	100.0	10.1	995	0.4	1,450
0-3	1.5	64.3	9.0	1.4	0.5	23.3	100.0	98.5	544	4.8	550
0-5	1.7	49.8	8.1	2.3	0.7	37.3	100.0	98.3	837	5.0	843
6-9	2.8	2.2	2.0	0.2	0.0	92.8	100.0	97.2	495	6.3	499
12-15	6.0	0.6	0.0	0.1	0.0	93.3	100.0	94.0	524	4.0	538
12-23	23.5	0.5	0.1	0.1	0.0	75.9	100.0	76.5	1,487	2.4	1,576
20-23	49.0	0.0	0.0	0.0	0.0	50.9	100.0	51.0	420	1.2	468

Note: Breastfeeding status refers to a '24-hour' period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and non-milk liquids and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

[1] Based on all children under three years

Figure 11.3 Infant Feeding Practices by Age



TDHS 2010

The regulations regarding breast milk substitutes in Tanzania discourage the use of bottles with nipples. The use of a bottle with a nipple, regardless of the contents (breast milk, formula, or any other liquid), requires hygienic handling to avoid contamination that may cause infection to the infant. The survey data show that 5 percent of infants under 6 months are fed with a bottle with a nipple.

11.2.3 Duration and Frequency of Breastfeeding

Table 11.4 provides information on median duration of breastfeeding among children born in the three years preceding the survey and also on the frequency of breastfeeding for children under age 6 months. The median duration of any breastfeeding in Tanzania is 21 months. This duration does not change much by the child's sex, or the mother's educational attainment, household wealth, or residence. The median duration of exclusive breastfeeding at the national level is 2.4 months. This value is higher than the 1.8 months reported in the 2004-05 TDHS. The differences in the median duration of exclusive breastfeeding by background characteristics are small.

Table 11.4 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, percentage of breastfeeding children under 6 months living with the mother who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by background characteristics, Tanzania 2010

	Median duration (months) of breastfeeding among children born in the past three years[1]			Frequency of breastfeeding among children under age 6 months[2]			
Background characteristic	Any breast-feeding	Exclusive breast-feeding	Predomi-nant breast-feeding[3]	Percentage breastfed 6+ times in past 24 hours	Mean number of day feeds	Mean number of night feeds	Number of children
Sex							
Male	20.7	2.3	3.2	97.7	7.9	6.2	420
Female	21.0	2.4	3.2	97.5	7.5	6.1	398
Residence							
Urban	19.9	1.9	2.4	97.6	8.1	6.9	160
Rural	21.0	2.5	3.4	97.6	7.6	5.9	658
Mainland/Zanzibar							
Mainland	20.9	2.4	3.2	97.6	7.7	6.1	798
Urban	19.9	2.0	2.4	97.7	8.1	6.9	154
Rural	21.1	2.6	3.4	97.5	7.6	5.9	644
Zanzibar	20.6	0.5	2.1	97.9	8.9	7.4	20
Unguja	20.5	0.6	2.0	98.5	9.5	8.0	12
Pemba	20.7	0.4	2.3	96.8	8.0	6.4	8
Zone							
Western	19.9	2.6	3.6	98.2	7.7	5.1	206
Northern	23.1	2.4	3.0	94.8	8.6	6.9	93
Central	20.9	3.4	4.3	99.7	7.2	6.5	83
Southern Highlands	20.5	1.9	2.4	95.6	7.0	5.7	113
Lake	18.8	3.3	3.9	98.5	6.7	5.9	166
Eastern	21.6	1.0	1.7	96.0	7.8	6.9	77
Southern	22.4	2.3	2.5	100.0	10.8	8.0	60
Zanzibar	20.6	0.5	2.1	97.9	8.9	7.4	20
Mother's education							
No education	21.3	2.5	3.2	99.2	8.3	6.4	217
Primary incomplete	19.9	2.4	3.5	98.0	7.2	5.5	129
Primary complete	21.0	2.4	3.2	96.7	7.5	6.1	424
Secondary+	20.4	2.3	2.6	96.9	8.4	7.4	48
Wealth quintile							
Lowest	21.9	3.2	3.8	99.3	8.0	6.3	153
Second	20.6	2.7	3.5	98.1	7.6	5.7	213
Middle	20.9	2.4	3.2	97.5	7.8	6.0	189
Fourth	20.6	2.1	2.8	94.9	7.5	6.5	166
Highest	19.9	1.6	2.2	98.4	7.8	6.4	96
Total	20.9	2.4	3.2	97.6	7.7	6.1	818
Mean for all children	20.4	4.1	4.7	na	na	na	na

Note: Median and mean durations are based on current status. Includes children living and deceased at the time of the survey.
na = Not applicable
[1] It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding
[2] Excludes children without a valid answer on the number of times breastfed
[3] Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

Table 11.4 also shows the median duration of predominant breastfeeding, which is defined as exclusive breastfeeding, or breastfeeding in combination with plain water, water-based liquids, or juices. The median length of predominant breastfeeding is 3.2 months. There is little variation by background characteristics.

It is important for an infant to breastfeed frequently as this improves milk production. Almost all children under age 6 months (98 percent) were breastfed at least six times during the 24 hours preceding the survey, which meets the WHO/UNICEF recommendations for optimal breastfeeding. The mean number of day-time feeds is 7.7, while the mean number of night-time feeds is 6.1. These results are comparable to those of the 2004-2005 TDHS, which were 7.4 and 5.7 percent, respectively.

11.2.4 Types of Complementary Foods

Complementary foods (solid or semisolid foods fed to infants in addition to breast milk) are recommended to be started at age 6 months. This is because, at this age, breast milk alone is no longer sufficient to maintain the child's optimal growth. Children are fed small quantities of solid and semisolid foods while continuing to breastfeed up to 2 years or beyond. The amounts of feeds are increased gradually from 6 to 23 months, which is the period of transition to eating the family diet. This period is characterised by an increase in the prevalence of malnutrition because of poor feeding practices and infections. The 2010 TDHS collected data on foods eaten in the 24 hours preceding the survey by breastfeeding and non-breastfeeding children under age 3.

Data in Table 11.5 show that, contrary to the recommendations, the practice of feeding children with any solid or semi-solid foods starts early in life. Eleven percent of breastfeeding children in the first two months receive some kind of solid or semi-solid foods, and by 2-3 months and 4-5 months, the proportions are 34 and 65 percent, respectively.

Table 11.5 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under three years of age who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Tanzania 2010

	Liquids			Solid or semi-solid foods										
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vege-tables rich in vitamin A[4]	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry, and eggs	Milk, cheese, yogurt, other milk product[5]	Any solid or semi-solid food	Sugary foods	Number of children
BREASTFEEDING CHILDREN														
0-1	0.6	3.8	2.1	0.6	7.0	0.5	0.0	0.0	0.5	0.0	3.2	11.0	0.0	243
2-3	0.0	16.0	10.0	0.0	20.6	1.3	0.0	0.1	0.2	0.6	15.6	34.1	0.1	293
4-5	2.3	15.4	24.6	1.5	60.3	11.9	2.2	5.0	5.5	5.7	16.0	64.9	1.6	286
6-8	0.9	24.7	34.5	4.5	86.2	47.5	14.5	22.0	28.3	23.3	22.1	94.7	7.9	374
9-11	0.1	30.4	45.8	5.1	89.9	64.7	16.9	24.8	36.9	33.8	31.1	98.6	8.9	393
12-17	0.3	32.1	47.1	2.6	94.3	73.9	19.5	28.8	42.9	41.7	30.1	99.4	15.2	706
18-23	0.4	25.4	44.1	3.0	94.0	73.6	18.4	32.7	44.7	44.6	22.4	98.7	14.6	432
24-35	0.0	21.2	22.3	0.0	45.8	34.0	4.9	10.2	13.4	9.4	21.8	45.9	4.6	100
6-23	0.4	28.8	43.7	3.6	91.7	66.8	17.7	27.5	39.2	37.1	27.0	98.1	12.3	1,905
Total	0.6	23.7	33.9	2.6	72.3	47.6	12.3	19.4	27.5	25.9	22.5	78.8	8.6	2,828
NON-BREASTFEEDING CHILDREN														
12-17	2.0	27.8	35.1	7.5	92.8	61.5	16.5	49.0	33.5	41.8	33.1	97.7	11.6	66
18-23	0.7	40.6	52.5	5.0	92.8	72.8	20.1	39.6	44.8	46.3	37.6	98.9	15.6	282
24-35	0.0	6.3	11.4	0.4	22.5	18.0	4.5	9.1	11.4	10.4	5.8	23.3	2.9	895
6-23	2.4	36.5	49.3	5.4	91.9	68.7	18.7	38.8	42.1	44.8	35.5	97.4	14.0	377
Total	0.7	15.1	22.4	1.9	42.7	32.7	8.6	17.8	20.3	20.4	14.4	44.8	6.1	1,286

Note: Breastfeeding status and food consumed refer to a '24-hour' period (yesterday and last night
[1] Other milk includes animal milk
[2] Doesn't include plain water
[3] Includes fortified baby food
[4] Includes meat, liver, fish, poultry, eggs, pumpkin, carrots, yellow/orange sweet potatoes, ripe mango or papaya, passion fruit, any dark green leafy vegetables (spinach/amaranth/cassava), and other locally grown yellow/orange-colour fruits or vegetables
[5] Includes tinned, powdered milk, fresh animal milk, yogurt, and cheese

Overall, 98 percent of breastfed children age 6-23 months received solid or semi-solid complementary foods in addition to the breast milk. These include foods made from grains (92 percent) and vitamin A-rich fruits and vegetables (67 percent). The children are also fed protein-rich foods: legumes and nuts (39 percent) and meat, fish, poultry, and eggs (37 percent). Other foods are roots and tubers (28 percent) and cheese, yogurt, and other milk products (27 percent). Liquids other than breast milk fed to this age include milk (29 percent) and other liquids (44 percent). Use of infant formula and fortified baby foods is minimal.

Table 11.5 also presents data on types of complementary foods consumed by non-breast-feeding children age 6-23 months. Like the breastfeeding children, most of the non-breastfeeding children (97 percent) are fed solid or semi-solid foods. Consumption of foods made from grains (92 percent) and vitamin A-rich fruits and vegetables (69 percent) also is comparable with consumption of the breastfeeding children. With regard to the other foods, however, consumption is higher than in the breastfeeding children, which is plausible, since non-breastfeeding children tend to be older than breastfeeding children.

11.2.5 Infant and Young Child Feeding (IYCF) Practices

Table 11.6 presents the frequency of consumption of complementary foods by children less than age 2 in the day or night preceding the interview. This takes into account the percentages of children for whom feeding practices meet the minimum standards with respect to food diversity (i.e., the number of food groups consumed) and feeding frequency (i.e., the number of times the child is fed), as well the consumption of breast milk or other milks or milk products. Breastfed children are considered to be fed within the minimum standards if they consume at least three food groups and food other than breast milk at least twice per day in the case of infants 6-8 months and at least three times per day in the case of children 9-23 months. Non-breastfed children are considered to be fed in accordance with the minimum standards if they consume milk or milk products, are fed four food groups (including milk products), and are fed at least four times per day.

According to the results presented in Table 11.6, among breastfed children age 6-23 months, 61 percent were given foods from three or more food groups in the 24 hours preceding the survey, and 39 percent were fed the minimum number of times in the previous 24 hours. The combined percentage of children who fall in both categories (given foods from three or more groups and fed the minimum times per day) is 24 percent (Figure 11.4). The proportion of breastfeeding children age 6-23 months who are given a variety of foods at least three times daily increases with the mother's education and wealth.

Less than half of non-breastfed children age 6-23 months (41 percent) are given milk or milk products, 32 percent are given food from at least four food groups, and 11 percent are fed four or more times per day. Hence, only 6 percent of non-breastfeeding children are fed in accordance with all three IYCF practices.

Ninety percent of children age 6-23 months (both breastfed and non-breastfed) are given either breast milk or other milk products. Slightly more than half (56 percent) are given foods from the appropriate number of food groups, and 34 percent are fed an appropriate number of times per day. Overall, only 2 out of 10 Tanzanian children are fed in accordance with the recommended IYCF practices. The likelihood of children being fed appropriately increases also with mother's education and wealth quintile, but the differences are small.

Table 11.6 Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based upon number of food groups and times they are fed during the day or night preceding the survey, by breastfeeding status and background characteristics, Tanzania 2010

	Among breastfed children 6-23 months, percentage fed:				Among non-breastfed children 6-23 months, percentage fed:					Among all children 6-23 months, percentage fed:				
Background characteristic	3+ food groups[1]	Minimum times or more[2]	Both 3+ food groups and minimum times or more	Number of breastfed children 6-23 months	Milk or milk products[3]	4+ food groups	4+ times or more	With 3 IYCF practices[4]	Number of non-breastfed children 6-23 months	Breast milk or milk products[3]	3+ or 4+ food groups[5]	Minimum times or more[6]	With all 3 IYCF practices	Number of all children 6-23 months
Age														
6-8	41.6	64.6	27.7	374	*	*	*	*	13	97.9	40.3	62.5	26.8	387
9-11	57.7	24.9	18.0	393	*	*	*	*	15	97.6	56.9	24.2	17.5	408
12-17	69.5	32.5	23.1	706	34.4	21.8	9.6	3.3	66	94.4	65.4	30.5	21.4	773
18-23	68.0	38.5	29.1	432	42.6	35.5	12.3	6.9	282	77.3	55.1	28.2	20.4	714
Sex														
Male	61.6	42.5	26.5	923	37.8	31.2	10.3	5.6	193	89.3	56.4	37.0	22.9	1,115
Female	60.9	34.9	22.3	983	43.8	32.8	12.1	6.4	184	91.1	56.4	31.3	19.8	1,167
Residence														
Urban	68.1	42.4	27.1	386	45.1	49.6	13.4	9.7	83	90.2	64.8	37.3	24.0	469
Rural	59.5	37.6	23.6	1,519	39.5	27.0	10.6	5.0	293	90.2	54.2	33.2	20.6	1,813
Mainland/Zanzibar														
Mainland	61.7	38.4	24.3	1,852	41.1	32.1	11.2	6.2	366	90.3	56.8	33.9	21.3	2,218
Urban	69.0	41.8	27.0	366	45.3	50.2	13.6	10.2	80	90.2	65.7	36.7	24.0	446
Rural	59.9	37.6	23.7	1,486	39.9	27.1	10.6	5.1	286	90.3	54.6	33.2	20.7	1,773
Zanzibar	43.8	45.3	23.5	53	28.3	26.3	10.9	0.6	11	88.0	40.9	39.5	19.6	64
Unguja	45.5	48.7	25.1	33	(31.3)	(35.8)	(16.5)	(1.1)	6	90.1	44.1	44.0	21.7	39
Pemba	41.1	39.6	20.6	20	(25.0)	(15.8)	(4.7)	(0.0)	5	84.7	35.9	32.5	16.4	25
Zone														
Western	59.7	31.3	18.8	398	41.8	25.2	5.2	1.4	96	88.7	53.0	26.2	15.4	494
Northern	67.5	52.5	35.8	256	(75.8)	(63.7)	(38.8)	31.7	28	97.6	67.2	51.2	35.4	284
Central	49.8	25.7	8.7	187	(28.3)	(26.3)	(10.9)	(0.6)	27	94.0	45.6	23.5	7.6	214
Southern Highlands	69.6	30.8	24.4	250	(47.1)	(54.5)	(11.6)	(8.6)	50	91.2	67.1	27.6	21.7	300
Lake	56.2	42.1	25.0	363	31.5	24.1	11.9	3.9	100	85.2	49.3	35.6	20.4	463
Eastern	68.4	42.4	28.1	240	(36.4)	(32.8)	(6.2)	(6.2)	52	88.7	62.1	35.9	24.2	292
Southern	61.6	45.9	31.1	158	*	*	*	*	13	92.8	58.5	43.5	29.3	172
Mother's education														
No education	51.7	34.6	17.5	485	37.1	21.2	3.4	1.0	90	90.1	46.9	29.7	14.9	575
Primary incomplete	52.8	32.2	17.7	265	32.6	26.7	12.1	3.9	65	86.8	47.7	28.3	15.0	329
Primary complete	66.1	40.7	27.8	1,009	45.5	34.9	15.9	10.2	188	91.4	61.2	36.8	25.0	1,198
Secondary+	74.2	48.9	35.1	147	(39.7)	(54.9)	(4.0)	(0.2)	33	88.8	70.6	40.6	28.6	180
Wealth quintile														
Lowest	54.1	33.9	19.5	443	(39.0)	(8.9)	(3.8)	(0.0)	57	93.1	49.0	30.5	17.3	500
Second	57.6	36.7	19.7	452	33.1	22.4	10.0	4.3	87	89.2	52.0	32.4	17.2	538
Middle	61.6	40.7	27.7	387	35.9	31.4	11.1	3.6	93	87.6	55.7	34.9	23.0	480
Fourth	62.0	37.1	23.5	346	46.6	37.2	12.0	8.8	66	91.5	58.0	33.1	21.1	412
Highest	77.0	48.1	36.0	277	51.7	56.9	17.6	13.1	75	89.7	72.7	41.6	31.1	351
Total	61.2	38.6	24.3	1,905	40.7	32.0	11.2	6.0	377	90.2	56.4	34.1	21.3	2,282

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Food groups: (a) infant formula, milk other than breast milk, cheese or yogurt, or other milk products; (b) foods made from grains, roots, and tubers, including porridge, fortified baby food from grains; (c) vitamin A-rich fruits and vegetables; (d) other fruits and vegetables; (e) eggs; (f) meat, poultry, fish, and shellfish (and organ meats); (g.) legumes and nuts; (h) foods made with oil, fat, butter

[2] At least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months

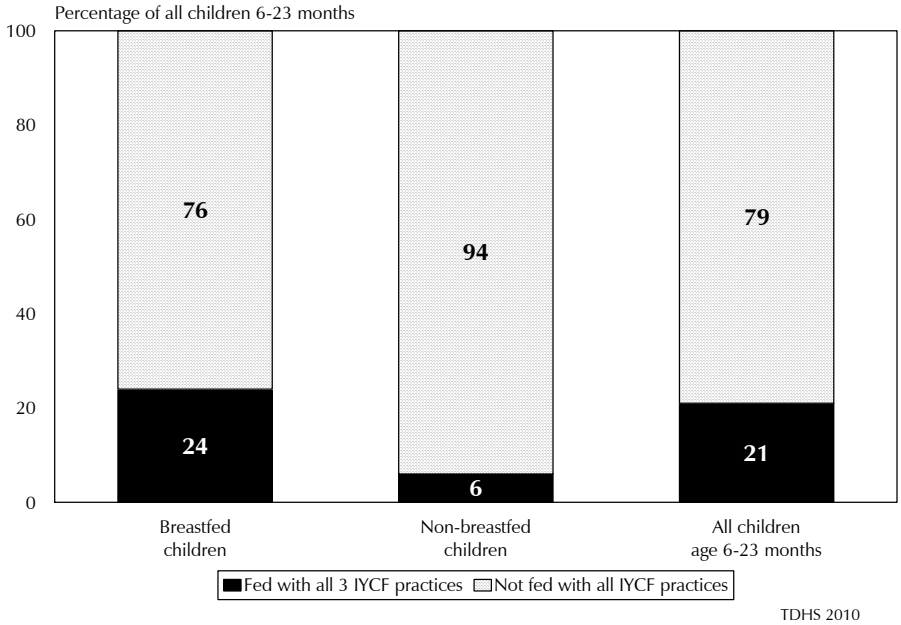
[3] Includes commercial infant formula; fresh, tinned, and powdered animal milk; and cheese, yogurt, and other milk products

[4] Non-breastfed children age 6-23 months are considered to be fed with a minimum standard of three Infant and Young Child Feeding practices if they receive other milk or milk products and are fed at least the minimum number of times per day with at least the minimum number of food groups.

[5] 3+ food groups for breastfed children and 4+ food groups for non-breastfed children

[6] Fed solid or semi-solid food at least twice a day for infants 6-8 months, 3+ times for other breastfed children, and 4+ times for non-breastfed children

Figure 11.4 Infant and Young Child Feeding (IYCF) Practices



11.3 Prevalence of Anaemia in Children

Anaemia, characterised by a low level of haemoglobin in the blood, is a major health problem in Tanzania, especially among young children and pregnant women. Anaemia may be the underlying cause of maternal mortality, spontaneous abortions, premature births, and low birth weight. The most common cause of anaemia is nutritional anaemia resulting from inadequate dietary intake of nutrients necessary for synthesis of haemoglobin, such as iron, folate, vitamin B_{12}, or other nutrients. Anaemia also results from sickle cell disease, malaria, or parasitic infections. A number of interventions have been put in place to address anaemia in children. These include promotion of use of insecticide-treated mosquito nets (ITNs) by children under age 5 and deworming of children age 2 to 5 years every six months.

The 2010 TDHS used several methods to determine anaemia levels among women and children under age 5. One was the HemoCue rapid testing methodology. Another was using dried blood spots that were tested in a laboratory for transferrin receptor. The results of the latter testing will be presented in a separate report. Table 11.7 presents anaemia levels among children 6 months to 5 years of age, according to selected background characteristics. Of the 7,119 eligible children (age 6-59 months), haemoglobin was measured in 6,689 children (94 percent). Unadjusted (i.e., measured) values of haemoglobin are obtained using the HemoCue instrument. Given that haemoglobin requirements differ substantially depending on altitude, an adjustment to sea-level equivalents is made before classifying children by level of anaemia.

Table 11.7 indicates that six in ten children in Tanzania have any anaemia; 27 percent have mild, 29 percent have moderate, and 2 percent have severe anaemia. However, compared with the values of the 2004-05 TDHS, the prevalence of anaemia has dropped by 18 percent in the past five years, from 72 percent to 59 percent (Figure 11.5). The most noticeable drop has been in the prevalence of moderate anaemia by about 14 percentage points (29 percent in 2010 compared with 43 percent in 2004-2005).

Children age 9-11 months are the most affected by anaemia (81 percent) compared with the other children. Severe anaemia, which has a serious impact on the health of an individual, is also highest among children age 9-11 months (6 percent). Male children and children residing in urban areas are slightly more likely to be anaemic.

Table 11.7 Prevalence of anaemia in children

Percentage of children age 6-59 months classified as having anaemia, by background characteristics, Tanzania 2010

Background characteristic	Anaemia status by haemoglobin level: Mild (10.0-10.9 g/dl)	Moderate (7.0-9.9 g/dl)	Severe (below 7.0 g/dl)	Any anaemia (11.0 g/dl)	Number of children
Age in months					
6-8	36.1	40.1	1.7	77.9	334
9-11	31.3	44.2	5.5	81.1	388
12-17	25.9	43.1	3.1	72.0	770
18-23	26.5	40.1	2.1	68.7	758
24-35	30.3	28.3	1.2	59.8	1,431
36-47	25.5	25.0	1.3	51.8	1,578
48-59	24.4	15.7	1.5	41.7	1,431
Sex					
Male	27.0	32.0	1.8	60.9	3,294
Female	27.6	26.8	1.9	56.4	3,396
Mother's interview status					
Interviewed	27.6	30.2	2.0	59.8	5,889
Not interviewed, but in household	24.3	23.9	0.8	48.9	150
Not interviewed, and not in the household[1]	25.3	23.4	1.5	50.2	651
Residence					
Urban	28.6	30.5	1.9	60.9	1,247
Rural	27.0	29.1	1.9	58.1	5,442
Mainland/Zanzibar					
Mainland	27.2	29.2	1.9	58.3	6,508
Urban	28.0	30.6	1.9	60.6	1,185
Rural	27.0	28.9	1.9	57.8	5,323
Zanzibar	32.2	34.9	1.4	68.5	181
Unguja	32.7	33.8	1.4	67.9	109
Pemba	31.6	36.5	1.4	69.4	72
Zone					
Western	30.4	37.2	2.6	70.2	1,373
Northern	22.8	27.9	2.3	53.1	891
Central	27.6	17.7	1.1	46.4	677
Southern Highlands	28.3	19.8	0.5	48.6	859
Lake	24.2	29.1	1.9	55.2	1,462
Eastern	28.4	34.4	2.9	65.7	708
Southern	30.7	34.1	1.1	65.8	538
Region					
Dodoma	27.1	19.3	1.4	47.8	414
Arusha	20.6	38.3	4.1	63.1	233
Kilimanjaro	20.3	20.9	0.7	41.8	188
Tanga	25.5	25.3	2.2	53.0	288
Morogoro	26.6	27.0	5.5	59.2	272
Pwani	28.8	41.3	0.8	70.9	168
Dar es Salaam	29.9	37.5	1.6	69.1	269
Lindi	34.1	41.0	1.6	76.8	114
Mtwara	31.0	34.7	1.5	67.2	202
Ruvuma	28.5	29.9	0.4	58.9	222
Iringa	30.2	15.1	0.3	45.6	271
Mbeya	27.7	26.2	0.7	54.6	380
Singida	28.3	15.1	0.8	44.2	264
Tabora	31.6	34.3	2.9	68.9	369
Rukwa	27.0	14.3	0.3	41.7	208
Kigoma	32.4	26.6	3.4	62.3	326
Shinyanga	28.7	43.9	2.1	74.7	679
Kagera	22.6	25.6	1.1	49.2	416
Mwanza	25.8	34.2	2.8	62.8	697
Mara	23.0	23.0	1.2	47.1	349
Manyara	24.1	26.2	1.8	52.1	181
Unguja North	29.4	45.8	2.9	78.2	30
Unguja South	27.8	31.0	0.5	59.2	16
Town West	35.4	28.8	0.8	65.1	63
Pemba North	26.0	41.6	2.1	69.6	37
Pemba South	37.5	31.1	0.7	69.3	35

Continued ...

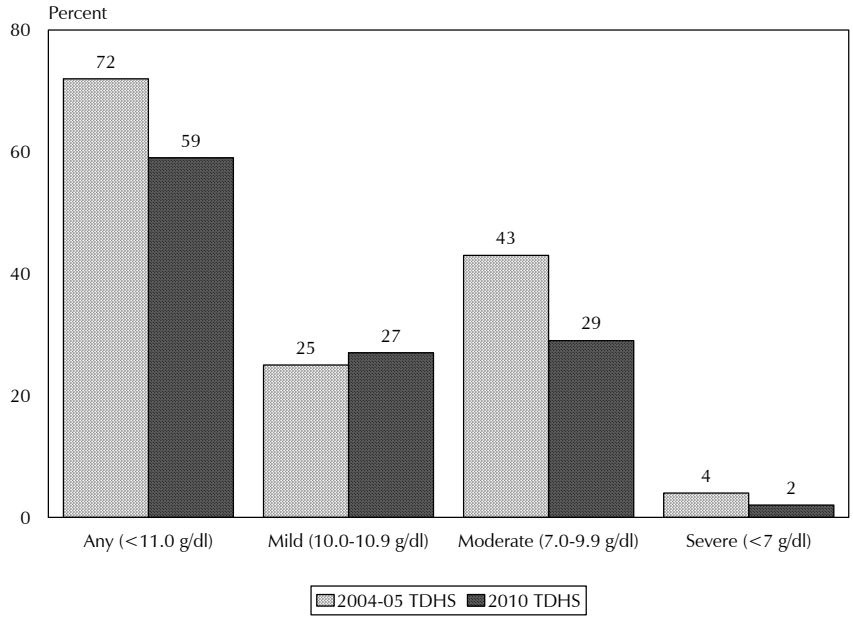
Table 11.7—*Continued*

Background characteristic	Anaemia status by haemoglobin level: Mild (10.0-10.9 g/dl)	Moderate (7.0-9.9 g/dl)	Severe (below 7.0 g/dl)	Any anaemia (11.0 g/dl)	Number of children
Mother's education[2]					
No education	30.0	31.2	2.2	63.4	576
Primary incomplete	31.0	29.0	2.1	62.1	604
Primary complete	29.4	30.0	1.6	61.0	434
Secondary+	28.3	33.9	1.8	64.0	147
Wealth quintile					
Lowest	27.2	30.6	3.1	60.9	1,453
Second	28.9	31.4	1.5	61.8	1,581
Middle	26.6	27.3	1.4	55.4	1,538
Fourth	26.9	26.7	1.7	55.3	1,243
Highest	26.6	31.1	1.7	59.4	876
Total	27.3	29.4	1.9	58.6	6,689

Note: Table is based on children who slept in the household the night before the interview. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using formulas in CDC, 1998. Haemoglobin is in grams per decilitre (g/dl)
[1] Includes children whose mothers are deceased
[2] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

Anaemia prevalence in children varies across residence. Children in Mainland Tanzania are less likely to be anaemic than children in Zanzibar (58 and 69 percent, respectively). In Mainland, anaemia prevalence ranges between 75 percent in Shinyanga and 42 percent in Kilimanjaro and Rukwa. Morogoro has the highest proportion of children with severe anaemia (6 percent). There seems to be no linear relationship between anaemia prevalence and mother's education and wealth quintile.

Figure 11.5 Trends in Anaemia Status among Children 6-59 Months



11.4 MICRONUTRIENT INTAKE AMONG CHILDREN

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Children can receive micronutrients from foods, food fortification, and direct supplementation. Table 11.8 presents measures relating to intake of several key micronutrients among children.

Vitamin A is an essential micronutrient for the immune system that plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage. VAD can also increase the severity of infections, such as measles and diarrhoeal diseases in children, and slow recovery from illness. Vitamin A is found in breast milk, other milks, liver, eggs, fish, butter, red palm oil, mangoes, papayas, carrots, pumpkins, and dark green leafy vegetables. The liver can store an adequate amount of the vitamin for four to six months. Periodic dosing (usually every six months) of vitamin A supplements is one method of ensuring that children at risk do not develop VAD. The 2010 TDHS collected information on the consumption of foods rich in vitamin A.

Table 11.8 shows that 62 percent of children age 6-35 months, consumed foods rich in vitamin A the day or night preceding the survey. As one would expect, the proportion of children consuming vitamin A-rich foods increases with age, from 53 percent at 6-8 months to 87 percent at 18-23 months, but consumption declines to 22 percent at 24-35 months. At the regional level, children in Mara (80 percent) are the most likely to consume vitamin A-rich foods, and those in Arusha region are the least likely (42 percent). The educational level of the mother does not correlate with the level of consumption of vitamin A-rich foods: the data show that 62 percent of children whose mothers have no education are fed with vitamin A-rich foods compared with 63 percent of children whose mothers have some secondary education.

Iron is essential for cognitive development. Low iron intake can also contribute to anaemia. Iron requirements are greatest at ages of 6-11 months, when growth is extremely rapid. The results of the 2010 TDHS (Table 11.8) show that consumption of iron rich foods in the 24 hours preceding the survey is highest in children age 18-23 months (45 percent). The consumption of iron-rich foods is higher in urban areas (38 percent) than in rural areas (28 percent). Children in Pemba North are most likely to consume iron-rich foods (71 percent) while those in Dodoma are the least likely (12 percent). The data also show that children whose mothers have a secondary education are two times more likely to consume iron-rich foods (48 percent) than those whose mothers have no education (24 percent).

The 2010 TDHS also collected data on vitamin A and iron supplementation for children under age 5. Table 11.8 shows that 61 percent of children age 6-59 months were given vitamin A supplements in the six months before the survey. The proportion of children receiving a vitamin A supplement increases with age from 40 percent at 6-8 months to 69 percent at 12-17 months and declines to 59 percent at 48-59 months. Children in urban areas are more likely to get vitamin A supplements (65 percent) than those in rural areas (60 percent). At the regional level, the proportion of children receiving vitamin A supplements is exceptionally low in Shinyanga and Tabora (12 and 28 percent, respectively), while Pemba North and Unguja South have the highest proportion of vitamin A supplementation (87 and 90 percent, respectively).

Survey data indicate that iron supplementation coverage is generally low. Only 1 percent of children ages 6-59 months was given iron supplements in the final seven days preceding the survey. It is, however, worth noting that Unguja South and Dar es Salaam have relatively high coverage (8 percent and 6 percent, respectively).

Certain types of intestinal parasites can cause anaemia. Periodic deworming for organisms like helminths and schistosomes (bilharzia) can improve children's micronutrient status. Table 11.8 shows that 50 percent of children age 6-59 months received deworming medication in the six months before the survey. The likelihood of receiving deworming medication increases with the child's age, urban residence, mother's education, and mother's wealth. Pemba North is the region with the highest proportion of children who receive deworming medication (83 percent), while Tabora and Shinyanga have the lowest proportions (14 and 15 percent, respectively).

Table 11.8 Micronutrient intake among children

Among the youngest children age 6-35 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, and among all children 6-59 months, the percentages who were given vitamin A supplements in the six months preceding the survey, who were given iron supplements in the past seven days, and who were given deworming medication in the six months preceding the survey, and among all children age 6-59 months who live in households that were tested for iodised salt, the percentage who live in households with adequately iodised salt, by background characteristics, Tanzania 2010

	Among youngest children age 6-35 months living with the mother:			Among all children age 6-59 months:				Among children age 6-59 months living in households tested for iodised salt:	
Background characteristic	Percentage who consumed foods rich in vitamin A in past 24 hours[1]	Percentage who consumed foods rich in iron in past 24 hours[2]	Number of children	Percentage given vitamin A supplements in past 6 months	Percentage given iron supplements in past 7 days	Percentage given deworming medication in past 6 months[3]	Number of children	Percentage living in households with adequately iodised salt[4]	Number of children
Age in months									
6-8	52.8	23.1	387	39.5	3.0	10.8	391	54.6	383
9-11	75.3	34.4	408	61.8	1.5	24.1	410	58.6	396
12-17	85.8	41.7	773	68.5	0.9	39.6	802	54.5	786
18-23	86.9	45.3	714	66.2	2.1	57.4	774	54.4	737
24-35	22.3	10.3	995	60.5	1.1	55.8	1,450	55.5	1,408
36-47	na	na	na	60.9	0.8	56.2	1,567	55.2	1,527
48-59	na	na	na	59.2	2.0	55.4	1,430	54.9	1,399
Sex									
Male	60.6	29.0	1,608	61.8	1.4	51.2	3,375	54.9	3,281
Female	62.4	30.6	1,669	59.8	1.5	48.0	3,449	55.5	3,353
Breastfeeding status									
Breastfeeding	75.9	35.7	2,006	62.1	1.6	37.8	2,043	54.6	1,982
Not breastfeeding	39.0	20.7	1,266	60.4	1.4	54.6	4,666	55.3	4,541
Residence									
Urban	60.5	37.7	705	65.4	2.8	55.8	1,367	80.1	1,328
Rural	61.8	27.7	2,572	59.6	1.1	48.0	5,457	49.0	5,306
Mainland/Zanzibar									
Mainland	61.5	29.2	3,191	60.3	1.4	49.0	6,638	55.5	6,454
Urban	60.1	36.7	674	64.9	3.0	55.0	1,302	80.7	1,264
Rural	61.9	27.2	2,517	59.2	1.1	47.5	5,336	49.4	5,190
Zanzibar	63.1	53.8	86	78.7	1.2	71.5	186	43.7	180
Unguja	62.3	54.4	52	78.8	1.3	66.3	109	58.7	106
Pemba	64.3	53.0	34	78.6	0.9	79.0	76	22.5	75
Zone									
Western	66.9	25.3	671	29.6	1.7	22.7	1,405	53.9	1,373
Northern	53.9	27.1	439	62.1	1.9	55.7	889	62.3	860
Central	63.4	13.5	303	64.5	0.4	55.7	648	32.5	636
Southern Highlands	62.4	33.5	444	65.6	1.0	59.6	931	52.1	895
Lake	60.4	38.4	637	75.3	0.6	54.2	1,409	68.0	1,379
Eastern	59.2	32.8	427	69.0	3.4	57.6	811	77.2	782
Southern	62.7	25.5	270	70.8	1.1	53.6	545	17.4	528
Region									
Dodoma	60.8	12.2	184	63.3	0.7	59.3	386	36.5	380
Arusha	42.3	20.9	117	69.9	3.0	65.2	250	97.3	237
Kilimanjaro	62.9	46.3	84	60.5	0.5	57.7	171	70.2	171
Tanga	59.4	26.6	155	57.6	2.0	46.3	292	36.1	287
Morogoro	51.7	18.9	151	77.1	2.5	63.7	299	65.0	288
Pwani	66.5	31.4	79	58.2	0.5	48.0	171	75.9	158
Dar es Salaam	62.1	43.9	197	67.4	5.7	57.0	341	88.2	337
Lindi	63.1	20.4	67	57.0	0.0	40.0	125	8.9	123
Mtwara	59.4	29.2	94	69.6	1.8	49.7	203	16.0	195
Ruvuma	65.4	25.4	110	79.8	1.1	65.0	216	23.7	209
Iringa	56.8	24.3	129	81.9	2.8	77.0	268	54.8	256
Mbeya	58.3	33.4	203	62.6	0.4	54.0	428	48.8	414
Singida	67.5	15.4	119	66.2	0.0	50.3	262	26.6	256
Tabora	65.8	24.7	173	27.5	0.7	14.4	368	58.7	362
Rukwa	76.3	44.3	112	52.4	0.0	50.1	235	55.0	226
Kigoma	49.1	21.3	180	65.3	3.6	45.7	354	78.1	344
Shinyanga	77.6	27.8	318	12.1	1.4	15.2	683	38.8	668
Kagera	55.4	34.3	194	77.0	0.3	57.2	426	61.2	414
Mwanza	54.7	32.2	304	76.9	0.8	54.8	662	57.9	654
Mara	80.1	57.5	139	69.4	0.7	48.8	321	98.5	311
Manyara	51.1	17.2	84	60.1	1.3	56.0	176	49.4	166
Unguja North	54.1	44.3	14	83.7	0.0	67.3	30	32.4	28
Unguja South	70.8	53.2	7	90.3	7.6	63.6	16	54.2	15
Town West	64.1	59.5	30	73.6	0.4	66.4	64	71.5	63
Pemba North	74.7	71.4	18	87.4	0.3	82.8	38	10.6	37
Pemba South	53.0	33.0	16	69.9	1.6	75.2	38	34.1	38

Continued...

Table 11.8—*Continued*

Background characteristic	Among youngest children age 6-35 months living with the mother: Percentage who consumed foods rich in vitamin A in past 24 hours[1]	Percentage who consumed foods rich in iron in past 24 hours[2]	Number of children	Among all children age 6-59 months: Percentage given vitamin A supplements in past six months	Percentage given iron supplements in past seven days	Percentage given deworming medication in past six months[3]	Number of children	Among children age 6-59 months living in households tested for iodised salt: Percentage living in households with adequately iodised salt[4]	Number of children
Mother's education									
No education	62.0	23.6	801	48.7	0.8	35.6	1,733	45.8	1,678
Primary incomplete	62.1	26.0	472	57.9	0.5	48.0	1,002	49.1	960
Primary complete	61.0	31.2	1,758	66.1	1.9	55.4	3,649	59.0	3,563
Secondary+	63.1	47.9	246	71.3	2.0	60.8	439	74.1	432
Mother's age at birth									
15-19	68.2	38.8	224	52.3	0.0	33.8	282	55.5	268
20-29	63.3	32.6	1,680	58.0	1.7	46.9	3,501	54.9	3,410
30-39	60.5	26.6	1,121	64.4	1.1	54.5	2,417	55.8	2,350
40-49	48.5	18.2	252	66.3	1.5	53.1	623	54.2	606
Wealth quintile									
Lowest	62.5	21.0	690	53.3	0.8	40.2	1,461	44.1	1,406
Second	65.8	27.8	752	54.2	1.0	42.8	1,602	46.2	1,563
Middle	58.0	28.3	712	62.7	1.3	52.8	1,511	51.8	1,464
Fourth	58.5	32.2	608	68.7	2.3	56.2	1,271	60.3	1,238
Highest	62.5	43.9	515	69.5	2.2	61.3	978	84.4	963
Total	61.5	29.8	3,277	60.8	1.4	49.6	6,824	55.2	6,634

Note: Information on vitamin A is based both on mother's recall and the immunization card (where available). Information on iron supplements and deworming medication is based on the mother's recall.
na = Not applicable
[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A, and red palm oil [if data are collected.]
[2] Includes meat (including organ meat)
[3] Deworming for intestinal parasites is commonly done for helminths and for schistosomes.
[4] Salt containing 15 parts per million of iodine or more. Excludes children in households in which salt was not tested.

Iodine deficiency has serious effects on body growth and mental development. The principal cause of iodine deficiency is inadequate iodine in foods. The fortification of salt with iodine is the most common method of preventing iodine deficiency. In Tanzania the compound used for fortification of salt is potassium iodate (KIO_3). According to the World Health Organization, a country's salt iodisation program is considered to be on a good track (poised to attain the goal of eliminating iodine deficiency) when 90 percent of the households are using iodised salt. Fortified salt that contains 15 parts of iodine per million parts of salt (15 ppm) is considered adequate for the prevention of iodine deficiency (ICCIDD, UNICEF, and WHO, 2001). To assess the use of adequately iodised salt in Tanzania, the 2010 TDHS included a component in which interviewers asked households to provide a teaspoon of salt used for cooking. The salt was tested for iodine using the 'iodine rapid test kit.'

Table 11.8 shows that 55 percent of children live in households that use adequately iodised salt (containing 15 or more parts per million or ppm). The percentage is much higher in urban areas than in rural areas (80 percent compared with 49 percent), and is higher in the Mainland (56 percent) than in Zanzibar (44 percent). At the regional level, Mara and Arusha have the highest proportion of children living in households using adequately iodised salt (99 and 97 percent, respectively). In Dar es Salaam the proportion is 88 percent. On the other hand, some regions have very low proportions: Lindi (9 percent), Pemba North (11 percent), and Mtwara (16 percent).

Use of adequately iodised salt is correlated with mother's education and wealth quintile. The survey results show that children whose mothers have some secondary education were more likely to have adequately iodised salt (74 percent) compared with those whose mothers do not have any form of education (46 percent). Likewise, the proportion of children in households using adequately iodised salt is higher among children in the highest wealth quintile (84 percent) compared with those in the lowest wealth quintile (44 percent).

11.5 IODISATION OF HOUSEHOLD SALT

Table 11.9 shows that salt was tested for iodine in 94 percent of households. Of those, 59 percent are using salt that is adequately iodised (15+ ppm), and 23 percent are using salt that is inadequately iodised (< 15 ppm), thus indicating that 82 percent of the households are using salt that has some iodine. The availability of iodised salt shows a large increase of 8 percent when compared with the findings of the 2004-2005 TDHS, which showed that 73 percent of households were using iodised salt. It is comparable also with the findings of a survey conducted in the same year (2004) by the Tanzania Food and Nutrition Centre (TFNC), for Tanzania Mainland, which showed an 84 percent availability of iodised salt at the household level (TFNC, 2004).

Table 11.9 Presence of iodised salt in household

Among all households, percentage of households tested for iodine content and percentage of households with no salt; and among households with salt tested, the percent distribution by level of iodine in salt (parts per million or ppm), according to background characteristics, Tanzania 2010

Background characteristic	Among all households, the percentage		Number of households	Among households with tested salt, the percent distribution by iodine content of salt			Total	Number of households
	With salt tested	With no salt		None (0 ppm)	Inadequate (<15 ppm)	Adequate (15+ ppm)		
Residence								
Urban	92.2	7.8	2,507	6.7	12.8	80.5	100.0	2,312
Rural	95.2	4.8	7,116	22.2	26.8	50.9	100.0	6,775
Mainland/Zanzibar								
Mainland	94.5	5.5	9,377	18.0	23.3	58.7	100.0	8,858
Urban	92.1	7.9	2,417	6.6	12.7	80.8	100.0	2,227
Rural	95.3	4.7	6,959	21.8	26.9	51.3	100.0	6,631
Zanzibar	92.7	7.3	246	29.7	21.0	49.3	100.0	228
Unguja	92.3	7.7	157	14.5	21.8	63.7	100.0	145
Pemba	93.4	6.6	89	56.4	19.5	24.1	100.0	83
Zone								
Western	94.5	5.5	1,389	18.8	22.2	59.0	100.0	1,313
Northern	93.9	6.1	1,655	15.9	20.0	64.1	100.0	1,554
Central	98.3	1.7	882	25.6	43.3	31.1	100.0	867
Southern Highlands	95.3	4.7	1,367	16.8	25.9	57.4	100.0	1,302
Lake	96.1	3.9	1,580	8.0	18.0	74.0	100.0	1,518
Eastern	89.4	10.6	1,498	6.2	10.7	83.1	100.0	1,340
Southern	95.9	4.1	1,005	47.2	34.7	18.1	100.0	963
Region								
Dodoma	98.3	1.7	580	15.1	51.1	33.8	100.0	570
Arusha	90.5	9.5	411	0.2	2.7	97.0	100.0	372
Kilimanjaro	97.3	2.7	460	11.4	14.8	73.8	100.0	448
Tanga	94.6	5.4	551	21.1	42.7	36.2	100.0	521
Morogoro	93.5	6.5	499	7.8	19.4	72.8	100.0	466
Pwani	84.8	15.2	269	17.0	6.8	76.2	100.0	229
Dar es Salaam	88.4	11.6	730	1.3	5.8	92.9	100.0	645
Lindi	95.2	4.8	219	70.8	23.4	5.8	100.0	208
Mtwara	95.9	4.1	425	42.0	40.1	18.0	100.0	408
Ruvuma	96.2	3.8	361	39.2	35.2	25.6	100.0	347
Iringa	95.2	4.8	498	20.4	23.0	56.7	100.0	474
Mbeya	94.4	5.6	591	15.1	26.3	58.6	100.0	558
Singida	98.4	1.6	302	45.6	28.5	25.9	100.0	297
Tabora	94.5	5.5	365	7.5	34.0	58.5	100.0	345
Rukwa	97.2	2.8	278	13.9	30.1	56.0	100.0	271
Kigoma	93.4	6.6	417	10.6	13.7	75.6	100.0	389
Shinyanga	95.3	4.7	607	31.0	20.9	48.1	100.0	579
Kagera	95.3	4.7	556	12.3	21.0	66.7	100.0	530
Mwanza	96.6	3.4	699	8.0	23.2	68.9	100.0	675
Mara	96.0	4.0	326	0.5	1.9	97.6	100.0	313
Manyara	91.7	8.3	233	39.8	5.7	54.5	100.0	213
Unguja North	87.7	12.3	41	33.5	27.0	39.5	100.0	36
Unguja South	94.3	5.7	27	18.3	28.0	53.7	100.0	26
Town West	93.9	6.1	89	5.3	17.7	77.0	100.0	84
Pemba North	93.0	7.0	45	78.0	9.5	12.5	100.0	42
Pemba South	93.9	6.1	44	34.1	29.8	36.1	100.0	41
Wealth quintile								
Lowest	94.3	5.7	1,931	30.3	28.8	40.9	100.0	1,821
Second	94.3	5.7	1,917	23.7	28.7	47.6	100.0	1,808
Middle	95.7	4.3	1,946	20.3	26.2	53.5	100.0	1,862
Fourth	94.3	5.7	1,911	12.5	22.6	64.9	100.0	1,803
Highest	93.4	6.6	1,918	4.2	9.9	85.9	100.0	1,792
Total	94.4	5.6	9,623	18.3	23.3	58.5	100.0	9,087

With regard to adequacy of iodisation, 59 percent of the households use salt that is adequately iodised (15+ ppm). This is an improvement compared with the situation in 2004-2005 when only 43 percent of households were using adequately iodised salt (TDHS 2004-2005). The proportion of households using adequately iodised salt in urban areas (81 percent) is far larger than in rural areas (51 percent). A higher proportion of households in Tanzania Mainland (59 percent) is using salt that is adequately iodised than in Zanzibar (49 percent). At the regional level, Mara, Arusha, and Dar es Salaam have the highest proportions of households using adequately iodised salt (98, 97, and 93, percent, respectively). Regions with the lowest proportions are Lindi (6 percent), Pemba North (13 percent), and Mtwara (18 percent). Households in the higher wealth quintiles are more likely to use salt that is adequately iodised; the proportion rises steadily from 41 percent in the lowest quintile to 86 percent in the highest quintile.

11.6 NUTRITIONAL STATUS OF WOMEN

The nutritional status of women was assessed by use of two anthropometric indices—height and body mass index (BMI). To derive those indices, the 2010 TDHS took height and weight measurements of women age 15-49 years. Women who gave birth in the two months preceding the survey were excluded from the analysis.

Short stature reflects previously poor socioeconomic conditions and inadequate nutrition during childhood and adolescence. In a woman, short stature is a risk factor for poor birth outcomes and obstetric complications. For example, short stature is associated with small pelvic size, which increases the likelihood of difficulty during delivery and the risk of bearing low birth weight babies. A woman is considered to be at risk if her height is below 145 cm.

According to Table 11.10, the proportion of women with heights below 145 cm is 3 percent. Adolescent women (age 15-19 years) are slightly more likely to have heights below 145 cm than older women. There is no difference between urban and rural areas or between Tanzania Mainland and Zanzibar. In the Mainland, Mtwara has the highest proportion of women with heights below 145 cm (11 percent), while Arusha, Mara, and Shinyanga have the lowest proportion (1 percent). The likelihood of having a height below 145 cm does not correlate with the woman's level of education or wealth quintile.

BMI is used to measure thinness or obesity. BMI is defined as weight in kilograms divided by height squared in meters (kg/m^2). A BMI below 18.5 indicates thinness or acute undernutrition and a BMI of 25.0 or above indicates overweight or obesity. **A** BMI that is below 16 kg/m^2 indicates severe undernutrition and is associated with increased mortality. Low pre-pregnancy BMI, like short stature, is associated with poor birth outcomes and obstetric complications.

Table 11.10 shows that the mean BMI for women age 15-49 is 23 kg/m^2. The mean BMI does not show a linear correlation with age. Urban women have a slightly higher mean BMI (24 kg/m^2) than rural women (22 kg/m^2). There is no difference in mean BMI between Tanzania Mainland and Zanzibar; and regional variations are minimal. The mean BMI does not correlate with women's levels of education. With regard to wealth, the mean BMI shows a steady rise from 21 kg/m^2 for women in the lowest wealth quintile to 25 kg/m^2 in the highest quintile.

Eleven percent of women in the reproductive age are thin or undernourished (BMI < 18.5 kg/m^2). Despite the absence of a linear correlation with age, the data show that the adolescents (age group 15-19 years) are most likely to be thin. Rural women are more likely to be thin (13 percent) than urban women (8 percent). The proportion of thin women in Zanzibar is slightly higher (14 percent) than in Tanzania Mainland (11 percent). In Dodoma, one out of four women is thin (25 percent), followed by Lindi and Pemba North (20 percent); and Singida and Arusha (19 percent). Regions with the lowest proportion are Mbeya and Iringa (5 percent). While thinness in women does not correlate with the level of education, it does, however, correlate with wealth. Women in the lowest wealth quintile are more likely to be thin (18 percent) than women in the highest quintile (7 percent).

Table 11.10 Nutritional status of women

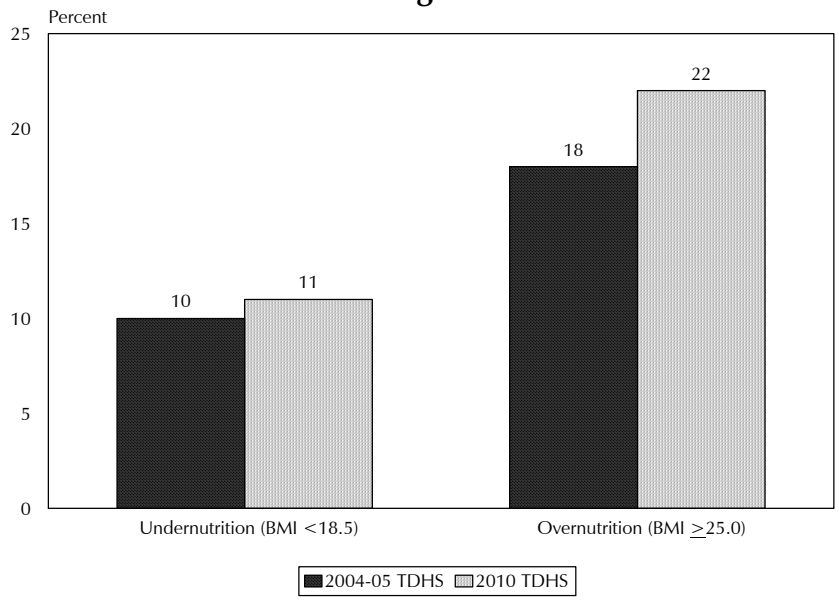
Among women age 15-49, the percentage with height under 145 cm, mean body mass index (BMI), and the percentages with specific BMI levels, by background characteristics, Tanzania 2010

Background characteristic	Height		Body Mass Index[1]								
	Percentage below 145 cm	Number of women	Mean Body Mass Index (BMI)	18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total overweight or obese)	25.0-29.9 (overweight)	≥30.0 (obese)	Number of women
Age											
15-19	5.4	2,149	21.0	73.3	17.6	13.3	4.4	9.1	8.0	1.1	1,939
20-29	2.8	3,525	22.5	71.2	9.2	7.5	1.7	19.6	15.9	3.7	2,899
30-39	3.0	2,681	23.6	61.9	8.9	7.5	1.4	29.3	18.4	10.9	2,339
40-49	2.9	1,660	23.3	59.9	11.6	8.9	2.7	28.5	18.2	10.3	1,612
Residence											
Urban	3.4	2,846	24.2	55.7	8.1	6.7	1.4	36.3	22.9	13.4	2,623
Rural	3.4	7,169	21.9	72.0	12.8	10.0	2.8	15.2	12.0	3.2	6,166
Mainland/Zanzibar											
Mainland	3.4	9,690	22.6	67.5	11.3	9.0	2.3	21.2	15.1	6.1	8,493
Urban	3.4	2,712	24.2	56.0	7.8	6.6	1.2	36.2	23.0	13.2	2,498
Rural	3.4	6,978	21.9	72.3	12.8	10.0	2.8	14.9	11.8	3.1	5,996
Zanzibar	3.0	325	23.4	55.7	13.9	10.2	3.6	30.4	18.8	11.7	295
Unguja	3.0	211	24.0	52.0	12.9	9.2	3.7	35.1	19.9	15.2	195
Pemba	2.9	114	22.2	62.9	15.8	12.3	3.5	21.3	16.4	4.9	100
Zone											
Western	2.2	1,694	21.9	72.1	13.0	11.0	1.9	14.9	11.4	3.5	1,412
Northern	2.7	1,522	23.0	62.5	12.0	9.5	2.5	25.5	16.7	8.8	1,367
Central	2.5	806	21.0	66.6	22.4	16.6	5.8	11.0	9.1	2.0	714
Southern Highlands	3.9	1,330	23.0	70.4	5.4	4.4	0.9	24.3	20.0	4.3	1,163
Lake	1.8	1,802	22.0	73.7	11.6	8.9	2.7	14.7	11.4	3.3	1,520
Eastern	4.5	1,582	24.3	55.9	6.9	5.9	1.1	37.2	23.5	13.7	1,469
Southern	8.2	955	21.8	73.5	13.7	10.2	3.5	12.8	9.3	3.5	848
Region											
Dodoma	2.8	491	20.7	66.0	24.5	18.4	6.0	9.5	8.3	1.2	432
Arusha	0.8	399	22.7	58.2	18.7	14.9	3.8	23.1	15.6	7.5	349
Kilimanjaro	2.7	407	23.7	57.1	8.0	7.4	0.6	34.9	24.1	10.8	385
Tanga	3.6	497	23.0	67.0	8.4	6.5	1.9	24.6	14.2	10.3	442
Morogoro	5.9	480	23.7	66.0	5.5	4.7	0.8	28.5	17.1	11.4	446
Pwani	6.2	256	22.9	58.5	13.6	10.7	2.9	28.0	19.5	8.5	222
Dar es Salaam	3.2	846	25.1	49.6	5.9	5.1	0.7	44.6	28.1	16.4	800
Lindi	7.0	197	21.2	70.0	20.4	15.3	5.1	9.6	5.8	3.8	168
Mtwara	10.9	407	21.6	76.5	12.8	9.1	3.6	10.7	8.0	2.8	372
Ruvuma	5.7	350	22.3	71.9	11.2	8.7	2.5	16.9	12.8	4.1	307
Iringa	6.8	486	23.0	72.9	5.0	4.4	0.6	22.1	17.3	4.8	445
Mbeya	1.9	589	23.4	65.8	4.5	4.0	0.5	29.7	24.8	4.9	509
Singida	1.9	315	21.6	67.5	19.2	13.9	5.3	13.3	10.2	3.1	282
Tabora	1.7	440	22.2	70.1	11.3	10.0	1.3	18.6	14.8	3.8	352
Rukwa	3.1	255	22.1	76.2	8.2	5.4	2.8	15.6	13.9	1.7	209
Kigoma	4.4	447	21.7	72.9	14.0	11.4	2.6	13.1	7.7	5.4	387
Shinyanga	1.2	806	21.8	72.7	13.2	11.4	1.8	14.1	11.8	2.3	673
Kagera	2.9	587	21.7	76.2	12.4	8.4	4.0	11.4	9.7	1.7	505
Mwanza	1.6	842	22.3	71.4	10.0	8.3	1.8	18.6	13.9	4.7	712
Mara	0.5	373	21.7	75.1	13.8	11.0	2.8	11.1	8.4	2.7	303
Manyara	3.8	219	21.8	71.1	15.7	10.5	5.3	13.2	9.6	3.6	190
Unguja North	3.4	50	22.5	59.9	16.3	11.9	4.4	23.9	17.0	6.9	45
Unguja South	2.9	30	24.2	52.1	9.6	7.1	2.5	38.2	23.4	14.8	28
Town West	2.9	130	24.5	49.1	12.4	8.7	3.7	38.5	20.2	18.3	123
Pemba North	2.9	56	21.7	62.0	19.6	15.2	4.4	18.4	14.5	3.9	49
Pemba South	2.9	58	22.6	63.7	12.2	9.5	2.7	24.0	18.2	5.8	51
Education											
No education	4.2	1,901	21.9	71.6	12.9	10.7	2.3	15.5	13.3	2.3	1,586
Primary incomplete	6.3	1,469	21.6	70.5	16.1	11.7	4.5	13.4	10.8	2.6	1,278
Primary complete	2.6	5,033	22.9	66.3	9.9	7.8	2.1	23.8	15.8	8.0	4,391
Secondary+	2.3	1,613	23.2	62.0	10.3	8.6	1.7	27.7	19.3	8.3	1,534
Wealth quintile											
Lowest	3.6	1,669	21.0	73.5	18.2	14.4	3.7	8.3	7.5	0.8	1,445
Second	4.0	1,924	21.4	76.1	13.4	10.7	2.8	10.5	8.8	1.7	1,603
Middle	3.7	1,974	21.8	73.4	12.7	9.8	2.9	13.9	11.4	2.6	1,676
Fourth	3.3	2,086	22.9	66.2	9.1	7.0	2.1	24.8	18.6	6.2	1,866
Highest	2.5	2,361	24.8	52.3	6.5	5.4	1.1	41.2	25.2	16.0	2,198
Total	3.4	10,015	22.6	67.1	11.4	9.0	2.4	21.5	15.2	6.2	8,789

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m^2).
[1] Excludes pregnant women and women with a birth in the preceding two months

According to the 2010 TDHS, 22 percent of women are overweight or obese (BMI 25 kg/m^2 or above): 15 percent are overweight (BMI 25-29 kg/m^2) and 6 percent are obese (BMI 30 kg/m^2 or above). The proportion of women who are overweight or obese is 4 percentage points higher than in the 2004-05 TDHS (Figure 11.6). Younger women are less likely than older women to be overweight or obese. For example, the proportion of women age 15-19 years who are overweight or obese is 9 percent compared with 29 percent of women ages 30-39 or 40-49 years. Urban women are more likely to be overweight/obese (36 percent) than rural women (15 women). Zanzibar has a higher proportion of overweight/obese women (30 percent) than Tanzania Mainland (21 percent). Dar es Salaam is the region with the highest proportion of overweight/obese women (45 percent), and Dodoma and Lindi have the lowest proportion (10 percent). Overweight and obesity are positively correlated with wealth quintile: the proportion of overweight/obese women increases steadily from 8 percent in the lowest wealth quintile to 41 percent in the highest quintile.

Figure 11.6 **Trends in Nutritional Status among Women Age 15-49**



11.7 MICRONUTRIENT INTAKE AMONG MOTHERS

The quantity and quality of food that mothers consume influences their health and that of their children, especially the unborn and those breastfeeding. The 2010 TDHS included questions on the type of foods consumed by mothers of children aged below three years during the day and night preceding the interview.

The findings, as presented in Table 11.11, show that 31 percent of the women consumed tea and/or coffee in the day or night preceding the interview. In addition to caffeine, tea and coffee contain tannins—compounds known to inhibit absorption of iron and other mineral elements in the gut. The proportion of women consuming tea or coffee declines gradually with age, dropping from 37 percent at age 15-19 to 22 percent at age 40-49. Women in urban areas are more likely to consume tea or coffee (59 percent) than those in rural areas (23 percent). Likewise, women living in Zanzibar are much more likely to consume tea or coffee (77 percent) than those in Tanzania Mainland (30 percent). In Mainland, Dar es Salaam has the highest proportion of women consuming tea or coffee (67 percent), and Kigoma and Dodoma have the lowest (15 percent). Consumption of tea or coffee is correlated with education level and wealth. Women with secondary education are three times more likely to consume tea or coffee (65 percent) than those with no formal education (21 percent). Similarly, women in the highest wealth quintile (65 percent) are far more likely to consume tea or coffee than those in the lowest quintile (15 percent).

Table 11.11 Foods consumed by mothers in the day or night preceding the interview

Among mothers age 15-49 with a child under age 3 living with them, the percentage who consumed specific types of foods in the day or night preceding the interview, by background characteristics, Tanzania 2010

	Liquids		Solid or semi-solid foods								
Background characteristic	Tea/ coffee	Other liquids	Foods made from roots/ tubers	Foods made from legumes	Meat/ fish/ shellfish/ poultry/ eggs	Cheese/ yogurt[1]	Vitamin A-rich fruits/ vege-tables[2]	Other fruits/ vege-tables	Other solid or semi-solid food	Sugary foods	Number of women
Age											
15-19	36.9	27.6	35.6	41.6	48.2	24.2	67.3	14.4	91.5	3.9	347
20-29	32.2	23.9	34.7	39.6	37.3	18.5	62.8	16.9	81.3	5.0	2,121
30-39	28.5	22.2	29.7	34.5	30.4	17.4	60.5	16.7	75.8	3.0	1,353
40-49	21.9	21.9	22.6	27.1	24.5	17.1	51.8	13.1	66.3	2.8	293
Residence											
Urban	59.0	30.8	29.8	38.4	46.4	13.4	61.6	26.1	76.8	9.3	867
Rural	23.1	21.5	32.9	36.9	32.0	19.9	61.6	13.8	79.9	2.7	3,247
Mainland/Zanzibar											
Mainland	29.5	23.1	32.3	37.8	34.3	18.8	62.2	16.4	79.3	4.1	4,007
Urban	58.1	30.1	30.2	39.3	45.4	13.5	62.3	26.5	76.7	9.3	829
Rural	22.0	21.3	32.8	37.4	31.4	20.2	62.2	13.8	80.0	2.7	3,178
Zanzibar	76.5	36.9	33.2	14.6	61.9	7.8	40.5	15.2	78.1	4.5	106
Unguja	74.3	38.3	23.6	17.1	64.8	8.2	42.7	17.1	81.1	6.6	64
Pemba	79.7	34.9	47.8	10.9	57.6	7.0	37.1	12.3	73.7	1.3	42
Zone											
Western	18.3	11.0	54.5	37.9	29.5	28.0	65.8	10.1	82.0	2.4	883
Northern	46.4	35.0	13.7	32.0	32.5	29.1	57.3	21.2	76.5	1.5	532
Central	17.6	7.8	8.9	20.2	16.7	24.3	73.4	8.1	82.4	2.8	386
Southern Highlands	28.9	33.2	23.2	48.5	40.8	16.2	64.3	20.6	78.5	4.9	561
Lake	20.2	22.0	38.6	38.7	43.7	13.6	50.5	15.8	79.1	4.9	810
Eastern	53.0	31.8	26.5	41.6	39.0	8.2	65.0	24.0	78.0	7.0	506
Southern	33.2	26.7	38.5	41.2	29.9	4.8	68.3	18.0	77.0	6.4	330
Region											
Dodoma	15.2	1.9	8.7	22.2	13.3	20.7	73.9	9.9	83.6	3.9	239
Arusha	65.4	40.7	13.5	26.6	24.3	39.4	53.0	23.6	75.7	2.0	150
Kilimanjaro	50.9	33.5	18.7	39.5	55.1	31.8	62.0	37.7	83.1	2.1	98
Tanga	27.7	28.7	16.4	28.6	36.2	12.4	59.4	15.0	71.7	1.7	182
Morogoro	38.0	34.6	21.9	40.9	25.6	3.1	57.0	20.2	73.8	3.3	181
Pwani	49.7	22.3	24.4	32.5	29.5	5.0	72.6	14.0	84.3	3.5	103
Dar es Salaam	66.8	34.0	31.1	46.4	54.3	13.7	68.1	31.8	78.4	11.6	223
Lindi	27.4	24.6	21.4	27.3	20.7	1.6	67.4	6.5	73.8	2.7	82
Mtwara	35.1	33.4	40.0	38.8	39.2	4.8	66.6	12.8	82.0	9.4	115
Ruvuma	35.1	22.1	47.7	51.7	27.4	6.7	70.2	29.7	74.7	6.1	133
Iringa	42.5	23.8	15.7	37.5	30.5	1.9	59.7	26.9	71.6	8.7	156
Mbeya	24.9	36.7	20.8	45.3	42.9	27.5	65.2	23.0	76.9	4.0	258
Singida	21.5	17.4	9.2	17.0	22.3	30.2	72.5	5.1	80.4	1.0	147
Tabora	20.9	18.2	34.6	34.6	27.7	28.6	71.2	11.1	77.2	2.5	232
Rukwa	21.3	37.3	35.6	66.0	47.9	11.3	67.4	9.4	88.7	2.4	146
Kigoma	14.7	15.6	41.1	51.2	28.5	1.8	43.5	10.7	67.0	2.9	225
Shinyanga	18.9	4.7	72.5	32.7	31.0	41.5	74.7	9.3	92.6	2.1	426
Kagera	24.4	23.3	43.5	61.0	41.2	9.6	47.6	34.2	76.3	1.3	246
Mwanza	17.9	20.0	29.5	33.0	37.7	12.1	48.8	6.8	76.7	7.1	389
Mara	19.6	24.7	52.1	20.0	60.3	22.6	58.2	9.8	88.2	5.1	175
Manyara	47.6	39.4	4.4	39.0	16.2	41.2	55.3	13.3	80.2	0.0	102
Unguja North	62.4	20.4	29.5	8.0	52.8	3.5	40.8	12.8	77.7	3.2	18
Unguja South	71.4	40.5	25.1	20.2	59.2	3.9	59.2	22.9	80.9	4.9	9
Town West	80.8	46.4	20.3	20.8	71.9	11.6	39.6	17.7	82.8	8.7	37
Pemba North	83.4	38.1	54.0	8.6	73.5	3.1	32.3	9.3	80.8	0.0	22
Pemba South	75.7	31.4	41.0	13.4	40.1	11.3	42.3	15.7	65.8	2.8	20
Education											
No education	21.0	22.3	32.1	33.5	27.4	22.2	63.8	9.9	82.5	1.6	1,026
Primary incomplete	20.0	17.6	34.3	35.1	30.2	14.5	60.0	12.2	78.1	2.8	606
Primary complete	33.5	23.2	31.7	39.2	36.8	18.1	60.5	18.8	78.0	4.3	2,187
Secondary+	64.8	41.5	32.9	39.6	58.2	17.2	66.1	29.3	79.8	14.1	295
Wealth quintile											
Lowest	14.7	18.0	29.2	30.2	23.3	19.3	64.4	8.4	81.5	1.5	847
Second	20.2	19.2	38.6	37.8	31.7	23.8	64.2	13.3	82.0	1.4	968
Middle	22.8	21.7	33.7	41.4	32.6	16.0	57.7	13.6	76.8	3.4	908
Fourth	43.4	29.2	27.5	35.8	40.1	15.1	57.6	19.6	77.9	5.4	777
Highest	64.8	33.2	30.5	41.5	53.9	17.2	64.8	32.3	77.3	11.5	613
Total	30.7	23.5	32.3	37.2	35.0	18.5	61.6	16.4	79.3	4.1	4,113

Note: Foods consumed in the last '24-hour' period (yesterday and last night)
[1] Includes tinned and powdered milk, fresh animal milk, yogurt and cheese
[2] Includes meat, liver, fish, poultry, eggs, pumpkin, carrots, yellow/orange sweet potatoes, ripe mango or papaya, passion fruit, any dark green leafy vegetables (spinach/amaranth/cassava,) and other locally grown yellow/orange-colour fruits or vegetables.

In the day and night preceding the interview, 24 percent of the women consumed other liquids, which may have included water, milk, and juice. Foods made of roots and tubers (which complement cereals as a source of energy) were eaten by 32 percent of women. Thirty-seven percent of women consumed protein-rich foods such as legumes, and 35 percent consumed meat/fish/shellfish/poultry/eggs, the latter being a good source of iron. Cheese/yogurt was consumed by a small proportion of women (19 percent).

Vitamin A-rich fruits and vegetables were consumed by 62 percent of women. Women in the younger age groups were more likely to consume vitamin A-rich fruits and vegetables than those in the older age groups. For example, 67 percent of those age 15-19 years consumed vitamin A-rich fruits and vegetables compared with those age 40-49 (52 percent). Women living in Tanzania Mainland are more likely to consume vitamin A-rich fruits and vegetables (62 percent) than those in Zanzibar (41 percent). There is no variation in consumption between urban and rural. At the regional level in Mainland, variations are generally not large. Consumption of vitamin A-rich fruits and vegetables is not correlated with education level or wealth quintile.

One in six women (16 percent) consumed other fruits and vegetables, and 79 percent had other solid and semi-solid foods without much variation by background characteristics. Consumption of sugary foods is very low (4 percent) in Tanzanian women.

11.8 Prevalence of Anaemia in Women

Table 11.12 presents anaemia prevalence among women age 15-49 based on haemoglobin levels, according to selected background characteristics. The raw measured values of haemoglobin were obtained using the HemoCue instrument and adjusted by altitude and smoking status.

Table 11.12 shows that 40 percent of women age 15-49 are anaemic, with 1 percent being severely anaemic. When compared with the 2004-05 TDHS, anaemia prevalence has declined by 17 percentage points. Both the prevalence of mild and moderate anaemia declined between the two surveys (Figure 11.7).

Pregnancy has an association with anaemia. Pregnant women are more likely to be anaemic (53 percent) than women who are breastfeeding and women who are neither pregnant nor breastfeeding (39 percent). This could be due to the high demand for iron and folate during pregnancy. Anaemia also varies by urban and rural areas; it is more prevalent in urban areas (44 percent) compared with rural areas (39 percent). The disparity between women in the Mainland and Zanzibar is large (40 and 59 percent, respectively). Education of women does not make much difference in their likelihood to suffer from anaemia. Finally, although scientific evidence has identified an association between smoking and anaemia, these figures show no difference between smokers and nonsmokers.

Table 11.12 Prevalence of anaemia in women

Percentage of women age 15-49 with anaemia, by background characteristics, Tanzania 2010

Background characteristic	Not pregnant / Pregnant	Anaemia status by haemoglobin level: Mild	Moderate	Severe	Any	Number of women
	Not pregnant	10.0-11.9 g/dl	7.0-9.9 g/dl	<7.0 g/dl	<12.0 g/dl	
	Pregnant	10.0-10.9 g/dl	7.0-9.9 g/dl	< 7.0 g/dl	<11.0 g/dl	
Age						
15-19		32.1	9.4	0.7	42.2	2,127
20-29		27.9	11.7	0.9	40.4	3,463
30-39		27.8	9.5	1.5	38.8	2,640
40-49		29.4	8.6	0.9	38.9	1,646
Number of children ever born						
0		30.1	10.6	0.8	41.4	2,470
1		30.4	12.2	0.7	43.3	1,352
2-3		26.0	10.4	1.2	37.6	2,551
4-5		29.2	9.1	1.5	39.7	1,744
6+		30.5	8.3	0.9	39.7	1,758
Maternity status						
Pregnant		23.2	27.7	1.8	52.7	958
Breastfeeding		30.9	7.4	1.0	39.2	2,752
Neither		29.1	8.5	0.9	38.6	6,166
Using IUD						
Yes		(9.6)	(11.2)	(0.0)	(20.8)	43
No		29.1	10.1	1.0	40.2	9,832
Smoking status						
Smokes cigarettes/tobacco		28.9	8.0	3.1	40.0	132
Does not smoke		29.0	10.1	1.0	40.1	9,739
Residence						
Urban		30.2	12.3	0.9	43.5	2,758
Rural		28.5	9.2	1.0	38.8	7,118
Mainland/Zanzibar						
Mainland		28.6	9.9	1.0	39.5	9,553
Urban		29.8	12.1	0.9	42.8	2,625
Rural		28.1	9.1	1.0	38.2	6,928
Zanzibar		42.3	14.3	2.1	58.7	322
Unguja		41.0	14.2	2.1	57.3	210
Pemba		44.8	14.5	2.0	61.3	112
Zone						
Western		34.4	13.8	0.9	49.1	1,684
Northern		18.9	8.2	1.6	28.6	1,490
Central		21.4	6.7	0.9	29.0	805
Southern Highlands		23.1	4.8	0.9	28.8	1,316
Lake		30.8	9.3	1.0	41.1	1,795
Eastern		36.2	15.0	0.6	51.8	1,512
Southern		30.6	8.8	0.8	40.2	952
Region						
Dodoma		21.4	6.8	0.6	28.8	493
Arusha		22.4	7.3	3.0	32.7	382
Kilimanjaro		11.7	5.2	1.0	17.9	406
Tanga		22.4	11.7	1.1	35.2	484
Morogoro		34.8	10.2	0.0	45.0	472
Pwani		33.9	15.1	2.0	51.0	253
Dar es Salaam		37.8	17.9	0.5	56.2	787
Lindi		41.4	13.5	0.7	55.6	196
Mtwara		29.2	8.2	1.5	39.0	406
Ruvuma		26.2	6.9	0.0	33.1	350
Iringa		23.7	4.2	0.5	28.3	473
Mbeya		26.5	4.6	0.9	32.1	594
Singida		21.3	6.5	1.5	29.3	312
Tabora		36.5	17.7	0.5	54.7	440
Rukwa		13.7	6.3	1.7	21.7	249
Kigoma		28.1	6.4	0.4	34.8	442
Shinyanga		36.8	15.8	1.3	53.9	802
Kagera		21.5	6.3	1.1	28.9	582
Mwanza		39.1	11.9	0.9	51.9	839
Mara		26.8	8.0	1.3	36.1	374
Manyara		18.0	7.6	1.5	27.1	217
Unguja North		45.0	15.7	1.5	62.2	50
Unguja South		35.9	9.4	1.3	46.5	30
Town West		40.7	14.7	2.5	58.0	130
Pemba North		46.1	15.4	2.7	64.2	54
Pemba South		43.5	13.7	1.4	58.6	58

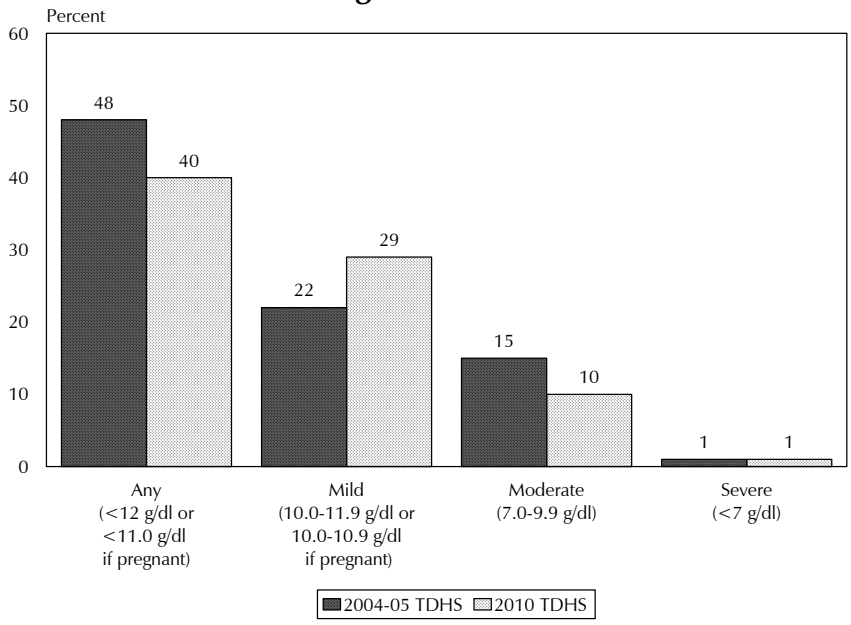
Continued...

Table 11.12—*Continued*

Background characteristic	Anaemia status by haemoglobin level: Not pregnant: Mild 10.0-11.9 g/dl	Moderate 7.0-9.9 g/dl	Severe <7.0 g/dl	Any <12.0 g/dl	Number of women
	Pregnant: Mild 10.0-10.9 g/dl	Moderate 7.0-9.9 g/dl	Severe < 7.0 g/dl	Any <11.0 g/dl	
Education					
No education	29.4	12.8	1.5	43.7	1,891
Primary incomplete	31.8	9.2	0.9	41.9	1,456
Primary complete	27.2	9.3	0.9	37.4	4,959
Secondary+	31.8	10.0	0.8	42.6	1,570
Wealth quintile					
Lowest	31.1	9.5	1.5	42.0	1,652
Second	29.7	9.2	1.1	40.1	1,917
Middle	27.3	9.6	0.8	37.7	1,960
Fourth	27.5	9.5	0.7	37.7	2,062
Highest	29.8	12.1	1.1	43.0	2,284
Total	29.0	10.1	1.0	40.1	9,875

Note: Prevalence is adjusted for altitude and for smoking status if known using formulas in CDC, 1998. Figures in parentheses are based on 25-49 unweighted cases.

Figure 11.7 **Trends in Anaemia Status among Women Age 15-49**



11.9 MICRONUTRIENT INTAKE AMONG WOMEN

Adequate micronutrient intake by women has important benefits for both women and their children. Breastfeeding children benefit from micronutrient supplementation that mothers receive, especially vitamin A. Iron supplementation of women during pregnancy protects the mother and infant against anaemia, which is considered a major cause of perinatal and maternal mortality. Anaemia also results in an increased risk of premature delivery and low birth weight. Finally, iodine deficiency is related to a number of adverse pregnancy outcomes including abortion, foetal brain damage and congenital malformation, stillbirth, and prenatal death.

Table 11.13 includes measures that are useful in assessing micronutrient intake by women during pregnancy and for two months after birth (postpartum period). The findings show that 72 percent of women with a child under age 3 consumed vitamin A-rich foods in the 24 hours preceding the survey. The consumption decreases progressively by age, from 83 percent among women age 15-19 to 59 percent among women age 40-49. There is no substantial variation between urban and

rural areas or between Tanzania Mainland and Zanzibar. In Mainland, consumption of vitamin A-rich foods is 80 percent or higher in Mara, Shinyanga, Rukwa, Pemba North, and Pwani, compared with consumption below 60 percent in Arusha and Kigoma. Consumption of vitamin A-rich foods is not correlated with education level or wealth quintile.

The survey shows that 35 percent of women consumed iron-rich foods in the 24 hours preceding the survey. The proportion is higher in the urban areas (46 percent) compared with rural areas (32 percent), and is much higher in Zanzibar (62 percent) than in Tanzania Mainland (34 percent). In Mainland, regions with the highest proportions of women consuming iron-rich foods are 50 percent or higher in Kilimanjaro, Dar es Salaam, and Mara, while Dodoma and Manyara have the lowest proportions (13 and 16 percent, respectively). Consumption of iron-rich foods is positively correlated with education of the mother, ranging from 27 percent in the women with no formal education to 58 percent in those with secondary education. Likewise, it is correlated with wealth quintile, ranging from 23 percent in the lowest wealth quintile to 54 percent in the highest.

A single dose of vitamin A is given to women within eight weeks of childbirth, aimed to increase the mother's vitamin A status and the content of the vitamin in the breast milk for the benefit of the child. Because of risk of teratogenesis (abnormal development of the foetus) resulting from high doses of vitamin A during pregnancy, the dose should not be given to pregnant women. The policy of the Ministry of Health and Social Welfare regarding maternal vitamin A supplementation (VAS) is to provide a high-dose vitamin A capsule (200,000 IU) within the first four weeks after delivery (MOHSW, 1997). However, the policy is currently under review to be in line with new WHO guidelines that VAS should be provided to all postpartum mothers within six weeks after delivery or within eight weeks to those who are breastfeeding (WHO 2003).

Table 11.13 shows that only one out of four women who gave birth in the five years preceding the survey received vitamin A supplementation within two months after childbirth. The proportion of women receiving vitamin A supplementation is slightly higher among older women. Vitamin A supplementation is more common in urban areas (36 percent) than in rural areas (23 percent). Women in Zanzibar are more likely than those in the Mainland to receive vitamin A postpartum. There are variations in supplementation by region in Mainland, ranging from 40 percent of women in Dar es Salaam to less than 10 percent in Rukwa and Shinyanga. Women with secondary education are more than two times as likely as mothers with no education to have received a vitamin A supplement within two months of childbirth (41 and 18 percent, respectively). Women in the wealthiest households are the most likely to receive vitamin A supplementation postpartum.

Night blindness is a symptom of severe vitamin A deficiency, which pregnant women are especially prone to suffer. In the 2010 TDHS, women were asked if they suffered from night blindness during their last pregnancy. Table 11.13 shows that 4 percent of women with a recent birth reported experiencing night blindness. After adjusting for women who also reported vision problems during the day, an estimated 1 percent of women suffered from night blindness. An indication of VAD in the wider population is considered only when prevalence of night blindness among pregnant women is 5 percent or more (IVACG, 2001).

Nutritional deficiencies like anaemia are often exacerbated during pregnancy because of the additional nutrient demands associated with foetal growth. Iron status can be improved by providing iron supplements to food consumed by women along with improved diets and control of parasites and malaria. Iron supplementation is necessary for pregnant women because their needs are usually too high to be met solely by food intake. For pregnant women, daily iron tables are recommended throughout the pregnancy period (MOHSW, 1997). According to Table 11.3 only 4 percent of pregnant women take iron tablets daily for 90 or more days. Five percent take iron supplements for 60 to 89 days, and the majority (49 percent) take supplements for fewer than 60 days. Forty-one percent of pregnant women do not take iron supplements at all.

Table 11.13 Micronutrient intake among mothers

Among women age 15-49 with a child under age 3 living with her, the percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; among women age 15-49 with a child born in the past five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child; among mothers age 15-49 who during the pregnancy of the last child born in the five years prior to the survey, the percentage who suffered from night blindness, the percentage who took iron tablets or syrup for specific numbers of days, and the percentage who took deworming medication; and among women age 15-49 with a child born in the past five years, who live in households that were tested for iodised salt, the percentage who live in households with adequately iodised salt, by background characteristics, Tanzania 2010

Background characteristic	Women with children under age 3 living with them			Women with children under age 5								Among women with a child born in the past five years who live in households that were tested for iodised salt	
	Percentage consumed vitamin-A rich foods[1]	Percentage consumed iron-rich foods[2]	Number of women	Percentage who received vitamin A dose post-partum[3]	Percentage who had night blindness during pregnancy for last birth		Number of days iron tablets or syrup taken during pregnancy for past birth					Number of women	Percentage living in households with adequately iodised salt[5]	Number of women
					Reported	Adjusted[4]	None	<60	60-89	90+	Don't know/ missing			
Age														
15-19	82.8	48.2	347	19.4	5.5	0.6	47.2	46.3	3.3	2.1	1.1	373	57.4	354
20-29	73.5	37.3	2,121	25.6	3.9	0.8	40.6	49.2	5.1	3.6	1.3	2,698	55.9	2,616
30-39	69.6	30.4	1,353	26.7	4.6	0.7	39.3	49.2	6.2	3.4	1.9	1,905	57.4	1,846
40-49	59.3	24.5	293	27.5	4.1	0.5	41.5	48.2	5.7	3.9	0.8	543	54.4	527
Residence														
Urban	72.6	46.4	867	35.6	4.0	0.6	34.5	52.7	6.1	4.5	2.3	1,273	80.3	1,231
Rural	71.8	32.0	3,247	22.8	4.4	0.8	42.6	47.8	5.2	3.2	1.2	4,246	49.2	4,111
Mainland/Zanzibar														
Mainland	72.0	34.3	4,007	25.4	4.4	0.7	41.2	49.1	5.1	3.1	1.5	5,378	56.6	5,205
Urban	72.4	45.4	829	35.3	4.1	0.6	35.0	53.2	5.7	3.8	2.4	1,222	80.8	1,181
Rural	71.9	31.4	3,178	22.5	4.4	0.8	43.1	47.9	4.9	2.9	1.2	4,156	49.5	4,024
Zanzibar	72.3	61.9	106	38.9	1.7	0.4	20.0	42.6	20.3	16.4	0.7	141	46.8	137
Unguja	72.9	64.8	64	45.1	2.1	0.5	18.9	41.4	17.3	21.7	0.7	89	60.8	87
Pemba	71.3	57.6	42	28.3	1.0	0.2	21.8	44.7	25.5	7.3	0.7	52	23.0	51
Zone														
Western	75.8	29.5	883	17.4	8.9	1.1	50.9	42.3	5.5	1.1	0.2	1,042	53.6	1,016
Northern	65.3	32.5	532	27.7	4.0	0.3	40.9	53.0	1.4	1.3	3.4	782	64.0	755
Central	77.0	16.7	386	32.7	5.1	0.3	25.5	61.7	6.0	6.2	0.6	503	33.9	493
Southern Highlands	73.7	40.8	561	17.3	1.1	0.3	44.6	45.7	5.5	2.7	1.5	761	55.3	727
Lake	69.0	43.7	810	27.4	4.1	1.7	48.4	46.0	2.8	1.1	1.6	1,031	69.6	1,003
Eastern	71.3	39.0	506	32.4	2.5	0.2	33.6	48.2	10.5	6.7	1.1	744	78.6	714
Southern	72.5	29.9	330	29.1	2.8	0.6	29.3	57.0	4.7	6.7	2.2	514	18.1	497
Region														
Dodoma	76.1	13.3	239	33.2	5.8	0.0	23.3	64.9	6.4	5.5	0.0	316	37.2	309
Arusha	55.5	24.3	150	22.4	4.1	0.0	48.5	44.8	1.4	2.2	3.3	232	97.1	219
Kilimanjaro	76.6	55.1	98	32.8	1.3	0.7	34.5	63.6	0.7	1.2	0.0	162	71.5	162
Tanga	69.4	36.2	182	30.2	3.8	0.6	38.3	57.0	1.2	0.5	2.9	255	36.7	250
Morogoro	63.8	25.6	181	28.9	4.1	0.6	39.8	44.0	8.1	7.1	1.0	262	66.5	251
Pwani	80.0	29.5	103	22.0	1.5	0.0	30.7	34.2	24.4	10.8	0.0	149	75.3	136
Dar es Salaam	73.5	54.3	223	39.8	1.8	0.0	29.9	57.7	6.2	4.5	1.7	333	89.2	327
Lindi	69.2	20.7	82	37.2	3.2	0.5	26.5	51.6	6.7	11.7	3.5	121	8.6	119
Mtwara	74.1	39.2	115	37.0	2.2	0.0	22.4	62.2	3.4	8.9	3.1	197	18.5	190
Ruvuma	73.1	27.4	133	16.2	3.3	1.2	37.9	55.1	4.9	1.5	0.6	196	23.9	187
Iringa	66.7	30.5	156	27.9	0.6	0.6	34.9	60.4	2.0	1.4	1.3	237	55.9	227
Mbeya	72.7	42.9	258	15.4	1.6	0.0	48.5	36.7	8.3	4.1	2.4	347	54.4	331
Singida	78.3	22.3	147	31.7	4.0	0.8	29.1	56.4	5.3	7.6	1.6	187	28.4	184
Tabora	74.7	27.7	232	20.7	7.9	0.5	51.8	40.8	6.0	1.3	0.0	289	58.0	281
Rukwa	82.9	47.9	146	6.8	0.5	0.5	50.1	43.6	4.7	1.6	0.0	177	56.6	169
Kigoma	57.4	28.5	225	29.5	4.2	1.7	30.8	64.2	3.6	0.7	0.7	262	74.7	256
Shinyanga	86.0	31.0	426	8.9	12.0	1.2	61.1	31.6	6.2	1.1	0.0	492	39.8	479
Kagera	65.5	41.2	246	26.5	7.0	2.3	37.0	59.7	2.0	0.5	0.8	323	63.4	308
Mwanza	62.9	37.7	389	32.1	2.4	1.4	56.3	37.0	3.1	1.3	2.3	480	60.4	472
Mara	87.4	60.3	175	18.8	3.7	1.4	48.1	45.4	3.6	1.6	1.3	229	97.9	222
Manyara	61.6	16.2	102	25.8	7.3	0.0	40.3	46.8	2.9	1.2	8.9	134	50.7	125
Unguja North	64.2	52.8	18	49.8	4.1	0.9	12.1	43.9	18.0	24.4	1.5	23	36.6	21
Unguja South	74.8	59.2	9	64.4	4.0	1.6	9.6	35.1	21.5	33.8	0.0	14	53.5	14
Town West	76.6	71.9	37	37.9	0.8	0.0	24.3	42.0	15.8	17.3	0.6	53	72.8	51
Pemba North	80.5	73.5	22	28.8	0.0	0.0	27.2	40.8	26.5	5.1	0.4	26	11.1	25
Pemba South	61.1	40.1	20	27.7	2.0	0.5	16.4	48.6	24.6	9.5	0.9	26	35.0	25

Continued ...

Table 11.13—*Continued*

Background characteristic	Women with children under age 3 living with them			Women with children under age 5									Among women with a child born in the past five years, who live in households that were tested for iodised salt	
	Percentage consumed vitamin-A rich foods[1]	Percentage consumed iron-rich foods[2]	Number of women	Percentage who received vitamin A dose post-partum[3]	Percentage who had night blindness during pregnancy for last birth		Number of days iron tablets or syrup taken during pregnancy for last birth					Number of women	Percentage living in households with adequately iodised salt[5]	Number of women
					Reported	Adjusted[4]	None	<60	60-89	90+	Don't know/ missing			
Education														
No education	72.1	27.4	1,026	18.4	6.5	0.9	45.7	43.3	6.4	2.4	2.2	1,313	46.9	1,265
Primary incomplete	71.6	30.2	606	21.3	3.6	0.6	41.6	48.6	4.5	4.7	0.7	777	48.3	743
Primary complete	71.7	36.8	2,187	28.0	3.4	0.6	39.3	51.1	5.0	3.3	1.3	3,015	59.9	2,927
Secondary+	75.2	58.2	295	40.7	5.1	1.5	33.5	51.4	7.6	5.9	1.7	414	75.2	407
Wealth quintile														
Lowest	71.6	23.3	847	22.4	5.3	0.7	41.7	48.4	4.9	3.7	1.3	1,087	43.2	1,042
Second	75.7	31.7	968	19.9	4.4	0.7	47.0	43.1	6.4	2.3	1.2	1,222	46.2	1,184
Middle	68.2	32.6	908	23.7	4.5	0.6	43.3	49.2	3.5	2.6	1.3	1,175	51.5	1,135
Fourth	70.1	40.1	777	28.0	3.3	1.3	33.8	53.8	7.2	3.5	1.7	1,111	61.7	1,076
Highest	74.6	53.9	613	37.5	3.8	0.2	36.1	51.1	5.2	5.7	1.9	924	84.5	905
Total	72.0	35.0	4,113	25.8	4.3	0.7	40.7	48.9	5.4	3.5	1.5	5,519	56.4	5,342

[1] Includes meat, liver, fish, poultry, eggs, pumpkin, carrots, red sweet potatoes, ripe mango or papaya, passion fruit, any dark green leafy vegetables (spinach/amaranth/cassava) and other locally grown yellow/orange-colour fruits or vegetables
[2] Includes meat (and organ meat), fish, poultry, eggs
[3] In the first two months after delivery
[4] Women who reported night blindness but did not report difficulty with vision during the day
[5] Deworming for intestinal parasites is commonly done for helminths and for schistosomes
[6] Salt containing 15 ppm of iodine or more; excludes women in households where salt was not tested

The difference in daily iron supplement intake, for 90 or more days, is small between urban and rural areas (5 percent and 3 percent, respectively). However, pregnant women in Zanzibar are five times more likely to take iron supplements daily for 90 or more days (16 percent) than their counterparts in Tanzania Mainland (3 percent). There are variations at regional level, but the intake is generally low. The region with the highest proportion is Unguja South (34 percent). The proportion of pregnant women who take iron supplements daily for 90 or more days is not correlated with age, level of education, or wealth quintile.

Iodine deficiency has adverse effects on all population groups, but women of reproductive age are often the worst affected. For example, iodine deficiency is related to adverse pregnancy outcomes including abortion, foetal brain damage and congenital malformation, stillbirth, and perinatal death. For this reason, use of iodised salt by women of reproductive age receives emphasis. Table 11.13 shows that 56 percent of women with a child born in the five years preceding the survey live in households that use adequately iodised salt (containing 15 or more ppm). The proportion in urban areas (80 percent) is far greater than in rural areas (49 percent), and is higher in the Mainland (57 percent) than in Zanzibar (47 percent). In Mainland, Mara, and Arusha have the highest proportion of women living in households using adequately iodised salt (98 and 97 percent, respectively). In Dar es Salaam the proportion is 89 percent. On the other hand, some regions have very low proportions—Lindi (9 percent), Pemba North (11 percent), and Mtwara (19 percent).

Use of adequately iodised salt is correlated with education and wealth quintile. The survey results show that women who have some secondary education are more likely to use adequately iodised salt (75 percent) compared with those who do not have any form of education (47 percent). Likewise, the proportion of households using adequately iodised salt is higher in the highest wealth quintile (85 percent) compared with the proportion using it in the lowest wealth quintile (43 percent).

MALARIA 12

12.1 INTRODUCTION

Malaria is a major public health concern for all Tanzanians, especially for pregnant women and children under age 5. The disease is a leading cause of morbidity and mortality among outpatient and inpatient admissions. It accounts for up to 40 percent of all outpatient attendance (MOHSW, 2006). Many parts of the country, including the uplands, report malaria transmission throughout the year, although it occurs most frequently during and after the raining season from April to May.

Malaria is caused by four species of plasmodia parasites that are transmitted by Anopheles mosquitoes. In Tanzania, *Plasmodium falciparum (P. Falciparum)* is the most common parasite. It causes severe malaria, and is fatal if not recognized promptly and properly managed. The most severe cases occur among persons who have not yet developed sufficient immunity to malaria through previous exposure. Children under age 5 are at highest risk, followed by pregnant women, because of their reduced natural immunity. Pregnant women are four times as likely to experience the complications of malaria as non-pregnant women, and malaria is a major cause of pregnancy loss, low birth weight, and neonatal mortality (Jamison et al., 1993).

Malaria poses many societal and economic burdens in Tanzania, ranging from school absenteeism to low productivity in the workplace. In the short term, widespread malaria reduces agricultural production and other economic outputs. Additionally, the cumulative effect in the long term may be a decrease in national economic capacity and development. The international Roll Back Malaria (RBM) Initiative works to reduce the malaria burden. The primary objective of RBM is to increase access to the most effective and affordable protective measures. These measures include use of insecticide-treated mosquito nets (ITNs) for sleeping and increased coverage of prompt and effective treatment. The RBM Initiative also promotes the use of intermittent preventive treatment (IPT) of malaria among pregnant women. In Tanzania, the recommendations of the RBM Initiative are implemented through the National Malaria Control Strategy (MOHSW, 2002). The National Malaria Control Strategy also includes other vector control measures such as indoor residual spraying (IRS) and epidemic prevention and control.

The Government of Tanzania, primarily through the Ministry of Health and Social Welfare (MOHSW), is committed to the control and prevention of malaria. A considerable amount of the health budget is allocated to address malaria and malaria-related illnesses. Household expenditures related to malaria are high and are mainly for treatment. These costs are expected to rise substantially because of the recent introduction of artemisinin-based combination therapy (ACT). ACT is a response to the emerging resistance of malaria parasites to monotherapy antimalarial drugs, for example, sulphadoxine pyrimethamine (SP) and chloroquine, which used to be first-line antimalarial drugs in Tanzania.

The malaria component of the 2010 TDHS measures malaria prevention and treatment outcomes. At the household level, it includes coverage of malaria interventions, possession and use of ITNs, and indoor residual spraying (IRS). At the individual level, information is collected about prompt antimalarial treatment of children under age 5 with fever and use of IPT among pregnant women. Many of the indicators were assessed in the 2004-05 TDHS and the 2007-08 THMIS, which allows for trend analysis (NBS, 2005; TACAIDS et al., 2008).

12.2 MOSQUITO NETS

The use of insecticide-treated mosquito nets (ITNs) is a primary health intervention designed to reduce malaria transmission in Tanzania. Distribution of long-lasting insecticide nets (LLINs) to children under 5 in Mainland started in late 2008 with a pilot project in Tanga. It was expanded region by region in May 2009. By the time data collection for the 2010 TDHS began in December 2009, three regions (Arusha, Morogoro, and Dar es Salaam) had not started the distribution of LLINs. Four regions (Dodoma, Pwani, Kilimanjaro, and Singida) received the LLINs at around the same time as the DHS fieldwork was conducted, and the remaining regions (14 regions) had already received the distribution of LLINs to all children under 5. It is anticipated that widespread use of ITNs will reduce mosquito density and biting intensity. ITNs are being promoted through three main channels: (1) in the public sector as community-based projects, (2) in public/private partnerships implemented by nongovernmental organisations directly in the community, and (3) in the private sector as social marketing initiatives, such as those assisted by Population Services International (PSI).

The following section presents 2010 TDHS findings on household possession and use of mosquito nets and treatment of bed nets by household members.

12.2.1 Ownership of Mosquito Nets

All households in the 2010 TDHS were asked whether they own mosquito nets, and if so, how many. Table 12.1 and Figure 12.1 show that 75 percent of households in Mainland Tanzania and 89 percent in Zanzibar own at least one mosquito net. These figures are much higher than in the 2004-05 TDHS (46 and 65 percent, respectively).

In this survey, an insecticide-treated net (ITN) is a factory-treated net that does not require any further treatmen, or a net that has been soaked with insecticide within the past 12 months. Between the 2004-05 TDHS and the 2010 TDHS, ownership of ITNs increased from 23 percent to 63 percent in Mainland and from 28 percent to 76 percent in Zanzibar. This significant increase in ownership of mosquito nets can be attributed to the government health programmes mentioned above. These programmes started in Zanzibar in September 2005 and in Mainland in 2009.

Coverage of mosquito nets in Tanzania has greatly improved in all regions since 2004. In Shinyanga, Mwanza, and Mara, 90 percent or more of households have at least one mosquito net, while the proportion in Singida is less than 50 percent (47 percent).

In the Mainland, ownership of ITNs is 50 percent or more in all regions except Kilimanjaro (49 percent), Morogoro (37 percent), and Singida (34 percent). Ownership of ITNs is low in Singida (34 percent). The increase in ITN ownership between 2004-05 and 2010 surveys is most notable in Iringa (from 7 percent to 53 percent) and Manyara (from 8 percent to 73 percent).

In the 2010 TDHS, rural households are less likely than urban households to own a mosquito net (72 and 84 percent, respectively). However, they are as likely to own at least one ITN (65 and 63 percent, respectively). Compared with the 2004-05 TDHS finding, the gap between urban and rural households in ownership of at least one ITN has narrowed significantly. In 2004-05, the figures were 14 percent for rural and 47 percent for urban areas. Surprisingly, rural households are more likely to own more than one ITN than urban households (38 and 35 percent, respectively). Table 12.1 also shows that ownership of any type of mosquito nets increases with wealth quintile, ranging from 65 percent to 88 percent.

A majority of the ITNs are long-lasting insecticidal nets (54 of 64 percent). The variations in ownership of LLINs across subgroups of households are the same as for ITNs. The low levels of ownership and use of mosquito nets in Kilimanjaro, Singida, Arusha, and Morogoro regions are due to the fact that these regions had not started the LLIN distribution. Dar es Salaam, which had the highest proportion of households with ITNs in Mainland in the 2004-05 TDHS and 2007-08 THMIS, shows a low ownership of LLINs in 2010 because the LLIN distribution program had not started in the region by the time of the 2010 TDHS data collection.

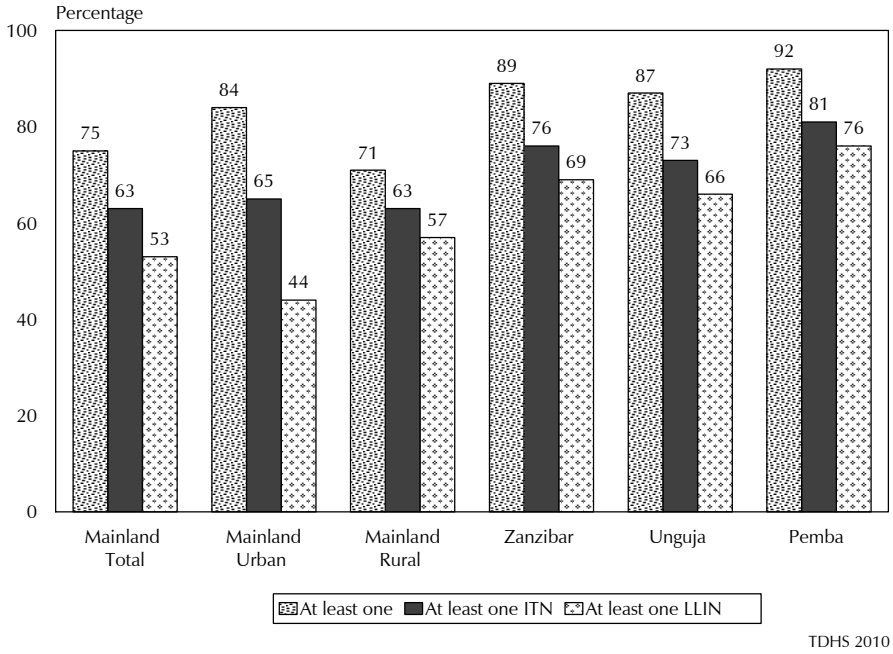
Table 12.1 Ownership of mosquito nets

Percentage of households with at least one and more than one mosquito net (treated or untreated), insecticide-treated net (ITN), and long-lasting insecticidal net (LLIN), and the average number of nets per household, by background characteristics, Tanzania 2010

Background characteristic	Any type of mosquito net			Insecticide-treated mosquito net (ITN)[1]			Long-lasting insecticide net (LLIN)[2]			Number of households
	Percentage with at least one	Percentage with more than one	Average number of nets per household	Percentage with at least one	Percentage with more than one	Average number of ITNs per household	Percentage with at least one	Percentage with more than one	Average number of LLINs per household	
Residence										
Urban	84.0	54.4	1.9	64.8	35.1	1.3	43.8	18.5	0.7	2,507
Rural	71.9	47.8	1.5	63.4	38.2	1.2	57.3	30.7	1.0	7,116
Mainland/Zanzibar										
Mainland	74.7	48.9	1.6	63.4	36.9	1.2	53.4	27.0	0.9	9,377
Urban	84.0	54.0	1.9	64.9	34.9	1.3	43.5	18.1	0.7	2,417
Rural	71.4	47.2	1.5	63.0	37.6	1.2	56.8	30.1	1.0	6,959
Zanzibar	88.6	71.8	2.4	75.8	55.8	1.8	69.2	49.2	1.6	246
Unguja	87.0	68.5	2.3	72.9	52.1	1.7	65.6	44.5	1.4	157
Pemba	91.5	77.6	2.6	80.7	62.1	2.0	75.6	57.4	1.8	89
Zone										
Western	83.0	64.2	2.0	73.5	53.0	1.6	67.9	44.7	1.4	1,389
Northern	65.3	36.3	1.2	56.5	28.6	1.0	48.6	21.4	0.8	1,655
Central	66.1	36.8	1.2	58.9	30.4	1.0	51.1	22.3	0.8	882
Southern Highlands	68.0	42.5	1.4	57.7	31.8	1.1	50.7	22.7	0.8	1,367
Lake	85.8	63.5	2.1	75.9	50.4	1.6	70.3	44.0	1.4	1,580
Eastern	75.2	44.2	1.6	54.8	25.5	1.0	28.4	9.2	0.4	1,498
Southern	77.0	52.0	1.6	66.1	36.6	1.2	57.5	21.5	0.8	1,005
Region										
Dodoma	76.0	41.3	1.3	71.8	36.1	1.2	65.8	28.1	1.0	580
Arusha	59.2	27.8	1.0	51.1	22.9	0.8	41.9	17.7	0.7	411
Kilimanjaro	58.4	29.5	1.0	48.6	20.5	0.8	44.2	14.6	0.6	460
Tanga	70.4	40.1	1.3	60.2	30.7	1.1	48.9	19.7	0.7	551
Morogoro	56.8	33.9	1.2	36.9	17.5	0.7	15.0	4.1	0.2	499
Pwani	80.3	56.8	1.9	68.7	40.1	1.4	62.2	28.7	1.1	269
Dar es Salaam	85.8	46.6	1.8	61.9	25.5	1.1	25.0	5.3	0.3	730
Lindi	79.0	52.4	1.6	64.4	35.9	1.2	53.0	20.0	0.8	219
Mtwara	76.1	53.7	1.7	63.7	36.1	1.2	54.9	19.4	0.8	425
Ruvuma	77.0	49.8	1.5	70.0	37.6	1.2	63.2	24.9	0.9	361
Iringa	60.6	35.5	1.1	52.5	26.0	0.9	45.8	15.7	0.6	498
Mbeya	69.3	44.2	1.5	57.8	33.1	1.1	49.7	22.6	0.8	591
Singida	47.1	28.3	0.9	34.1	19.7	0.6	22.6	11.3	0.4	302
Tabora	82.3	62.4	2.0	73.1	53.3	1.6	66.2	40.4	1.3	365
Rukwa	78.4	51.5	1.6	66.7	39.5	1.2	61.6	35.3	1.1	278
Kigoma	69.0	50.1	1.5	57.7	34.4	1.1	54.9	30.5	1.0	417
Shinyanga	92.9	75.0	2.4	84.6	65.6	2.0	77.7	57.0	1.7	607
Kagera	75.8	50.9	1.6	67.6	42.2	1.3	63.4	39.0	1.2	556
Mwanza	90.8	69.3	2.3	78.7	53.2	1.7	71.6	44.4	1.4	699
Mara	92.3	72.5	2.4	84.3	58.3	1.8	79.4	51.6	1.6	326
Manyara	78.1	56.0	1.6	72.6	50.0	1.4	68.6	45.3	1.3	233
Unguja North	93.1	79.5	2.7	86.8	66.4	2.2	83.5	61.1	2.0	41
Unguja South	92.5	76.1	2.4	90.3	71.3	2.2	88.1	65.7	1.9	27
Town West	82.5	61.2	2.1	61.4	39.8	1.4	50.5	30.5	1.0	89
Pemba North	94.1	81.1	2.7	88.0	69.7	2.3	85.8	68.4	2.2	45
Pemba South	88.8	74.0	2.5	73.2	54.3	1.8	65.1	46.1	1.4	44
Wealth quintile										
Lowest	64.7	38.0	1.2	56.6	29.6	1.0	53.0	26.0	0.9	1,931
Second	71.5	47.4	1.5	63.9	38.5	1.2	59.7	32.4	1.1	1,917
Middle	72.1	48.9	1.6	63.6	39.7	1.3	56.5	31.8	1.0	1,946
Fourth	79.5	52.5	1.7	66.8	38.7	1.3	56.2	28.6	1.0	1,911
Highest	87.6	60.8	2.2	68.0	40.6	1.4	43.5	18.9	0.7	1,918
Total	75.0	49.5	1.6	63.8	37.4	1.2	53.8	27.6	0.9	9,623

[1] An insecticide-treated net (ITN) is a permanent net that does not require any treatment (LLIN) or a net that has been soaked with insecticide within the past 12 months.
[2] A long-lasting insecticidal net (LLIN) is a ready-to-use, pre-treated mosquito net, which requires no further treatment during its expected life span.

Figure 12.1 Ownership of Mosquito Nets by Residence



TDHS 2010

12.2.2 Use of Mosquito Nets

The 2010 THDS asked respondents about the use of mosquito nets by household members the night before the survey. Table 12.2 shows that 56 percent of all household members slept under a mosquito net the night before the survey, 45 percent slept under an ITN, and 19 percent slept under an LLIN. Household members in urban areas are more likely than those in rural areas to sleep under a net. Use of an ITN in households with an ITN ranges from 72 percent in Morogoro, Dar es Salaam, Shinyanga, and Mwanza to 39 percent in Iringa.

Table 12.2 Use of mosquito nets by household members

Among de facto household members, the percentages who slept under a mosquito net (treated or untreated) the night before the survey, under an insecticide-treated net (ITN), and under a long-lasting insecticidal net (LLIN); and among all household members in households with at least one ITN, the percentage who slept the night before the survey under an ITN, by background characteristics, Tanzania 2010

	Percentage of household members who:				Household population in households with ITN[1]	
Background characteristic	Slept under any net the night before the survey	Slept under an ITN the night before the survey[1]	Slept under a LLIN the night before the survey[2]	Number of household members	Percentage who slept under an ITN the night before the survey[1]	Number of household members
Residence						
Urban	70.8	50.4	13.9	10,596	71.4	7,478
Rural	52.0	43.6	21.0	35,858	60.4	25,883
Mainland/Zanzibar						
Mainland	56.2	45.1	19.6	45,125	63.1	32,308
Urban	71.5	51.0	14.1	10,077	72.1	7,129
Rural	51.8	43.5	21.1	35,049	60.5	25,179
Zanzibar	60.4	45.4	12.6	1,328	57.3	1,053
Unguja	59.1	43.4	11.7	827	57.1	628
Pemba	62.5	48.8	14.1	501	57.7	424
Zone						
Western	63.4	53.4	19.8	8,272	66.0	6,686
Northern	44.0	37.0	21.7	7,074	58.3	4,491
Central	46.1	40.3	25.0	4,170	63.3	2,655
Southern Highlands	41.7	33.4	17.4	6,298	48.7	4,312
Lake	70.6	57.7	20.0	8,813	68.6	7,406
Eastern	61.5	41.0	14.7	6,318	70.6	3,666
Southern	56.4	45.1	19.9	4,180	61.0	3,092

Continued .

Table 12.2—*Continued*

Among de facto household members, the percentages who slept under a mosquito net (treated or untreated) the night before the survey, under an insecticide-treated net (ITN), and under a long-lasting insecticidal net (LLIN); and among all household members in households with at least one ITN, the percentage who slept the night before the survey under an ITN, by background characteristics, Tanzania 2010

Background characteristic	Percentage of household members who:				Household population in households with ITN[1]	
	Slept under any net the night before the survey	Slept under an ITN the night before the survey[1]	Slept under a LLIN the night before the survey[2]	Number of household members	Percentage who slept under an ITN the night before the survey[1]	Number of household members
Region						
Dodoma	58.6	53.6	34.8	2,585	66.8	2,076
Arusha	34.0	29.4	22.1	1,850	55.6	978
Kilimanjaro	41.9	31.9	20.9	1,790	55.3	1,032
Tanga	49.1	41.1	19.9	2,237	60.5	1,518
Morogoro	43.0	27.0	16.2	2,254	72.0	844
Pwani	67.6	52.4	20.9	1,258	67.4	979
Dar es Salaam	73.7	47.0	10.6	2,807	71.6	1,843
Lindi	57.3	44.3	16.9	847	59.3	632
Mtwara	58.0	45.0	17.6	1,746	62.4	1,261
Ruvuma	54.1	45.7	24.0	1,588	60.5	1,199
Iringa	29.5	25.2	18.9	2,031	38.8	1,320
Mbeya	39.6	31.0	12.7	2,861	44.8	1,980
Singida	25.9	18.6	9.0	1,585	50.8	579
Tabora	56.1	46.8	18.0	2,221	59.6	1,744
Rukwa	63.4	50.0	24.8	1,406	69.5	1,012
Kigoma	50.7	38.3	21.1	2,124	58.8	1,381
Shinyanga	74.4	65.3	20.1	3,927	72.0	3,561
Kagera	55.8	48.5	22.4	2,822	62.8	2,179
Mwanza	77.9	61.9	18.9	4,111	72.3	3,523
Mara	76.7	62.2	18.6	1,879	68.6	1,703
Manyara	53.2	48.7	25.2	1,197	60.5	962
Unguja North	57.3	47.1	13.0	199	53.1	176
Unguja South	67.1	59.4	18.2	126	63.8	118
Town West	57.8	37.8	9.6	502	56.8	334
Pemba North	63.6	54.0	15.9	248	59.0	227
Pemba South	61.4	43.7	12.4	253	56.2	197
Wealth quintile						
Lowest	47.9	40.2	25.1	8,806	60.8	5,819
Second	51.7	43.8	22.4	9,901	60.0	7,224
Middle	51.8	43.4	19.5	10,155	59.7	7,374
Fourth	59.3	47.3	18.1	9,110	63.8	6,761
Highest	72.8	51.7	11.0	8,482	71.0	6,182
Total	56.3	45.2	19.4	46,454	62.9	33,361

[1] An insecticide-treated net (ITN) is a permanent net that does not require any treatment or a net that has been soaked with insecticide within the past 12 months.
[2] A long-lasting insecticidal net (LLIN) is a ready-to-use pre-treated mosquito net, which requires no further treatment during its expected life span.

Table 12.3 shows that 72 percent of children under age 5 slept under a mosquito net the night before the survey, 64 percent slept under an ITN, and 24 percent slept under an LLIN. These figures are higher than those reported in the 2004-05 TDHS. For example, the proportion of children who slept under an ITN was 16 percent in the 2004-05 TDHS. Use of mosquito nets and ITNs is not significantly associated with children's age. As in the 2004-05 TDHS, there is no significant difference by sex in the use of mosquito nets among children. In households with an ITN, urban children are slightly more likely than rural children to sleep under an ITN (81 and 75 percent, respectively). Looking at regional levels, among households with an ITN 60 percent or more of children in all regions except Mbeya slept under an ITN. The proportion ranges from a low of 51 percent in Mbeya to a high of 88 percent in Mwanza.

Table 12.3 Use of mosquito nets by children

Among children under age 5 in all households, the percentage who slept under a mosquito net (treated or untreated) the night before the survey, under an insecticide-treated net (ITN), and under a long-lasting insecticidal net (LLIN), and among children under age 5 in households with at least one ITN, the percentage who slept the night before the survey under an ITN, by background characteristics, Tanzania 2010

	Children under age 5 in all households				Children under age 5 in households with an ITN[1]	
Background characteristic	Percentage who slept under any net the night before the survey	Percentage who slept under an ITN the night before the survey[1]	Percentage who slept under an LLIN the night before the survey[2]	Number of children	Percentage who slept under an ITN the night before the survey[1]	Number of children
Age in years						
<1	73.3	63.8	23.0	1,635	76.9	1,356
1	74.3	65.1	21.8	1,620	77.8	1,356
2	72.0	63.3	24.8	1,512	76.0	1,259
3	70.8	63.1	25.6	1,658	74.7	1,402
4	71.3	62.6	26.7	1,553	74.9	1,300
Sex						
Male	72.0	63.5	23.3	3,957	75.3	3,335
Female	72.6	63.7	25.5	4,022	76.8	3,338
Residence						
Urban	80.3	64.1	17.2	1,553	80.5	1,236
Rural	70.4	63.5	26.1	6,426	75.0	5,437
Mainland/Zanzibar						
Mainland	72.4	63.9	24.6	7,768	76.3	6,499
Urban	80.8	64.9	17.4	1,481	81.2	1,183
Rural	70.4	63.6	26.3	6,287	75.2	5,316
Zanzibar	70.6	54.6	17.0	210	65.9	174
Unguja	70.0	51.9	13.7	125	65.6	99
Pemba	71.5	58.7	21.7	86	66.3	76
Zone						
Western	75.6	67.8	22.7	1,687	76.2	1,501
Northern	63.4	57.1	27.9	1,029	74.6	788
Central	65.8	59.1	31.6	780	81.7	565
Southern Highlands	59.7	52.1	22.8	1,089	60.9	931
Lake	85.3	76.4	23.0	1,660	81.7	1,554
Eastern	67.4	52.6	18.4	896	81.1	581
Southern	81.7	73.4	31.7	627	79.4	580
Region						
Dodoma	83.2	79.1	45.8	479	86.2	439
Arusha	50.1	43.5	27.4	288	78.9	159
Kilimanjaro	72.0	65.8	30.4	207	75.4	180
Tanga	59.5	52.2	26.4	333	66.9	260
Morogoro	41.2	28.2	19.4	327	74.9	123
Pwani	83.7	74.9	26.6	206	82.7	186
Dar es Salaam	81.9	62.0	13.0	364	82.8	272
Lindi	77.6	66.5	26.4	136	75.4	120
Mtwara	85.4	75.2	30.1	238	79.5	226
Ruvuma	80.4	75.4	35.9	253	81.3	234
Iringa	57.7	54.1	24.8	313	59.7	284
Mbeya	50.9	42.6	16.7	508	50.5	428
Singida	38.2	27.5	9.1	301	65.7	126
Tabora	65.4	58.5	20.6	462	68.9	392
Rukwa	78.8	67.6	31.9	269	83.1	218
Kigoma	69.2	55.6	21.9	409	69.0	329
Shinyanga	84.5	79.1	24.2	816	82.8	779
Kagera	71.4	64.6	22.9	485	71.5	438
Mwanza	91.8	82.7	25.3	789	87.7	744
Mara	89.3	78.6	18.3	386	81.6	372
Manyara	79.8	75.9	28.6	202	81.0	189
Unguja North	64.4	54.8	14.2	34	60.7	31
Unguja South	76.3	68.3	22.8	18	73.3	17
Town West	71.0	46.3	11.2	72	66.0	51
Pemba North	72.6	63.1	22.1	44	66.4	42
Pemba South	70.2	54.0	21.3	41	66.2	34
Wealth quintile						
Lowest	68.1	61.1	31.5	1,691	77.9	1,326
Second	70.0	64.0	25.7	1,874	74.4	1,613
Middle	68.3	61.7	24.0	1,832	71.7	1,578
Fourth	77.3	67.3	23.3	1,509	79.7	1,274
Highest	82.9	65.0	13.0	1,073	79.0	883
Total	72.3	63.6	24.4	7,979	76.1	6,673

[1] An insecticide-treated net (ITN) is a permanent net that does not require any treatment or a net that has been soaked with insecticide within the past 12 months.
[2] A long-lasting insecticidal net (LLIN) is a ready-to-use, pre-treated mosquito net, which requires no further treatment during its expected life span.

12.2.3 Use of Mosquito Nets by Pregnant Women

Table 12.4 shows the proportion of all pregnant women who slept under a mosquito net. Overall, 68 percent of pregnant women in Tanzania slept under any net the night before the survey, 57 percent slept under an ITN, and 25 percent slept under an LLIN. Pregnant women in Mainland Tanzania (57 percent) are more likely than in Zanzibar (50 percent) to sleep under an ITN. They are also more likely to sleep under an LLIN (25 percent compared with 12 percent). These figures show a substantial increase compared with previous survey findings. For instance, the proportion of pregnant women who slept under an ITN in the 2007-08 THMIS is 26 percent. The greater use of ITNs in Tanzania may be attributed to programmes of providing subsidized mosquito nets to pregnant women and children under age 5.

Table 12.4 Use of mosquito nets by pregnant women

Among pregnant women age 15-49 in all households, the percentages who slept the night before the survey under a mosquito net (treated or untreated), under an insecticide-treated net (ITN), and under a long-lasting insecticidal net (LLIN), and among pregnant women age 15-49 in households with at least one ITN, the percentage who slept the night before the survey under an ITN, by background characteristics, Tanzania 2010

	Percentage of pregnant women age 15-49 who:				Percentage of pregnant women age 15-49 in households with ITN who:[1]	
Background characteristic	Slept under any net last night	Slept under an ITN last night[1]	Slept under an LLIN last night[2]	Number of women	Slept under an ITN last night[1]	Number of women
Residence						
Urban	69.3	46.7	22.7	179	70.2	119
Rural	67.2	59.2	25.2	768	74.2	614
Mainland/Zanzibar						
Mainland	67.6	57.1	25.0	922	73.8	713
Urban	70.0	47.5	23.1	172	71.0	115
Rural	67.1	59.2	25.5	750	74.3	598
Zanzibar	66.5	49.5	11.8	25	64.1	19
Unguja	61.7	47.2	12.8	13	63.8	9
Pemba	71.7	51.8	10.8	12	64.4	10
Zone						
Western	64.8	54.8	26.1	218	71.3	167
Northern	55.6	50.5	29.9	117	72.6	82
Central	61.4	56.5	37.8	72	(83.9)	49
Southern Highlands	57.7	46.4	16.1	113	63.8	82
Lake	86.9	74.5	18.3	225	81.9	205
Eastern	67.1	47.6	30.2	96	(77.8)	59
Southern	58.6	50.7	29.1	80	58.4	70
Education						
No education	63.9	54.2	27.2	242	72.7	181
Primary incomplete	67.6	63.1	32.1	149	76.9	122
Primary complete	69.0	58.0	21.8	496	73.2	393
Secondary+	70.8	42.6	20.2	59	70.0	36
Wealth quintile						
Lowest	61.2	55.6	36.0	177	75.3	131
Second	68.3	61.5	25.9	239	77.7	190
Middle	63.0	56.4	20.5	225	68.0	187
Fourth	69.0	57.3	22.6	168	71.9	134
Highest	80.5	50.7	17.5	137	76.1	91
Total	67.6	56.9	24.7	947	73.5	732

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] An insecticide-treated net (ITN) is a permanent net that does not require any treatment or a net that has been soaked with insecticide within the past 12 months.
[2] A long-lasting insecticidal net (LLIN) is a ready-to-use, pre-treated mosquito net, which requires no further treatment during its expected life span.

12.3 USE OF ANTIMALARIAL DRUGS DURING PREGNANCY

Malaria during pregnancy is extremely common among women who live in countries that are malaria-endemic. Pregnant women in these areas are semi-immune to malaria and often have a low prevalence of peripheral parasitaemia but have a high prevalence of placental infection (Steketee et al., 2001). Malaria placental infection is a major contributor to low birth weight, infant mortality, maternal anaemia, spontaneous abortion, and stillbirth. Studies have shown that intermittent preventive treatment (IPT) with two doses of Sulphadoxine Pyrimethamine (SP) protects pregnant women from maternal anaemia and malaria placental infection and reduces the incidence of low birth weight (Steketee et al., 2001). As a protective measure, it is recommended that all pregnant women in Tanzania receive at least two doses of IPT with SP during the second and third trimesters of pregnancy. Women in the 2010 TDHS were asked if they took any antimalarial medications during the pregnancy leading to their last live birth, and if so, what drugs were taken. Women were also asked whether the drugs they received were part of an antenatal care visit. It should be noted that obtaining information about drugs can be difficult because some respondents may not know or remember the name or the type of drug that they received. Table 12.5 shows the percentage of women who had a live birth in the two years preceding the survey who took any antimalarial drug and the percentage who took IPT during pregnancy. The fourth and fifth columns in Table 12.5 assess the extent to which women took SP for IPT.

Overall, 66 percent of pregnant women took an antimalarial drug during pregnancy (66 percent in Mainland and 85 percent in Zanzibar). The data suggest that IPT use of SP is integrated into routine antenatal care; 60 percent of pregnant women in Mainland Tanzania and 84 percent in Zanzibar reported having taken at least one dose of SP (IPT-1) during an ANC visit. However, only 27 percent of pregnant women in Mainland and 47 percent in Zanzibar received the recommended two or more doses of SP (IPT-2). These figures show an increase in these rates since the 2004-05 TDHS, when 22 percent of pregnant women in Mainland and 14 percent in Zanzibar received two or more doses of SP.

There are significant differences among women who received complete IPT (IPT-2), as determined by background characteristics. Women in urban areas are more likely than their rural counterparts to receive IPT-2 (31 percent and 25 percent, respectively). The same pattern is observed in the 2004-05 TDHS (29 and 20 percent, respectively).

Coverage of IPT-2 is highest (41 percent) in Mtwara, while in Mbeya, Tabora, and Shinyanga it is 20 percent or lower. Women in Zanzibar are much more likely than those in Mainland to receive IPT-2. The rates range from 34 percent in Pemba North to 68 percent in Unguja South. Coverage of IPT-2 increases with the woman's education and wealth. Women in wealthier households and better educated women are more likely than other women to receive IPT-2.

Although the percentage of pregnant women who received IPT-2 in the 2910 TDHS is higher than that in the 2004-05 TDHS, it is lower than that recorded in the 2007-08 THMIS.

Table 12.5 Prophylactic use of antimalarial drugs and use of Intermittent Preventive Treatment (IPT) by women during pregnancy

Percentages of women who took any antimalarial drugs for prevention, who took SP/Fansidar, and who received Intermittent Preventive Treatment (IPT) during the pregnancy for their last live birth in the two years preceding the survey, by background characteristics, Tanzania 2010

Background characteristic	Percentage who took any antimalarial drug	SP/Fansidar		Percentage who received any SP/Fansidar during an ANC visit	Percentage who received 2+ doses, at least one during an ANC visit	Number of women
		Percentage who took any SP/Fansidar	Percentage who took 2+ doses of SP/Fansidar[1]			
Residence						
Urban	73.8	68.8	30.8	65.0	30.5	682
Rural	64.4	61.8	26.3	59.4	25.2	2,584
Mainland/Zanzibar						
Mainland	65.9	62.7	26.7	59.9	25.7	3,179
Urban	73.1	68.0	29.9	63.9	29.6	646
Rural	64.0	61.4	25.8	58.9	24.8	2,533
Zanzibar	84.7	84.1	47.3	83.6	47.0	87
Unguja	85.8	85.0	52.5	84.1	52.1	54
Pemba	82.8	82.8	39.0	82.8	39.0	34
Zone						
Western	57.2	53.9	21.9	52.3	21.6	733
Northern	75.4	72.6	32.3	69.0	31.7	393
Central	58.7	57.8	28.0	57.4	27.6	304
Southern Highlands	59.4	54.0	18.2	53.7	18.2	445
Lake	68.8	67.9	30.2	60.5	26.9	666
Eastern	74.3	69.2	28.2	66.1	27.7	395
Southern	75.8	70.9	33.6	70.9	33.6	243
Region						
Dodoma	51.3	51.3	23.3	51.3	23.3	189
Arusha	71.8	68.5	33.0	62.6	30.7	105
Kilimanjaro	78.6	77.0	27.3	71.1	27.3	72
Tanga	80.9	77.7	38.8	75.8	38.8	137
Morogoro	74.5	71.6	31.9	69.3	30.9	138
Pwani	76.7	72.8	32.3	70.4	31.6	78
Dar es Salaam	73.0	65.7	23.7	61.7	23.7	178
Lindi	71.3	65.8	38.7	65.8	38.7	58
Mtwara	83.6	82.4	40.6	82.4	40.6	87
Ruvuma	71.7	63.7	24.4	63.7	24.4	98
Iringa	66.4	60.8	23.7	60.8	23.7	121
Mbeya	56.2	50.1	14.1	50.1	14.1	206
Singida	70.6	68.3	35.7	67.3	34.7	115
Tabora	53.8	49.1	16.3	48.4	16.3	184
Rukwa	58.4	54.6	20.5	53.5	20.5	118
Kigoma	61.1	58.6	29.5	54.4	29.0	184
Shinyanga	56.6	53.5	20.2	52.7	19.9	362
Kagera	80.2	80.2	33.5	79.0	32.3	203
Mwanza	59.8	58.8	24.4	48.9	20.8	318
Mara	73.0	71.0	39.0	60.4	33.5	148
Manyara	67.8	65.1	24.5	63.7	24.5	79
Unguja North	91.1	88.8	61.8	88.0	61.1	14
Unguja South	93.3	91.4	69.1	90.3	68.0	7
Town West	81.8	81.8	44.4	81.0	44.4	32
Pemba North	86.0	86.0	34.0	86.0	34.0	17
Pemba South	79.4	79.4	44.4	79.4	44.4	16
Education						
No education	56.0	53.1	22.4	52.1	22.1	836
Primary incomplete	65.5	61.5	25.5	58.7	24.4	491
Primary complete	70.7	67.9	28.2	64.4	27.0	1,697
Secondary+	73.7	69.8	40.4	66.1	39.9	243
Wealth quintile						
Lowest	62.4	60.9	25.7	57.8	24.5	687
Second	60.9	57.5	24.4	55.5	23.3	780
Middle	64.9	62.4	27.1	60.9	26.3	707
Fourth	73.0	67.2	28.7	63.0	27.9	613
Highest	74.9	72.4	32.4	68.9	31.8	478
Total	66.4	63.3	27.2	60.5	26.3	3,266

[1] IPT: Intermittent Preventive Treatment is preventive intermittent treatment with at least 2 doses of SP/Fansidar.

12.4 TREATMENT OF CHILDREN WITH FEVER

In malaria-endemic areas of sub-Saharan Africa, acute malarial clinical disease is almost always confined to young children who suffer high parasite densities. If untreated, this can progress very rapidly to severe malaria, which can cause death. The diagnosis of malaria is based on clinical criteria (clinical diagnosis) and supplemented by the detection of parasites in the blood (parasitological or confirmatory diagnosis).

12.4.1 Type and Timing of Antimalarial Drugs

Early treatment of malaria is critical to a positive outcome. Progression to severe malaria is often rapid, and children may die within 48 hours of onset of illness. Treatment must therefore be prompt. Studies show that provision of early treatment for persons with uncomplicated malaria within the community reduces progression to severe disease (Armstrong Schellenberg et al., 2002).

For each child under age 5 in the 2010 TDHS, mothers were asked if the child had had fever in the two weeks preceding the survey, whether treatment was sought for the fever, and the type of treatment given to the child for each episode. Table 12.6 shows the results. Overall, 23 percent of children under age 5 in Tanzania had a fever during the two weeks preceding the survey—23 percent in Mainland and 19 percent in Zanzibar. The proportion of children with fever in the two weeks before the survey is highest at age 12-23 months (29 percent). Six in ten children with fever were treated with antimalarial drugs; 60 percent in Mainland and only 17 percent in Zanzibar.

Sixty-five percent of children who had fever were taken to a health facility or provider. Children from urban areas were more likely to be taken to a health facility than those in rural areas, as were the children of more educated mothers and mothers who live in households that are in the higher wealth quintiles. There are significant variations by region, ranging from 41 percent in Shinyanga to 96 percent in Morogoro.

In Mainland, whereas the proportion of children who received treatment for fever and the proportion of children who were treated with antimalarial drugs did not change much since the 2004-05 TDHS, the proportion of children who were treated on the same or the next day has decreased significantly, from 51 percent in 2004-05 to 41 percent in 2010. In Zanzibar, the proportion of children who received antimalarial drugs to treat fever decreased from 61 percent in the 2004-05 TDHS to 17 percent in the 2010 TDHS, while the proportion of children who were treated on the same day or the next day after the onset of fever decreased from 48 percent to 15 percent for the same period.

Children living in urban areas are more likely than those in rural areas to receive antimalarial drugs (67 percent and 57 percent, respectively). The corresponding figures in the 2004-05 TDHS are 65 and 57 percent, respectively. Furthermore, urban children are more likely than rural children to receive malaria treatment promptly (49 and 38 percent, respectively).

There are striking differences in the timing of treatment of children with fever across regions. In Mainland Tanzania, prompt treatment of fever ranges from 21 percent for children in Arusha to 80 percent for children in Mtwara. In Zanzibar, children in Unguja North and Pemba North regions are the least likely to receive malaria treatment promptly (7 percent) compared with 24 percent for children in Town West. The probability of having a fever in the two weeks preceding the survey and the treatment of fever do not differ much by the mother's education. As in the 2004-05 TDHS, there is no clear relationship between the probability of having fever in the two weeks before the survey and wealth status. However, children with mothers in the highest wealth quintile are more likely than other children to receive prompt treatment.

Table 12.6 Prevalence and prompt treatment of fever

Percentage of children under age 5 with fever in the two weeks preceding the survey, and among children under age 5 with fever, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage who took antimalarial drugs, and the percentage who took the drugs the same or the next day following the onset of fever, by background characteristics, Tanzania 2010

	Among children under age 5:		Among children under age 5 with fever:			
Background characteristic	Percentage with fever in the two weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[1]	Percentage who took antimalarial drugs	Percentage who took antimalarial drugs same or next day	Number of children
Age (in months)						
<12	23.3	1,644	71.1	49.0	33.1	383
12-23	29.1	1,576	68.8	60.7	38.0	459
24-35	24.1	1,450	60.9	65.9	48.1	349
36-47	20.9	1,567	58.1	61.3	47.4	327
48-59	16.5	1,430	61.5	59.4	39.1	236
Residence						
Urban	29.7	1,530	75.8	66.6	49.3	454
Rural	21.2	6,137	60.9	56.5	37.9	1,300
Mainland/Zanzibar						
Mainland	23.0	7,461	64.6	60.1	41.4	1,715
Urban	30.1	1,463	76.1	67.6	49.9	441
Rural	21.2	5,998	60.6	57.5	38.5	1,274
Zanzibar	19.1	206	73.3	16.9	14.8	39
Unguja	17.7	121	74.1	19.1	17.8	22
Pemba	20.9	85	72.4	14.4	11.1	18
Zone						
Western	20.6	1,620	51.8	63.7	38.0	334
Northern	20.6	985	79.4	44.2	35.0	202
Central	28.8	730	64.8	52.8	35.3	210
Southern Highlands	13.8	1,050	60.4	60.5	38.9	145
Lake	27.6	1,580	49.6	61.9	37.5	435
Eastern	29.9	890	85.5	62.3	49.6	266
Southern	20.1	606	87.0	77.1	71.4	122
Region						
Dodoma	32.2	442	66.3	51.0	32.4	143
Arusha	23.3	285	74.5	28.6	21.0	67
Kilimanjaro	29.7	185	82.8	(39.1)	(32.2)	55
Tanga	18.6	319	85.2	(65.5)	(50.8)	60
Morogoro	26.3	329	95.9	73.6	55.6	86
Pwani	22.8	196	87.4	59.2	44.3	45
Dar es Salaam	36.9	366	78.3	56.1	47.4	135
Lindi	20.7	140	91.3	(73.4)	(67.8)	29
Mtwara	20.9	225	84.9	(83.5)	(80.4)	47
Ruvuma	19.0	240	86.3	(72.9)	(64.4)	46
Iringa	9.5	296	79.1	*	*	28
Mbeya	15.2	484	48.6	63.9	37.6	74
Singida	23.5	289	61.7	56.7	41.4	68
Tabora	14.1	427	50.1	54.7	43.5	60
Rukwa	15.9	271	68.5	63.4	44.0	43
Kigoma	38.5	399	60.8	72.3	44.1	154
Shinyanga	15.1	792	41.2	57.2	26.9	120
Kagera	22.7	478	59.4	56.3	41.9	108
Mwanza	26.9	747	49.2	67.0	42.8	201
Mara	35.4	357	41.8	58.8	25.4	126
Manyara	11.1	194	70.3	(46.9)	(42.0)	21
Unguja North	18.1	33	80.5	8.1	6.5	6
Unguja South	*	17	91.0	*	*	1
Town West	19.8	71	69.6	24.7	23.5	14
Pemba North	20.8	43	85.7	9.1	7.0	9
Pemba South	21.2	42	59.1	19.7	15.3	9
Mother's education						
No education	22.7	1,959	59.7	57.4	37.1	445
Primary incomplete	23.8	1,136	57.4	55.7	40.2	271
Primary complete	22.1	4,084	66.1	60.1	42.2	902
Secondary+	28.0	489	86.8	65.2	45.2	137
Wealth quintile						
Lowest	23.0	1,618	57.9	57.1	36.5	373
Second	19.3	1,819	61.6	57.6	38.6	351
Middle	21.1	1,710	61.2	56.8	41.6	360
Fourth	28.0	1,444	66.1	58.6	40.3	404
Highest	24.8	1,076	81.2	67.9	49.6	267
Total	22.9	7,667	64.8	59.1	40.8	1,754

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has suppressed.

Prompt access to effective antimalarial treatment is one of the major strategies for reducing the burden of malaria. This means having treatment available as near as possible to the house so that the drugs are given within 24 hours of the onset of symptoms. Table 12.7 shows the different antimalarial drugs that were received by children under age 5 with a fever in the two weeks preceding the survey. The drug most commonly used to treat fever among children in Tanzania is ACT (37 percent), followed by quinine (12 percent) and Amodiaquine (7 percent). ACT is currently the recommended first-line antimalarial drug in Mainland Tanzania, and Amodiaquine, a monotherapy drug, is no longer recommended. In general, use of ACT to treat fever among children increases with age until age 4. Treatment with ACT on the same or next day varies across zones, ranging from 20 percent for children in the Southern Highlands to 49 percent for children in the Southern zone.

In Zanzibar, Amodiaquine, the first-line antimalarial treatment is given to 9 percent of children with fever, while 5 percent of the children received a combination of Artesunate and Amodaquine, and less than 1 percent received ACT, the second line of treatment.

There is no strong association between the mother's education and the use of ACT as an antimalarial drug on the same or next day. Children in the lowest wealth quintile are the most likely to be treated with ACT (44 percent) and to be treated with ACT on the same day or next day (30 percent) compared with other children in higher quintiles.

Table 12.7 Type and timing of antimalarial drugs taken by children with fever

Among children under age five with fever in the two weeks preceding the survey, percentage who took specific antimalarial drugs and percentage who took each type of drug the same or next day after developing the fever, by background characteristics, Tanzania 2010

Background Characteristic	Percentage of children who took drug:								Percentage of children who took drug the same or next day:							Number of children with fever
	SP/ Fansidar	Chloro-quine	Amodia-quine	Quinine	ACT	Artesunate	Artesunate and Amoda-quine	Other anti-malarial	SP/ Fansidar	Amodia-quine	Quinine	ACT	Artesunate	Artesunate and Amoda-quine	Other anti-malarial	
Age (in months)																
<12	2.1	0.0	6.3	12.3	28.1	0.0	0.7	0.5	1.6	4.9	8.6	17.4	0.0	0.4	0.2	383
12-23	3.0	0.0	8.0	13.3	35.2	0.0	0.5	1.3	1.8	4.9	7.2	23.6	0.0	0.3	0.4	459
24-35	5.1	0.2	8.1	13.6	38.5	1.3	0.2	2.1	2.4	6.0	9.0	28.7	1.3	0.2	1.7	349
36-47	3.0	0.2	5.0	10.5	43.3	0.2	0.3	0.0	2.7	3.5	7.3	33.7	0.2	0.3	0.0	327
48-59	2.2	0.0	4.7	9.1	42.0	0.0	0.6	1.7	1.7	2.5	4.9	29.1	0.0	0.4	0.8	236
Residence																
Urban	3.9	0.0	7.8	20.8	32.6	1.2	0.2	2.2	3.9	6.6	15.3	21.7	1.2	0.2	1.3	454
Rural	2.8	0.1	6.2	9.0	38.2	0.0	0.5	0.7	1.4	3.8	4.8	27.3	0.0	0.3	0.4	1,300
Mainland/Zanzibar																
Mainland	3.2	0.1	6.6	12.3	37.6	0.3	0.3	1.1	2.1	4.4	7.7	26.5	0.3	0.2	0.6	1,715
Urban	4.1	0.0	7.6	21.2	33.2	1.2	0.0	2.2	4.1	6.3	15.8	22.2	1.2	0.0	1.4	441
Rural	2.9	0.1	6.2	9.2	39.1	0.0	0.5	0.7	1.4	3.8	4.9	28.0	0.0	0.3	0.3	1,274
Zanzibar	0.2	0.0	9.4	0.3	0.3	0.0	5.3	1.3	0.2	9.2	0.3	0.3	0.0	3.7	1.0	39
Unguja	0.0	0.0	13.2	0.6	0.6	0.0	4.7	0.0	0.0	12.7	0.6	0.6	0.0	3.9	0.0	22
Pemba	0.5	0.0	4.9	0.0	0.0	0.0	6.0	2.9	0.5	4.9	0.0	0.0	0.0	3.4	2.2	18
Zone																
Western	2.4	0.0	10.0	14.8	35.7	1.4	0.5	2.0	1.9	5.1	7.1	22.0	1.4	0.5	1.4	334
Northern	1.9	0.0	4.3	7.9	30.5	0.0	0.0	0.5	1.5	3.3	4.9	24.8	0.0	0.0	0.5	202
Central	5.2	0.0	0.1	7.5	39.1	0.3	0.5	0.0	3.4	0.1	3.7	27.7	0.3	0.0	0.0	210
Southern Highlands	2.0	0.0	9.7	13.0	36.0	0.0	0.0	0.9	0.0	9.7	9.1	20.0	0.0	0.0	0.0	145
Lake	3.4	0.4	9.6	10.9	37.2	0.0	0.7	1.3	1.7	5.6	5.1	24.5	0.0	0.5	0.6	435
Eastern	3.0	0.0	5.5	15.9	37.5	0.0	0.0	1.2	2.4	5.0	13.1	28.6	0.0	0.0	0.5	266
Southern	5.0	0.0	0.0	17.6	55.4	0.0	0.0	1.0	4.4	0.0	17.0	49.4	0.0	0.0	0.6	122
Region																
Dodoma	3.2	0.0	0.0	6.6	41.2	0.0	0.0	0.0	1.6	0.0	2.9	27.9	0.0	0.0	0.0	143
Arusha	0.7	0.0	2.8	1.7	23.4	0.0	0.0	0.0	0.7	2.8	0.0	17.5	0.0	0.0	0.0	67
Kilimanjaro	(2.9)	(0.0)	(5.2)	(7.9)	(24.2)	(0.0)	(0.0)	(1.9)	(2.9)	(5.2)	(2.9)	(19.4)	(0.0)	(0.0)	(1.9)	55
Tanga	(1.7)	(0.0)	(4.4)	(15.2)	(44.1)	(0.0)	(0.0)	(0.0)	(1.7)	(1.7)	(11.6)	(35.8)	(0.0)	(0.0)	(0.0)	60
Morogoro	2.1	0.0	4.0	22.5	46.6	0.0	0.0	0.0	0.0	2.7	18.2	34.8	0.0	0.0	0.0	86
Pwani	0.0	0.0	0.0	8.4	52.4	0.0	0.0	0.0	0.0	0.0	6.8	37.5	0.0	0.0	0.0	45
Dar es Salaam	4.6	0.0	8.2	14.2	26.7	0.0	0.0	2.3	4.6	8.2	11.9	21.7	0.0	0.0	1.0	135
Lindi	(2.4)	(0.0)	(0.0)	(10.5)	(56.2)	(0.0)	(0.0)	(4.3)	(2.4)	(0.0)	(10.5)	(52.3)	(0.0)	(0.0)	(2.6)	29
Mtwara	(5.8)	(0.0)	(0.0)	(20.6)	(57.1)	(0.0)	(0.0)	(0.0)	(5.8)	(0.0)	(20.6)	(54.0)	(0.0)	(0.0)	(0.0)	47
Ruvuma	(5.7)	(0.0)	(0.0)	(19.0)	(53.2)	(0.0)	(0.0)	(0.0)	(4.2)	(0.0)	(17.5)	(42.7)	(0.0)	(0.0)	(0.0)	46
Iringa	*	*	*	*	*	*	*	*`	*	*	*	*	*	*	*	28

Continued .

Table 12.7 Type and timing of antimalarial drugs taken by children with fever

Background Characteristic	Percentage of children who took drug: SP/ Fansidar	Chloro-quine	Amodia-quine	Quinine	ACT	Artesunate	Artesunate and Amoda-quine	Other anti-malarial	Percentage of children who took drug the same or next day: SP/ Fansidar	Amodia-quine	Quinine	ACT	Artesunate	Artesunate and Amodia-quine	Other anti-malarial	Number of children with fever
Region (continued)																
Mbeya	(3.9)	(0.0)	(14.3)	(5.9)	(38.0)	(0.0)	(0.0)	(1.8)	(0.0)	(14.3)	(5.9)	(17.4)	(0.0)	(0.0)	(0.0)	74
Singida	9.5	0.0	0.4	9.4	34.9	1.1	1.5	0.0	7.3	0.4	5.2	27.5	1.1	0.0	0.0	68
Tabora	0.0	0.0	6.9	8.7	39.5	0.0	1.0	1.7	0.0	6.4	5.1	31.0	0.0	1.0	0.0	60
Rukwa	0.0	0.0	4.7	21.7	38.9	0.0	0.0	0.0	0.0	4.7	10.5	28.8	0.0	0.0	0.0	43
Kigoma	4.2	0.0	1.9	20.0	43.6	3.0	0.8	3.7	4.2	1.3	11.8	23.1	3.0	0.8	3.0	154
Shinyanga	1.2	0.0	22.0	11.9	23.5	0.0	0.0	0.0	0.0	9.4	2.2	15.3	0.0	0.0	0.0	120
Kagera	0.0	0.0	5.7	6.4	42.8	0.0	2.8	0.0	0.0	4.3	3.6	32.1	0.0	1.9	0.0	108
Mwanza	4.1	0.0	14.1	7.1	40.4	0.0	0.0	1.9	3.2	7.4	4.1	27.4	0.0	0.0	0.8	201
Mara	5.4	1.2	5.7	20.7	27.3	0.0	0.0	1.4	0.6	3.8	8.1	13.4	0.0	0.0	0.6	126
Manyara	(3.2)	(0.0)	(6.0)	(6.6)	(31.1)	(0.0)	(0.0)	(0.0)	(0.0)	(4.3)	(6.6)	(31.1)	(0.0)	(0.0)	(0.0)	21
Unguja North	0.0	0.0	3.9	2.2	2.1	0.0	0.0	0.0	0.0	2.3	2.2	2.1	0.0	0.0	0.0	6
Unguja South	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1
Town West	0.0	0.0	18.6	0.0	0.0	0.0	6.2	0.0	0.0	18.6	0.0	0.0	0.0	4.9	0.0	14
Pemba North	0.0	0.0	4.7	0.0	0.0	0.0	4.4	0.0	0.0	4.7	0.0	0.0	0.0	2.3	0.0	9
Pemba South	1.0	0.0	5.2	0.0	0.0	0.0	7.7	5.8	1.0	5.2	0.0	0.0	0.0	4.6	4.5	9
Mother's education																
No education	2.6	0.0	6.9	9.8	37.6	0.0	0.6	0.0	1.7	3.1	5.2	26.9	0.0	0.1	0.0	445
Primary incomplete	2.5	0.0	6.9	10.5	36.2	0.0	0.1	0.8	2.1	3.8	6.6	27.0	0.0	0.1	0.6	271
Primary complete	3.5	0.2	6.0	13.6	36.8	0.0	0.5	1.2	2.1	4.7	9.0	25.8	0.0	0.5	0.5	902
Secondary+	3.3	0.0	9.5	11.8	34.8	3.9	0.4	4.8	2.8	9.2	7.7	21.1	3.9	0.3	3.5	137
Wealth quintile																
Lowest	2.4	0.4	3.7	6.2	44.1	0.0	0.3	0.6	1.4	0.6	4.1	30.0	0.0	0.3	0.0	373
Second	3.3	0.0	6.7	11.3	36.0	0.0	0.9	0.4	1.0	4.7	5.7	26.5	0.0	0.6	0.2	351
Middle	2.9	0.0	8.0	10.0	35.6	1.3	0.5	1.3	1.5	7.1	4.7	27.0	1.3	0.2	1.3	360
Fourth	3.5	0.0	6.8	16.0	32.1	0.0	0.1	1.4	3.3	3.1	11.5	21.7	0.0	0.1	0.9	404
Highest	3.7	0.0	8.6	17.9	36.0	0.3	0.4	2.2	3.1	8.4	12.7	24.2	0.3	0.3	0.7	267
Total	3.1	0.1	6.6	12.0	36.8	0.3	0.4	1.1	2.0	4.5	7.6	25.9	0.3	0.3	0.6	1,754

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has suppressed
ACT = Artemisinin combination therapy

12.5 ANAEMIA PREVALENCE

Table 12.8 shows the percentage of children age 6-59 months who tested positive for severe anaemia (haemoglobin concentration of less than 8.0 grams per decilitre). The measure of severe anaemia is different than that used in Chapter 11 on Nutrition (below 7.0 grams per decilitre).

The prevalence of anaemia varies little by urban-rural residence, but there are large differentials across regions in Mainland Tanzania. Across zones, anaemia prevalence ranges from 2.4 in Southern Highlands to 6.9 in Lake zone. While 10 percent or more of children in Arusha are severely anaemic, the proportion of children who are severely anaemic in other regions is 8 percent or less.

Children age 9-11 months are the most likely to be severely anaemic (11 percent). This finding indicates that malaria alone is not the cause of anaemia. Other possibilities include nutritional anaemia and hookworm infection.

The prevalence of anaemia varies little by the mother's education and wealth status.

Table 12.8 Prevalence of haemoglobin <8.0 g/dl in children

Percentage of children age 6-59 months with haemoglobin lower than 8.0 g/dl, by background characteristics, Tanzania 2010

Background characteristic	Haemoglobin <8.0 g/dl	Number of children
Age in months		
6-8	6.5	384
9-11	10.5	412
12-17	7.9	820
18-23	5.9	793
24-35	5.1	1,513
36-47	4.2	1,662
48-59	2.5	1,534
Sex		
Male	5.7	3,506
Female	4.6	3,613
Mother's interview status		
Interviewed	5.4	6,210
Not interviewed but in household	2.0	215
Not interviewed, and not in the household[1]	3.8	693
Residence		
Urban	4.9	1,387
Rural	5.2	5,732
Mainland/Zanzibar		
Mainland	5.2	6,929
Urban	5.0	1,322
Rural	5.2	5,608
Zanzibar	3.8	190
Unguja	3.6	112
Pemba	4.1	77
Zone		
Western	6.3	1,472
Northern	5.5	931
Central	3.1	698
Southern Highlands	2.4	959
Lake	6.9	1,485
Eastern	5.4	817
Southern	4.3	567

Continued .

Table 12.8—*Continued*

Background characteristic	Haemoglobin <8.0 g/dl	Number of children
Region		
Dodoma	3.8	423
Arusha	9.6	252
Kilimanjaro	3.9	192
Tanga	4.1	303
Morogoro	7.1	297
Pwani	5.9	182
Dar es Salaam	3.7	339
Lindi	6.1	122
Mtwara	4.7	217
Ruvuma	2.9	228
Iringa	1.2	284
Mbeya	3.7	444
Singida	2.0	275
Tabora	6.2	403
Rukwa	1.3	231
Kigoma	7.5	363
Shinyanga	5.7	707
Kagera	7.2	430
Mwanza	7.5	705
Mara	5.3	350
Manyara	3.6	183
Unguja North	6.4	31
Unguja South	3.8	16
Town West	2.2	66
Pemba North	4.6	39
Pemba South	3.5	38
Mother's education[2]		
No education	6.2	1,830
Primary incomplete	5.6	1,044
Primary complete	4.6	3,732
Secondary+	4.8	511
Wealth quintile		
Lowest	6.7	1,526
Second	4.8	1,658
Middle	4.8	1,629
Fourth	4.5	1,333
Highest	4.8	974
Total	5.1	7,119

Note: Total includes 1 child with information missing on mother's interview status and 2 children with missing information on mother's education. Table is based on children who stayed in the household the night before the interview. Prevalence of anaemia is based on haemoglobin levels and is adjusted for altitude using CDC formulas (CDC, 1998). Haemoglobin is measured in grams per decilitre (g/dl).

[1] Includes children whose mothers are deceased

[2] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOUR

13

13.1 INTRODUCTION

Acquired immune deficiency syndrome (AIDS) is caused by the human immunodeficiency virus (HIV). HIV weakens the immune system, making the body susceptible to secondary infections and opportunistic diseases. Without treatment, HIV infection leads to AIDS, which is invariably fatal. The predominant mode of HIV transmission is through sexual contact. Other modes of transmission are mother-to-child transmission (in which the mother passes HIV to her child during pregnancy, delivery, or breastfeeding), use of tainted blood supplies during blood transfusions, and unsafe injections.

AIDS is one of the most serious public health and development challenges in sub-Saharan Africa. According to the 2007-08 Tanzania HIV and Malaria Indicator Survey (THMIS), which covered Mainland and Zanzibar, 6 percent of adults age 15-49 were infected with HIV, the virus that causes AIDS. HIV transmission through heterosexual contact accounts for most HIV infections in the country. The impact of AIDS is now affecting all sectors of Tanzanian society.

The future course of Tanzania's AIDS epidemic depends on a number of factors including HIV/AIDS-related knowledge, social stigmatization, risk behaviour modification, access to high-quality services for sexually transmitted infections (STIs), provision and uptake of HIV counselling and testing, and access to anti-retroviral therapy (ART). The principal objective of this chapter is to establish the prevalence of relevant knowledge, perceptions, and behaviours at the national level and within the geographic and socioeconomic subgroups of the population, using data from the 2010 TDHS.

This chapter presents current levels of HIV/AIDS knowledge, attitudes, and related behaviours among the general adult population, and specifically, among youth. The chapter concludes with information on patterns of sexual activity among young people, as they are the main target of many HIV prevention efforts. Based on findings from this chapter, AIDS control and prevention programmes can target those groups of people most in need of information and services and most vulnerable to the risk of HIV infection.

Findings presented in this chapter can also be compared with the findings from the 2004-05 TDHS (NBS and ORC Macro, 2005) and 2007-08 THMIS (TACAIDS et al., 2008).

13.2 HIV/AIDS KNOWLEDGE, TRANSMISSION, AND PREVENTION METHODS

13.2.1 Awareness of HIV/AIDS

The 2010 TDHS respondents were asked whether they had heard of AIDS. Those who reported having heard of AIDS then were asked a number of questions about whether and how HIV/AIDS could be avoided.

Table 13.1 shows that knowledge of AIDS is nearly universal, with almost 100 percent of respondents having heard of AIDS.

Table 13.1 Knowledge of AIDS

Percentage of women and men age 15-49 who have heard of AIDS, by background characteristics, Tanzania 2010

Background characteristic	Women		Men	
	Has heard of AIDS	Number of women	Has heard of AIDS	Number of men
Age				
15-24	99.3	4,081	99.9	1,058
15-19	99.1	2,172	99.8	645
20-24	99.5	1,909	100.0	414
25-29	100.0	1,668	99.7	343
30-39	99.7	2,712	99.8	651
40-49	99.5	1,678	99.7	475
Marital status				
Never married	99.1	2,540	99.9	1,046
Ever had sex	99.7	1,137	100.0	563
Never had sex	98.7	1,403	99.8	483
Married/living together	99.7	6,412	99.7	1,317
Divorced/separated/widowed	99.9	1,188	100.0	164
Residence				
Urban	99.9	2,892	99.9	693
Rural	99.4	7,247	99.8	1,834
Mainland/Zanzibar				
Mainland	99.5	9,813	99.8	2,452
Urban	99.9	2,758	99.9	662
Rural	99.4	7,055	99.8	1,790
Zanzibar	100.0	326	99.8	75
Unguja	100.0	212	99.7	53
Pemba	99.9	115	100.0	22
Zone				
Western	99.5	1,728	100.0	371
Northern	98.5	1,530	99.2	350
Central	99.7	812	100.0	208
Southern Highlands	99.8	1,370	100.0	355
Lake	99.9	1,809	99.8	521
Eastern	99.9	1,608	100.0	413
Southern	99.5	955	99.5	236
Education				
No education	98.5	1,940	99.9	239
Primary incomplete	99.5	1,482	99.6	460
Primary complete	99.9	5,071	99.8	1,249
Secondary+	99.9	1,646	100.0	578
Wealth quintile				
Lowest	98.9	1,681	100.0	401
Second	99.3	1,947	99.5	447
Middle	99.7	1,997	99.5	490
Fourth	99.9	2,112	100.0	572
Highest	99.9	2,403	100.0	618
Total 15-49	99.6	10,139	99.8	2,527

In Tanzania, HIV/AIDS prevention programs focus messages and efforts on three important aspects of behaviour: using condoms, limiting the number of sexual partners (or staying faithful to one partner), and delaying sexual debut (abstinence) of the young and the never married. To ascertain whether programmes have effectively communicated at least two of these messages, respondents were prompted with specific questions about whether it is possible to reduce the chance of getting the AIDS virus by having just one faithful sexual partner and using a condom at every sexual encounter.

As shown in Table 13.2, there is widespread knowledge of HIV/AIDS prevention methods. Nearly nine in ten respondents (87 percent of women and 90 percent of men) know that the chance of becoming infected with the AIDS virus is reduced by limiting sexual intercourse to one uninfected partner who has no other partners. Three-quarters of respondents (76 percent each of women and men) know that the chance of contracting HIV/AIDS is reduced by using condoms.

Table 13.2 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse and by having one sex partner who is not infected and who has no other partners, by background characteristics, Tanzania 2010

	Women				Men			
	Percentage who say HIV can be prevented by:				Percentage who say HIV can be prevented by:			
Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner	Number of women	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner	Number of men
Age								
15-24	73.8	85.1	68.2	4,081	72.4	86.7	65.1	1,058
15-19	70.6	81.7	63.8	2,172	69.2	83.0	59.7	645
20-24	77.4	89.0	73.1	1,909	77.3	92.6	73.5	414
25-29	78.9	89.3	74.3	1,668	81.6	93.1	77.5	343
30-39	79.5	89.5	74.6	2,712	77.3	91.4	72.6	651
40-49	75.2	86.3	69.6	1,678	77.1	92.6	73.3	475
Marital status								
Never married	72.0	86.4	67.8	2,540	73.0	86.9	65.4	1,046
Ever had sex	80.9	90.2	77.2	1,137	80.1	92.5	74.3	563
Never had sex	64.7	83.3	60.3	1,403	64.8	80.4	55.0	483
Married/living together	77.8	87.6	72.1	6,412	77.9	92.1	74.1	1,317
Divorced/separated/widowed	78.2	86.3	72.8	1,188	76.3	91.2	70.5	164
Residence								
Urban	78.9	93.5	76.0	2,892	77.2	92.9	73.4	693
Rural	75.4	84.7	69.2	7,247	75.2	88.8	69.1	1,834
Mainland/Zanzibar								
Mainland	76.8	87.1	71.4	9,813	76.5	90.2	71.1	2,452
Urban	79.3	93.5	76.4	2,758	78.4	93.1	74.6	662
Rural	75.8	84.6	69.5	7,055	75.8	89.2	69.8	1,790
Zanzibar	65.5	89.4	61.3	326	51.1	78.4	44.4	75
Unguja	67.3	90.4	63.0	212	54.1	82.3	48.6	53
Pemba	62.1	87.7	58.2	115	44.0	69.3	34.5	22
Zone								
Western	78.9	79.7	68.6	1,728	77.0	87.2	69.6	371
Northern	67.2	88.1	65.2	1,530	73.5	86.9	68.7	350
Central	85.2	94.8	82.9	812	85.4	97.5	82.8	208
Southern Highlands	76.7	87.7	71.7	1,370	73.4	87.3	67.1	355
Lake	70.7	80.5	63.1	1,809	75.5	90.7	68.9	521
Eastern	81.1	93.9	78.3	1,608	75.3	93.8	72.0	413
Southern	85.1	92.3	80.7	955	81.8	90.8	75.5	236
Region								
Dodoma	89.7	97.4	88.0	495	88.6	98.9	87.5	122
Arusha	58.4	76.1	55.1	401	55.1	72.8	46.9	87
Kilimanjaro	71.5	95.5	70.8	411	79.3	92.2	76.2	92
Tanga	76.1	92.9	73.7	498	86.9	89.3	82.0	124
Morogoro	78.5	91.3	75.9	481	75.3	94.2	72.6	146
Pwani	87.2	97.0	85.7	261	77.6	99.0	76.6	59
Dar es Salaam	80.7	94.4	77.3	866	74.6	92.1	70.2	207
Lindi	86.2	92.2	81.5	198	85.4	90.9	76.3	47
Mtwara	83.2	93.5	80.1	407	80.5	90.9	76.2	87
Ruvuma	86.7	91.0	80.9	350	81.3	90.7	74.5	102
Iringa	75.2	87.5	70.1	490	73.3	92.4	68.4	140
Mbeya	79.2	87.0	73.6	623	72.6	82.0	62.8	143
Singida	78.2	90.8	75.1	317	80.8	95.5	76.2	86
Tabora	76.9	79.9	68.3	447	79.0	83.2	67.2	105
Rukwa	73.3	89.9	70.1	257	74.9	88.1	73.2	72
Kigoma	78.2	89.6	72.2	462	71.3	87.8	67.7	96
Shinyanga	80.5	74.1	66.8	819	79.1	89.4	72.2	169
Kagera	85.5	91.6	81.0	590	69.0	91.9	64.7	161
Mwanza	58.1	72.8	49.6	844	77.8	92.3	71.3	276
Mara	76.1	80.4	65.2	376	80.5	82.9	69.3	83
Manyara	55.1	85.5	53.6	220	60.5	96.1	59.2	47
Unguja North	52.8	87.8	49.8	50	44.7	76.1	41.9	11
Unguja South	77.0	85.1	68.6	30	64.2	72.9	49.7	9
Town West	70.6	92.6	66.8	131	54.6	86.9	50.5	33
Pemba North	57.3	87.8	54.2	56	39.4	65.2	32.9	10
Pemba South	66.7	87.5	62.0	59	47.7	72.5	35.8	12

Continued...

Table 13.2—*Continued*

Background characteristic	Women: Percentage who say HIV can be prevented by: Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner	Number of women	Men: Percentage who say HIV can be prevented by: Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner	Number of men
Education								
No education	67.1	78.5	60.4	1,940	64.4	86.5	59.0	239
Primary incomplete	72.6	79.4	64.3	1,482	74.9	85.5	66.5	460
Primary complete	80.0	90.2	75.2	5,071	78.0	90.5	72.5	1,249
Secondary+	79.7	95.1	77.1	1,646	76.4	93.5	73.1	578
Wealth quintile								
Lowest	70.7	79.5	64.0	1,681	71.6	85.9	65.4	401
Second	73.5	83.4	66.4	1,947	74.9	89.9	68.1	447
Middle	78.4	85.7	71.7	1,997	77.4	86.9	69.9	490
Fourth	78.4	90.1	73.9	2,112	74.9	92.7	71.3	572
Highest	79.4	94.2	77.0	2,403	78.8	92.3	74.2	618
Total 15-49	76.4	87.2	71.1	10,139	75.8	89.9	70.3	2,527

[1] Using condoms every time they have sexual intercourse
[2] Partner who has no other partners

Knowledge of both of these means of avoiding HIV transmission is also high, and more than seven in ten respondents cite both as ways of reducing the risk of getting the AIDS virus. The proportion among women is higher than that estimated in the 2007-08 THMIS (71 percent compared with 61 percent).

` There are notable differences in knowledge of HIV/AIDS prevention. Although age differentials are inconsistent, youth age 15-19 appear to have lower levels of knowledge than those in older age groups. Knowledge of HIV prevention methods is lowest among those who have never had sex. Levels of knowledge of preventive methods are higher in urban than in rural areas. In general, respondents in the Mainland are more likely than those in Zanzibar to be aware of various HIV prevention methods. For instance, 71 percent of men on the Mainland and 44 percent in Zanzibar are aware that both condom use and limiting sex to one partner reduces the risk of contracting HIV/AIDS. Variation by region is particularly striking. In Mainland, for example, 88 percent of women in Dodoma are aware of both methods of HIV/AIDS prevention compared with 50 percent of women in Mwanza. For men, knowledge of both methods ranges from 88 percent in Dodoma to 47 percent in Arusha.

As expected, better educated women and men and those in higher wealth quintiles are more likely than other respondents to be aware of prevention methods.

13.2.3 Rejection of Misconceptions about HIV/AIDS

The 2010 TDHS also asked about common misconceptions regarding AIDS and HIV transmission. Respondents were asked whether they think it is possible for a healthy-looking person to have the AIDS virus. Results for women and men are presented in Tables 13.3.1 and 13.3.2. The tables also present the percentages of the population that correctly reject the common misconceptions about transmission of AIDS. Respondents were asked whether a person can get AIDS from mosquito bites, from supernatural means, or from eating off the same plate as a person who has AIDS.

Table 13.3.1 Comprehensive knowledge about AIDS: Women

Percentage of women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS, by background characteristics, Tanzania 2010

Background characteristic	Percentage of respondents who say that:				Percentage who say that a healthy looking person can have the AIDS virus and who reject the two most common local misconceptions[1]	Percentage with a comprehensive knowledge about AIDS[2]	Number of women
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
Age							
15-24	82.9	82.8	85.1	87.4	63.3	48.2	4,081
15-19	81.1	84.3	86.5	86.9	64.3	46.3	2,172
20-24	85.0	81.1	83.5	88.1	62.2	50.4	1,909
25-29	86.5	79.8	84.3	89.3	62.0	50.7	1,668
30-39	86.0	76.5	82.8	86.7	59.7	49.1	2,712
40-49	85.8	71.7	81.2	84.6	56.4	44.5	1,678
Marital status							
Never married	83.1	86.4	87.8	89.1	67.3	50.3	2,540
Ever had sex	86.8	85.4	88.5	91.7	69.0	57.1	1,137
Never had sex	80.1	87.2	87.2	86.9	66.0	44.8	1,403
Married/living together	85.1	75.9	83.0	85.9	58.8	47.3	6,412
Divorced/separated/widowed	87.0	78.4	78.8	89.2	59.2	48.8	1,188
Residence							
Urban	91.0	86.0	87.5	94.4	71.1	56.8	2,892
Rural	82.3	76.0	82.2	84.2	56.9	44.8	7,247
Mainland/Zanzibar							
Mainland	84.7	78.8	84.1	87.0	61.2	48.6	9,813
Urban	90.8	85.8	88.2	94.4	71.4	57.3	2,758
Rural	82.3	76.1	82.5	84.1	57.2	45.2	7,055
Zanzibar	88.8	78.7	71.9	89.8	54.1	36.0	326
Unguja	92.1	83.6	72.9	92.3	59.8	40.0	212
Pemba	82.5	69.5	70.1	85.2	43.6	28.7	115
Zone							
Western	84.9	80.1	80.7	85.5	61.2	49.6	1,728
Northern	81.4	76.0	81.5	80.9	58.7	44.0	1,530
Central	82.8	78.4	90.7	88.6	65.6	57.6	812
Southern Highlands	81.5	76.5	88.0	88.4	57.5	45.5	1,370
Lake	83.5	78.7	81.8	84.8	57.6	41.0	1,809
Eastern	92.4	82.2	84.9	93.3	67.6	56.1	1,608
Southern	84.8	79.1	86.3	89.7	63.0	53.3	955
Education							
No education	77.0	63.8	70.0	73.6	41.7	32.1	1,940
Primary incomplete	79.0	74.7	79.4	82.7	51.4	39.3	1,482
Primary complete	87.2	81.7	87.6	90.7	65.6	52.6	5,071
Secondary+	91.8	91.2	91.8	96.1	78.3	62.0	1,646
Wealth quintile							
Lowest	77.3	72.8	77.6	79.0	50.1	39.2	1,681
Second	80.5	77.1	81.6	82.8	56.9	44.0	1,947
Middle	83.6	74.9	82.9	85.3	56.4	44.7	1,997
Fourth	87.9	78.7	85.3	90.2	62.7	49.9	2,112
Highest	91.8	87.8	89.0	95.0	74.3	59.4	2,403
Total 15-49	84.8	78.8	83.7	87.1	61.0	48.2	10,139

[1] Two most common local misconceptions: 'AIDS can be transmitted by mosquito bites' and 'AIDS can be transmitted by supernatural means'

[2] Comprehensive knowledge means knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

Table 13.3.2 Comprehensive knowledge about AIDS: Men

Percentage of men age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Tanzania 2010

Background characteristic	Percentage of respondents who say that:				Percentage who say that a healthy looking person can have the AIDS virus and who reject the two most common local misconceptions[1]	Percentage with a comprehensive knowledge about AIDS[2]	Number of men
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
Age							
15-24	83.5	77.0	89.3	84.4	59.4	42.7	1,058
15-19	79.9	77.4	89.3	83.8	57.9	40.9	645
20-24	89.0	76.5	89.3	85.3	61.6	45.4	414
25-29	89.9	81.2	89.2	87.3	67.8	55.0	343
30-39	90.3	73.2	87.6	85.6	62.0	47.6	651
40-49	87.9	69.5	88.5	86.8	58.8	45.1	475
Marital status							
Never married	83.9	78.7	89.7	85.6	61.3	44.5	1,046
Ever had sex	87.7	77.3	89.9	86.1	63.2	50.8	563
Never had sex	79.5	80.4	89.5	85.0	59.1	37.1	483
Married/living together	89.0	73.5	88.2	85.5	61.6	47.7	1,317
Divorced/separated/widowed	89.4	66.8	86.0	85.7	55.6	43.3	164
Residence							
Urban	93.6	86.1	93.3	92.4	76.6	58.4	693
Rural	84.4	71.1	87.0	83.0	55.2	41.4	1,834
Mainland/Zanzibar							
Mainland	86.8	74.9	88.7	85.3	60.7	46.5	2,452
Urban	93.5	85.9	93.3	92.2	76.3	59.2	662
Rural	84.3	70.9	87.0	82.8	55.0	41.7	1,790
Zanzibar	90.7	83.9	88.4	92.6	72.9	33.4	75
Unguja	90.2	83.7	86.7	91.7	71.9	35.9	53
Pemba	92.0	84.2	92.4	94.7	75.5	27.2	22
Zone							
Western	77.7	75.4	83.4	83.5	54.8	43.0	371
Northern	85.5	76.4	88.4	85.5	64.6	47.8	350
Central	87.6	72.7	92.8	88.2	59.5	50.0	208
Southern Highlands	91.0	76.6	87.2	84.5	62.1	41.4	355
Lake	82.3	69.0	92.3	80.2	52.9	40.8	521
Eastern	94.9	79.2	86.7	89.0	68.9	53.2	413
Southern	92.1	77.4	91.9	91.7	66.5	55.1	236
Education							
No education	70.5	58.2	77.2	65.0	34.2	25.6	239
Primary incomplete	80.1	65.5	82.3	77.3	46.2	32.8	460
Primary complete	90.0	75.3	90.4	88.2	63.5	48.8	1,249
Secondary+	92.5	89.8	94.9	94.8	78.8	59.2	578
Wealth quintile							
Lowest	76.7	67.5	82.5	77.4	45.0	33.2	401
Second	82.9	65.3	86.0	80.6	50.4	36.7	447
Middle	86.4	73.5	87.0	80.9	57.4	44.6	490
Fourth	90.1	79.5	90.9	91.6	67.0	50.5	572
Highest	94.0	84.8	94.0	92.5	76.7	58.4	618
Total 15-49	86.9	75.2	88.7	85.5	61.1	46.1	2,527

[1] Two most common local misconceptions: 'AIDS can be transmitted by mosquito bites' and 'AIDS can be transmitted by supernatural means'

[2] Comprehensive knowledge means knowing that consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

The vast majority of Tanzanian adults know that people infected with HIV do not necessarily show signs of infection. Eighty-five percent of women and 87 percent of men know that a healthy-looking person can have the virus that causes AIDS. There are minimal gender differences in misconceptions about HIV/AIDS transmission: 79 percent of women and 75 percent of men understand that AIDS cannot be transmitted by mosquito bites, and 84 percent of women and 89 percent of men know that AIDS cannot be transmitted by supernatural means. Similarly, nearly nine in ten respondents know that a person cannot become infected with HIV by sharing food with a person who has AIDS. A majority of adults (61 percent of women and men) understand that the two most common misconceptions about HIV/AIDS transmission are incorrect and also know that a healthy-looking person can have the AIDS virus. The 2004-05 TDHS and 2008-09 THMIS found similar results in the level of each of the misconceptions.

Comprehensive knowledge of AIDS is defined as (1) knowing that both condom use and limiting sex partners to one uninfected partner are HIV prevention methods, (2) being aware that a healthy-looking person can have HIV, and (3) rejecting the two most common local misconceptions—that HIV/AIDS can be transmitted through mosquito bites and by supernatural means. The 2010 TDHS reveals that comprehensive knowledge of AIDS is low and has changed little from the results reported in the 2004-05 TDHS and the 2008-09 THMIS. Less than half of the respondents have comprehensive knowledge of HIV/AIDS transmission and prevention methods: 48 percent of women and 46 percent of men. Age, education, wealth, and residence are related to comprehensive knowledge. The youngest (age 15-19) respondents and the oldest (age 40-49) respondents are the least likely to have comprehensive knowledge of HIV/AIDS transmission and prevention methods. As expected, women and men with higher levels of schooling, those from the wealthier households, and those in urban areas are more likely than other respondents to have comprehensive knowledge of HIV/AIDS.

Women and men in Zanzibar are less knowledgeable about AIDS than those in Mainland Tanzania (36 and 49 percent, respectively, for women; 33 and 47 percent, respectively, for men).

13.3 KNOWLEDGE OF PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

Increasing the level of general knowledge of HIV transmission from mother to child and reducing the risk of transmission using antiretroviral drugs (ARTs) is critical to reducing mother-to-child transmission (MTCT) of HIV during pregnancy, delivery, and breastfeeding. To assess MTCT knowledge, respondents were asked if the virus that causes AIDS can be transmitted from a mother to a child through breastfeeding and whether a mother with HIV can reduce the risk of transmission to the baby by taking certain drugs during pregnancy.

As shown in Table 13.4, 89 percent of women and 81 percent of men know that HIV can be transmitted through breastfeeding. Somewhat fewer (75 percent of women and 67 percent of men) know that the risk of MTCT can be reduced through the use of ARTs during pregnancy. Seventy-two percent of women and 61 percent of men are aware that HIV can be transmitted through breastfeeding and that the risk of MTCT transmission can be reduced by taking ARTs. This is a significant increase from the data reported in the 2004-05 TDHS (29 percent of women and 30 percent of men) and the 2007-08 THMIS (49 percent of women and 38 percent of men).

Table 13.4 Knowledge of prevention of mother to child transmission of HIV

Percentage of women and men who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by a mother taking special drugs during pregnancy, by background characteristics, Tanzania 2010

	Women				Men			
	Percentage who know that:				Percentage who know that:			
Background characteristic	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding, and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of women	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding, and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of men
Age								
15-24	86.1	71.1	68.2	4,081	80.2	61.2	55.0	1,058
15-19	82.0	63.5	60.1	2,172	76.9	58.3	51.1	645
20-24	90.7	79.8	77.4	1,909	85.4	65.8	61.2	414
25-29	92.7	80.4	78.3	1,668	81.7	74.7	67.5	343
30-39	91.0	77.6	75.6	2,712	83.8	71.2	65.3	651
40-49	89.0	71.7	69.1	1,678	80.2	66.0	60.9	475
Marital status								
Never married	84.2	67.0	64.0	2,540	79.5	63.5	56.0	1,046
Ever had sex	88.4	75.7	73.5	1,137	83.8	68.0	60.9	563
Never had sex	80.7	59.9	56.3	1,403	74.4	58.2	50.3	483
Married/living together	90.5	77.0	74.6	6,412	83.0	69.1	63.8	1,317
Divorced/separated/widowed	90.9	76.7	74.6	1,188	80.2	65.0	61.8	164
Currently pregnant								
Pregnant	87.6	75.4	72.9	969	na	na	na	0
Not pregnant or not sure	89.1	74.4	71.9	9,170	na	na	na	0
Residence								
Urban	92.9	86.2	83.3	2,892	85.6	80.5	71.8	693
Rural	87.4	69.8	67.5	7,247	79.7	61.2	56.2	1,834
Mainland/Zanzibar								
Mainland	88.9	74.3	71.8	9,813	81.3	66.2	60.2	2,452
Urban	92.9	86.2	83.3	2,758	85.5	80.3	71.6	662
Rural	87.3	69.6	67.3	7,055	79.7	61.0	56.1	1,790
Zanzibar	91.0	80.1	78.6	326	83.6	75.5	67.6	75
Unguja	92.0	85.4	83.8	212	80.9	79.7	68.9	53
Pemba	89.3	70.3	68.8	115	90.1	65.6	64.5	22
Zone								
Western	85.6	76.6	74.2	1,728	85.4	66.0	62.5	371
Northern	87.6	69.8	67.7	1,530	84.1	69.0	65.0	350
Central	85.0	65.1	60.8	812	91.6	78.0	74.9	208
Southern Highlands	86.3	69.1	65.4	1,370	68.9	65.5	51.5	355
Lake	89.4	71.1	68.7	1,809	72.2	53.0	45.7	521
Eastern	93.8	85.7	83.1	1,608	86.3	73.4	68.3	413
Southern	94.8	79.3	78.8	955	91.3	69.9	67.8	236
Zanzibar	91.0	80.1	78.6	326	83.6	75.5	67.6	75
Education								
No education	83.2	62.1	60.4	1,940	69.0	46.5	43.9	239
Primary incomplete	84.8	67.2	63.9	1,482	78.7	55.4	50.5	460
Primary complete	90.8	78.1	75.6	5,071	81.9	68.1	61.3	1,249
Secondary+	93.8	84.4	81.6	1,646	87.4	80.2	73.4	578
Wealth quintile								
Lowest	83.4	61.8	59.9	1,681	78.4	55.7	53.9	401
Second	86.4	67.6	65.3	1,947	78.9	59.6	54.5	447
Middle	89.7	71.2	68.8	1,997	78.8	59.0	54.0	490
Fourth	91.6	80.8	78.3	2,112	80.5	67.1	58.8	572
Highest	92.1	86.1	82.9	2,403	87.7	83.9	75.8	618
Total 15-49	89.0	74.5	72.0	10,139	81.3	66.5	60.5	2,527

na = Not applicable

There are notable differences in knowledge of MTCT among women and men by age, marital status, education, and wealth. Women and men age 25-29 are most knowledgeable about MTCT prevention (78 percent of women and 68 percent of men know both means of prevention). Whereas 75 percent of married women and 64 percent of married men have knowledge of MTCT prevention methods, only 64 percent of never married women and 56 percent of never married men reported knowing both methods. There are differences in knowledge of prevention of MTCT by residence. Eighty-three percent of women and 72 percent of men in urban areas reported comprehensive MTCT knowledge compared with 68 percent of women and 56 percent of men in rural areas. Respondents in Zanzibar reported higher MTCT knowledge than in Mainland. In Mainland, women in the Central zone have the lowest MTCT knowledge (61 percent), while men in the same zone have the highest MTCT knowledge (75 percent).

MTCT knowledge varies directly with education level and wealth. Comprehensive knowledge is lowest among those with no education (60 percent of women and 44 percent of men) and highest among those with secondary school or higher (82 percent of women and 73 percent of men). Knowledge of MTCT is lowest among those in the bottom wealth quintile (60 percent of women and 54 percent of men) and highest in the top wealth quintile (83 percent of women and 76 percent of men).

13.4 ATTITUDES TOWARDS PEOPLE LIVING WITH AIDS

Widespread stigma and discrimination towards people infected with HIV or living with AIDS can adversely affect both people's willingness to be tested for HIV and also their adherence to antiretroviral therapy. Thus, reduction of stigma and discrimination is an important indicator of the success of programs targeting HIV/AIDS prevention and control.

To assess survey respondents' attitudes towards people living with HIV/AIDS, respondents who had heard of AIDS were asked if they would be willing to care for a relative sick with AIDS in their own households, if they would be willing to buy fresh vegetables from a market vendor who had the AIDS virus, if they thought a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching, and if they would want to keep a family member's HIV positive status secret. Tables 13.5.1 and 13.5.2 show the results for women and men, respectively.

Most women and men would be willing to care at home for a relative with AIDS (nine in ten respondents), seven in ten would buy fresh vegetables from a market vendor with the AIDS virus, and eight in ten believe that an HIV-positive female teacher should be allowed to continue teaching. While there are small gender differences on these three indicators, less than half of female respondents (44 percent) and just over half of male respondents (57 percent) would not want to keep secret the fact that a family member is infected with the AIDS virus. Only 30 percent of women and 41 percent of men expressed acceptance on all four indicators: they would care for an HIV-positive family member in their own home, buy fresh food from a shopkeeper with AIDS, allow an HIV-positive teacher to continue teaching, and not keep the HIV-positive status of a family member a secret.

Women and men in Zanzibar show a higher acceptance of all four indicators of tolerance, (40 percent of women and 53 percent of men) compared with those in Mainland (30 percent of women and 41 percent of men). Among women, the highest rate of acceptance is in the Eastern zone (39 percent), and the lowest is in the Lake and Southern zones (22 percent). Among men, the highest rate of acceptance is in the Central zone (54 percent), and the lowest is in the Lake zone (30 percent).

Respondents in urban areas are one and a half times as likely as those in rural areas to show acceptance on all four indicators. Education and wealth are correlated with positive attitudes towards those who are HIV positive. Women and men with higher educational attainment and in wealthier households are more likely than other respondents to accept all four indicators.

Table 13.5.1 Accepting attitudes toward those living with HIV/AIDS: Women

Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with AIDS, by background characteristics, Tanzania 2010

Background characteristic	Percentage of respondents who: Are willing to care for a family member with the AIDS virus in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher with the AIDS virus who is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing acceptance attitudes on all four indicators	Number of women who have heard of AIDS
Age						
15-24	91.4	71.7	85.2	43.3	30.5	4,053
15-19	89.1	70.3	84.8	42.0	29.4	2,153
20-24	94.1	73.2	85.6	44.8	31.7	1,900
25-29	93.0	73.2	85.7	42.5	30.2	1,668
30-39	93.8	71.3	86.7	42.2	28.9	2,704
40-49	93.8	67.7	84.1	47.1	31.8	1,670
Marital status						
Never married	91.9	76.6	87.2	44.9	33.6	2,518
Ever had sex	95.0	82.1	89.9	42.9	34.7	1,133
Never had sex	89.4	72.0	85.1	46.6	32.7	1,385
Married/living together	92.6	68.7	84.5	43.5	29.3	6,389
Divorced/separated/widowed	94.9	72.9	86.9	40.7	28.2	1,187
Residence						
Urban	97.3	86.3	95.0	47.1	40.6	2,890
Rural	90.8	65.1	81.7	42.0	26.1	7,205
Mainland/Zanzibar						
Mainland	92.7	71.2	85.3	43.1	29.9	9,768
Urban	97.4	86.5	94.9	46.8	40.3	2,755
Rural	90.8	65.2	81.5	41.6	25.8	7,013
Zanzibar	93.4	70.6	93.1	56.5	39.5	326
Unguja	94.9	79.1	95.3	56.7	44.8	212
Pemba	90.6	55.0	89.1	56.0	29.7	114
Zone						
Western	90.2	64.6	76.5	50.3	34.0	1,719
Northern	88.4	69.6	84.5	44.3	32.2	1,507
Central	91.1	60.8	78.8	43.4	23.4	810
Southern Highlands	92.7	75.8	88.2	42.5	31.0	1,367
Lake	92.9	65.2	83.0	37.4	22.2	1,807
Eastern	96.8	84.2	94.1	48.3	39.0	1,607
Southern	97.8	77.3	92.8	30.4	22.2	951
Education						
No education	86.1	51.0	71.6	36.7	17.2	1,911
Primary incomplete	90.8	62.1	79.2	38.6	22.5	1,474
Primary complete	94.3	75.4	89.2	44.0	31.9	5,064
Secondary+	97.1	89.8	95.8	54.3	47.2	1,645
Wealth quintile						
Lowest	86.0	54.6	73.5	37.8	19.8	1,662
Second	89.7	61.4	79.5	41.7	24.7	1,933
Middle	92.5	65.5	83.0	40.5	24.5	1,990
Fourth	95.6	78.9	91.3	44.7	33.0	2,109
Highest	97.4	88.5	95.7	50.4	44.3	2,400
Total 15-49	92.7	71.2	85.5	43.5	30.2	10,094

Table 13.5.2 Accepting attitudes toward those living with HIV/AIDS: Men

Among men age 15-49 who have heard of HIV/AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Tanzania 2010

Background characteristic	Percentage of respondents who: Are willing to care for a family member with the AIDS virus in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher with the AIDS virus who is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing acceptance attitudes on all four indicators	Number of men who have heard of AIDS
Age						
15-24	93.7	73.5	81.3	54.4	38.3	1,057
15-19	91.8	71.5	79.8	51.2	35.9	644
20-24	96.6	76.6	83.7	59.3	42.0	414
25-29	94.0	81.9	87.7	56.5	44.6	342
30-39	96.4	77.9	84.8	56.2	40.3	650
40-49	95.5	76.4	82.6	63.7	45.7	473
Marital status						
Never married	93.3	76.5	83.1	54.8	40.7	1,045
Ever had sex	95.4	81.4	85.0	57.0	43.5	563
Never had sex	91.0	70.8	81.0	52.4	37.4	482
Married/living together	95.5	75.9	83.0	57.7	40.5	1,313
Divorced/separated/widowed	98.1	77.6	87.6	63.4	48.0	164
Residence						
Urban	98.0	90.9	92.7	60.3	52.0	692
Rural	93.6	70.8	79.8	55.6	36.9	1,830
Mainland/Zanzibar						
Mainland	94.8	76.1	83.0	56.6	40.7	2,448
Urban	98.1	90.8	92.5	59.6	51.3	661
Rural	93.5	70.7	79.5	55.5	36.8	1,786
Zanzibar	95.0	82.8	94.7	65.1	53.0	74
Unguja	95.9	86.7	94.7	67.1	56.5	52
Pemba	92.9	73.3	94.7	60.5	44.6	22
Zone						
Western	92.4	73.0	76.4	60.5	39.9	371
Northern	93.3	73.9	80.3	55.6	39.8	347
Central	97.3	83.4	85.3	66.1	53.8	208
Southern Highlands	90.9	69.9	86.8	54.4	35.3	355
Lake	95.5	68.4	76.6	48.3	30.4	520
Eastern	96.6	85.5	90.6	59.2	48.8	413
Southern	99.4	87.8	90.2	60.9	48.2	234
Education						
No education	86.8	48.1	66.1	46.7	20.6	239
Primary incomplete	93.0	65.5	76.8	54.5	34.3	458
Primary complete	95.6	78.6	83.5	57.5	41.0	1,247
Secondary+	97.6	91.6	95.3	61.7	54.9	578
Wealth quintile						
Lowest	90.6	60.9	65.9	53.2	28.7	401
Second	91.0	66.4	75.9	52.2	30.4	444
Middle	94.5	70.7	82.3	57.2	36.6	487
Fourth	96.8	84.0	89.6	57.0	46.9	572
Highest	98.5	90.6	95.0	62.2	54.8	618
Total 15-49	94.8	76.3	83.3	56.9	41.1	2,522

13.5 ATTITUDES TOWARDS NEGOTIATING SAFER SEX

Knowledge about HIV transmission and ways to prevent it are of little use if people feel powerless to negotiate safer sex practices with their partners. In an effort to assess the ability of women to negotiate safer sex with a husband who has a sexually transmitted disease (STD), respondents were asked two attitudinal questions: Is a wife justified in refusing to have sex with her husband when she knows he has a disease that can be transmitted through sexual intercourse? Is a woman in the same circumstance justified if she asks her husband to use a condom?

Nine out of ten women and men believe that a woman may either refuse to have sex with her husband or ask him to wear a condom if she knows he has an STD (Table 13.6). More than eight in ten women and men say that a woman can refuse to have sex. About 80 percent of women and 87 percent of men say that she can propose using a condom. Small differences are observed by marital status, age, and urban or rural residence. Women and men in Zanzibar are less likely than those in Mainland to believe that a woman can refuse sex or ask that a condom is used when she knows that her husband has an STD. The highest proportions are shown by women in the Eastern zone (96 percent) and men in the Central zone (99 percent). Variations among regions are small. Among women, the lowest percentages are observed in Arusha, Manyara, and, and Rukwa (76 to 78 percent), and the highest percentage is in Kigoma (97 percent). The higher a woman's educational attainment, the more likely she is to say that a woman can refuse sex or propose condom use (82 percent for women with no education versus 96 percent for women with secondary or higher education). For men, attitudes do not vary much across education levels (88 to 96 percent).

Table 13.6 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that, if a husband has a sexually transmitted disease, his wife is justified in refusing to have sexual intercourse with him or asking that they use a condom, by background characteristics, Tanzania 2010

	Women				Men			
Background characteristic	Refusing to have sexual intercourse	Asking that they use a condom	Refusing sexual intercourse or asking that they use a condom	Number of women	Refusing to have sexual intercourse	Asking that they use a condom	Refusing sexual intercourse or asking that they use a condom	Number of men
Age								
15-24	79.5	78.9	88.1	4,081	83.9	85.5	91.6	1,058
15-19	76.9	75.7	85.7	2,172	80.2	83.0	89.6	645
20-24	82.6	82.6	90.8	1,909	89.7	89.4	94.7	414
25-29	84.7	84.4	93.2	1,668	89.0	84.8	95.1	343
30-39	84.8	81.1	92.7	2,712	91.3	90.0	95.7	651
40-49	85.6	78.0	91.7	1,678	89.4	87.1	94.9	475
Marital status								
Never married	78.7	77.7	87.4	2,540	83.5	84.2	91.4	1,046
Ever had sex	85.0	87.3	93.8	1,137	87.5	89.8	95.7	563
Never had sex	73.5	69.9	82.2	1,403	78.9	77.7	86.3	483
Married/living together	84.0	80.7	91.7	6,412	90.9	88.7	95.7	1,317
Divorced/separated/widowed	85.2	83.3	92.6	1,188	86.0	88.8	93.2	164
Residence								
Urban	87.0	87.0	95.7	2,892	92.1	88.7	96.5	693
Rural	81.1	77.5	88.8	7,247	85.8	86.2	92.7	1,834
Mainland/Zanzibar								
Mainland	83.0	80.5	90.9	9,813	87.8	87.2	93.9	2,452
Urban	87.5	87.4	96.1	2,758	92.6	88.9	96.7	662
Rural	81.2	77.8	88.9	7,055	86.0	86.6	92.9	1,790
Zanzibar	77.5	72.8	85.5	326	79.0	74.8	88.4	75
Unguja	75.5	75.2	85.5	212	83.2	84.6	93.6	53
Pemba	81.3	68.2	85.6	115	69.0	51.4	76.2	22
Zone								
Western	84.4	84.4	90.5	1,728	89.2	86.0	94.9	371
Northern	80.7	69.4	87.7	1,530	83.2	78.6	87.9	350
Central	86.7	79.6	91.9	812	90.0	92.6	99.3	208
Southern Highlands	78.3	76.6	86.9	1,370	84.4	84.4	93.3	355
Lake	81.5	80.8	91.6	1,809	88.3	90.0	92.6	521
Eastern	86.3	87.1	95.7	1,608	92.1	90.7	97.1	413
Southern	84.7	85.7	92.3	955	87.0	89.4	94.7	236
Region								
Dodoma	90.3	81.9	92.5	495	89.4	91.9	100.0	122
Arusha	73.3	63.0	77.5	401	64.8	65.1	70.8	87
Kilimanjaro	86.2	81.6	94.5	411	92.2	83.4	95.3	92
Tanga	84.5	73.7	95.0	498	92.0	88.1	96.9	124
Morogoro	91.0	82.7	95.5	481	93.5	92.8	96.7	146
Pwani	91.2	86.1	94.2	261	98.7	96.5	100.0	59
Dar es Salaam	82.1	89.9	96.2	866	89.3	87.4	96.5	207
Lindi	87.9	87.2	93.9	198	85.9	89.8	94.2	47
Mtwara	84.0	82.6	89.1	407	88.3	91.3	93.9	87
Ruvuma	83.8	88.5	95.2	350	86.3	87.6	95.7	102

Continued...

Table 13.6—*Continued*

Background characteristic	Women				Men			
	Refusing to have sexual intercourse	Asking that they use a condom	Refusing sexual intercourse or asking that they use a condom	Number of women	Refusing to have sexual intercourse	Asking that they use a condom	Refusing sexual intercourse or asking that they use a condom	Number of men
Region (continued)								
Iringa	80.1	77.8	91.9	490	89.4	92.6	96.7	140
Mbeya	80.5	79.7	87.4	623	83.3	81.1	91.7	143
Singida	81.2	75.9	91.0	317	90.8	93.5	98.3	86
Tabora	80.6	80.6	86.8	447	89.6	85.2	95.5	105
Rukwa	69.7	67.0	76.4	257	77.0	75.1	90.0	72
Kigoma	91.7	88.4	96.8	462	80.7	81.5	93.2	96
Shinyanga	82.4	84.3	89.1	819	93.8	89.2	95.6	169
Kagera	78.6	87.6	93.4	590	70.7	76.9	80.7	161
Mwanza	80.7	73.0	89.5	844	95.8	95.9	98.2	276
Mara	87.9	87.5	93.5	376	97.2	95.7	97.2	83
Manyara	75.2	48.4	77.0	220	76.5	69.5	81.5	47
Unguja North	74.5	65.3	82.2	50	69.2	74.0	88.0	11
Unguja South	75.6	78.7	86.9	30	86.4	90.1	93.8	9
Town West	75.8	78.3	86.5	131	87.1	86.6	95.4	33
Pemba North	78.9	62.6	81.5	56	64.7	44.3	72.9	10
Pemba South	83.6	73.5	89.3	59	72.4	57.0	78.9	12
Education								
No education	76.1	68.0	82.4	1,940	83.6	78.8	87.5	239
Primary incomplete	77.5	75.6	87.1	1,482	80.0	82.1	90.5	460
Primary complete	85.3	83.7	93.4	5,071	89.2	88.4	95.0	1,249
Secondary+	87.7	88.3	95.6	1,646	91.5	90.8	96.2	578
Wealth quintile								
Lowest	79.4	72.2	86.2	1,681	84.4	82.4	90.0	401
Second	81.1	76.7	87.6	1,947	87.1	86.4	94.2	447
Middle	81.4	78.5	89.7	1,997	84.8	86.0	92.6	490
Fourth	84.3	83.3	92.2	2,112	87.0	86.3	92.7	572
Highest	86.4	87.5	96.0	2,403	92.5	91.3	97.8	618
Total 15-49	82.8	80.2	90.7	10,139	87.5	86.9	93.8	2,527

13.6 HIGH-RISK SEX

Information on sexual behaviour is important in designing and monitoring intervention programs to control the spread of HIV/AIDS. The 2010 TDHS included questions on respondents' sexual partners during their lifetime and over the 12 months preceding the survey. For male respondents, an additional question was asked on whether they paid for sex during the 12 months preceding the interview. Information on the use of condoms at the last sexual encounter with each type of partner was collected for women and men. These questions are sensitive, and it is recognized that some respondents may have been reluctant to provide information on recent sexual behaviour.

13.6.1 Multiple Partners and Condom Use

Tables 13.7.1 and 13.7.2 show that 4 percent of women and 21 percent of men reported having two or more partners in the 12 months preceding the survey. The percentages of men who had two or more sexual partners in the last 12 months in general has a negative correlation with their education level and wealth quintile; less educated and less wealthy men are more likely to have two or more partners.

Age is a factor in sexual history: the youngest respondents are the least likely to have had more than one sexual partner. Among men, only 7 percent of men age 15-19 had more than one partner in the past 12 months compared with 30 percent of men age 25-29. Among those who had multiple sexual partners in the past year, 27 percent of women and 24 percent of men used a condom during their last sexual intercourse.

In general, condom use during the last sexual intercourse among women and men with more than one partner is inversely related to age; younger respondents are more likely to use condoms than older respondents. Overall, the highest rate of condom use during last sexual intercourse was reported by divorced, separated, or widowed women and men (49 percent and 43 percent, respectively). For men, condom use is highest in the Southern zone (41 percent) and lowest in the Lake zone (13 percent).

Table 13.7.1 Multiple sexual partners: Women

Among all women age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among women having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during a lifetime for women who ever had sexual intercourse, by background characteristics, Tanzania 2010

	All respondents		Among respondents who had 2+ partners in the past 12 months:		Among respondents who ever had sexual intercourse[1]:	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number	Percentage who reported using a condom during last sexual inter-course	Number	Mean number of sexual partners in lifetime	Number
Age						
15-24	3.2	4,081	31.6	132	1.9	2,715
15-19	1.9	2,172	(35.3)	42	1.6	987
20-24	4.7	1,909	29.9	90	2.1	1,728
25-29	4.6	1,668	32.1	77	2.3	1,645
30-39	3.7	2,712	22.6	101	2.5	2,693
40-49	2.8	1,678	(16.6)	48	2.6	1,663
Marital status						
Never married	2.2	2,540	35.8	56	2.0	1,132
Married or living together	2.7	6,412	8.1	173	2.1	6,404
Divorced/separated/widowed	10.8	1,188	48.9	129	3.4	1,178
Residence						
Urban	3.1	2,892	29.6	89	2.5	2,398
Rural	3.7	7,247	26.3	269	2.2	6,317
Mainland/Zanzibar						
Mainland	3.6	9,813	27.2	356	2.3	8,500
Urban	3.2	2,758	29.8	88	2.5	2,311
Rural	3.8	7,055	26.4	268	2.2	6,189
Zanzibar	0.4	326	*	1	1.6	215
Unguja	0.6	212	*	1	1.6	143
Pemba	0.1	115	*	0	1.5	72
Zone						
Western	2.5	1,728	(9.0)	44	2.1	1,491
Northern	2.0	1,530	*	31	1.8	1,250
Central	3.4	812	*	27	2.0	706
Southern Highlands	2.7	1,370	*	37	1.7	1,167
Lake	4.4	1,809	(26.0)	79	2.6	1,583
Eastern	3.4	1,608	(27.2)	55	2.5	1,422
Southern	8.6	955	29.2	83	3.5	881
Education						
No education	3.5	1,940	23.8	69	2.3	1,871
Primary incomplete	5.8	1,482	29.1	85	2.5	1,198
Primary complete	3.4	5,071	27.4	175	2.3	4,638
Secondary+	1.8	1,646	(27.8)	29	2.0	1,008
Wealth quintile						
Lowest	4.9	1,681	15.6	82	2.5	1,527
Second	3.7	1,947	23.9	72	2.4	1,727
Middle	3.4	1,997	31.7	69	2.1	1,738
Fourth	3.4	2,112	39.2	72	2.3	1,807
Highest	2.6	2,403	27.2	63	2.3	1,915
Total 15-49	3.5	10,139	27.2	357	2.3	8,715

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has suppressed.
[1] Means are calculated excluding respondents who gave non-numeric responses.

The mean number of lifetime sexual partners is 2.3 for women and 6.7 for men. The mean number of sexual partners increases with age and is highest among those women and men who are divorced, separated, or widowed (3.4 for women and 10.4 for men). Small differences are observed by urban-rural residence, education level, and wealth quintile. For both women and men, the mean number of lifetime partners is lower in Zanzibar than in Mainland. The disparity is larger for men: 6.8 in the Mainland compared with 2.8 in Zanzibar.

Overall, low rates of condom use coupled with high rates of multiple sexual partners among men may increase the spread of HIV/AIDS in Tanzania.

Table 13.7.2 Multiple sexual partners: Men

Among all men age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among men having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during a lifetime for men who ever had sexual intercourse, by background characteristics, Tanzania 2010

	All respondents		Among respondents who had 2+ partners in the past 12 months:		Among respondents who ever had sexual intercourse[1]:	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number	Percentage who reported using a condom during last sexual inter-course	Number	Mean number of sexual partners in lifetime	Number
Age						
15-24	12.3	1,058	36.2	131	3.9	582
15-19	6.8	645	(34.2)	44	2.8	240
20-24	20.9	414	37.3	87	4.7	343
25-29	30.0	343	25.8	103	6.7	329
30-39	24.1	651	23.5	157	7.6	628
40-49	27.8	475	9.7	132	9.1	457
Marital status						
Never married	10.1	1,046	53.1	106	3.8	557
Married or living together	28.3	1,317	13.1	373	7.5	1,281
Divorced/separated/widowed	26.6	164	(42.5)	44	10.4	157
Residence						
Urban	15.5	693	32.0	107	6.5	535
Rural	22.7	1,834	21.5	416	6.8	1,460
Mainland/Zanzibar						
Mainland	21.0	2,452	23.8	516	6.8	1,953
Urban	15.8	662	32.7	104	6.6	517
Rural	23.0	1,790	21.6	411	6.9	1,436
Zanzibar	9.6	75	8.9	7	2.8	43
Unguja	10.6	53	(11.5)	6	3.1	33
Pemba	7.3	22	*	2	1.8	10
Zone						
Western	17.0	371	21.4	63	7.9	307
Northern	17.2	350	19.0	60	6.6	269
Central	31.7	208	23.4	66	4.8	179
Southern Highlands	17.6	355	22.3	62	3.8	246
Lake	25.2	521	12.7	131	8.4	414
Eastern	16.2	413	37.8	67	6.0	324
Southern	27.9	236	40.7	66	8.8	213
Zanzibar	9.6	75	8.9	7	2.8	43
Education						
No education	28.9	239	12.8	69	7.4	216
Primary incomplete	16.3	460	25.2	75	7.4	329
Primary complete	24.9	1,249	23.1	311	7.0	1,098
Secondary+	11.7	578	35.3	68	4.6	352
Wealth quintile						
Lowest	23.2	401	24.8	93	7.9	332
Second	24.5	447	12.2	109	7.1	372
Middle	23.8	490	17.7	116	6.4	367
Fourth	18.6	572	26.0	107	6.5	449
Highest	15.8	618	40.0	97	6.1	474
Total 15-49	20.7	2,527	23.6	523	6.7	1,995

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has suppressed.
[1] Means are calculated excluding respondents who gave non-numeric responses.

13.6.2 Transactional Sex

Transactional sex involves exchange of sex for money, favours, or gifts. Transactional sex is associated with a high risk of contracting HIV and other sexually transmitted infections due to compromised power relations and the tendency to have multiple partnerships. Male respondents in the 2010 TDHS who had had sex in the preceding 12 months were asked whether they paid in exchange for sex in the past 12 months or if they ever paid anyone in exchange for sex. Men who had paid for sex were asked about condom use during paid sexual encounters.

As shown in Table 13.8, 15 percent of men have ever paid for sexual intercourse, and 8 percent did so in the past twelve months. Men age 20-39 are most likely to have paid for sex in the past 12 months. Divorced, separated, or widowed men are substantially more likely than other men to have paid for sex. There are small differences in the prevalence of paid sex by educational attainment, wealth, and residence. Paid sex is far less common in Zanzibar than in Mainland (3 percent compared with 15 percent).

Table 13.8 Payment for sexual intercourse and condom use at last paid sexual intercourse: Men

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, and among them, the percentage reporting that a condom was used the last time they paid for sexual intercourse, by background characteristics, Tanzania 2010

	Among all men			Among men who paid for sex in the past 12 months	
Background characteristic	Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men	Percentage reporting condom use at last paid sexual intercourse	Number of men
Age					
15-24	11.1	9.7	1,058	47.2	103
15-19	5.3	5.0	645	38.7	32
20-24	20.2	17.2	414	51.1	71
25-29	19.5	9.0	343	*	31
30-39	20.2	9.1	651	69.8	59
40-49	10.9	3.7	475	*	17
Marital status					
Never married	11.6	9.2	1,046	52.1	96
Married or living together	14.8	5.9	1,317	58.8	78
Divorced/separated/widowed	31.1	22.4	164	(76.8)	37
Residence					
Urban	17.1	8.3	693	(65.2)	57
Rural	13.6	8.4	1,834	56.5	153
Mainland/Zanzibar					
Mainland	14.9	8.5	2,452	58.9	210
Urban	17.7	8.6	662	65.3	57
Rural	13.9	8.5	1,790	56.6	153
Zanzibar	2.7	1.8	75	*	1
Unguja	3.4	2.4	53	*	1
Pemba	1.0	0.4	22	*	0
Zone					
Western	13.9	11.0	371	(44.8)	41
Northern	8.0	4.7	350	*	16
Central	13.0	6.1	208	*	13
Southern Highlands	15.2	7.6	355	*	27
Lake	9.2	8.2	521	(53.4)	43
Eastern	20.0	6.9	413	*	28
Southern	31.7	17.6	236	(76.7)	41
Zanzibar	2.7	1.8	75	*	1
Education					
No education	10.8	6.0	239	*	14
Primary incomplete	16.8	11.3	460	50.2	52
Primary complete	16.5	9.0	1,249	64.5	112
Secondary+	10.1	5.6	578	(60.0)	32
Wealth quintile					
Lowest	13.5	8.9	401	(50.5)	35
Second	14.1	7.4	447	(48.6)	33
Middle	13.3	10.9	490	(50.8)	53
Fourth	15.2	8.0	572	(69.0)	46
Highest	16.0	7.0	618	(72.7)	43
Total 15-49	14.5	8.3	2,527	58.9	211

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Nearly 60 percent of men reported condom use at the most recent time they had paid for sex. Because the number of men who reported having sex with prostitutes is small, it is not possible to interpret with confidence the differentials in condom use by social and demographic characteristics.

13.7 COVERAGE OF HIV TESTING

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce risk and increase safer sex practices so they can remain disease free. For those who are HIV infected, knowledge of their status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future. To assess the awareness and coverage of HIV testing services, 2010 TDHS respondents were asked whether they had ever been tested for HIV. If they said that they had been, they were asked whether they had received the results of their last test and where they had been tested. If they had never been tested, they were asked if they knew a place where they could go to be tested.

Tables 13.9.1 and 13.9.2 show that nine in ten women and men know where to get an HIV test. The tables also show that 59 percent of women and 43 percent of men have ever been tested for HIV, and 55 percent of women and 40 percent of men have been tested at some time and received the results of their HIV test. Three in ten women and 25 percent of men were tested for HIV in the year preceding the survey and received the results of their test. These figures are much higher than those recorded in the 2004-05 TDHS (6 percent of women and 7 percent of men) and in the 2007-08 THMIS (19 percent of women and 19 percent of men). These figures suggest that Tanzanians are increasingly aware of opportunities for testing and learning their HIV status.

Women age 20-39 and men age 25 and older are the most likely to have been tested for HIV. Respondents in urban areas are more likely than those in rural areas to have an HIV test. Women and men who have never had sex are the least likely to have taken the test. Similar patterns are observed in testing and receiving results for women and men.

Regional variations exist and differ among women and men. Tanzanians living in Mainland are more likely than those living in Zanzibar to have been tested and received the results. For example, 56 percent of women in Mainland and 48 percent in Zanzibar have been tested and received results. There is only a small difference for male respondents (40 percent in Mainland and 39 percent in Zanzibar). The proportion of women who took the test and received the results ranges from 33 percent in Rukwa to 69 percent in Kilimanjaro. Among men, rates vary from 24 percent in Lindi to 64 percent in Ruvuma. HIV testing is more common among better educated and wealthier respondents.

Table 13.9.1 Coverage of prior HIV testing: Women

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women age 15-49 by testing status and by whether they received the results of the last test, the percentage of women ever tested, and the percentage of women age 15-49 who received their test results the last time they were tested for HIV in the past 12 months, according to background characteristics, Tanzania 2010

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and whether they received the results of the last test			Total	Percentage ever tested	Percentage who received results from last HIV test taken in the past 12 months	Number of women
		Ever tested and received results	Ever tested did not receive results	Never tested[1]				
Age								
15-24	88.3	47.1	3.1	49.8	100.0	50.2	28.6	4,081
15-19	83.5	29.3	2.5	68.1	100.0	31.9	20.5	2,172
20-24	93.8	67.4	3.7	28.9	100.0	71.1	37.9	1,909
25-29	96.3	69.9	3.6	26.5	100.0	73.5	34.5	1,668
30-39	95.9	63.5	5.1	31.5	100.0	68.5	32.5	2,712
40-49	92.7	47.6	3.4	49.0	100.0	51.0	21.7	1,678
Marital status								
Never married	86.4	34.6	2.6	62.8	100.0	37.2	21.6	2,540
Ever had sex	93.2	56.9	3.0	40.1	100.0	59.9	35.5	1,137
Never had sex	80.9	16.5	2.2	81.3	100.0	18.7	10.4	1,403
Married/living together	94.2	62.0	4.3	33.7	100.0	66.3	32.5	6,412
Divorced/separated/widowed	95.2	63.6	3.3	33.0	100.0	67.0	29.8	1,188
Residence								
Urban	97.1	66.4	2.4	31.1	100.0	68.9	36.9	2,892
Rural	90.4	50.9	4.3	44.8	100.0	55.2	26.5	7,247
Mainland/Zanzibar								
Mainland	92.3	55.6	3.8	40.6	100.0	59.4	29.7	9,813
Urban	97.4	67.1	2.5	30.5	100.0	69.5	37.5	2,758
Rural	90.4	51.1	4.3	44.6	100.0	55.4	26.7	7,055
Zanzibar	92.9	47.9	1.9	50.3	100.0	49.7	22.9	326
Unguja	93.8	50.7	2.0	47.3	100.0	52.7	23.7	212
Pemba	91.2	42.5	1.7	55.7	100.0	44.3	21.6	115
Zone								
Western	95.3	57.8	3.5	38.7	100.0	61.3	29.0	1,728
Northern	90.4	58.7	5.4	36.0	100.0	64.0	30.0	1,530
Central	96.3	47.8	3.6	48.6	100.0	51.4	26.5	812
Southern Highlands	87.7	49.6	4.2	46.2	100.0	53.8	27.3	1,370
Lake	88.4	51.6	3.0	45.4	100.0	54.6	29.2	1,809
Eastern	95.7	62.0	3.0	35.0	100.0	65.0	34.0	1,608
Southern	95.3	58.5	4.4	37.1	100.0	62.9	30.4	955
Region								
Dodoma	98.6	46.2	3.5	50.3	100.0	49.7	23.0	495
Arusha	85.2	56.0	7.6	36.4	100.0	63.6	32.1	401
Kilimanjaro	96.3	69.2	3.3	27.5	100.0	72.5	32.5	411
Tanga	93.8	56.1	5.3	38.6	100.0	61.4	27.5	498
Morogoro	91.3	51.3	1.3	47.4	100.0	52.6	31.0	481
Pwani	96.6	62.8	5.9	31.3	100.0	68.7	32.8	261
Dar es Salaam	97.9	67.7	3.1	29.2	100.0	70.8	36.0	866
Lindi	96.2	55.2	6.1	38.7	100.0	61.3	28.0	198
Mtwara	95.3	52.5	4.6	42.9	100.0	57.1	21.4	407
Ruvuma	94.8	67.4	3.3	29.3	100.0	70.7	42.3	350
Iringa	94.4	59.2	5.8	35.0	100.0	65.0	35.6	490
Mbeya	87.5	49.1	3.7	47.3	100.0	52.7	25.1	623
Singida	92.7	50.4	3.7	45.9	100.0	54.1	32.0	317
Tabora	95.1	56.4	3.1	40.5	100.0	59.5	32.7	447
Rukwa	75.3	32.6	2.2	65.2	100.0	34.8	16.6	257
Kigoma	93.4	60.7	4.0	35.2	100.0	64.8	35.0	462
Shinyanga	96.5	56.9	3.4	39.6	100.0	60.4	23.5	819
Kagera	94.3	54.9	3.6	41.5	100.0	58.5	30.0	590
Mwanza	82.5	48.1	2.5	49.4	100.0	50.6	28.5	844
Mara	92.2	54.1	3.3	42.6	100.0	57.4	29.4	376
Manyara	81.3	49.8	5.3	44.8	100.0	55.2	27.1	220
Unguja North	94.9	44.4	3.0	52.6	100.0	47.4	19.3	50
Unguja South	95.5	51.0	2.4	46.6	100.0	53.4	23.6	30
Town West	93.0	53.1	1.5	45.4	100.0	54.6	25.4	131
Pemba North	91.0	42.5	1.7	55.8	100.0	44.2	20.5	56
Pemba South	91.5	42.5	1.8	55.7	100.0	44.3	22.6	59
Education								
No education	85.8	48.4	4.4	47.3	100.0	52.7	23.9	1,940
Primary incomplete	86.7	45.1	3.6	51.3	100.0	48.7	23.4	1,482
Primary complete	94.8	60.3	3.8	35.8	100.0	64.2	31.6	5,071
Secondary+	97.5	57.3	3.0	39.7	100.0	60.3	34.9	1,646
Wealth quintile								
Lowest	87.5	45.8	4.1	50.2	100.0	49.8	22.9	1,681
Second	89.8	50.4	3.9	45.6	100.0	54.4	23.0	1,947
Middle	90.4	53.3	4.5	42.2	100.0	57.8	27.7	1,997
Fourth	95.6	58.9	4.0	37.1	100.0	62.9	34.7	2,112
Highest	96.5	64.5	2.5	33.0	100.0	67.0	36.3	2,403
Total 15-49	92.4	55.3	3.8	40.9	100.0	59.1	29.5	10,139

[1] Includes 'don't know/missing'

Table 13.9.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men age 15-49 by testing status and by whether they received the results of the last test, the percentage of men ever tested, and the percentage of men age 15-49 who received their test results the last time they were tested for HIV in the past 12 months, according to background characteristics, Tanzania 2010

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and whether they received the results of the last test			Total	Percentage ever tested	Percentage who received results from last HIV test taken in the past 12 months	Number of men
		Ever tested and received results	Ever tested did not receive results	Never tested[1]				
Age								
15-24	85.4	27.5	2.4	70.1	100.0	29.9	18.8	1,058
15-19	81.2	17.9	2.3	79.7	100.0	20.3	13.0	645
20-24	91.8	42.3	2.5	55.2	100.0	44.8	27.9	414
25-29	97.2	50.9	4.3	44.8	100.0	55.2	30.9	343
30-39	96.2	48.9	3.6	47.4	100.0	52.6	29.7	651
40-49	91.4	46.9	1.6	51.4	100.0	48.6	28.2	475
Marital status								
Never married	86.2	27.8	2.6	69.6	100.0	30.4	18.5	1,046
Ever had sex	92.2	37.9	2.7	59.4	100.0	40.6	23.8	563
Never had sex	79.3	16.1	2.5	81.4	100.0	18.6	12.3	483
Married/living together	94.5	48.3	3.2	48.4	100.0	51.6	29.8	1,317
Divorced/separated/widowed	91.4	48.2	1.0	50.8	100.0	49.2	28.6	164
Residence								
Urban	96.4	45.3	2.6	52.1	100.0	47.9	28.8	693
Rural	88.8	37.8	2.9	59.3	100.0	40.7	23.6	1,834
Mainland/Zanzibar								
Mainland	90.8	39.9	2.9	57.3	100.0	42.7	25.1	2,452
Urban	96.4	45.5	2.7	51.9	100.0	48.1	29.1	662
Rural	88.8	37.8	3.0	59.2	100.0	40.8	23.6	1,790
Zanzibar	92.6	39.0	1.1	59.9	100.0	40.1	22.1	75
Unguja	92.5	40.9	1.4	57.7	100.0	42.3	21.8	53
Pemba	92.9	34.5	0.6	64.9	100.0	35.1	22.9	22
Zone								
Western	85.7	43.4	3.8	52.8	100.0	47.2	29.4	371
Northern	90.9	42.6	1.5	55.9	100.0	44.1	29.8	350
Central	98.7	39.8	1.8	58.4	100.0	41.6	27.6	208
Southern Highlands	90.5	36.1	4.2	59.7	100.0	40.3	19.4	355
Lake	89.6	34.8	2.9	62.3	100.0	37.7	20.6	521
Eastern	91.4	40.2	1.3	58.5	100.0	41.5	23.5	413
Southern	94.2	46.5	5.2	48.3	100.0	51.7	30.6	236
Region								
Dodoma	100.0	38.1	1.1	60.8	100.0	39.2	24.8	122
Arusha	86.2	38.7	1.1	60.2	100.0	39.8	29.6	87
Kilimanjaro	91.7	46.2	1.4	52.3	100.0	47.7	29.0	92
Tanga	92.6	41.8	2.5	55.8	100.0	44.2	32.6	124
Morogoro	84.7	33.6	3.7	62.7	100.0	37.3	22.0	146
Pwani	92.4	33.4	0.0	66.6	100.0	33.4	15.5	59
Dar es Salaam	95.8	46.7	0.0	53.3	100.0	46.7	26.9	207
Lindi	96.4	23.8	5.0	71.2	100.0	28.8	14.6	47
Mtwara	95.1	38.3	9.4	52.2	100.0	47.8	21.9	87
Ruvuma	92.4	63.9	1.6	34.5	100.0	65.5	45.3	102
Iringa	96.1	40.0	6.2	53.8	100.0	46.2	21.7	140
Mbeya	88.5	35.4	3.3	61.3	100.0	38.7	18.1	143
Singida	96.7	42.3	2.7	55.1	100.0	44.9	31.5	86
Tabora	88.6	43.7	2.1	54.2	100.0	45.8	29.2	105
Rukwa	83.4	29.8	2.2	67.9	100.0	32.1	17.3	72
Kigoma	93.9	49.1	8.5	42.4	100.0	57.6	39.7	96
Shinyanga	79.3	40.1	2.2	57.8	100.0	42.2	23.6	169
Kagera	96.7	40.3	1.5	58.2	100.0	41.8	23.7	161
Mwanza	85.8	29.7	4.0	66.3	100.0	33.7	16.1	276
Mara	88.6	41.4	1.7	56.9	100.0	43.1	29.7	83
Manyara	93.8	44.5	0.0	55.5	100.0	44.5	24.6	47
Unguja North	86.5	27.1	1.8	71.1	100.0	28.9	21.2	11
Unguja South	90.3	40.7	0.0	59.3	100.0	40.7	17.6	9
Town West	95.1	45.7	1.6	52.8	100.0	47.2	23.1	33
Pemba North	95.0	30.2	0.0	69.8	100.0	30.2	19.6	10
Pemba South	91.2	37.9	1.1	61.1	100.0	38.9	25.5	12

Continued...

Table 13.9.2—*Continued*

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and whether they received the results of the last test			Total	Percentage ever tested	Percentage who received results from last HIV test taken in the past 12 months	Number of men
		Ever tested and received results	Ever tested did not receive results	Never tested[1]				
Education								
No education	79.8	24.4	3.4	72.2	100.0	27.8	11.7	239
Primary incomplete	83.0	28.6	3.1	68.3	100.0	31.7	17.7	460
Primary complete	93.3	43.0	2.3	54.8	100.0	45.2	27.5	1,249
Secondary+	96.6	48.4	3.6	48.1	100.0	51.9	31.0	578
Wealth quintile								
Lowest	84.1	28.1	2.6	69.3	100.0	30.7	17.1	401
Second	87.6	35.1	1.9	63.1	100.0	36.9	22.4	447
Middle	90.1	37.4	3.0	59.6	100.0	40.4	23.8	490
Fourth	92.7	40.5	3.7	55.9	100.0	44.1	23.7	572
Highest	96.6	52.3	2.7	45.0	100.0	55.0	34.1	618
Total 15-49	90.9	39.8	2.8	57.3	100.0	42.7	25.0	2,527

[1] Includes 'don't know/missing'

Mother-to-child transmission of HIV is the second most common cause of HIV transmission in Tanzania. Because of the effectiveness of antiretroviral drugs (ARVs) in preventing mother to child transmission, screening for the virus in pregnant women is an important tool in reducing HIV transmission. Data on HIV counselling and HIV testing among pregnant women who gave birth in the two years preceding the survey is presented in Table 13.10. Overall, 64 percent of women who gave birth in the two years preceding the survey received HIV counselling during antenatal care, and a majority of these women also received post-test counselling (63 percent). Over half of the women (55 percent) had pretest counselling and then an HIV test, after which they received the test results. These figures represent a significant increase over those reported in 2004-05, when 27 percent received HIV counselling during antenatal care and 9 percent were offered and accepted an HIV test and received results.

The percentage of women who received pretest counselling during an antenatal care visit is higher in urban areas than in rural areas (80 and 60 percent, respectively). Women in the Eastern and Southern zones are the most likely to receive HIV pretest counselling (73 and 76 percent, respectively) while women in the Central zone are least likely to receive HIV pretest counselling (50 percent). Among women who were counselled before the test, were tested, and received the HIV test result, better educated and wealthier women are more likely to receive the results of their test than other women. For instance, 41 percent of women with no education compared with 74 percent of women with secondary or higher education received the results of their HIV test provided during antenatal care.

Table 13.10 Pregnant women counselled and tested for HIV

Among all women age 15-49 who gave birth in the two years preceding the survey, the percentage who received HIV pretest counselling, the percentage who received an HIV test during antenatal care for their most recent birth by whether they received their results and post-test counselling, according to background characteristics, Tanzania 2010

Background characteristic	Percentage who received HIV pretest counselling during antenatal care[1]	Percentage who received an HIV test during antenatal care and who received results and:			Percentage who received pretest counselling, had an HIV test, and who received results	Number of women who gave birth in the past two years[2]
		Received post-test counselling	Did not receive post-test counselling	Did not receive results		
Age						
15-24	60.6	62.5	8.6	3.0	52.6	1,220
15-19	59.3	59.1	11.4	2.5	52.2	335
20-24	61.1	63.7	7.6	3.2	52.7	886
25-29	65.8	62.0	8.2	1.9	57.7	830
30-39	67.2	63.6	8.5	3.7	57.5	1,035
40-49	59.7	58.5	6.1	4.4	48.3	181
Residence						
Urban	80.2	82.5	7.9	2.6	76.8	682
Rural	59.7	57.2	8.5	3.1	49.5	2,584
Mainland/Zanzibar						
Mainland	63.8	62.1	8.4	3.1	55.0	3,179
Urban	80.2	82.3	8.0	2.7	76.8	651
Rural	59.6	56.9	8.5	3.2	49.4	2,528
Zanzibar	70.7	78.1	5.8	1.7	62.2	87
Unguja	72.0	81.6	8.1	2.3	67.8	54
Pemba	68.5	72.4	2.2	0.8	53.2	34
Zone						
Western	67.3	68.1	7.0	3.6	61.7	731
Northern	66.2	63.5	17.1	3.3	61.8	393
Central	49.9	53.8	5.9	3.1	39.0	303
Southern Highlands	59.5	47.8	5.1	3.4	44.3	445
Lake	57.7	56.3	8.2	2.8	45.8	668
Eastern	73.1	73.4	8.7	2.4	67.6	395
Southern	76.2	75.4	8.2	2.6	68.6	243
Education						
No education	50.8	48.4	11.0	4.2	40.6	836
Primary incomplete	60.0	59.1	6.4	2.8	49.0	491
Primary complete	69.4	68.1	7.6	2.6	61.5	1,697
Secondary+	79.8	78.9	8.7	2.4	74.0	243
Wealth quintile						
Lowest	52.5	51.1	8.5	4.1	42.3	687
Second	58.7	54.3	10.3	2.6	48.2	780
Middle	63.1	61.3	6.6	3.1	53.1	707
Fourth	70.8	71.9	8.1	2.8	64.2	613
Highest	81.5	81.9	8.0	2.6	76.9	478
Total 15-49	64.0	62.5	8.4	3.0	55.2	3,266

[1] In this context, 'counselled' means that someone talked with the respondent about all three of the following topics: (1) babies getting the AIDS virus from their mother, (2) preventing the virus, and (3) getting tested for the virus.
[2] Denominator for percentages includes women who did not receive antenatal care for their last birth in the past two years.

13.8 MALE CIRCUMCISION

Male circumcision involves the removal of some foreskin or the entire foreskin of the penis. Male circumcision decreases the risk of HIV infection, presumably in part because of physiological differences that reduce the susceptibility to HIV infection among circumcised men. Several recent studies in sub-Saharan Africa, including clinical trials conducted in South Africa, Kenya, and Uganda (Auvert et al., 2005; NIAID, 2006), have documented that the protective effect of male circumcision may be significant.

The 2010 TDHS collected information on the prevalence of male circumcision and on attitudes relating to the practice. Table 13.11 provides information on the percentage of men age 15-49 who were circumcised and the distribution of circumcised men by age at circumcision.

Seventy-two percent of men reported that they had been circumcised. Circumcision is most common before puberty; two-thirds (64 percent) of men were circumcised before age 14. The percentage of men who have been circumcised increases with age, ranging from 64 percent of men age 15–19 to 80 percent of men age 45-49. Respondents living in urban areas are more likely to be circumcised than men in rural areas (90 percent and 66 percent, respectively). Circumcision in Zanzibar is almost universal, while in Mainland only 71 percent of men have been circumcised.

Fifty-seven percent of circumcisions were performed by a health worker or health professional and 34 percent by a traditional practitioner, family, or friends (data not shown). Forty-five percent of circumcisions were performed at a health facility; 33 percent were performed at the respondent's home (data not shown). A majority of the men who did not know who performed the circumcision or where it took place were circumcised before age 5 (data not shown).

Table 13.11 Male circumcision

Percentage of men age 15-49 who report having been circumcised, and percent distribution of circumcised men by age of circumcision, according to background characteristics, Tanzania 2010

			Among circumcised men: age at circumcision						
Background characteristic	Percentage circumcised	Number of men	Under 5	5-13	14-19	20 or more	Don't know/ missing	Total	Number of men circumcised
Age									
15-19	64.3	645	24.6	47.5	17.8	na	10.1	100.0	415
20-24	74.5	414	21.9	40.2	25.6	5.9	6.3	100.0	308
25-29	75.4	343	21.7	40.9	24.6	5.9	6.9	100.0	259
30-34	75.0	352	23.3	44.5	18.2	8.6	5.4	100.0	264
35-39	72.1	300	23.2	35.6	18.6	13.1	9.5	100.0	216
40-44	74.7	270	15.3	39.4	28.6	10.2	6.6	100.0	202
45-49	79.8	204	17.6	44.7	21.2	11.1	5.4	100.0	163
Residence									
Urban	89.9	693	31.8	41.8	13.1	3.0	10.3	100.0	623
Rural	65.6	1,834	16.5	42.6	26.2	8.7	5.9	100.0	1,203
Mainland/Zanzibar									
Mainland	71.4	2,452	21.1	43.6	22.6	7.0	5.7	100.0	1,752
Urban	89.4	662	31.5	43.4	13.8	3.1	8.2	100.0	592
Rural	64.8	1,790	15.8	43.7	27.2	9.0	4.4	100.0	1,160
Zanzibar	99.5	75	37.4	12.4	0.7	0.5	48.9	100.0	74
Unguja	99.3	53	37.3	13.3	0.8	0.7	47.8	100.0	52
Pemba	100.0	22	37.6	10.4	0.5	0.0	51.6	100.0	22
Zone									
Western	50.7	371	19.1	42.2	27.8	7.3	3.6	100.0	188
Northern	95.3	350	32.3	31.0	20.1	8.1	8.5	100.0	333
Central	93.5	208	7.5	46.2	42.3	3.6	0.4	100.0	194
Southern Highlands	45.6	355	22.7	34.2	27.4	8.8	7.0	100.0	162
Lake	51.8	521	18.7	26.1	32.6	16.9	5.8	100.0	269
Eastern	95.9	413	29.1	50.7	9.4	2.0	8.9	100.0	396
Southern	88.6	236	4.3	79.2	12.2	3.6	0.7	100.0	209
Education									
No education	52.4	239	12.5	37.6	21.2	16.1	12.6	100.0	125
Primary incomplete	63.0	460	17.3	53.5	15.3	7.8	6.0	100.0	290
Primary complete	72.4	1,249	18.7	41.4	27.0	7.3	5.7	100.0	904
Secondary+	87.5	578	32.0	38.7	16.3	2.9	10.1	100.0	506
Wealth quintile									
Lowest	64.8	401	11.5	50.7	22.8	10.0	5.1	100.0	260
Second	54.1	447	14.3	42.8	30.0	8.8	4.0	100.0	242
Middle	65.8	490	18.3	46.8	23.1	5.7	6.0	100.0	322
Fourth	75.4	572	18.9	38.2	24.2	10.6	8.0	100.0	432
Highest	92.4	618	33.6	38.9	15.1	2.0	10.3	100.0	571
Total 15-49	72.3	2,527	21.7	42.3	21.7	6.7	7.4	100.0	1,826

na = Not applicable

13.9 SELF-REPORTING OF SEXUALLY TRANSMITTED INFECTIONS

Information about the incidence of sexually transmitted infections (STIs) is not only useful as a marker of unprotected sexual intercourse but also as a co-factor for HIV transmission. The 2010 TDHS asked respondents who had ever had sex whether they had had a disease that they got through

sexual contact in the past 12 months. They were also asked whether, in the past 12 months, they had any genital discharge and whether they had experienced a genital sore or ulcer. These symptoms have been shown to be useful in identifying STIs in men. They are less easily interpreted in women because women are likely to experience more non-STI conditions of the reproductive tract that produce a discharge. Table 13.12 shows that 3 percent each of women and men in Tanzania reported an STI in the past 12 months. Five percent of women and 3 percent of men reported having had an abnormal genital discharge, and 3 percent each of women and men reported having had a genital sore or ulcer in the 12 months before the survey. Seven percent of women and 6 percent of men reported having an STI, an abnormal discharge, or a genital sore. These numbers, however, may be underestimates because respondents may be embarrassed or ashamed to admit having STIs.

Table 13.12 Self-reported prevalence of sexually-transmitted infections (STIs) and STI symptoms

Among women and men age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Tanzania 2010

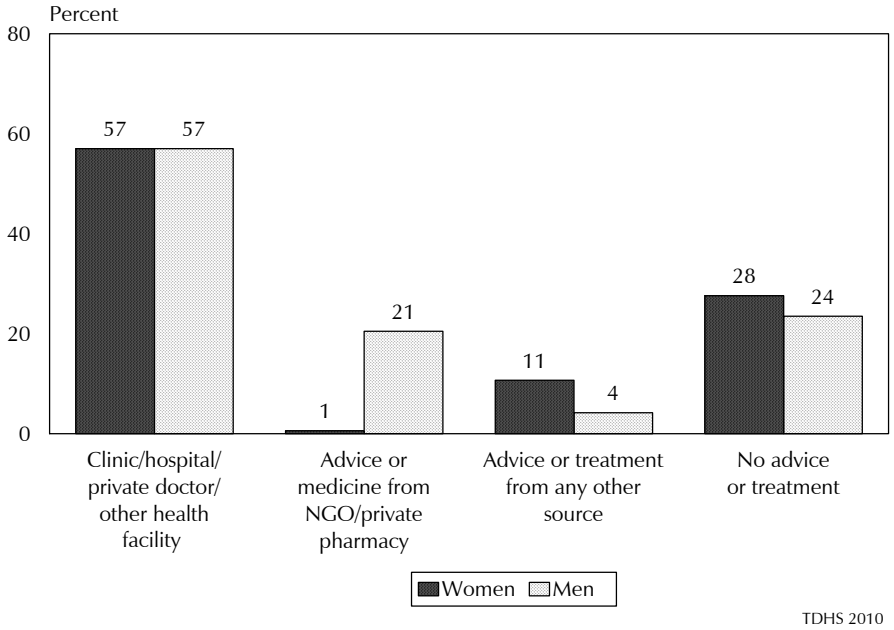
	Women					Men				
	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
Background characteristic	STI	Bad smelling/ abnormal genital discharge	Genital sore/ulcer	STI/ genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse	STI	Bad smelling/ abnormal genital discharge	Genital sore/ulcer	STI/ genital discharge/ sore or ulcer	Number of men who ever had sexual intercourse
Age										
15-24	3.2	4.2	3.4	6.9	2,720	3.3	3.2	5.0	7.4	587
15-19	2.3	5.0	4.1	7.4	987	1.5	0.8	4.6	5.0	240
20-24	3.8	3.7	3.0	6.6	1,733	4.5	4.9	5.3	9.0	347
25-29	3.6	4.7	3.6	7.8	1,646	6.1	3.5	4.4	9.6	336
30-39	3.0	5.2	2.4	7.3	2,699	2.6	3.1	2.9	5.1	648
40-49	1.8	4.2	2.3	5.5	1,671	1.1	2.7	2.5	4.1	473
Marital status										
Never married	2.7	3.1	2.4	5.9	1,137	3.0	2.4	4.8	6.9	563
Married or living together	2.8	4.7	3.0	6.9	6,412	2.7	2.9	2.8	5.5	1,317
Divorced/separated/widowed	3.8	5.5	3.3	8.0	1,188	5.7	7.1	6.6	9.8	164
Male circumcision										
Circumcised	na	na	na	na	0	2.7	2.8	2.7	5.2	1,522
Not circumcised	na	na	na	na	0	4.0	4.1	6.4	9.1	522
Residence										
Urban	3.9	4.7	3.7	8.5	2,407	1.6	0.5	2.4	3.5	549
Rural	2.6	4.5	2.7	6.3	6,329	3.5	4.1	4.1	7.2	1,494
Mainland/Zanzibar										
Mainland	3.0	4.7	3.0	7.0	8,520	3.1	3.2	3.7	6.3	2,000
Urban	4.0	4.8	3.8	8.7	2,320	1.6	0.5	2.4	3.6	530
Rural	2.6	4.6	2.7	6.4	6,200	3.6	4.1	4.2	7.3	1,470
Zanzibar	0.8	1.5	0.7	2.2	216	0.7	1.5	1.5	1.8	44
Unguja	0.8	1.7	0.9	2.5	144	0.8	1.9	1.9	2.3	34
Pemba	0.9	1.2	0.3	1.6	72	0.0	0.0	0.0	0.0	10
Zone										
Western	2.9	5.4	3.6	7.8	1,495	2.7	2.4	2.3	5.7	307
Northern	1.2	2.9	1.0	3.5	1,255	1.6	2.6	2.9	4.7	275
Central	2.8	5.2	1.8	6.5	706	2.6	1.8	0.0	2.6	179
Southern Highlands	2.1	3.5	1.6	4.3	1,168	2.7	2.9	7.8	9.2	268
Lake	5.1	7.5	6.0	11.9	1,587	4.8	5.9	6.4	10.3	415
Eastern	3.8	4.9	3.4	8.6	1,427	0.9	0.8	2.1	2.5	341
Southern	2.0	1.8	1.5	3.5	882	6.5	4.9	2.0	7.4	214
Education										
No education	2.6	4.4	3.2	6.6	1,881	4.5	3.6	2.7	7.4	222
Primary incomplete	4.0	5.5	4.4	8.4	1,203	2.6	3.9	4.0	7.2	338
Primary complete	3.0	4.7	2.7	7.0	4,641	3.4	3.6	4.3	6.9	1,128
Secondary+	1.9	3.3	1.7	5.3	1,011	1.2	0.6	2.0	2.6	356
Wealth quintile										
Lowest	2.0	5.2	2.9	6.6	1,530	4.6	4.3	4.0	7.8	341
Second	2.8	3.9	2.4	5.5	1,734	2.2	2.5	3.4	6.3	379
Middle	3.0	4.3	2.2	6.1	1,742	3.5	3.9	4.8	7.2	378
Fourth	3.1	5.5	4.2	8.6	1,811	4.0	4.0	3.8	6.2	458
Highest	3.6	4.2	2.9	7.6	1,920	1.3	1.4	2.6	4.4	488
Total 15-49	2.9	4.6	2.9	6.9	8,736	3.0	3.1	3.6	6.2	2,044

na = Not applicable

Given the low levels of incidence of STIs, variation across subgroups is limited. Nevertheless, several statistics stand out. Men who were not circumcised are nearly twice as likely to have STIs/genital discharge/sores/ulcers as those who have been circumcised (9 percent compared with 5 percent). Urban women have a higher prevalence of STIs/genital discharge/sores/ulcers than rural women (9 percent and 6 percent, respectively). For men, the situation is the reverse; 7 percent of rural men and 4 percent of urban men reported having STI or STI symptoms in the past 12 months. Female and male respondents living in Mainland are three times more likely to have an STI or STI symptoms than those living in Zanzibar. Women and men reporting the highest incidence of STIs or STI symptoms live in the Lake zone (12 percent of women and 10 percent of men).

It is important for people experiencing symptoms of STIs to be able to recognise them and seek appropriate treatment. If respondents reported an STI or an STI symptom (i.e., discharge or sore or ulcer) in the past 12 months, they were asked questions about what they did about the illness or symptom. Figure 13.1 presents information on women and men who sought care from any source. More than half (57 percent each of women and men) sought care for the STIs and/or symptoms of STIs from a clinic, hospital, or health professional. One in five men (21 percent) sought advice or medicine from a nongovernmental organization or a private pharmacy. Eleven percent of women and 4 percent of men sought advice or treatment from other sources, and 28 percent of women and 24 percent of men who had an STI or STI symptom in the past 12 months did not seek advice or treatment.

Figure 13.1 **Women and Men Seeking Advice or Treatment for STIs**



13.10 Prevalence of Medical Injections

Injection overuse in a health care setting can contribute to the transmission of bloodborne pathogens because it amplifies the effect of unsafe practices, such as reuse of injection equipment. As a consequence, the proportion of injections given with reused injection equipment is an important indicator in an initiative to prevent and control HIV/AIDS. Table 13.13 presents data on the prevalence of injections among respondents. Respondents were asked if they had received an injection in the past 12 months, and, if so, the number of injections in total and the number received from a health worker. Female respondents who had received one or more injections from a health worker were then asked if their most recent injection from a health worker was given using a syringe from a new,

unopened package. It should be noted that medical injections can be self-administered (e.g., insulin for diabetes). These injections were not included in the calculation.

Women are more likely than men to report receiving medical injections (36 and 20 percent, respectively). Gender differences are greatest among respondents age 20-39, most likely because of injections given to women during antenatal care or family planning visits. Women and men in rural areas are less likely than those in urban areas to have had injections within the past 12 months. Women in the Eastern zone are the most likely and women in the Lake zone are the least likely to have had a medical injection (43 and 30 percent, respectively). The corresponding figures for men are 25 percent in the Northern zone and 12 percent in the Western zone. Differentials by education and wealth status are smaller for women than for men.

Table 13.13 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the last 12 months, the average number of medical injections per person in the past 12 months, and among women who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package by background characteristics, Tanzania 2010

	Women					Men			
Background characteristic	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the past 12 months	Number of women	For last injection, syringe and needle taken from a new, unopened package	Number of women receiving medical injections in the last 12 months	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the past 12 months	Number of men	Number of men receiving medical injections in the last 12 months
Age									
15-24	36.6	1.3	4,081	97.8	1,496	20.0	0.6	1,058	211
15-19	32.0	1.0	2,172	97.8	695	18.3	0.5	645	118
20-24	41.9	1.6	1,909	97.8	801	22.5	0.7	414	93
25-29	41.3	1.6	1,668	97.6	688	18.9	0.7	343	65
30-39	36.2	1.4	2,712	99.2	982	20.7	0.8	651	135
40-49	28.8	1.2	1,678	97.7	483	18.2	0.9	475	86
Residence									
Urban	40.2	1.7	2,892	98.2	1,164	23.2	0.9	693	161
Rural	34.3	1.2	7,247	98.1	2,485	18.4	0.6	1,834	337
Mainland/Zanzibar									
Mainland	36.1	1.4	9,813	98.1	3,542	19.9	0.7	2,452	487
Urban	40.5	1.7	2,758	98.2	1,117	23.6	0.9	662	156
Rural	34.4	1.2	7,055	98.0	2,425	18.5	0.6	1,790	331
Zanzibar	32.6	1.0	326	99.2	106	13.2	0.5	75	10
Unguja	32.2	1.1	212	98.9	68	13.0	0.4	53	7
Pemba	33.5	0.9	115	99.8	38	13.7	0.9	22	3
Zone									
Western	35.7	1.3	1,728	96.9	617	11.5	0.4	371	43
Northern	34.3	1.2	1,530	99.1	525	25.2	0.8	350	88
Central	36.8	1.4	812	98.0	299	15.3	0.5	208	32
Southern Highlands	37.6	1.9	1,370	97.2	515	17.5	0.6	355	62
Lake	30.3	0.9	1,809	97.9	548	24.0	0.9	521	125
Eastern	42.7	1.6	1,608	98.4	687	21.5	0.7	413	89
Southern	36.7	1.3	955	99.7	351	20.8	1.0	236	49
Education									
No education	32.6	1.2	1,940	98.5	632	16.6	0.6	239	40
Primary incomplete	36.4	1.3	1,482	97.6	540	19.3	0.8	460	89
Primary complete	37.9	1.5	5,071	98.2	1,924	19.5	0.7	1,249	244
Secondary+	33.6	1.3	1,646	98.0	553	21.6	0.6	578	125
Wealth quintile									
Lowest	32.3	1.1	1,681	98.0	543	16.3	0.6	401	65
Second	33.1	1.1	1,947	98.4	645	16.0	0.5	447	71
Middle	34.7	1.3	1,997	97.8	693	18.3	0.6	490	89
Fourth	39.3	1.5	2,112	98.1	831	20.0	0.7	572	114
Highest	39.0	1.6	2,403	98.3	938	25.4	1.0	618	157
Total 15-49	36.0	1.3	10,139	98.1	3,648	19.7	0.7	2,527	497

Note: Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker.

The vast majority of recent medical injections received by women (98 percent) were given with a syringe taken from a newly opened package (commonly termed a disposable syringe). Variation by sociodemographic characteristics is minimal, indicating that use of disposable syringes is approaching universal levels.

13.11 HIV/AIDS Knowledge and Sexual Behaviour among Youth

This section addresses HIV/AIDS-related knowledge and sexual behaviour among youth age 15-24 years. The period between the initiation of sexual activity and marriage is often a time of sexual experimentation and may involve risky behaviours. Comprehensive knowledge of HIV/AIDS transmission and prevention as well as knowledge of where to obtain condoms among youth is analysed below. Issues such as age at first sex, age differences between partners, sex related to alcohol use, and voluntary counselling and testing for HIV are also covered in this section.

13.11.1 Knowledge about HIV/AIDS and Source for Condoms

Knowledge of how HIV is transmitted is crucial to enabling people to avoid HIV infection, especially for young people, who are often at greater risk because they may have shorter relationships with more partners or engage in other risky behaviours. Young respondents in the 2010 TDHS were asked the same set of questions as older respondents about whether condom use and limiting partners to one uninfected partner can help protect against HIV, and whether a healthy-looking person can have HIV (see Tables 13.2, 13.3.1, and 13.3.2).

Table 13.14 shows the level of comprehensive knowledge about AIDS among young people, measured by their responses to prompted questions. They (1) agree that people can reduce their chances of getting the AIDS virus by having sex with only one uninfected, faithful partner and by using condoms consistently; (2) know that a healthy-looking person can have the AIDS virus; and 3) know that HIV cannot be transmitted by mosquito bites or by supernatural means. Forty-eight percent of women and 43 percent of men age 15-24 know all of these facts about HIV/AIDS.

Women and men age 20-24 are more likely than those age 15-19 to have comprehensive knowledge about AIDS. Knowledge increases with educational attainment: youth with secondary schooling or higher are more likely than those with no schooling to have comprehensive knowledge of HIV/AIDS. Of interest, however, especially among male youth, is the decrease in the gap in comprehensive knowledge between those with no education and those with secondary education or more. In the 2004-05 TDHS, 14 percent of male youth with no education and 59 percent of male youth with secondary or more education had comprehensive knowledge of AIDS. In the 2007-08 THMIS, these figures are 21 percent and 59 percent, respectively. In the 2010 TDHS, 24 percent of male youth with no education and 55 percent with secondary or more education have comprehensive knowledge of HIV/AIDS.

The higher the wealth quintile, the more likely the youth are to have comprehensive knowledge of AIDS. Urban youth are more likely than rural youth to have comprehensive HIV/AIDS knowledge. Youth in Mainland are more likely to have comprehensive knowledge than those in Zanzibar (48 and 34 percent of women and 43 and 30 percent of men, respectively). There is significant zonal variation.

Table 13.14 Comprehensive knowledge about AIDS and of a source of condoms among youth

Percentage of young women and young men age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Tanzania 2010

	Women age 15-24			Men age 15-24		
Background characteristic	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of women	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of men
Age						
15-19	46.3	75.2	2,172	40.9	83.3	645
15-17	43.8	70.6	1,396	36.8	79.1	401
18-19	50.8	83.4	776	47.8	90.3	243
20-24	50.4	86.9	1,909	45.4	95.7	414
20-22	50.6	84.3	1,139	45.7	95.5	260
23-24	50.1	90.7	771	44.9	96.0	153
Marital status						
Never married	50.1	76.6	2,272	43.3	87.8	915
Ever had sex	57.6	88.7	911	49.9	97.2	444
Never had sex	45.1	68.5	1,361	37.1	79.0	471
Ever married	45.9	85.7	1,809	38.7	90.4	143
Residence						
Urban	54.7	87.7	1,273	56.9	95.4	286
Rural	45.3	77.5	2,809	37.4	85.5	773
Mainland/Zanzibar						
Mainland	48.7	82.0	3,939	43.1	89.0	1,023
Urban	55.3	89.4	1,216	57.9	95.9	272
Rural	45.8	78.7	2,723	37.8	86.5	751
Zanzibar	33.9	42.8	142	29.8	62.6	35
Unguja	37.2	48.8	90	32.9	72.3	23
Pemba	28.2	32.5	52	(23.6)	(43.1)	12
Zone						
Western	52.6	89.1	797	40.3	84.2	168
Northern	45.2	72.6	576	45.0	84.2	123
Central	55.1	91.2	291	53.1	92.8	76
Southern Highlands	48.6	74.0	531	44.3	87.5	161
Lake	38.5	75.0	791	35.0	91.0	248
Eastern	55.0	90.3	644	47.0	90.1	157
Southern	52.7	86.9	310	50.8	96.8	90
Education						
No education	34.4	71.7	563	24.3	86.2	71
Primary incomplete	37.4	72.5	696	29.1	77.1	239
Primary complete	50.4	83.0	1,702	41.7	89.3	360
Secondary+	58.6	86.6	1,121	55.3	94.2	387
Wealth quintile						
Lowest	38.9	71.7	567	33.5	83.2	145
Second	46.2	76.0	784	30.5	85.6	174
Middle	45.8	79.5	764	39.1	83.9	231
Fourth	50.1	84.6	883	46.6	88.7	252
Highest	54.8	86.3	1,083	55.5	96.0	256
Total 15-24	48.2	80.7	4,081	42.7	88.1	1,058

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Comprehensive knowledge means knowing that consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention. The components of comprehensive knowledge are presented in Tables 13.2, 13.3.1, and 13.3.2.
[2] The following responses are not considered sources for condoms: friends, family members, and home.

Because of the important role that condoms play in combating the transmission of HIV, respondents were asked if they knew where condoms could be obtained. Only responses about 'formal' sources were counted; friends and family and other similar sources were not included. As shown in Table 13.14, young men are more likely than young women to know where to obtain a condom (88 and 81 percent, respectively). Women and men in Mainland are more likely than those in Zanzibar to know a source of condoms, and those in urban areas are more likely than those in rural areas to know of a condom source. Among men, knowledge of a condom source is highest in the Southern zone (97 percent), and among women, knowledge is highest in the Central zone (91 percent). The largest gender gap is in the Lake zone, with 75 percent of women and 91 percent of men knowing where to obtain a condom. Consistent with patterns for other indicators, respondents who are better educated and wealthier are more likely than other respondents to know a source of condoms.

13.11.2 Age at First Sex

The discussion below deals with age at first sex, premarital and other high-risk sex, and condom use among young women and men. Table 13.15 shows the proportions of women and men age 15-24 who had sex before age 15 and before age 18. Thirteen percent of young women and 7 percent of young men had had sex by age 15. Women age 15-24 who have been married are much more likely than never married women to have had sexual intercourse before age 15 (20 and 7 percent, respectively) or before age 18 (71 and 37 percent, respectively). In contrast, marital status has little impact on sexual debut among men. Among women and men age 18-24, there are differences in age at first intercourse by their knowledge of condom source. For example, 45 percent of men who know the source for condoms have had sex by age 18 compared with 27 percent who do not know the source for condoms.

Table 13.15 Age at first sexual intercourse among youth

Percentage of young women and of young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and of young men age 18-24 who had sexual intercourse before age 18, by background characteristics, Tanzania 2010

	Women age 15-24		Women age 18-24		Men age 15-24		Men age 18-24	
Background characteristic	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)
Age								
15-19	11.3	2,172	na	na	7.8	645	na	na
15-17	11.4	1,396	na	na	8.2	401	na	na
18-19	11.1	776	58.0	776	7.2	243	49.8	243
20-24	14.6	1,909	57.5	1,909	5.5	414	40.4	414
20-22	13.8	1,139	56.4	1,139	5.5	260	39.6	260
23-24	15.7	771	59.1	771	5.5	153	41.7	153
Marital status								
Never married	7.4	2,272	36.8	1,023	6.6	915	43.5	514
Ever married	19.7	1,809	70.5	1,662	8.8	143	45.3	143
Knows condom source[1]								
Yes	13.3	3,292	59.2	2,306	7.0	933	45.0	615
No	11.1	790	47.9	379	6.0	125	27.4	42
Residence								
Urban	10.2	1,273	49.0	858	6.9	286	36.9	194
Rural	14.1	2,809	61.7	1,828	6.9	773	46.8	463
Mainland/Zanzibar								
Mainland	13.2	3,939	58.9	2,593	7.1	1,023	44.9	634
Urban	10.6	1,216	50.3	820	7.0	272	37.8	185
Rural	14.4	2,723	62.9	1,773	7.1	751	47.9	449
Zanzibar	2.4	142	20.7	92	2.7	35	13.5	23
Unguja	2.6	90	21.3	61	3.4	23	18.4	15
Pemba	2.0	52	19.6	31	1.2	12	3.5	7
Zone								
Western	13.4	797	63.9	543	4.3	168	41.2	124
Northern	8.3	576	43.5	357	8.0	123	41.9	67
Central	10.5	291	63.3	177	14.1	76	(56.6)	46
Southern Highlands	8.9	531	45.2	353	4.0	161	36.3	99
Lake	17.1	791	65.8	507	6.6	248	42.6	147
Eastern	13.3	644	57.8	445	6.4	157	49.1	97
Southern	21.8	310	77.9	211	12.8	90	62.3	55
Education								
No education	26.1	563	78.5	453	14.6	71	57.2	56
Primary incomplete	17.8	696	72.5	368	11.8	239	54.7	111
Primary complete	11.9	1,702	59.3	1,230	4.8	360	45.9	237
Secondary+	4.6	1,121	30.9	635	4.5	387	34.2	253
Wealth quintile								
Lowest	19.2	567	68.3	389	11.0	145	48.6	87
Second	15.3	784	66.2	524	8.4	174	55.8	111
Middle	13.8	764	60.0	478	4.8	231	39.1	142
Fourth	13.1	883	58.2	577	6.0	252	45.9	142
Highest	6.8	1,083	43.6	717	6.4	256	36.2	175
Total	12.8	4,081	57.6	2,685	6.9	1,058	43.9	657

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] The following responses are not considered a source for condoms: friends, family members, and home.

Women in rural areas are more likely than those in urban areas to have had sex by age 15 and by age 18. Men in urban areas are as likely as men in rural areas to have sex by age 15. However, men in rural areas are more likely than urban men to have sex by age 18 (47 and 37 percent, respectively). Young women and men in Mainland initiate sexual intercourse earlier than those in Zanzibar. For instance, while 59 percent of women age 15-24 in Mainland have had sexual intercourse by age 18, the corresponding proportion in Zanzibar is 21 percent. Education has a negative correlation with sexual debut. Young women with no schooling are considerably more likely than those who go to school to have had sex by age 15 (26 compared with 18 percent or less). Differences by educational attainment are smaller among men. The higher the wealth quintile, the less likely a young woman is to have had sex by age 15. This pattern does not hold among men.

13.11.3 Recent Sexual Activity among Young Women and Men

Young adults who use condoms at first sex are more likely to sustain condom use later in life. Condom use at first sex serves as an indicator of reduced risk of exposure at the beginning of sexual activity.

The period between age at first sex and age at marriage is often a time of sexual experimentation. Unfortunately, in the era of HIV/AIDS, it can also be a risky time. Consistent condom use is advocated by HIV control programs to reduce the risk of sexual transmission of HIV among sexually active young adults.

Table 13.16 shows that 60 percent of never-married young women and 52 percent of never-married young men say that they have never had sex. For women and men, abstinence rates are considerably higher in Zanzibar than in the Mainland (93 percent compared with 58 percent for women and 81 percent compared with 50 percent for men). The abstinence rate among young never-married respondents in the 2010 TDHS is similar to that recorded in the 2004-05 TDHS and the 2007-08 THMIS. For instance, for women the rate is 60 percent in the 2010 TDHS, 62 percent in the 2007-08 THMIS, and 62 percent in the 2004-05 TDHS.

The percentage of unmarried youth who have never had sex declines rapidly with age. Among women, it declines from 68 percent for age 15-19 to 34 percent for age 20-24.

Table 13.16 also shows that 34 percent of never-married women and 37 percent of never-married men had sex in the past 12 months. About half of these women and men (49 and 54 percent, respectively) reported using a condom during their last sexual intercourse. For men, the rate of condom use is higher than that reported in the 2004-05 TDHS and 2007-08 THMIS (46 and 49 percent, respectively). For women, condom use at last sex is markedly above that reported in the 2004-05 TDHS (37 percent) and is identical to that reported in the 2007-08 THMIS (49 percent). Young women in urban areas are slightly more likely than those in rural areas to have had sex in the last year (36 compared with 32 percent) and to have used a condom (53 and 47 percent, respectively). Among young men, there is an urban-rural difference in the incidence of sex (33 and 38 percent, respectively), but men in urban areas are much more likely to have used condoms the last time they had sex than rural men (68 and 49 percent, respectively).

Women and men who know a source of condoms are twice as likely use condoms as those who do not know a source of condoms. Use of condoms among female youth in Zanzibar (31 percent) is lower than in the Mainland (49 percent). For women and men, there are no clear differences by educational attainment. For men, as wealth increases, so does the likelihood of condom use.

Table 13.16 Premarital sexual intercourse and condom use during premarital sexual intercourse among youth

Among never-married women and men age 15-24, the percentage who have never had sexual intercourse, the percentage who had sexual intercourse in the past 12 months, and among those who had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Tanzania 2010

	Never-married women age 15-24					Never-married men age 15-24				
				Among women who had sexual intercourse in the past 12 months					Among men who had sexual intercourse in the past 12 months	
Background characteristic	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married women	Percentage who used condom at last sexual intercourse	Number of women	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married men	Percentage who used condom at last sexual intercourse	Number of men
Age										
15-19	67.9	26.9	1,744	50.2	469	65.7	25.1	616	46.1	154
15-17	76.0	20.4	1,249	48.7	255	75.8	17.7	401	38.0	71
18-19	47.6	43.3	495	52.1	214	46.7	38.9	215	52.9	84
20-24	33.5	55.2	528	47.6	291	22.3	60.8	300	60.4	182
20-22	36.0	53.5	393	43.8	210	25.6	57.6	211	54.6	122
23-24	26.0	60.1	135	57.5	81	14.3	68.4	88	72.0	60
Knows condom source[1]										
Yes	53.6	38.9	1,741	51.7	677	46.3	40.9	804	54.5	328
No	80.7	15.6	532	29.0	83	88.8	7.2	112	*	8
Residence										
Urban	54.3	36.3	855	52.7	310	53.0	32.9	261	68.2	86
Rural	63.3	31.7	1,418	46.8	450	50.9	38.3	654	48.8	250
Mainland/Zanzibar										
Mainland	58.3	34.9	2,165	49.3	755	50.4	37.7	882	54.1	333
Urban	52.2	38.0	809	52.9	307	51.9	34.1	250	68.7	85
Rural	61.9	33.0	1,356	46.9	448	49.7	39.2	633	49.1	248
Zanzibar	92.9	4.9	108	(31.3)	5	81.3	11.1	33	*	4
Unguja	89.3	7.4	68	(32.7)	5	72.4	16.7	22	*	4
Pemba	99.2	0.6	40	*	0	*	*	11	*	0
Zone										
Western	65.9	28.3	345	42.0	98	51.1	40.6	124	(42.0)	50
Northern	68.1	25.3	383	56.6	97	63.0	26.7	114	(52.4)	31
Central	65.9	31.0	159	(59.6)	49	41.7	48.1	68	(52.7)	33
Southern Highlands	66.7	26.6	298	40.8	79	60.1	26.5	144	(61.3)	38
Lake	52.3	42.5	420	49.5	179	48.9	38.8	212	47.8	82
Eastern	44.2	44.8	398	52.2	178	48.4	37.7	142	(57.6)	54
Southern	45.7	46.4	161	44.4	75	27.5	58.3	77	(71.2)	45
Education										
No education	45.3	41.8	122	(28.3)	51	(36.5)	(43.7)	46	43.1	20
Primary incomplete	69.7	26.2	395	25.2	104	59.2	30.0	206	36.1	62
Primary complete	53.4	39.8	773	44.3	308	39.9	46.9	289	50.3	135
Secondary+	62.9	30.3	982	66.2	298	58.0	31.8	374	68.8	119
Wealth quintile										
Lowest	65.1	31.7	230	42.3	73	48.3	42.4	123	35.8	52
Second	61.1	33.9	346	32.5	117	51.4	38.0	131	41.6	50
Middle	63.6	30.5	392	40.2	120	55.0	35.7	200	51.9	71
Fourth	56.4	37.2	521	51.3	194	49.5	37.1	223	53.9	83
Highest	58.3	32.8	783	61.4	256	52.2	33.7	238	74.7	80
Total	59.9	33.5	2,272	49.2	760	51.5	36.8	915	53.8	336

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has suppressed.
[1] The following responses are not considered a source for condoms: friends, family members, and home.

13.11.4 Multiple Partners among Young Adults

Table 13.17 shows that 3 percent of women age 15-24 and 12 percent of men age 15-24 had sexual intercourse with more than one partner in the past 12 months.

Among women, there are small differences in the prevalence of multiple partners by background characteristics. In general, older women, ever married women, and those who know a source for condoms are the most likely to have had more than one sexual partner in the past 12 months. Women who live in rural areas and in Mainland are also more likely than other women to have had multiple sexual partners in the recent past. In Mainland, the proportion of young women who had more than one partner ranges from 2 percent in the Northern zone to 9 percent in the Southern zone.

Table 13.17 Multiple sexual partners in the past 12 months among youth

Percentage of all young women age 15-24 and men age 15-24 who had more than one sexual partner in the past 12 months, by background characteristics, Tanzania 2010

Background characteristic	Among women age 15-24		Among men age 15-24	
	Percentage who had 2+ partners in the past 12 months	Number of women	Percentage who had 2+ partners in the past 12 months	Number of men
Age				
15-19	1.9	2,172	6.8	645
15-17	0.9	1,396	4.1	401
18-19	3.9	776	11.3	243
20-24	4.7	1,909	20.9	414
20-22	4.8	1,139	17.8	260
23-24	4.6	771	26.2	153
Marital status				
Never married	2.1	2,272	9.1	915
Ever married	4.6	1,809	33.0	143
Knows condom source[1]				
Yes	3.9	3,292	13.8	933
No	0.5	790	1.5	125
Residence				
Urban	2.5	1,273	7.2	286
Rural	3.6	2,809	14.2	773
Mainland/Zanzibar				
Mainland	3.3	3,939	12.7	1,023
Urban	2.6	1,216	7.5	272
Rural	3.7	2,723	14.6	751
Zanzibar	0.4	142	1.4	35
Unguja	0.6	90	2.1	23
Pemba	0.0	52	0.0	12
Zone				
Western	2.7	797	9.9	168
Northern	1.9	576	5.7	123
Central	2.3	291	11.5	76
Southern Highlands	2.9	531	11.7	161
Lake	3.8	791	16.0	248
Eastern	3.0	644	11.1	157
Southern	8.8	310	24.1	90
Education				
No education	3.0	563	26.0	71
Primary incomplete	5.0	696	9.2	239
Primary complete	3.5	1,702	17.4	360
Secondary+	1.9	1,121	7.1	387
Wealth quintile				
Lowest	4.8	567	16.8	145
Second	3.1	784	17.2	174
Middle	2.8	764	12.9	231
Fourth	4.1	883	10.2	252
Highest	2.1	1,083	8.2	256
Total 15-24	3.2	4,081	12.3	1,058

[1] The following responses are not considered a source for condoms: friends, family members, and home.

Men show the same patterns as women; however, the variations across subgroups are wider. Men age 20-24 are three times as likely as men age 15-19 to have more than one sexual partner (21 percent and 7 percent, respectively). Rural men are twice as likely as urban men to have multiple sexual partners. The comparison between men in Mainland and in Zanzibar is 13 percent and 1 percent, respectively. In Mainland, the proportion of young men who had more than one partner ranges from 6 percent in Northern zone to 24 percent in Southern zone.

The relationship between education and sexual practice is not uniform. However, 26 percent of men with no education have multiple partners compared with 7 percent of men with secondary or higher education. Wealth is negatively correlated with having multiple sexual partners; 17 percent for men in the lowest two quintiles compared with 13 percent or lower for men in the three higher quintiles.

13.12 VOLUNTARY HIV TESTING AMONG YOUNG ADULTS

Knowledge of one's HIV serostatus can motivate a person to protect himself/herself, or to practice safer sexual behaviour to avoid transmitting the virus to others. It is particularly important to measure the coverage of voluntary HIV testing among youths, not only because of their vulnerability, but also because they may experience obstacles in accessing voluntary counselling and testing (VCT). Table 13.18 shows that 39 percent of young women age 15-24 and 25 percent of men age 15-24 who had sexual intercourse in the past 12 months were tested for HIV in the past 12 months and received the results of the test.

Women and men age 20-24 were more likely than women and men age 15-19 to have been tested. For instance, 40 percent of women age 20-24 have been tested for HIV compared with 35 percent of women age 15-24. The difference in HIV testing by age is wider for men than for women; 15 percent for men age 15-19 and 32 percent for men age 20-24. The percentage of young adults who had sex in the 12 months preceding the survey, were tested for HIV, and know their results has increased dramatically from the 2004-05 TDHS (6 percent of women and 7 percent of men) and the 2007-08 THMIS (24 percent of women and 20 percent of men).

Differences in HIV testing by marital status are small. Urban youth are more likely than rural youth to have been tested for HIV. HIV testing is more common in Zanzibar. For women and men, there is a strong association between counselling and testing services and level of education or wealth status. Young women and men with no education and those in the lowest wealth quintile are the least likely to have been tested for HIV compared with other youth.

Table 13.18 Recent HIV tests among youth

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, the percentage who have had an HIV test in the past 12 months and received the results of the test, by background characteristics, Tanzania 2010

Background characteristic	Among women age 15-24 who have had sexual intercourse in the past 12 months:		Among men age 15-24 who have had sexual intercourse in the past 12 months:	
	Percentage who have been tested for HIV and received results in the past 12 months	Number of women	Percentage who have been tested for HIV and received results in the past 12 months	Number of men
Age				
15-19	35.4	879	15.1	183
15-17	28.1	400	13.0	71
18-19	41.5	479	16.4	112
20-24	40.1	1,629	31.8	292
20-22	40.5	935	26.2	167
23-24	39.6	694	39.4	125
Marital status				
Never married	36.8	760	24.0	336
Ever married	39.2	1,748	28.8	138
Knows condom source[1]				
Yes	40.8	2,184	26.1	453
No	22.6	324	*	22
Residence				
Urban	49.5	718	34.0	110
Rural	34.0	1,791	22.8	365
Mainland/Zanzibar				
Mainland	38.3	2,470	25.3	469
Urban	49.4	705	33.8	108
Rural	33.9	1,765	22.8	362
Zanzibar	48.5	38	28.4	5
Unguja	50.4	26	(26.7)	5
Pemba	44.5	12	*	1
Zone				
Western	33.3	541	21.8	91
Northern	47.2	277	(35.7)	39
Central	35.2	181	(21.2)	40
Southern Highlands	35.2	300	(23.5)	55
Lake	36.8	545	22.5	118
Eastern	42.7	412	28.0	67
Southern	42.1	214	31.2	58
Education				
No education	28.5	479	10.3	44
Primary incomplete	32.0	393	12.3	95
Primary complete	40.3	1,202	26.0	207
Secondary+	50.2	434	39.1	129
Wealth quintile				
Lowest	27.8	396	16.1	74
Second	30.1	542	23.4	92
Middle	34.4	478	20.5	100
Fourth	47.3	546	26.6	111
Highest	49.2	547	37.9	98
Total 15-24	38.5	2,508	25.4	475

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] The following responses are not considered a source for condoms: friends, family members, and home.

WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

14

In the Woman's Questionnaire of the 2010 Tanzania Demographic and Health Survey (TDHS), data were collected on the general background characteristics of women, such as age, education, and employment status. Additional data were collected on characteristics specific to women's empowerment through their work. These included receipt of cash earnings, magnitude of cash earnings relative to those of a husband or partner,[1] and control over cash earnings.

In addition, female and male survey respondents expressed their attitudes towards specific household decisions, such as who makes decisions about major household purchases, as well as their attitudes towards certain actions, such as whether a man is justified in beating his wife if she refuses to have sex with him. Married women and men who received earnings in cash were asked about control over their cash income.

Finally, in this report, three separate indices of empowerment were developed based on (1) the number of decisions in which the woman participates, (2) the number of reasons the woman finds wife beating to be justifiable, and (3) the number of reasons the woman finds refusing sexual intercourse with her husband to be acceptable. The relative ranking of women on these indices is found to predict demographic and health outcomes, including contraceptive use, ideal family size, unmet need for family planning, and access to reproductive health care.

14.1 EMPLOYMENT AND FORM OF EARNINGS

Employment is one aspect of social phenomena where gender roles and relationships emerge. Employment can be a source of empowerment for both women and men, especially if they are in control of the income they generate. In the 2010 TDHS, respondents were asked whether they were employed at the time of the survey and, if not, whether they were employed in the 12 months preceding the survey.[2]

Table 14.1 depicts the distribution of employment and cash earnings of currently married women and men who were employed for 12 months preceding the survey. The table reveals that nine in ten currently married women age 15-49 were employed in the 12 months preceding the survey and so were almost all married men. Women who are age 15-29 are slightly less likely than older women to be employed. This may be because they attend school or training classes rather than work in the labour market. The employment status of men does not vary by age.

[1] For the remainder of this chapter, the term *husband* refers to both the current/most recent husband (for currently/formerly legally married women) and to the current/most recent partner (for women currently living together or who formerly lived together with their partner in an informal union).

[2] *Currently employed* is defined as having done work in the past seven days. The category includes persons who did not work in the past seven days but who are regularly employed and are absent from work for leave, illness, vacation, or any other such reason.

Table 14.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and the percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Tanzania 2010

Age	Currently married respondents		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings						
	Percentage employed	Number	Cash only	Cash and in-kind	In-kind only	Not paid	Missing	Total	Number of employed respondents
				WOMEN					
15-19	83.9	399	17.3	8.1	1.5	73.1	0.0	100.0	335
20-24	85.8	1,210	27.8	13.6	1.8	56.6	0.3	100.0	1,038
25-29	85.8	1,338	32.7	12.3	1.4	53.5	0.0	100.0	1,148
30-34	89.7	1,137	34.2	15.5	1.8	48.2	0.3	100.0	1,021
35-39	91.5	1,036	28.8	16.1	3.1	51.5	0.4	100.0	948
40-44	90.6	741	31.6	18.2	1.1	49.1	0.0	100.0	671
45-49	94.7	550	28.3	17.0	1.9	52.8	0.0	100.0	520
Total 15-49	88.6	6,412	30.0	14.6	1.9	53.3	0.2	100.0	5,681
				MEN					
15-19	*	*	*	*	*	*	*	*	26
20-24	99.4	91	54.2	24.2	0.0	21.6	0.0	100.0	90
25-29	100.0	241	52.7	14.7	0.8	31.8	0.0	100.0	241
30-34	100.0	280	55.8	16.7	0.2	27.4	0.0	100.0	280
35-39	98.9	267	57.9	12.0	1.0	29.1	0.0	100.0	264
40-44	99.1	236	57.1	17.5	0.0	25.4	0.0	100.0	233
45-49	100.0	176	50.7	16.8	0.0	32.5	0.0	100.0	176
Total 15-49	99.5	1,317	55.6	15.9	0.4	28.1	0.0	100.0	1,311

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

When the types of earnings are taken into account, signs of disempowerment among women are evident. Among employed, currently married women, only 30 percent are paid in cash for their work compared with 56 percent of men. Moreover, 53 percent of women are not paid for their work compared with 28 percent of men.

14.2 CONTROL OVER EARNINGS

14.2.1 Control over Wife's Earnings

Besides access to employment, control over cash earnings is another dimension of gender empowerment. Currently married, employed women who earn cash for their work were asked the relative magnitude of their earnings compared with their husband's earnings. In addition, they were asked who the main decision maker is with regard to the use of their earnings. This information may provide some insight into women's empowerment within the family and the extent of their control over decision-making in the household. It is expected that women who are employed and who receive cash earnings are more likely to have control of these earnings.

Table 14.2.1 shows the percent distribution of currently married women who received cash earnings in the past 12 months, according to the person who controls their earnings and their perception of the magnitude of their earnings relative to those of their husband's. Only 36 percent of women say that they themselves mainly decide how their cash earnings are used. Forty-seven percent indicate that the decision is made jointly with their husbands, and 17 percent say that the decision is made mainly by their husbands.

Table 14.2.1 Control over women's cash earnings and relative magnitude of women's earnings: Women

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey, by person who decides how wife's cash earnings are used and by whether the wife earns more or less than her husband, according to background characteristics, Tanzania 2010

Background characteristic	Person who decides how the wife's cash earnings are used:					Women's cash earnings compared with husband's cash earnings:						
	Mainly wife	Wife and husband jointly	Mainly husband	Missing	Total	More	Less	About the same	Husband/ partner has no earnings	Don't know/ Missing	Total	Number of women
Age												
15-19	13.8	52.3	33.9	0.0	100.0	12.5	77.5	8.7	1.3	0.0	100.0	85
20-24	31.9	49.8	18.0	0.3	100.0	7.2	79.3	11.0	0.9	1.5	100.0	430
25-29	32.5	50.7	16.8	0.1	100.0	5.8	75.7	14.9	1.8	1.8	100.0	518
30-34	38.6	46.4	14.5	0.6	100.0	11.2	71.3	13.8	1.8	1.9	100.0	507
35-39	36.4	46.7	17.0	0.0	100.0	10.4	71.6	13.9	2.4	1.7	100.0	426
40-44	42.6	40.4	16.5	0.4	100.0	12.2	70.3	11.1	4.1	2.3	100.0	334
45-49	42.4	45.8	11.8	0.0	100.0	15.2	63.5	16.3	3.1	1.9	100.0	236
Number of living children												
0	24.1	63.3	12.7	0.0	100.0	13.2	74.4	9.5	1.0	1.9	100.0	171
1-2	35.5	48.4	15.7	0.4	100.0	8.9	75.3	12.7	1.2	2.0	100.0	1,001
3-4	38.4	43.8	17.7	0.0	100.0	9.7	73.9	12.5	2.3	1.6	100.0	772
5+	36.7	45.1	18.0	0.2	100.0	10.7	67.3	16.3	4.1	1.6	100.0	591
Residence												
Urban	47.6	44.1	7.9	0.3	100.0	10.5	79.8	6.6	0.9	2.3	100.0	1,014
Rural	28.1	49.3	22.5	0.2	100.0	9.4	68.4	17.7	3.0	1.4	100.0	1,521
Mainland/Zanzibar												
Mainland	34.3	48.4	17.0	0.2	100.0	9.7	72.9	13.6	2.2	1.7	100.0	2,448
Urban	46.1	45.5	8.1	0.3	100.0	10.5	80.0	6.6	0.9	2.0	100.0	973
Rural	26.5	50.3	22.9	0.2	100.0	9.1	68.2	18.2	3.1	1.4	100.0	1,475
Zanzibar	80.6	13.8	5.6	0.0	100.0	14.8	75.6	4.8	0.2	4.5	100.0	87
Unguja	80.2	14.1	5.8	0.0	100.0	13.5	78.4	4.3	0.1	3.7	100.0	73
Pemba	*	*	*	0.0	100.0	*	*	*	*	*	*	13
Zone												
Western	34.0	54.3	11.3	0.4	100.0	8.8	72.6	17.3	0.3	1.0	100.0	395
Northern	37.8	50.4	11.2	0.5	100.0	8.6	73.5	15.4	0.9	1.5	100.0	594
Central	27.2	54.0	16.5	2.2	100.0	6.4	79.3	12.1	0.0	2.2	100.0	65
Southern Highlands	21.5	51.1	27.4	0.0	100.0	10.6	73.1	12.2	1.3	2.9	100.0	333
Lake	37.1	55.1	7.8	0.0	100.0	9.9	83.4	4.6	0.4	1.7	100.0	202
Eastern	47.0	43.9	9.1	0.0	100.0	12.7	77.0	7.2	1.6	1.5	100.0	547
Southern	19.0	36.8	44.2	0.0	100.0	6.9	56.2	24.1	11.1	1.7	100.0	312
Region												
Dodoma	*	*	*	*	100.0	*	*	*	*	*	100.0	23
Arusha	46.8	48.1	5.2	0.0	100.0	7.0	82.2	6.6	2.9	1.3	100.0	102
Kilimanjaro	44.8	48.2	7.0	0.0	100.0	12.8	63.4	22.5	0.6	0.8	100.0	210
Tanga	29.4	54.1	15.3	1.1	100.0	6.0	78.5	12.6	0.5	2.3	100.0	249
Morogoro	21.6	56.4	22.0	0.0	100.0	3.0	76.4	17.2	2.3	1.2	100.0	124
Pwani	28.7	56.9	14.4	0.0	100.0	12.1	79.4	5.0	2.6	0.9	100.0	74
Dar es Salaam	60.0	36.6	3.4	0.0	100.0	16.3	76.7	4.1	1.1	1.7	100.0	349
Lindi	10.8	40.4	48.8	0.0	100.0	8.4	45.4	40.2	0.0	6.0	100.0	53
Mtwara	23.9	23.9	52.2	0.0	100.0	6.3	62.3	28.6	2.0	0.9	100.0	131
Ruvuma	17.4	48.6	34.1	0.0	100.0	7.0	54.4	13.0	24.9	0.7	100.0	128
Iringa	29.9	52.3	17.9	0.0	100.0	13.4	69.0	15.8	1.7	0.0	100.0	90
Mbeya	22.0	46.4	31.6	0.0	100.0	10.0	73.6	9.2	1.7	5.5	100.0	161
Singida	(23.0)	(55.5)	(18.1)	(3.4)	100.0	(4.1)	(77.3)	(15.2)	(0.0)	(3.4)	(100.0)	43
Tabora	28.4	52.4	19.2	0.0	100.0	4.7	84.5	10.7	0.0	0.0	100.0	87
Rukwa	11.7	58.9	29.5	0.0	100.0	8.6	76.5	14.0	0.0	1.0	100.0	82
Kigoma	24.2	61.5	14.4	0.0	100.0	8.3	85.1	6.6	0.0	0.0	100.0	90
Shinyanga	40.3	52.0	7.0	0.7	100.0	10.6	62.7	24.2	0.5	1.9	100.0	219
Kagera	(33.2)	(59.0)	(7.8)	(0.0)	100.0	(12.6)	(79.8)	(5.6)	(0.0)	(1.9)	100.0	79
Mwanza	(34.0)	(58.8)	(7.3)	(0.0)	100.0	(9.6)	(86.2)	(2.2)	(0.0)	(2.0)	100.0	93
Mara	(56.7)	(33.7)	(9.6)	(0.0)	100.0	(3.9)	(84.2)	(9.0)	(2.8)	(0.0)	(100.0)	30
Manyara	29.2	44.2	25.6	1.1	100.0	(6.5)	(73.9)	(18.6)	(0.0)	(1.1)	(100.0)	34
Unguja North	70.7	20.6	8.8	0.0	100.0	*	*	*	*	*	*	15
Unguja South	83.3	7.9	8.8	0.0	100.0	*	*	*	*	*	*	14
Town West	82.4	13.8	3.8	0.0	100.0	(11.6)	(78.1)	(4.9)	(0.0)	(5.3)	(100.0)	44
Pemba North	(88.5)	(4.6)	(7.0)	(0.0)	100.0	(13.1)	(68.1)	(4.6)	(0.0)	(14.3)	*	5
Pemba South	79.9	16.8	3.3	0.0	100.0	*	*	*	*	*	*	8
Education												
No education	30.8	41.5	27.4	0.4	100.0	8.4	70.0	17.2	1.4	3.0	100.0	411
Primary incomplete	34.3	44.2	21.5	0.0	100.0	8.2	70.6	14.4	4.1	2.7	100.0	284
Primary complete	35.4	49.1	15.3	0.3	100.0	9.5	74.2	12.9	2.2	1.3	100.0	1,484
Secondary+	45.3	48.7	5.9	0.1	100.0	14.1	73.2	9.4	1.5	1.7	100.0	355
Wealth quintile												
Lowest	28.3	45.3	25.9	0.5	100.0	6.9	65.3	20.9	4.1	2.8	100.0	285
Second	23.8	46.3	29.9	0.0	100.0	7.2	67.5	21.4	2.5	1.4	100.0	365
Middle	27.8	44.2	27.7	0.4	100.0	10.2	69.0	16.3	3.0	1.5	100.0	404
Fourth	35.7	51.0	13.3	0.0	100.0	11.5	71.3	13.0	2.4	1.8	100.0	600
Highest	47.2	47.1	5.3	0.4	100.0	10.5	80.6	6.3	0.9	1.7	100.0	880
Total	35.9	47.2	16.6	0.2	100.0	9.8	73.0	13.3	2.2	1.8	100.0	2,535

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

Table 14.2.1 also shows that 10 percent of women earn more than their husbands, 73 percent earn less than their husbands, and 13 percent earn about the same amount as their husbands. About 2 percent of women say that their husbands have no cash earnings. The likelihood that a currently married woman is the main decision maker regarding the use of her cash earnings increases with age, suggesting that older women are more empowered than younger women. The table also reveals that women with more than two children, women with secondary or higher education, and women in the highest wealth quintile are more likely than other women to decide for themselves how their cash earnings are used.

In terms of locality, women in urban areas (48 percent) are more likely than women in rural areas (28 percent) to mainly decide themselves how their cash earnings are used. Women living in Zanzibar (81 percent) are far more likely than women who live in Mainland Tanzania (34 percent) to mainly decide for themselves how their earnings are used. In the Mainland, only 11 percent of women in Lindi and 12 percent of women in Rukwa mainly decided for themselves how to use their cash earnings compared with 60 percent of women in Dar es Salaam. Husbands play the dominant role in making decisions regarding their wives' earnings in the Southern zone (44 percent), in Mtwara (52 percent), and in Lindi (49 percent).

14.2.2 Control over Husband's Earnings

Currently married men age 15-49 who receive cash earnings were asked who decides how the husband's cash earnings are spent. Table 14.2.2 shows that half of currently married men age 15-49 who receive cash earnings report that they decide jointly with their wives how their earnings will be used, while 45 percent say they mainly make the decisions themselves. Only a small proportion of men (3 percent) say that decisions on how their earnings are used are mainly made by their wives.

There are a few distinct patterns on how a husband's earnings are used. Married men in the Western zone (71 percent) are most likely to make joint decisions with their wives on how to use their cash earnings. Conversely, married men in the Lake zone (65 percent) are most likely to make such decisions autonomously. Joint decisions increase with the husband's education, while solitary decisions decrease. For example, married men with at least some secondary education are more likely than those with no education to make joint decisions on how to use their cash earnings (58 percent and 35 percent, respectively).

Table 14.2.2 Control over men's cash earnings

Percent distribution of currently married men age 15-49 who receive cash earnings, by person who decides how husband's cash earnings are used, according to background characteristics, Tanzania 2010

Background characteristic	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number
Age						
15-19	*	*	*	*	*	23
20-24	1.4	42.1	44.3	12.2	100.0	71
25-29	3.3	49.5	46.7	0.6	100.0	163
30-34	1.8	55.8	41.0	1.3	100.0	203
35-39	2.1	52.0	45.9	0.0	100.0	185
40-44	6.6	51.6	41.8	0.0	100.0	174
45-49	4.5	44.9	49.1	1.5	100.0	119
Number of living children						
0	4.9	41.6	44.0	9.5	100.0	77
1-2	2.9	48.2	46.2	2.7	100.0	333
3-4	1.9	56.5	41.5	0.0	100.0	269
5+	4.7	47.6	47.4	0.3	100.0	258
Residence						
Urban	4.6	49.7	45.8	0.0	100.0	287
Rural	2.7	50.0	44.7	2.6	100.0	650
Mainland/Zanzibar						
Mainland	3.2	51.1	43.8	1.9	100.0	909
Urban	4.6	51.3	44.1	0.0	100.0	275
Rural	2.7	50.9	43.7	2.7	100.0	634
Zanzibar	(4.4)	(11.3)	(84.3)	(0.0)	100.0	28
Unguja	*	*	*	*	*	21
Pemba	*	*	*	*	*	7
Zone						
Western	2.5	71.1	19.1	7.3	100.0	187
Northern	0.9	58.1	40.9	0.0	100.0	145
Central	*	*	*	*	*	21
Southern Highlands	4.4	44.9	50.7	0.0	100.0	86
Lake	3.6	30.3	65.3	0.9	100.0	202
Eastern	6.3	46.2	46.7	0.8	100.0	186
Southern	0.9	53.0	46.1	0.0	100.0	81
Region						
Dodoma	*	*	*	*	*	16
Arusha	(0.0)	(59.4)	(40.6)	(0.0)	100.0	43
Kilimanjaro	*	*	*	*	100.0	33
Tanga	(2.8)	(60.6)	(36.6)	(0.0)	100.0	47
Morogoro	7.0	44.8	48.2	0.0	100.0	67
Pwani	(0.0)	(56.6)	(43.4)	(0.0)	100.0	29
Dar es Salaam	7.8	43.9	46.6	1.7	100.0	90
Lindi	*	*	*	*	*	9
Mtwara	*	*	*	*	*	15
Ruvuma	1.2	61.9	36.9	0.0	100.0	57
Iringa	*	*	*	*	100.0	33
Mbeya	*	*	*	*	100.0	32
Singida	*	*	*	*	*	6
Tabora	0.5	72.0	15.7	11.8	100.0	58
Rukwa	*	*	*	*	*	21
Kigoma	*	*	*	*	*	29
Shinyanga	0.0	83.5	9.6	6.9	100.0	100
Kagera	*	*	*	*	*	26
Mwanza	5.3	27.2	67.5	0.0	100.0	137
Mara	(0.0)	(30.3)	(69.7)	(0.0)	100.0	40
Manyara	(0.0)	(24.4)	(75.6)	(0.0)	*	22
Unguja North	(8.6)	(16.4)	(75.0)	(0.0)	*	5
Unguja South	(2.0)	(4.9)	(93.2)	(0.0)	*	3
Town West	*	*	*	*	*	13
Pemba North	*	*	*	*	*	3
Pemba South	(0.0)	(7.0)	(93.0)	(0.0)	(100.0)	5
Education						
No education	4.3	35.2	59.7	0.8	100.0	102
Primary incomplete	3.1	44.7	45.6	6.5	100.0	131
Primary complete	3.4	51.8	43.5	1.3	100.0	574
Secondary+	2.2	58.0	39.8	0.0	100.0	131
Wealth quintile						
Lowest	2.2	46.8	49.1	1.8	100.0	141
Second	1.3	54.2	42.2	2.3	100.0	168
Middle	2.3	48.6	44.0	5.0	100.0	145
Fourth	6.7	45.4	47.2	0.7	100.0	220
Highest	2.8	53.1	43.4	0.7	100.0	263
Total 15-49	3.3	49.9	45.0	1.8	100.0	937

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

For currently married women who earned cash in the past 12 months, Table 14.3 shows the person who decides how the woman's cash earnings are used, according to the relative magnitude of the woman's and the husband's cash earnings. Women whose cash earnings exceed their husband's are more likely to decide for themselves how they are used (51 percent) relative to those who earn less than their husband (37 percent) or who earn the same as their husband (16 percent). Women who earn the same as their husbands are the most likely to report that decisions on the use of their earnings are mainly made jointly with their husbands (66 percent), followed by those that earn less than their husbands (45 percent) or more than their husbands (44 percent). Among women whose husbands have no cash earnings, 30 percent say that they mainly make decisions regarding the use of their earnings, 30 percent report that their husbands are mainly in charge of their income, and 40 percent share the decision jointly with their husbands.

Table 14.3 Women's control over their own earnings and over those of their husband

Percent distribution of currently married women age 15-49 with cash earnings in the past 12 months by person who decides how the women's cash earnings are used, according to the relationship between the woman's and the husband's cash earnings, Tanzania 2010

	Person who decides how the woman's cash earnings are used:					
Women's earnings relative to husband's earnings	Mainly wife	Wife and husband jointly	Mainly husband	Missing	Total	Number
More than husband	50.6	43.7	5.7	0.0	100.0	249
Less than husband	37.4	45.1	17.4	0.0	100.0	1,849
Same as husband	16.1	65.9	18.1	0.0	100.0	336
Husband has no cash earnings/did not work	30.3	39.5	30.2	0.0	100.0	55
Total[1]	35.9	47.2	16.6	0.2	100.0	2,535

Note: Total includes women with information missing on their earnings relative to their husband's earnings.
[1] Excludes cases where a woman or her husband has no earnings and includes cases where a woman does not know whether she earned more or less than her husband

14.3 WOMEN'S EMPOWERMENT

To assess women's decision-making autonomy, the 2010 TDHS collected information on currently married women's participation in three different types of decisions: on the respondent's own health care, on making large household purchases, and on visits to family, friends, or relatives. Having a final say in the decision-making process is the highest degree of autonomy. Women are considered to participate in a decision if they usually make that decision alone or jointly with their husband.

Table 14.4.1 shows the percent distribution of currently married women according to the person in the household who usually makes the decisions concerning these matters. The ability of women to make decisions that affect the circumstances of their own lives is an essential aspect of empowerment.

14.3.1 Women's Participation in Decision-Making

Table 14.4.1 shows that for most women, decisions on their own health care (15 percent), major household purchases (7 percent), and visits to their family (9 percent) are only rarely made by women alone. Much more commonly, these decisions are made either jointly with their husbands or mainly by their husbands.

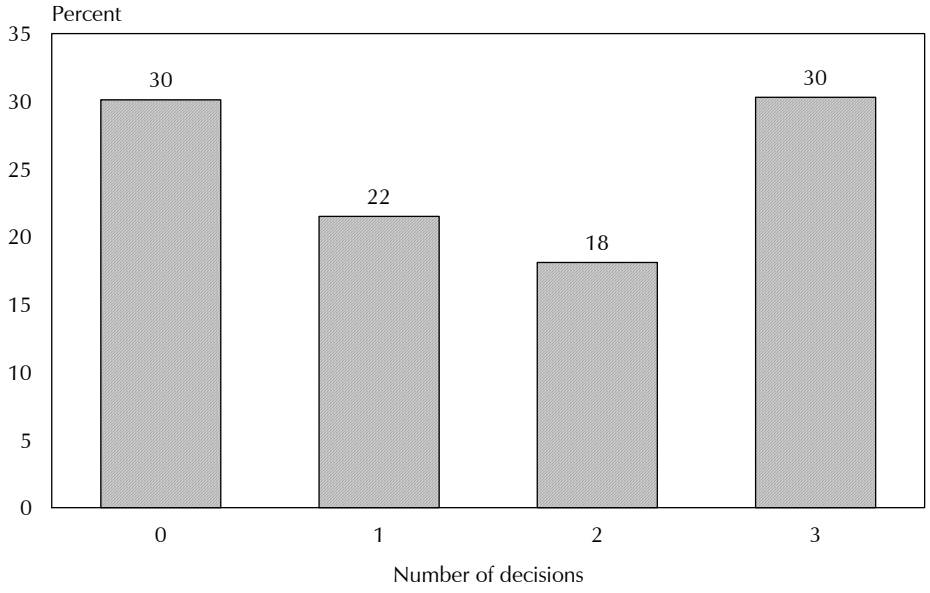
Figure 14.1 summarises women's participation in household decision-making.

Table 14.4.1 Women's participation in decision-making

Percent distribution of currently married women by person who usually makes decisions about three kinds of issues, Tanzania 2010

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Missing	Total	Number of women
Own health care	15.3	45.0	38.1	1.4	0.1	0.0	100.0	6,412
Major household purchases	6.9	31.9	57.7	3.2	0.2	0.1	100.0	6,412
Visits to her family or relatives	9.1	40.4	48.9	1.3	0.1	0.2	100.0	6,412

Figure 14.1 Number of Decisions in Which Currently Married Women Participate



TDHS 2010

Currently married men were also asked who makes decisions about two specific issues: their own health care and major household purchases. Table 14.4.2 reveals that 66 percent of men mainly make decisions about their own health care and 30 percent make them jointly with their wives. Likewise, the majority of men make decisions on major household purchases by themselves (57 percent) or in consultation with their wives (36 percent). Only in rare instances are wives the chief decision-makers about men's health care (3 percent) or major household purchases (4 percent).

Table 14.4.2 Decision-making according to men

Percent distribution of currently married men 15-49 by person who usually makes decisions about two kinds of issues, Tanzania 2010

Decision	Wife	Wife and husband equally	Husband	Other	Missing	Total	Number of men
Own health care	2.6	29.6	65.9	1.6	0.3	100.0	1,317
Major household purchases	4.2	36.4	57.0	2.1	0.3	100.0	1,317

Table 14.5 shows that women's participation in decision-making increases with age, number of children, and education level. Women who are employed for cash are more likely than other women to be involved in decision-making.

Table 14.5 Women's participation in decision-making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husbands, by background characteristics, Tanzania 2010

Background characteristic	Own health care	Making major household purchases	Visits to her family or relatives	Percentage who participate in all three decisions	Percentage who participate in none of the three decisions	Number of women
Age						
15-19	40.6	21.0	29.0	14.3	51.9	399
20-24	54.5	31.8	44.1	24.2	36.5	1,210
25-29	57.4	37.4	49.9	29.4	31.4	1,338
30-34	64.6	39.9	51.0	31.2	27.1	1,137
35-39	65.8	42.1	50.5	33.9	25.1	1,036
40-44	66.6	47.8	58.9	38.5	22.4	741
45-49	66.8	49.6	58.0	38.4	23.1	550
Employment (past 12 months)						
Not employed	51.8	30.3	43.2	24.7	38.2	730
Employed for cash	65.8	47.1	55.6	37.3	24.3	2,535
Employed not for cash	57.8	34.1	46.0	26.0	33.0	3,137
Number of living children						
0	53.3	34.3	43.1	26.2	36.6	451
1-2	59.0	36.9	47.3	27.8	31.3	2,282
3-4	61.9	40.0	51.9	32.1	28.6	1,935
5+	62.2	41.1	51.5	32.8	28.5	1,744
Residence						
Urban	67.8	45.0	54.7	33.9	21.8	1,585
Rural	57.9	36.7	47.8	29.2	32.8	4,827
Mainland/Zanzibar						
Mainland	60.5	39.2	49.7	30.6	29.9	6,232
Urban	68.3	46.0	55.3	34.6	21.3	1,516
Rural	58.0	37.0	47.9	29.3	32.7	4,715
Zanzibar	54.3	25.3	44.1	22.3	37.6	180
Unguja	56.9	22.6	44.7	18.7	32.6	115
Pemba	49.8	30.0	43.0	28.8	46.5	64
Zone						
Western	58.8	41.9	47.5	33.6	32.7	1,175
Northern	66.4	48.5	63.6	42.7	22.9	939
Central	76.9	58.9	68.9	47.0	12.6	556
Southern Highlands	51.8	26.2	37.8	18.1	38.7	895
Lake	54.5	22.8	33.8	13.8	37.3	1,101
Eastern	70.3	45.8	56.2	35.8	20.3	917
Southern	49.3	40.1	50.9	31.6	38.7	648
Region						
Dodoma	77.9	61.9	69.3	48.5	11.3	334
Arusha	55.7	33.2	50.8	26.2	30.3	240
Kilimanjaro	82.9	70.9	78.8	63.5	11.6	228
Tanga	76.2	54.4	71.5	49.6	14.5	324
Morogoro	63.6	33.1	46.4	26.9	28.8	301
Pwani	69.1	47.9	52.7	36.8	22.0	168
Dar es Salaam	75.2	53.7	64.2	41.5	13.8	448
Lindi	60.2	49.2	55.2	45.1	34.6	134
Mtwara	47.6	45.9	45.8	40.3	46.6	277
Ruvuma	45.2	28.0	54.6	13.7	31.8	236
Iringa	63.7	35.6	64.8	20.9	14.1	277
Mbeya	44.3	22.8	27.0	18.6	51.0	426
Singida	75.4	54.4	68.3	44.7	14.6	221
Tabora	54.9	41.0	49.6	32.3	35.5	312
Rukwa	51.4	20.5	22.9	12.9	46.9	192
Kigoma	76.3	23.4	41.9	18.0	18.4	288
Shinyanga	52.3	51.7	49.2	42.2	38.3	575
Kagera	81.9	30.4	49.9	20.8	13.1	372
Mwanza	44.4	21.1	28.6	11.3	43.9	474
Mara	33.3	14.8	20.2	8.4	60.5	255
Manyara	36.4	25.6	43.6	22.1	46.9	147
Unguja North	59.3	21.0	51.8	16.7	28.9	29
Unguja South	53.0	15.7	41.6	12.3	36.5	17
Town West	56.8	25.0	42.4	21.2	33.2	69
Pemba North	49.6	36.2	44.3	35.5	48.4	31
Pemba South	50.0	24.3	41.9	22.5	44.6	33
Education						
No education	52.0	35.1	42.9	27.2	37.2	1,524
Primary incomplete	54.0	32.6	43.2	26.0	37.2	866
Primary complete	63.6	40.0	52.1	31.1	27.2	3,529
Secondary+	74.0	52.5	62.3	42.1	16.9	492
Wealth quintile						
Lowest	54.7	38.7	47.7	31.5	34.9	1,165
Second	55.7	36.2	47.1	29.1	35.4	1,344
Middle	59.6	34.8	47.0	27.1	31.0	1,333
Fourth	59.1	37.1	46.0	26.2	31.2	1,301
Highest	72.4	47.5	60.0	38.2	18.1	1,269
Total	60.3	38.8	49.5	30.3	30.1	6,412

Note: Total includes 10 women with information missing on employment in the past 12 months.

Urban women are more likely to participate in decision-making than their rural counterparts. Women in Mainland Tanzania are more involved in decision-making than women in Zanzibar. Across zones and regions, women in the Central zone and the Kilimanjaro region are generally more involved in decision-making than women in other zones and regions. On the other hand, women in the Lake zone and Mara region are the least likely to participate in decision-making.

14.4 ATTITUDE TOWARDS WIFE BEATING

Wife beating is a form of physical violence that degrades women's humanity. It is also a violation of women's human rights. Abuse by a husband or partner is one of the most common forms of violence against women worldwide (Heise et al., 1999). Acceptance of this practice reflects women's low status and the perception that men are superior to women. In addition to negative physical health outcomes, this form of violence lowers a woman's self esteem and her image in society, leading to her disempowerment. It should therefore suffice to conclude that all violence against women has serious consequences for their mental and physical well-being, including their reproductive and sexual health (WHO, 1999).

The 2010 TDHS gathered information on attitudes towards wife beating. Women and men were asked whether a husband is justified in beating his wife under a series of circumstances: if the wife goes out without telling him, neglects the children, argues with him, refuses sexual relations, or burns the food. Women who perceive that a husband is justified to hit or beat his wife for any of the mentioned reasons may suffer from low self-esteem and believe that they are low in status, both absolutely and relative to men. Such a stereotyped perception could act as a barrier to taking advantage of social and economic opportunities. This in turn may negatively affect women's quality of life and general well-being.

Table 14.6.1 summarizes women's attitudes towards wife beating in any of the five circumstances just listed and also shows the percentage of women who agree with at least one of the specified circumstances.

More than half (54 percent) of women agree that wife beating by a husband is justified for at least one of the specified situations. This proportion, although high, is lower than that reported in the 2004-05 TDHS (60 percent). Indeed, the proportion of women who believe wife beating is justified for each of the specified situations has declined since the 2004-05 TDHS, with the exception of the situation regarding refusal of sexual relations, which remains at about 30 percent. Overall, however, these trends may indicate that Tanzanian women are less likely to accept wife beating now than they were in the past.

Table 14.6.1 Attitude towards wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Tanzania 2010

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	16.4	37.8	34.3	38.7	21.9	52.2	2,172
20-24	17.6	40.0	35.6	39.2	29.3	54.2	1,909
25-29	17.8	40.9	39.0	41.1	32.6	54.7	1,668
30-34	17.7	38.5	37.3	40.3	31.1	54.1	1,422
35-39	18.7	37.8	38.8	41.9	36.1	56.1	1,290
40-44	20.0	38.5	37.6	40.4	33.3	52.0	938
45-49	17.5	35.7	37.1	36.3	32.3	49.3	740
Employment (past 12 months)							
Not employed	12.2	32.7	30.4	34.6	21.4	45.3	1,999
Employed for cash	14.0	34.4	32.7	34.2	25.9	48.0	3,779
Employed not for cash	23.6	45.3	43.2	47.0	37.5	62.1	4,343
Marital status							
Never married	14.3	33.9	29.5	34.8	19.2	47.0	2,540
Married or living together	18.9	40.8	39.5	42.3	33.8	56.0	6,412
Divorced/separated/widowed	18.8	37.9	37.6	37.0	32.7	53.8	1,188
Number of living children							
0	14.4	34.7	30.3	34.6	20.2	48.1	2,665
1-2	17.6	39.9	38.0	40.0	30.7	53.9	3,080
3-4	19.3	38.9	37.7	40.8	32.3	54.3	2,346
5+	20.5	42.0	42.6	45.0	39.0	59.0	2,048
Residence							
Urban	10.8	30.4	28.6	31.4	19.6	43.0	2,892
Rural	20.5	42.1	40.1	43.1	34.1	57.7	7,247
Mainland/Zanzibar							
Mainland	18.2	39.6	37.4	40.6	30.6	54.5	9,813
Urban	11.2	31.4	29.1	32.3	20.1	44.0	2,758
Rural	20.9	42.8	40.6	43.9	34.7	58.6	7,055
Zanzibar	4.5	12.9	18.9	15.0	11.5	23.4	326
Unguja	3.9	15.5	22.6	18.2	13.4	29.0	212
Pemba	5.5	7.9	12.1	9.2	8.1	13.1	115
Zone							
Western	15.8	41.9	36.6	37.4	31.0	56.8	1,728
Northern	11.3	32.3	31.2	33.2	21.0	43.1	1,530
Central	34.6	50.2	47.2	49.1	41.4	62.7	812
Southern Highlands	13.5	36.4	32.1	40.7	32.2	53.3	1,370
Lake	27.6	50.5	50.4	56.7	41.5	73.0	1,809
Eastern	11.6	31.7	30.6	30.7	19.4	42.5	1,608
Southern	19.7	35.2	35.0	37.2	31.8	48.7	955
Region							
Dodoma	42.1	56.7	54.1	55.5	48.9	70.6	495
Arusha	14.8	36.0	32.5	40.8	26.6	48.9	401
Kilimanjaro	9.7	29.3	28.9	27.2	16.1	38.0	411
Tanga	9.9	34.1	32.3	31.6	19.6	44.6	498
Morogoro	19.8	47.1	45.7	45.4	32.7	61.2	481
Pwani	16.3	43.1	45.1	44.2	27.8	55.2	261
Dar es Salaam	5.7	19.8	17.8	18.5	9.6	28.2	866
Lindi	18.9	36.9	34.5	32.9	31.1	49.6	198
Mtwara	15.8	26.8	26.4	27.6	24.0	36.6	407
Ruvuma	24.6	44.1	45.2	50.8	41.3	62.3	350
Iringa	18.2	30.8	24.8	34.9	22.9	44.9	490
Mbeya	10.5	38.8	35.0	42.1	36.7	56.5	623
Singida	23.0	40.1	36.5	39.0	29.7	50.3	317
Tabora	12.8	55.4	47.1	40.2	29.8	67.1	447
Rukwa	11.7	41.4	39.1	48.4	39.2	61.4	257
Kigoma	32.0	55.9	54.1	64.0	54.0	78.7	462
Shinyanga	8.3	26.6	20.9	20.8	18.6	38.9	819
Kagera	38.1	56.0	51.6	69.0	44.3	80.0	590
Mwanza	19.0	43.9	46.9	46.4	35.8	67.0	844
Mara	30.6	56.6	56.5	60.8	50.1	75.5	376
Manyara	10.9	27.3	30.7	34.2	23.0	38.9	220
Unguja North	5.1	22.0	30.5	22.4	19.7	36.7	50
Unguja South	5.6	15.4	23.9	20.8	13.7	32.7	30
Town West	3.1	13.0	19.2	15.9	10.8	25.1	131
Pemba North	4.7	6.0	8.5	7.0	6.0	8.9	56
Pemba South	6.2	9.8	15.5	11.2	10.2	17.0	59
Education							
No education	22.8	46.5	44.6	44.9	39.9	62.3	1,940
Primary incomplete	22.3	43.2	42.2	45.1	34.1	60.1	1,482
Primary complete	18.2	39.4	37.9	41.7	30.9	54.9	5,071
Secondary+	6.5	23.4	19.4	23.0	11.6	33.0	1,646
Wealth quintile							
Lowest	24.0	45.3	43.9	43.9	38.1	60.9	1,681
Second	20.7	42.2	41.2	43.0	34.6	58.9	1,947
Middle	22.9	45.0	42.8	47.0	38.4	60.1	1,997
Fourth	17.7	40.1	38.0	43.6	29.5	56.7	2,112
Highest	6.8	25.0	22.2	25.0	13.9	35.7	2,403
Total	17.8	38.7	36.8	39.8	30.0	53.5	10,139

Note: Total includes 10 women with information missing on employment in the past 12 months.

Whether women believe a husband is justified in wife beating varies little by age. However, women who are currently married or who were previously married and women who are employed but not for cash are more likely than other women to believe that there are occasions when wife beating is justified. In addition, the more children a woman has, the more likely she is to believe that wife beating is justified. The acceptance of wife beating inversely correlates with education and wealth. Women with no education are nearly twice as likely as women with some secondary education to agree with at least one specified justification for wife beating (62 percent and 33 percent, respectively). Likewise, 61 percent of women in the lowest wealth quintile agree with at least one specified justification for wife beating compared with only 36 percent of women in the highest wealth quintile.

Women's attitudes towards wife beating were also examined by residence and location. Almost six in ten women in rural areas agree with at least one specified justification for wife beating compared with four in ten women living in the urban areas. Women living in Mainland Tanzania were twice as likely as those living in Zanzibar to agree with at least one specified justification for wife beating (55 percent and 23 percent, respectively). A large variation in the acceptability of wife beating was also observed across zones: 43 percent of women in the Northern and Eastern zones agree with at least one specified justification compared with 73 percent of women in the Lake zone. Across regions in the Mainland, the proportion of women who agree with at least one specified justification for wife beating ranges from 28 percent in Dar es Salaam to 80 percent in Kagera.

Table 14.6.2 shows men's attitudes towards wife beating. About four in ten men (38 percent) agree that wife beating by a husband is justified in at least one of the specified situations. This proportion is slightly lower than in the 2004-05 TDHS (42 percent) and reflects declines in the acceptability of wife beating for each of the specified situations. Although the declines are not large, they may indicate that wife beating is increasingly unacceptable among men.

Similar to the finding for female respondents, there are only small age differentials in men's attitudes towards wife beating. The acceptability of wife beating is highest among married men and positively correlates with the number of living children of men. Whereas 54 percent of men with no education agree with at least one specified reason for wife beating, the proportion drops to 28 percent of men with at least some secondary education. Likewise, men within the lowest wealth quintile are more likely than those in the highest to agree with at least one specified reason for wife beating (46 percent and 25 percent, respectively).

As was observed for female respondents, men living in rural areas are more likely than men living in urban areas to accept wife beating (42 percent and 27 percent, respectively). Similarly, men in Mainland Tanzania are much more likely than men in Zanzibar to agree with at least one specified justification for wife beating (39 percent and 15 percent, respectively). The proportion of men who agree with at least one specified justification for wife beating varies by zone: from a low of 25 percent in the Southern zone to a high of 54 percent in the Lake zone. Across regions, the proportion of men who agree with at least one specified justification for wife beating varies from 11 percent in Mtwara to 63 percent in Mara and Kigoma.

Table 14.6.2 Attitude towards wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Tanzania 2010

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	5.0	22.4	24.3	28.5	10.0	39.0	645
20-24	8.8	22.0	23.0	25.9	13.5	40.3	414
25-29	7.9	24.9	23.1	26.8	16.9	42.6	343
30-34	3.2	17.8	22.2	22.3	13.8	33.9	352
35-39	5.4	22.5	23.3	24.6	13.8	34.4	300
40-44	5.7	19.5	25.1	25.6	14.7	36.0	270
45-49	9.5	22.3	23.2	28.3	22.1	38.5	204
Employment (past 12 months)							
Not employed	7.1	22.5	24.7	30.9	11.3	40.7	370
Employed for cash	5.7	22.8	23.0	24.7	13.7	36.7	1,452
Employed not for cash	7.0	19.3	24.3	27.2	15.9	39.7	696
Marital status							
Never married	5.9	20.1	20.6	24.4	10.8	35.5	1,046
Married or living together	6.2	23.5	26.1	27.8	15.5	40.6	1,317
Divorced/separated/widowed	8.5	17.6	21.8	25.0	21.8	34.4	164
Number of living children							
0	6.0	20.0	21.5	25.3	11.3	36.6	1,146
1-2	6.8	22.7	22.7	24.7	12.7	36.3	556
3-4	4.3	19.8	23.3	25.6	15.3	37.4	429
5+	8.1	27.5	30.8	31.5	22.0	45.5	396
Residence							
Urban	1.8	15.1	13.7	19.0	8.4	27.4	693
Rural	7.9	24.2	27.2	28.9	16.1	42.1	1,834
Mainland/Zanzibar							
Mainland	6.4	22.2	23.9	26.7	14.1	38.8	2,452
Urban	1.8	15.5	14.0	19.5	8.5	28.1	662
Rural	8.1	24.6	27.5	29.4	16.2	42.7	1,790
Zanzibar	2.0	7.3	10.7	8.9	8.9	15.3	75
Unguja	1.5	6.7	10.1	7.7	7.7	14.4	53
Pemba	3.1	8.5	11.9	11.9	11.8	17.4	22
Zone							
Western	6.4	20.2	23.8	23.7	13.6	40.0	371
Northern	6.5	30.0	32.5	31.4	16.5	43.3	350
Central	6.6	19.4	25.8	26.9	20.7	40.5	208
Southern Highlands	2.4	15.8	13.5	20.8	12.1	32.0	355
Lake	12.8	33.8	36.3	39.5	17.9	54.0	521
Eastern	2.1	16.4	14.5	19.8	8.4	27.7	413
Southern	4.9	10.1	14.6	17.1	10.4	24.7	236
Region							
Dodoma	9.5	24.6	30.0	31.5	27.0	48.6	122
Arusha	7.3	39.7	44.2	44.1	24.8	58.9	87
Kilimanjaro	0.0	15.9	20.0	17.7	1.2	26.2	92
Tanga	10.5	30.1	29.3	27.5	18.6	42.1	124
Morogoro	2.7	23.0	23.0	30.3	10.2	36.9	146
Pwani	2.7	30.9	26.5	26.7	16.2	37.1	59
Dar es Salaam	1.6	7.6	5.0	10.3	4.9	18.5	207
Lindi	7.0	9.7	11.0	12.2	8.5	17.4	47
Mtwara	6.2	7.7	8.5	7.7	4.9	11.1	87
Ruvuma	2.9	12.4	21.4	27.4	16.0	39.6	102
Iringa	0.8	12.3	7.5	16.5	3.8	25.6	140
Mbeya	0.0	11.3	14.0	19.7	12.9	31.4	143
Singida	2.4	12.0	19.9	20.4	11.8	28.9	86
Tabora	7.1	22.5	22.5	19.0	12.8	39.5	105
Rukwa	10.4	31.8	23.9	31.4	26.3	45.6	72
Kigoma	1.7	20.1	32.2	52.4	20.2	63.1	96
Shinyanga	8.6	18.8	19.9	10.3	10.4	27.1	169
Kagera	11.3	23.5	37.5	51.8	19.2	61.7	161
Mwanza	13.0	35.7	35.9	30.3	16.1	46.8	276
Mara	15.3	47.3	34.8	46.5	21.3	62.6	83
Manyara	7.2	39.2	43.4	44.8	25.5	50.6	47
Unguja North	2.3	12.3	19.0	13.8	14.6	23.0	11
Unguja South	0.0	1.8	2.7	3.3	2.7	4.2	9
Town West	1.6	6.2	9.1	6.8	6.7	14.2	33
Pemba North	2.6	7.5	11.7	11.0	11.3	16.2	10
Pemba South	3.5	9.3	12.0	12.7	12.2	18.4	12
Education							
No education	13.6	34.7	36.5	37.2	22.7	53.8	239
Primary incomplete	9.3	24.1	26.2	30.1	16.3	40.6	460
Primary complete	5.1	22.6	24.4	25.3	14.6	38.8	1,249
Secondary+	3.1	12.7	14.1	20.6	7.3	28.0	578
Wealth quintile							
Lowest	13.1	30.6	31.6	34.6	21.8	46.1	401
Second	8.4	26.9	29.6	28.9	20.1	46.1	447
Middle	6.4	25.1	24.1	30.2	12.9	42.0	490
Fourth	4.3	18.1	23.7	24.9	12.8	37.2	572
Highest	1.9	12.9	13.2	16.7	6.5	24.8	618
Total 15-49	6.2	21.7	23.5	26.2	14.0	38.1	2,527

Note: Total includes 9 men with information missing on employment in the past 12 months.

14.5 WOMEN'S EMPOWERMENT INDICES

Three women's empowerment indices were created, namely women's participation in making household decisions, women's attitude towards wife beating, and women's attitude towards a wife's right to refuse sexual intercourse with her husband/partner (see Chapter 13, Table 13.6). The distribution of women by these three indices is then linked to select demographic and health outcomes such as contraceptive use, ideal family size, unmet need for family planning, and utilization of reproductive health care.

The first index ranges in value from 0 to 3 and corresponds with the number of decisions in which women participate alone or jointly with their husband/partner (see Table 14.4.1 for the list of decisions). This index reflects the degree of decision-making control that women are able to exercise in areas that affect their own lives and environments. A high score on this index indicates a high level of empowerment.

The second index ranges in value from 0 to 5 and corresponds with the total number of reasons for which the respondent feels that a husband is justified in beating his wife (see Table 14.6.1 for the list of reasons). A low score on this index is interpreted as reflecting a greater sense of self-worth and a higher status of women.

The third index ranges in value from 0 to 1 and corresponds with whether the respondent feels that a woman is justified in refusing sexual intercourse with her husband or partner if she knows he has a disease transmitted by sexual intercourse. This index reflects perceptions of sexual roles and women's rights over their bodies and relates positively to women's sense of self and empowerment.

Table 14.7 shows how these three indices relate to each other. In general, the expectation is that women who participate in making household decisions are also more likely to have egalitarian gender beliefs. Greater decision-making participation is normally associated with disapproval of wife beating and vice versa. The first panel in Table 14.8 shows that women who participate in three decisions are more likely than other women to disagree with wife beating (57 percent) and to agree with a woman's right to refuse sex with her husband (89 percent).

Table 14.7 Indices of women's empowerment

Percentage of women age 15-49 who participate in all decision-making, percentage who disagree with all reasons for justifying wife beating, and percentage who agree with all reasons for refusing sexual intercourse with husband, by value on each of the indices of women's empowerment, Tanzania 2010

	Currently married women				
Empowerment index	Percentage who participate in all decision making[1]	Number of women	Percentage who disagree with all the reasons justifying wife beating	Percentage who agree with the reason for refusing sexual intercourse with husband	Number of women
Number of decisions in which women participate[1]					
0	na	na	33.9	79.2	1,931
1-2	na	na	41.6	83.7	2,535
3	na	na	57.0	89.2	1,945
Number of reasons for which wife beating is justified[2]					
0	39.4	2,818	na	83.7	4,713
1-2	25.1	1,311	na	82.2	2,104
3-4	22.7	1,423	na	83.3	2,120
5	21.3	859	na	79.6	1,202
Number of reasons given for refusing to have sexual intercourse with husband[3]					
0	20.5	1,026	44.1	na	1,744
1	32.2	5,385	47.0	na	8,395

[1] Restricted to currently married women. See Table 14.5 for the list of decisions.
[2] See Table 14.6.1 for the list of reasons
[3] If she knows that her husband has STI

The second panel in Table 14.7 shows that participation in making household decisions declines as the number of justifications for wife beating increases. Disapproval of wife beating is not strongly associated with agreement regarding a woman's right to refuse sex with her husband if she knows he has a sexually transmitted infection.

The third panel in Table 14.7 reveals that decision-making participation is associated with agreement that there is no justification for wife beating and that a wife can refuse sex with her husband. For example, among women who agree that a wife can refuse sex with her husband, 32 percent participate in all decision-making and 47 percent disagree with all the reasons offered to justify wife beating. In contrast, among women who do not believe a wife can refuse sex with her husband, only 21 percent participate in all decision making and 44 percent disagree with all the reasons justifying wife beating.

14.6 Current Use of Contraception by Women's Status

A woman's ability to control her fertility and method of contraception is likely to be affected by her self-image and sense of empowerment. A woman who feels that she is unable to control other aspects of her life may be less likely to feel she can make decisions regarding fertility. She may also feel the need to choose methods that are easier to conceal from her husband or partner or that do not depend on his cooperation.

Table 14.8 shows the relationship of each of the three empowerment indices with current use of contraceptive methods by currently married women age 15-49. The data indicate that there is a positive association between the three empowerment indices and contraceptive use. For example, the proportion of married women who are using any method of contraception rises steadily, from 27 percent of women who do not participate in any household decision-making to 40 percent of women who participate in each of three decisions. The data further show that use of a contraceptive method decreases with the increase in the number of reasons a woman thinks wife beating is justified. About four in ten women (38 percent) who do not feel that wife beating is justified for any reason are using a contraceptive method compared with three in ten women who believe that wife beating is justified for all five reasons. The proportion of women using any method of contraception is 28 percent for women who say that a wife is justified in refusing to have sex with her husband if she knows he has a sexually transmitted infection and 36 percent for women who do not believe this.

Table 14.8 Current use of contraception by women's status

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indices of women's status, Tanzania 2010

Empowerment index	Any method	Any modern method	Modern methods: Female sterilisation	Male sterilisation	Temporary modern female methods[1]	Male condom	Any traditional method	Not currently using	Total	Number of women
Number of decisions in which women participate[2]										
0	27.1	21.1	2.2	0.0	17.2	1.8	6.0	72.9	100.0	1,931
1-2	35.9	28.1	3.8	0.1	21.6	2.6	7.9	64.1	100.0	2,535
3	39.5	32.7	4.5	0.0	25.6	2.5	6.8	60.5	100.0	1,945
Number of reasons for which wife beating is justified[3]										
0	37.5	29.7	3.8	0.1	23.3	2.5	7.8	62.5	100.0	2,818
1-2	32.8	26.1	3.8	0.0	19.7	2.6	6.6	67.2	100.0	1,311
3-4	32.1	24.9	3.1	0.0	19.4	2.4	7.1	67.9	100.0	1,423
5	30.4	25.8	3.1	0.1	21.3	1.3	4.6	69.6	100.0	859
Number of reasons given for refusing to have sexual intercourse with husband[4]										
0	28.3	22.2	2.6	0.1	16.5	3.0	6.1	71.7	100.0	1,026
1	35.5	28.4	3.7	0.0	22.4	2.2	7.2	64.5	100.0	5,385
Total	34.4	27.4	3.5	0.0	21.5	2.3	7.0	65.6	100.0	6,412

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Pill, IUD, injectables, implants, female condom, diaphragm, foam/jelly, and lactational amenorrhea method
[2] See Table 14.5 for the list of decisions.
[3] See Table 14.6.1 for the list of reasons.
[4] If she knows that her husband has an STI

14.7 IDEAL FAMILY SIZE AND UNMET NEED BY WOMEN'S STATUS

As a woman becomes more empowered, she is more likely to have a say in the number and spacing of children she desires (ideal family size). Table 14.9 depicts how a woman's ideal family size and her unmet need for family planning vary by the three indices of women's empowerment.

There is positive correlation between the three indices and women's mean ideal number of children. For instance, women who participate in 3 decisions desire 5.1 children on average, compared with 5.6 children wanted by women who do not participate in any decision. The scenario is reversed with respect to the number of reasons for which wife beating is justified. Women who accept all five reasons for wife beating have the highest mean ideal number of children (5.4), while women who do not justify wife beating for any reason have the lowest mean ideal family size (4.6). Women who report no reason for refusing to have sex desire 5.0 children compared with 4.8 children for women reporting one reason for refusing sex.

The data in Table 14.9 further show that women's status is negatively associated with unmet need for family planning services. In general, the percentage of currently married women with unmet needs for family planning decreases with each increase in the number of decisions in which women participate and increases with the number of reasons for which women believe wife beating is justified. For example, 22 percent of women who participate in no household decisions have an unmet need for family planning services compared with 18 percent of women who participate in three decisions. The percentage of women with an unmet need for family planning services decreases when women believe a wife can refuse sex with her husband if she knows he has a sexually transmitted infection.

Table 14.9 Women's empowerment and ideal number of children and unmet need for family planning

Mean ideal number of children for women 15-49 and the percentage of currently married women age 15-49 with an unmet need for family planning, by indices of women's empowerment, Tanzania 2010

Empowerment index	Mean ideal number of children[1]	Number of women	Percentage of currently married women with an unmet need for family planning[2] For spacing	For limiting	Total	Number of women
Number of decisions in which women participate[3]						
0	5.6	1,890	17.5	4.4	21.9	1,931
1-2	5.2	2,494	15.5	5.4	20.9	2,535
3	5.1	1,897	12.6	5.6	18.2	1,945
Number of reasons for which wife beating is justified[4]						
0	4.6	4,617	14.4	4.4	18.9	2,818
1-2	4.9	2,082	16.1	4.9	21.0	1,311
3-4	5.0	2,071	15.6	6.2	21.8	1,423
5	5.4	1,177	15.8	6.4	22.1	859
Number of reasons given for refusing to have sexual intercourse with husband[5]						
0	5.0	1,674	16.8	5.3	22.1	1,026
1	4.8	8,272	14.9	5.1	20.0	5,385
Total	4.9	9,947	15.2	5.2	20.4	6,412

[1] Mean excludes respondents who gave non-numeric responses.
[2] See Table 7.3.1 for the definition of unmet need for family planning.
[3] Restricted to currently married women. See Table 14.5 for the list of decisions.
[4] See Table 14.6.1 for the list of reasons.
[5] If she knows that her husband has an STI

14.8 WOMEN'S STATUS AND REPRODUCTIVE HEALTH CARE

In societies where health care is widespread, women's status may not affect their access to health services. In other societies, however, increased empowerment of women is likely to increase their ability to seek out and use health services to better meet their own reproductive health goals, including the goal of safe motherhood.

Table 14.10 examines whether women's use of antenatal, delivery, and postnatal care services from health workers varies by their status as measured against the three women's empowerment indices. The table reveals that the proportion of women who received antenatal care for a live birth in the five years before the survey increases with the number of decisions in which the woman participates, from 94 percent of women who do not participate in any decisions to 99 percent of those who have a say in three decisions. Similar patterns are shown for delivery assistance and postnatal care from health personnel.

Table 14.10 also shows that the number of reasons that justify wife beating is negatively associated with women's access to antenatal and delivery care by a health professional, while the belief that women can refuse sex with a husband is positively linked with women's access to antenatal and delivery care by a health professional.

Table 14.10 Reproductive health care by women's empowerment

Percentage of women age 15-49 with a live birth in the five years preceding the survey who received antenatal care, delivery assistance, and postnatal care from health personnel for the most recent birth, by indices of women's empowerment, Tanzania 2010

Empowerment index	Received antenatal care from health personnel	Received delivery assistance from health personnel	Received postnatal care from health personnel within the first two days since delivery[1]	Number of women with a child born in the past five years
Number of decisions in which women participate[2]				
0	93.8	44.5	21.0	1,472
1-2	95.5	54.6	28.5	1,760
3	98.8	59.5	33.1	1,307
Number of reasons for which wife beating is justified[3]				
0	97.3	60.8	32.7	2,352
1-2	94.8	49.5	25.9	1,163
3-4	94.7	51.7	25.6	1,242
5	95.3	46.7	20.3	762
Number of reasons given for refusing to have sexual intercourse with husband[4]				
0	93.5	44.9	21.5	883
1	96.4	56.2	29.2	4,636
Total	95.9	54.4	28.0	5,519

Note: 'Health personnel' includes doctor/AMO, clinical official, assistant clinical officer, nurse/midwife, and MCH aide.

[1] Includes deliveries in a health facility and not in a health facility

[2] Restricted to currently married women. See Table 14.5 for the list of decisions.

[3] See Table 14.6.1 for the list of reasons.

[4] If she knows that her husband has an STI

14.9 DIFFERENTIALS IN INFANT AND CHILD MORTALITY BY WOMEN'S STATUS

The abilities of women to access information, make decisions, and act effectively in their own interest, or in the interest of those who depend on them, are essential aspects of the empowerment of women. If women, the primary caretakers of children, are empowered, the health and survival of their infants will be enhanced. In fact, maternal empowerment fits into Mosley and Chen's framework on child survival as an individual-level variable that affects child survival through the proximate determinants (Mosley, W.H., and L.C. Chen, 1984).

Table 14.11 presents mortality rates by three indices of women's status: participation in household decision-making, attitude towards a wife refusing to have sex with her husband, and attitude towards wife beating. Children of women who have no say in any decision in the household have an under-5 mortality rate (87 deaths per 1,000 live births) that is slightly below those of children whose mother participates in one to two decisions (89 deaths per 1,000 live births) or three decisions (90 deaths per 1,000 live births). Children whose mothers agree that women have a right to refuse to have sex with a husband have a slightly higher under-5 mortality than those who disagree that women can refuse to have sex with a husband (90 deaths per 1,000 live births and 82 deaths per 1,000 live births, respectively). Thus, contrary to expectations, neither of the first two empowerment indices correlates with reduced under-5 mortality. However, the differences are small and may be attributed to sampling variation.

In contrast, there is a clear positive correlation with women's negative attitude towards wife-beating and reduced under-5 mortality. Children whose mothers believe wife beating is not justified under any of the specified situations have a lower mortality rate (82 deaths per 1,000 live births) than children whose mothers who believe wife beating is justified for any reason (86 deaths or higher per 1,000 live births).

Table 14.11 Early childhood mortality rates by women's status

Infant, child, and under-five mortality rates for the 10-year period preceding the survey, by indices of women's status, Tanzania 2010

Empowerment index	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Number of decisions in which women participate[1]			
0	58	31	87
1-2	59	32	89
3	56	36	90
Number of reasons for which wife beating is justified[2]			
0	53	31	82
1-2	58	29	86
3-4	64	36	98
5	61	38	97
Number of reasons given for refusing to have sexual intercourse with husband[3]			
0	58	26	82
1	58	34	90

[1] Restricted to currently married women. See Table 14.5 for the list of decisions.
[2] See Table 14.6.1 for the list of reasons.
[3] If she knows that her husband has an STI

ADULT AND MATERNAL MORTALITY 15

Adult and maternal mortality rates are key indicators of the health status of a population. In Tanzania, they are national development indicators estimated from the population census. However, census information by itself does not provide data on causes of death, which is needed to estimate maternal mortality with accuracy. The best source for tracking causes of death would have been data collected in registration of vital statistics, but this source of information is incomplete in Tanzania. In an effort to improve the coverage of vital statistics registration, the Ministry of Health and Social Welfare (MoHSW), in collaboration with local and international institutes, introduced sentinel sites for the Demographic Surveillance System (DSS). The sentinel sites were not selected using a scientific sampling procedure, however, so the data collected from the sites cannot be used to draw a national picture. The MoHSW, in collaboration with Ifakara Health Institute, therefore has expanded the number of sentinel sites to more precisely estimate the burden of disease in Tanzania.

This chapter presents information from the 2010 TDHS on overall adult mortality and maternal mortality in Tanzania. Data were collected from respondents about their siblings and whether they were alive or dead. The data allowed for the estimation of adult mortality and maternal mortality.

15.1 ASSESSMENT OF DATA QUALITY

To obtain a sibling history, each female respondent was asked to list all children born to her biological mother, starting with the first born. Then, the respondent was asked whether each of these siblings was still alive at the time of the survey. For living siblings, the current age of each sibling was collected. For deceased siblings, the age at death and the number of years since death were recorded. Interviewers were told that when a respondent could not provide precise information on age at death or years since death, approximate but quantitative answers were acceptable. For sisters who had died at age 12 or older, three questions were asked to determine whether the death was maternity related: 'Was [NAME OF SISTER] pregnant when she died?' and, if the response was negative, 'Did she die during childbirth?' and, if negative again, 'Did she die within two months after the end of a pregnancy or childbirth?' It is intended that this information will not only give an estimate of maternal risk but a complete profile of exposure to the risk of mortality for the adult population of Tanzania.

Adult and maternal mortality estimation, by either direct or indirect means, requires accurate reporting of the number of siblings of the respondent, the number who have died, and the number of the sisters who have died of maternity-related causes (to estimate maternal mortality). Information from the 2010 TDHS is not free from sampling and nonsampling errors, which may include the respondent's memory lapse. Although there is no definitive procedure for establishing the completeness of retrospective data on sibling survivorship, Table 15.1 presents several indicators that can be used to measure the quality of this data.

A total of 56,734 siblings were recorded in the sibling histories of the 2010 TDHS respondents. The survival status was not reported for 30 siblings (0.1 percent). Among surviving siblings, current age was not reported for 56 siblings (0.1 percent). For 98 percent of deceased siblings, both age at death (AD) and years since death (YSD) were reported. In 0.4 percent of cases, both the AD and YSD were missing. The sex ratio of the enumerated siblings (the ratio of brothers to sisters) is 100.4, which is lower than the expected value of 102–105 and implies an underreporting of brothers.

Table 15.1 Data on siblings

Number of siblings reported by survey respondents and completeness of the reported data on age, age at death (AD), and years since death (YSD), Tanzania 2010

Sibling status and completeness of reporting	Females		Males		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
All siblings	28,309	100.0	28,425	100.0	56,734	100.0
Surviving	23,971	84.7	23,802	83.7	47,774	84.2
Deceased	4,324	15.3	4,606	16.2	8,931	15.7
Missing information	13	0.0	17	0.1	30	0.1
Surviving siblings	23,971	100.0	23,802	100.0	47,774	100.0
Age reported	23,941	99.9	23,776	99.9	47,717	99.9
Age missing	30	0.1	26	0.1	56	0.1
Deceased siblings	4,324	100.0	4,606	100.0	8,931	100.0
AD and YSD reported	4,261	98.5	4,530	98.3	8,791	98.4
Missing only AD	24	0.6	26	0.6	51	0.6
Missing only YSD	21	0.5	31	0.7	52	0.6
Missing both	18	0.4	19	0.4	37	0.4

Rather than exclude the siblings with missing data from further analysis, information on the birth order of siblings in conjunction with other information was used to impute the missing data.[1] The sibling survivorship data, including cases with imputed values, have been used in the direct estimation of adult and maternal mortality. In general the data do not show any obvious defects that would indicate poor data quality or significant underreporting.

15.2 ESTIMATES OF ADULT MORTALITY

One way to assess the quality of data used to estimate maternal mortality is to evaluate the plausibility and stability of overall adult mortality. It is reasoned that if estimated rates of overall adult mortality are implausible, rates based on a subset on deaths—i.e., maternal deaths in particular—are likely to have serious problems. Also, levels and trends in overall adult mortality have important implications in their own right for health and social programmes in Tanzania, especially with regard to the potential impact of the AIDS epidemic, other infectious diseases, and noncommunicable diseases.

The direct estimation of adult mortality uses the reported ages at death and years since death of the respondents' brothers and sisters. Because of the differentials in exposure to the risk of dying, both age- and sex-specific death rates are presented in this report. The results are also compared with rates obtained from the 2004 TDHS. As the number of deaths on which the rates are based is not very large (826 female deaths and 796 male deaths in the 2010 TDHS and 893 female deaths and 807 male deaths in the 2004-05 TDHS), the estimated age–specific rates are subject to considerable sampling variations.

[1] The imputation procedure is based on the assumption that the reported birth order of siblings in the history is correct. The first step is to calculate birth dates. For each living sibling with a reported age and each dead sibling with complete information on both age at death and years since death, the birth date was calculated. For a sibling missing these data, a birth date was imputed within the range defined by the birth dates of the bracketing siblings. In the case of living siblings, an age at the time of the survey was then calculated from the imputed birth date. In the case of dead siblings, if either the age at death or years since death was reported, that information was combined with the birth date to produce the missing information. If both pieces of information were missing, the distribution of the ages at death for siblings for whom the years since death was unreported, but age at death was reported, was used as a basis for imputing the age at death.

Table 15.2 presents age–specific rates for female and male mortality (15-49 years) for the ten-year period preceding the survey. The ten-year period is determined as a compromise between the desire for the most recent data possible and the desire to minimise the level of sampling errors by having a larger number of deaths. The overall mortality rate is similar among women (5.1 deaths per 1,000 years of exposure) and men (5.0 deaths per 1,000 years of exposure). Generally, the rates show the expected increases for both sexes with increasing age. Female mortality exceeds male mortality in age groups 20-34, which are the ages at which women bear children. In age groups 35-44, male mortality exceeds female mortality by greater margins as age advances.

Table 15.2 Adult mortality rates

Age-specific mortality rates for women and men age 15-49 based on the survivorship of sisters and brothers of survey respondents, for the ten-year period preceding the survey, Tanzania 2010

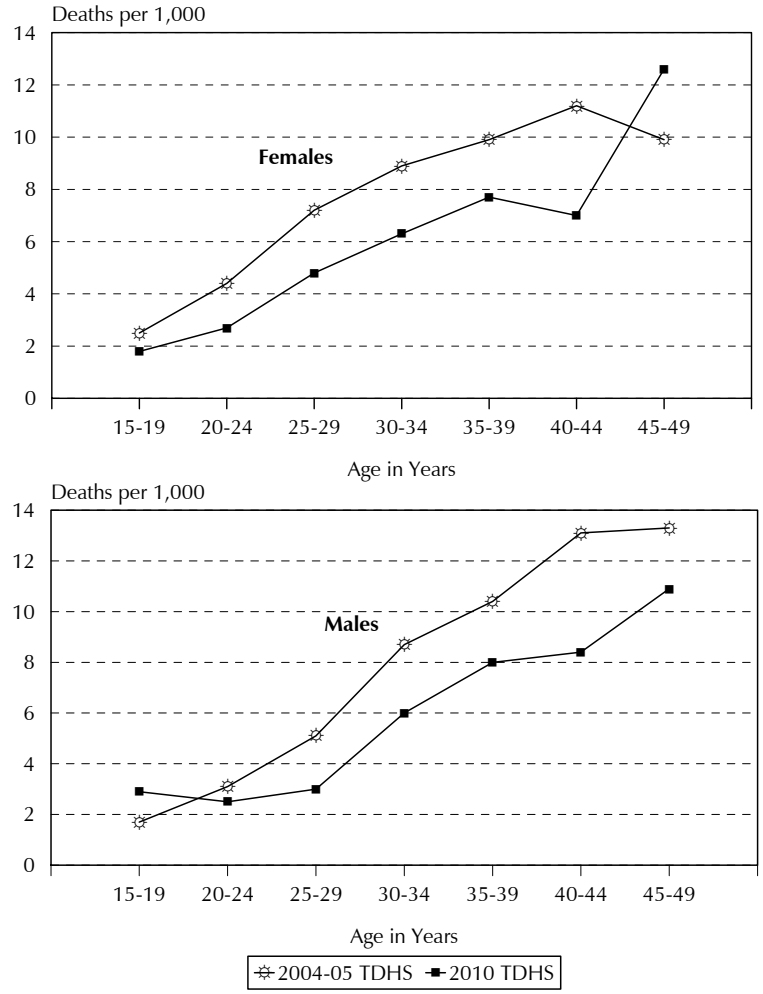
Age	Deaths	Exposure	Mortality rates
WOMEN			
15-19	61	34,548	1.8
20-24	95	35,628	2.7
25-29	159	32,800	4.8
30-34	173	27,542	6.3
35-39	156	20,292	7.7
40-44	93	13,124	7.0
45-49	90	7,198	12.6
15-49	826	171,132	5.1[a]
MEN			
15-19	100	34,108	2.9
20-24	89	36,215	2.5
25-29	104	34,316	3.0
30-34	168	28,109	6.0
35-39	157	19,689	8.0
40-44	103	12,253	8.4
45-49	74	6,797	10.9
15-49	796	171,488	5.0[a]

[a] Age-standardised

Figure 15.1 shows the age-specific mortality rates for women and men age 15-49 for the seven-year period preceding the 2004-05 TDHS and the ten-year period preceding the 2010 TDHS. In general, for women and men, mortality rates in 2010 are lower than those in 2004-05, indicating a decline in mortality rates in the past 5 years. The summary measure of mortality for age group 15-49 shows a decline of 23 percent in female mortality rates and 19 percent in male mortality rates from the 2004-05 TDHS rates.

Among women, the rates for age groups 15-39 increase with age. The rate for age 40-44 in the 2010 TDHS is lower than that in the 2004-05 TDHS, but for age 45-49 is much higher than in the 2004-05 TDHS. The somewhat erratic pattern in the oldest age groups may be due to sampling variability. Among men, except for those age 15-19, the rates from the 2010 TDHS are lower than those from the 2004-05 survey.

Figure 15.1 Trends in Adult Mortality, Tanzania 2004-05 and 2010



Note: Data refer to the seven-year period preceding the 2004-05 TDHS and the ten-year period preceding the 2010 TDHS.

15.3 ESTIMATES OF MATERNAL MORTALITY

Maternal mortality in developing countries like Tanzania can be estimated using two procedures: the sisterhood method (Graham et al, 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan, 1991). In this report, the direct estimation procedure is applied. Age-specific mortality rates are calculated by dividing the number of maternal deaths by women years of exposure. To remove the effect of truncation bias (the upper boundary for eligibility for women interviewed in the TDHS is 49 years), the report standardised the overall rate for women age 15–49 by the age distribution of the survey respondents. Maternal deaths were defined as any death that was reported as occurring during pregnancy, childbirth, or within two months after the birth or termination of a pregnancy. This time-dependent definition includes all deaths that occurred during pregnancy and two months after pregnancy, even if the death was due to nonmaternal causes. However, this definition is unlikely to result in overreporting of maternal deaths because most deaths to women during the two-month period after pregnancy are due to maternal causes, and maternal deaths are more likely to be underreported than overreported. Estimates of maternal mortality are therefore based solely on the timing of the death in relationship to the pregnancy.

Table 15.3 presents direct estimates of maternal mortality for the ten-year period preceding the survey. The data indicate that the mortality rate associated with pregnancy and childbearing is 0.8 maternal deaths per 1,000 women-years of exposure. The estimated age-specific mortality rates display a generally plausible pattern, being higher at the peak of childbearing ages (20-34) than at the younger and older age groups. However, the age-specific pattern should be interpreted with caution because of the small number of events—only 142 maternal deaths for women of all ages. Maternal deaths represent 17 percent of all deaths to women age 15-49 (142/826), a figure that is similar to that found in the 2004-05 TDHS (18 percent).

Table 15.3 Maternal mortality

Maternal mortality rates for the ten-year period preceding the survey, based on the survivorship of sisters of survey respondents, Tanzania 2010

Age	Maternal deaths	Exposure (years)	Mortality rates (1,000)
15-19	14	34,548	0.1
20-24	28	35,628	0.1
25-29	31	32,800	0.2
30-34	34	27,542	0.2
35-39	17	20,292	0.1
40-44	13	13,124	0.1
45-49	4	7,198	0.0
Total 15-49	142	171,132	0.8
General fertility rate[1]			0.179
Maternal mortality ratio[2]			454[a]

[a] Age standardised (a not in table)
[1] Expressed per 1,000 woman-years of exposure
[2] Expressed per 100,000 live births; calculated as maternal mortality rate divided by the general fertility rate

The maternal mortality rate can be converted to a maternal mortality ratio and expressed per 100,000 live births by dividing the rate by the general fertility rate of 0.179 that prevailed during the same time period. The advantage of this conversion is that it highlights the obstetric risk, which has great programmatic significance. With this procedure, the maternal mortality ratio during the ten-year period before the survey is estimated as 454 maternal deaths per 100,000 live births. In other words, for every 1,000 live births in Tanzania during this period, about four to five women died of pregnancy-related causes.

It should be kept in mind that maternal mortality is a difficult indicator to measure because of the large sample sizes required to calculate an accurate estimate. The fact that the maternal mortality ratio is expressed per 100,000 live births demonstrates that it is a relatively rare event. As a result, the maternal mortality estimates are subject to large sampling errors. The 95 percent confidence interval for the 2004-05 rate of 578 is 466-690. The 95 percent confidence intervals indicate that true maternal mortality ratio from the 2010 TDHS ranges from 353 to 556 deaths per 100,000 live births.

Although the confidence intervals overlap, the upper limit of the 2010 TDHS maternal mortality ratio of 556 is lower than the 2004 TDHS estimate of 578, suggesting that the maternal mortality in Tanzania may have started to decline.

GENDER-BASED VIOLENCE 16

16.1 INTRODUCTION

In recent years, there has been increasing concern about violence against women in general and domestic violence in particular, in both developed and developing countries. Not only has domestic violence against women been acknowledged worldwide as a violation of the basic human rights of women, but an increasing amount of research highlights the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations General Assembly, 1991; Heise et al., 1994; Heise et al., 1999; Jejeebhoy, 1998). Gender-based violence occurs in all socioeconomic and cultural backgrounds. In many societies, including Tanzania, women are socialized to accept, tolerate, and even rationalize domestic violence. They may remain silent about such experiences (Zimmerman, 1994). Violence of any kind has a serious impact on the economy of a country. Women bear the brunt of domestic violence, and they bear the health and psychological burdens as well. Victims of domestic violence are abused inside what should be the most secure environment of all–their own homes.

To stop the occurrence of violence, which may cause great physical harm, death, psychological abuse, separation, divorce, and a host of other social ills, the Government of Tanzania has formulated the National Development Vision 2025, The Women and Gender Development Policy of 2000, and the National Plan of Action for the Prevention and Eradication of Violence against Women and Children (2001-2015). The Parliament has also amended the penal code, Cap 16 (Rev. 2002), specifically section 130, which addresses issues of sexual violence.

16.2 DATA COLLECTION

Although gender-based violence is usually defined to include any physical, sexual or psychological violence occurring not only in the family but also within the general community (such as sexual harassment at the workplace and trafficking in women for prostitution), this survey only covers domestic violence occurring within the household. The current survey was the first one in the history of the Demographic and Health Surveys (DHS) in Tanzania to pose questions on domestic violence.

As mentioned earlier, there is a culture of silence surrounding gender-based violence that makes collection of data on this sensitive topic particularly challenging. Even women who want to share their experiences of domestic violence may find doing so difficult because of feelings of shame or fear. The need to establish rapport with the respondent to ensure confidentiality and privacy during the interview, are important for the entire survey but are also critical for ensuring the validity of the data on domestic violence. Complete privacy is also essential to ensure the security of the respondent and the interviewer. Asking about or reporting violence, especially in households where the perpetrator may be present at the time of interview, carries the risk of further violence.

Given these concerns related to the collection of data on violence, organisers of the 2010 Tanzania Demographic and Health Survey (TDHS) took the following steps to ensure the validity of the data and the security of respondents and interviewers:

- The module was specially designed to allow the interviewer to continue the interview only if privacy was ensured. If privacy could not be ensured, the interviewer was instructed to skip the module, thank the respondent, and end the interview.

- Only one eligible woman in each selected household was administered the questions on domestic violence. In households with more than one eligible woman, the woman who was asked the questions was randomly selected using a specially designed, simple procedure. By interviewing only one woman in each household with the module, any security breach caused by other persons in the household knowing that information on domestic violence was being discussed was minimized.

- Informed consent of the respondent was obtained for the survey at the start of the individual interview. The respondent was given the option to not answer any question during the interview. In addition, at the start of the domestic violence section, each respondent was read a statement informing her that she was now going to be asked questions that could be personal in nature because they explored different aspects of the relationship between couples. The statement assured her that her answers were completely confidential and would not be shared with anyone else and that no one else in the household would be asked these questions.

Research on violence suggests that the most common form of domestic violence for adults is spousal violence. Thus, spousal violence was measured using a modified and greatly shortened conflict tactics scale (CTS) used by Strauss (1990). This scale has been found to be effective in measuring domestic violence and can be easily adapted for use in different cultural situations. In the 2010 TDHS, spousal violence was measured using the following set of questions for ever-married women:

Does/Did your (last) husband/partner ever:

(a) Push you, shake you, or throw something at you?

(b) Slap you?

(c) Twist your arm or pull your hair?

(d) Punch you with his fist or with something that could hurt you?

(e) Kick you or drag you or beat you up?

(f) Try to choke you or burn you on purpose?

(g) Threaten or attack you with a knife, gun, or any other weapon?

(h) Physically force you to have sexual intercourse with him even when you did not want to?

(i) Force you to perform any sexual acts you did not want to?

The questions were asked with reference to the current husband for women currently married and with reference to the last husband for women not currently married. Women could answer 'yes' or 'no' to each item, and in cases when the answer was 'yes', women were asked about the frequency of the act in the 12 months preceding the survey. A 'yes' to one or more of items (a) to (g) constitutes evidence of physical violence, and a 'yes' to items (h) or (i) constitutes evidence of sexual violence.

A similar approach was used to measure the prevalence of emotional violence. Respondents were asked the questions:

Does/Did your last husband ever:

(a) Say or do something to humiliate you in front of others?

(b) Threaten to hurt or harm you or someone close to you?

(c) Insult you or make you feel bad about yourself?

Women could answer 'yes' or 'no' to each item, and for items they answered 'yes' to, they were asked about frequency of occurrence in the 12 months preceding the survey.

This approach of asking separately about specific acts has the advantage of not being affected by different understandings of what constitutes violence. A woman has to say whether she has, for example, ever been 'slapped,' not whether she has ever experienced any 'violence.' All women would probably agree on what constitutes a slap, but what constitutes a violent act or is understood as violence may vary across women as it does across cultures. In fact, summary terms such as 'abuse' or 'violence' were avoided in training and not used at all anywhere in the title, design, or implementation of the module. This approach also has the advantage of giving the respondent multiple opportunities to disclose any experience of violence, and, if the different violent acts included in the list are chosen carefully, also allows the assessment of the severity of violence.

In addition to spousal violence, women were asked if they had experienced violence at the hands of anyone other than their current or last husband using the question: "From the time you were 15 years old has anyone (other than your (current/last) husband) hit, slapped, kicked, or done anything else to hurt you physically?" Women who responded 'yes' to this question were asked who had done this and how often during the 12 months preceding the survey.

Although this approach to questioning is widely considered to be optimal, the possibility of some underreporting of violence cannot be entirely ruled out in any survey. Caution should always be exercised in interpreting not only the overall prevalence of violence data, but also differentials in prevalence between subgroups of the population. Although a large part of any substantial difference in prevalence of violence between subgroups undoubtedly reflects actual differences in prevalence, differential underreporting by women in the different subgroups can also contribute to exaggerating or narrowing differences in prevalence to an unknown extent.

In the 2010 TDHS, men were not asked about their experience of violence. However, women were asked if they had ever hit, slapped, kicked, or done anything else to physically hurt their husbands or partners at any time when they were not already beating or physically hurting the women. They were further asked if their husbands or partners drink alcohol or take illegal drugs, as these actions are often associated with violence.

16.3 Experience of Physical Violence

Table 16.1 shows that 39 percent of women age 15-49 have ever experienced physical violence since age 15, and almost one-third of women (33 percent) age 15-49 have experienced physical violence in the previous 12 months.

The social and economic background of a woman has a bearing on her risk of experiencing physical violence. The prevalence of physical violence generally increases with the woman's age as well as with her number of living children. Analysis by marital status reveals that women who are divorced, separated, or widowed are more likely to be exposed to violence (61 percent) than married women (41 percent) or never-married women (23 percent). There are notable variations in the prevalence of physical violence across zones. Although 61 percent of women in the Central zone have experienced physical violence, only 22 percent of women in the Northern zone had this problem. Women in Zanzibar are the least likely to report experiencing physical violence (10 percent). There is no clear relationship between the prevalence of physical violence and the woman's education or wealth status.

Table 16.1 Experience of physical violence

Percentage of women age 15-49 who have ever experienced physical violence since age 15 and percentage who have experienced physical violence during the 12 months preceding the survey, by background characteristics, Tanzania 2010

Background characteristic	Percentage who have ever experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes	
Current age					
15-19	23.8	3.4	18.4	21.8	1,500
20-24	37.9	8.8	25.9	34.7	1,343
25-29	43.5	11.2	26.8	38.0	1,174
30-39	46.3	12.8	25.9	38.7	1,861
40-49	41.7	10.7	20.6	31.3	1,170
Employed past 12 months					
Not employed	24.7	5.1	18.1	23.3	1,346
Employed for cash	38.6	10.1	22.2	32.3	2,686
Employed not for cash	45.0	10.7	27.2	37.9	3,006
Marital status					
Never married	22.7	3.5	17.3	20.8	1,759
Married or living together	40.9	9.5	26.0	35.5	4,471
Divorced/separated/widowed	61.0	21.8	23.9	45.7	818
Number of living children					
0	22.6	4.2	16.6	20.8	1,841
1-2	43.0	10.1	28.0	38.1	2,182
3-4	45.0	11.2	25.3	36.5	1,614
5+	45.7	13.2	23.9	37.1	1,411
Residence					
Urban	35.7	7.5	22.6	30.1	2,003
Rural	39.9	10.2	24.0	34.2	5,045
Mainland/Zanzibar					
Mainland	39.6	9.6	24.1	33.8	6,826
Urban	36.7	7.7	23.3	31.0	1,912
Rural	40.7	10.4	24.5	34.9	4,914
Zanzibar	10.4	2.5	6.3	8.8	222
Unguja	12.4	3.0	7.3	10.3	144
Pemba	6.9	1.7	4.5	6.2	79
Zone					
Western	33.1	6.3	19.4	25.7	1,186
Northern	22.4	6.1	12.0	18.2	1,069
Central	61.1	10.6	37.6	48.1	563
Southern Highlands	46.4	11.9	29.6	41.5	980
Lake	50.4	14.9	31.9	46.8	1,251
Eastern	36.7	9.9	21.7	31.7	1,104
Southern	35.1	6.8	22.1	28.9	672
Region					
Dodoma	70.5	8.9	40.8	49.6	339
Arusha	29.4	11.1	16.1	27.2	279
Kilimanjaro	22.6	5.0	8.5	13.4	287
Tanga	15.7	3.0	9.1	12.1	349
Morogoro	50.1	14.6	33.7	48.3	331
Pwani	28.3	9.9	17.0	26.9	181
Dar es Salaam	31.8	7.4	16.4	23.8	592
Lindi	24.4	7.7	15.8	23.5	141
Mtwara	26.8	7.5	17.6	25.1	283
Ruvuma	50.8	5.4	30.9	36.3	248
Iringa	42.3	5.6	28.2	33.9	344
Mbeya	48.8	14.6	31.6	46.2	455
Singida	46.8	13.1	32.7	45.8	224
Tabora	41.8	8.9	27.3	36.2	303
Rukwa	48.2	17.2	27.2	44.3	181
Kigoma	37.0	4.2	28.2	32.4	322
Shinyanga	26.2	6.2	10.0	16.2	561
Kagera	49.4	17.8	29.1	46.9	408
Mwanza	43.6	9.5	32.3	41.8	576
Mara	66.4	21.8	35.7	57.5	267
Manyara	24.6	6.6	18.0	24.6	154
Unguja North	8.2	1.8	5.8	7.6	34
Unguja South	17.7	5.3	9.9	15.2	20
Town West	12.7	3.0	7.3	10.2	90
Pemba North	6.3	1.9	3.5	5.4	39
Pemba South	7.5	1.5	5.4	6.9	40

Continued...

Table 16.1—*Continued*

Background characteristic	Percentage who have ever experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes	
Education					
No education	39.7	12.8	20.2	33.0	1,331
Primary incomplete	41.7	10.4	24.9	35.3	997
Primary complete	41.2	9.4	25.6	34.9	3,579
Secondary+	27.1	4.8	20.1	25.0	1,141
Wealth quintile					
Lowest	45.6	13.8	24.4	38.2	1,174
Second	35.2	9.4	20.2	29.6	1,355
Middle	41.8	8.7	27.0	35.7	1,404
Fourth	42.8	9.7	27.4	37.1	1,458
Highest	30.3	6.7	19.5	26.2	1,657
Total	38.7	9.4	23.6	33.0	7,048

Note: Total includes 11 women with employment status missing
[1] Includes experience of physical violence in the past 12 months

Table 16.2 looks at the perpetrators, and distinguishes the women by their marital status. For women who have ever been married, the main perpetrators of physical violence are almost exclusively their current or former husband or partner. Mothers or stepmothers are cited by 4 percent of ever-married women. Among never-married women who have experienced physical violence, the most often cited perpetrators are teachers (35 percent), mothers and step-mothers (20 percent), and siblings (19 percent).

Table 16.2 Persons committing physical violence

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to the respondent's marital status, Tanzania 2010

Person	Marital status		Total
	Ever married	Never married	
Current husband/partner	69.5	na	59.3
Former husband/partner	24.5	na	20.9
Current boyfriend	0.2	4.0	0.8
Former boyfriend	1.8	6.1	2.4
Father/step-father	0.5	2.3	0.8
Mother/ step-mother	3.6	19.5	5.9
Sister/brother	2.5	19.4	5.0
Other relative	0.9	14.8	3.0
Mother-in-law	0.2	na	0.2
Other in-laws	1.0	na	0.9
Teacher	2.3	35.2	7.1
Employer/someone at work	0.1	2.8	0.5
Other	2.9	15.3	4.7
Number of women	2,328	398	2,727

na = Not applicable

16.4 EXPERIENCE OF SEXUAL VIOLENCE

The 2010 TDHS investigated women's experience of sexual violence, including whether the respondent's first sexual intercourse was forced against her will. Force at first sexual intercourse is not uncommon among Tanzanian women; 10 percent of women age 15-49 report that their first sexual intercourse was forced against their will (Table 16.3). Women who had sex for the first time before age 15 are more likely to report that their first intercourse was forced than were those who initiated sex at the time of first marriage.

In addition to the question of whether first sexual intercourse was forced, the 2010 TDHS included two sets of questions on sexual violence. The first set of questions asked women about sexual violence committed by their current husband or partner, if they were currently married, and by their most recent husband or partner, if they were currently divorced, separated, or widowed. The second set asked all respondents whether they had ever, as a child or as an adult, experienced sexual violence. Sexual violence here includes being forced to have sexual intercourse or perform any other sexual acts against her will. Tables 16.4 and 16.5 present the results of experience of sexual violence. The subset of results on sexual violence by a spouse or intimate partner is explored later in the chapter.

Table 16.3 Force at sexual initiation

Percentage of women age 15-49 who have ever had sexual intercourse who say that their first experience of sexual intercourse was forced against their will, by age at first sexual intercourse and whether the first sexual intercourse was at the time of first marriage or before, Tanzania 2010

	Percentage whose first sexual intercourse was forced against their will	Number of women who have ever had sex
Age at first sexual intercourse		
<15	11.3	1,020
15-19	10.8	4,085
20-24	9.1	689
25-29	4.5	110
First sexual intercourse was:		
At the time of first marriage/ first cohabitation	8.6	3,011
Before first marriage/first cohabitation[1]	12.6	2,897
Total	10.4	6,085

Note: Total includes 177 women missing age/timing of first sexual intercourse and 4 women whose age at first intercourse was 30-49

[1] Includes never married women

Table 16.4 shows that 20 percent of women in the TDHS sample report that they have ever experienced sexual violence. The likelihood of experiencing physical violence increases with the woman's age, from 13 percent for women age 15-19 to 25 percent for women age 25-29. Over one-third of women who are divorced, separated, or widowed have experienced sexual violence, compared with only 22 percent of women who are currently married and 11 percent of never-married women.

Analysis across zones indicates that the highest prevalence is in Southern Highlands (29 percent). As is the case with physical violence, there is no direct relationship between the prevalence of sexual violence with the woman's education level or wealth status.

Table 16.4 Experience of sexual violence

Percentage of women age 15-49 who have ever experienced sexual violence, by background characteristics, Tanzania 2010

Background characteristic	Percentage who have ever experienced sexual violence[1]	Number of women
Current age		
15-19	13.2	1,500
20-24	18.6	1,343
25-29	25.0	1,174
30-39	24.4	1,861
40-49	20.3	1,170
Employed past 12 months		
Not employed	12.6	1,346
Employed for cash	23.1	2,686
Employed not for cash	21.2	3,006
Marital status		
Never married	10.6	1,759
Married or living together	21.7	4,471
Divorced/separated/widowed	33.7	818
Residence		
Urban	20.2	2,003
Rural	20.4	5,045
Mainland/Zanzibar		
Mainland	20.8	6,826
Urban	20.9	1,912
Rural	20.7	4,914
Zanzibar	6.5	222
Unguja	7.8	144
Pemba	4.1	79
Zone		
Western	15.4	1,186
Northern	12.8	1,069
Central	16.7	563
Southern Highlands	29.2	980
Lake	27.8	1,251
Eastern	23.3	1,104
Southern	16.9	672
Region		
Dodoma	13.3	339
Arusha	17.5	279
Kilimanjaro	11.4	287
Tanga	11.3	349
Morogoro	26.6	331
Pwani	14.7	181
Dar es Salaam	24.1	592
Lindi	11.0	141
Mtwara	8.0	283
Ruvuma	30.4	248
Iringa	26.5	344
Mbeya	30.8	455
Singida	21.8	224
Tabora	9.8	303
Rukwa	30.2	181
Kigoma	31.9	322
Shinyanga	8.9	561
Kagera	29.2	408
Mwanza	24.5	576
Mara	32.5	267
Manyara	10.3	154
Unguja North	9.5	34
Unguja South	12.1	20
Town West	6.2	90
Pemba North	3.5	39
Pemba South	4.7	40

Continued...

Table 16.4—*Continued*

Background characteristic	Percentage who have ever experienced sexual violence[1]	Number of women
Education		
No education	19.0	1,331
Primary incomplete	20.9	997
Primary complete	22.9	3,579
Secondary+	13.2	1,141
Wealth quintile		
Lowest	18.2	1,174
Second	19.1	1,355
Middle	21.6	1,404
Fourth	24.0	1,458
Highest	18.5	1,657
Total	20.3	7,048

Note: Total includes 11 women with employment status missing
[1] Includes those whose sexual initiation was forced against their will

Table 16.5 shows information on the types of persons who are reported to have committed sexual violence against women. Similar to the findings for physical violence, there are large differentials by the woman's marital status. In the vast majority of cases, sexual violence is perpetrated by persons with whom the woman has a close personal relationship; either their current husband or partners (42 percent) or former husband or partners (18 percent) or current/former boyfriend (9 percent). It is worth noting that only 3 percent of sexual violence was committed by strangers. Women who have never been married report that the main perpetrators of sexual violence are their friends/acquaintances (32 percent) or current/former boyfriends (27 percent).

Table 16.5 Persons committing sexual violence

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons committing sexual violence, according to current marital status, Tanzania 2010

	Marital status		
Person	Ever married	Never married	Total
Current husband/partner	48.1	na	41.9
Former husband/partner	20.7	na	18.0
Current/former boyfriend	6.7	27.4	9.4
Father	0.3	0.0	0.2
Other relative	1.5	7.1	2.2
In-law	0.3	0.0	0.2
Own friend acquaintance	6.4	32.4	9.8
Family friend	0.6	2.0	0.8
Teacher	0.2	0.0	0.2
Employer/someone at work	0.4	0.5	0.4
Police/soldier	0.1	0.0	0.1
Stranger	1.8	11.0	3.0
Other	2.2	6.3	2.8
Missing	10.6	13.2	11.0
Number of women	1,246	186	1,432

na = Not applicable

Table 16.6 shows the percentage of women who have experienced different combinations of physical and sexual violence, by age. Overall, almost half (45 percent) of women age 15-49 have experienced either physical or sexual violence. Specifically, 25 percent of women have experienced only physical violence, 7 percent have experienced only sexual violence, and 14 percent have experienced both physical and sexual violence.

Table 16.6 Experience of different forms of violence

Percentage of women age 15-49 who have experienced different forms of violence by current age, Tanzania 2010

Age	Physical violence only	Sexual violence only[1]	Physical and sexual violence[1]	Physical or sexual violence[1]	Number of women
15-19	17.1	6.4	6.8	30.3	1,500
15-17	14.9	5.5	5.3	25.7	958
18-19	20.9	8.0	9.3	38.2	542
20-24	25.6	6.2	12.4	44.2	1,343
25-29	27.0	8.5	16.5	52.0	1,174
30-39	28.3	6.4	18.0	52.7	1,861
40-49	28.0	6.6	13.7	48.3	1,170
Total	25.1	6.8	13.6	45.4	7,048

[1] Includes forced sexual initiation

Women who have ever been pregnant were asked about the experience of physical violence during pregnancy. The findings presented in Table 16.7 indicate that 9 percent of women in Tanzania experienced physical violence during pregnancy. The likelihood of having experienced violence during pregnancy increases with the number of living children the woman has, from 5 percent of women who have ever been pregnant and have no living children to 11 percent among women who have three or more children. This relation is not unexpected because women with more pregnancies are more frequently exposed to the risk of physical violence during pregnancy.

Never-married women who have ever been pregnant also experienced physical abuse during pregnancy, albeit at a lower rate than currently married women (6 percent compared with 8 percent). Seven percent of urban women experience physical violence while pregnant compared with 10 percent of rural women. Regional differences on physical violence during pregnancy are similar to the differentials in the prevalence of physical violence (see Table 16.1), with women in the Central zone being the most at risk. Women who have attended secondary education and women in the highest wealth quintile have the lowest risk of being physically abused during pregnancy. For example, while 5 percent of women in the highest wealth quintile experienced physical violence during pregnancy, the corresponding proportion for women in the lower wealth quintiles is 9 percent or higher.

Table 16.7 Violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Tanzania 2010

Background characteristic	Percentage who have ever experienced physical violence during pregnancy	Number of women who have ever been pregnant
Current age		
15-19	9.3	348
20-24	8.8	1,070
25-29	10.2	1,132
30-39	9.7	1,812
40-49	7.9	1,152
Marital status		
Never married	6.4	365
Married or living together	7.9	4,359
Divorced/separated/widowed	17.8	791
Number of living children		
0	4.9	308
1-2	7.7	2,182
3-4	10.8	1,614
5+	10.8	1,411
Residence		
Urban	7.3	1,446
Rural	9.9	4,069
Mainland/Zanzibar		
Mainland	9.3	5,381
Urban	7.4	1,394
Rural	10.0	3,987
Zanzibar	4.9	134
Unguja	5.6	87
Pemba	3.6	47
Zone		
Western	6.3	927
Northern	6.0	799
Central	14.6	480
Southern Highlands	12.9	778
Lake	12.8	988
Eastern	6.0	840
Southern	8.8	569
Region		
Dodoma	20.0	301
Arusha	8.1	206
Kilimanjaro	5.1	200
Tanga	4.5	273
Morogoro	9.0	281
Pwani	6.6	159
Dar es Salaam	3.6	401
Lindi	4.6	123
Mtwara	4.6	235
Ruvuma	15.8	212
Iringa	9.5	250
Mbeya	13.3	370
Singida	5.6	179
Tabora	5.5	251
Rukwa	17.3	158
Kigoma	3.4	253
Shinyanga	8.5	422
Kagera	17.4	295
Mwanza	6.5	469
Mara	19.8	224
Manyara	7.2	120
Unguja North	2.9	20
Unguja South	7.8	15
Town West	6.0	52
Pemba North	6.1	23
Pemba South	1.2	24

Continued...

Table 16.7—*Continued*

Background characteristic	Percentage who have ever experienced physical violence during pregnancy	Number of women who have ever been pregnant
Education		
No education	10.5	1,233
Primary incomplete	11.7	778
Primary complete	8.6	3,052
Secondary+	5.6	452
Wealth quintile		
Lowest	11.9	1,011
Second	9.1	1,122
Middle	9.0	1,127
Fourth	10.8	1,173
Highest	5.3	1,081
Total	9.2	5,515

16.5 MARITAL CONTROL

Gender-based violence is not restricted to physical and sexual violence. Verbal abuse, restrictions in freedom of movement, and withholding of funds can also constitute violent behaviour. Accordingly, women interviewed in the 2010 TDHS were also asked about various ways in which their husbands/marital partners try to control their actions. Specifically, ever-married women were asked if their husband:

(a) Is jealous or angry if she communicates with other men;

(b) Frequently accuses her of being unfaithful;

(c) Does not permit her to see her female friends;

(d) Tries to limit her contact with her family;

(e) Insists on knowing where she is at all times; and

(f) Does not trust her with any money.

Table 16.8 shows that the most commonly reported controlling behaviour exhibited by husbands/partners is to be jealous or angry when the woman talks to other men (66 percent). Almost half (49 percent) report that their husbands insist on knowing where they are at all times, 16 percent say their husbands do not trust them with money, 32 percent frequently accuse them of being unfaithful, and 20 percent do not permit them to meet their female friends. A less common controlling behaviour is to limit contact with the woman's family (18 percent). As a summary measure, 35 percent of ever-married women say their husbands display at least three of the six types of controlling behaviours, while 23 percent say their husbands do not display any of the specific behaviours.

Half of women who are divorced, separated, or widowed report that their current or last husband displayed controlling behaviours, many more than women who are currently married (32 percent). Similarly, women who have been married more than once are more likely than women in their first marriage to say that their husbands try to control their actions.

Table 16.8 Degree of marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husband/partner ever demonstrates specific types of controlling behaviours, according to background characteristics, Tanzania 2010

Background characteristic	Percentage of women whose husband: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Does not trust her with any money	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of women
Current age									
15-19	56.6	28.6	24.5	13.3	45.6	14.9	32.8	29.0	286
20-24	64.8	32.0	21.3	19.6	49.3	12.9	34.4	22.0	975
25-29	71.2	35.6	21.9	20.2	52.7	17.7	39.0	19.0	1,082
30-39	64.6	30.2	19.5	18.8	48.7	16.3	34.4	24.0	1,802
40-49	65.4	32.3	17.4	15.1	45.0	14.5	33.6	25.1	1,144
Employed past 12 months									
Not employed	62.6	23.9	21.2	13.4	48.1	16.6	31.6	26.5	554
Employed for cash	67.8	33.7	20.1	19.3	53.6	15.9	37.1	21.5	2,231
Employed not for cash	64.6	32.3	19.9	18.1	44.4	14.9	34.1	23.8	2,495
Number of living children									
0	61.5	29.6	20.9	19.0	52.6	16.1	36.5	25.4	373
1-2	67.3	32.8	23.1	19.7	49.2	15.1	35.3	21.7	1,923
3-4	65.9	31.8	19.7	17.6	49.5	16.6	36.4	23.2	1,588
5+	64.5	31.8	16.5	16.4	46.1	14.6	32.9	24.3	1,405
Marital status and duration									
Currently married woman	64.1	29.9	17.3	15.5	46.8	13.1	32.3	24.4	4,471
Married only once	62.8	27.9	17.2	15.3	46.5	11.8	30.8	25.1	3,551
0-4 years	61.2	26.5	20.7	16.7	47.3	12.1	30.5	25.8	933
5-9 years	63.9	29.4	18.3	13.5	47.5	12.6	31.2	22.4	851
10+ years	63.1	27.8	14.7	15.5	45.5	11.3	30.8	26.1	1,766
Married more than once	69.1	38.0	18.0	16.2	48.2	17.9	38.0	21.8	920
Divorced/separated/widowed	74.5	43.2	35.6	32.3	58.9	28.6	50.3	16.0	818
Residence									
Urban	70.3	32.7	23.9	21.7	58.1	18.0	39.3	17.7	1,346
Rural	64.2	31.8	18.9	16.9	45.5	14.6	33.6	24.9	3,943
Mainland/Zanzibar									
Mainland	66.3	32.5	20.5	18.4	49.0	15.7	35.6	22.6	5,152
Urban	71.4	33.7	24.6	22.3	58.9	18.6	40.4	16.5	1,293
Rural	64.5	32.1	19.1	17.1	45.7	14.8	34.0	24.6	3,859
Zanzibar	45.5	13.0	8.2	8.2	36.4	5.3	14.2	43.9	137
Unguja	48.3	13.6	8.7	8.8	44.3	4.9	16.5	41.4	89
Pemba	40.4	11.9	7.2	7.1	22.1	6.1	9.9	48.5	48
Zone									
Western	51.7	33.2	16.7	16.7	44.3	9.9	31.3	34.7	906
Northern	67.2	23.0	13.7	13.4	43.9	7.3	26.3	25.5	768
Central	70.2	34.5	18.5	17.5	29.9	13.2	29.6	25.2	464
Southern Highlands	68.0	30.6	21.9	16.9	59.5	19.0	38.9	15.1	743
Lake	68.8	33.5	22.4	20.3	51.4	18.5	38.9	19.5	936
Eastern	75.6	42.2	27.6	28.3	67.9	21.7	49.1	11.7	790
Southern	65.5	30.1	22.3	13.3	34.6	21.7	31.7	27.2	546
Region									
Dodoma	77.7	37.9	19.3	19.2	31.8	14.1	30.8	19.8	287
Arusha	57.0	22.2	17.5	14.8	52.2	10.0	29.0	31.1	198
Kilimanjaro	66.4	24.6	12.1	16.0	41.8	4.6	22.4	27.4	193
Tanga	74.0	26.0	11.6	11.4	42.5	8.3	29.5	20.0	264
Morogoro	79.0	41.9	28.3	22.8	70.9	18.4	52.9	9.9	250
Pwani	77.6	33.2	22.5	26.7	69.5	13.0	44.6	7.0	150
Dar es Salaam	72.6	45.7	29.2	32.5	65.4	27.2	48.4	14.6	391
Lindi	52.0	22.2	14.7	11.5	26.8	12.6	22.0	42.9	122
Mtwara	65.0	22.3	18.9	11.9	15.5	13.1	20.5	32.2	226
Ruvuma	74.5	43.7	31.0	16.0	61.3	37.1	50.6	11.7	197
Iringa	70.7	32.8	29.6	20.5	51.8	25.2	45.1	16.1	233
Mbeya	63.1	30.0	19.9	16.3	58.1	18.0	37.8	17.7	357
Singida	58.1	28.8	17.3	14.7	26.9	11.7	27.7	33.9	177
Tabora	60.3	39.6	16.6	16.0	42.4	10.5	29.3	29.7	244
Rukwa	75.6	28.5	14.7	12.6	74.6	12.1	31.9	7.5	153
Kigoma	49.6	29.7	13.9	19.1	58.5	14.3	32.8	23.7	242
Shinyanga	47.9	31.5	18.3	15.6	37.2	7.0	31.5	43.9	421
Kagera	65.8	33.0	21.7	15.7	51.8	18.2	36.3	22.5	286
Mwanza	67.4	31.3	22.5	22.9	54.0	20.2	40.9	19.5	442
Mara	75.9	38.7	23.0	21.3	45.2	15.3	38.0	15.4	208
Manyara	71.0	14.8	14.7	11.4	36.0	5.3	20.7	25.7	113
Unguja North	49.6	19.2	9.4	10.5	51.3	7.8	17.7	32.3	21
Unguja South	45.8	23.3	11.9	11.3	34.9	7.4	24.1	44.7	15
Town West	48.4	8.6	7.5	7.4	44.0	3.0	13.9	44.2	53
Pemba North	38.8	13.8	6.1	3.5	19.9	4.1	7.0	49.6	24
Pemba South	42.1	10.0	8.3	10.7	24.3	8.0	12.7	47.5	24

Continued...

Table 16.8—*Continued*

Background characteristic	Percentage of women whose husband: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Does not trust her with any money	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of women
Education									
No education	60.6	30.6	17.9	17.1	42.4	16.6	32.3	26.9	1,214
Primary incomplete	69.0	38.6	24.4	18.1	51.4	15.1	40.9	20.9	746
Primary complete	66.7	31.9	20.0	18.2	49.5	15.6	35.2	22.2	2,948
Secondary+	67.9	24.3	19.7	20.7	56.8	11.2	31.9	22.6	380
Wealth quintile									
Lowest	64.0	33.8	18.1	18.2	40.9	15.3	33.9	27.4	1,003
Second	60.7	30.1	19.9	16.2	41.6	13.9	31.9	27.9	1,084
Middle	64.2	31.3	19.6	15.9	44.9	16.8	33.1	23.8	1,090
Fourth	69.8	35.5	23.6	19.9	58.8	15.0	41.7	19.6	1,091
Highest	70.1	29.3	19.3	20.5	57.0	16.4	34.6	16.8	1,021
Total	65.7	32.0	20.1	18.1	48.7	15.5	35.1	23.1	5,289

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 10 women with employment status missing.

Ever-married women age 25-29, women employed for cash, and urban women are more likely than other women to report that their husbands display three or more specific controlling behaviours. The number of children that a woman has does not affect her husband's controlling behaviour. Women in Zanzibar report lower rates of controlling behaviours from their husbands than those living in Mainland. In Mainland Tanzania, the proportion of women who say their husbands display at least three of the controlling behaviours varies by zone and region, ranging from 53 percent in Morogoro to 21 percent in Mtwara. There is no clear correlation between the proportion of women who report that their husbands show controlling behaviours and either the women's educational level or wealth status.

16.6 MARITAL VIOLENCE

Marital violence refers to violence perpetrated by partners in a marital union. In the 2010 TDHS, currently married women were asked about violence perpetrated by their current husband and formerly married women were asked about violence perpetrated by their most recent husband. Respondents were asked about seven specific acts of physical violence, two of sexual violence, and three of emotional abuse.

Table 16.9 shows the proportion of ever-married women age 15-49 who have experienced each of the specific forms of violence at the hands of their current or former husbands. The different types of violence are not mutually exclusive; therefore, women may report experiencing multiple forms of violence.

Table 16.9 shows that 39 percent of ever-married women age 15-49 have ever experienced physical abuse perpetrated by their current or former husbands, 17 percent experienced sexual violence, and 36 percent experienced emotional violence. In summary, 44 percent of ever-married women have experienced some form of physical and/or sexual violence, and 13 percent have experienced both physical and sexual violence. One in two ever-married women age 15-49 report having experienced either one or a combination of the three types of violence—emotional, physical and sexual violence—while 11 percent report experiencing all three violent behaviours.

Regarding violence occurring in the past 12 months, 33 percent of women experienced physical violence, 14 percent experienced sexual violence, and 32 percent experienced emotional violence.

Table 16.9 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey, committed by their husband/partner, Tanzania 2010

Form of violence	Ever	In the past 12 months[1]		
		Often	Sometimes	Often or sometimes
Physical violence				
Any	39.2	10.4	23.0	33.4
Pushed her, shook her, or threw something at her	16.4	4.3	9.3	13.7
Slapped her	35.6	8.5	21.4	29.9
Twisted her arm or pulled her hair	6.3	1.8	3.6	5.4
Punched her with his fist or with something that could hurt her	17.6	5.3	10.0	15.3
Kicked her, dragged her, or beat her up	12.8	3.9	6.9	10.8
Tried to choke her or burn her on purpose	3.0	0.9	1.6	2.5
Threatened her or attacked her with a knife, gun, or any other weapon	3.2	0.7	2.1	2.8
Sexual violence				
Any	17.2	5.1	8.7	13.7
Physically forced her to have sexual intercourse with him even when she did not want to	13.9	4.6	8.3	12.9
Forced her to perform any sexual acts she did not want to	7.7	2.1	4.5	6.6
Sexual initiation was with current or most recent husband and was forced[2]	3.3	na	na	na
Emotional violence				
Any	36.3	11.8	20.1	31.9
Said or did something to humiliate her in front of others	15.3	5.0	8.4	13.4
Threatened to hurt or harm her or someone close to her	9.1	2.7	5.2	7.9
Insulted her or made her feel bad about herself	33.7	10.6	19.1	29.7
Any form of physical and/or sexual violence	43.6	12.9	23.9	36.8
Any form of physical and sexual violence	12.7	2.7	6.3	9.0
Any form of emotional, physical, and/or sexual violence	50.2	17.3	26.5	43.8
Any form of emotional, physical, and sexual violence	10.9	2.0	4.3	6.3
Number of ever married women	5,289	5,086	5,086	5,086

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.
[1] Excludes widows
[2] Excludes women who have been married more than once because their sexual initiation could not have been with the current/ most recent partner
na = Not applicable

Among the spousal acts of physical violence, slapping was the most commonly reported act, experienced by 36 percent of ever-married women, followed by being punched (18 percent) and being pushed, shaken, or had something thrown at them (16 percent). Figure 16.1 shows the individual types of physical and sexual violence ever experienced. Among acts of sexual violence, being forced to have sex with their husbands when they did not want to is reported by 14 percent of women, while the most often cited emotional violence is being insulted or made to feel bad about themselves, reported by 34 percent of women.

Figure 16.1 Percentage of Ever-married Women Who Have Experienced Violence by Their Current or Last Husband/Partner (Ever, Often, Sometimes, and in Past 12 Months)

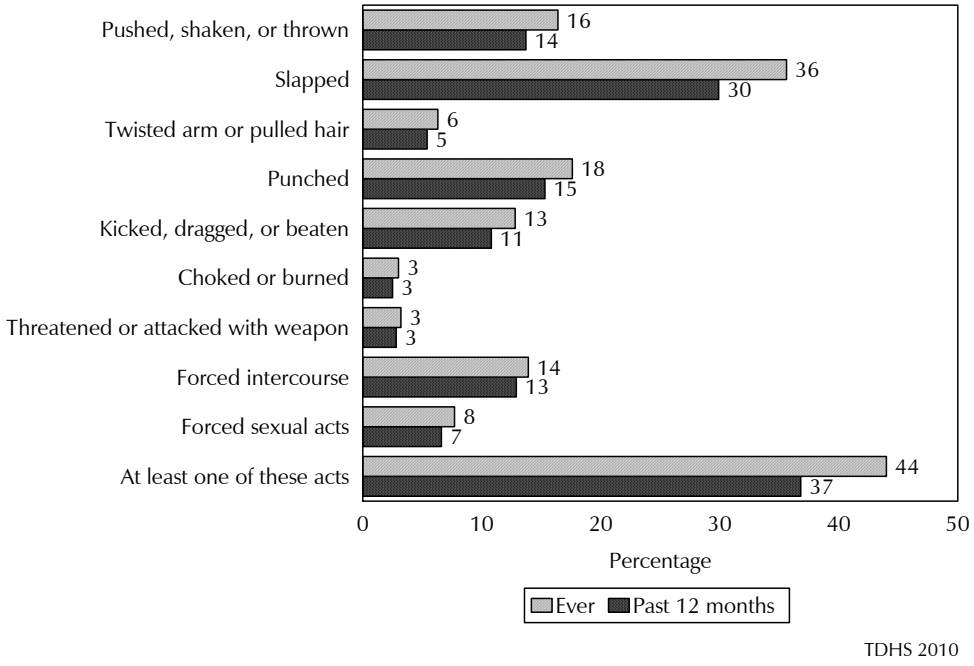


Table 16.10 shows that, in general, the percentage of women who have experienced any emotional, physical, or sexual violence at the hands of their current or last husbands/partners increases with the woman's age and number of living children. Women who are not employed are less likely than women who are employed to experience spousal violence. Experience of spousal violence has a strong relationship with marital status; women who are divorced, separated, or widowed are much more likely than currently married women to have experienced each type of violence. For example, 68 percent of formerly married women experienced emotional, physical, or sexual violence compared with 47 percent of currently married women. This finding suggests that experience of violence may increase the likelihood of marital dissolution.

There are large variations in the extent of emotional, physical, or sexual violence by husbands across zones, ranging from 77 percent of women in the Central zone to 31 percent of women in the Northern zone. Women in Zanzibar are the least likely to have experienced any type of violence (11 percent). Women who have attended secondary school are the least likely to have suffered any type of violence at the hands of their husband (36 percent compared with 48 percent or higher). The same pattern is shown by wealth status; whereas 43 percent of women in the highest wealth quintile have experienced emotional, physical, or sexual violence, the corresponding proportion for women in the lower quintiles is 53 percent.

Data in Table 16.10 suggest that violence runs in the family: women whose fathers beat their mothers are much more likely than women whose fathers did not beat their mothers to experience emotional, physical, or sexual violence (66 percent and 38 percent, respectively).

Table 16.10 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 by whether they have ever experienced emotional, physical, or sexual violence committed by their husband/partner, according to background characteristics, Tanzania 2010

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical or sexual violence	Emotional, physical, or sexual violence	Number of women
Current age						
15-19	23.1	31.6	19.6	40.8	46.1	286
20-24	32.7	35.3	16.4	40.0	47.3	975
25-29	38.3	40.7	19.1	44.3	50.5	1,082
30-39	38.7	42.2	18.6	46.6	52.4	1,802
40-49	37.0	38.2	13.2	42.0	49.8	1,144
Employed past 12 months						
Not employed	21.9	29.7	11.0	32.5	37.0	554
Employed for cash	32.9	36.3	17.9	41.2	46.8	2,231
Employed not for cash	42.5	43.8	17.7	48.2	56.1	2,495
Number of living children						
0	22.6	25.6	12.1	30.5	34.9	373
1-2	32.9	38.5	18.3	42.9	48.4	1,923
3-4	38.8	40.4	16.7	45.2	52.8	1,588
5+	41.8	42.3	17.4	46.2	53.7	1,405
Marital status and duration						
Currently married woman	33.3	36.0	15.3	40.4	46.9	4,471
Married only once	33.0	36.8	15.6	41.3	47.7	3,551
0-4 years	23.5	28.1	14.3	34.0	38.8	933
5-9 years	34.6	39.9	17.5	44.0	51.0	851
10+ years	37.2	39.9	15.4	43.9	50.8	1,766
Married more than once	34.7	33.2	14.2	37.0	43.9	920
Divorced/separated/widowed	52.6	56.3	27.3	60.9	68.2	818
Residence						
Urban	33.2	36.8	16.1	41.9	48.1	1,346
Rural	37.4	40.0	17.5	44.2	50.9	3,943
Mainland/Zanzibar						
Mainland	37.1	40.0	17.5	44.5	51.2	5,152
Urban	34.3	38.0	16.6	43.3	49.6	1,293
Rural	38.0	40.7	17.8	44.9	51.8	3,859
Zanzibar	7.9	7.0	3.8	8.6	11.4	137
Unguja	8.9	7.6	3.9	8.7	12.5	89
Pemba	6.1	6.0	3.5	8.3	9.4	48
Zone						
Western	27.7	31.0	10.9	34.8	39.0	906
Northern	18.8	24.1	10.1	27.5	30.6	768
Central	67.4	61.8	14.4	64.4	77.4	464
Southern Highlands	50.0	47.9	26.5	54.7	65.4	743
Lake	49.1	50.9	26.6	56.9	65.3	936
Eastern	29.3	37.8	18.7	42.5	47.1	790
Southern	25.5	32.7	12.3	35.6	40.8	546
Region						
Dodoma	77.7	68.6	12.2	70.6	85.0	287
Arusha	27.2	34.3	11.5	36.2	40.6	198
Kilimanjaro	13.6	25.5	10.6	30.2	30.9	193
Tanga	15.1	12.3	8.7	16.4	20.6	264
Morogoro	36.1	43.3	22.2	46.2	54.9	250
Pwani	22.3	26.8	9.4	28.3	33.8	150
Dar es Salaam	27.5	38.5	20.1	45.7	47.2	391
Lindi	17.4	20.8	3.3	21.6	30.0	122
Mtwara	20.4	25.2	3.2	26.3	33.1	226
Ruvuma	36.3	48.8	28.2	54.8	56.4	197
Iringa	45.2	49.3	20.2	54.1	62.7	233
Mbeya	51.2	46.9	28.3	54.6	67.0	357
Singida	50.7	50.7	18.0	54.6	65.1	177
Tabora	22.7	36.1	7.0	36.4	40.1	244
Rukwa	54.4	48.0	31.6	55.7	65.5	153
Kigoma	43.2	35.6	24.7	47.9	56.2	242
Shinyanga	21.8	25.4	5.1	26.3	28.5	421
Kagera	54.2	49.7	25.9	54.8	64.2	286
Mwanza	40.2	43.8	24.3	51.3	60.0	442
Mara	61.2	67.6	32.4	71.7	78.0	208
Manyara	21.3	31.5	10.2	33.6	35.7	113
Unguja North	10.9	6.5	4.0	7.9	11.7	21
Unguja South	11.3	14.3	4.9	16.7	21.7	15
Town West	7.4	6.1	3.6	6.7	10.3	53
Pemba North	5.9	6.7	2.4	7.0	8.3	24
Pemba South	6.3	5.4	4.5	9.7	10.5	24

Continued...

Table 16.10—*Continued*

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical or sexual violence	Emotional, physical, or sexual violence	Number of women
Education						
No education	37.3	38.7	14.7	41.6	48.1	1,214
Primary incomplete	40.4	44.1	19.8	48.6	56.0	746
Primary complete	36.3	39.3	17.8	44.5	51.3	2,948
Secondary+	25.2	30.2	14.6	32.9	36.4	380
Wealth quintile						
Lowest	41.9	44.4	16.3	46.7	53.4	1,003
Second	36.3	36.0	15.4	39.3	46.6	1,084
Middle	36.6	40.7	17.9	46.8	53.9	1,090
Fourth	38.0	42.4	21.8	48.1	53.2	1,091
Highest	28.8	32.3	14.2	36.9	43.4	1,021
Respondent's father beat her mother						
Yes	48.2	52.3	23.7	58.0	66.0	2,032
No	26.5	28.7	11.6	32.1	37.6	2,836
Total	36.3	39.2	17.2	43.6	50.2	5,289

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 10 women with employment status missing and 422 with no information about father's abuse of mother.

Table 16.11 shows information about spousal violence according to the husband's characteristics and indicators of women's empowerment. The better educated men are less likely than men with less education to show violent behaviour. For example, 48 percent of women whose husband had no education experienced emotional, physical, or sexual violence compared with 39 percent of women whose husband had secondary or higher education. There is a strong positive relationship between alcohol consumption and the tendency to be violent. Women whose husbands are often drunk are twice as likely to experience emotional, physical, or sexual violence as those whose spouses do not drink alcohol (81 and 39 percent, respectively).

It is interesting to note that spousal age difference is related to how women are treated by their husbands; women who are the same age as their husbands are more likely to experience violence than those who are either older or younger than their husbands. There are small variations by differences in spousal education.

The number of marital control behaviours displayed by the husband is closely associated with the prevalence of violence. The more controlling behaviours displayed by the husband, the greater is the likelihood of the wife reporting experience of spousal violence. For instance, while 26 percent of women who report no controlling behaviour suffer from emotional, physical, or sexual violence, the corresponding proportion for women who report five or six of the controlling behaviours is 84 percent.

Table 16.11 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have ever suffered emotional, physical, or sexual violence committed by their husband/partner, according to his characteristics, marital characteristics, and empowerment indicators, Tanzania 2010

Husband's/couple's characteristics	Emotional violence	Physical violence	Sexual violence	Physical or sexual violence	Emotional, physical, or sexual violence	Number of women
Husband's education						
No education	38.7	37.3	14.6	40.7	48.2	800
Primary incomplete	38.8	41.2	18.1	45.1	52.2	711
Primary complete	37.1	41.7	18.3	46.3	52.4	3,134
Secondary +	26.3	27.1	14.0	32.5	39.4	624
Husband's alcohol consumption						
Does not drink	27.3	28.4	13.0	32.6	39.3	3,186
Drinks/never gets drunk	22.5	26.9	15.5	37.3	44.3	154
Gets drunk sometimes	41.5	47.0	18.0	51.6	59.5	1,154
Gets drunk very often	67.6	73.3	32.9	77.2	81.0	779
Spousal age difference[1]						
Wife older	38.2	40.6	12.5	43.7	46.3	169
Wife is same age	36.0	40.5	23.0	45.1	52.6	139
Wife's 1-4 years younger	32.9	37.8	16.3	42.0	48.0	1,416
Wife's 5-9 years younger	32.0	34.7	14.7	39.7	45.9	1,571
Wife's 10+ years younger	34.4	34.2	14.5	38.0	45.9	1,156
Spousal education difference						
Husband better educated	35.0	38.1	17.6	42.6	48.6	1,821
Wife better educated	38.7	39.9	18.9	44.8	51.3	873
Both equally educated	36.0	40.3	17.4	45.1	51.6	2,109
Neither educated	38.0	37.1	11.2	38.5	47.4	450
Number of marital control behaviours displayed by husband						
0	15.4	17.9	5.0	20.0	25.8	1,222
1-2	29.9	33.6	13.7	38.8	45.1	2,212
3-4	51.8	54.8	24.7	59.6	67.6	1,313
5-6	72.1	71.9	40.2	77.5	83.5	542
Number of decisions in which women participate[1]						
0	33.8	39.8	16.5	44.2	50.1	1,307
1-2	37.2	36.7	17.5	42.1	50.0	1,827
3-4	27.6	31.5	11.2	34.4	39.4	1,337
Number of reasons given for refusing to have sex with husband						
0	37.4	39.5	16.2	44.0	50.7	828
1	36.1	39.1	17.3	43.5	50.1	4,461
Number of reasons for which wife beating is justified						
0	27.3	30.0	12.6	33.9	39.4	2,359
1-2	39.2	41.9	16.5	45.8	53.6	1,108
3-4	44.5	47.2	23.1	52.7	60.0	1,126
5	49.0	53.0	24.2	58.4	65.3	696
Total	36.3	39.2	17.2	43.6	50.2	5,289

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 20 women missing husband's education level, 17 missing husband's alcohol consumption, 20 missing spousal age difference, and 37 missing spousal education difference.

[1] Includes only currently married women

The last three indicators are those used to measure women's empowerment. In general, marital violence is associated with the woman's participation in making household decisions and her view on wife beating. Women who participate in three to four household decisions are less likely than women who participate in fewer decisions to experience violence (39 percent compared with 50 percent). Similarly, women who feel that wife beating is not justified are less likely than women who justify wife beating to suffer violence (39 percent compared with 54 percent or higher). Experience with violence has no association with the woman's view on a wife's right to refuse to have sexual intercourse with her husband.

16.7 FREQUENCY OF SPOUSAL VIOLENCE

Frequency of spousal violence is an indication of the extent to which domestic violence is a current or recurring problem for Tanzanian women. Table 16.12 shows that 88 percent of women who have ever experienced emotional violence by their husbands experienced such violence in the 12 months preceding the survey; 33 percent experienced emotional abuse often and 55 percent sometimes experienced emotional abuse. Similarly, 85 percent of women who have experienced physical or sexual violence by their husbands experienced such violence in the 12 months preceding the survey; 30 percent experienced such violence often, and 56 percent experienced the abuse only sometimes.

Among women who have ever experienced spousal emotional, physical, or sexual violence, the likelihood of experiencing such violence in the past 12 months decreases with increasing age. Among women who have ever experienced marital abuse, the proportion that experienced abuse often in the 12 months before the survey is considerably higher among those who are divorced or separated than among those who are currently married. Rural women who have ever experienced violence are more likely than urban women to experience frequent emotional violence in the 12 months before the survey. Women in Zanzibar are more likely than women in Tanzania Mainland to have experienced emotional violence often in the past 12 months. In Mainland Tanzania, more than 90 percent of women who have ever experienced spousal emotional violence in the Southern Highlands and Lake zones experienced such violence in the 12 months before the survey compared with 76 percent of women in the Central zone.

Table 16.12 Frequency of spousal violence among those who report violence

Percent distribution of ever-married women age 15-49 (excluding widows) who have ever suffered emotional violence committed by their current or most recent husband/partner by frequency of violence in the 12 months preceding the survey and percent distribution of those who have ever suffered physical or sexual violence committed by their current or most recent husband/partner by frequency of violence in the 12 months preceding the survey, according to background characteristics, Tanzania 2010

Background characteristic	Frequency of emotional violence in the past 12 months					Frequency of physical or sexual violence in the past 12 months				
	Often	Some-times	Not at all	Total	Number of women	Often	Some-times	Not at all	Total	Number of women
Current age										
15-19	(21.8)	(62.2)	(16.0)	100.0	66	20.5	68.3	11.2	100.0	106
20-24	24.2	68.1	7.6	100.0	306	28.6	64.1	7.3	100.0	372
25-29	32.0	58.8	9.1	100.0	394	28.5	59.0	12.5	100.0	453
30-39	36.8	51.1	12.0	100.0	650	32.7	51.8	15.5	100.0	785
40-49	35.0	47.8	17.2	100.0	379	29.0	48.5	22.6	100.0	413
Employed past 12 months										
Not employed	39.0	58.7	2.3	100.0	115	31.0	65.8	3.1	100.0	169
Employed for cash	36.8	51.3	11.9	100.0	680	31.6	51.9	16.5	100.0	829
Employed not for cash	29.1	57.9	13.0	100.0	997	28.2	56.9	14.9	100.0	1,126
Number of living children										
0	35.0	52.1	12.9	100.0	79	28.3	58.8	12.9	100.0	98
1-2	28.7	62.8	8.6	100.0	600	29.2	60.4	10.3	100.0	774
3-4	31.3	56.2	12.5	100.0	573	27.3	56.1	16.6	100.0	662
5+	38.2	47.1	14.7	100.0	543	33.3	48.6	18.1	100.0	596
Marital status and duration										
Currently married woman	30.0	61.8	8.2	100.0	1,444	27.0	61.8	11.3	100.0	1,720
Married only once	28.1	63.0	8.9	100.0	1,130	25.2	62.9	11.9	100.0	1,382
0-4 years	19.3	75.8	4.9	100.0	214	15.6	78.3	6.2	100.0	293
5-9 years	28.3	65.0	6.7	100.0	281	31.5	59.5	9.0	100.0	353
10+ years	31.0	57.8	11.1	100.0	635	26.0	58.3	15.7	100.0	737
Married more than once	36.8	57.5	5.7	100.0	314	34.2	57.2	8.6	100.0	338
Divorced/separated	43.7	29.3	27.1	100.0	351	41.4	30.2	28.4	100.0	409
Residence										
Urban	23.7	63.7	12.5	100.0	413	26.7	56.0	17.2	100.0	522
Rural	35.4	53.0	11.7	100.0	1,382	30.7	55.6	13.7	100.0	1,607
Mainland/Zanzibar										
Mainland	32.6	55.4	11.9	100.0	1,785	29.7	55.7	14.6	100.0	2,119
Urban	23.5	63.9	12.6	100.0	408	26.6	56.1	17.3	100.0	518
Rural	35.4	52.9	11.7	100.0	1,376	30.7	55.5	13.7	100.0	1,600
Zanzibar	40.3	55.1	4.6	100.0	10	39.8	55.1	5.1	100.0	10
Unguja	32.9	60.8	6.3	100.0	7	34.7	57.3	8.0	100.0	7
Pemba	*	*	*	100.0	3	(48.9)	(51.1)	(0.0)	100.0	4

Continued...

Table 16.12—*Continued*

Background characteristic	Frequency of emotional violence in the past 12 months: Often	Some-times	Not at all	Total	Number of women	Frequency of physical or sexual violence in the past 12 months: Often	Some-times	Not at all	Total	Number of women
Zone										
Western	28.5	54.3	17.2	100.0	235	28.9	48.4	22.6	100.0	295
Northern	50.5	36.2	13.2	100.0	130	32.3	49.1	18.6	100.0	182
Central	21.3	55.1	23.6	100.0	298	19.4	55.7	24.9	100.0	287
Southern Highlands	35.1	60.8	4.1	100.0	331	33.8	58.5	7.7	100.0	347
Lake	35.0	59.4	5.6	100.0	439	34.0	60.7	5.2	100.0	511
Eastern	30.7	56.9	12.3	100.0	215	30.3	53.5	16.2	100.0	310
Southern	36.9	48.5	14.6	100.0	136	23.7	58.1	18.2	100.0	186
Education										
No education	36.3	51.8	11.9	100.0	420	37.5	45.6	16.9	100.0	477
Primary incomplete	33.4	53.0	13.6	100.0	282	31.1	53.5	15.4	100.0	332
Primary complete	32.1	56.1	11.8	100.0	1,002	26.6	59.3	14.1	100.0	1,206
Secondary+	20.4	72.1	7.5	100.0	91	26.6	66.3	7.1	100.0	114
Wealth quintile										
Lowest	39.9	49.2	10.8	100.0	398	36.0	49.0	14.9	100.0	445
Second	33.4	49.4	17.2	100.0	372	31.8	50.7	17.6	100.0	390
Middle	28.3	60.3	11.4	100.0	365	24.5	61.5	13.9	100.0	461
Fourth	35.5	56.2	8.3	100.0	389	30.8	58.5	10.7	100.0	490
Highest	22.9	65.3	11.8	100.0	271	24.9	58.1	17.1	100.0	343
Total	32.7	55.4	11.9	100.0	1,795	29.7	55.7	14.6	100.0	2,129

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced or separated women. Total includes five women with employment status missing. Numbers in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that have been suppressed.

Table 16.13 shows the proportion of ever-married women who have experienced physical or sexual violence at the hands of their current or former husbands or partners by the onset of violence. Overall, 56 percent of ever-married women never experienced violence by their husband or other intimate partner. The first five years of marriage are the most critical; 16 percent of women experienced abuse by their husbands or partners within one to two years of marriage, and 12 percent of women reported being abused by their husbands in the following three years of marriage. This is true regardless of the marital duration. For example, among women who have married once and have been married for less than one year, 23 percent reported experiencing physical or sexual violence.

Table 16.13 Onset of marital violence

Percent distribution of ever-married women by number of years between marriage and first experience of physical or sexual violence by their husband/partner, if ever, according to marital status and duration, Tanzania 2010

Marital status and duration	Years between marriage[1] and first experience of violence: Experienced no violence	Before marriage	<1 year	1-2 years	3-5 years	6-9 years	10+ years	Don't know/ missing[2]	Total	Number of women
Currently married	59.6	0.2	5.9	14.1	10.8	5.0	3.4	1.0	100.0	4,471
Married only once	58.7	0.2	6.0	14.2	11.2	5.3	3.3	1.1	100.0	3,551
< 1 year	74.6	1.1	22.8	na	na	na	na	1.5	100.0	198
1-2 years	67.0	0.7	13.1	16.9	na	na	na	2.2	100.0	357
3-5 years	59.1	0.2	4.5	22.3	10.5	na	na	3.4	100.0	551
6-9 years	56.1	0.0	4.7	19.3	15.7	3.7	na	0.5	100.0	678
10+ years	56.1	0.1	3.6	10.7	13.2	9.2	6.7	0.3	100.0	1,766
Married more than once	63.0	0.3	5.5	13.9	9.4	3.7	3.5	0.8	100.0	920
Divorced/separated/widowed	39.1	0.9	9.1	23.2	16.0	7.0	3.4	1.2	100.0	818
Total	56.4	0.3	6.4	15.5	11.6	5.3	3.4	1.0	100.0	5,289

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.

[1] For couples who are not married but are living together as if married, the time of marriage refers to the time when the respondent first started living together with her partner.

[2] Includes women for whom the timing of the first experience of violence and duration of marriage are inconsistent.

na = Not applicable

Data in the table show that 60 percent of currently married women have never experienced physical violence by their current or most recent husband or partner compared with 39 percent of divorced, separated, or widowed women. Currently married women who were married only once are slightly less likely than women who were married more than once to experience no violence by their husband or partner (59 percent and 63 percent, respectively).

16.8 PHYSICAL CONSEQUENCES OF SPOUSAL VIOLENCE

In the 2010 TDHS, women who ever experienced spousal physical or sexual violence were asked about the consequences of the violence. Specifically, they were asked if, as a consequence of what their husbands did to them, they ever had any of three different sets of physical injuries: cuts, bruises or aches; eye injuries, sprains, dislocations, or burns; and deep wounds, broken bones, broken teeth, or any other serious injury. Table 16.14 shows the percentage of ever-married women who reported any spousal physical or sexual violence, by the different types of physical consequences and according to the type of violence experienced.

About six in ten ever-married women age 15-49 who have ever experienced physical or sexual violence by their current or most recent husband report having injuries. About 14 percent of women who ever experienced sexual violence say that they suffered eye injuries, sprains, dislocations, or burns as well as deep wounds, broken bones, broken teeth, or any other serious injury as a result of the violence. In general, 11 to 15 percent of women report having suffered deep wounds, broken bones, broken teeth, or other serious injuries.

Figures in Table 16.14 show that there are no differences in the occurrence of violence in the past and in the past 12 months, suggesting that these violent behaviours may have happened for a long time without any changes in the recent past.

Table 16.14 Injuries to women due to spousal violence

Percentage of ever-married women age 15-49 who have experienced specific types of spousal violence by types of injuries resulting from what their husband/partner did to them, according to the type of violence and whether they have experienced the violence ever and in the 12 months preceding the survey, Tanzania 2010

	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women
Experienced physical violence[1]					
Ever[2]	61.5	11.0	11.8	63.0	2,072
In the past 12 months[3]	62.6	11.1	12.3	63.9	1,701
Experienced sexual violence[4]					
Ever[2]	60.8	14.5	14.3	62.1	780
In the past 12 months[3]	60.8	13.4	14.5	62.0	697
Experienced physical or sexual violence[4]					
Ever[2]	58.1	10.2	10.9	59.5	2,232
In the past 12 months[3]	58.6	10.2	11.3	59.7	1,869

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women.
[1] Excludes women who experienced physical violence only during pregnancy
[2] Includes in the past 12 months
[3] Excludes widows
[4] Excludes women whose sexual initiation was forced but who have not experienced any other form of physical or sexual violence

16.9 VIOLENCE INITIATED BY WOMEN AGAINST HUSBANDS

Violence by husbands or partners against wives is not the only form of spousal violence; women may sometimes be the perpetrators of violence. In most cultures, however, the level of spousal violence initiated by wives is only a fraction of the level of spousal violence initiated by husbands. To measure spousal violence by women in the TDHS, ever-married women were asked, '*Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) husband/ partner at times when he was not already beating or physically hurting you?*' This line of questioning may result in some underreporting if women find it difficult to admit that they themselves initiated violence. Table 16.15 shows the percentage of ever-married women who have ever initiated violence against their current or most recent husband, and the percentage of all ever-married women (excluding widows) who say that they have initiated spousal violence in the 12 months preceding the survey.

Table 16.15 Violence by women against their spouse

Percentage of ever-married women age 15-49 who have committed physical violence against their husband/partner when he was not already beating or physically hurting them ever and in the past 12 months, according to women's own experience of spousal violence and their own and husband's/partner's characteristics, Tanzania 2010

Background characteristic	Percentage who have committed physical violence against their current or most recent husband/partner: Ever	Number of women	In the past 12 months[1]	Number of women[1]
Woman's experience of spousal physical violence				
Ever	5.3	2,072	3.1	1,995
In the past 12 months	5.3	1,710	3.6	1,661
Not past 12 months/widow/missing	5.1	362	0.9	334
Never	0.5	3,217	0.4	3,091
Current age				
15-19	1.7	286	1.7	283
20-24	1.9	975	1.7	961
25-29	2.7	1,082	1.5	1,070
30-39	2.9	1,802	1.6	1,735
40-49	1.9	1,144	0.9	1,038
Employed past 12 months				
Not employed	1.9	554	1.5	536
Employed for cash	3.7	2,231	2.0	2,125
Employed not for cash	1.2	2,495	0.9	2,416
Number of living children				
0	2.0	373	1.3	363
1-2	3.1	1,923	2.3	1,867
3-4	2.3	1,588	0.9	1,527
5+	1.6	1,405	0.9	1,329
Residence				
Urban	3.7	1,346	2.3	1,292
Rural	1.9	3,943	1.2	3,794
Mainland/Zanzibar				
Mainland	2.4	5,152	1.4	4,952
Urban	3.7	1,293	2.2	1,240
Rural	1.9	3,859	1.2	3,712
Zanzibar	3.8	137	2.5	134
Unguja	5.0	89	3.3	87
Pemba	1.5	48	1.1	47
Zone				
Western	1.7	906	1.3	884
Northern	1.4	768	1.0	734
Central	3.3	464	2.7	450
Southern Highlands	3.2	743	1.0	701
Lake	0.7	936	0.2	893
Eastern	4.0	790	2.8	758
Southern	3.4	546	1.9	532
Region				
Dodoma	3.6	287	2.7	279
Arusha	1.0	198	1.1	185
Kilimanjaro	1.2	193	1.3	183
Tanga	2.2	264	1.0	256
Morogoro	3.2	250	2.9	238
Pwani	1.7	150	1.8	146
Dar es Salaam	5.3	391	3.1	373

Continued...

Table 16.15—*Continued*

Background characteristic	Percentage who have committed physical violence against their current or most recent husband/partner: Ever	Number of women	In the past 12 months[1]	Number of women[1]
Region (continued)				
Lindi	5.3	122	3.8	122
Mtwara	2.7	226	1.5	218
Ruvuma	2.9	197	1.1	192
Iringa	4.7	233	1.3	214
Mbeya	2.5	357	0.8	340
Singida	2.9	177	2.6	172
Tabora	1.8	244	1.6	240
Rukwa	2.2	153	0.9	147
Kigoma	2.3	242	2.3	230
Shinyanga	1.2	421	0.7	413
Kagera	0.4	286	0.0	277
Mwanza	1.3	442	0.3	423
Mara	0.0	208	0.0	193
Manyara	0.3	113	0.3	110
Unguja North	2.5	21	2.2	21
Unguja South	7.3	15	3.4	14
Town West	5.3	53	3.7	51
Pemba North	2.7	24	1.9	23
Pemba South	0.3	24	0.4	24
Wealth quintile				
Lowest	2.5	1,003	1.9	965
Second	1.5	1,084	1.1	1,043
Middle	2.0	1,090	0.8	1,040
Fourth	2.3	1,091	1.5	1,052
Highest	3.7	1,021	2.1	987
Marital status and duration				
Currently married woman	2.3	4,471	1.5	4,471
Married only once	2.0	3,551	1.2	3,551
0-4 years	1.7	933	1.6	933
5-9 years	2.2	851	1.1	851
10+ years	2.1	1,766	1.1	1,766
Married more than once	3.4	920	2.5	920
Divorced/separated/widowed	2.9	818	1.1	615
Education				
No education	1.7	1,214	1.5	1,167
Primary incomplete	2.5	746	1.3	717
Primary complete	2.4	2,948	1.4	2,842
Secondary+	4.0	380	1.8	361
Husband's/partner's education				
No education	1.5	800	1.3	770
Primary incomplete	2.4	711	1.4	690
Primary complete	2.4	3,134	1.3	3,015
Secondary +	3.7	624	2.7	593
Husband's/partner's alcohol consumption				
Does not drink	1.9	3,186	1.3	3,115
Drinks/never gets drunk	1.2	154	0.0	143
Gets drunk sometimes	2.5	1,154	1.2	1,068
Gets drunk very often	4.4	779	3.0	743
Spousal age difference[2]				
Wife older	4.1	169	3.1	169
Wife is same age	5.7	139	4.1	139
Wife's 1-4 years younger	2.1	1,416	1.5	1,416
Wife's 5-9 years younger	1.4	1,571	0.9	1,571
Wife's 10+ years younger	3.0	1,156	1.8	1,156
Spousal education difference				
Husband better educated	2.5	1,821	1.6	1,732
Wife better educated	3.1	873	2.0	843
Both equally educated	2.2	2,109	1.1	2,041
Neither educated	1.6	450	1.3	435
Total	2.4	5,289	1.5	5,086

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 10 women with employment status missing, 18 with husband's education missing, 17 with husband's alcohol consumption missing, 20 with spousal age difference missing, and 35 with spousal education difference missing,

[1] Excludes widows

[2] Currently married women

Overall, 2 percent of ever-married women age 15-49 report that they have initiated physical violence against their current or most recent husband, and 2 percent say they committed such violence in the 12 months preceding the survey. The likelihood that a woman initiated physical violence against her husband has a direct association with her husband's violent behaviour. Five percent of women who have also experienced spousal physical violence initiated violence against their spouse compared with 1 percent of women who did not experience physical violence. Differentials in women's initiating physical violence against their current or most recent husbands are generally small; however, there are a few exceptions. Urban women are twice as likely as rural women to initiate violent behaviour against their husbands (4 and 2 percent, respectively). Disparities by zone indicate that the Eastern zone has the highest proportion of men experiencing violence at the hands of their partners. As shown in Table 16.13, men who are often drunk are more likely to be violent. Table 16.15 shows that men who get drunk very often are also at an increased risk of violence from their spouses.

16.10 RESPONSE TO VIOLENCE

Women who have experienced physical or sexual violence by any person were asked a series of questions about whether and from whom they sought help to try to end the violence. Table 16.16 shows that almost half (47 percent) of women sought help to stop the violence, 35 percent did not seek help and did not tell anyone about the violence, and 10 percent told someone about the violence but did not ask for help. Women who have experienced both physical and sexual violence are more likely to seek help (57 percent) than those who experienced physical violence only (45 percent) or sexual violence only (18 percent). The low percentage of women who sought help after experiencing sexual violence may be an indication that women are not aware that they have been violated sexually and that they are embarrassed to talk about the violence.

Differences by background characteristics in help-seeking behaviour are not large. The group of women who are most likely to seek help is divorced, separated, or widowed women. Across zones, women in the Central zone who have ever experienced violence are most likely to seek help to stop the violence (60 percent) compared with women in other zones (50 percent or lower).

Table 16.16 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by whether they have told anyone about the violence and whether they have ever sought help from any source to and the violence, according to type of violence and background characteristics, Tanzania 2010

Background characteristic	Never sought help: Never told anyone	Never sought help: Percentage who told someone	Have sought help from any source	Missing/ don't know	Total	Number of women
Type of violence						
Physical only	34.3	10.8	44.5	10.3	100.0	1,771
Sexual only	60.0	10.3	17.7	12.0	100.0	233
Both physical and sexual	29.8	8.8	57.4	4.0	100.0	956
Current age						
15-19	34.7	11.7	32.4	21.2	100.0	421
20-24	32.4	10.7	45.3	11.6	100.0	553
25-29	33.1	10.0	52.0	4.8	100.0	545
30-39	34.4	10.5	50.7	4.4	100.0	922
40-49	40.3	7.7	46.5	5.5	100.0	518
Employed past 12 months						
Not employed	30.7	8.5	43.5	17.3	100.0	366
Employed for cash	33.4	10.7	47.2	8.7	100.0	1,139
Employed not for cash	37.0	10.1	47.0	5.9	100.0	1,448
Number of living children						
0	29.1	10.0	37.4	23.6	100.0	484
1-2	36.3	11.9	44.9	6.8	100.0	1,001
3-4	33.4	9.0	52.6	5.0	100.0	785
5+	38.6	9.0	48.6	3.8	100.0	689
Marital status and duration						
Never married	28.7	12.6	34.2	24.5	100.0	447
Currently married woman	38.8	9.1	45.8	6.3	100.0	1,987
Married only once	39.8	9.7	43.9	6.6	100.0	1,551
0-4 years	42.4	10.5	35.1	11.9	100.0	365
5-9 years	40.8	10.0	44.8	4.4	100.0	383
10+ years	38.1	9.1	47.6	5.2	100.0	803
Married more than once	35.2	7.3	52.3	5.3	100.0	435
Divorced/separated/widowed	25.4	11.8	60.2	2.6	100.0	525
Residence						
Urban	33.4	10.6	43.1	13.0	100.0	793
Rural	35.4	10.0	47.9	6.7	100.0	2,167
Mainland/Zanzibar						
Mainland	35.0	10.0	46.6	8.4	100.0	2,932
Urban	33.5	10.4	43.1	13.0	100.0	779
Rural	35.5	9.9	47.9	6.7	100.0	2,153
Zanzibar	25.2	21.2	45.2	8.4	100.0	27
Unguja	28.3	22.6	44.3	4.8	100.0	20
Pemba	15.8	17.2	47.9	19.2	100.0	7
Zone						
Western	31.7	11.4	41.1	15.8	100.0	447
Northern	34.5	6.5	43.4	15.6	100.0	261
Central	29.0	5.1	59.7	6.2	100.0	350
Southern Highlands	35.7	13.4	42.0	8.9	100.0	490
Lake	41.4	9.4	45.0	4.1	100.0	683
Eastern	31.8	11.4	49.5	7.3	100.0	447
Southern	36.5	10.8	49.3	3.5	100.0	253
Region						
Dodoma	25.1	5.1	63.3	6.5	100.0	239
Arusha	34.0	5.8	54.8	5.4	100.0	88
Kilimanjaro	28.4	1.0	44.1	26.5	100.0	71
Tanga	40.4	11.2	26.0	22.4	100.0	62
Morogoro	31.5	9.9	53.6	4.9	100.0	172
Pwani	30.9	8.5	55.7	4.9	100.0	54
Dar es Salaam	32.1	13.3	44.8	9.7	100.0	221
Lindi	34.4	15.6	39.5	10.5	100.0	37
Mtwara	35.2	7.1	53.1	4.6	100.0	82
Ruvuma	37.8	11.6	49.7	0.8	100.0	134
Iringa	37.0	7.7	54.9	0.4	100.0	164
Mbeya	29.7	16.8	36.8	16.7	100.0	232
Singida	37.6	5.0	51.8	5.6	100.0	111
Tabora	35.7	9.3	42.2	12.8	100.0	131
Rukwa	48.3	15.0	32.5	4.2	100.0	93

Continued...

Table 16.16—*Continued*

Background characteristic	Never sought help: Never told anyone	Never sought help: Percentage who told someone	Have sought help from any source	Missing/ don't know	Total	Number of women
Region (continued)						
Kigoma	31.3	13.2	38.4	17.1	100.0	160
Shinyanga	28.7	11.3	43.1	16.9	100.0	157
Kagera	28.4	6.6	54.5	10.6	100.0	214
Mwanza	52.1	9.7	37.4	0.8	100.0	282
Mara	40.1	12.1	45.9	1.9	100.0	187
Manyara	37.2	10.7	44.0	8.0	100.0	40
Unguja North	33.0	9.3	53.9	3.8	100.0	4
Unguja South	33.9	19.5	46.6	0.0	100.0	4
Town West	24.9	27.9	40.5	6.7	100.0	12
Pemba North	3.4	27.0	40.8	28.8	100.0	3
Pemba South	24.1	10.6	52.6	12.7	100.0	4
Education						
No education	36.8	12.9	45.4	4.9	100.0	564
Primary incomplete	34.2	11.7	44.8	9.4	100.0	447
Primary complete	36.6	8.0	48.6	6.8	100.0	1,619
Secondary+	24.3	13.7	40.9	21.2	100.0	329
Wealth quintile						
Lowest	35.5	9.6	50.1	4.7	100.0	557
Second	30.3	12.1	51.1	6.5	100.0	511
Middle	39.3	8.5	43.9	8.4	100.0	645
Fourth	34.5	9.8	46.7	9.0	100.0	684
Highest	33.9	11.2	41.9	13.0	100.0	562
Total	34.9	10.1	46.6	8.4	100.0	2,959

Note: Excludes women whose sexual initiation was forced but who have not experienced any other form of physical or sexual violence. Total includes five women with employment status missing.

Table 16.17 shows the sources of help sought by women who have ever experienced violence. A majority of women sought help from their own family (47 percent), followed by in-laws (40 percent), and religious leaders (23 percent). Twelve percent of women sought help from friends or neighbours.

Table 16.17 Sources from where help was sought

Percentage of women age 15-49 who have ever experienced physical or sexual violence and sought help according to source from which help was sought, by type of violence experienced, Tanzania 2010

Percentage who sought help from:	Type of violence: Physical only	Sexual only	Both physical and sexual	Total
Own family	46.3	56.8	46.3	46.6
In-laws	41.0	22.7	38.7	39.5
Husband/partner/boyfriend	3.7	0.0	1.7	2.8
Friend/neighbour	9.8	23.6	15.0	12.3
Religious leader	28.5	14.3	39.5	32.5
Doctor/medical personnel	1.0	0.0	1.5	1.2
Police	5.9	5.2	4.9	5.5
Lawyer	0.3	0.0	2.0	1.0
Social service organisation	0.3	0.0	0.3	0.3
Other	2.0	1.7	1.6	1.8
Number of women	789	41	549	1,379

FEMALE GENITAL CUTTING 17

Female genital cutting (FGC), also known as female circumcision or female genital mutilation (FGM), is a common practice in many societies in Africa. Nearly universal in a few countries, it is practiced by various groups in at least 25 African countries, in Yemen, and in immigrant African populations in Europe and North America (Yoder, Abderrahim, and Zhuzhuni, 2004). In a few societies, the procedure is routinely carried out when a girl is a few weeks or a few months old (e.g., Eritrea, Yemen), while in most others, it occurs later in childhood or adolescence. In the case of the latter, FGC is typically part of a ritual initiation into womanhood that includes a period of seclusion and education about the rights and duties of a wife.

The Tanzanian Special Provision Act, a 1998 amendment to the penal code, specifically prohibits FGC (NLB, 1998). However, while the practice has been outlawed, it still occurs in many areas. FGC is considered compulsory in some communities, but in others it is optional.

The 2010 TDHS collected data on the practice of female circumcision from women age 15-49. The same information was collected in the 1996 and 2004-05 TDHS surveys. This chapter discusses knowledge, prevalence, and attitudes towards the practice of female circumcision. For women who were circumcised, information about the type of circumcision, age at circumcision, and person who performed the circumcision was also collected. The terms FGC and female circumcision are used interchangeably in this chapter.

17.1 KNOWLEDGE OF FEMALE GENITAL CUTTING

Table 17.1 presents data on women's knowledge of female circumcision. Overall, 82 percent of Tanzanian women have heard of the practice. There are noticeable variations in knowledge of female circumcision by residence, region, education, and wealth quintile. Ninety-five percent of women in the urban areas have heard of female circumcision compared with 77 percent of women in the rural areas.

Knowledge of female circumcision among women is higher in Zanzibar than in the Mainland (91 and 82 percent, respectively). Almost all women in the Northern, Central, and Eastern zones have heard of the practice, compared with 80 percent or less in other zones.

The variations by zone and residence reflect ethnic differentials and advocacy campaigns. In the Northern zone, where the Maasai and Chagga tribes are located, and in the Central zone, where the Gogo and Nyaturu tribes are the primary residents, women have greater knowledge of female circumcision than ethnic groups in the Southern zone. The Eastern zone, which includes the capital city of Dar es Salaam, has higher awareness compared with the Southern Highlands, Lake, and Western zones because the Eastern zone is more urban and is where most advocacy groups at the national level are based.

With regard to education differentials, the table reveals that awareness of the practice is highest (96 percent) among women with at least some secondary education and gradually decreases to 70 percent among women with no education.

Differentials by wealth quintile are similar to those by education. The percentage of women who are aware of female circumcision ranges from 97 percent for women in the highest quintile to 71 percent for women in the second quintile.

Table 17.1 Knowledge of female circumcision: Women

Percentage of women age 15-49 who have heard of female circumcision by background characteristics, Tanzania 2010

Background characteristic	Percentage of women who have heard of female circumcision	Number of women
Age		
15-19	75.2	2,172
20-24	82.7	1,909
25-29	84.0	1,668
30-34	85.2	1,422
35-39	84.3	1,290
40-44	86.8	938
45-49	82.1	740
Residence		
Urban	94.9	2,892
Rural	77.1	7,247
Mainland/Zanzibar		
Mainland	81.9	9,813
Urban	94.9	2,758
Rural	76.8	7,055
Zanzibar	91.0	326
Unguja	95.2	212
Pemba	83.1	115
Zone		
Western	64.5	1,728
Northern	97.7	1,530
Central	99.5	812
Southern Highlands	79.7	1,370
Lake	68.6	1,809
Eastern	97.0	1,608
Southern	76.1	955
Region		
Dodoma	100.0	495
Arusha	99.5	401
Kilimanjaro	97.3	411
Tanga	95.6	498
Morogoro	93.8	481
Pwani	95.4	261
Dar es Salaam	99.2	866
Lindi	78.7	198
Mtwara	72.3	407
Ruvuma	79.0	350
Iringa	88.8	490
Mbeya	84.0	623
Singida	98.8	317
Tabora	79.6	447
Rukwa	52.1	257
Kigoma	57.6	462
Shinyanga	60.2	819
Kagera	50.1	590
Mwanza	69.7	844
Mara	95.1	376
Manyara	99.6	220
Unguja North	88.6	50
Unguja South	95.6	30
Town West	97.7	131
Pemba North	79.6	56
Pemba South	86.4	59
Education		
No education	70.2	1,940
Primary incomplete	71.6	1,482
Primary complete	85.4	5,071
Secondary+	95.9	1,646
Wealth quintile		
Lowest	73.3	1,681
Second	71.3	1,947
Middle	78.1	1,997
Fourth	86.0	2,112
Highest	97.3	2,403
Total	82.2	10,139

17.2 PREVALENCE OF FEMALE GENITAL CUTTING

Table 17.2 shows the prevalence of female circumcision by background characteristics. The prevalence of FGC in the country appears to have dropped slightly, from 18 percent in the 1996 TDHS to 15 percent in the 2010 TDHS. The prevalence of female circumcision seems to have a negative relationship with the level of knowledge of circumcision. For example, knowledge among urban women is higher than among rural women, but the prevalence of FGC in the rural areas is more than double that in the urban areas. The highest proportions of women who are circumcised are found in the Northern and Central zones. The high prevalence of female circumcision in Manyara (71 percent) and Dodoma (64 percent) regions may largely be attributed to the ethnic background of the population in the regions.

The practice of FGC is less common among younger women. Women age 15-19 are less likely than older women to report being circumcised (Figure 17.1). It is unclear what the real reason is for the lower percentage of younger women being circumcised. It may result from an actual decline in the practice, or it may be an underreporting of the practice because it is now prohibited by law. Although the FGC prevalence in Manyara has declined from 81 percent in the 2004-05 TDHS to 71 percent in the 2010 TDHS, the region remains the leader in FGC prevalence in the country (NBS and ORC Macro, 2005). The prevalence of FGC has changed little in Arusha since the 2004-05 TDHS (55 percent) and in Mara, increased from 38 percent in the 2004-05 TDHS to 40 percent in the 2010 TDHS.

The prevalence of FGC generally declines as education and wealth quintile of the woman increases.

A question about the type of circumcision was asked of women who reported they had been circumcised. Table 17.2 indicates that for the overwhelming majority of women, circumcision involved cutting and removal of flesh (91 percent). Only one percent of women reported that their vagina was sewn closed (infibulated) during circumcision, which is the most radical procedure. It is noteworthy that no woman in the Central zone, which has the highest proportion of women who are circumcised, has had the severest form of circumcision. On the other hand, women in the Lake zone, where the prevalence of circumcision is rather low (9 percent), are most likely to be infibulated (3 percent).

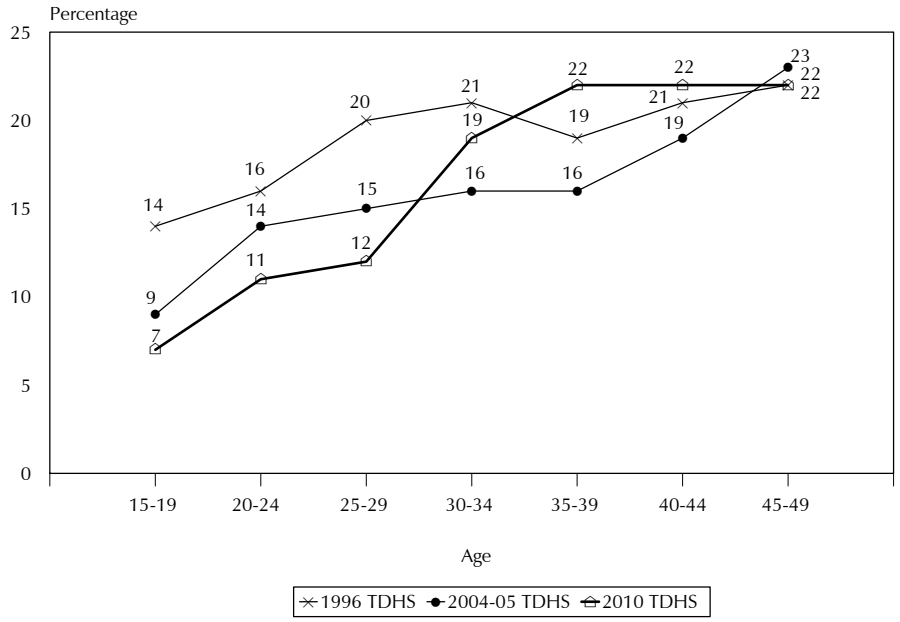
Table 17.2 Prevalence of female circumcision and type of circumcision

Percentage of women circumcised and the percent distribution of circumcised women by type of circumcision by background characteristics, Tanzania 2010

Background characteristic	Percentage of women circumcised	Number of women	Type of circumcision					Total	Number of circumcised women
			Cut, no flesh removed	Cut, flesh removed	Sewn closed	Not determined	Missing		
Age									
15-19	7.1	2,172	0.8	89.5	0.8	9.0	0.0	100.0	154
20-24	11.0	1,909	1.6	89.8	2.4	4.9	1.2	100.0	210
25-29	11.7	1,668	0.9	89.2	0.7	9.0	0.2	100.0	195
30-34	19.1	1,422	3.9	89.4	0.9	5.5	0.4	100.0	272
35-39	21.6	1,290	2.3	89.9	0.0	7.8	0.0	100.0	279
40-44	22.2	938	2.3	93.4	0.0	4.3	0.0	100.0	208
45-49	21.5	740	2.4	96.6	0.0	1.0	0.0	100.0	159
Residence									
Urban	7.8	2,892	4.8	90.6	0.0	4.1	0.6	100.0	226
Rural	17.3	7,247	1.7	90.9	0.8	6.4	0.2	100.0	1,250
Mainland/Zanzibar									
Mainland	15.0	9,813	2.1	90.9	0.7	6.0	0.3	100.0	1,476
Urban	8.2	2,758	4.7	90.6	0.0	4.1	0.6	100.0	226
Rural	17.7	7,055	1.7	90.9	0.8	6.4	0.2	100.0	1,250
Zanzibar	0.2	326	*	*	*	*	*	100.0	1
Unguja	0.3	212	*	*	*	*	*	100.0	1
Pemba	0.0	115	*	*	*	*	*	100.0	0
Zone									
Western	1.7	1,728	(6.1)	(88.4)	(0.0)	(5.5)	(0.0)	100.0	30
Northern	37.8	1,530	2.9	83.9	0.3	12.7	0.2	100.0	579
Central	58.8	812	0.9	98.0	0.0	1.1	0.0	100.0	477
Southern Highlands	5.3	1,370	(2.4)	(93.5)	(2.0)	(2.1)	(0.0)	100.0	72
Lake	8.9	1,809	1.8	91.2	3.3	2.2	1.5	100.0	162
Eastern	9.1	1,608	1.9	94.6	1.2	2.3	0.0	100.0	147
Southern	0.9	955	*	*	*	*	*	100.0	8
Region									
Dodoma	63.8	495	0.5	99.5	0.0	0.0	0.0	100.0	316
Arusha	58.6	401	1.5	81.3	0.0	16.8	0.4	100.0	235
Kilimanjaro	21.7	411	1.8	93.7	1.3	3.2	0.0	100.0	89
Tanga	19.9	498	10.7	86.3	0.0	2.9	0.0	100.0	99
Morogoro	21.1	481	0.0	94.9	1.8	3.3	0.0	100.0	102
Pwani	5.7	261	*	*	*	*	*	*	15
Dar es Salaam	3.5	866	*	*	*	*	*	*	30
Lindi	0.4	198	*	*	*	*	*	*	1
Mtwara	0.0	407	*	*	*	*	*	*	0
Ruvuma	2.1	350	*	*	*	*	*	*	8
Iringa	13.3	490	(2.6)	(95.0)	(0.0)	(2.3)	(0.0)	100.0	65
Mbeya	0.9	623	*	*	*	*	*	100.0	6
Singida	51.0	317	1.7	95.0	0.0	3.3	0.0	100.0	162
Tabora	5.6	447	(2.5)	(90.9)	(0.0)	(6.6)	(0.0)	100.0	25
Rukwa	0.5	257	*	*	*	*	*	*	1
Kigoma	0.5	462	*	*	*	*	*	*	2
Shinyanga	0.3	819	*	*	*	*	*	*	3
Kagera	0.8	590	*	*	*	*	*	*	5
Mwanza	0.9	844	*	*	*	*	*	*	7
Mara	39.9	376	2.0	94.2	3.6	0.2	0.0	100.0	150
Manyara	70.8	220	0.9	80.5	0.3	18.0	0.2	100.0	156
Unguja North	0.3	50	*	*	*	*	*	100.0	0
Unguja South	0.0	30	*	*	*	*	*	100.0	0
Town West	0.3	131	*	*	*	*	*	100.0	0
Pemba North	0.0	56	*	*	*	*	*	100.0	0
Pemba South	0.0	59	*	*	*	*	*	100.0	0
Education									
No education	20.3	1,940	1.2	90.6	0.8	7.4	0.0	100.0	395
Primary incomplete	12.9	1,482	1.1	93.9	0.5	4.5	0.0	100.0	191
Primary complete	16.6	5,071	2.9	90.2	0.7	5.8	0.4	100.0	841
Secondary+	3.1	1,646	1.8	92.2	1.1	3.8	1.0	100.0	50
Wealth quintile									
Lowest	24.5	1,681	1.3	90.0	0.8	7.9	0.0	100.0	412
Second	15.7	1,947	1.4	91.6	0.4	6.6	0.0	100.0	305
Middle	16.7	1,997	2.0	93.2	1.0	3.8	0.0	100.0	334
Fourth	13.0	2,112	1.0	92.2	0.9	5.0	0.9	100.0	274
Highest	6.3	2,403	8.3	84.3	0.0	6.5	0.9	100.0	151
Total	14.6	10,139	2.2	90.9	0.7	6.0	0.3	100.0	1,477

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Figure 17.1 **Percentage of Women Circumcised**



17.3 AGE AT CIRCUMCISION

The percent distribution of women by age at circumcision is presented in Table 17.3. Unlike in Nigeria, where female circumcisions occur mostly before the first birthday (NPC and ORC Macro, 2004), in Tanzania, female circumcision is done throughout childhood. Almost one in three women (32 percent) was circumcised by age 1, and 27 percent were circumcised at age 13 or older. The proportion of women who were circumcised before age 5 is 39 percent in the 2010 TDHS compared with 34 percent in the 2004-05 TDHS. An examination of the age at circumcision from the 2004-05 TDHS and the 2010 TDHS shows that the timing of circumcision has not changed (Figure 17.2).

Table 17.3 also shows that women are increasingly subjected to circumcision at an early age. Thirty-seven percent of women age 15-49 were circumcised by age 1 in the 2010 TDHS, and the corresponding figure in the 2004-05 TDHS is 28 percent.

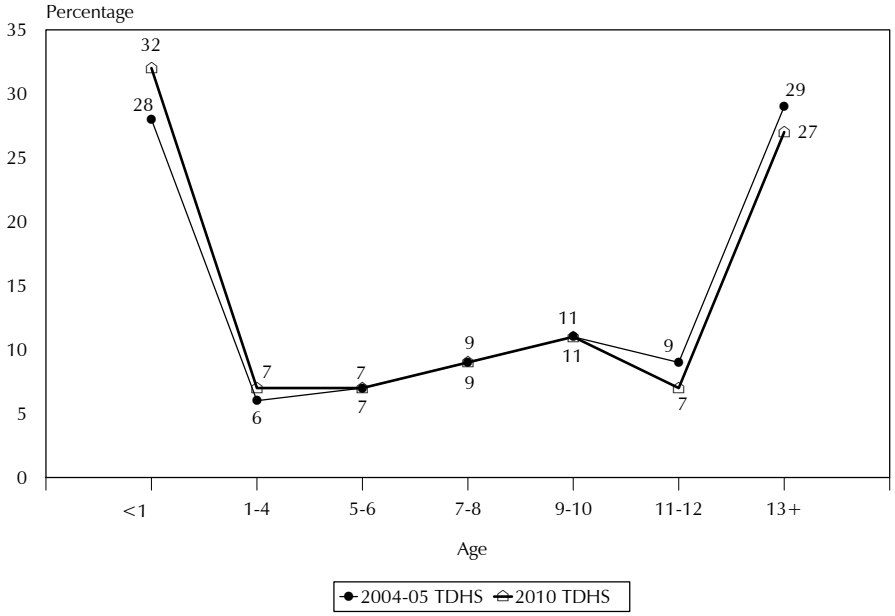
There are marked variations in the timing of circumcision by residence, zone, and region. The percentage of women who were circumcised by age 1 is higher in urban areas (41 percent) than in rural areas (30 percent).

Table 17.3 Age at circumcision

Percent distribution of circumcised women by age at circumcision, according to background characteristics, Tanzania 2010

Background characteristic	Age at circumcision (in years) <1	1-4	5-6	7-8	9-10	11-12	13+	Don't know/ missing	Total	Number of circumcised women
Age										
15-19	44.0	6.2	3.1	8.8	5.3	3.7	28.5	0.4	100.0	154
20-24	29.0	9.1	7.3	5.9	8.9	6.9	29.1	3.7	100.0	210
25-29	37.6	6.0	8.3	7.8	10.9	7.1	21.2	0.9	100.0	195
30-34	37.3	5.7	4.8	10.2	10.0	7.6	23.2	1.2	100.0	272
35-39	28.6	8.5	5.7	7.5	11.3	6.7	28.9	2.8	100.0	279
40-44	27.5	6.1	9.6	11.0	12.0	4.1	28.8	1.1	100.0	208
45-49	17.7	5.7	8.7	12.8	15.2	9.7	29.5	0.7	100.0	159
Marital status										
Never married	44.4	5.3	4.6	7.9	7.6	6.3	23.2	0.6	100.0	174
Married or living together	29.8	7.1	7.4	8.2	11.0	6.5	28.0	2.1	100.0	1,121
Divorced, separated, widowed	31.5	6.7	4.3	15.4	11.0	7.4	23.6	0.2	100.0	181
Residence									100.0	
Urban	40.7	4.2	7.6	10.7	9.5	4.7	20.4	2.0	100.0	226
Rural	30.1	7.3	6.6	8.7	10.8	6.9	28.1	1.6	100.0	1,250
Mainland/Zanzibar									100.0	
Mainland	31.7	6.9	6.7	9.0	10.6	6.6	26.9	1.7	100.0	1,476
Urban	40.7	4.2	7.6	10.8	9.5	4.7	20.4	2.0	100.0	226
Rural	30.1	7.3	6.6	8.7	10.8	6.9	28.1	1.6	100.0	1,250
Zanzibar	37.7	0.0	0.0	0.0	0.0	0.0	36.6	25.7	100.0	1
Unguja	37.7	0.0	0.0	0.0	0.0	0.0	36.6	25.7	100.0	1
Pemba	-	-	-	-	-	-	-	-	-	0
Zone										
Western	77.0	0.0	0.0	0.0	3.1	0.0	17.8	2.1	100.0	30
Northern	53.6	1.5	4.3	4.5	6.5	3.1	23.1	3.4	100.0	579
Central	18.9	18.8	13.4	17.2	17.0	8.2	6.4	0.0	100.0	477
Southern Highlands	10.0	3.6	5.9	6.5	2.4	1.3	68.3	2.0	100.0	72
Lake	1.3	0.0	0.5	3.8	10.2	16.2	66.4	1.5	100.0	162
Eastern	23.0	0.0	3.0	9.1	10.8	8.6	45.5	0.0	100.0	147
Southern	9.6	0.0	11.8	11.8	23.5	0.0	43.4	0.0	100.0	8
Education										
No education	35.5	9.3	8.6	7.7	11.8	6.3	17.3	3.5	100.0	395
Primary incomplete	22.5	6.1	8.8	10.8	10.5	5.8	35.6	0.0	100.0	191
Primary complete	31.1	5.7	5.7	9.2	10.5	7.1	29.7	1.1	100.0	841
Secondary+	46.6	10.5	2.2	10.4	2.3	3.7	21.2	3.1	100.0	50
Total	31.7	6.9	6.7	9.0	10.6	6.6	26.9	1.7	100.0	1,477

Figure 17.2 Age at Circumcision, 2004-05 TDHS and 2010 TDHS



17.4 CIRCUMCISION OF DAUGHTERS

Women interviewed in the 2010 TDHS who had daughters were asked if any of their daughters had been circumcised, and if not, whether they intended to have their daughters circumcised. Table 17.4 shows that among women who have at least one daughter, 3 percent had a daughter circumcised and an additional 3 percent intend to have a daughter circumcised.

The proportion of women having had at least one daughter circumcised increases with age but the percentage who intended to have a daughter circumcised in the future decreases with age. Overall, women age 40 and older are more likely than younger women to have a daughter who has been circumcised but less likely to intend to have a daughter circumcised.

Rural women are more likely than urban women to have a circumcised daughter (4 percent and 1 percent, respectively). Women in the Northern and Central zones are more likely than women in other zones to have at least one circumcised daughter (10 and 12 percent, respectively). The likelihood of having at least one daughter circumcised (in the past or in the future) decreases as the mother's education and household wealth increases.

Table 17.4 Daughter's circumcision experience

Among women with at least one living daughter, percentage with at least one circumcised daughter and percentage who intend to have their daughter circumcised, according to background characteristics, Tanzania 2010

Mother's background characteristic	Percentage of women with at least one daughter circumcised	Percentage of women who intend to have daughter circumcised	Number of women with at least one living daughter
Age			
15-19	0.6	3.5	179
20-24	0.5	4.1	948
25-29	0.8	2.4	1,209
30-34	2.0	3.0	1,154
35-39	3.7	1.9	1,118
40-44	9.9	1.8	814
45-49	7.0	0.9	653
Residence			
Urban	0.8	0.9	1,437
Rural	4.2	2.9	4,639
Zone			
Western	0.4	0.7	1,057
Northern	9.7	7.6	885
Central	12.0	2.3	559
Southern Highlands	0.3	1.4	842
Lake	2.3	2.8	1,103
Eastern	2.1	2.0	852
Southern	0.5	0.5	613
Education			
No education	5.4	4.2	1,507
Primary incomplete	3.5	2.2	837
Primary complete	2.9	2.0	3,307
Secondary+	0.2	0.5	424
Wealth quintile			
Lowest	5.3	3.8	1,178
Second	4.9	2.5	1,308
Middle	3.9	3.7	1,258
Fourth	2.2	1.7	1,240
Highest	0.4	0.5	1,092
Total	3.4	2.5	6,075

Table 17.5 indicates that one-fourth (25 percent) of the most recently circumcised daughters were circumcised before their first birthday, 21 percent were circumcised between ages 1 and 4, and more than half were circumcised at age 5 or older.

Three of every four most recent circumcisions were performed by traditional circumcisers, and 22 percent were carried out by traditional birth attendants.

Table 17.5 Aspects of daughter's circumcision

Percent distribution of most recently circumcised daughters by the age of the daughter at the time she was circumcised, and the person performing the circumcision, Tanzania 2010

Aspects	Percent
Age of daughter when she was circumcised (in years)	
<1	25.0
1-4	20.8
5-6	8.3
7-8	10.9
9-10	10.8
11-12	4.6
13+	18.9
Don't know/missing	0.7
Person who performed the circumcision	
Traditional circumciser	73.0
Traditional birth attendant	21.9
Other traditional	4.4
Nurse/midwife	0.4
Missing	0.4
Total	100.0
Number	206

17.5 ATTITUDES TOWARDS FEMALE CIRCUMCISION

Women who had heard of female circumcision were asked if they thought the practice should be continued or discontinued. Table 17.6 indicates that among the Tanzanian women who had heard of female circumcision, 92 percent think that the practice should be discontinued. Only a small minority (6 percent) believe the practice should be continued, and 2 percent of women expressed conditional approval or were unsure of their opinion. The proportion of women who say that female circumcision should continue does not vary much by age, but the practice finds greater support among rural women than it does among urban women. It is also more favoured among those who are circumcised than it is among those who are not.

The view that the practice of female circumcision should continue is highest in the Lake zone (11 percent) and Mara region (16 percent). Opposition to female circumcision is 92 percent in the Mainland and almost universal in Zanzibar (99 percent). Opposition to female circumcision is positively related to the women's level of education and wealth.

Table 17.6 Attitudes towards female genital cutting: women

Percent distribution of all women who have heard of female circumcision by opinion on whether female genital cutting should be continued, according to selected background characteristics, Tanzania 2010

Background characteristic	Attitude towards female circumcision				Total	Number of women
	Should be continued	Should be discontinued	Depends/ don't know	Missing		
Age						
15-19	5.9	91.8	2.1	0.2	100.0	1,633
20-24	5.6	91.6	2.6	0.2	100.0	1,579
25-29	4.4	92.5	3.0	0.1	100.0	1,400
30-34	5.8	92.2	1.8	0.2	100.0	1,212
35-39	6.3	91.2	2.5	0.1	100.0	1,088
40-44	7.1	90.7	1.7	0.5	100.0	814
45-49	3.3	93.8	2.8	0.1	100.0	607
Circumcision status						
Not circumcised	2.7	95.3	1.9	0.2	100.0	6,853
Circumcised	19.0	76.5	4.5	0.0	100.0	1,477
Residence						
Urban	1.8	97.5	0.7	0.0	100.0	2,745
Rural	7.4	89.2	3.2	0.2	100.0	5,589
Mainland/Zanzibar						
Mainland	5.7	91.7	2.4	0.2	100.0	8,038
Urban	1.9	97.4	0.7	0.0	100.0	2,616
Rural	7.6	88.9	3.3	0.2	100.0	5,422
Zanzibar	0.4	98.5	1.0	0.1	100.0	297
Unguja	0.4	98.6	0.9	0.1	100.0	201
Pemba	0.4	98.2	1.3	0.1	100.0	95
Zone						
Western	4.3	92.5	2.6	0.6	100.0	1,115
Northern	7.9	88.7	3.5	0.0	100.0	1,495
Central	7.7	90.6	1.7	0.0	100.0	808
Southern Highlands	3.7	91.7	4.2	0.4	100.0	1,092
Lake	10.9	87.5	1.6	0.0	100.0	1,241
Eastern	2.7	96.1	1.0	0.1	100.0	1,559
Southern	2.1	95.3	2.4	0.2	100.0	727
Region						
Dodoma	9.6	88.3	2.1	0.0	100.0	495
Arusha	11.1	84.6	4.4	0.0	100.0	399
Kilimanjaro	2.1	96.4	1.4	0.0	100.0	400
Tanga	7.7	90.4	1.9	0.0	100.0	477
Morogoro	5.6	91.3	2.7	0.3	100.0	452
Pwani	2.6	96.8	0.6	0.0	100.0	249
Dar es Salaam	1.3	98.5	0.3	0.0	100.0	859
Lindi	0.9	95.8	3.3	0.0	100.0	156
Mtwara	1.0	96.3	2.3	0.4	100.0	295
Ruvuma	3.8	94.0	2.2	0.0	100.0	276
Iringa	5.3	90.2	4.5	0.0	100.0	436
Mbeya	3.0	92.5	4.0	0.5	100.0	523
Singida	4.7	94.2	1.1	0.0	100.0	313
Tabora	5.5	93.0	1.1	0.5	100.0	356
Rukwa	0.9	94.0	4.0	1.1	100.0	134
Kigoma	1.3	95.8	1.1	1.9	100.0	266
Shinyanga	5.2	90.4	4.4	0.0	100.0	493
Kagera	0.0	99.7	0.3	0.0	100.0	295
Mwanza	13.3	84.4	2.3	0.0	100.0	588
Mara	16.0	82.5	1.5	0.0	100.0	357
Manyara	12.8	78.2	8.9	0.0	100.0	219
Unguja North	0.0	98.5	1.2	0.2	100.0	45
Unguja South	0.5	98.4	0.7	0.4	100.0	29
Town West	0.6	98.6	0.8	0.0	100.0	128
Pemba North	0.3	97.9	1.8	0.0	100.0	44
Pemba South	0.5	98.5	0.8	0.3	100.0	51
Education						
No education	12.1	82.8	4.7	0.4	100.0	1,361
Primary incomplete	8.5	88.7	2.6	0.2	100.0	1,062
Primary complete	4.3	93.3	2.3	0.1	100.0	4,332
Secondary+	1.2	98.0	0.5	0.3	100.0	1,579
Wealth quintile						
Lowest	10.3	85.7	3.9	0.1	100.0	1,232
Second	7.7	88.2	3.5	0.5	100.0	1,387
Middle	7.9	88.4	3.4	0.3	100.0	1,560
Fourth	4.2	93.5	2.2	0.1	100.0	1,817
Highest	1.2	98.5	0.3	0.0	100.0	2,338
Total	5.5	91.9	2.4	0.2	100.0	8,334

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SAMPLE IMPLEMENTATION

Appendix A

Table A.1 Sample implementation: Women

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women, and overall response rates, according to urban-rural residence and region, Tanzania 2010

	Mainland				
Result	Urban	Rural	Total	Zanzibar	Total
Selected households					
Completed (C)	90.1	93.6	92.8	96.1	93.4
Household present but no compe-tent respondent at home (HP)	0.7	0.5	0.5	0.2	0.4
Refused (R)	0.7	0.4	0.5	0.1	0.4
Dwelling not found (DNF)	0.7	0.2	0.3	0.1	0.3
Household absent (HA)	3.6	2.5	2.7	2.6	2.7
Dwelling vacant/address not a dwelling (DV)	3.1	1.6	2.0	0.6	1.7
Dwelling destroy (DD)	0.4	0.8	0.7	0.3	0.6
Other (O)	0.5	0.4	0.4	0.1	0.3
Total	100.0	100.0	100.0	100.0	100.0
Number of sampled households	1,908	6,412	8,320	1,980	10,300
Household response rate (HRR)[1]	97.6	98.8	98.6	99.7	98.8
Eligible women					
Completed (EWC)	95.8	96.2	96.1	97.1	96.4
Not at home (EWNH)	1.9	2.3	2.2	1.1	1.9
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	1.2	0.5	0.6	0.4	0.6
Partly completed (EWPC)	0.2	0.1	0.1	0.2	0.1
Incapacitated (EWI)	0.6	0.8	0.8	0.9	0.8
Other (EWO)	0.3	0.1	0.2	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0
Number of women	1,967	6,088	8,055	2,467	10,522
Eligible women response rate (EWRR)[2]	95.8	96.2	96.1	97.1	96.4
Overall response rate (ORR)[3]	93.5	95.1	94.8	96.8	95.2

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{100 * EWC}{EWC + EWNH + EWP + EWR + EWPC + EWI + EWO}$$

[3] The overall response rate (ORR) is calculated as: ORR = HRR * EWRR/100.

Table A.2 Sample implementation: Men

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men and overall response rates, according to urban-rural residence and region, Tanzania 2010

Result	Mainland			Zanzibar	Total
	Urban	Rural	Total		
Selected households					
Completed (C)	89.9	93.2	92.5	94.9	92.9
Household present but no competent respondent at home (HP)	0.5	0.4	0.4	0.0	0.3
Refused (R)	0.7	0.3	0.4	0.2	0.3
Dwelling not found (DNF)	0.7	0.1	0.2	0.0	0.2
Household absent (HA)	4.0	2.9	3.2	3.3	3.2
Dwelling vacant/address not a dwelling (DV)	3.5	1.8	2.2	1.0	2.0
Dwelling destroy (DD)	0.3	0.9	0.8	0.6	0.7
Other (O)	0.5	0.3	0.4	0.0	0.3
Total	100.0	100.0	100.0	100.0	100.0
Number of sampled households	605	2,040	2,645	630	3,275
Household response rate (HRR)[1]	98.0	99.2	98.9	99.8	99.1
Eligible men					
Completed (EMC)	88.3	91.3	90.5	93.7	91.2
Not at home (EMNH)	8.0	6.7	7.0	4.2	6.4
Refused (EMR)	1.9	0.6	0.9	1.3	1.0
Partly completed (EMPC)	0.0	0.1	0.0	0.3	0.1
Incapacitated (EMI)	1.5	1.0	1.1	0.3	0.9
Other (EMO)	0.4	0.4	0.4	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0
Number of men	528	1,641	2,169	601	2,770
Eligible men response rate (EMRR)[2]	88.3	91.3	90.5	93.7	91.2
Overall response rate (ORR)[3]	86.5	90.5	89.6	93.5	90.4

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] Using the number of eligible men falling into specific response categories, the eligible man response rate (EMRR) is calculated as:

$$\frac{100 * EMC}{EMC + EMNH + EMP + EMR + EMPC + EMI + EMO}$$

[3] The overall response rate (ORR) is calculated as: ORR = HRR * EMRR/100.

ESTIMATES OF SAMPLING ERRORS

Appendix B

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2010 Tanzania Demographic and Health Survey (TDHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2010 TDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2010 TDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. The computer software used to calculate sampling errors for the 2010 TDHS is the ISSA Sampling Error Module. This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics, such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_{h-1}}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } \; z_h = y_h - rx_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of clusters selected in the h^{th} stratum,
y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum,
x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum, and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulas. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2010 TDHS, there were 475 non-empty clusters. Hence, 474 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 475 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 474 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, ISSA computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error is due to the use of a more complex and less statistically efficient design. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2010 TDHS are calculated for selected variables considered to be of primary interest for the woman's survey and for the man's survey, respectively. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the eight zones (including Zanzibar), Mainland, Mainland Urban, Mainland Rural, Pemba, and Unguja. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.12 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE) for each variable. The DEFT is considered undefined when the standard error in a simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for *children ever born to women age 40-49*) can be interpreted as follows: the overall average from the national sample is 5.960, and its standard error is 0.104. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $5.960 \pm 2 \times 0.104$. There is a high probability (95 percent) that the *true* average number of children ever born to all women aged 40 to 49 is between 5.752 and 6.169.

Sampling errors are analyzed for the national woman's sample and for two separate groups of estimates: (1) means and proportions and (2) complex demographic rates. The relative standard errors (SE/R) for the means and proportions range between 0.3 and 13.7 percent, except for *currently using IUD (*20.6 percent), which has very few cases. So, in general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. The relative standard error for the total fertility rate is small, 2.5 percent. However, for the mortality rates, the average relative standard error is higher. For example, the relative standard error for the 0 to 4 year estimate of infant mortality is 6.5 percent.

There are differentials in the relative standard error for the estimates of subpopulations. For example, for the variable *want no more children*, the relative standard errors for the whole country, the rural areas, and the urban areas are 3.0, 3.7, and 4.9 percent, respectively.

For the total sample, the value of the design effect (DEFT), ranges over all variables from 1.173 to 2.853; which means that, due to multi-stage clustering of the sample, the standard error is increased by a factor of DEFT over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Tanzania 2010

Variable	Estimate	Base population
	WOMEN	
Urban residence	Proportion	All women
Literate	Proportion	All women
No education	Proportion	All women
Secondary education or higher	Proportion	All women
Net attendance ratio for primary school	Ratio	Children 7-12 years
Never married	Proportion	All women
Currently married/in union	Proportion	All women
Married by age 20	Proportion	Women age 20-49
Had sexual intercourse by age 18	Proportion	Women age 20-49
Currently pregnant	Proportion	All women
Children ever born	Mean	All women
Children surviving	Mean	All women
Children ever born to women age 40-49	Mean	Women age 40-49
Total fertility rate (3 years)	Rate	All women
Knows any contraceptive method	Proportion	Currently married women
Knows any modern contraceptive method	Proportion	Currently married women
Currently using any contraceptive method	Proportion	Currently married women
Currently using a modern method	Proportion	Currently married women
Currently using pill	Proportion	Currently married women
Currently using injectables	Proportion	Currently married women
Currently using IUD	Proportion	Currently married women
Currently using female sterilisation	Proportion	Currently married women
Currently using condom	Proportion	Currently married women
Currently using periodic abstinence	Proportion	Currently married women
Used public sector source	Proportion	Current users of modern methods
Want no more children	Proportion	Currently married women
Want to delay birth at least 2 years	Proportion	Currently married women
Ideal family size	Mean	All women
Perinatal mortality (0-4 years)	Ratio	Number of pregnancies of 7+ months
Neonatal mortality (0-9 years)	Rate	Children exposed to the risk of mortality
Post-neonatal mortality (0-9 years)	Rate	Children exposed to the risk of mortality
Infant mortality (0-9 years)	Rate	Children exposed to the risk of mortality
Child mortality (0-9 years)	Rate	Children exposed to the risk of mortality
Under-5 mortality (0-9 years)	Rate	Children exposed to the risk of mortality
Mothers received tetanus injection for last birth	Proportion	Women with at least one live birth in five years before survey
Mothers received medical assistance at delivery	Proportion	Births occurring 1-59 months before interview
Had diarrhoea in two weeks before survey	Proportion	Children age 0-59 months
Treated with oral rehydration salts (ORS)	Proportion	Children with diarrhea in two weeks before interview
Taken to a health provider	Proportion	Children with diarrhea in two weeks before interview
Vaccination card seen	Proportion	Children age 12-23 months
Received BCG vaccine	Proportion	Children age 12-23 months
Received DPT/DPT-HB/DPT-HB-Hib vaccine (3 doses)	Proportion	Children age 12-23 months
Received polio vaccine (3 doses)	Proportion	Children age 12-23 months
Received measles vaccine	Proportion	Children age 12-23 months
Height-for-age (-2SD)	Proportion	Children age 0-59 months
Weight-for-height (-2SD)	Proportion	Children age 0-59 months
Weight-for-age (-2SD)	Proportion	Children age 0-59 months
Prevalence of anaemia in children	Proportion	Children age 6-59 months
Prevalence of anaemia in women	Proportion	All women
Body Mass Index (BMI) <18.5	Proportion	All women
Had 2+ sexual partners in past 12 months	Proportion	All women
Condom used at last higher-risk intercourse[1]	Proportion	All women who had higher-risk intercourse in past 12 months
Condom used at last higher-risk intercourse (youth)[1]	Proportion	All women 15-24 who had higher-risk intercourse in past 12 months
Abstinence among youth (never had intercourse)	Proportion	Women 15-24
Sexually active in past 12 months among never-married youth	Proportion	All women
Had an injection in past 12 months	Proportion	All women
Had HIV test and received results in past 12 months	Proportion	All women who have heard of HIV/AIDS
Accepting attitudes towards people with HIV	Proportion	All women
Had HIV test and received results in past 12 months	Proportion	All women
	MEN	
Urban residence	Proportion	All men
Literate	Proportion	All men
No education	Proportion	All men
Secondary education	Proportion	All men
Never married	Proportion	All men
Currently married	Proportion	All men
Married by age 20	Proportion	Men age 20-49
Had sexual intercourse by age 18	Proportion	All men
Comprehensive knowledge about HIV/AIDS	Proportion	All men
Had HIV test and received results in past 12 months	Proportion	All men who have heard of HIV/AIDS
Had an injection in past 12 months	Proportion	All men
Sexually active in past 12 months (15-24)	Proportion	Men 15-24
Had 2+ sexual partners in past 12 months	Proportion	All men
Condom used at last higher-risk intercourse	Proportion	All men who had higher-risk intercourse in past 12 months
Had higher-risk intercourse in past 12 months	Proportion	All men who had sexual intercourse in past 12 months

[1] Higher risk sexual intercourse is having sex with 2 or more partners

Table B.2.1 Sampling errors for National sample, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.285	0.027	10139	10139	5.962	0.094	0.232	0.339
Literate	0.722	0.012	10139	10139	2.708	0.017	0.698	0.746
No education	0.191	0.011	10139	10139	2.744	0.056	0.170	0.213
Secondary education or higher	0.162	0.009	10139	10139	2.520	0.057	0.144	0.181
Net attendance ratio for primary school	0.800	0.010	9991	9990	2.105	0.013	0.780	0.820
Never married	0.251	0.007	10139	10139	1.657	0.028	0.236	0.265
Currently married/in union	0.632	0.007	10139	10139	1.561	0.012	0.617	0.647
Married by age 20	0.616	0.010	7918	7967	1.911	0.017	0.595	0.637
Had sexual intercourse by age 18	0.580	0.011	7918	7967	1.992	0.019	0.558	0.602
Currently pregnant	0.096	0.004	10139	10139	1.428	0.044	0.087	0.104
Children ever born	2.880	0.050	10139	10139	1.859	0.017	2.780	2.980
Children surviving	2.525	0.043	10139	10139	1.841	0.017	2.438	2.612
Children ever born to women age 40-49	5.960	0.104	1807	1678	1.586	0.018	5.752	6.169
Total fertility rate	5.434	0.136	na	28215	1.868	0.025	5.161	5.707
Knows any contraceptive method	0.989	0.003	6310	6412	1.955	0.003	0.983	0.994
Known any modern contraceptive method	0.989	0.003	6310	6412	1.953	0.003	0.983	0.994
Currently using any contraceptive method	0.344	0.013	6310	6412	2.092	0.036	0.319	0.369
Currently using a modern method	0.274	0.011	6310	6412	1.932	0.040	0.252	0.295
Currently using pill	0.067	0.005	6310	6412	1.477	0.069	0.058	0.077
Currently using injectable	0.023	0.003	6310	6412	1.481	0.123	0.017	0.028
Currently using IUD	0.006	0.001	6310	6412	1.231	0.206	0.003	0.008
Currently using female sterilisation	0.035	0.003	6310	6412	1.328	0.087	0.029	0.041
Currently using condom	0.023	0.003	6310	6412	1.385	0.113	0.018	0.029
Currently using periodic abstinence	0.031	0.003	6310	6412	1.571	0.110	0.025	0.038
Used public sector source	0.567	0.018	2018	2296	1.597	0.031	0.532	0.603
Want no more children	0.297	0.009	6441	6563	1.576	0.030	0.279	0.315
Want to delay birth at least 2 years	0.439	0.009	6441	6563	1.403	0.020	0.421	0.456
Ideal family size	4.866	0.061	9925	9947	2.853	0.013	4.743	4.988
Perinatal mortality (0-4 years)	35.931	2.669	8160	8319	1.261	0.074	30.594	41.269
Neonatal mortality (0-4)	25.862	2.342	8045	8208	1.293	0.091	21.179	30.546
Post-neonatal mortality (0-4)	24.846	2.083	8056	8220	1.173	0.084	20.679	29.013
Infant mortality (0-4)	50.708	3.317	8058	8222	1.281	0.065	44.074	57.343
Infant mortality (5-9)	71.02	4.083	7126	7181	1.289	0.057	62.855	79.185
Infant mortality (10-14)	95.501	5.379	5901	5790	1.21	0.056	84.744	106.259
Child mortality (0-4)	32.012	2.859	8119	8299	1.315	0.089	26.294	37.73
Under-5 mortality (0-4)	81.097	4.406	8134	8316	1.34	0.054	72.284	89.91
Mother received 2+ tetanus injections for last birth	0.476	0.012	5358	5519	1.800	0.025	0.452	0.500
Mothers received medical assistance at delivery	0.489	0.018	8023	8176	2.755	0.037	0.453	0.525
Had diarrhoea in two weeks before survey	0.145	0.007	7526	7667	1.662	0.048	0.131	0.159
Treated with oral rehydration salts (ORS)	0.440	0.022	1015	1109	1.429	0.051	0.396	0.485
Taken to a health provider	0.526	0.023	1015	1109	1.444	0.044	0.480	0.572
Vaccination card seen	0.842	0.012	1549	1576	1.298	0.014	0.818	0.866
Received BCG	0.955	0.008	1549	1576	1.610	0.009	0.938	0.972
Received DPT/DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.880	0.014	1549	1576	1.736	0.016	0.852	0.909
Received polio (3 doses)	0.849	0.015	1549	1576	1.644	0.018	0.819	0.879
Received measles	0.845	0.014	1549	1576	1.555	0.017	0.816	0.874
Fully immunised	0.752	0.018	1549	1576	1.604	0.023	0.716	0.787
Height-for-age (below -2SD)	0.421	0.009	7554	7691	1.536	0.022	0.402	0.440
Weight-for-height (below -2SD)	0.047	0.003	7554	7691	1.226	0.066	0.041	0.054
Weight-for-age (below -2SD)	0.158	0.007	7554	7691	1.508	0.043	0.144	0.172
Prevalence of anaemia in children	0.586	0.010	6777	6873	1.640	0.018	0.565	0.607
Prevalence of anaemia in women	0.401	0.010	9928	9875	2.037	0.025	0.381	0.421
Body Mass Index (BMI) <18.5	0.114	0.005	8852	8789	1.444	0.043	0.104	0.124
Had 2+ sexual partners in past 12 months	0.035	0.003	10139	10139	1.672	0.087	0.029	0.041
Condom used at last intercourse	0.272	0.037	291	357	1.423	0.137	0.197	0.346
Sexually active in past 12 months (15-24)	0.226	0.008	7583	7957	1.568	0.033	0.211	0.241
Abstinence among youth (never had intercourse)	0.599	0.015	2442	2272	1.514	0.025	0.569	0.629
Sexually active in past 12 months (15-24)	0.335	0.014	2442	2272	1.445	0.041	0.307	0.362
Had an injection in past 12 months	0.360	0.007	10139	10139	1.550	0.021	0.345	0.375
Accepting attitudes towards people with HIV	0.301	0.010	10139	10139	2.088	0.032	0.282	0.320
Has HIV test and received result in past 12 months	0.295	0.008	10139	10139	1.729	0.027	0.279	0.310
Maternal mortality rate	454.313	50.680	na	na	na	0.112	352.953	555.673
MEN								
Urban residence	0.274	0.026	2527	2527	2.912	0.094	0.223	0.326
No education	0.095	0.009	2527	2527	1.614	0.099	0.076	0.113
Secondary education or higher	0.229	0.015	2527	2527	1.787	0.065	0.199	0.259
Never married	0.414	0.013	2527	2527	1.285	0.030	0.389	0.439
Currently married	0.521	0.013	2527	2527	1.331	0.025	0.495	0.548
Had sexual intercourse by age 18	0.388	0.017	1093	1126	1.140	0.043	0.354	0.421
Comprehensive knowledge about HIV/AIDS	0.461	0.012	2527	2527	1.258	0.027	0.436	0.486
Had HIV test and received result in past 12 months	0.250	0.011	2527	2527	1.269	0.044	0.228	0.272
Had injection in past 12 months	0.197	0.011	2527	2527	1.361	0.055	0.175	0.218
Abstinence among youth 15-24 (never intercourse)	0.515	0.021	980	915	1.313	0.041	0.473	0.557
Sexually active in past 12 months (15-24)	0.368	0.021	980	915	1.345	0.056	0.326	0.409
Had 2+ sexual partners in past 12 months	0.206	0.011	2527	2527	1.373	0.054	0.184	0.228
Condom used at last higher-risk intercourse	0.237	0.026	472	521	1.311	0.108	0.186	0.289
Had higher-risk intercourse in past 12 months	0.447	0.015	1748	1860	1.296	0.034	0.416	0.478

na = Not applicable

Table B.2.2 Sampling errors for Urban sample, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	1.000	0.000	2591	2892	N A	0.000	1.000	1.000
Literate	0.875	0.014	2591	2892	2.173	0.016	0.847	0.904
No education	0.077	0.011	2591	2892	2.164	0.147	0.055	0.100
Secondary education or higher	0.322	0.017	2591	2892	1.835	0.052	0.288	0.356
Net attendance ratio for primary school	0.893	0.012	1882	1952	1.505	0.013	0.870	0.916
Never married	0.336	0.013	2591	2892	1.371	0.038	0.310	0.361
Currently married/in union	0.548	0.014	2591	2892	1.381	0.025	0.521	0.575
Married by age 20	0.481	0.020	2001	2249	1.797	0.042	0.441	0.522
Had sexual intercourse by age 18	0.514	0.018	2001	2249	1.637	0.036	0.477	0.550
Currently pregnant	0.063	0.007	2591	2892	1.414	0.107	0.050	0.077
Children ever born	1.987	0.071	2591	2892	1.689	0.036	1.846	2.128
Children surviving	1.758	0.059	2591	2892	1.588	0.034	1.641	1.876
Children ever born to women age 40-49	4.656	0.185	385	382	1.431	0.040	4.285	5.027
Total fertility rate	3.725	0.158	na	23688	2.671	0.053	3.42	4.231
Knows any contraceptive method	1.000	0.000	1389	1585	N A	0.000	1.000	1.000
Known any modern contraceptive method	1.000	0.000	1389	1585	N A	0.000	1.000	1.000
Currently using any contraceptive method	0.459	0.021	1389	1585	1.578	0.046	0.417	0.502
Currently using a modern method	0.341	0.019	1389	1585	1.479	0.055	0.303	0.378
Currently using pill	0.086	0.010	1389	1585	1.277	0.112	0.067	0.105
Currently using injectable	0.025	0.005	1389	1585	1.269	0.211	0.015	0.036
Currently using IUD	0.008	0.003	1389	1585	1.258	0.383	0.002	0.014
Currently using female sterilisation	0.039	0.007	1389	1585	1.347	0.180	0.025	0.053
Currently using condom	0.032	0.006	1389	1585	1.278	0.187	0.020	0.045
Currently using periodic abstinence	0.067	0.011	1389	1585	1.591	0.160	0.045	0.088
Used public sector source	0.460	0.029	626	777	1.430	0.062	0.403	0.517
Want no more children	0.300	0.015	1416	1615	1.210	0.049	0.271	0.330
Want to delay birth at least 2 years	0.437	0.020	1416	1615	1.486	0.045	0.398	0.477
Ideal family size	3.968	0.072	2551	2845	2.124	0.018	3.824	4.113
Perinatal mortality (0-4 years)	49.301	6.662	1545	1698	1.173	0.135	35.977	62.624
Child mortality (0-9 years)	33.830	5.802	2813	3023	1.557	0.171	22.226	45.433
Infant mortality (0-9 years)	62.795	5.257	2808	3018	1.116	0.084	52.282	73.308
Neonatal mortality (0-9 years)	31.217	4.361	2801	3009	1.274	0.140	22.496	39.939
Post-neonatal mortality (0-9 years)	31.577	3.804	2808	3018	1.129	0.120	23.969	39.186
Under-5 mortality (0-9 years)	94.500	8.519	2820	3032	1.451	0.090	77.461	111.538
Mother received 2+ tetanus njections for last birth	0.603	0.021	1130	1273	1.473	0.035	0.560	0.645
Mothers received medical assistance at delivery	0.824	0.036	1511	1660	2.967	0.044	0.753	0.896
Had diarrhoea in two weeks before survey	0.181	0.017	1400	1530	1.533	0.091	0.147	0.214
Treated with oral rehydration salts (ORS)	0.443	0.046	211	276	1.411	0.105	0.350	0.536
Taken to a health provider	0.562	0.044	211	276	1.321	0.078	0.475	0.650
Vaccination card seen	0.848	0.023	287	305	1.042	0.027	0.802	0.893
Received BCG	0.982	0.011	287	305	1.330	0.011	0.960	1.003
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.970	0.011	287	305	1.049	0.011	0.948	0.992
Received polio (3 doses)	0.909	0.020	287	305	1.123	0.022	0.870	0.948
Received measles	0.929	0.016	287	305	1.020	0.017	0.898	0.961
Fully immunised	0.856	0.024	287	305	1.110	0.028	0.809	0.903
Height-for-age (below -2SD)	0.317	0.023	1365	1498	1.695	0.073	0.271	0.363
Weight-for-height (below -2SD)	0.046	0.007	1365	1498	1.089	0.142	0.033	0.060
Weight-for-age (below -2SD)	0.113	0.013	1365	1498	1.366	0.110	0.088	0.138
Prevalence of anaemia in children	0.609	0.025	1205	1292	1.674	0.041	0.559	0.658
Prevalence of anaemia in women	0.435	0.017	2504	2758	1.745	0.040	0.400	0.469
Body Mass Index (BMI) <18.5	0.081	0.007	2363	2623	1.302	0.091	0.066	0.096
Had 2+ sexual partners in past 12 months	0.031	0.004	2591	2892	1.307	0.145	0.022	0.039
Condom used at last intercourse	0.296	0.064	65	89	1.118	0.215	0.169	0.424
Sexually active in past 12 months (15-24)	0.289	0.016	1832	2177	1.528	0.056	0.257	0.321
Abstinence among youth (never had intercourse)	0.543	0.025	785	855	1.420	0.047	0.492	0.593
Sexually active in past 12 months (15-24)	0.363	0.022	785	855	1.284	0.061	0.319	0.407
Had an injection in past 12 months	0.402	0.013	2591	2892	1.317	0.032	0.377	0.428
Accepting attitudes towards people with HIV	0.405	0.018	2591	2892	1.848	0.044	0.370	0.441
Has HIV test and received result in past 12 months	0.369	0.012	2591	2892	1.220	0.031	0.346	0.392
MEN								
Urban residence	1.000	0.000	624	693	na	0.000	1.000	1.000
No education	0.029	0.008	624	693	1.233	0.286	0.012	0.045
Secondary education or higher	0.423	0.034	624	693	1.715	0.080	0.355	0.491
Never married	0.468	0.029	624	693	1.426	0.061	0.411	0.525
Currently married	0.463	0.030	624	693	1.482	0.064	0.404	0.523
Had sexual intercourse by age 18	0.328	0.037	276	310	1.324	0.114	0.253	0.403
Comprehensive knowledge about HIV/AIDS	0.584	0.025	624	693	1.272	0.043	0.534	0.634
Had HIV test and received result in past 12 months	0.288	0.023	624	693	1.241	0.078	0.243	0.333
Had injection in past 12 months	0.232	0.025	624	693	1.464	0.107	0.182	0.281
Abstinence among youth 15-24 (never intercourse)	0.530	0.037	247	261	1.171	0.070	0.456	0.605
Sexually active in past 12 months (15-24)	0.329	0.036	247	261	1.198	0.109	0.258	0.401
Had 2+ sexual partners in past 12 months	0.154	0.019	624	693	1.286	0.121	0.116	0.191
Condom used at last higher-risk intercourse	0.323	0.052	93	106	1.066	0.161	0.219	0.426
Had higher-risk intercourse in past 12 months	0.457	0.033	413	490	1.341	0.072	0.392	0.523

na = Not applicable

Table B.2.3 Sampling errors for Rural areas, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.000	0.000	7548	7247	N A	N A	0.000	0.000
Literate	0.661	0.013	7548	7247	2.446	0.020	0.635	0.688
No education	0.237	0.013	7548	7247	2.606	0.054	0.211	0.262
Secondary education or higher	0.099	0.007	7548	7247	1.897	0.066	0.086	0.112
Net attendance ratio for primary school	0.778	0.012	8109	8038	2.125	0.015	0.754	0.801
Never married	0.217	0.007	7548	7247	1.521	0.033	0.202	0.231
Currently married/in union	0.666	0.008	7548	7247	1.451	0.012	0.650	0.682
Married by age 20	0.669	0.010	5917	5718	1.578	0.014	0.649	0.688
Had sexual intercourse by age 18	0.606	0.013	5917	5718	2.042	0.021	0.580	0.632
Currently pregnant	0.108	0.005	7548	7247	1.354	0.045	0.099	0.118
Children ever born	3.236	0.044	7548	7247	1.353	0.014	3.148	3.325
Children surviving	2.831	0.038	7548	7247	1.349	0.014	2.754	2.908
Children ever born to women age 40-49	6.346	0.106	1422	1295	1.455	0.017	6.133	6.558
Total fertility rate	6.079	0.134	na	63167	3.046	0.028	5.547	6.211
Knows any contraceptive method	0.985	0.003	4921	4827	1.969	0.003	0.978	0.992
Known any modern contraceptive method	0.985	0.003	4921	4827	1.967	0.003	0.978	0.992
Currently using any contraceptive method	0.305	0.014	4921	4827	2.149	0.046	0.277	0.334
Currently using a modern method	0.252	0.013	4921	4827	2.034	0.050	0.227	0.277
Currently using pill	0.061	0.005	4921	4827	1.536	0.086	0.051	0.072
Currently using injectable	0.022	0.003	4921	4827	1.558	0.150	0.015	0.028
Currently using IUD	0.005	0.001	4921	4827	1.188	0.241	0.003	0.007
Currently using female sterilisation	0.034	0.003	4921	4827	1.309	0.099	0.027	0.041
Currently using condom	0.021	0.003	4921	4827	1.420	0.140	0.015	0.026
Currently using periodic abstinence	0.020	0.003	4921	4827	1.276	0.128	0.015	0.025
Used public sector source	0.623	0.022	1392	1518	1.656	0.035	0.580	0.666
Want no more children	0.296	0.011	5025	4948	1.690	0.037	0.275	0.318
Want to delay birth at least 2 years	0.439	0.010	5025	4948	1.366	0.022	0.420	0.458
Ideal family size	5.225	0.062	7374	7101	2.446	0.012	5.101	5.349
Perinatal mortality (0-4 years)	32.502	2.883	6615	6621	1.295	0.089	26.736	38.268
Child mortality (0-9 years)	34.479	2.435	12401	12410	1.265	0.071	29.609	39.349
Infant mortality (0-9 years)	59.516	3.105	12363	12371	1.382	0.052	53.307	65.725
Neonatal mortality (0-9 years)	26.865	2.011	12338	12345	1.324	0.075	22.844	30.886
Post-neonatal mortality (0-9 years)	32.651	2.168	12361	12368	1.300	0.066	28.315	36.987
Under-5 mortality (0-9 years)	91.943	4.010	12428	12439	1.413	0.044	83.922	99.964
Mother received 2+ tetanus njections for last birth	0.438	0.013	4228	4246	1.801	0.031	0.411	0.465
Mothers received medical assistance at delivery	0.404	0.017	6512	6516	2.462	0.043	0.369	0.438
Had diarrhoea in two weeks before survey	0.136	0.008	6126	6137	1.665	0.055	0.121	0.151
Treated with oral rehydration salts (ORS)	0.439	0.025	804	833	1.436	0.058	0.388	0.490
Taken to a health provider	0.515	0.027	804	833	1.497	0.053	0.460	0.569
Vaccination card seen	0.841	0.014	1262	1271	1.367	0.016	0.813	0.869
Received BCG	0.948	0.010	1262	1271	1.648	0.011	0.928	0.968
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.859	0.017	1262	1271	1.741	0.020	0.825	0.892
Received polio (3 doses)	0.835	0.018	1262	1271	1.701	0.021	0.800	0.870
Received measles	0.825	0.017	1262	1271	1.578	0.020	0.791	0.858
Fully immunised	0.726	0.020	1262	1271	1.632	0.028	0.686	0.767
Height-for-age (below -2SD)	0.446	0.010	6189	6193	1.495	0.023	0.426	0.466
Weight-for-height (below -2SD)	0.048	0.004	6189	6193	1.267	0.074	0.040	0.055
Weight-for-age (below -2SD)	0.169	0.008	6189	6193	1.549	0.047	0.153	0.185
Prevalence of anaemia in children	0.581	0.012	5572	5581	1.637	0.020	0.558	0.604
Prevalence of anaemia in women	0.388	0.012	7424	7118	2.161	0.032	0.364	0.413
Body Mass Index (BMI) <18.5	0.128	0.006	6489	6166	1.457	0.047	0.116	0.140
Had 2+ sexual partners in past 12 months	0.037	0.004	7548	7247	1.784	0.105	0.029	0.045
Condom used at last intercourse	0.263	0.045	226	269	1.544	0.172	0.173	0.354
Sexually active in past 12 months (15-24)	0.202	0.008	5751	5780	1.518	0.040	0.186	0.219
Abstinence among youth (never had intercourse)	0.633	0.018	1657	1418	1.517	0.028	0.597	0.669
Sexually active in past 12 months (15-24)	0.317	0.017	1657	1418	1.529	0.055	0.282	0.352
Had an injection in past 12 months	0.343	0.009	7548	7247	1.610	0.026	0.325	0.360
Accepting attitudes towards people with HIV	0.259	0.010	7548	7247	1.916	0.037	0.240	0.279
Has HIV test and received result in past 12 months	0.265	0.009	7548	7247	1.771	0.034	0.247	0.283
MEN								
Urban residence	0.000	0.000	1903	1834	na	na	0.000	0.000
No education	0.119	0.012	1903	1834	1.628	0.101	0.095	0.144
Secondary education or higher	0.156	0.013	1903	1834	1.524	0.081	0.130	0.181
Never married	0.394	0.014	1903	1834	1.212	0.034	0.366	0.421
Currently married	0.543	0.014	1903	1834	1.249	0.026	0.515	0.572
Had sexual intercourse by age 18	0.410	0.019	817	816	1.087	0.046	0.373	0.448
Comprehensive knowledge about HIV/AIDS	0.414	0.013	1903	1834	1.153	0.031	0.388	0.440
Had HIV test and received result in past 12 months	0.236	0.012	1903	1834	1.271	0.052	0.211	0.261
Had injection in past 12 months	0.184	0.012	1903	1834	1.306	0.063	0.160	0.207
Abstinence among youth 15-24 (never intercourse)	0.509	0.026	733	654	1.381	0.050	0.458	0.560
Sexually active in past 12 months (15-24)	0.383	0.025	733	654	1.399	0.066	0.333	0.433
Had 2+ sexual partners in past 12 months	0.226	0.013	1903	1834	1.388	0.059	0.199	0.253
Condom used at last higher-risk intercourse	0.215	0.029	379	414	1.387	0.136	0.157	0.274
Had higher-risk intercourse in past 12 months	0.443	0.017	1335	1370	1.286	0.039	0.408	0.478

na = Not apaplicable

Table B.2.4 Sampling errors for Mainland, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.281	0.028	7743	9813	5.391	0.098	0.226	0.336
Literate	0.719	0.012	7743	9813	2.428	0.017	0.694	0.744
No education	0.192	0.011	7743	9813	2.466	0.057	0.170	0.215
Secondary education or higher	0.149	0.009	7743	9813	2.311	0.063	0.130	0.168
Net attendance ratio for primary school	0.799	0.010	7893	9709	1.926	0.013	0.778	0.820
Never married	0.247	0.007	7743	9813	1.499	0.030	0.232	0.261
Currently married/in union	0.635	0.008	7743	9813	1.408	0.012	0.620	0.650
Married by age 20	0.619	0.011	6112	7720	1.732	0.017	0.597	0.640
Had sexual intercourse by age 18	0.586	0.011	6112	7720	1.796	0.019	0.563	0.609
Currently pregnant	0.096	0.004	7743	9813	1.283	0.045	0.088	0.105
Children ever born	2.883	0.052	7743	9813	1.687	0.018	2.780	2.987
Children surviving	2.526	0.045	7743	9813	1.672	0.018	2.436	2.615
Children ever born to women age 40-49	5.928	0.108	1330	1615	1.412	0.018	5.712	6.144
Total fertility rate	5.446	0.141	na	27309	1.682	0.026	5.165	5.727
Knows any contraceptive method	0.988	0.003	4982	6232	1.771	0.003	0.983	0.994
Known any modern contraceptive method	0.988	0.003	4982	6232	1.769	0.003	0.983	0.994
Currently using any contraceptive method	0.348	0.013	4982	6232	1.909	0.037	0.322	0.374
Currently using a modern method	0.278	0.011	4982	6232	1.761	0.040	0.256	0.300
Currently using pill	0.068	0.005	4982	6232	1.344	0.070	0.059	0.078
Currently using injectable	0.023	0.003	4982	6232	1.343	0.124	0.017	0.029
Currently using IUD	0.006	0.001	4982	6232	1.114	0.208	0.003	0.008
Currently using female sterilisation	0.036	0.003	4982	6232	1.201	0.088	0.030	0.042
Currently using condom	0.024	0.003	4982	6232	1.252	0.113	0.019	0.029
Currently using periodic abstinence	0.031	0.004	4982	6232	1.433	0.113	0.024	0.039
Used public sector source	0.565	0.018	1822	2270	1.532	0.032	0.529	0.600
Want no more children	0.299	0.009	5100	6381	1.441	0.031	0.281	0.318
Want to delay birth at least 2 years	0.438	0.009	5100	6381	1.283	0.020	0.420	0.456
Ideal family size	4.809	0.063	7582	9627	2.615	0.013	4.684	4.935
Perinatal mortality (0-4 years)	35.543	2.736	6498	8094	1.141	0.077	30.072	41.015
Child mortality (0-9 years)	34.775	2.312	12110	15015	1.173	0.066	30.150	39.399
Infant mortality (0-9 years)	60.335	2.767	12075	14971	1.188	0.046	54.800	65.870
Neonatal mortality (0-9 years)	27.673	1.866	12049	14937	1.171	0.067	23.941	31.405
Post-neonatal mortality (0-9 years)	32.662	1.938	12073	14969	1.127	0.059	28.785	36.539
Under-5 mortality (0-9 years)	93.011	3.717	12138	15051	1.265	0.040	85.577	100.446
Mother received 2+ tetanus njections for last birth	0.479	0.012	4312	5378	1.618	0.026	0.454	0.504
Mothers received medical assistance at delivery	0.488	0.019	6389	7955	2.477	0.038	0.451	0.525
Had diarrhoea in two weeks before survey	0.146	0.007	5986	7461	1.492	0.049	0.131	0.160
Treated with oral rehydration salts (ORS)	0.441	0.023	833	1086	1.281	0.052	0.396	0.487
Taken to a health provider	0.526	0.023	833	1086	1.294	0.045	0.479	0.572
Vaccination card seen	0.843	0.012	1224	1533	1.168	0.015	0.818	0.867
Received BCG	0.954	0.009	1224	1533	1.438	0.009	0.937	0.971
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.878	0.015	1224	1533	1.549	0.017	0.849	0.908
Received polio (3 doses)	0.849	0.015	1224	1533	1.477	0.018	0.818	0.880
Received measles	0.845	0.015	1224	1533	1.398	0.017	0.815	0.874
Fully immunised	0.751	0.018	1224	1533	1.441	0.024	0.715	0.787
Height-for-age (below -2SD)	0.424	0.010	6035	7488	1.407	0.023	0.405	0.443
Weight-for-height (below -2SD)	0.045	0.003	6035	7488	1.140	0.070	0.039	0.052
Weight-for-age (below -2SD)	0.157	0.007	6035	7488	1.386	0.045	0.143	0.171
Prevalence of anaemia in children	0.583	0.011	5396	6688	1.507	0.018	0.562	0.605
Prevalence of anaemia in women	0.395	0.010	7565	9553	1.846	0.026	0.374	0.416
Body Mass Index (BMI) <18.5	0.113	0.005	6696	8493	1.305	0.045	0.103	0.123
Had 2+ sexual partners in past 12 months	0.036	0.003	7743	9813	1.487	0.087	0.030	0.043
Condom used at last intercourse	0.272	0.037	279	356	1.396	0.137	0.198	0.347
Sexually active in past 12 months (15-24)	0.230	0.008	6127	7761	1.431	0.033	0.215	0.245
Abstinence among youth (never had intercourse)	0.583	0.016	1665	2165	1.287	0.027	0.552	0.614
Sexually active in past 12 months (15-24)	0.349	0.014	1665	2165	1.227	0.041	0.320	0.377
Had an injection in past 12 months	0.361	0.008	7743	9813	1.396	0.021	0.346	0.376
Accepting attitudes towards people with HIV	0.298	0.010	7743	9813	1.884	0.033	0.278	0.317
Has HIV test and received result in past 12 months	0.297	0.008	7743	9813	1.556	0.027	0.281	0.313
MEN								
Urban residence	0.270	0.027	1964	2452	2.652	0.098	0.217	0.323
No education	0.096	0.010	1964	2452	1.456	0.101	0.076	0.115
Secondary education or higher	0.216	0.015	1964	2452	1.658	0.071	0.185	0.247
Never married	0.410	0.013	1964	2452	1.166	0.032	0.384	0.436
Currently married	0.525	0.014	1964	2452	1.206	0.026	0.498	0.552
Had sexual intercourse by age 18	0.394	0.017	876	1095	1.047	0.044	0.359	0.428
Comprehensive knowledge about HIV/AIDS	0.465	0.013	1964	2452	1.140	0.028	0.439	0.490
Had HIV test and received result in past 12 months	0.251	0.011	1964	2452	1.149	0.045	0.229	0.274
Had injection in past 12 months	0.199	0.011	1964	2452	1.231	0.056	0.177	0.221
Abstinence among youth 15-24 (never intercourse)	0.504	0.022	709	882	1.157	0.043	0.460	0.547
Sexually active in past 12 months (15-24)	0.377	0.022	709	882	1.182	0.057	0.334	0.420
Had 2+ sexual partners in past 12 months	0.209	0.011	1964	2452	1.239	0.054	0.187	0.232
Condom used at last higher-risk intercourse	0.239	0.026	420	514	1.250	0.109	0.187	0.291
Had higher-risk intercourse in past 12 months	0.452	0.016	1463	1821	1.207	0.035	0.420	0.483

na = Not apaplicable

Table B.2.5 Sampling errors for Mainland Urban, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	1.000	0.000	1884	2758	N A	0.000	1.000	1.000
Literate	0.873	0.015	1884	2758	1.922	0.017	0.844	0.903
No education	0.078	0.012	1884	2758	1.917	0.151	0.055	0.102
Secondary education or higher	0.305	0.017	1884	2758	1.630	0.057	0.270	0.339
Net attendance ratio for primary school	0.892	0.012	1297	1842	1.385	0.014	0.868	0.916
Never married	0.333	0.013	1884	2758	1.223	0.040	0.306	0.359
Currently married/in union	0.550	0.014	1884	2758	1.230	0.026	0.522	0.578
Married by age 20	0.484	0.021	1456	2145	1.605	0.043	0.441	0.526
Had sexual intercourse by age 18	0.523	0.019	1456	2145	1.451	0.036	0.485	0.561
Currently pregnant	0.064	0.007	1884	2758	1.256	0.111	0.050	0.078
Children ever born	1.966	0.074	1884	2758	1.535	0.037	1.819	2.114
Children surviving	1.736	0.061	1884	2758	1.445	0.035	1.613	1.858
Children ever born to women age 40-49	4.554	0.193	247	357	1.220	0.042	4.167	4.941
Total fertility rate	3.699	0.178	na	7663	1.378	0.048	3.344	4.055
Knows any contraceptive method	1.000	0.000	1027	1516	N A	0.000	1.000	1.000
Known any modern contraceptive method	1.000	0.000	1027	1516	N A	0.000	1.000	1.000
Currently using any contraceptive method	0.468	0.022	1027	1516	1.417	0.047	0.424	0.512
Currently using a modern method	0.349	0.020	1027	1516	1.321	0.056	0.309	0.388
Currently using pill	0.087	0.010	1027	1516	1.139	0.115	0.067	0.108
Currently using injectable	0.026	0.006	1027	1516	1.132	0.218	0.015	0.037
Currently using IUD	0.008	0.003	1027	1516	1.116	0.391	0.002	0.014
Currently using female sterilisation	0.040	0.007	1027	1516	1.196	0.184	0.025	0.054
Currently using condom	0.034	0.006	1027	1516	1.129	0.189	0.021	0.046
Currently using periodic abstinence	0.067	0.011	1027	1516	1.423	0.166	0.045	0.089
Used public sector source	0.455	0.029	555	764	1.369	0.064	0.397	0.513
Want no more children	0.301	0.015	1052	1546	1.087	0.051	0.270	0.331
Want to delay birth at least 2 years	0.438	0.020	1052	1546	1.335	0.047	0.398	0.479
Ideal family size	3.878	0.072	1857	2714	1.911	0.019	3.734	4.023
Perinatal mortality (0-4 years)	48.460	6.947	1127	1620	1.056	0.143	34.566	62.354
Child mortality (0-9 years)	35.036	6.106	2002	2873	1.367	0.174	22.825	47.248
Infant mortality (0-9 years)	63.293	5.545	1997	2867	1.001	0.088	52.203	74.383
Neonatal mortality (0-9 years)	31.044	4.601	1992	2859	1.151	0.148	21.842	40.245
Post-neonatal mortality (0-9 years)	32.249	3.996	1997	2867	0.999	0.124	24.258	40.241
Under-5 mortality (0-9 years)	96.112	8.969	2007	2881	1.292	0.093	78.174	114.050
Mother received 2+ tetanus njections for last birth	0.611	0.022	858	1222	1.309	0.036	0.567	0.655
Mothers received medical assistance at delivery	0.828	0.038	1100	1583	2.668	0.046	0.752	0.903
Had diarrhoea in two weeks before survey	0.186	0.017	1016	1459	1.341	0.092	0.152	0.220
Treated with oral rehydration salts (ORS)	0.444	0.047	182	271	1.242	0.106	0.349	0.538
Taken to a health provider	0.561	0.045	182	271	1.161	0.079	0.472	0.651
Vaccination card seen	0.849	0.024	202	290	0.933	0.028	0.802	0.897
Received BCG	0.982	0.011	202	290	1.194	0.012	0.959	1.004
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.972	0.011	202	290	0.974	0.012	0.950	0.995
Received polio (3 doses)	0.913	0.021	202	290	1.020	0.023	0.871	0.954
Received measles	0.936	0.016	202	290	0.932	0.017	0.904	0.969
Fully immunised	0.863	0.025	202	290	1.004	0.029	0.813	0.912
Height-for-age (below -2SD)	0.322	0.024	994	1428	1.541	0.075	0.274	0.370
Weight-for-height (below -2SD)	0.043	0.007	994	1428	1.020	0.157	0.030	0.057
Weight-for-age (below -2SD)	0.111	0.013	994	1428	1.263	0.118	0.085	0.137
Prevalence of anaemia in children	0.605	0.026	867	1229	1.540	0.043	0.553	0.657
Prevalence of anaemia in women	0.428	0.018	1807	2625	1.554	0.042	0.392	0.464
Body Mass Index (BMI) <18.5	0.078	0.008	1708	2498	1.170	0.097	0.063	0.094
Had 2+ sexual partners in past 12 months	0.032	0.005	1884	2758	1.146	0.145	0.023	0.041
Condom used at last intercourse	0.298	0.064	63	88	1.105	0.216	0.169	0.426
Sexually active in past 12 months (15-24)	0.296	0.017	1428	2100	1.388	0.057	0.262	0.329
Abstinence among youth (never had intercourse)	0.522	0.026	547	809	1.226	0.050	0.470	0.575
Sexually active in past 12 months (15-24)	0.380	0.023	547	809	1.104	0.060	0.334	0.426
Had an injection in past 12 months	0.405	0.013	1884	2758	1.172	0.033	0.378	0.431
Accepting attitudes towards people with HIV	0.403	0.019	1884	2758	1.649	0.046	0.366	0.440
Has HIV test and received result in past 12 months	0.375	0.012	1884	2758	1.077	0.032	0.351	0.399
MEN								
Urban residence	1.000	0.000	466	662	na	0.000	1.000	1.000
No education	0.030	0.009	466	662	1.103	0.293	0.012	0.047
Secondary education or higher	0.408	0.036	466	662	1.559	0.087	0.337	0.480
Never married	0.465	0.030	466	662	1.283	0.064	0.406	0.525
Currently married	0.467	0.031	466	662	1.332	0.066	0.406	0.529
Had sexual intercourse by age 18	0.337	0.039	205	296	1.182	0.116	0.259	0.416
Comprehensive knowledge about HIV/AIDS	0.592	0.026	466	662	1.148	0.044	0.540	0.644
Had HIV test and received result in past 12 months	0.291	0.023	466	662	1.113	0.081	0.244	0.337
Had injection in past 12 months	0.236	0.026	466	662	1.311	0.109	0.184	0.287
Abstinence among youth 15-24 (never intercourse)	0.519	0.039	186	250	1.056	0.075	0.442	0.597
Sexually active in past 12 months (15-24)	0.341	0.038	186	250	1.077	0.110	0.265	0.416
Had 2+ sexual partners in past 12 months	0.156	0.019	466	662	1.154	0.124	0.117	0.195
Condom used at last higher-risk intercourse	0.329	0.053	79	104	1.003	0.162	0.223	0.436
Had higher-risk intercourse in past 12 months	0.464	0.034	330	474	1.241	0.074	0.396	0.532

na = Not applicable

Table B.2.6 Sampling errors for Mainland Rural, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.000	0.000	5859	7055	N A	N A	0.000	0.000
Literate	0.659	0.014	5859	7055	2.203	0.021	0.632	0.686
No education	0.237	0.013	5859	7055	2.353	0.055	0.211	0.263
Secondary education or higher	0.088	0.006	5859	7055	1.731	0.073	0.075	0.101
Net attendance ratio for primary school	0.777	0.012	6596	7866	1.947	0.015	0.753	0.801
Never married	0.213	0.007	5859	7055	1.380	0.035	0.198	0.228
Currently married/in union	0.668	0.008	5859	7055	1.313	0.012	0.652	0.685
Married by age 20	0.670	0.010	4656	5575	1.434	0.015	0.651	0.690
Had sexual intercourse by age 18	0.610	0.013	4656	5575	1.849	0.022	0.584	0.637
Currently pregnant	0.109	0.005	5859	7055	1.221	0.046	0.099	0.119
Children ever born	3.242	0.045	5859	7055	1.230	0.014	3.151	3.332
Children surviving	2.835	0.039	5859	7055	1.227	0.014	2.756	2.913
Children ever born to women age 40-49	6.319	0.109	1083	1258	1.308	0.017	6.101	6.537
Total fertility rate	6.117	0.154	na	19646	1.635	0.025	5.808	6.426
Knows any contraceptive method	0.985	0.004	3955	4715	1.795	0.004	0.978	0.992
Known any modern contraceptive method	0.985	0.004	3955	4715	1.793	0.004	0.978	0.992
Currently using any contraceptive method	0.310	0.014	3955	4715	1.969	0.047	0.281	0.338
Currently using a modern method	0.255	0.013	3955	4715	1.861	0.051	0.230	0.281
Currently using pill	0.062	0.005	3955	4715	1.404	0.087	0.051	0.073
Currently using injectable	0.022	0.003	3955	4715	1.417	0.150	0.015	0.029
Currently using IUD	0.005	0.001	3955	4715	1.079	0.242	0.003	0.007
Currently using female sterilisation	0.035	0.003	3955	4715	1.190	0.100	0.028	0.042
Currently using condom	0.021	0.003	3955	4715	1.290	0.140	0.015	0.027
Currently using periodic abstinence	0.020	0.003	3955	4715	1.166	0.130	0.015	0.025
Used public sector source	0.620	0.022	1267	1506	1.589	0.035	0.577	0.664
Want no more children	0.299	0.011	4048	4835	1.551	0.037	0.277	0.321
Want to delay birth at least 2 years	0.438	0.010	4048	4835	1.255	0.022	0.419	0.458
Ideal family size	5.175	0.064	5725	6914	2.251	0.012	5.047	5.302
Perinatal mortality (0-4 years)	32.312	2.944	5371	6475	1.172	0.091	26.425	38.199
Child mortality (0-9 years)	34.714	2.489	10108	12142	1.139	0.072	29.736	39.692
Infant mortality (0-9 years)	59.638	3.172	10078	12104	1.247	0.053	53.295	65.981
Neonatal mortality (0-9 years)	26.874	2.055	10057	12078	1.195	0.076	22.764	30.983
Post-neonatal mortality (0-9 years)	32.764	2.214	10076	12101	1.173	0.068	28.337	37.192
Under-5 mortality (0-9 years)	92.281	4.097	10131	12170	1.274	0.044	84.088	100.475
Mother received 2+ tetanus njections for last birth	0.440	0.014	3454	4156	1.623	0.031	0.413	0.468
Mothers received medical assistance at delivery	0.404	0.018	5289	6373	2.221	0.044	0.369	0.439
Had diarrhoea in two weeks before survey	0.136	0.008	4970	6002	1.503	0.057	0.120	0.151
Treated with oral rehydration salts (ORS)	0.440	0.026	651	815	1.295	0.059	0.388	0.492
Taken to a health provider	0.514	0.028	651	815	1.350	0.054	0.458	0.569
Vaccination card seen	0.841	0.014	1022	1243	1.234	0.017	0.813	0.869
Received BCG	0.948	0.010	1022	1243	1.476	0.011	0.927	0.968
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.857	0.017	1022	1243	1.556	0.020	0.822	0.891
Received polio (3 doses)	0.834	0.018	1022	1243	1.530	0.022	0.798	0.870
Received measles	0.823	0.017	1022	1243	1.418	0.021	0.789	0.857
Fully immunised	0.725	0.021	1022	1243	1.468	0.028	0.684	0.766
Height-for-age (below -2SD)	0.448	0.010	5041	6059	1.372	0.023	0.428	0.469
Weight-for-height (below -2SD)	0.046	0.004	5041	6059	1.177	0.078	0.039	0.053
Weight-for-age (below -2SD)	0.168	0.008	5041	6059	1.424	0.048	0.152	0.184
Prevalence of anaemia in children	0.578	0.012	4529	5459	1.505	0.020	0.555	0.602
Prevalence of anaemia in women	0.382	0.013	5758	6928	1.965	0.033	0.357	0.407
Body Mass Index (BMI) <18.5	0.128	0.006	4988	5996	1.319	0.049	0.115	0.140
Had 2+ sexual partners in past 12 months	0.038	0.004	5859	7055	1.594	0.105	0.030	0.046
Condom used at last intercourse	0.264	0.045	216	268	1.512	0.172	0.173	0.355
Sexually active in past 12 months (15-24)	0.206	0.008	4699	5661	1.387	0.040	0.189	0.222
Abstinence among youth (never had intercourse)	0.619	0.019	1118	1356	1.283	0.030	0.581	0.656
Sexually active in past 12 months (15-24)	0.330	0.018	1118	1356	1.292	0.055	0.294	0.367
Had an injection in past 12 months	0.344	0.009	5859	7055	1.454	0.026	0.326	0.362
Accepting attitudes towards people with HIV	0.257	0.010	5859	7055	1.732	0.039	0.237	0.277
Has HIV test and received result in past 12 months	0.267	0.009	5859	7055	1.599	0.035	0.248	0.285
MEN								
Urban residence	0.000	0.000	1498	1790	na	na	0.000	0.000
No education	0.120	0.012	1498	1790	1.472	0.103	0.095	0.145
Secondary education or higher	0.145	0.013	1498	1790	1.421	0.089	0.119	0.171
Never married	0.390	0.014	1498	1790	1.104	0.036	0.362	0.418
Currently married	0.546	0.015	1498	1790	1.136	0.027	0.517	0.575
Had sexual intercourse by age 18	0.414	0.019	671	799	1.005	0.046	0.376	0.453
Comprehensive knowledge about HIV/AIDS	0.417	0.013	1498	1790	1.047	0.032	0.391	0.444
Had HIV test and received result in past 12 months	0.236	0.013	1498	1790	1.154	0.054	0.211	0.262
Had injection in past 12 months	0.185	0.012	1498	1790	1.183	0.064	0.161	0.209
Abstinence among youth 15-24 (never intercourse)	0.497	0.026	523	633	1.206	0.053	0.445	0.550
Sexually active in past 12 months (15-24)	0.392	0.026	523	633	1.218	0.066	0.340	0.444
Had 2+ sexual partners in past 12 months	0.229	0.014	1498	1790	1.254	0.059	0.202	0.256
Condom used at last higher-risk intercourse	0.217	0.030	341	410	1.326	0.137	0.157	0.276
Had higher-risk intercourse in past 12 months	0.448	0.018	1133	1348	1.199	0.040	0.412	0.483

na = Not applicable

Table B.2.7 Sampling errors for Zanzibar region, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.412	0.064	2396	326	6.369	0.155	0.284	0.540
Literate	0.814	0.021	2396	326	2.578	0.025	0.773	0.855
No education	0.157	0.020	2396	326	2.661	0.126	0.117	0.196
Secondary education or higher	0.567	0.022	2396	326	2.205	0.039	0.522	0.612
Net attendance ratio for primary school	0.846	0.014	2098	281	1.671	0.017	0.817	0.875
Never married	0.367	0.013	2396	326	1.312	0.035	0.341	0.393
Currently married/in union	0.551	0.014	2396	326	1.414	0.026	0.523	0.580
Married by age 20	0.530	0.016	1806	247	1.382	0.031	0.498	0.562
Had sexual intercourse by age 18	0.386	0.016	1806	247	1.419	0.042	0.353	0.418
Currently pregnant	0.077	0.007	2396	326	1.246	0.088	0.064	0.091
Children ever born	2.780	0.090	2396	326	1.382	0.033	2.600	2.961
Children surviving	2.505	0.078	2396	326	1.334	0.031	2.348	2.662
Children ever born to women age 40-49	6.795	0.194	477	63	1.452	0.029	6.408	7.183
Total fertility rate	5.121	0.279	na	2805	2.22	0.042	4.563	5.679
Knows any contraceptive method	0.996	0.002	1328	180	0.912	0.002	0.992	0.999
Known any modern contraceptive method	0.996	0.002	1328	180	0.912	0.002	0.992	0.999
Currently using any contraceptive method	0.184	0.020	1328	180	1.868	0.108	0.144	0.224
Currently using a modern method	0.124	0.015	1328	180	1.641	0.120	0.094	0.154
Currently using pill	0.040	0.007	1328	180	1.296	0.174	0.026	0.054
Currently using injectable	0.010	0.003	1328	180	1.098	0.306	0.004	0.015
Currently using IUD	0.002	0.001	1328	180	1.245	0.781	0.000	0.005
Currently using female sterilisation	0.010	0.005	1328	180	2.025	0.565	0.000	0.020
Currently using condom	0.006	0.002	1328	180	1.074	0.386	0.001	0.010
Currently using periodic abstinence	0.030	0.007	1328	180	1.484	0.231	0.016	0.044
Used public sector source	0.819	0.032	196	26	1.173	0.040	0.754	0.884
Want no more children	0.226	0.014	1341	181	1.198	0.061	0.198	0.253
Want to delay birth at least 2 years	0.454	0.012	1341	181	0.912	0.027	0.429	0.479
Ideal family size	6.565	0.162	2343	319	2.910	0.025	6.240	6.889
Perinatal mortality (0-4 years)	49.918	5.960	1662	225	1.029	0.119	37.999	61.838
Child mortality (0-9 years)	19.980	2.943	3104	419	0.983	0.147	14.093	25.867
Infant mortality (0-9 years)	53.914	5.126	3096	418	1.142	0.095	43.662	64.166
Neonatal mortality (0-9 years)	29.373	3.141	3090	417	0.943	0.107	23.092	35.655
Post-neonatal mortality (0-9 years)	24.541	3.978	3096	418	1.308	0.162	16.585	32.497
Under-5 mortality (0-9 years)	72.817	5.768	3110	420	1.077	0.079	61.280	84.353
Mother received 2+ tetanus njections for last birth	0.355	0.022	1046	141	1.490	0.063	0.310	0.399
Mothers received medical assistance at delivery	0.522	0.036	1634	221	2.384	0.070	0.449	0.594
Had diarrhoea in two weeks before survey	0.113	0.011	1540	206	1.252	0.097	0.091	0.135
Treated with oral rehydration salts (ORS)	0.401	0.047	182	23	1.194	0.118	0.306	0.495
Taken to a health provider	0.562	0.042	182	23	1.061	0.075	0.477	0.647
Vaccination card seen	0.828	0.025	325	43	1.203	0.031	0.777	0.879
Received BCG	0.981	0.008	325	43	1.047	0.008	0.965	0.997
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.946	0.012	325	43	0.975	0.013	0.922	0.971
Received polio (3 doses)	0.865	0.018	325	43	0.933	0.021	0.829	0.901
Received measles	0.850	0.023	325	43	1.160	0.027	0.804	0.897
Fully immunised	0.772	0.025	325	43	1.065	0.033	0.721	0.822
Height-for-age (below -2SD)	0.301	0.019	1519	204	1.556	0.064	0.262	0.339
Weight-for-height (below -2SD)	0.119	0.009	1519	204	1.019	0.072	0.102	0.136
Weight-for-age (below -2SD)	0.199	0.013	1519	204	1.240	0.067	0.172	0.226
Prevalence of anaemia in children	0.685	0.016	1381	185	1.267	0.023	0.654	0.717
Prevalence of anaemia in women	0.587	0.013	2363	322	1.275	0.022	0.561	0.613
Body Mass Index (BMI) <18.5	0.139	0.010	2156	295	1.341	0.072	0.119	0.159
Had 2+ sexual partners in past 12 months	0.004	0.001	2396	326	0.994	0.306	0.002	0.007
Condom used at last intercourse	0.071	0.070	12	1	0.900	0.984	0.000	0.210
Sexually active in past 12 months (15-24)	0.076	0.012	1456	196	1.668	0.152	0.053	0.100
Abstinence among youth (never had intercourse)	0.929	0.013	777	108	1.395	0.014	0.904	0.955
Sexually active in past 12 months (15-24)	0.049	0.011	777	108	1.386	0.220	0.027	0.070
Had an injection in past 12 months	0.326	0.013	2396	326	1.335	0.039	0.301	0.352
Accepting attitudes towards people with HIV	0.395	0.019	2396	326	1.943	0.049	0.356	0.434
Has HIV test and received result in past 12 months	0.229	0.010	2396	326	1.129	0.042	0.210	0.249
MEN								
Urban residence	0.413	0.058	563	75	2.774	0.139	0.298	0.528
No education	0.054	0.015	563	75	1.566	0.275	0.024	0.084
Secondary education or higher	0.651	0.025	563	75	1.254	0.039	0.601	0.702
Never married	0.539	0.031	563	75	1.466	0.057	0.477	0.600
Currently married	0.409	0.030	563	75	1.469	0.075	0.348	0.470
Had sexual intercourse by age 18	0.174	0.028	217	31	1.105	0.164	0.117	0.231
Comprehensive knowledge about HIV/AIDS	0.334	0.027	563	75	1.349	0.080	0.280	0.387
Had HIV test and received result in past 12 months	0.221	0.022	563	75	1.264	0.100	0.177	0.265
Had injection in past 12 months	0.132	0.016	563	75	1.089	0.118	0.101	0.163
Abstinence among youth 15-24 (never intercourse)	0.813	0.028	271	33	1.190	0.035	0.756	0.869
Sexually active in past 12 months (15-24)	0.111	0.021	271	33	1.094	0.189	0.069	0.152
Had 2+ sexual partners in past 12 months	0.096	0.015	563	75	1.240	0.161	0.065	0.127
Condom used at last higher-risk intercourse	0.089	0.049	52	7	1.219	0.545	0.000	0.187
Had higher-risk intercourse in past 12 months	0.211	0.032	285	39	1.329	0.153	0.146	0.275

na = Not applicable

Table B.2.8 Sampling errors for Unguga, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.531	0.081	1457	212	6.158	0.152	0.370	0.692
Literate	0.880	0.020	1457	212	2.334	0.023	0.841	0.920
No education	0.101	0.021	1457	212	2.598	0.203	0.060	0.142
Secondary education or higher	0.619	0.025	1457	212	1.938	0.040	0.569	0.668
Net attendance ratio for primary school	0.891	0.015	1159	166	1.606	0.017	0.860	0.922
Never married	0.365	0.018	1457	212	1.416	0.049	0.329	0.401
Currently married/in union	0.546	0.020	1457	212	1.501	0.036	0.507	0.585
Married by age 20	0.489	0.017	1124	164	1.161	0.035	0.454	0.524
Had sexual intercourse by age 18	0.369	0.019	1124	164	1.333	0.052	0.331	0.407
Currently pregnant	0.061	0.007	1457	212	1.175	0.121	0.046	0.076
Children ever born	2.472	0.094	1457	212	1.236	0.038	2.285	2.659
Children surviving	2.263	0.090	1457	212	1.288	0.040	2.083	2.443
Children ever born to women age 40-49	6.132	0.197	276	38	1.168	0.032	5.738	6.526
Total fertility rate	4.563	0.2	na	612	1.312	0.044	4.162	4.963
Knows any contraceptive method	0.997	0.002	808	115	0.811	0.002	0.994	1.000
Known any modern contraceptive method	0.997	0.002	808	115	0.811	0.002	0.994	1.000
Currently using any contraceptive method	0.236	0.027	808	115	1.810	0.115	0.182	0.290
Currently using a modern method	0.149	0.021	808	115	1.678	0.141	0.107	0.191
Currently using pill	0.050	0.010	808	115	1.266	0.195	0.030	0.069
Currently using injectable	0.007	0.003	808	115	1.073	0.450	0.001	0.013
Currently using IUD	0.003	0.002	808	115	1.198	0.772	0.000	0.008
Currently using female sterilisation	0.015	0.008	808	115	1.947	0.556	0.000	0.032
Currently using condom	0.009	0.003	808	115	1.040	0.383	0.002	0.016
Currently using periodic abstinence	0.045	0.010	808	115	1.356	0.220	0.025	0.065
Used public sector source	0.815	0.039	153	20	1.233	0.048	0.737	0.893
Want no more children	0.227	0.018	817	117	1.260	0.081	0.190	0.264
Want to delay birth at least 2 years	0.437	0.015	817	117	0.890	0.035	0.406	0.468
Ideal family size	5.769	0.118	1407	205	1.947	0.021	5.533	6.006
Perinatal mortality (0-4 years)	60.849	7.493	933	133	0.917	0.123	45.863	75.834
Child mortality (0-9 years)	13.382	3.040	1702	244	1.052	0.227	7.303	19.462
Infant mortality (0-9 years)	52.514	5.593	1700	244	0.975	0.107	41.328	63.701
Neonatal mortality (0-9 years)	32.798	4.302	1696	243	0.923	0.131	24.194	41.401
Post-neonatal mortality (0-9 years)	19.717	3.725	1700	244	1.139	0.189	12.267	27.167
Under-5 mortality (0-9 years)	65.194	5.983	1706	245	0.958	0.092	53.228	77.160
Mother received 2+ tetanus njections for last birth	0.391	0.030	629	89	1.502	0.076	0.332	0.451
Mothers received medical assistance at delivery	0.661	0.038	915	131	1.995	0.057	0.586	0.737
Had diarrhoea in two weeks before survey	0.103	0.015	860	121	1.317	0.143	0.074	0.133
Treated with oral rehydration salts (ORS)	0.392	0.070	97	13	1.314	0.179	0.252	0.533
Taken to a health provider	0.607	0.057	97	13	1.082	0.095	0.492	0.722
Vaccination card seen	0.860	0.035	176	24	1.316	0.041	0.790	0.930
Received BCG	0.984	0.010	176	24	1.055	0.010	0.963	1.004
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.932	0.018	176	24	0.922	0.019	0.897	0.968
Received polio (3 doses)	0.886	0.023	176	24	0.942	0.026	0.840	0.933
Received measles	0.840	0.034	176	24	1.204	0.041	0.771	0.909
Fully immunised	0.797	0.035	176	24	1.105	0.043	0.728	0.866
Height-for-age (below -2SD)	0.264	0.024	855	121	1.542	0.092	0.216	0.313
Weight-for-height (below -2SD)	0.126	0.012	855	121	1.082	0.097	0.101	0.150
Weight-for-age (below -2SD)	0.188	0.018	855	121	1.343	0.097	0.152	0.225
Prevalence of anaemia in children	0.679	0.021	781	110	1.283	0.031	0.637	0.721
Prevalence of anaemia in women	0.573	0.017	1447	210	1.312	0.030	0.539	0.608
Body Mass Index (BMI) <18.5	0.129	0.013	1335	195	1.449	0.103	0.102	0.155
Had 2+ sexual partners in past 12 months	0.006	0.002	1457	212	0.958	0.317	0.002	0.010
Condom used at last intercourse	0.077	0.076	11	1	0.899	0.984	0.000	0.229
Sexually active in past 12 months (15-24)	0.109	0.016	920	130	1.540	0.145	0.077	0.141
Abstinence among youth (never had intercourse)	0.893	0.018	450	68	1.257	0.021	0.856	0.930
Sexually active in past 12 months (15-24)	0.074	0.016	450	68	1.257	0.210	0.043	0.105
Had an injection in past 12 months	0.322	0.016	1457	212	1.317	0.050	0.289	0.354
Accepting attitudes towards people with HIV	0.448	0.024	1457	212	1.810	0.053	0.401	0.495
Has HIV test and received result in past 12 months	0.237	0.011	1457	212	0.993	0.047	0.215	0.259
MEN								
Urban residence	0.504	0.073	372	53	2.807	0.144	0.359	0.650
No education	0.030	0.014	372	53	1.547	0.456	0.003	0.057
Secondary education or higher	0.678	0.030	372	53	1.254	0.045	0.617	0.739
Never married	0.523	0.041	372	53	1.569	0.078	0.442	0.605
Currently married	0.404	0.040	372	53	1.555	0.098	0.325	0.484
Had sexual intercourse by age 18	0.204	0.035	150	23	1.057	0.171	0.134	0.273
Comprehensive knowledge about HIV/AIDS	0.359	0.035	372	53	1.403	0.097	0.289	0.429
Had HIV test and received result in past 12 months	0.218	0.028	372	53	1.309	0.129	0.162	0.274
Had injection in past 12 months	0.130	0.019	372	53	1.097	0.147	0.092	0.168
Abstinence among youth 15-24 (never intercourse)	0.724	0.035	174	22	1.035	0.049	0.654	0.795
Sexually active in past 12 months (15-24)	0.167	0.030	174	22	1.044	0.177	0.108	0.226
Had 2+ sexual partners in past 12 months	0.106	0.020	372	53	1.240	0.187	0.066	0.145
Condom used at last higher-risk intercourse	0.115	0.062	38	6	1.188	0.541	0.000	0.240
Had higher-risk intercourse in past 12 months	0.274	0.041	205	29	1.304	0.149	0.193	0.356

na = Not apaplicable

Table B.2.9 Sampling errors for Pemba, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.193	0.067	939	115	5.191	0.347	0.059	0.327
Literate	0.691	0.033	939	115	2.154	0.047	0.626	0.756
No education	0.259	0.032	939	115	2.231	0.123	0.195	0.323
Secondary education or higher	0.471	0.035	939	115	2.118	0.073	0.402	0.540
Net attendance ratio for primary school	0.781	0.022	939	115	1.446	0.028	0.737	0.825
Never married	0.371	0.016	939	115	1.044	0.044	0.338	0.404
Currently married/in union	0.561	0.019	939	115	1.153	0.033	0.524	0.599
Married by age 20	0.611	0.025	682	83	1.313	0.040	0.562	0.660
Had sexual intercourse by age 18	0.419	0.027	682	83	1.438	0.065	0.365	0.474
Currently pregnant	0.108	0.011	939	115	1.106	0.104	0.086	0.130
Children ever born	3.350	0.120	939	115	1.006	0.036	3.110	3.589
Children surviving	2.951	0.091	939	115	0.872	0.031	2.769	3.132
Children ever born to women age 40-49	7.830	0.279	201	24	1.421	0.036	7.272	8.389
Total fertility rate	6.402	0.36	na	329	1.269	0.056	5.683	7.121
Knows any contraceptive method	0.994	0.003	520	64	0.992	0.003	0.987	1.001
Known any modern contraceptive method	0.994	0.003	520	64	0.992	0.003	0.987	1.001
Currently using any contraceptive method	0.092	0.017	520	64	1.333	0.184	0.058	0.126
Currently using a modern method	0.081	0.016	520	64	1.338	0.198	0.049	0.113
Currently using pill	0.023	0.008	520	64	1.226	0.352	0.007	0.039
Currently using injectable	0.014	0.006	520	64	1.116	0.408	0.003	0.026
Currently using IUD	0.000	0.000	520	64	N A	N A	0.000	0.000
Currently using female sterilisation	0.000	0.000	520	64	N A	N A	0.000	0.000
Currently using condom	0.000	0.000	520	64	N A	N A	0.000	0.000
Currently using periodic abstinence	0.004	0.003	520	64	0.999	0.695	0.000	0.009
Used public sector source	0.833	0.049	43	5	0.853	0.059	0.735	0.931
Want no more children	0.224	0.019	524	65	1.043	0.085	0.186	0.262
Want to delay birth at least 2 years	0.486	0.019	524	65	0.884	0.040	0.447	0.524
Ideal family size	7.992	0.184	936	114	1.998	0.023	7.625	8.359
Perinatal mortality (0-4 years)	33.921	8.373	729	91	1.064	0.247	17.176	50.666
Child mortality (0-9 years)	29.463	5.218	1402	175	0.947	0.177	19.026	39.899
Infant mortality (0-9 years)	55.998	9.888	1396	174	1.391	0.177	36.223	75.774
Neonatal mortality (0-9 years)	24.560	4.656	1394	174	1.004	0.190	15.249	33.871
Post-neonatal mortality (0-9 years)	31.439	8.049	1396	174	1.463	0.256	15.341	47.536
Under-5 mortality (0-9 years)	83.811	10.927	1404	175	1.213	0.130	61.957	105.665
Mother received 2+ tetanus njections for last birth	0.292	0.030	417	52	1.337	0.101	0.233	0.351
Mothers received medical assistance at delivery	0.319	0.047	719	90	2.217	0.147	0.225	0.413
Had diarrhoea in two weeks before survey	0.127	0.015	680	85	1.117	0.120	0.096	0.157
Treated with oral rehydration salts (ORS)	0.410	0.062	85	11	1.069	0.151	0.286	0.534
Taken to a health provider	0.509	0.060	85	11	1.038	0.119	0.388	0.630
Vaccination card seen	0.786	0.035	149	19	1.046	0.044	0.717	0.855
Received BCG	0.978	0.013	149	19	1.061	0.013	0.953	1.003
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.964	0.014	149	19	0.942	0.015	0.936	0.993
Received polio (3 doses)	0.838	0.028	149	19	0.946	0.034	0.781	0.894
Received measles	0.863	0.029	149	19	1.045	0.034	0.805	0.921
Fully immunised	0.740	0.037	149	19	1.051	0.050	0.665	0.814
Height-for-age (below -2SD)	0.353	0.027	664	83	1.388	0.077	0.299	0.408
Weight-for-height (below -2SD)	0.109	0.011	664	83	0.883	0.101	0.087	0.131
Weight-for-age (below -2SD)	0.214	0.019	664	83	1.070	0.088	0.177	0.252
Prevalence of anaemia in children	0.695	0.023	600	74	1.235	0.034	0.648	0.741
Prevalence of anaemia in women	0.613	0.018	916	112	1.121	0.029	0.577	0.649
Body Mass Index (BMI) <18.5	0.158	0.013	821	100	1.038	0.084	0.132	0.184
Had 2+ sexual partners in past 12 months	0.001	0.001	939	115	0.971	0.982	0.000	0.003
Condom used at last intercourse	0.000	0.000	1	0	na	na	0.000	0.000
Sexually active in past 12 months (15-24)	0.013	0.005	536	66	1.029	0.392	0.003	0.023
Abstinence among youth (never had intercourse)	0.992	0.006	327	40	1.149	0.006	0.980	1.003
Sexually active in past 12 months (15-24)	0.006	0.004	327	40	0.932	0.688	0.000	0.013
Had an injection in past 12 months	0.335	0.021	939	115	1.372	0.063	0.293	0.377
Accepting attitudes towards people with HIV	0.297	0.023	939	115	1.551	0.078	0.250	0.343
Has HIV test and received result in past 12 months	0.216	0.018	939	115	1.344	0.084	0.180	0.252
MEN								
Urban residence	0.196	0.075	191	22	2.607	0.383	0.046	0.346
No education	0.113	0.038	191	22	1.653	0.337	0.037	0.188
Secondary education or higher	0.589	0.045	191	22	1.251	0.076	0.500	0.678
Never married	0.576	0.041	191	22	1.132	0.070	0.495	0.657
Currently married	0.419	0.040	191	22	1.130	0.097	0.338	0.500
Had sexual intercourse by age 18	0.083	0.037	67	8	1.083	0.442	0.010	0.157
Comprehensive knowledge about HIV/AIDS	0.272	0.039	191	22	1.200	0.142	0.195	0.350
Had HIV test and received result in past 12 months	0.229	0.033	191	22	1.090	0.145	0.162	0.295
Had injection in past 12 months	0.137	0.026	191	22	1.056	0.192	0.084	0.190
Abstinence among youth 15-24 (never intercourse)	0.987	0.013	97	11	1.151	0.014	0.960	1.014
Sexually active in past 12 months (15-24)	0.000	0.000	97	11	na	na	0.000	0.000
Had 2+ sexual partners in past 12 months	0.073	0.022	191	22	1.190	0.307	0.028	0.118
Condom used at last higher-risk intercourse	0.000	0.000	14	2	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.012	0.012	80	9	0.962	0.993	0.000	0.035

na = Not applicable

Table B.2.10 Sampling errors for Western zone, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.175	0.067	1355	1728	6.490	0.383	0.041	0.309
Literate	0.620	0.034	1355	1728	2.589	0.055	0.552	0.689
No education	0.290	0.033	1355	1728	2.705	0.115	0.224	0.357
Secondary education or higher	0.094	0.018	1355	1728	2.322	0.196	0.057	0.131
Net attendance ratio for primary school	0.732	0.026	1376	1754	1.755	0.036	0.679	0.785
Never married	0.213	0.015	1355	1728	1.357	0.071	0.183	0.244
Currently married/in union	0.680	0.015	1355	1728	1.160	0.022	0.651	0.710
Married by age 20	0.713	0.020	1020	1314	1.430	0.028	0.672	0.753
Had sexual intercourse by age 18	0.642	0.024	1020	1314	1.620	0.038	0.593	0.690
Currently pregnant	0.129	0.011	1355	1728	1.205	0.085	0.107	0.151
Children ever born	3.136	0.096	1355	1728	1.213	0.031	2.943	3.328
Children surviving	2.754	0.082	1355	1728	1.193	0.030	2.590	2.918
Children ever born to women age 40-49	6.782	0.214	186	226	1.063	0.032	6.354	7.211
Total fertility rate	7.192	0.237	na	13892	2.647	0.052	6.718	7.666
Knows any contraceptive method	0.989	0.005	925	1175	1.352	0.005	0.979	0.998
Known any modern contraceptive method	0.989	0.005	925	1175	1.352	0.005	0.979	0.998
Currently using any contraceptive method	0.201	0.023	925	1175	1.708	0.112	0.156	0.246
Currently using a modern method	0.146	0.019	925	1175	1.635	0.130	0.108	0.184
Currently using pill	0.026	0.006	925	1175	1.151	0.232	0.014	0.038
Currently using injectable	0.003	0.002	925	1175	1.024	0.572	0.000	0.007
Currently using IUD	0.005	0.002	925	1175	0.966	0.447	0.001	0.010
Currently using female sterilisation	0.030	0.007	925	1175	1.182	0.222	0.017	0.043
Currently using condom	0.019	0.006	925	1175	1.219	0.286	0.008	0.030
Currently using periodic abstinence	0.018	0.008	925	1175	1.840	0.450	0.002	0.034
Used public sector source	0.588	0.065	171	209	1.728	0.111	0.458	0.719
Want no more children	0.201	0.017	943	1194	1.276	0.083	0.168	0.234
Want to delay birth at least 2 years	0.525	0.021	943	1194	1.270	0.039	0.484	0.566
Ideal family size	5.772	0.142	1344	1714	2.286	0.025	5.488	6.056
Perinatal mortality (0-4 years)	29.381	5.836	1370	1754	1.223	0.199	17.710	41.053
Child mortality (0-9 years)	44.717	5.974	2437	3140	1.142	0.134	32.769	56.666
Infant mortality (0-9 years)	55.799	4.928	2422	3123	1.026	0.088	45.942	65.655
Neonatal mortality (0-9 years)	24.619	3.462	2420	3120	1.078	0.141	17.696	31.542
Post-neonatal mortality (0-9 years)	31.180	4.049	2422	3123	1.101	0.130	23.083	39.277
Under-5 mortality (0-9 years)	98.021	7.632	2439	3143	1.124	0.078	82.757	113.285
Mother received 2+ tetanus njections for last birth	0.484	0.029	811	1042	1.630	0.059	0.427	0.541
Mothers received medical assistance at delivery	0.356	0.039	1340	1723	2.457	0.108	0.279	0.433
Had diarrhoea in two weeks before survey	0.115	0.021	1257	1618	2.177	0.182	0.073	0.157
Treated with oral rehydration salts (ORS)	0.490	0.061	141	186	1.359	0.123	0.369	0.611
Taken to a health provider	0.472	0.043	141	186	0.990	0.092	0.386	0.558
Vaccination card seen	0.836	0.033	273	336	1.460	0.040	0.769	0.903
Received BCG	0.904	0.026	273	336	1.428	0.029	0.852	0.956
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.749	0.037	273	336	1.372	0.049	0.675	0.823
Received polio (3 doses)	0.756	0.039	273	336	1.466	0.052	0.678	0.835
Received measles	0.682	0.039	273	336	1.356	0.057	0.604	0.761
Fully immunised	0.582	0.043	273	336	1.418	0.075	0.495	0.668
Height-for-age (below -2SD)	0.420	0.019	1264	1622	1.240	0.045	0.382	0.458
Weight-for-height (below -2SD)	0.031	0.005	1264	1622	1.077	0.170	0.020	0.041
Weight-for-age (below -2SD)	0.119	0.010	1264	1622	1.038	0.083	0.099	0.139
Prevalence of anaemia in children	0.701	0.021	1106	1408	1.420	0.030	0.658	0.743
Prevalence of anaemia in women	0.491	0.024	1319	1684	1.740	0.049	0.444	0.539
Body Mass Index (BMI) <18.5	0.130	0.010	1103	1412	1.019	0.079	0.109	0.150
Had 2+ sexual partners in past 12 months	0.025	0.004	1355	1728	1.001	0.169	0.017	0.034
Condom used at last intercourse	0.090	0.047	36	44	0.972	0.521	0.000	0.185
Sexually active in past 12 months (15-24)	0.163	0.012	1083	1380	1.104	0.076	0.138	0.188
Abstinence among youth (never had intercourse)	0.659	0.033	273	345	1.136	0.050	0.594	0.725
Sexually active in past 12 months (15-24)	0.283	0.031	273	345	1.140	0.110	0.221	0.345
Had an injection in past 12 months	0.357	0.016	1355	1728	1.212	0.044	0.325	0.389
Accepting attitudes towards people with HIV	0.338	0.024	1355	1728	1.876	0.071	0.290	0.387
Has HIV test and received result in past 12 months	0.290	0.021	1355	1728	1.696	0.072	0.248	0.332
MEN								
Urban residence	0.215	0.073	301	371	3.096	0.341	0.068	0.362
No education	0.099	0.029	301	371	1.660	0.289	0.042	0.156
Secondary education or higher	0.192	0.036	301	371	1.598	0.190	0.119	0.264
Never married	0.374	0.039	301	371	1.388	0.104	0.296	0.451
Currently married	0.577	0.041	301	371	1.443	0.071	0.494	0.659
Had sexual intercourse by age 18	0.527	0.045	108	135	0.936	0.086	0.436	0.617
Comprehensive knowledge about HIV/AIDS	0.430	0.035	301	371	1.214	0.081	0.361	0.499
Had HIV test and received result in past 12 months	0.294	0.030	301	371	1.142	0.102	0.233	0.354
Had injection in past 12 months	0.115	0.024	301	371	1.301	0.208	0.067	0.163
Abstinence among youth 15-24 (never intercourse)	0.511	0.047	111	124	0.986	0.092	0.417	0.605
Sexually active in past 12 months (15-24)	0.406	0.042	111	124	0.891	0.103	0.322	0.489
Had 2+ sexual partners in past 12 months	0.170	0.025	301	371	1.163	0.148	0.120	0.221
Condom used at last higher-risk intercourse	0.214	0.061	58	63	1.132	0.287	0.091	0.337
Had higher-risk intercourse in past 12 months	0.361	0.038	227	288	1.186	0.105	0.285	0.437

na = Not applicable

Table B.2.11 Sampling errors for Northern zone, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.272	0.059	1347	1530	4.833	0.216	0.154	0.389
Literate	0.771	0.028	1347	1530	2.408	0.036	0.716	0.826
No education	0.160	0.027	1347	1530	2.686	0.168	0.106	0.213
Secondary education or higher	0.186	0.016	1347	1530	1.523	0.087	0.154	0.218
Net attendance ratio for primary school	0.848	0.017	1388	1553	1.649	0.021	0.813	0.883
Never married	0.282	0.018	1347	1530	1.451	0.063	0.247	0.318
Currently married/in union	0.614	0.018	1347	1530	1.365	0.030	0.577	0.650
Married by age 20	0.517	0.029	1051	1203	1.878	0.056	0.459	0.575
Had sexual intercourse by age 18	0.412	0.021	1051	1203	1.415	0.052	0.369	0.455
Currently pregnant	0.078	0.008	1347	1530	1.056	0.099	0.062	0.093
Children ever born	2.672	0.126	1347	1530	1.825	0.047	2.421	2.923
Children surviving	2.439	0.116	1347	1530	1.856	0.048	2.208	2.671
Children ever born to women age 40-49	5.373	0.196	241	275	1.173	0.037	4.981	5.766
Total fertility rate	4.594	0.226	na	13279	2.811	0.07	4.142	5.046
Knows any contraceptive method	0.963	0.015	814	939	2.245	0.015	0.934	0.993
Known any modern contraceptive method	0.963	0.015	814	939	2.234	0.015	0.933	0.992
Currently using any contraceptive method	0.488	0.032	814	939	1.822	0.065	0.424	0.552
Currently using a modern method	0.387	0.026	814	939	1.526	0.067	0.335	0.439
Currently using pill	0.090	0.014	814	939	1.363	0.152	0.063	0.117
Currently using injectable	0.021	0.006	814	939	1.298	0.312	0.008	0.034
Currently using IUD	0.011	0.005	814	939	1.242	0.408	0.002	0.020
Currently using female sterilisation	0.040	0.007	814	939	1.092	0.189	0.025	0.055
Currently using condom	0.020	0.007	814	939	1.376	0.337	0.007	0.034
Currently using periodic abstinence	0.049	0.009	814	939	1.132	0.175	0.032	0.066
Used public sector source	0.598	0.038	390	460	1.516	0.063	0.523	0.673
Want no more children	0.374	0.025	832	962	1.515	0.068	0.323	0.425
Want to delay birth at least 2 years	0.419	0.023	832	962	1.353	0.055	0.373	0.465
Ideal family size	4.196	0.113	1306	1487	2.349	0.027	3.970	4.422
Perinatal mortality (0-4 years)	27.193	6.523	929	1041	1.144	0.240	14.146	40.239
Child mortality (0-9 years)	18.166	5.209	1844	2045	1.428	0.287	7.748	28.583
Infant mortality (0-9 years)	40.335	6.181	1841	2042	1.318	0.153	27.973	52.698
Neonatal mortality (0-9 years)	21.747	3.700	1837	2036	1.096	0.170	14.347	29.148
Post-neonatal mortality (0-9 years)	18.588	4.182	1841	2042	1.265	0.225	10.224	26.952
Under-5 mortality (0-9 years)	57.768	9.356	1848	2051	1.551	0.162	39.057	76.479
Mother received 2+ tetanus njections for last birth	0.636	0.029	689	782	1.569	0.045	0.578	0.693
Mothers received medical assistance at delivery	0.499	0.048	922	1030	2.516	0.096	0.403	0.595
Had diarrhoea in two weeks before survey	0.120	0.014	883	984	1.222	0.116	0.092	0.148
Treated with oral rehydration salts (ORS)	0.483	0.061	101	118	1.231	0.127	0.360	0.606
Taken to a health provider	0.672	0.059	101	118	1.210	0.088	0.554	0.790
Vaccination card seen	0.841	0.034	160	178	1.120	0.041	0.772	0.909
Received BCG	0.964	0.016	160	178	1.089	0.017	0.932	0.997
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.921	0.025	160	178	1.163	0.027	0.870	0.971
Received polio (3 doses)	0.884	0.029	160	178	1.059	0.033	0.827	0.942
Received measles	0.879	0.029	160	178	1.092	0.032	0.822	0.936
Fully immunised	0.802	0.033	160	178	1.012	0.042	0.736	0.869
Height-for-age (below -2SD)	0.424	0.023	876	978	1.315	0.055	0.378	0.471
Weight-for-height (below -2SD)	0.069	0.010	876	978	1.161	0.148	0.049	0.089
Weight-for-age (below -2SD)	0.224	0.024	876	978	1.532	0.107	0.176	0.272
Prevalence of anaemia in children	0.533	0.023	810	900	1.303	0.044	0.486	0.579
Prevalence of anaemia in women	0.286	0.019	1315	1490	1.558	0.068	0.247	0.325
Body Mass Index (BMI) <18.5	0.120	0.011	1205	1367	1.224	0.096	0.097	0.142
Had 2+ sexual partners in past 12 months	0.020	0.005	1347	1530	1.279	0.241	0.011	0.030
Condom used at last intercourse	0.379	0.104	24	31	1.026	0.274	0.171	0.586
Sexually active in past 12 months (15-24)	0.207	0.020	987	1139	1.575	0.098	0.166	0.248
Abstinence among youth (never had intercourse)	0.681	0.037	347	383	1.486	0.055	0.607	0.756
Sexually active in past 12 months (15-24)	0.253	0.034	347	383	1.468	0.136	0.184	0.322
Had an injection in past 12 months	0.343	0.020	1347	1530	1.542	0.058	0.303	0.383
Accepting attitudes towards people with HIV	0.317	0.023	1347	1530	1.806	0.072	0.272	0.363
Has HIV test and received result in past 12 months	0.300	0.017	1347	1530	1.332	0.055	0.267	0.333
MEN								
Urban residence	0.290	0.068	304	350	2.611	0.235	0.153	0.426
No education	0.088	0.024	304	350	1.481	0.274	0.040	0.136
Secondary education or higher	0.193	0.027	304	350	1.211	0.142	0.138	0.248
Never married	0.381	0.031	304	350	1.104	0.081	0.319	0.442
Currently married	0.512	0.034	304	350	1.187	0.067	0.444	0.580
Had sexual intercourse by age 18	0.388	0.040	163	191	1.056	0.104	0.307	0.469
Comprehensive knowledge about HIV/AIDS	0.478	0.035	304	350	1.208	0.072	0.409	0.548
Had HIV test and received result in past 12 months	0.298	0.030	304	350	1.133	0.100	0.239	0.358
Had injection in past 12 months	0.252	0.034	304	350	1.369	0.136	0.183	0.320
Abstinence among youth 15-24 (never intercourse)	0.630	0.075	99	114	1.529	0.118	0.481	0.779
Sexually active in past 12 months (15-24)	0.267	0.058	99	114	1.302	0.218	0.151	0.383
Had 2+ sexual partners in past 12 months	0.172	0.025	304	350	1.163	0.147	0.121	0.222
Condom used at last higher-risk intercourse	0.190	0.059	50	60	1.048	0.310	0.072	0.307
Had higher-risk intercourse in past 12 months	0.356	0.040	217	249	1.242	0.114	0.275	0.437

na = Not applicable

Table B.2.12 Sampling errors for Central zone, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.153	0.067	709	812	4.923	0.435	0.020	0.286
Literate	0.670	0.035	709	812	1.953	0.052	0.601	0.739
No education	0.237	0.032	709	812	1.978	0.133	0.173	0.300
Secondary education or higher	0.094	0.024	709	812	2.154	0.252	0.047	0.141
Net attendance ratio for primary school	0.726	0.035	819	947	2.001	0.048	0.656	0.796
Never married	0.214	0.021	709	812	1.358	0.098	0.172	0.256
Currently married/in union	0.685	0.023	709	812	1.319	0.034	0.638	0.731
Married by age 20	0.696	0.018	575	658	0.938	0.026	0.660	0.732
Had sexual intercourse by age 18	0.591	0.034	575	658	1.641	0.057	0.524	0.659
Currently pregnant	0.090	0.014	709	812	1.274	0.152	0.063	0.117
Children ever born	3.497	0.092	709	812	0.856	0.026	3.312	3.681
Children surviving	3.054	0.080	709	812	0.860	0.026	2.894	3.214
Children ever born to women age 40-49	6.610	0.260	147	169	1.309	0.039	6.090	7.129
Total fertility rate	6.473	0.373	na	7437	2.165	0.064	5.727	7.219
Knows any contraceptive method	0.993	0.004	490	556	1.166	0.004	0.985	1.002
Known any modern contraceptive method	0.993	0.004	490	556	1.166	0.004	0.985	1.002
Currently using any contraceptive method	0.288	0.027	490	556	1.333	0.095	0.233	0.342
Currently using a modern method	0.267	0.028	490	556	1.381	0.103	0.212	0.322
Currently using pill	0.048	0.010	490	556	0.994	0.200	0.029	0.067
Currently using injectable	0.025	0.009	490	556	1.336	0.377	0.006	0.044
Currently using IUD	0.009	0.005	490	556	1.166	0.553	0.000	0.019
Currently using female sterilisation	0.028	0.009	490	556	1.192	0.316	0.010	0.046
Currently using condom	0.009	0.004	490	556	0.950	0.457	0.001	0.017
Currently using periodic abstinence	0.010	0.005	490	556	1.173	0.536	0.000	0.020
Used public sector source	0.698	0.057	166	190	1.600	0.082	0.584	0.812
Want no more children	0.327	0.030	498	565	1.436	0.092	0.267	0.388
Want to delay birth at least 2 years	0.483	0.027	498	565	1.192	0.055	0.430	0.536
Ideal family size	5.284	0.136	690	792	1.729	0.026	5.012	5.556
Perinatal mortality (0-4 years)	24.412	8.569	673	771	1.411	0.351	7.273	41.550
Child mortality (0-9 years)	28.070	5.753	1285	1480	1.234	0.205	16.564	39.575
Infant mortality (0-9 years)	57.370	7.708	1281	1475	1.092	0.134	41.954	72.787
Neonatal mortality (0-9 years)	25.587	4.968	1279	1472	0.991	0.194	15.651	35.523
Post-neonatal mortality (0-9 years)	31.783	5.447	1281	1475	1.049	0.171	20.889	42.678
Under-5 mortality (0-9 years)	83.830	8.744	1287	1483	1.076	0.104	66.342	101.317
Mother received 2+ tetanus njections for last birth	0.352	0.032	432	503	1.407	0.091	0.288	0.416
Mothers received medical assistance at delivery	0.434	0.051	665	761	2.263	0.118	0.332	0.536
Had diarrhoea in two weeks before survey	0.195	0.024	641	731	1.417	0.124	0.147	0.243
Treated with oral rehydration salts (ORS)	0.440	0.054	118	142	1.137	0.123	0.332	0.549
Taken to a health provider	0.528	0.042	118	142	0.859	0.080	0.443	0.613
Vaccination card seen	0.884	0.033	116	134	1.094	0.037	0.819	0.949
Received BCG	0.983	0.012	116	134	0.989	0.012	0.960	1.007
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.951	0.021	116	134	1.070	0.023	0.908	0.994
Received polio (3 doses)	0.895	0.027	116	134	0.942	0.030	0.842	0.949
Received measles	0.884	0.030	116	134	1.017	0.034	0.824	0.945
Fully immunised	0.790	0.039	116	134	1.031	0.049	0.712	0.868
Height-for-age (below -2SD)	0.493	0.031	670	766	1.559	0.063	0.431	0.555
Weight-for-height (below -2SD)	0.067	0.012	670	766	1.109	0.175	0.044	0.091
Weight-for-age (below -2SD)	0.239	0.018	670	766	1.059	0.077	0.202	0.276
Prevalence of anaemia in children	0.465	0.029	596	682	1.506	0.063	0.406	0.524
Prevalence of anaemia in women	0.290	0.024	703	805	1.428	0.084	0.241	0.339
Body Mass Index (BMI) <18.5	0.224	0.022	627	714	1.345	0.100	0.179	0.269
Had 2+ sexual partners in past 12 months	0.034	0.008	709	812	1.152	0.232	0.018	0.049
Condom used at last intercourse	0.297	0.105	24	27	1.097	0.352	0.088	0.507
Sexually active in past 12 months (15-24)	0.199	0.025	565	646	1.478	0.125	0.149	0.249
Abstinence among youth (never had intercourse)	0.659	0.045	138	159	1.106	0.068	0.569	0.748
Sexually active in past 12 months (15-24)	0.310	0.045	138	159	1.135	0.145	0.220	0.400
Had an injection in past 12 months	0.368	0.027	709	812	1.488	0.073	0.315	0.422
Accepting attitudes towards people with HIV	0.234	0.026	709	812	1.607	0.109	0.182	0.285
Has HIV test and received result in past 12 months	0.265	0.024	709	812	1.448	0.091	0.217	0.313
MEN								
Urban residence	0.113	0.052	187	208	2.233	0.459	0.009	0.217
No education	0.172	0.035	187	208	1.278	0.206	0.101	0.242
Secondary education or higher	0.114	0.029	187	208	1.260	0.258	0.055	0.173
Never married	0.354	0.030	187	208	0.864	0.086	0.293	0.414
Currently married	0.586	0.030	187	208	0.836	0.051	0.526	0.647
Had sexual intercourse by age 18	0.405	0.047	86	95	0.874	0.115	0.312	0.499
Comprehensive knowledge about HIV/AIDS	0.500	0.049	187	208	1.331	0.098	0.402	0.597
Had HIV test and received result in past 12 months	0.276	0.038	187	208	1.146	0.136	0.200	0.351
Had injection in past 12 months	0.153	0.028	187	208	1.075	0.186	0.096	0.209
Abstinence among youth 15-24 (never intercourse)	0.417	0.079	66	68	1.294	0.190	0.259	0.575
Sexually active in past 12 months (15-24)	0.481	0.076	66	68	1.228	0.158	0.329	0.633
Had 2+ sexual partners in past 12 months	0.317	0.046	187	208	1.335	0.144	0.226	0.408
Condom used at last higher-risk intercourse	0.234	0.067	57	66	1.184	0.286	0.100	0.368
Had higher-risk intercourse in past 12 months	0.568	0.045	155	173	1.126	0.079	0.478	0.658

na = Not applicable

Table B.2.13 Sampling errors for Southern zone, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.220	0.068	1009	1370	5.192	0.308	0.084	0.355
Literate	0.739	0.035	1009	1370	2.544	0.048	0.668	0.809
No education	0.168	0.033	1009	1370	2.770	0.194	0.103	0.234
Secondary education or higher	0.143	0.024	1009	1370	2.146	0.165	0.096	0.190
Net attendance ratio for primary school	0.830	0.027	1089	1422	1.995	0.033	0.775	0.884
Never married	0.247	0.020	1009	1370	1.479	0.081	0.207	0.287
Currently married/in union	0.653	0.022	1009	1370	1.435	0.033	0.610	0.696
Married by age 20	0.611	0.027	811	1097	1.599	0.045	0.556	0.666
Had sexual intercourse by age 18	0.473	0.034	811	1097	1.920	0.071	0.406	0.541
Currently pregnant	0.087	0.010	1009	1370	1.080	0.110	0.068	0.106
Children ever born	2.943	0.136	1009	1370	1.612	0.046	2.671	3.214
Children surviving	2.585	0.122	1009	1370	1.621	0.047	2.341	2.828
Children ever born to women age 40-49	6.287	0.202	173	218	1.042	0.032	5.882	6.692
Total fertility rate	5.441	0.386	na	11597	3.273	0.086	4.669	6.213
Knows any contraceptive method	0.994	0.003	665	895	1.045	0.003	0.987	1.000
Known any modern contraceptive method	0.994	0.003	665	895	1.045	0.003	0.987	1.000
Currently using any contraceptive method	0.456	0.026	665	895	1.357	0.058	0.403	0.508
Currently using a modern method	0.336	0.027	665	895	1.465	0.080	0.283	0.390
Currently using pill	0.062	0.011	665	895	1.175	0.178	0.040	0.084
Currently using injectable	0.037	0.010	665	895	1.301	0.258	0.018	0.056
Currently using IUD	0.008	0.004	665	895	1.124	0.482	0.000	0.016
Currently using female sterilisation	0.029	0.007	665	895	1.039	0.233	0.016	0.043
Currently using condom	0.039	0.009	665	895	1.229	0.237	0.020	0.057
Currently using periodic abstinence	0.055	0.010	665	895	1.093	0.177	0.035	0.074
Used public sector source	0.517	0.045	237	348	1.385	0.087	0.427	0.607
Want no more children	0.339	0.030	679	918	1.666	0.089	0.278	0.399
Want to delay birth at least 2 years	0.378	0.019	679	918	1.046	0.051	0.339	0.417
Ideal family size	4.696	0.174	994	1354	2.689	0.037	4.348	5.044
Perinatal mortality (0-4 years)	41.165	7.797	877	1150	1.081	0.189	25.570	56.760
Child mortality (0-9 years)	34.557	7.372	1626	2139	1.408	0.213	19.813	49.301
Infant mortality (0-9 years)	69.981	7.472	1622	2136	1.041	0.107	55.037	84.925
Neonatal mortality (0-9 years)	38.178	6.580	1620	2133	1.257	0.172	25.017	51.338
Post-neonatal mortality (0-9 years)	31.803	4.068	1622	2136	0.896	0.128	23.667	39.940
Under-5 mortality (0-9 years)	102.120	8.644	1628	2141	1.013	0.085	84.832	119.408
Mother received 2+ tetanus njections for last birth	0.442	0.025	578	761	1.174	0.056	0.392	0.491
Mothers received medical assistance at delivery	0.497	0.052	862	1128	2.498	0.105	0.393	0.601
Had diarrhoea in two weeks before survey	0.151	0.017	804	1050	1.297	0.114	0.117	0.186
Treated with oral rehydration salts (ORS)	0.435	0.054	108	159	1.119	0.124	0.327	0.543
Taken to a health provider	0.395	0.071	108	159	1.501	0.180	0.252	0.537
Vaccination card seen	0.828	0.037	175	232	1.267	0.044	0.754	0.901
Received BCG	0.930	0.031	175	232	1.604	0.034	0.867	0.992
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.819	0.050	175	232	1.676	0.061	0.719	0.919
Received polio (3 doses)	0.803	0.059	175	232	1.901	0.073	0.686	0.920
Received measles	0.840	0.033	175	232	1.182	0.040	0.773	0.907
Fully immunised	0.739	0.058	175	232	1.701	0.078	0.623	0.854
Height-for-age (below -2SD)	0.509	0.032	788	1005	1.609	0.062	0.445	0.572
Weight-for-height (below -2SD)	0.026	0.006	788	1005	0.971	0.231	0.014	0.038
Weight-for-age (below -2SD)	0.134	0.017	788	1005	1.272	0.129	0.100	0.169
Prevalence of anaemia in children	0.487	0.029	696	910	1.354	0.060	0.429	0.546
Prevalence of anaemia in women	0.288	0.029	971	1316	2.001	0.101	0.229	0.346
Body Mass Index (BMI) <18.5	0.054	0.007	863	1163	0.922	0.132	0.039	0.068
Had 2+ sexual partners in past 12 months	0.027	0.006	1009	1370	1.150	0.218	0.015	0.039
Condom used at last intercourse	0.363	0.091	24	37	0.912	0.252	0.180	0.546
Sexually active in past 12 months (15-24)	0.180	0.017	776	1053	1.218	0.093	0.146	0.214
Abstinence among youth (never had intercourse)	0.667	0.038	217	298	1.182	0.057	0.591	0.743
Sexually active in past 12 months (15-24)	0.266	0.031	217	298	1.027	0.116	0.205	0.328
Had an injection in past 12 months	0.376	0.020	1009	1370	1.297	0.053	0.337	0.416
Accepting attitudes towards people with HIV	0.309	0.026	1009	1370	1.814	0.085	0.257	0.362
Has HIV test and received result in past 12 months	0.273	0.028	1009	1370	1.993	0.102	0.217	0.329
MEN								
Urban residence	0.222	0.072	277	355	2.897	0.327	0.077	0.367
No education	0.056	0.021	277	355	1.488	0.367	0.015	0.098
Secondary education or higher	0.225	0.041	277	355	1.618	0.181	0.143	0.306
Never married	0.434	0.036	277	355	1.222	0.084	0.361	0.507
Currently married	0.503	0.040	277	355	1.314	0.079	0.424	0.582
Had sexual intercourse by age 18	0.325	0.044	120	152	1.025	0.135	0.237	0.413
Comprehensive knowledge about HIV/AIDS	0.414	0.031	277	355	1.030	0.074	0.353	0.475
Had HIV test and received result in past 12 months	0.194	0.028	277	355	1.194	0.147	0.137	0.250
Had injection in past 12 months	0.175	0.024	277	355	1.060	0.139	0.126	0.223
Abstinence among youth 15-24 (never intercourse)	0.601	0.055	106	144	1.161	0.092	0.490	0.712
Sexually active in past 12 months (15-24)	0.265	0.069	106	144	1.595	0.259	0.128	0.403
Had 2+ sexual partners in past 12 months	0.170	0.033	277	355	1.459	0.194	0.104	0.236
Condom used at last higher-risk intercourse	0.230	0.101	45	60	1.586	0.437	0.029	0.432
Had higher-risk intercourse in past 12 months	0.372	0.059	188	236	1.684	0.160	0.253	0.491

na = Not applicable

Table B.2.14 Sampling errors for Lake zone, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.193	0.063	1249	1809	5.614	0.325	0.067	0.318
Literate	0.686	0.028	1249	1809	2.125	0.041	0.630	0.741
No education	0.194	0.021	1249	1809	1.856	0.107	0.152	0.235
Secondary education or higher	0.120	0.019	1249	1809	2.015	0.154	0.083	0.157
Net attendance ratio for primary school	0.783	0.026	1395	1993	1.920	0.033	0.731	0.835
Never married	0.256	0.017	1249	1809	1.382	0.067	0.222	0.290
Currently married/in union	0.609	0.016	1249	1809	1.154	0.026	0.577	0.640
Married by age 20	0.667	0.023	947	1364	1.505	0.035	0.621	0.714
Had sexual intercourse by age 18	0.667	0.024	947	1364	1.568	0.036	0.619	0.715
Currently pregnant	0.127	0.012	1249	1809	1.264	0.094	0.103	0.151
Children ever born	3.139	0.123	1249	1809	1.464	0.039	2.892	3.385
Children surviving	2.698	0.101	1249	1809	1.390	0.037	2.497	2.899
Children ever born to women age 40-49	7.046	0.269	185	252	1.222	0.038	6.507	7.584
Total fertility rate	6.339	0.371	na	14909	2.072	0.048	5.597	7.081
Knows any contraceptive method	0.992	0.004	780	1101	1.305	0.004	0.984	1.000
Known any modern contraceptive method	0.992	0.004	780	1101	1.305	0.004	0.984	1.000
Currently using any contraceptive method	0.181	0.023	780	1101	1.652	0.126	0.136	0.227
Currently using a modern method	0.155	0.021	780	1101	1.600	0.134	0.113	0.196
Currently using pill	0.030	0.008	780	1101	1.236	0.251	0.015	0.045
Currently using injectable	0.015	0.005	780	1101	1.238	0.364	0.004	0.025
Currently using IUD	0.003	0.002	780	1101	0.998	0.699	0.000	0.006
Currently using female sterilisation	0.053	0.010	780	1101	1.225	0.185	0.033	0.073
Currently using condom	0.015	0.004	780	1101	1.019	0.292	0.006	0.024
Currently using periodic abstinence	0.007	0.003	780	1101	1.130	0.491	0.000	0.013
Used public sector source	0.410	0.045	166	241	1.175	0.110	0.320	0.500
Want no more children	0.323	0.016	810	1145	0.982	0.050	0.291	0.355
Want to delay birth at least 2 years	0.397	0.017	810	1145	0.977	0.042	0.364	0.431
Ideal family size	5.127	0.122	1237	1789	2.018	0.024	4.883	5.370
Perinatal mortality (0-4 years)	35.942	4.684	1242	1750	0.859	0.130	26.575	45.309
Child mortality (0-9 years)	48.223	4.819	2248	3174	0.872	0.100	38.585	57.862
Infant mortality (0-9 years)	64.223	7.738	2243	3164	1.381	0.120	48.747	79.699
Neonatal mortality (0-9 years)	20.982	3.835	2236	3155	1.170	0.183	13.311	28.653
Post-neonatal mortality (0-9 years)	43.241	5.393	2242	3163	1.159	0.125	32.456	54.026
Under-5 mortality (0-9 years)	109.349	10.352	2256	3184	1.438	0.095	88.646	130.053
Mother received 2+ tetanus njections for last birth	0.345	0.026	718	1031	1.446	0.075	0.293	0.397
Mothers received medical assistance at delivery	0.414	0.034	1214	1710	2.012	0.082	0.346	0.482
Had diarrhoea in two weeks before survey	0.177	0.013	1110	1582	1.047	0.071	0.152	0.202
Treated with oral rehydration salts (ORS)	0.407	0.048	199	280	1.320	0.118	0.311	0.503
Taken to a health provider	0.469	0.052	199	280	1.341	0.111	0.365	0.573
Vaccination card seen	0.824	0.022	236	330	0.888	0.027	0.779	0.869
Received BCG	0.964	0.014	236	330	1.178	0.015	0.935	0.993
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.914	0.020	236	330	1.093	0.022	0.874	0.955
Received polio (3 doses)	0.879	0.021	236	330	0.962	0.024	0.838	0.921
Received measles	0.891	0.024	236	330	1.148	0.027	0.844	0.939
Fully immunised	0.798	0.030	236	330	1.128	0.038	0.738	0.859
Height-for-age (below -2SD)	0.384	0.019	1170	1663	1.252	0.049	0.346	0.422
Weight-for-height (below -2SD)	0.045	0.007	1170	1663	1.065	0.146	0.032	0.058
Weight-for-age (below -2SD)	0.131	0.013	1170	1663	1.225	0.101	0.105	0.158
Prevalence of anaemia in children	0.550	0.021	1054	1498	1.282	0.038	0.508	0.592
Prevalence of anaemia in women	0.411	0.023	1238	1795	1.666	0.057	0.365	0.458
Body Mass Index (BMI) <18.5	0.116	0.012	1044	1520	1.165	0.100	0.093	0.139
Had 2+ sexual partners in past 12 months	0.044	0.011	1249	1809	1.985	0.263	0.021	0.067
Condom used at last intercourse	0.260	0.135	49	79	2.139	0.521	0.000	0.530
Sexually active in past 12 months (15-24)	0.273	0.018	1029	1481	1.293	0.066	0.237	0.309
Abstinence among youth (never had intercourse)	0.523	0.031	281	420	1.032	0.059	0.461	0.584
Sexually active in past 12 months (15-24)	0.425	0.033	281	420	1.106	0.077	0.360	0.491
Had an injection in past 12 months	0.303	0.015	1249	1809	1.191	0.051	0.272	0.334
Accepting attitudes towards people with HIV	0.222	0.024	1249	1809	2.063	0.109	0.173	0.271
Has HIV test and received result in past 12 months	0.292	0.017	1249	1809	1.288	0.057	0.259	0.325
MEN								
Urban residence	0.159	0.063	350	521	3.243	0.399	0.032	0.286
No education	0.135	0.027	350	521	1.473	0.200	0.081	0.189
Secondary education or higher	0.212	0.045	350	521	2.075	0.214	0.121	0.303
Never married	0.441	0.028	350	521	1.065	0.064	0.385	0.498
Currently married	0.506	0.030	350	521	1.120	0.059	0.446	0.566
Had sexual intercourse by age 18	0.406	0.043	141	217	1.027	0.105	0.320	0.491
Comprehensive knowledge about HIV/AIDS	0.408	0.024	350	521	0.916	0.059	0.359	0.456
Had HIV test and received result in past 12 months	0.206	0.028	350	521	1.295	0.136	0.150	0.262
Had injection in past 12 months	0.240	0.032	350	521	1.389	0.132	0.177	0.304
Abstinence among youth 15-24 (never intercourse)	0.489	0.041	142	212	0.967	0.083	0.408	0.570
Sexually active in past 12 months (15-24)	0.388	0.041	142	212	1.006	0.106	0.305	0.470
Had 2+ sexual partners in past 12 months	0.252	0.026	350	521	1.137	0.105	0.200	0.305
Condom used at last higher-risk intercourse	0.127	0.036	93	131	1.049	0.287	0.054	0.200
Had higher-risk intercourse in past 12 months	0.516	0.033	252	376	1.048	0.064	0.450	0.582

na = Not applicable

Table B.2.15 Sampling errors for Eastern zone, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.660	0.064	1087	1608	4.455	0.097	0.532	0.788
Literate	0.812	0.020	1087	1608	1.665	0.024	0.773	0.852
No education	0.140	0.017	1087	1608	1.640	0.124	0.105	0.174
Secondary education or higher	0.257	0.029	1087	1608	2.209	0.114	0.199	0.316
Net attendance ratio for primary school	0.850	0.024	913	1161	1.613	0.028	0.802	0.897
Never married	0.291	0.020	1087	1608	1.434	0.068	0.252	0.331
Currently married/in union	0.570	0.020	1087	1608	1.358	0.036	0.530	0.611
Married by age 20	0.502	0.027	882	1286	1.627	0.055	0.447	0.557
Had sexual intercourse by age 18	0.587	0.024	882	1286	1.465	0.041	0.538	0.635
Currently pregnant	0.061	0.008	1087	1608	1.056	0.126	0.045	0.076
Children ever born	2.195	0.119	1087	1608	1.790	0.054	1.956	2.434
Children surviving	1.928	0.105	1087	1608	1.792	0.055	1.717	2.138
Children ever born to women age 40-49	4.662	0.235	182	260	1.211	0.050	4.192	5.131
Total fertility rate	3.871	0.253	na	13892	2.515	0.076	3.365	4.377
Knows any contraceptive method	0.997	0.002	637	917	0.910	0.002	0.994	1.001
Known any modern contraceptive method	0.997	0.002	637	917	0.910	0.002	0.994	1.001
Currently using any contraceptive method	0.475	0.022	637	917	1.117	0.047	0.431	0.520
Currently using a modern method	0.351	0.022	637	917	1.163	0.063	0.307	0.395
Currently using pill	0.099	0.012	637	917	1.039	0.124	0.074	0.124
Currently using injectable	0.036	0.009	637	917	1.161	0.239	0.019	0.053
Currently using IUD	0.001	0.001	637	917	0.959	0.998	0.000	0.004
Currently using female sterilisation	0.017	0.005	637	917	1.041	0.310	0.007	0.028
Currently using condom	0.039	0.009	637	917	1.180	0.233	0.021	0.057
Currently using periodic abstinence	0.068	0.015	637	917	1.500	0.221	0.038	0.098
Used public sector source	0.486	0.040	334	480	1.446	0.081	0.407	0.565
Want no more children	0.239	0.018	651	935	1.089	0.076	0.203	0.276
Want to delay birth at least 2 years	0.433	0.024	651	935	1.259	0.056	0.384	0.482
Ideal family size	4.100	0.104	1030	1540	1.793	0.025	3.892	4.308
Perinatal mortality (0-4 years)	59.734	10.154	721	982	1.074	0.170	39.426	80.042
Child mortality (0-9 years)	26.027	5.623	1336	1783	1.130	0.216	14.780	37.274
Infant mortality (0-9 years)	70.062	7.986	1332	1778	1.046	0.114	54.090	86.035
Neonatal mortality (0-9 years)	38.286	5.781	1329	1773	1.031	0.151	26.724	49.849
Post-neonatal mortality (0-9 years)	31.776	5.715	1332	1778	1.101	0.180	20.346	43.206
Under-5 mortality (0-9 years)	94.266	11.057	1339	1788	1.244	0.117	72.152	116.379
Mother received 2+ tetanus njections for last birth	0.597	0.029	539	744	1.315	0.048	0.539	0.655
Mothers received medical assistance at delivery	0.758	0.047	708	964	2.425	0.063	0.663	0.853
Had diarrhoea in two weeks before survey	0.134	0.016	653	891	1.090	0.118	0.103	0.166
Treated with oral rehydration salts (ORS)	0.425	0.067	77	120	1.156	0.157	0.292	0.559
Taken to a health provider	0.688	0.056	77	120	1.027	0.081	0.576	0.800
Vaccination card seen	0.852	0.029	140	210	0.963	0.034	0.794	0.909
Received BCG	1.000	0.000	140	210	N A	0.000	1.000	1.000
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.980	0.017	140	210	1.421	0.017	0.946	1.013
Received polio (3 doses)	0.917	0.026	140	210	1.103	0.028	0.866	0.969
Received measles	0.952	0.021	140	210	1.058	0.022	0.910	0.993
Fully immunised	0.866	0.034	140	210	1.165	0.040	0.798	0.935
Height-for-age (below -2SD)	0.314	0.032	621	842	1.528	0.101	0.251	0.378
Weight-for-height (below -2SD)	0.056	0.010	621	842	1.011	0.177	0.036	0.076
Weight-for-age (below -2SD)	0.134	0.019	621	842	1.332	0.142	0.096	0.172
Prevalence of anaemia in children	0.659	0.028	549	738	1.286	0.042	0.603	0.715
Prevalence of anaemia in women	0.518	0.023	1036	1512	1.491	0.045	0.472	0.565
Body Mass Index (BMI) <18.5	0.069	0.008	985	1469	0.980	0.114	0.053	0.085
Had 2+ sexual partners in past 12 months	0.034	0.006	1087	1608	1.170	0.188	0.021	0.047
Condom used at last intercourse	0.272	0.071	36	55	0.947	0.262	0.129	0.414
Sexually active in past 12 months (15-24)	0.310	0.017	882	1288	1.085	0.054	0.277	0.344
Abstinence among youth (never had intercourse)	0.442	0.036	248	398	1.130	0.081	0.370	0.513
Sexually active in past 12 months (15-24)	0.448	0.033	248	398	1.055	0.074	0.381	0.515
Had an injection in past 12 months	0.427	0.018	1087	1608	1.203	0.042	0.391	0.464
Accepting attitudes towards people with HIV	0.390	0.020	1087	1608	1.345	0.051	0.350	0.429
Has HIV test and received result in past 12 months	0.340	0.018	1087	1608	1.260	0.053	0.304	0.376
MEN								
Urban residence	0.621	0.063	288	413	2.205	0.102	0.495	0.747
No education	0.065	0.018	288	413	1.246	0.279	0.029	0.101
Secondary education or higher	0.324	0.040	288	413	1.462	0.125	0.243	0.405
Never married	0.468	0.033	288	413	1.134	0.071	0.401	0.534
Currently married	0.478	0.034	288	413	1.140	0.070	0.411	0.545
Had sexual intercourse by age 18	0.326	0.048	131	195	1.170	0.147	0.230	0.423
Comprehensive knowledge about HIV/AIDS	0.532	0.034	288	413	1.138	0.063	0.465	0.599
Had HIV test and received result in past 12 months	0.235	0.024	288	413	0.963	0.103	0.187	0.284
Had injection in past 12 months	0.215	0.025	288	413	1.039	0.117	0.165	0.266
Abstinence among youth 15-24 (never intercourse)	0.484	0.058	105	142	1.174	0.119	0.369	0.599
Sexually active in past 12 months (15-24)	0.377	0.057	105	142	1.202	0.152	0.263	0.491
Had 2+ sexual partners in past 12 months	0.162	0.029	288	413	1.330	0.178	0.104	0.220
Condom used at last higher-risk intercourse	0.378	0.090	46	67	1.252	0.240	0.197	0.558
Had higher-risk intercourse in past 12 months	0.489	0.035	213	306	1.015	0.071	0.419	0.558

na = Not applicable

Table B.2.16 Sampling errors for Southern zone, Tanzania 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.213	0.065	987	955	4.948	0.303	0.084	0.342
Literate	0.737	0.028	987	955	2.010	0.038	0.680	0.793
No education	0.152	0.022	987	955	1.933	0.146	0.107	0.196
Secondary education or higher	0.116	0.023	987	955	2.220	0.195	0.071	0.161
Net attendance ratio for primary school	0.841	0.024	913	881	1.787	0.029	0.792	0.890
Never married	0.184	0.019	987	955	1.566	0.105	0.145	0.222
Currently married/in union	0.678	0.021	987	955	1.390	0.030	0.637	0.720
Married by age 20	0.666	0.023	826	797	1.407	0.035	0.620	0.712
Had sexual intercourse by age 18	0.767	0.020	826	797	1.337	0.026	0.728	0.807
Currently pregnant	0.087	0.009	987	955	1.053	0.109	0.068	0.106
Children ever born	2.835	0.114	987	955	1.533	0.040	2.606	3.064
Children surviving	2.397	0.094	987	955	1.519	0.039	2.208	2.586
Children ever born to women age 40-49	5.055	0.204	216	215	1.202	0.040	4.646	5.463
Total fertility rate	4.372	0.212	na	9043	1.921	0.058	3.948	4.796
Knows any contraceptive method	0.994	0.003	671	648	0.903	0.003	0.988	0.999
Known any modern contraceptive method	0.994	0.003	671	648	0.903	0.003	0.988	0.999
Currently using any contraceptive method	0.419	0.020	671	648	1.038	0.047	0.380	0.459
Currently using a modern method	0.395	0.019	671	648	1.027	0.049	0.356	0.434
Currently using pill	0.160	0.018	671	648	1.277	0.113	0.124	0.197
Currently using injectable	0.036	0.011	671	648	1.504	0.302	0.014	0.057
Currently using IUD	0.004	0.002	671	648	0.952	0.575	0.000	0.009
Currently using female sterilisation	0.055	0.011	671	648	1.290	0.206	0.032	0.078
Currently using condom	0.024	0.008	671	648	1.291	0.318	0.009	0.039
Currently using periodic abstinence	0.008	0.003	671	648	0.980	0.411	0.001	0.015
Used public sector source	0.699	0.036	358	341	1.501	0.052	0.626	0.772
Want no more children	0.334	0.021	687	662	1.140	0.061	0.293	0.375
Want to delay birth at least 2 years	0.432	0.018	687	662	0.931	0.041	0.397	0.467
Ideal family size	4.349	0.097	981	951	1.765	0.022	4.155	4.542
Perinatal mortality (0-4 years)	31.122	6.692	686	645	1.002	0.215	17.737	44.507
Child mortality (0-9 years)	28.294	4.928	1334	1253	1.010	0.174	18.437	38.150
Infant mortality (0-9 years)	67.825	8.789	1334	1253	1.170	0.130	50.247	85.404
Neonatal mortality (0-9 years)	31.312	5.503	1328	1248	1.035	0.176	20.307	42.317
Post-neonatal mortality (0-9 years)	36.514	6.697	1333	1252	1.224	0.183	23.120	49.907
Under-5 mortality (0-9 years)	94.200	9.902	1341	1259	1.117	0.105	74.396	114.004
Mother received 2+ tetanus njections for last birth	0.510	0.029	545	514	1.337	0.057	0.452	0.568
Mothers received medical assistance at delivery	0.668	0.042	678	638	2.010	0.063	0.584	0.752
Had diarrhoea in two weeks before survey	0.134	0.015	638	605	1.106	0.111	0.104	0.163
Treated with oral rehydration salts (ORS)	0.423	0.059	89	81	1.086	0.140	0.305	0.541
Taken to a health provider	0.645	0.055	89	81	1.034	0.085	0.535	0.755
Vaccination card seen	0.884	0.026	124	114	0.885	0.030	0.832	0.937
Received BCG	0.986	0.009	124	114	0.888	0.010	0.968	1.005
Received DPT /DPT-HB/ DPT-HB-HB-Hib (3 doses)	0.940	0.024	124	114	1.105	0.026	0.891	0.988
Received polio (3 doses)	0.889	0.025	124	114	0.869	0.028	0.839	0.939
Received measles	0.901	0.027	124	114	0.993	0.030	0.846	0.956
Fully immunised	0.798	0.032	124	114	0.875	0.041	0.733	0.863
Height-for-age (below -2SD)	0.470	0.020	646	612	0.975	0.042	0.431	0.510
Weight-for-height (below -2SD)	0.037	0.008	646	612	0.986	0.206	0.022	0.053
Weight-for-age (below -2SD)	0.188	0.018	646	612	1.063	0.094	0.152	0.223
Prevalence of anaemia in children	0.658	0.026	585	553	1.270	0.040	0.605	0.711
Prevalence of anaemia in women	0.402	0.019	983	952	1.183	0.046	0.365	0.439
Body Mass Index (BMI) <18.5	0.137	0.014	869	848	1.190	0.101	0.109	0.165
Had 2+ sexual partners in past 12 months	0.086	0.012	987	955	1.337	0.138	0.062	0.110
Condom used at last intercourse	0.292	0.043	86	83	0.878	0.148	0.205	0.379
Sexually active in past 12 months (15-24)	0.259	0.020	805	775	1.314	0.078	0.219	0.300
Abstinence among youth (never had intercourse)	0.457	0.053	161	161	1.353	0.117	0.350	0.564
Sexually active in past 12 months (15-24)	0.464	0.046	161	161	1.162	0.099	0.373	0.556
Had an injection in past 12 months	0.367	0.025	987	955	1.605	0.067	0.318	0.416
Accepting attitudes towards people with HIV	0.221	0.019	987	955	1.408	0.084	0.184	0.258
Has HIV test and received result in past 12 months	0.304	0.024	987	955	1.621	0.078	0.256	0.351
MEN								
Urban residence	0.169	0.057	257	236	2.430	0.337	0.055	0.283
No education	0.062	0.015	257	236	0.997	0.242	0.032	0.092
Secondary education or higher	0.186	0.033	257	236	1.352	0.177	0.120	0.251
Never married	0.355	0.034	257	236	1.138	0.096	0.287	0.423
Currently married	0.563	0.031	257	236	1.008	0.055	0.501	0.626
Had sexual intercourse by age 18	0.420	0.038	127	111	0.873	0.091	0.343	0.497
Comprehensive knowledge about HIV/AIDS	0.551	0.038	257	236	1.210	0.068	0.476	0.627
Had HIV test and received result in past 12 months	0.306	0.030	257	236	1.026	0.097	0.247	0.365
Had injection in past 12 months	0.208	0.027	257	236	1.047	0.128	0.155	0.261
Abstinence among youth 15-24 (never intercourse)	0.275	0.056	80	77	1.109	0.203	0.164	0.387
Sexually active in past 12 months (15-24)	0.583	0.051	80	77	0.917	0.087	0.482	0.685
Had 2+ sexual partners in past 12 months	0.279	0.027	257	236	0.976	0.098	0.224	0.334
Condom used at last higher-risk intercourse	0.407	0.062	71	66	1.053	0.152	0.283	0.530
Had higher-risk intercourse in past 12 months	0.522	0.030	211	195	0.869	0.057	0.462	0.582

na = Not applicable

DATA QUALITY TABLES

Appendix C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Tanzania 2010

	Female		Male			Female		Male	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	829	3.4	869	3.9	36	260	1.1	232	1.0
1	838	3.5	756	3.4	37	267	1.1	221	1.0
2	761	3.2	758	3.4	38	191	0.8	186	0.8
3	825	3.4	816	3.7	39	223	0.9	153	0.7
4	794	3.3	775	3.5	40	278	1.2	289	1.3
5	806	3.3	801	3.6	41	179	0.7	180	0.8
6	726	3.0	781	3.5	42	165	0.7	168	0.8
7	751	3.1	767	3.4	43	159	0.7	139	0.6
8	639	2.7	625	2.8	44	139	0.6	110	0.5
9	748	3.1	767	3.4	45	178	0.7	201	0.9
10	741	3.1	687	3.1	46	126	0.5	136	0.6
11	618	2.6	642	2.9	47	146	0.6	126	0.6
12	663	2.8	636	2.8	48	174	0.7	126	0.6
13	698	2.9	630	2.8	49	118	0.5	134	0.6
14	617	2.6	606	2.7	50	149	0.6	137	0.6
15	487	2.0	539	2.4	51	126	0.5	108	0.5
16	510	2.1	446	2.0	52	168	0.7	127	0.6
17	455	1.9	491	2.2	53	127	0.5	101	0.5
18	404	1.7	462	2.1	54	136	0.6	74	0.3
19	385	1.6	415	1.9	55	195	0.8	113	0.5
20	437	1.8	393	1.8	56	134	0.6	91	0.4
21	373	1.5	289	1.3	57	80	0.3	78	0.3
22	353	1.5	276	1.2	58	107	0.4	83	0.4
23	391	1.6	280	1.3	59	62	0.3	62	0.3
24	379	1.6	257	1.2	60	202	0.8	156	0.7
25	418	1.7	361	1.6	61	68	0.3	64	0.3
26	312	1.3	221	1.0	62	80	0.3	84	0.4
27	345	1.4	251	1.1	63	62	0.3	45	0.2
28	311	1.3	245	1.1	64	58	0.2	51	0.2
29	291	1.2	218	1.0	65	117	0.5	97	0.4
30	390	1.6	372	1.7	66	38	0.2	44	0.2
31	295	1.2	224	1.0	67	43	0.2	56	0.3
32	286	1.2	272	1.2	68	78	0.3	64	0.3
33	231	1.0	206	0.9	69	53	0.2	47	0.2
34	222	0.9	197	0.9	70+	725	3.0	635	2.8
35	373	1.5	283	1.3	Don't know/ missing	3	0.0	2	0.0
					Total	24,115	100.0	22,337	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2 Age distribution of eligible and interviewed women and men

De facto household population of women age 10-54 and men 10-54 age 10-54, interviewed women age 15-49 and interviewed men age 15-49, and percentage of eligible women and who were interviewed (weighted), by five-year age groups, Tanzania 2010

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of women
		Number	Percent	
10-14	3,337	na	na	na
15-19	2,241	2,111	21.4	94.2
20-24	1,933	1,868	18.9	96.7
25-29	1,676	1,624	16.5	96.9
30-34	1,424	1,383	14.0	97.1
35-39	1,313	1,277	12.9	97.3
40-44	920	890	9.0	96.7
45-49	742	714	7.2	96.3
50-54	706	na	na	na
15-49	10,249	9,868	100.0	96.3

Age group	Household population of men age 10-54	Interviewed men age 15-49		Percentage of men
		Number	Percent	
10-14	1,078	na	na	na
15-19	710	637	25.4	89.7
20-24	467	428	17.0	91.6
25-29	364	334	13.3	91.9
30-34	383	341	13.6	89.1
35-39	323	296	11.8	91.5
40-44	303	276	11.0	90.9
45-49	219	201	8.0	91.5
50-54	189	na	na	na
15-49	2,769	2,512	100.0	90.7

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household schedule.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Tanzania 2010

Subject	Reference group	Percentage with information missing	Number of cases
Birth date	Births in the 15 years preceding the survey		
Month only		0.45	21,098
Month and year		0.03	21,098
Age at death	Deceased children born in the 15 years preceding the survey	0.18	2,068
Age/date at first union[1]	Ever-married women age 15-49	0.40	7,599
Respondent's education	All women age 15-49	0.01	10,139
Diarrhoea in past 2 weeks	Living children age 0-59 months	3.13	7,667
Anthropometry	Living children age 0-59 months (from the Household Questionnaire		
Height		3.65	7,959
Weight		3.32	7,959
Height or weight		3.70	7,959
Anaemia	Living children age 6-59 months (from the		
Children	Household Questionnaire	4.71	7,119
Women	All women (from the Household Questionnaire	5.05	10,249

[1] Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living (L), dead (D), and total (T) children (weighted), Tanzania 2010

Calendar year	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
	L	D	T	L	D	T	L	D	T	L	D	T
2010	329	6	335	100.0	100.0	100.0	98.9	480.1	101.4	na	na	na
2009	1,654	85	1,739	100.0	100.0	100.0	103.6	144.3	105.2	na	na	na
2008	1,565	99	1,664	100.0	100.0	100.0	94.8	208.4	99.2	100.2	91.6	99.6
2007	1,470	132	1,601	100.0	100.0	100.0	101.0	110.5	101.8	95.1	130.7	97.3
2006	1,526	102	1,628	100.0	100.0	100.0	94.8	122.7	96.3	106.2	86.6	104.7
2005	1,405	104	1,509	100.0	100.0	100.0	96.0	87.6	95.4	93.0	84.2	92.3
2004	1,495	145	1,640	99.7	97.8	99.6	97.5	103.2	98.0	107.9	115.2	108.6
2003	1,364	148	1,512	99.6	96.1	99.3	105.5	90.9	104.0	100.3	96.7	99.9
2002	1,226	161	1,386	99.7	96.5	99.3	104.3	107.7	104.7	99.8	126.1	102.3
2001	1,091	107	1,198	99.5	96.7	99.3	90.2	75.1	88.7	89.3	58.8	85.4
2006-2010	6,544	424	6,968	100.0	100.0	100.0	98.5	140.5	100.7	na	na	na
2001-2005	6,580	665	7,245	99.7	97.3	99.5	98.7	93.9	98.3	na	na	na
1996-2000	5,153	868	6,021	99.3	97.3	99.0	100.1	112.9	101.9	na	na	na
1991-1995	3,730	725	4,455	99.7	98.2	99.4	98.9	108.0	100.4	na	na	na
<1991	3,594	917	4,511	99.3	95.6	98.5	108.9	116.1	110.3	na	na	na
All	25,602	3,599	29,201	99.6	97.4	99.4	100.4	111.7	101.7	na	na	na

na = Not applicable

[1] Both year and month of birth given

[2] (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively

[3] [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Tanzania 2010

	Number of years preceding the survey				Total
Age at death (days)	0-4	5-9	10-14	15-19	0-19
<1	60	52	53	33	199
1	46	61	40	33	179
2	17	21	10	11	59
3	22	19	11	11	63
4	5	2	4	0	12
5	5	2	5	6	18
6	3	1	5	8	16
7	15	20	22	15	72
8	0	4	3	3	10
9	2	0	1	1	5
10	0	0	0	2	2
11	0	0	0	2	2
12	2	2	0	1	5
13	1	1	0	0	2
14	19	10	17	8	54
15	2	2	4	1	9
16	1	0	0	0	1
17	1	0	0	0	1
18	0	0	2	0	2
19	0	2	0	0	2
20	5	1	3	0	8
21	4	1	10	5	19
22	0	1	0	2	4
23	0	0	0	1	1
25	0	0	0	0	0
26	0	0	0	0	0
27	2	1	1	0	4
28	1	2	2	3	8
29	1	0	0	0	1
30	2	0	3	1	6
Total 0-30	215	204	196	148	762
Percent early neonatal[1]	72.3	77.5	65.8	69.7	71.5

[1] 0-6 days / 0-30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods of birth preceding the survey, Tanzania 2010

Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1[a]	215	204	196	148	762
1	25	25	31	15	95
2	17	20	34	28	99
3	19	33	47	21	119
4	12	20	19	23	74
5	10	35	39	24	108
6	23	28	49	44	146
7	22	22	28	31	103
8	9	31	37	10	88
9	24	29	36	24	113
10	11	11	6	9	37
11	6	10	17	9	42
12	7	22	20	14	63
13	5	11	13	7	37
14	4	12	15	5	37
15	10	9	9	4	32
16	9	3	2	2	16
17	2	12	4	3	20
18	9	14	26	24	72
19	1	5	3	6	15
20	5	3	0	8	15
21	0	4	5	3	13
22	0	0	4	0	4
23	6	1	0	3	10
24+	0	1	1	0	2
1 year	7	10	24	30	72
Total 0-11	394	469	539	386	1,788
Percent neonatal[1]	54.7	43.4	36.3	38.3	42.6

[a] Includes deaths under one month reported in days
[1] Under one month / under one year

Table C.7 Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Tanzania 2010

Background characteristic	Height-for-age			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage above +2 SD	Mean Z-score (SD)	
Age in months												
<6	2.3	9.6	-0.5	0.5	2.3	11.2	0.5	0.4	3.0	4.8	0.1	718
6-8	1.9	16.0	-0.8	1.2	5.9	7.1	0.1	2.4	11.9	1.8	-0.6	367
9-11	6.8	27.3	-1.3	1.8	7.6	8.2	-0.2	4.0	24.4	1.2	-1.1	392
12-17	14.0	41.7	-1.6	0.5	6.2	3.0	-0.3	6.0	26.3	0.8	-1.3	772
18-23	21.3	53.3	-2.1	0.8	9.2	4.0	-0.4	6.3	29.8	1.2	-1.4	756
24-35	12.9	37.0	-1.6	0.4	3.5	1.3	-0.3	3.8	23.5	0.4	-1.2	1,437
36-47	14.6	40.4	-1.7	0.2	2.0	0.9	-0.3	3.3	20.8	0.2	-1.2	1,575
48-59	12.9	35.5	-1.7	0.4	2.4	0.7	-0.3	3.6	19.7	0.1	-1.2	1,448
Sex												
Male	12.9	37.2	-1.6	0.7	4.4	3.0	-0.2	4.1	21.5	0.9	-1.1	3,707
Female	11.8	33.6	-1.5	0.4	3.7	3.4	-0.2	3.4	19.8	1.0	-1.1	3,758
Birth interval in months[2]												
First birth[3]	10.4	33.8	-1.5	0.4	4.1	3.0	-0.2	3.4	18.1	1.0	-1.0	1,305
<24	15.2	39.9	-1.7	0.5	3.6	3.4	-0.2	3.9	23.0	0.8	-1.1	824
24-47	12.7	36.4	-1.6	0.6	4.4	3.9	-0.2	3.9	21.1	0.8	-1.1	3,246
48+	9.1	29.0	-1.3	0.8	3.5	2.7	-0.2	3.4	20.2	1.3	-1.0	1,293
Size at birth[2]												
Very small	30.1	56.2	-2.1	2.6	7.1	0.0	-0.6	10.6	44.9	0.0	-1.8	91
Small	17.1	41.5	-1.8	1.3	4.3	2.3	-0.4	7.7	30.4	0.5	-1.4	428
Average or larger	11.0	33.7	-1.5	0.5	4.0	3.5	-0.2	3.3	19.4	1.0	-1.0	5,927
Missing	18.0	44.9	-1.8	0.7	3.3	5.7	-0.0	5.1	23.4	0.0	-1.2	223
Mother's interview status												
Interviewed	11.8	34.9	-1.5	0.6	4.1	3.4	-0.2	3.7	20.6	1.0	-1.1	6,669
Not interviewed but in household	13.7	38.1	-1.5	0.0	5.9	0.9	-0.2	2.6	19.1	1.8	-1.1	157
Not interviewed, and not in the household[4]	17.1	39.7	-1.6	0.2	3.5	1.1	-0.3	4.3	21.6	0.5	-1.2	639
Mother's nutritional status[5]												
Thin (BMI<18.5)	16.7	42.6	-1.8	0.9	7.6	1.5	-0.6	6.4	35.0	0.2	-1.6	619
Normal (BMI 18.5-24.9)	12.0	36.0	-1.5	0.6	3.9	3.4	-0.2	3.9	20.7	0.8	-1.1	4,910
Overweight/obese (BMI ≥25)	8.5	26.7	-1.2	0.2	2.8	4.3	0.0	1.1	12.3	2.0	-0.7	1,154
Missing	15.2	34.9	-1.4	0.3	7.4	3.0	-0.1	5.2	21.2	2.2	-1.0	126
Residence												
Urban	8.5	25.3	-1.2	0.6	4.2	3.3	-0.2	1.9	15.5	1.4	-0.9	1,447
Rural	13.3	37.8	-1.6	0.5	4.0	3.1	-0.2	4.2	21.9	0.8	-1.1	6,018
Mainland/Zanzibar												
Mainland	12.4	35.7	-1.5	0.5	3.9	3.2	-0.2	3.7	20.5	0.9	-1.1	7,265
..Urban	8.5	25.7	-1.2	0.5	3.9	3.5	-0.1	1.9	15.3	1.4	-0.9	1,378
..Rural	13.3	38.0	-1.6	0.5	3.8	3.1	-0.2	4.2	21.8	0.8	-1.1	5,887
Zanzibar	9.3	25.2	-1.1	2.4	11.0	2.7	-0.6	4.1	24.6	0.7	-1.2	199
..Unguja	8.4	21.8	-1.0	2.7	11.6	2.1	-0.7	3.7	22.3	0.4	-1.2	119
..Pemba	10.6	30.3	-1.4	1.8	10.2	3.6	-0.5	4.6	28.0	1.1	-1.3	80
Zone												
Western	10.2	34.0	-1.5	0.1	2.0	3.6	-0.1	2.7	16.5	1.1	-1.0	1,579
Northern	14.1	35.2	-1.5	0.9	5.9	1.8	-0.4	5.3	26.8	0.5	-1.2	964
Central	17.7	44.3	-1.8	0.5	5.9	3.2	-0.3	7.3	30.0	0.7	-1.3	761
Southern Highlands	15.5	43.5	-1.8	0.6	1.8	5.8	0.1	2.3	17.1	1.4	-1.0	952
Lake	10.8	31.7	-1.5	0.6	4.2	2.6	-0.1	4.1	17.5	0.7	-1.0	1,613
Eastern	9.0	26.6	-1.1	0.5	5.4	3.1	-0.3	1.6	18.9	1.7	-0.9	808
Southern	13.1	40.5	-1.7	0.1	2.8	2.0	-0.3	3.5	25.0	0.5	-1.3	589

Continued...

Table C.7—*Continued*

Background characteristic	Height-for-age: Percentage below -3 SD	Height-for-age: Percentage below -2 SD[1]	Height-for-age: Mean Z-score (SD)	Weight-for-height: Percentage below -3 SD	Weight-for-height: Percentage below -2 SD[1]	Weight-for-height: Percentage above +2 SD	Weight-for-height: Mean Z-score (SD)	Weight-for-age: Percentage below -3 SD	Weight-for-age: Percentage below -2 SD[1]	Weight-for-age: Percentage above +2 SD	Weight-for-age: Mean Z-score (SD)	Number of children
Region												
Dodoma	21.6	50.9	-2.0	0.3	5.2	4.2	-0.2)	8.4	33.3	0.5	-1.4)	469
Arusha	13.2	37.7	-1.5	1.7	7.7	3.3	-0.4)	6.2	30.8	0.8	-1.2)	256
Kilimanjaro	3.9	18.8	-1.1	0.0	5.4	2.2	-0.3)	1.6	15.4	0.9	-0.9)	205
Tanga	16.5	42.2	-1.7	0.5	4.2	1.0	-0.4)	5.8	29.3	0.0	-1.3)	314
Morogoro	13.5	39.6	-1.6	0.5	4.0	3.7	-0.2)	2.6	21.8	1.5	-1.1)	298
Pwani	7.3	25.5	-1.1	0.0	5.7	1.8	-0.4)	2.2	15.4	1.0	-1.0)	191
Dar es Salaam	5.8	15.2	-0.7	0.8	6.6	3.4	-0.3)	0.2	18.2	2.2	-0.8)	320
Lindi	16.3	43.9	-1.9	0.6	3.2	1.8	-0.4)	5.2	31.3	0.0	-1.5)	124
Mtwara	12.1	36.9	-1.7	0.0	3.1	1.4	-0.4)	4.2	25.4	1.1	-1.3)	223
Ruvuma	12.3	42.0	-1.7	0.0	2.5	2.6	-0.1)	2.0	21.3	0.3	-1.1)	241
Iringa	16.6	46.9	-1.8	0.8	2.0	7.0	0.0	1.9	21.0	1.4	-1.1)	295
Mbeya	14.2	39.7	-1.7	0.0	0.5	5.6	0.2	2.4	12.5	2.1	-0.9)	406
Singida	11.4	33.8	-1.5	0.8	7.0	1.5	-0.4)	5.6	24.6	1.1	-1.2)	291
Tabora	9.8	26.7	-1.3	0.5	2.5	3.1	-0.2)	2.4	17.3	1.3	-0.9)	418
Rukwa	16.4	45.8	-1.8	1.3	3.7	4.7	0.1	2.8	19.9	0.3	-1.1)	251
Kigoma	13.4	37.3	-1.7	0.0	1.7	3.0	-0.1)	4.3	18.8	1.7	-1.2)	386
Shinyanga	8.7	36.3	-1.4	0.0	2.0	4.0	-0.0)	2.1	14.9	0.7	-0.9)	774
Kagera	12.1	34.7	-1.6	1.5	4.7	1.7	-0.3)	6.2	23.9	0.3	-1.2)	462
Mwanza	12.3	33.1	-1.5	0.3	3.7	2.9	-0.1)	3.1	15.1	0.8	-1.0)	772
Mara	6.0	25.0	-1.3	0.2	4.6	2.8	-0.2)	3.7	14.8	0.9	-0.9)	380
Manyara	22.1	37.9	-1.7	1.5	7.0	0.4	-0.5)	7.4	29.5	0.4	-1.4)	189
Unguja North	11.0	32.5	-1.4	2.2	14.1	3.7	-0.7)	5.1	29.9	0.5	-1.4)	32
Unguja South	7.0	25.5	-1.1	3.1	8.3	5.0	-0.4)	4.2	20.8	1.9	-1.0)	17
Town West	7.6	15.9	-0.7	2.9	11.2	0.6	-0.8)	2.9	19.1	0.0	-1.1)	70
Pemba North	11.3	33.0	-1.4	2.2	12.0	3.9	-0.5)	5.0	28.7	0.6	-1.3)	41
Pemba South	9.9	27.5	-1.3	1.3	8.3	3.3	-0.5)	4.2	27.2	1.6	-1.2)	39
Mother's education[6]												
No education	15.4	39.5	-1.6	0.7	5.1	2.9	-0.2)	5.5	24.7	0.8	-1.2)	1,758
Primary	11.3	34.9	-1.5	0.5	3.7	3.5	-0.2)	3.2	19.9	0.8	-1.1)	4,651
Secondary	4.3	17.3	-1.0	0.9	4.1	3.3	-0.1)	1.7	11.2	3.1	-0.7)	401
More than secondary	0.0	0.0	0.3	0.0	2.7	16.5	0.5	0.0	4.9	24.8	0.5	16
Wealth quintile												
Lowest	16.6	41.9	-1.8	0.6	5.6	3.2	-0.3)	6.3	27.0	0.8	-1.3)	1,583
Second	14.4	39.1	-1.6	0.5	3.4	3.1	-0.2)	4.5	23.4	0.5	-1.2)	1,775
Middle	11.7	36.6	-1.6	0.4	3.7	3.3	-0.2)	3.0	19.6	0.7	-1.1)	1,699
Fourth	9.9	32.1	-1.4	0.4	3.2	3.0	-0.1)	2.6	16.9	1.2	-1.0)	1,416
Highest	6.4	21.1	-0.9	0.9	4.5	3.3	-0.1)	1.2	12.7	2.0	-0.7)	992
Total	12.3	35.4	-1.5	0.5	4.0	3.2	-0.2)	3.8	20.6	0.9	-1.1)	7,465

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO Child Growth Standards. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.

[1] Includes children who are below -3 standard deviations (SD) from the International Reference Population median

[2] Excludes children whose mothers were not interviewed

[3] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval

[4] Includes children whose mothers are dead

[5] Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.10.

[6] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

PERSONS INVOLVED IN THE 2010 TANZANIA DEMOGRAPHIC AND HEALTH SURVEY

Appendix **D**

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QUESTIONNAIRES

Appendix E

UNITED REPUBLIC OF TANZANIA
TANZANIA DEMOGRAPHIC AND HEALTH SURVEY 2009-2010
NATIONAL BUREAU OF STATISTICS

HOUSEHOLD QUESTIONNAIRE

NUMBER: **CONFIDENTIAL**

IDENTIFICATION

REGION _____

DISTRICT _____

WARD .....

ENUMERATION AREA .....

NAME OF HOUSEHOLD HEAD _____

TDHS NUMBER .....

HOUSEHOLD NUMBER .....

LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE
(LARGE CITY=1, SMALL CITY=2, TOWN=3, COUNTRYSIDE=4) .....

HOUSEHOLD SELECTED FOR MEN'S SURVEY AND SALT TESTING (YES=1, NO=2) .....

LARGE CITIES ARE : DAR ES SALAAM, MWANZA, MBEYA AND TANGA. **SMALL CITIES ARE**: MOROGORO, DODOMA, MOSHI, IRINGA, SHINYANGA, SINGIDA, SONGEA, MTWARA, TABORA, MUSOMA, SUMBAWANGA, BUKOBA, KIGOMA NA MJINI MAGHARIBI . MIJI MINGINE NI **MIJI MIDOGO**

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY .....
				MONTH .....
				YEAR 2 0
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT .....
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS .....
TIME				

*RESULT CODES:

1	COMPLETED	4	POSTPONED
2	NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT	5	REFUSED
		6	DWELLING VACANT OR ADDRESS NOT A DWELLING
3	ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME	7	DWELLING DESTROYED
		8	DWELLING NOT FOUND
9	OTHER _____ (SPECIFY)		

TOTAL PERSONS IN HOUSEHOLD .

TOTAL ELIGIBLE WOMEN 15-49 .....

TOTAL ELIGIBLE MEN 15-49 .....

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE .....

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with National Bureau of Statistics. We are conducting a survey about health all over Tanzania. The information we collect will help the government to plan health services.
Your household was selected for the survey. The survey usually takes about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Do you have any questions?

May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED ..... 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED ..... 2 → END

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-19 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, WRITE '95'	What is (NAME'S) current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN UNDER AGE 5
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
01			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		01	01	01
02			1 2	1 2	1 2			02	02	02
03			1 2	1 2	1 2			03	03	03
04			1 2	1 2	1 2			04	04	04
05			1 2	1 2	1 2			05	05	05
06			1 2	1 2	1 2			06	06	06
07			1 2	1 2	1 2			07	07	07
08			1 2	1 2	1 2			08	08	08
09			1 2	1 2	1 2			09	09	09
10			1 2	1 2	1 2			10	10	10

2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed? YES → ADD TO TABLE; NO

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? YES → ADD TO TABLE; NO

2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed? YES → ADD TO TABLE; NO

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = CO-WIFE
10 = OTHER RELATIVE
11 = ADOPTED/FOSTER/ STEPCHILD
12 = NOT RELATED
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS	IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT SCHOOL ATTENDANCE	BIRTH REGIS-TRATION
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? SEE CODES BELOW. What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	Is (NAME) currently attending school?	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
01	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 NEXT LINE	LEVEL GRADE	Y N 1 2 NEXT LINE	
02	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
03	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
04	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
05	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
06	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
07	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
08	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
09	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
10	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	

CODES FOR Q. 17

EDUCATION LEVEL

00=PREPRIMARY
01 = PRIMARY
02=POST PRIMARY TRAINING
03= SECONDARY O-LEVEL
04= SECONDARY A-LEVEL
05=POST-SECONDARY TRAINING 'O' LEVEL
06=POST-SECONDARY TRAINING'A' LEVEL
07=UNIVERSITY
98 = DON'T KNOW

EDUCATION GRADE

00=LESS THAN 1 YEAR COMPLETED
98= DON'T KNOW

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-19 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, WRITE '95'	What is (NAME'S) current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN UNDER AGE 5
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
11			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		11	11	11
12			1 2	1 2	1 2			12	12	12
13			1 2	1 2	1 2			13	13	13
14			1 2	1 2	1 2			14	14	14
15			1 2	1 2	1 2			15	15	15
16			1 2	1 2	1 2			16	16	16
17			1 2	1 2	1 2			17	17	17
18			1 2	1 2	1 2			18	18	18
19			1 2	1 2	1 2			19	19	19
20			1 2	1 2	1 2			20	20	20

TICK HERE IF CONTINUATION SHEET USED ☐

2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed? YES ☐ → ADD TO TABLE NO ☐

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? YES ☐ → ADD TO TABLE NO ☐

2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed? YES ☐ → ADD TO TABLE NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = CO-WIFE
10 = OTHER RELATIVE
11 = ADOPTED/FOSTER/ STEPCHILD
12 = NOT RELATED
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS	IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT SCHOOL ATTENDANCE	BIRTH REGIS-TRATION
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? SEE CODES BELOW. What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	Is (NAME) currently attending school?	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
11	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 NEXT LINE	LEVEL GRADE	Y N 1 2 NEXT LINE	
12	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
13	1 2 8 GO TO 16		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
14	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
15	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
16	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
17	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
18	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
19	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	
20	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE	

CODES FOR Q. 17

EDUCATION LEVEL

00=PREPRIMARY
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05=POST-SECONDARY TRAINING 'O' LEVEL
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07=UNIVERSITY
98 = DON'T KNOW

EDUCATION GRADE

00=LESS THAN 1 YEAR COMPLETED
98= DON'T KNOW

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the main source of drinking water for members of your household?	**PIPED WATER** PIPED INTO DWELLING . . . . . 11 PIPED INTO YARD/PLOT . . . . . 12 PUBLIC TAP . . . . . 13 NEIGHBOUR'S TAP . . . . . 14 **WATER FROM OPEN WELL** OPEN WELL IN DWELLING . . . . . 21 OPEN WELL IN YARD/PLOT . . . . . 22 OPEN PUBLIC WELL . . . . . 23 NEIGHBOUR'S OPEN WELL . . . . . 24 **WATER FROM COVERED WELL OR BOREHOLE** PROTECTED WELL IN DWELLING . . . . . 31 PROTECTED WELL IN YARD/PLOT . . . . . 32 PROTECTED PUBLIC WELL . . . . . 33 NEIGHBOUR'S BOREHOLE . . . . . 34 **SURFACE WATER** SPRING . . . . . 41 RIVER/STREAM . . . . . 42 POND/LAKE . . . . . 43 DAM . . . . . 44 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 WATER VENDOR . . . . . 71 BOTTLED WATER . . . . . 81 **OTHER** _____ 96 (SPECIFY)	→ 101B → 101B
101A	Who is providing water at your main source?	AUTHORITY . . . . . 1 CBO/NGO . . . . . 2 PRIVATE OPERATOR . . . . . 3 DON'T KNOW 8	
101B	How long does it take you to go there, get water, and come back including waiting time?	MINUTES . . . . . [ ][ ][ ] ON PREMISES 996	
101C	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 102
101D	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC.) . . . . . D SOLAR DISINFECTION . . . . . E LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
102	What kind of toilet facility do members of your household usually use?	FLUSH/ POUR FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH/ POUR FLUSH TO PIPED SEPTIC TANK . . . . . 12 FLUSH/ POUR FLUSH TO PIT LATRINE . . . . . 13 FLUSH/ POUR FLUSH TO ELSEWHERE . . . . . 14 **PIT LATRINE** VENTILATED IMPROVED PIT LATRINE (VIP) . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/OPEN PIT . . . . . 23 COMPOSTING TOILET/ECOSAN . . . 31 BUCKET . . . . . 41 NO FACILITY/BUSH/FIELD . . . . . 51 OTHER _____ 96 (SPECIFY)	→ 104

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
103	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 104
103A	How many households share this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . 0 [ ] 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
104	Does your household have: Electricity? A paraffin lamp? A radio? A television? A mobile telephone? A non-mobile telephone (land line)? An iron (charcoal or electric)? A refrigerator?	YES NO ELECTRICITY . . . . . 1 2 PARAFFIN LAMP . . . . . 1 2 RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 MOBILE TELEPHONE . . . . . 1 2 NON-MOBILE TELEPHONE . . . 1 2 IRON . . . . . 1 2 REFRIGERATOR 1 2	
105	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 01 BOTTLED GAS . . . . . 02 PARAFFIN / KEROSENE . . . . . 03 CHARCOAL . . . . . 04 FIREWOOD . . . . . 05 CROP RESIDUALS, STRAW, GRASS 06 ANIMAL DUNG . . . . . 07 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	
106	What is the main source of energy for lighting in the household?	ELECTRICITY . . . . . 01 SOLAR . . . . . 02 GAS . . . . . 03 PARAFFIN-HURRICANE LAMP . . . 04 PARAFFIN-PRESSURE LAMP . . . . . 05 PARAFFIN-WICK LAMP . . . . . 06 FIREWOOD . . . . . 07 CANDLES . . . . . 08 OTHER _____ 96 (SPECIFY)	
107	MAIN MATERIAL OF THE FLOOR RECORD OBSERVATION. MARK ONLY ONE.	EARTH, SAND, DUNG . . . . . 11 WOOD PLANKS, BAMBOO, PALM . . . 21 PARQUET OR POLISHED WOOD . . . 31 VINYL OR ASPHALT STRIPS . . . . . 32 CERAMIC TILES, TERRAZZO . . . . . 33 CEMENT . . . . . 34 CARPET . . . . . 35 OTHER _____ 96 (SPECIFY)	
108	WALL MATERIAL RECORD OBSERVATION. MARK ONLY ONE.	GRASS . . . . . 01 POLES AND MUD . . . . . 02 SUN-DRIED BRICKS . . . . . 03 BAKED BRICKS . . . . . 04 WOOD, TIMBER . . . . . 05 CEMENT BLOCKS . . . . . 06 STONES . . . . . 07 OTHER _____ 96 (SPECIFY)	
109	ROOFING MATERIAL RECORD OBSERVATION. MARK ONLY ONE.	GRASS / THATCH / MUD . . . . . 01 IRON SHEETS . . . . . 02 TILES . . . . . 03 CONCRETE . . . . . 04 ASBESTOS . . . . . 05 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
110	How many rooms in your household are used for sleeping? (INCLUDING ROOMS OUTSIDE THE MAIN DWELLING)	ROOMS	
111	Does any member of your household own: A watch? A bicycle? A motorcycle or motor scooter? A car or truck? A bank account?	YES NO WATCH . . . . . 1 2 BICYCLE . . . . . 1 2 MOTORCYCLE/SCOOTER . . . 1 2 CAR/TRUCK . . . . . 1 2 BANK ACCOUNT 1 2	
112	How many acres of land for farming or grazing does this household own? (PUT '0000.0' IF NONE AND 9999.8 IF DOESN'T KNOW)	ACRES FOR FARMING . . ACRES FOR GRAZING . .	
113	Does the household use land for farming or grazing that it doesn't own? IF YES: Is it rented, sharecropped, private land provided free, or open access/communal/other?	YES, RENTED . . . . . 1 YES, SHARECROPPED . . . . . 2 YES, PRIVATE LAND PROVIDED FREE 3 YES, OPEN ACCESS/COMMUNAL . . . 4 NO 5	→ 115
114	How many acres of land are used? (PUT '0000.0' IF NONE AND 9999.8 IF DOESN'T KNOW)	ACRES FOR FARMING . . ACRES FOR GRAZING . .	
115	How far is it to the nearest market place? (WRITE '00' IF LESS THAN ONE KILOMETRE)	KILOMETRES	
116	Now I would like to ask you about the food your household eats How many meals does your household usually have per day?	MEALS	
117	In the past week, on how many days did the household ea **meat?**	DAYS	
118	In the past week, on how many days did the household eat **fish?**	DAYS	
119	How often in the last year did you have problems in satisfying the food needs of the household?	NEVER . . . . . 1 SELDOM . . . . . 2 SOMETIMES . . . . . 3 OFTEN . . . . . 4 ALWAYS 5	
120	How far is it to the nearest **health** facility? (WRITE '00' IF LESS THAN ONE KILOMETRE) IF MORE THAN 95 KM, WRITE 95)	KILOMETRES	
121	If you were to go to (NAME OF HOSPITAL, HEALTH CENTRE, or HEALTH POST), how would you go there?	CAR/MOTORCYCLE . . . . . 1 PUBLIC TRANSPORT (BUS, TAXI) . . . 2 ANIMAL/ANIMAL CART . . . . . 3 WALKING . . . . . 4 BICYCLE . . . . . 5 OTHER _____ 6 (SPECIFY)	
122	Did anyone in the household prepare ugali with maize flour in the past 7 days?	YES . . . . . 1 NO 2	→ 126
123	Where did you get the maize flour?	GROUND OWN MAIZE AT HOME . . . 1 GROUND AT MAIZE MILL . . . . . 2 BOUGHT FLOUR . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 126 → 126 → 126

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
124	Where did you buy the **maize flour**?	SHOP . . . . . 1 MARKET . . . . . 2 AT HAMMERMILL . . . . . 3 OTHER _____ . . . 6 (SPECIFY)	
125	What brand did you buy?	SEMBA . . . . . 1 DONA . . . . . 2 NO BRAND SHOWN . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
126	Did your household use oil to cook with in the past 7 days?	YES . . . . . 1 NO 2	→ 130
127	What kind of oil was it?	SIMSIM/SESAME 01 GROUNT NUT . . . . . 02 SUNFLOWER . . . . . 03 COCONUT . . . . . 04 RED PALM . . . . . 05 COTTONSEED . . . . . 06 COW FAT . . . . . 07 GHEE ..... 08 OTHER FAT ___ . . . . . 96 (SPECIFY)	
128	Where did you get the oil?	PROCESSED SELF AT HOME . . . . . 1 LOCAL MILL . . . . . 2 BOUGHT . . . . . 3 OTHER _____ . . . 6 (SPECIFY)	→ 130 → 130 → 130
129	What brand did you buy?	NO BRAND . . . . . 1 BRAND _____ 6 (SPECIFY) DON'T KNOW 8	
130	Does your household have any mosquito nets that can be used while sleeping?	YES . . . . . 1 NO 2	→ 141
131	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS . . . . . ☐	

		NET # 1	NET # 2	NET # 3
132	ASK RESPONDENT TO SHOW YOU THE NET(S). IF MORE THAN 6 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	OBSERVED . . . . . 1 NOT OBSERVED 2	OBSERVED . . . . . 1 NOT OBSERVED 2	OBSERVED . . . . . 1 NOT OBSERVED 2
133	How many months ago did your household obtain the mosquito net? IF LESS THAN ONE MONTH, WRITE '00'.	MONTHS AGO [ ][ ] 37 OR MORE MONTHS AGO 95 NOT SURE 98	MONTHS AGO [ ][ ] 37 OR MORE MONTHS AGO 95 NOT SURE 98	MONTHS AGO [ ][ ] 37 OR MORE MONTHS AGO 95 NOT SURE 98
134	OBSERVE BRAND OR TYPE OF MOSQUITO NET. FEEL TEXTURE OF NET IF STIFF/ROUGH CIRCLE 'OLYSET'	'PERMANENT' NET OLYSET . . . . . 11 (SKIP TO 138) OTHER/ DK BRAND 12	'PERMANENT' NET OLYSET . . . . . 11 (SKIP TO 138) OTHER/ DK BRAND	'PERMANENT' NET OLYSET . . . . 11 (SKIP TO 138) OTHER/ DK BRAND 12
135	Since you got the mosquito net, was it ever soaked or dipped in a liquid to repel mosquitos or bugs?	YES . . . . 1 NO . . . . 2 (SKIP TO 138) NOT SURE 8	YES . . . . 1 NO . . . . 2 (SKIP TO 138) NOT SURE 8	YES . . . . 1 NO . . . . 2 (SKIP TO 138) NOT SURE 8
136	Who treated the net?	SELF/HOUSEHOLD MEMBER . . . . 1 CAMPAIGN . . . . 2 DON'T KNOW . . 8	SELF/HOUSEHOLD MEMBER . . . . 1 CAMPAIGN . . . . 2 DON'T KNOW . . 8	SELF/HOUSEHOLD MEMBER . . . . 1 CAMPAIGN . . . . 2 DON'T KNOW . . 8
137	How many months ago was the net last soaked or dipped? IF LESS THAN 1 MONTH, RECORD '00'.	MONTHS AGO . . . [ ][ ] 25 OR MORE MONTHS AGO 95 NOT SURE 98	MONTHS AGO . . . [ ][ ] 25 OR MORE MONTHS AGO 95 NOT SURE 98	MONTHS AGO . . . [ ][ ] 25 OR MORE MONTHS AGO 95 NOT SURE 98
138	Did anyone sleep under this mosquito net last night?	YES . . . . 1 NO . . . . 2 (SKIP TO 140) NOT SURE 8	YES . . . . 1 NO . . . . 2 (SKIP TO 140) NOT SURE 8	YES . . . . 1 NO . . . . 2 (SKIP TO 140) NOT SURE 8
139	Who slept under this mosquito net last night? RECORD THE PERSON'S NAME AND LINE NUMBER FROM THE HOUSEHOLD SCHEDULE	NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ]	NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ]	NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ]
140		GO BACK TO 132 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 141.	GO BACK TO 132 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 141.	GO BACK TO 132 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 141.

		NET # 4	NET # 5	NET # 6
132	ASK RESPONDENT TO SHOW YOU THE NET(S). IF MORE THAN 3 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	OBSERVED . . . . . 1 NOT OBSERVED 2	OBSERVED . . . . . 1 NOT OBSERVED 2	OBSERVED . . . . . 1 NOT OBSERVED 2
133	How many months ago did your household obtain the mosquito net? IF LESS THAN ONE MONTH, WRITE '00'.	MONTHS AGO . . . [ ][ ] 37 OR MORE MONTHS AGO 95 NOT SURE 98	MONTHS AGO . . . [ ][ ] 37 OR MORE MONTHS AGO 95 NOT SURE 98	MONTHS AGO . . . [ ][ ] 37 OR MORE MONTHS AGO 95 NOT SURE 98
134	OBSERVE BRAND OR TYPE OF MOSQUITO NET. FEEL TEXTURE OF NET IF STIFF/ROUGH CIRCLE 'OLYSET'	'PERMANENT' NET OLYSET . . . . . 11 (SKIP TO 138) OTHER/ DK BRAND 12	'PERMANENT' NET OLYSET . . . . . 11 (SKIP TO 138) OTHER/ DK BRAND	'PERMANENT' NET OLYSET . . . . . 11 (SKIP TO 138) OTHER/ DK BRAND 12
135	Since you got the mosquito net, was it ever soaked or dipped in a liquid to repel mosquitos or bugs?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 138) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 138) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 138) NOT SURE 8
136	Who treated the net?	SELF/HOUSEHOLD MEMBER . . 1 CAMPAIGN . . . . 2 DON'T KNOW . . 8	SELF/HOUSEHOLD MEMBER . . 1 CAMPAIGN . . . . 2 DON'T KNOW . . 8	SELF/HOUSEHOLD MEMBER . . 1 CAMPAIGN . . . . 2 DON'T KNOW . . 8
137	How many months ago was the net last soaked or dipped? IF LESS THAN 1 MONTH, RECORD '00'.	MONTHS AGO . . . [ ][ ] 25 OR MORE MONTHS AGC . . . 95 NOT SURE 98	MONTHS AGO . . . [ ][ ] 25 OR MORE MONTHS AGC . . . 95 NOT SURE 98	MONTHS AGO . . . [ ][ ] 25 OR MORE MONTHS AGC . . . 95 NOT SURE 98
138	Did anyone sleep under this mosquito net last night?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 140) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 140) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 140) NOT SURE 8

		NET # 4	NET # 5	NET # 6
139	Who slept under this mosquito net last night? RECORD THE PERSON'S NAME AND LINE NUMBER FROM THE HOUSEHOLD SCHEDULE	NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ]	NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ]	NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ] NAME ______ LINE NUMBER [ ][ ]
140		GO BACK TO 132 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 141.	GO BACK TO 132 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 141.	GO BACK TO 132 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 141.
141	ASK RESPONDENT FOR A TEASPOONFUL OF COOKING SALT. TEST SALT FOR IODINE. RECORD PPM (PARTS PER MILLION)		0 PPM (NO IODINE . . . . 1 BELOW 15 PPM . . . . 2 15 PPM AND ABOVE . . . . 3 NO SALT IN HH . . . . 4 SALT NOT TESTED ______ 6 (SPECIFY REASON)	
142	CHECK COVER OF HOUSEHOLD QUESTIONNAIRE. IF HOUSEHOLD SELECTED FOR ADDITIONAL SALT TESTING ASK FOR ADDITIONAL FULL TABLESPOON OF SALT. PLACE SALT IN CONTAINER. PUT THE 1ST BAR CODE LABEL HERE. [ ] PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S CONTAINER OF SALT AND THE 3RD ON THE TRANSMITTAL FORM.			

SELECTION OF RESPONDENTS FOR SECTION ON DOMESTIC VIOLENCE

200 ONLY ONE WOMAN PER HOUSEHOLD SHOULD BE SELECTED FOR DV MODULE.

USE THE TABLE BELOW TO SELECT ONE WOMAN TO BE INTERVIEWED WITH DV MODULE IN THIS HH.

NAME OF SELECTED WOMAN_____

HH LINE NUMBER | | |

GO TO COL. 9 IN THE HH SCHEDULE AND WRITE 'DV' NEXT TO THE LINE NUMBER OF THE WOMAN SELECTED.

HOW TO USE THE TABLE FOR SELECTION OF RESPONDENTS FOR DV

LOOK AT THE LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE FEMALES (COLUMN 9) IN THE HOUSEHOLD SCHEDULE. THIS IS THE COLUMN YOU SHOULD GO TO. THE CELL WHERE THE ROW AND THE COLUMN MEET IS THE NUMBER OF THE SELECTED WOMAN FOR THE DOMESTIC VIOLENCE MODULE IN THE HOUSEHOLD SCHEDULE.

FOR EXAMPLE, THERE ARE THREE ELIGIBLE WOMEN AGE 15-49 (LINE NUMBERS 02, 04, AND 05). IF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER IS '216', THE LAST DIGIT IS "6", THEREFORE GO TO ROW '6'. THERE ARE THREE ELIGIBLE WOMEN AGE 15-49 IN THE HOUSEHOLD, THEREFORE GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER WHERE THE ROW AND COLUMN MEET ('2') AND CIRCLE THE BOX. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE SECOND WOMAN WHO IS ELIGIBLE FOR THE WOMAN'S INTERVIEW (LINE NUMBER "04" IN OUR EXAMPLE). WRITE HER LINE NUMBER ABOVE IN THE BOXES INDICATED.

TABLE FOR SELECTION OF RESPONDENTS FOR SECTION ON DOMESTIC VIOLENCE

LAST DIGIT OF THE HOUSEHOLD Q-RE SERIAL NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN 15-49 IN THE HOUSEHOLD							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

WEIGHT, HEIGHT, HEMOGLOBIN, VITAMIN A AND IRON FOR CHILDREN 0-5 YEARS

501	CHECK COLUMN 11. RECORD THE LINE NUMBER, NAME AND AGE FOR ALL ELIGIBLE CHILDREN LESS THAN 5 YEARS OF AGE IN QUESTIONS 502-503. IF THERE ARE MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). A FINAL OUTCOME FOR THE ANEMIA TEST PROCEDURE MUST BE RECORDED IN 513 AND FOR THE VITAMIN A TEST PROCEDURE IN 517 FOR EACH ELIGIBLE CHILD.	IF NO ELIGIBLE CHILDREN, ☐ TICK HERE AND SKIP TO Q. 601

		CHILD 1	CHILD 2	CHILD 3
502	LINE NUMBER (COLUMN 11) NAME (COLUMN 2)	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
503	What is (NAME'S) birth date? IF MOTHER INTERVIEWED, COPY MONTH AND YEAR FROM BIRTH HISTORY AND ASK DAY OF BIRTH; IF MOTHER NOT INTERVIEWED, ASK DAY, MONTH AND YEAR OF BIRTH.	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐
504	CHECK 503: CHILD BORN IN JANUARY 2005 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE, GO TO 601)	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE, GO TO 601)	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE, GO TO 601)
505	WEIGHT IN KILOGRAMS	KG. . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	KG. . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	KG. . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
506	HEIGHT IN CENTIMETERS	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 RESFUED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 RESFUED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 RESFUED . . . . . 9995 OTHER 9996
507	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
509	CHECK 503: IS CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR FIVE PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE, GO TO 601) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE, GO TO 601) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE, GO TO 601) OLDER 2
510	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR CHILD (COLUMN 1 HH SCHEDULE). RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐

510A	**READ ALL CONSENT STATEMENTS . PREPARE EQUIPMENT AND SUPPLIES FOR THE TEST(S) FOR WHICH CONSENT WAS GIVEN.**

CONSENT STATEMENT FOR ANEMIA TEST FOR CHILDREN

As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease.
This survey will assist the government to develop programs to prevent and treat anemia.

We request that all children born in 2005 or later participate in the anemia testing part of this survey and give a few drops of blood from a finger. The equipment used in taking the blood is clean and completely safe. It has never been used before and will be thrown away after each test.

The blood will be tested for anemia immediately, and the result told to you right away. The result will be kept confidential and will not be shared with anyone other than members of our survey team.

Do you have any questions?

You can say yes to the test, or you can say no. It is up to you to decide.
Will you allow (NAME(S) OF CHILD(REN)) to participate in the anemia test?

		CHILD 1	CHILD 2	CHILD 3
	LINE NUMBER (COLUMN 11) NAME (COLUMN 2)	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
512	READ ANEMIA TEST CONSENT STATEMENT TO PARENT/OTHER ADULT RESPONSIBLE FOR CHILD. CIRCLE CODE AND SIGN.	GRANTED . . . . . 1 (SIGN) ← REFUSED 2	GRANTED . . . . . 1 (SIGN) ← REFUSED 2	GRANTED . . . . . 1 (SIGN) ← REFUSED 2
513	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
515	READ VITAMIN A AND IRON CONSENT STATEMENT TO PARENT/OTHER ADULT RESPONSIBLE FOR CHILD. CIRCLE CODE AND SIGN.	GRANTED . . . . . 1 (SIGN) ← REFUSED 2	GRANTED . . . . . 1 (SIGN) ← REFUSED 2	GRANTED . . . . . 1 (SIGN) ← REFUSED . . . . . 2 GO TO 517 ↵

CONSENT STATEMENT FOR VITAMIN A, IRON DEFICIENCY AND INFECTION TEST FOR CHILDREN

As part of the survey we also are asking people all over the country to take a test for vitamin A and iron deficiency and infection. Vitamin A and iron deficiency are health problems that can result from poor nutrition.
Low Vitamin A can lead to blindness and low resistence to infection and low iron can slow how well children grow and develop.
This survey will help the government to develop programs to prevent and treat iron and Viatmin A deficiency.
For these tests, we need a few (more) drops of blood from a finger.

No names will be attached so we will not be able to tell you the test results. No one else will be able to know the test results are for your child.

The test will be done at the Tanzanian Food and Nutrition Center Laboratory.

The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.

Do you have any questions?

You can say yes to the test, or you can say no. It is up to you to decide.
Will you allow (NAME(S) OF CHILD(REN)) to take the vitamin A deficiency test?

516	BAR CODE LABEL **VITAMIN A** **AND IRON**	PUT THE 1ST BAR CODE LABEL HERE. PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.
517	OUTCOME OF VITAMIN A AND IRON TEST PROCEDURE	BLOOD TAKEN . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6	BLOOD TAKEN . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6	BLOOD TAKEN . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6
518	GO BACK TO 502 IN NEXT COLUMN IN THIS QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 601.			

		CHILD 4	CHILD 5	CHILD 6
502	LINE NUMBER (COLUMN 11) NAME (COLUMN 2)	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
503	What is (NAME'S) birth date? IF MOTHER INTERVIEWED, COPY MONTH AND YEAR FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK DAY, MONTH AND YEAR.	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR . . . . . [ ][ ][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR . . . . . [ ][ ][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR . . . . . [ ][ ][ ][ ]
504	CHECK 503: CHILD BORN IN JANUARY 2005 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD, OR, IF NO MORE, GO TO 601)	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD, OR, IF NO MORE, GO TO 601)	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD, OR, IF NO MORE, GO TO 601)
505	WEIGHT IN KILOGRAMS	KG. . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 RESFUED . . . . . 995 OTHER 996	KG. . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 RESFUED . . . . . 995 OTHER 996	KG. . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 RESFUED . . . . . 995 OTHER 996
506	HEIGHT IN CENTIMETERS	CM. . . . . [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 RESFUED . . . . . 9995 OTHER 9996	CM. . . . . [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 RESFUED . . . . . 9995 OTHER 9996	CM. . . . . [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 RESFUED . . . . . 9995 OTHER 9996
507	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
509	CHECK 503: IS CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR FIVE PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (GO TO 502 FOR NEXT CHILD, OR, IF NO MORE, GO TO 601) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 502 FOR NEXT CHILD, OR, IF NO MORE, GO TO 601) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 502 FOR NEXT CHILD, OR, IF NO MORE, GO TO 601) OLDER 2
510	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR CHILD (COLUMN 1). RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]
512	READ ANEMIA TEST CONSENT STATEMENT TO PARENT/OTHER ADULT RESPONSIBLE FOR CHILD. CIRCLE CODE AND SIGN.	GRANTED . . . . . 1 (SIGN) REFUSED 2	GRANTED . . . . . 1 (SIGN) REFUSED 2	GRANTED . . . . . 1 (SIGN) REFUSED 2

CONSENT STATEMENT FOR VITAMIN A, IRON DEFICIENCY AND INFECTION TEST FOR CHILDREN

As part of the survey we also are asking people all over the country to take a test for vitamin A and iron deficiency and infection. Vitamin A and iron deficiency are health problems that can result from poor nutrition.

Low Vitamin A can lead to blindness and low resistence to infection and low iron can slow how well children grow and develop.

This survey will help the government to develop programs to prevent and treat iron and Viatmin A deficiency.

For these tests, we need a few (more) drops of blood from a finger.

No names will be attached so we will not be able to tell you the test results. No one else will be able to know the test results are for your child.

The test will be done at the Tanzanian Food and Nutrition Center Laboratory.

The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.

Do you have any questions?

You can say yes to the test, or you can say no. It is up to you to decide.

Will you allow (NAME(S) OF CHILD(REN)) to take the vitamin A deficiency test?

		CHILD 4	CHILD 5	CHILD 6
	LINE NUMBER (COLUMN 11) NAME (COLUMN 2)	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
513	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
515	READ VITAMIN A AND IRON CONSENT STATEMENT TO PARENT/OTHER ADULT RESPONSIBLE FOR CHILD. CIRCLE CODE AND SIGN.	GRANTED . . . . . 1 (SIGN) REFUSED 2	GRANTED . . . . . 1 (SIGN) REFUSED 2	GRANTED . . . . . 1 (SIGN) REFUSED . . . . . 2 GO TO 517
516	BAR CODE LABEL **VITAMIN A** **AND IRON**	PUT THE 1ST BAR CODE LABEL HERE. PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.
517	OUTCOME OF VITAMIN A AND IRON TEST PROCEDURE	BLOOD TAKEN . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6	BLOOD TAKEN . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6	BLOOD TAKEN . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6
518	GO BACK TO 502 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF ADDITIONAL QUESTIONNAIRE(S); IF NO MORE CHILDREN GO TO 601			

TICK HERE IF CONTINUED IN ANOTHER QUESTIONNAIRE. ☐

WEIGHT, HEIGHT, HEMOGLOBIN, VITAMIN A. IRON AND URINARY IODINE FOR WOMEN AGE 15-49

601	CHECK COLUMN 9. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 602. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S). A FINAL OUTCOME FOR THE ANEMIA TEST PROCEDURE MUST BE RECORDED IN 610 AND FOR THE VITAMIN A TEST PROCEDURE IN 616 FOR EACH ELIGIBLE WOMAN.	IF NO ELIGIBLE WOMEN, TICK HERE ☐

		WOMAN 1	WOMAN 2	WOMAN 3
602	LINE NUMBER (COLUMN 9) NAME (COLUMN 2)	LINE NUMBER . . . . ☐☐ NAME ____________	LINE NUMBER . . . . ☐☐ NAME ____________	LINE NUMBER . . . . ☐☐ NAME ____________
603	WEIGHT IN KILOGRAMS	KG. ☐☐☐.☐☐ NOT PRESENT . . . . .99994 REFUSED . . . . .99995 OTHER 99996	KG. ☐☐☐.☐☐ NOT PRESENT . . . . .99994 REFUSED . . . . .99995 OTHER 99996	KG. ☐☐☐.☐☐ NOT PRESENT . . . . .99994 REFUSED . . . . .99995 OTHER 99996
604	HEIGHT IN CENTIMETERS	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . .9994 REFUSED . . . . .9995 OTHER 9996	CM. . . . . . ☐☐☐.☐ NOT PRESENT . . . . .9994 REFUSED . . . . .9995 OTHER 9996	CM. . . . . . ☐☐☐.☐ NOT PRESENT . . . . .9994 REFUSED . . . . .9995 OTHER 9996
606	AGE: CHECK COLUMN 7.	15-17 YEARS . . . . 1 18-49 YEARS . . . . 2 (GO TO 609)	15-17 YEARS . . . . 1 18-49 YEARS . . . . 2 (GO TO 609)	15-17 YEARS . . . . 1 18-49 YEARS . . . . 2 (GO TO 609)
607	MARITAL STATUS: CHECK COLUMN 8.	CODE 4 (NEVER IN UNION . . . . . 1 OTHER . . . . 2 (GO TO 609)	CODE 4 (NEVER IN UNION . . . . . 1 OTHER . . . . 2 (GO TO 609)	CODE 4 (NEVER IN UNION . . . . 1 OTHER . . . . .2 (GO TO 609)
608	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPON-SIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT ☐☐
608A	READ ***ALL*** CONSENT STATEMENTS AND PREPARE EQUIPMENT AND SUPPLIES FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED.			
609	READ ANEMIA TEST CONSENT STATEMENT. FOR NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM PARENT/OTHER ADULT IDENTIFIED IN 608 BEFORE ASKING RESPON-DENT'S CONSENT.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 RESPONDENT REFUSED . . . . 3 ____________ (SIGN) (IF REFUSED, GO TO 610).	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 RESPONDENT REFUSED . . . . 3 ____________ (SIGN) (IF REFUSED, GO TO 610).	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 RESPONDENT REFUSED . . . . 3 ____________ (SIGN) (IF REFUSED, GO TO 610).

CONSENT STATEMENT FOR ANEMIA TEST

READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE '1' IN 609 IF RESPONDENT CONSENTS TO THE ANEMIA TEST AND CODE '3' IF SHE REFUSES.

FOR NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE Q.608) BEFORE ASKING THE ADOLESCENT FOR HER CONSENT. CIRCLE CODE '2' IN 609 IF THE PARENT (OTHER ADULT) REFUSES. CONDUCT THE TEST ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT.

As part of this survey, we are asking people all over the country to give blood for an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia.

For the anemia testing, we will need a few drops of blood from a finger. The equipment used in taking the blood is clean and completely safe.
It has never been used before and will be thrown away after each test.

The blood will be tested for anemia immediately, and the result told to you right away.
The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.
Do you have any questions?

You can say yes to the test, or you can say no. It is up to you to decide.
Will you (allow NAME OF ADOLESCENT to) take the anemia test?

		WOMAN 1	WOMAN 2	WOMAN 3
	LINE NUMBER (COLUMN 9) NAME (COLUMN 2)	LINE NUMBER . . . . [ ][ ] NAME ______________	LINE NUMBER . . . . [ ][ ] NAME ______________	LINE NUMBER . . . . [ ][ ] NAME ______________
610	RECORD HEMO-GLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL . . . . [ ][ ] . [ ] NOT PRESENT . . . . .994 REFUSED . . . . .995 OTHER 996	G/DL . . . . [ ][ ] . [ ] NOT PRESENT . . . . .994 REFUSED . . . . .995 OTHER 996	G/DL . . . . [ ][ ] . [ ] NOT PRESENT . . . . .994 REFUSED . . . . .995 OTHER 996
613	PREGNANCY STATUS: CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES . . . . .1 NO . . . . .2 DK 8	YES . . . . .1 NO . . . . .2 DK 8	YES . . . . .1 NO . . . . .2 DK 8
614	READ THE VITAMIN A AND IRON CONSENT STATEMENT. FOR NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM PARENT/ OTHER ADULT IDENTIFIED IN 608 BEFORE ASKING RESPONDENT'S CONSENT.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 RESPONDENT REFUSED . . . . 3 ______________ (SIGN) (IF REFUSED, GO TO 616).	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 RESPONDENT REFUSED . . . . 3 ______________ (SIGN) (IF REFUSED, GO TO 616).	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 RESPONDENT REFUSED . . . . 3 ______________ (SIGN) (IF REFUSED, GO TO 616).

CONSENT STATEMENT FOR VITAMIN A AND IRON DEFICIENCY TESTS

READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE '1' IN 614 IF RESPONDENT CONSENTS TO THE VITAMIN A AND IRON TESTS AND CODE '3' IF SHE REFUSES.

FOR NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE 608) BEFORE ASKING THE ADOLESCENT FOR HER CONSENT. CIRCLE CODE '2' IN 614 IF THE PARENT (OTHER ADULT) REFUSES. CONDUCT THE TEST ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT.

As part of the survey we also are asking people all over the country to give blood for a vitamin A and iron deficiency test . Low Iron and vitamin A are health problems that can result from poor nutrition. Low Vitamin A can lead to blindess and lower resistence to infections and low iron cause low energy and tiredness in women.
This survey will help the government to develop programs to prevent and treat vitamin A and iron deficiency.
For the tests , we need a few more drops of blood from a finger after the blood for anemia has been collected.
Again the equipment used in taking the blood is clean and completely safe.
It has never been used before and will be thrown away after each test.

The test will be done at the Tanzanian Food and Nutrition Center Laboratory.
No names will be attached so we will not be able to tell you the test results. No one else will be able to know the test results are for you/ (NAME OF ADOLESCENT).

The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.
Do you have any questions?

You can say yes to the test, or you can say no. It is up to you to decide.
Will you (allow NAME OF ADOLESCENT to) take the test?

615	BAR CODE LABEL **VITAMIN A AND IRON**	PUT THE 1ST BAR CODE LABEL HERE. [ ] PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. [ ] PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. [ ] PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.
616	OUTCOME OF VITAMIN A AND IRON TESTS PROCEDURE	BLOOD TAKEN . . . . 1 NOT PRESENT . . . . 2 REFUSED . . . . 3 OTHER 6	BLOOD TAKEN . . . . 1 NOT PRESENT . . . . 2 REFUSED . . . . 3 OTHER 6	BLOOD TAKEN . . . . 1 NOT PRESENT . . . . 2 REFUSED . . . . 3 OTHER 6

		WOMAN 1	WOMAN 2	WOMAN 3
	LINE NUMBER (COLUMN 9) NAME (COLUMN 2)	LINE NUMBER . . . . [ ][ ] NAME ______________	LINE NUMBER . . . . [ ][ ] NAME ______________	LINE NUMBER . . . . [ ][ ] NAME ______________
617	READ THE URINARY IODINE CONSENT STATEMENT. FOR NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM PARENT/ OTHER ADULT IDENTIFIED IN 608 BEFORE ASKING RESPONDENT'S CONSENT.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 RESPONDENT REFUSED . . . . 3 ______________ (SIGN) (IF REFUSED GO TO 620)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 RESPONDENT REFUSED . . . . 3 ______________ (SIGN) (IF REFUSED GO TO 620)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 RESPONDENT REFUSED . . . . 3 ______________ (SIGN) (IF REFUSED GO TO 620)

CONSENT STATEMENT FOR URINARY IODINE TEST

READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE '1' IN 617 IF RESPONDENT CONSENTS TO THE URINARY IODINE TEST AND CODE '3' IF SHE REFUSES.

FOR NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE 608) BEFORE ASKING THE ADOLESCENT FOR HER CONSENT. CIRCLE CODE '2' IN 617 IF THE PARENT (OTHER ADULT) REFUSES. CONDUCT THE TEST ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT.

As part of the survey we also are asking women all over the country to take a test for iodine deficiency. Iodine deficiency is a health proble that can result poor nutrition.

This survey will help the government to develop programs to prevent and treat iodine deficiency.
For the iodine test, we need a small amount of your urine. The urine will be tested at the Tanzanian Food and Nutrition Laboratory
No names will be attached so we will not be able to tell you the test results. No one else will be able to know the test results are for you/ (NAME OF ADOLESCENT).
The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.
Do you have any questions?

You can say yes to the test, or you can say no. It is up to you to decide.
Will you (allow NAME OF ADOLESCENT to) take the iodine deficiency test?

	BAR CODE URINARY IODINE	PUT THE 1ST BAR CODE LABEL [ ] PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S COLLECTION CUP AND THE THIRD LABEL ON THE COLLECTION TUBE AND THE FOURTH LABEL ON THE TRANSMITTAL FORM.	WEKA BAR CODE **YA KWANZA** HAPA. [ ] PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S COLLECTION CUP AND THE THIRD LABEL ON THE COLLECTION TUBE AND THE FOURTH LABEL ON THE TRANSMITTAL FORM.	WEKA BAR CODE **YA KWANZA** HAPA. [ ] PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S COLLECTION CUP AND THE THIRD LABEL ON THE COLLECTION TUBE AND THE FOURTH LABEL ON THE TRANSMITTAL FORM.
619	OUTCOME OF URINARY IODINE TEST PROCEDURE	URINE GIVEN . . . . 1 NOT PRESENT . . . . 2 REFUSED . . . . 3 OTHER 6	URINE GIVEN . . . . 1 NOT PRESENT . . . . 2 REFUSED . . . . 3 OTHER 6	URINE GIVEN . . . . 1 NOT PRESENT . . . . 2 REFUSED . . . . 3 OTHER 6
620	GO BACK TO 603 IN THE NEXT COLUMN IN THE QUESTIONNAIRE OR IN THE FIRST COLUMNS OF ADDITIONAL QUESTIONNAIRE(S); IF NO MORE WOMEN, END INTERVIEW.			

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF THE SUPERVISOR: _____ DATE: _____

UNITED REPUBLIC OF TANZANIA
TANZANIA DEMOGRAPHIC AND HEALTH SURVEY 2009-10
NATIONAL BUREAU OF STATISTICS
WOMAN'S QUESTIONNAIRE **CONFIDENTIAL**

IDENTIFICATION

REGION _____

DISTRICT _____

WARD . . . . . .

ENUMERATION AREA . . . . . .

NAME OF HEAD OF HOUSEHOLD _____

TDHS NUMBER . . . . . .

HOUSEHOLD NUMBER . . . . . .

LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE . . . . . .
(LARGE CITY=1, SMALL CITY=2, TOWN=3, COUNTRYSIDE=4)

NAME AND LINE NUMBER OF WOMAN _____

LARGE CITIES ARE : DAR ES SALAAM, MWANZA, MBEYA AND TANGA.SMALL CITIES ARE: MOROGORO, DODOMA, MOSHI, IRINGA, SHINYANGA, SINGIDA, SONGEA ,MTWARA, TABORA, MUSOMA, SUMBAWANGA, BUKOBA, KIGOMA NA MJINI MAGHARIBI . MIJI MINGINE NI MIJI MIDOGO

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR 2 0
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:
1 COMPLETED 4 REFUSED
2 NOT AT HOME 5 PARTLY COMPLETED 7 OTHER _____ (SPECIFY)
3 POSTPONED 6 INCAPACITATED

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		

INFORMED CONSENT

Hello. My name is _____. I am working with National Bureau of Statistics. We are conducting a survey about health all over Tanzania. The information we collect will help the government to plan health services.

Your household was selected for the survey. The survey usually takes about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Do you have any questions?

May I begin the interview now?

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐ MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING, NIGHT 3	
104	In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away?	NUMBER OF TRIPS . . . . . ☐☐ NONE 00	→ 106
105	In the last 12 months, have you been away from your home community for more than one month at a time?	YES . . . . . 1 NO 2	
106	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
107	How old were you at your last birthday? COMPARE AND CORRECT 106 AND/OR 107 IF INCONSISTENT.	AGE IN COMPLETED YEARS ☐☐	
108	Have you ever attended school?	YES . . . . . 1 NO 2	→ 112
109	What is the highest level of school you attended?	PREPRIMARY . . . . . 0 PRIMARY . . . . . 1 POST-PRIMARY TRAINING . . . . 2 SECONDARY . . . . . 3 POST-SECONDAY TRAINING . . . 4 UNIVERSITY 5	
110	What is the highest grade you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE . . . . . ☐☐	
111	CHECK 109: PRIMARY ☐ ↓ SECONDARY OR HIGHER ☐ →		115
112	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PARTS OF SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
114	CHECK 112: CODE '2', '3' OR '4' CIRCLED ☐ ↓ CODE '1' OR '5' CIRCLED ☐ →		116

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
115	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
116	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
117	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	

PARENTS LOVE THEIR CHILDREN.
FARMING IS HARD WORK.
THE CHILD IS READING A BOOK.
CHILDREN WORK HARD AT SCHOOL.

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . [ ][ ] DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . [ ][ ] DAUGHTERS ELSEWHERE . . . [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO 2	208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . [ ][ ] GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL . . . . . [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES NO PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: ONE OR MORE BIRTHS NO BIRTHS		226

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.
(IF THERE ARE MORE THAN 12 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW).

212 What name was given to your (first/next) baby? (NAME)	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (NEXT BIRTH)	DAYS . . . 1 MONTHS 2 YEARS . . 3	
02	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 → ADD BIRTH NO . . . . . 2 → NEXT BIRTH
03	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 → ADD BIRTH NO . . . . . 2 → NEXT BIRTH
04	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 → ADD BIRTH NO . . . . . 2 → NEXT BIRTH
05	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 → ADD BIRTH NO . . . . . 2 → NEXT BIRTH
06	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 → ADD BIRTH NO . . . . . 2 → NEXT BIRTH
07	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 → ADD BIRTH NO . . . . . 2 → NEXT BIRTH

212 What name was given to your next baby? (NAME)	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
08	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
09	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
10	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
11	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
12	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH

222	Have you had any live births since the birth of (NAME OF LAST BIRTH)? IF YES, RECORD BIRTH(S) IN TABLE.	YES . . . . . 1 NO 2
223	COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK: NUMBERS ARE SAME ☐ → NUMBERS ARE DIFFERENT ☐ → (PROBE AND RECONCILE)	
224	CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN 2005 OR LATER. IF NONE, RECORD '0' AND SKIP TO 226.	☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	FOR EACH BIRTH SINCE JANUARY 2005 , ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 229
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS	
228	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 229
228A	Did you want to have a baby later on or did you not want any (more) children?	LATER . . . . . 1 NO MORE 2	
229	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES . . . . . 1 NO 2	→ 237
230	When did the last such pregnancy end?	MONTH . . . . . YEAR	
231	CHECK 230: LAST PREGNANCY ENDED IN JAN. 2005 OR LATER → (continue) LAST PREGNANCY ENDED BEFORE JAN. 2005 →		→ 237
232	How many months pregnant were you when the last such pregnancy ended? RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.	MONTHS	
233	Since January 2005 have you had any other pregnancies that did not result in a live birth?	YES . . . . . 1 NO 2	→ 235
234	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 2005. ENTER 'T' IN THE CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.		
235	Did you have any miscarriages, abortions or stillbirths that ended before 2005?	YES . . . . . 1 NO 2	→ 237
236	When did the last such pregnancy that terminated before 2005 end?	MONTH . . . . . YEAR	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
237	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 | | | WEEKS AGO . . . . . 2 | | | MONTHS AGO . . . . . 3 | | | YEARS AGO . . . . . 4 | | | IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . 994 BEFORE LAST BIRTH . . . . . 995 NEVER MENSTRUATED 996	
238	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 301
239	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)? PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED.	
01	**Female Sterilization** PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	**Male Sterilization** PROBE : Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	**Injectables** PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
04	**Implants** PROBE: Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
05	**IUD** PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2
06	**PILL** PROBE : Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	**Condom** PROBE: Men can put a rubber sheath on their penis before sexual Intercourse.	YES . . . . . 1 NO 2
08	**Female Condom** PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	**Diaphragm** PROBE:Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
10	**Foam or Jelly** PROBE : Women can place a suppository, jelly or cream in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
11	**Lactational Amenorrhea Method (LAM)**	YES . . . . . 1 NO 2
12	**Rhythm Method** PROBE: Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES . . . . . 1 NO 2
13	**Withdrawal** PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
14	**Emergency Contraception** PROBE: As an emergency measure after unprotected sexual intercourse, women can take special pills at any time within five days to prevent pregnancy.	YES . . . . . 1 NO 2
15	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) NO 2
302	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐ → 309	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
303	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 309
304	Which method are you using? CIRCLE ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H DIAPHRAGM . . . . . I FOAM/JELLY . . . . . J LACTATIONAL AMEN. METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD _____ X (SPECIFY) OTHER TRADITIONAL METHOD . . . . . _____ Y (SPECIFY)	→ 305 → 306A → 304B → 306A
304A	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	MICROGYNON . . . . . 01 LO FEMANAL . . . . . 02 SAFE PLAN . . . . . 03 MACROVAL . . . . . 04 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 306A
304B	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	SALAMA . . . . . 01 MSD . . . . . 02 DUME . . . . . 03 ROUGH RIDER . . . . . 04 FAMILIA . . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 306A
305	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT/PARASTATAL** REFERRAL/SPEC.HOSPITAL . . . . . 11 REGIONAL HOSPITAL . . . . . 12 DISTRICT HOSPITAL . . . . . 13 HEALTH CENTRE . . . . . 14 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC.HOSPITAL . . . . . 21 DISTRICT HOSPITAL . . . . . 22 HEALTH CENTRE . . . . . 23 **PRIVATE** HOSPITAL . . . . . 31 HEALTH CENTRE . . . . . 32 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
306	In what month and year was the sterilization performed?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	→ 307

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
306A	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
307	CHECK 306/306A, 215 AND 230 : ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 306/306A GO BACK TO 306/306A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).	YES ☐ NO ☐	
308	CHECK 306/306A: YEAR IS 2005 OR LATER ☐ ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. YEAR IS 2004 OR EARLIER ☐ ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2005.	THEN SKIP TO → 322	
309	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2005. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH. ILLUSTRATIVE QUESTIONS: * When was the last time you used a method? Which method was that? * When did you start using that method? How long after the birth of (NAME)? * How long did you use the method then?		
309A	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ANY METHOD USED ☐	→ 310	
309B	Have you ever used anything or tried in any way to delay or avoid getting pregnant	YES . . . . . 1 NO 2	→ 324
310	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD 95 OTHER TRADITIONAL METHOD 96	→ 324 → 313 → 326 → 311A → 311A → 326 → 326 → 326

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
311	You first started using (CURRENT METHOD) in (DATE FROM 306/306A) . Where did you get it at the time?	**GOVERNMENT/PARASTATAL** REFERRAL/SPEC.HOSPITAL . . . . . 11 REGIONAL HOSPITAL . . . . . 12 DISTRICT HOSPITAL . . . . . 13 HEALTH CENTRE . . . . . 14 DISPENSARY . . . . . 15 VILLAGE HEALTH POST . . . . . 16 CBD WORKER . . . . . 17 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC.HOSPITAL . . . . . 21 DISTRICT HOSPITAL . . . . . 22 HEALTH CENTRE . . . . . 23 DISPENSARY . . . . . 24 **PRIVATE** HOSPITAL . . . . . 31 HEALTH CENTRE . . . . . 32 DISPENSARY . . . . . 33 **OTHER** PHARMACY . . . . . 41 NGO . . . . . 42 VCT CENTRE . . . . . 43 SHOP/KIOSK . . . . . 44 BAR . . . . . 45 GUEST HOUSE/HOTEL . . . . . 46 FRIEND/RELATIVE/NEIGHBOUR . . . 47 OTHER _____ 96 (SPECIFY)	
311A	Where did you learn how to use the rhythm/lactational amenorhea method?		
	IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)		
312	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD 12	→ 323 → 316 → 316 → 316 → 326 → 326
313	You obtained (CURRENT METHOD FROM 310) from (SOURCE OF METHOD FROM 305 OR 311) in (DATE FROM 306/306A). At that time, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 315
314	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 316
315	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	
316	CHECK 310: CODE '01' CIRCLED → At that time, were you told about other methods of family planning that you could use? CODE '01' NOT CIRCLED → When you obtained (CURRENT METHOD FROM 310) from (SOURCE OF METHOD FROM 305 OR 311) were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	→ 322

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
321	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES . . . . . 1 NO 2	
322	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD . . . 96	03 → 326 05 → 326 11–96 → 326
323	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF IS PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT/PARASTATAL** REFERRAL/SPEC.HOSPITAL . . . . . 11 REGIONAL HOSPITAL . . . . . 12 DISTRICT HOSPITAL . . . . . 13 HEALTH CENTRE . . . . . 14 DISPENSARY . . . . . 15 VILLAGE HEALTH POST . . . . . 16 CBD WORKER . . . . . 17 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC.HOSPITAL . . . . . 21 DISTRICT HOSPITAL . . . . . 22 GOVT.HEALTH CENTRE . . . . . 23 DISPENSARY . . . . . 24 **PRIVATE** DISTRICT HOSPITAL . . . . . 31 HEALTH CENTRE . . . . . 32 DISPENSARY . . . . . 33 **OTHER** PHARMACY . . . . . 41 NGO . . . . . 42 VCT CENTRE . . . . . 43 SHOP/KIOSK . . . . . 44 BAR . . . . . 45 GUEST HOUSE/HOTEL . . . . . 46 FRIEND/RELATIVE/NEIGHBOUR . . . 47 OTHER _____ 96 (SPECIFY)	→ 326
324	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→ 326

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
325	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**GOVERNMENT/PARASTATAL** REFERRAL/SPEC.HOSPITAL . . . . . A REGIONAL HOSPITAL . . . . . B DISTRICT HOSPITAL . . . . . C HEALTH CENTRE . . . . . D DISPENSARY . . . . . E VILLAGE HEALTH POST . . . . . F CBD WORKER . . . . . G **RELIGIOUS/VOLUNTARY** REFERAL/SPEC.HOSPITAL . . . . . H DISTRICT HOSPITAL . . . . . I GOVT.HEALTH CENTRE . . . . . J DISPENSARY . . . . . K **PRIVATE** DISTRICT HOSPITAL . . . . . L HEALTH CENTRE . . . . . M DISPENSARY . . . . . N **OTHER** PHARMACY . . . . . O NGO . . . . . P VCT CENTRE . . . . . Q SHOP/KIOSK . . . . . R BAR . . . . . S GUEST HOUSE/HOTEL . . . . . T FRIEND/RELATIVE/NEIGHBOUR . . . U OTHER _____ X (SPECIFY)	
326	In the last 12 months, were you visited by a fieldworker who talked to you about family planning?	YES . . . . . 1 NO 2	
327	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES . . . . . 1 NO 2	→ 401
328	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224:	ONE OR MORE BIRTHS IN 2005 OR LATER	NO BIRTHS IN 2005 OR LATER	576

402 CHECK 215: ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2005 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH.
(IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).

Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY	BIRTH HISTORY NO. ☐☐	BIRTH HISTORY NO. ☐☐	BIRTH HISTORY NO. ☐☐
404	FROM 212 AND 216	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES . . . . . 1 (SKIP TO 407) NO 2	YES . . . . . 1 (SKIP TO 432) NO 2	YES . . . . . 1 (SKIP TO 432) NO 2
405A	Did you want to have a baby later on, or did you not want any (more) children?	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 407)	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 432)	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 432)
406	How much longer did you want to wait?	MONTHS . 1 ☐☐ YEARS . 2 ☐☐ DON'T KNOW . . . 998	MONTHS . 1 ☐☐ YEARS . 2 ☐☐ DON'T KNOW . . . 998	MONTHS . 1 ☐☐ YEARS . 2 ☐☐ DON'T KNOW . . . 998
407	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 414)		
407A	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	**HEALTH PROFESSIONAL** DOCTOR/AMO . . . A CLINICAL OFFICER . . . . . B ASST. CLINICAL OFFICER . . . . . C NURSE/MIDWIFE . D MCH AIDE . . . . . E **OTHER PERSON** VILLAGE HEALTH WORKER . . . F TRAINED TBA/TBA G OTHER _____ X (SPECIFY) NO ONE . . . . . Y (SKIP TO 414)		
408	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY TYPE(S) OF SOURCE(S). IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	HOME . . . . . A **GOV. PARASTATAL** REFERAL/SPEC. HOSPITAL . . . B REGIONAL HOSP. C DISTRICT HOSP. . D HEALTH CENT. . E DISPENSARY . . . F VILLAGE HEALTH POST . . . . . G CBD WORKER . . H **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSPITAL . . . I DISTRICT HOSP. . J HEALTH CENT. . K DISPENSARY . . . L **PRIVATE** SPECIALISED HOSPITAL . . . M HEALTH CENT. . N DISPENSARY . . . O OTHER _____ X (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
409	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS . . . ☐☐ DON'T KNOW 98		
410	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES . ☐☐ DON'T KNOW 98		
411	As part of your antenatal care during this pregnancy, were any of the following done at least once: Was your blood pressure measured? Did you give a urine sample? Did you give a blood sample?	YES NO BP . . . . . 1 2 URINE . . . . . 1 2 BLOOD . . . 1 2		
412	During (any of) your antenatal care visit(s), were you told about the signs of pregnancy complications?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 417) DON'T KNOW 8		
415	During this pregnancy, how many times did you get this tetanus injection?	TIMES . . . . . ☐ DON'T KNOW 8		
416	CHECK 415:	2 OR MORE TIMES (SKIP TO 421) OTHER		
417	At any time before this pregnancy, did you receive any tetanus injections, either to protect yourself or another baby?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 421) DON'T KNOW 8		
418	Before this pregnancy, how many other times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES . . . . . ☐ DON'T KNOW . . . 8		
419	How many years ago did you receive the last tetanus injection before this pregnancy?	YEARS AGO . . . . . ☐☐ DON'T KNOW . . . 98		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
421	During this pregnancy, were you given or did you buy any iron syrup/iron or iron/folate tablets? SHOW TABLETS/SYRUP.	YES . . . . 1 NO . . . . 2 (SKIP TO 423) DON'T KNOW 8		
422	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS . [ ][ ][ ] DON'T KNOW . . . 998		
423	During this pregnancy, did you have difficulty with your vision during the daylight?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8		
424	During this pregnancy, did you suffer from night blindness [USE LOCAL TERM]?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8		
426	During this pregnancy, did you take any drugs to keep you from getting malaria?	YES . . . . 1 NO . . . . 2 (SKIP TO 432) DON'T KNOW 8		
427	What drugs did you take? RECORD ALL MENTIONED. IF TYPE OF DRUG IS NOT DETERMINED, SHOW TYPICAL ANTIMALARIAL DRUGS TO RESPONDENT.	SP/FANSIDAR . . . . . A CHLOROQUINE . . . B OTHER ______ X (SPECIFY) DON'T KNOW . . . . . . Z		
428	CHECK 427: DRUGS TAKEN FOR MALARIA PREVENTION.	CODE 'A' CIRCLED [ ] CODE 'A' NOT CIRCLED [ ] (SKIP TO 432)		
429	How many times did you take (SP/Fansidar) during this pregnancy?	TIMES . . . . . [ ][ ]		
430	CHECK 407A: ANTENATAL CARE FROM HEALTH PERSONNEL DURING THIS PREGNANCY	CODE 'A-E', CIRCLED [ ] OTHER [ ] (SKIP TO 432)		
431	Did you get the (SP/Fansidar) during any antenatal care visit, during another visit to a health facility or from another source?	ANTENATAL VISIT . . 1 ANOTHER FACILITY VISIT . . . . 2 OTHER SOURCE 6		
432	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
433	Was (NAME) weighed at birth?	YES . . . . 1 NO . . . . 2 (SKIP TO 435) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 435) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 435) DON'T KNOW 8
434	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW . 99.998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW . 99.998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW . 99.998
435	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	**HEALTH PROFESSIONAL** DOCTOR/AMO . A CLINICAL OFFICER . . . . . B ASST. CLINICAL OFFICER . . . . . C NURSE/MIDWIFE . D MCH AIDE . . . . . E **OTHER PERSON** VILLAGE HEALTH WORKER . . . . . F TRAINED TBA/TBA G RELATIVE/FRIEND H OTHER ________ X (SPECIFY) NO ONE . . . . Y	**HEALTH PROFESSIONAL** DOCTOR/AMO . A CLINICAL OFFICER . . . . . B ASST. CLINICAL OFFICER . . . . . C NURSE/MIDWIFE . D MCH AIDE . . . . . E **OTHER PERSON** VILLAGE HEALTH WORKER . . . . . F TRAINED TBA/TBA G RELATIVE/FRIEND H OTHER ________ X (SPECIFY) NO ONE . . . . Y	**HEALTH PROFESSIONAL** DOCTOR/AMO . A CLINICAL OFFICER . . . . . B ASST. CLINICAL OFFICER . . . . . C NURSE/MIDWIFE . D MCH AIDE . . . . . E **OTHER PERSON** VILLAGE HEALTH WORKER . . . . . F TRAINED TBA/TBA G RELATIVE/FRIEND H OTHER ________ X (SPECIFY) NO ONE . . . . Y
436	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE THE NAME OF THE PLACE. ________ (NAME OF PLACE)	**HOME** YOUR HOME . . . 11 (SKIP TO 443) OTHER HOME . . . 12 **GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL . . . 21 REGIONAL HOSP. 22 DISTRICT HOSP. 23 HEALTH CENT. . 24 DISPENSARY . . . 25 VILLAGE HEALTH POST . . . . 26 CBD WORKER . 27 **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL . . . 31 DISTRICT HOSP. . 32 HEALTH CENT. . 33 DISPENSARY . . . 34 **PRIVATE** SPECIALISED HOSPITAL . . . 41 HEALTH CENT. . 42 DISPENSARY . . . 43 OTHER ________ 96 (SPECIFY) (SKIP TO 443)	**HOME** YOUR HOME . . . 11 (SKIP TO 452A) OTHER HOME . . . 12 **GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL . . . 21 REGIONAL HOSP. 22 DISTRICT HOSP. 23 HEALTH CENT. . 24 DISPENSARY . . . 25 VILLAGE HEALTH POST . . . . 26 CBD WORKER . 27 **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL . . . 31 DISTRICT HOSP. . 32 HEALTH CENT. . 33 DISPENSARY . . . 34 **PRIVATE** SPECIALISED HOSPITAL . . . 41 HEALTH CENT. . 42 DISPENSARY . . . 43 OTHER ________ 96 (SPECIFY) (SKIP TO 452A)	**HOME** YOUR HOME . . . 11 (SKIP TO 452A) OTHER HOME . . . 12 **GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL . . . 21 REGIONAL HOSP. 22 DISTRICT HOSP. 23 HEALTH CENT. . 24 DISPENSARY . . . 25 VILLAGE HEALTH POST . . . . 26 CBD WORKER . 27 **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL . . . 31 DISTRICT HOSP. . 32 HEALTH CENT. . 33 DISPENSARY . . . 34 **PRIVATE** SPECIALISED HOSPITAL . . . 41 HEALTH CENT. . 42 DISPENSARY . . . 43 OTHER ________ 96 (SPECIFY) (SKIP TO 452A)
438	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
438A	After you delivered, did the health facility give you a birth notification form for the baby?	YES . . . . . 1 (SKIP TO 439) ← NO . . . . . 2 DON'T KNOW 3	YES . . . . . 1 (SKIP TO 452A) ← NO . . . . . 2 DON'T KNOW 3	YES . . . . . 1 (SKIP TO 452A) ← NO . . . . . 2 DON'T KNOW 3
438B	Did you get a birth notification form from any other place?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 3	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 3	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 3
439	Before you were discharged after (NAME) was born, did any health care provider check on your health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 442) ←		
440	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . 1 ☐☐ DAYS . . . 2 ☐☐ WEEKS . 3 ☐☐ DON'T KNOW . . . 998		
441	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PROFESSIONAL DOCTOR/AMO . . . 11 CLINICAL OFFICER . . . . . 12 ASST. CLINICAL OFFICER . . . . . 13 NURSE/MIDWIFE . 14 MCH AIDE . . . . . 15 OTHER PERSON VILLAGE HEALTH WORKER . . . . . 21 TRAINED TBA/TBA . 22 RELATIVE/FRIEND . 23 OTHER _____ 96 (SPECIFY) (SKIP TO 452A) ←		
442	After you were discharged, did any health care provider or a traditional birth attendant check on your health?	YES . . . . . 1 (SKIP TO 445) ← NO . . . . . 2 (SKIP TO 449) ←		
443	Why didn't you deliver in a health facility? PROBE: Any other reason? RECORD ALL MENTIONED.	COST TOO MUCH . A FACILITY NOT OPEN . B TOO FAR/ NO TRANS-PORTATION . . . C DON'T TRUST FACILITY/POOR QUALITY SERVICE D NO FEMALE PROVID-ER AT FACILITY . . E HUSBAND/FAMILY DID NOT ALLOW . . F NOT NECESSARY . . G NOT CUSTOMARY . . H OTHER _____ X (SPECIFY)		
444	After (NAME) was born, did any health care provider or a traditional birth attendant check on your health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 449) ←		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
445	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . 1 ☐☐ DAYS . . . 2 ☐☐ WEEKS . 3 ☐☐ DON'T KNOW . . . 998		
446	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PROFESSIONAL DOCTOR/AMO . 11 CLINICAL OFFICER . . . . . 12 ASST. CLINICAL OFFICER . . . . . 13 NURSE/MIDWIFE 14 MCH AIDE . . . . . 15 OTHER PERSON VILLAGE HEALTH WORKER . . . 21 TRAINED TBA/TBA 22 RELATIVE/FRIEND 23 OTHER _____ 96 (SPECIFY)		
447	Where did this first check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** YOUR HOME . . . 11 OTHER HOME . . . 12 **GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL 21 REGIONAL HOSP. 22 DISTRICT HOSP. 23 HEALTH CENT. 24 DISPENSARY 25 VILLAGE HEALTH POST . . . . . 26 CBD WORKER . 27 **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL . . . 31 DISTRICT HOSP. . 32 HEALTH CENT. . 33 DISPENSARY . . . 34 **PRIVATE** SPECIALISED HOSPITAL . . . 41 HEALTH CENT. . 42 DISPENSARY . . . 43 OTHER _____ 96 (SPECIFY)		
448	CHECK 442:	YES → (SKIP TO 452A) NOT ASKED		
449	In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on his/her health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 452A) DON'T KNOW 8		
450	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HRS AFTER BIRTH . . . 1 ☐☐ DAYS AFTER BIRTH . . . 2 ☐☐ WKS AFTER BIRTH . . . 3 ☐☐ DON'T KNOW . . . 998		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
451	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PROFESSIONAL DOCTOR/AMO . 11 CLINICAL OFFICER . . . . . 12 ASST. CLINICAL OFFICER . . . . . 13 NURSE/MIDWIFE 14 MCH AIDE . . . . . 15 OTHER PERSON VILLAGE HEALTH WORKER . . . 21 TRAINED TBA/TBA 22 RELATIVE/FRIEND 23 OTHER_____ 96 (SPECIFY)		
452	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** YOUR HOME . . . 11 OTHER HOME . . . 12 **GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL . . . 21 REGIONAL HOSP. 22 DISTRICT HOSP. . 23 HEALTH CENT. . 24 DISPENSARY . . . 25 VILLAGE HEALTH POST . . . . . 26 CBD WORKER . 27 **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL . . . 31 DISTRICT HOSP. 32 HEALTH CENT. 33 DISPENSARY . 34 **PRIVATE** SPECIALISED HOSPITAL . . . 41 HEALTH CENT. . 42 DISPENSARY . . . 43 OTHER _____ 96 (SPECIFY)		
452A	Do you have a birth certificate for (NAME)? ASK TO SEE CERTIFICATE.	YES, SEEN . . . . . 1 YES, NOT SEEN . . . 2 NO . . . . . 3 DON'T KNOW 8	YES, SEEN . . . . . 1 YES, NOT SEEN . . . 2 NO . . . . . 3 DON'T KNOW 8	YES, SEEN . . . . . 1 YES, NOT SEEN . . . 2 NO . . . . . 3 DON'T KNOW 8
453	In the first two months after delivery, did you receive a vitamin A dose (like this/any of these)? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
454	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 (SKIP TO 456) NO . . . . . 2 (SKIP TO 457)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
455	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 (SKIP TO 459)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 459)
456	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98
457	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT ☐ PREGNANT OR UNSURE ☐ (SKIP TO 459)		
458	Have you begun to have sexual intercourse again since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 460)		
459	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98
460	Did you ever breastfeed (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 467)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 467)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 467)
461	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . 000 HOURS 1 ☐☐ DAYS 2 ☐☐		
462	In the first three days after delivery, before your milk began flowing , was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 464)		
463	What was (NAME) given to drink? Anything else? RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) . A PLAIN WATER . . . . . B SUGAR OR GLUCOSE WATER . C GRIPE WATER . . . D SUGAR-SALT-WATER SOLUTION . . . . . E FRUIT JUICE . . . . . F INFANT FORMULA . G TEA/INFUSIONS . . . H HONEY . . . . . I OTHER _____ X (SPECIFY)		
464	CHECK 404: IS CHILD LIVING?	LIVING ☐ DEAD ☐ (SKIP TO 466)		
465	Are you still breastfeeding (NAME)?	YES . . . . . 1 (SKIP TO 468) NO 2		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
466	For how many months did you breastfeed (NAME)?	MONTHS . . . ☐☐ DON'T KNOW . . . 98	MONTHS . . . ☐☐ STILL BF . . . . . 95 DON'T KNOW . . . 98	MONTHS . . . ☐☐ STILL BF . . . . . 95 DON'T KNOW . . . 98
467	CHECK 404: IS CHILD LIVING?	LIVING ☐ (SKIP TO 469A) DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING ☐ (SKIP TO 470) DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING ☐ (SKIP TO 470) DEAD ☐ (GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501)
468	How many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF NIGHTTIME FEEDINGS . ☐☐		
469	How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYLIGHT FEEDINGS . ☐☐		
469A	How old was (NAME) when s/he was first fed something other than breast milk? INCLUDES : JUICE, COW'S MILK WATER, SUGAR WATER, SOLID FOODS OR ANYTHING ELSE	MONTHS . . . ☐☐ NOT STARTED GIVING ANYTHING . . . 01 DON'T KNOW . . . 98		
470	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
471		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS,

SECTION 5. CHILD IMMUNIZATION AND HEALTH AND CHILD'S AND WOMAN'S NUTRITION

501 ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2005 OR LATER.
ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH.
(IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
502	LINE NUMBER FROM 212	BIRTH HISTORY NUMBER	BIRTH HISTORY NUMBER	BIRTH HISTORY NUMBER . . . . .
503	FROM 212 AND 216	NAME _____ LIVING ☐ DEAD ☐ (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 573)	NAME _____ LIVING ☐ DEAD ☐ (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 573)	NAME _____ LIVING ☐ DEAD ☐ (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 573)
503A	Did (NAME) receive vitamin A like this during the last 6 months? (SHOW CAPSULES)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 504) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 504) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 504) DON'T KNOW 8
503B	Where did (NAME) the get the drops? During the campagin with other children, during a sick visit or during a routine/healthy visit?	VAC. CAMPAGIN . . . . . 1 SICK VISIT . . . . . 2 HEALTHY VISIT 3	VAC. CAMPAGIN . . . . . 1 SICK VISIT . . . . . 2 HEALTHY VISIT 3	VAC. CAMPAGIN . . . . . 1 SICK VISIT . . . . . 2 HEALTHY VISIT 3
504	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it please?	YES, SEEN . . . . . 1 YES, NOT SEEN . . . . . 2 (SKIP TO 508) NO CARD 3	YES, SEEN . . . . . 1 YES, NOT SEEN . . . . . 2 (SKIP TO 508) NO CARD 3	YES, SEEN . . . . . 1 YES, NOT SEEN . . . . . 2 (SKIP TO 508) NO CARD 3

506 (1) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD.
(2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED.
(3) IF MORE THAN TWO VITAMIN 'A' DOSES, RECORD DATES FOR MOST RECENT AND SECOND MOST RECENT DOSES.

	LAST BIRTH DAY	LAST BIRTH MONTH	LAST BIRTH YEAR	NEXT-TO-LAST BIRTH DAY	NEXT-TO-LAST BIRTH MONTH	NEXT-TO-LAST BIRTH YEAR	SECOND-FROM-LAST BIRTH DAY	SECOND-FROM-LAST BIRTH MONTH	SECOND-FROM-LAST BIRTH YEAR
BCG				BCG			BCG		
POLIO 0 (POLIO GIVEN AT BIRTH)				P0			P0		
POLIO 1				P1			P1		
POLIO 2				P2			P2		
POLIO 3				P3			P3		
DPT-HBIB 1				DH1			DH1		
DPT-HBIB 2				DH2			DH2		
DPT-HBIB 3				DH3			DH3		
DPT-HB1				D1			D1		
DPT-HB2				D2			D2		
DPT-HB3				D3			D3		
MEASLES				MEA			MEA		
VITAMIN A (MOST RECENT)				VIT A			VIT A		
VITAMIN A (MOST RECENT)				VIT A			VIT A		

506A	CHECK 506:	BCG TO MEASLES ALL RECORDED ☐ (GO TO 516) OTHER ☐	BCG TO MEASLES ALL RECORDED ☐ (GO TO 516) OTHER ☐	BCG TO MEASLES ALL RECORDED ☐ (GO TO 516) OTHER ☐

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
507	Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in a national immunization day campaign? RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-3, DPT-HBIB 1-3, DPT-HB 1-3 AND/OR MEASLES VACCINES.	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 516) NO . . . . 2 (SKIP TO 516) DON'T KNOW 8	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 516) NO . . . . 2 (SKIP TO 516) DON'T KNOW 8	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 516) NO . . . . 2 (SKIP TO 516) DON'T KNOW 8
508	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization campaign?	YES . . . . 1 NO . . . . 2 (SKIP TO 516) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 516) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 516) DON'T KNOW 8
509	Please tell me if (NAME) received any of the following vaccinations:			
509A	A BCG vaccination against tuberculosis, that is, an injection on the right arm or shoulder that usually causes a scar?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
509B	Polio vaccine, that is, drops in the mouth?	YES . . . . 1 NO . . . . 2 (SKIP TO 509E) DON'T KNOW . . . 8	YES . . . . 1 NO . . . . 2 (SKIP TO 509E) DON'T KNOW . . . 8	YES . . . . 1 NO . . . . 2 (SKIP TO 509E) DON'T KNOW . . . 8
509C	Was the first polio vaccine received in the first two weeks after birth or later?	FIRST 2 WEEKS . 1 LATER . . . . 2 DON'T KNOW 8	FIRST 2 WEEKS . 1 LATER . . . . 2 DON'T KNOW 8	FIRST 2 WEEKS . 1 LATER . . . . 2 DON'T KNOW 8
509D	How many times was the polio vaccine received?	NUMBER OF TIMES . . . . . ☐ DON'T KNOW . . . 8	NUMBER OF TIMES . . . . . ☐ DON'T KNOW . . . 8	NUMBER OF TIMES . . . . . ☐ DON'T KNOW . . . 8
509E	A DPT-HB vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio ?	YES . . . . 1 NO . . . . 2 (SKIP TO 509G) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 509G) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 509G) DON'T KNOW 8
509F	How many times was a DPT-HB vaccination received?	NUMBER OF TIMES . . . . . ☐ DON'T KNOW . . . 8	NUMBER OF TIMES . . . . . ☐ DON'T KNOW . . . 8	NUMBER OF TIMES . . . . . ☐ DON'T KNOW . . . 8
509G	A measles injection or MMR that is, a shot in the arm at the age of 9 months or older - to prevent him/her from getting measles?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
516	In the last seven days, did (NAME) take iron pills, sprinkles with iron, or iron syrup (like this/any of these)? SHOW COMMON TYPES OF PILLS/SPRINKLES/ SYRUPS.	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
517	Has (NAME) taken any pill for intestinal worms in the last six months?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
518	Has (NAME) had diarrhea in the last 2 weeks?	YES . . . . 1 NO . . . . 2 (SKIP TO 533)← DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 533)← DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 533)← DON'T KNOW 8
519	Was there any blood in the stools?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
520	Now I would like to know how much (NAME) was given to drink during the diarrhea (including breastmilk). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME . 3 MORE . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 NOTHING TO DRINK 5 DON'T KNOW . . . 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 NOTHING TO DRINK 5 DON'T KNOW . . . 8
521	When (NAME) had diarrhea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW 8
522	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . 1 NO . . . . 2 (SKIP TO 528)← DON'T KNOW . . . 8	YES . . . . 1 NO . . . . 2 (SKIP TO 528)← DON'T KNOW . . . 8	YES . . . . 1 NO . . . . 2 (SKIP TO 528)← DON'T KNOW . . . 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________________	NEXT-TO-LAST BIRTH NAME ________________	SECOND-FROM-LAST BIRTH NAME ________________
523	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE MEDICAL SECTOR, WRITE THE THE NAME OF THE PLACE. ________________ (NAME OF PLACE(S))	**GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL . . . A REGIONAL HOSP. B DISTRICT HOSP. . C HEALTH CENT. . D DISPENSARY . . . E VILLAGE HEALTH POST . . . . F CBD WORKER . G **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL . . . H DISTRICT HOSP. I HEALTH CENT. . J DISPENSARY . . . K **PRIVATE** SPECIALISED HOSPITAL . . . L HEALTH CENT. . M DISPENSARY . . . N **OTHER** PHARMACY . . . . . O NGO . . . . P OTHER ________ X (SPECIFY)	**GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL . . . A REGIONAL HOSP. B DISTRICT HOSP. . C HEALTH CENT. . D DISPENSARY . . . E VILLAGE HEALTH POST . . . . F CBD WORKER . G **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL . . . H DISTRICT HOSP. I HEALTH CENT. . J DISPENSARY . . . K **PRIVATE** SPECIALISED HOSPITAL . . . L HEALTH CENT. . M DISPENSARY . . . N **OTHER** PHARMACY . . . . . O NGO . . . . P OTHER ________ X (SPECIFY)	**GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL . . . A REGIONAL HOSP. B DISTRICT HOSP. . C HEALTH CENT. . D DISPENSARY . . . E VILLAGE HEALTH POST . . . . F CBD WORKER . G **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL . . . H DISTRICT HOSP. I HEALTH CENT. . J DISPENSARY . . . K **PRIVATE** SPECIALISED HOSPITAL . . . L HEALTH CENT. . M DISPENSARY . . . N **OTHER** PHARMACY . . . . . O NGO . . . . P OTHER ________ X (SPECIFY)
524	CHECK 523:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 528)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 528)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 528)
525	Where did you first seek advice or treatment? USE LETTER CODE FROM 523.	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐
528	Was he/she given any of the following at any time since he/she started having the diarrhea:	YES NO DK	YES NO DK	YES NO DK
	a) A fluid made from a special packet called ORS or ORS with zinc?	FLUID FROM ORS PKT . . 1 2 8	FLUID FROM ORS PKT . . 1 2 8	FLUID FROM ORS PKT . . 1 2 8
	b) Zinc?	ZINC . . . 1 2 8	ZINC . . . 1 2 8	ZINC . . . 1 2 8
	c) A government-recommended homemade fluid such as coconut water/tea/fruit juice?	HOMEMADE FLUID . . . 1 2 8	HOMEMADE FLUID . . . 1 2 8	HOMEMADE FLUID . . . 1 2 8
529	Was anything (else) given to treat the diarrhea?	YES . . . . 1 NO . . . . 2 (SKIP TO 533) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 533) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 533) DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
530	What (else) was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	PILL OR SYRUP . . . A INJECTION . . . . B (IV) INTRAVENOUS . C HOME REMEDY/ HERBAL MEDICINE . . . . D OTHER ________ X (SPECIFY)	PILL OR SYRUP . . . A INJECTION . . . . B (IV) INTRAVENOUS . C HOME REMEDY/ HERBAL MEDICINE . . . . D OTHER ________ X (SPECIFY)	PILL OR SYRUP . . . A INJECTION . . . . B (IV) INTRAVENOUS . C HOME REMEDY/ HERBAL MEDICINE . . . . D OTHER ________ X (SPECIFY)
533	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
534	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . 1 NO . . . . 2 (SKIP TO 537) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 537) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 537) DON'T KNOW 8
534A	At any time during the illness, did (NAME) have blood taken from his/her finger or heel for testing?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
535	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing?	YES . . . . 1 NO . . . . 2 (SKIP TO 538) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 538) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 538) DON'T KNOW 8
536	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . . . 1 NOSE ONLY . . . . 2 BOTH . . . . 3 OTHER ________ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 538)	CHEST ONLY . . . . . 1 NOSE ONLY . . . . 2 BOTH . . . . 3 OTHER ________ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 538)	CHEST ONLY . . . . . 1 NOSE ONLY . . . . 2 BOTH . . . . 3 OTHER ________ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 538)
537	CHECK 533: HAD FEVER?	YES / NO OR DK (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 573)	YES / NO OR DK (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 573)	YES / NO OR DK (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 573)
538	Now I would like to know how much (NAME) was given to drink (including breastmilk) during the illness with a (fever/cough). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE . . . . 4 NOTHING TO DRINK . 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE . . . . 4 NOTHING TO DRINK . 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE . . . . 4 NOTHING TO DRINK . 5 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
539	When (NAME) had a (fever/cough), was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE .... 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE .... 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE .... 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW 8
540	Did you seek advice or treatment for the illness from any source?	YES .... 1 NO .... 2 (SKIP TO 546)	YES .... 1 NO .... 2 (SKIP TO 546)	YES .... 1 NO .... 2 (SKIP TO 546)
541	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE THE NAME OF THE PLACE. ________ (NAME OF PLACE(S))	**GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL ... A REGIONAL HOSP. B DISTRICT HOSP.. C HEALTH CENT... D DISPENSARY ... E VILLAGE HEALTH POST .... F **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITA .... G DISTRICT HOSP.. H HEALTH CENT... I DISPENSARY ... J **PRIVATE** SPECIALISED HOSPITA ..... K HEALTH CENT... L DISPENSARY ... M **OTHER** PHARMACY ..... N NGO .... O OTHER X	**GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL ... A REGIONAL HOSP. B DISTRICT HOSP.. C HEALTH CENT... D DISPENSARY ... E VILLAGE HEALTH POST .... F **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITA .... G DISTRICT HOSP.. H HEALTH CENT... I DISPENSARY ... J **PRIVATE** SPECIALISED HOSPITA ..... K HEALTH CENT.... L DISPENSARY ... M **OTHER** PHARMACY ..... N NGO .... O OTHER X	**GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL ... A REGIONAL HOSP. B DISTRICT HOSP.. C HEALTH CENT... D DISPENSARY ... E VILLAGE HEALTH POST .... F **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITA .... G DISTRICT HOSP.. H HEALTH CENT... I DISPENSARY ... J **PRIVATE** SPECIALISED HOSPITA ..... K HEALTH CENT.... L DISPENSARY ... M **OTHER** PHARMACY ..... N NGO .... O OTHER X
542	CHECK 541:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 546)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 546)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 546)
543	Where did you first seek advice or treatment? USE LETTER CODE FROM 541.	FIRST PLACE ... ☐	FIRST PLACE ... ☐	FIRST PLACE ... ☐
546	At any time during the illness, did (NAME) take any drugs for the illness?	YES .... 1 NO .... 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 573) DON'T KNOW 8	YES .... 1 NO .... 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 573) DON'T KNOW 8	YES .... 1 NO .... 2 (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 573) DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________________	NEXT-TO-LAST BIRTH NAME ________________	SECOND-FROM-LAST BIRTH NAME ________________
547	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	**ANTIMALARIAL DRUGS** SP/FANSIDAR . . . A CHLOROQUIN . . . B AMODIAQUINE . . . C QUININE . . . . D ARTESUNATE . . . E ARTUSENATE AND AMODAQUINE . F ALU . . . . G OTHER ANTI-MALARIAL ________ . . . H (SPECIFY) **OTHER DRUGS** ASPIRIN . . . . I IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL J **OTHER** ________ X (SPECIFY) DON'T KNOW . . . . . Z	**ANTIMALARIAL DRUGS** SP/FANSIDAR . . . A CHLOROQUINE . B AMODIAQUINE . . . C QUININE . . . . D ARTESUNATE . . . E ARTUSENATE AND AMODAQUINE . F ALU . . . . G OTHER ANTI-MALARIAL ________ . . . H (SPECIFY) **OTHER DRUGS** ASPIRIN . . . . I IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL J **OTHER** ________ X (SPECIFY) DON'T KNOW . . . . . Z	**ANTIMALARIAL DRUGS** SP/FANSIDAR . . . A CHLOROQUINE . B AMODIAQUINE . . . C QUININE . . . . D ARTESUNATE . . . E ARTUSENATE AND AMODAQUINE . F ALU . . . . G OTHER ANTI-MALARIAL ________ . . . H (SPECIFY) **OTHER DRUGS** ASPIRIN . . . . I IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL J **OTHER** ________ X (SPECIFY) DON'T KNOW . . . . . Z
550	CHECK 547: ANY CODE A-H CIRCLED?	YES / NO (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 573)	YES / NO (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 573)	YES / NO (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 573)
551	CHECK 547: SP/FANSIDAR ('A') GIVEN	CODE 'A' CIRCLED / CODE 'A' NOT CIRCLED (SKIP TO 554)	CODE 'A' CIRCLED / CODE 'A' NOT CIRCLED (SKIP TO 554)	CODE 'A' CIRCLED / CODE 'A' NOT CIRCLED (SKIP TO 554)
552	How long after the fever started did (NAME) first take SP/FANSIDAR?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8
554	CHECK 547: CHLOROQUINE ('B') GIVEN	CODE 'B' CIRCLED / CODE 'B' NOT CIRCLED (SKIP TO 557)	CODE 'B' CIRCLED / CODE 'B' NOT CIRCLED (SKIP TO 557)	CODE 'B' CIRCLED / CODE 'B' NOT CIRCLED (SKIP TO 557)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
555	How long after the fever started did (NAME) first take chloroquine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8
557	CHECK 547: AMODIAQUINE ('C') GIVEN	CODE 'C' CIRCLED CODE 'C' NOT CIRCLED (SKIP TO 560)	CODE 'C' CIRCLED CODE 'C' NOT CIRCLED (SKIP TO 560)	CODE 'C' CIRCLED CODE 'C' NOT CIRCLED (SKIP TO 560)
558	How long after the fever started did (NAME) first take Amodiaquine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8
560	CHECK 547: QUININE ('D') GIVEN	CODE 'D' CIRCLED CODE 'D' NOT CIRCLED (SKIP TO 566)	CODE 'D' CIRCLED CODE 'D' NOT CIRCLED (SKIP TO 566)	CODE 'D' CIRCLED CODE 'D' NOT CIRCLED (SKIP TO 566)
561	How long after the fever started did (NAME) first take quinine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8
566	CHECK 547: ARTESUNATE ('E') GIVEN	CODE 'E' CIRCLED CODE 'E' NOT CIRCLED (SKIP TO 568)	CODE 'E' CIRCLED CODE 'E' NOT CIRCLED (SKIP TO 568)	CODE 'E' CIRCLED CODE 'E' NOT CIRCLED (SKIP TO 568)
566A	How long after the fever started did (NAME) first take ARTESUNATE?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
568	CHECK 547: ARTESUNATE AND AMODIAQUINE ('F') GIVEN	CODE 'F' CIRCLED / CODE 'F' NOT CIRCLED (SKIP TO 570)	CODE 'F' CIRCLED / CODE 'F' NOT CIRCLED (SKIP TO 570)	CODE 'F' CIRCLED / CODE 'F' NOT CIRCLED (SKIP TO 570)
569	How long after the fever started did (NAME) first take ARTESUNATE AND AMODIAQUINE?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8
570	CHECK 547: CORATEM (ALU) ('G') GIVEN	CODE 'G' CIRCLED / CODE 'G' NOT CIRCLED (SKIP TO 572)	CODE 'G' CIRCLED / CODE 'G' NOT CIRCLED (SKIP TO 572)	CODE 'G' CIRCLED / CODE 'G' NOT CIRCLED (SKIP TO 572)
571	How long after the fever started did (NAME) first take CORATEM (Alu)	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8
572	CHECK 547: OTHER ANTI-MALARIAL ('H') GIVEN	CODE 'H' CIRCLED / CODE 'H' NOT CIRCLED (SKIP TO 572B)	CODE 'H' CIRCLED / CODE 'H' NOT CIRCLED (SKIP TO 572B)	CODE 'H' CIRCLED / CODE 'H' NOT CIRCLED (SKIP TO 572B)
572A	How long after the fever started did (NAME) first take (OTHER ANTI-MALARIAL)	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE DAYS AFTER FEVER . . . . 3 DON'T KNOW 8
572B		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 573.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 573.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 573.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
573	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2005 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ NONE ☐ → 576 RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE WITH 574) _____ (NAME)		
574	The last time (NAME FROM 573) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN OR DITCH . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 USE DISPOSABLE DIAPERS . . . . . 07 USE WASHABLE DIAPERS . . . . . 08 NOT DISPOSED OF . . . . . 09 OTHER _____ 96 (SPECIFY)	
575	CHECK 528(a)ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET OR PRE-PACKAGED ORS LIQUID ☐ ANY CHILD RECEIVED FLUID FROM ORS PACKET OR PRE-PACKAGED ORS LIQUID ☐ → 577		
576	Have you ever heard of a special product called ORS you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	
577	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2008 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ NONE ☐ → 601 RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE WITH 578) _____ (NAME)		
578	Now I would like to ask you about liquids or foods (NAME FROM 577) had yesterday during the day or at night. Did (NAME FROM 577) (drink/eat): a. Plain water? b. Commercially produced infant formula? c. Any [BRAND NAME OF COMMERCIALLY FORTIFIED BABY FOOD, E.G., Cerelac]? d. Any milk from animals e. Any (other) porridge like ugali?	YES NO DK a. PLAIN WATER . . . . . 1 2 8 b. FORMULA . . . . . 1 2 8 c. BABY CEREAL . . . . . 1 2 8 d. ANIMAL MILK . . . . . 1 2 8 e. OTHER PORRIDGE/ UGALI 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

579 Now I would like to ask you about (other) liquids or foods that (NAME FROM 577)/you may have had yesterday during the day or at night. I am interested in whether your child/you had the item even if it was combined with other foods.

	Did (NAME FROM 577)/you drink (eat):		CHILD YES	CHILD NO	CHILD DK	MOTHER YES	MOTHER NO	MOTHER DK
a)	Milk tinned, powdered, fresh animal milk, yogurt, cheese?	a	1	2	8	1	2	8
b)	Tea or coffee?	b	1	2	8	1	2	8
c)	Any other liquids?	c	1	2	8	1	2	8
d)	Food made from roots or tubers, for example cocoyams, irish potatoes, white sweet potatoes, white yams, cassava, or other local roots or tubers?	d	1	2	8	1	2	8
e)	Foods made from maize meal (ugali), porridges, millet, rice, sorghum, or any other food made from grains?	e	1	2	8	1	2	8
f)	Bread, maandazi, chapati, or other foods made from wheat flour?	f	1	2	8	1	2	8
g)	Yellow/orange colour fruits or vegetables such as pumpkin, carrots, yellow/orange sweet potato, ripe mangoes or papayas, passion fruit?	g	1	2	8	1	2	8
h)	Any dark green, leafy vegetables such as amaranth, cassava, pumpkin or sweet potato leaves, and spinach ?	h	1	2	8	1	2	8
i)	Any other fruits or vegetables?	i	1	2	8	1	2	8
j)	Meat such as beef, goat, poultry(chicken), fish, shellfish liver?	j	1	2	8	1	2	8
k)	Eggs?	k	1	2	8	1	2	8
l)	Any foods made from beans, peas, lentils, or nuts?	l	1	2	8	1	2	8
m)	Food or drink that you added brown or white sugar to?	m	1	2	8	1	2	8
n)	Any sweets, candies such as chocolates pastries, cakes, or biscuits?	n	1	2	8	1	2	8
o)	Any other solid or semi-solid food?	o	1	2	8	1	2	8

580 CHECK 578 c AND e AND 579 (CATEGORIES d THROUGH o FOR CHILD):

AT LEAST ONE "YES' ☐

NOT A SINGLE "YES" ☐ → 582

581 How many times did (NAME FROM 577) eat solid, semisolid, or soft foods yesterday during the day or at night?

IF 7 OR MORE TIMES, RECORD '7'.

NUMBER OF TIMES . . . . . ☐☐

DON'T KNOW . . . . . 8 → 601

582 CHECK Q578 AND 579 NOT A SINGLE 'YES', ASK:

Aside from breastmilk, did (NAME) get anything at all to eat or drink yesterday or last night?

YES 1
NO 2
DON'T KNOW 8

SECTION 6. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION 3	→ 604
602	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN . . . . . 2 NO 3	→ 617
603	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 609
604	Is your husband/partner living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
605	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
606	Does your husband/partner have other wives or does he live with other women as if married?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 609
607	Including yourself, in total, how many wives or partners does your husband live with now as if married?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . . . . . DON'T KNOW 98	
608	Are you the first, second, … wife?	RANK	
609	Have you been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
615	CHECK 609: MARRIED/ LIVED WITH A MAN ONLY ONCE → In what month and year did you start living with your (husband/partner)? MARRIED/ LIVED WITH A MAN MORE THAN ONCE → Now I would like to ask about first (husband/partner) In what month and year did you start living with him?	MONTH . . . . . . DON'T KNOW MONTH . . . . . 98 YEAR . . . . . . DON'T KNOW YEAR 9998	→ 617
616	How old were you when you first started living with him?	AGE	
617	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
618	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . . FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER 95	→ 641
618A	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
626	When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO 4	→ 640

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
627	When was the last time you had sexual intercourse with this person?		DAYS . 1 WEEKS 2 MONTHS 3	DAYS . 1 WEEKS 2 MONTHS 3
628	The last time you had sexual intercourse (with this second/third person), was a condom used?	YES . . . . 1 NO . . . . 2 (SKIP TO 630)	YES . . . . 1 NO . . . . 2 (SKIP TO 630)	YES . . . . 1 NO . . . . 2 (SKIP TO 630)
629	Did you use a condom every time you had sexual intercourse with this person in the last 12 months?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
630	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	HUSBAND . . . . 1 LIVE-IN PARTNER . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER ______ 6 (SPECIFY) (SKIP TO 631A)	HUSBAND . . . . 1 LIVE-IN PARTNER . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER ______ 6 (SPECIFY) (SKIP TO 631A)	HUSBAND . . . . 1 LIVE-IN PARTNER . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER ______ 6 (SPECIFY) (SKIP TO 631A)
630A	CHECK 609:	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 631A)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 631A)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 631A)
630B	CHECK 618:	1st TIME WHEN STARTED LIVING WITH 1st HUSBAND (SKIP TO 631B) OTHER	1st TIME WHEN STARTED LIVING WITH 1st HUSBAND (SKIP TO 631B) OTHER	1st TIME WHEN STARTED LIVING WITH 1st HUSBAND (SKIP TO 631B) OTHER
631A	How long ago did you first have sexual intercourse with this person?	DAYS . 1 MONTHS 2 YEARS 3	DAYS . 1 MONTHS 2 YEARS 3	DAYS . 1 MONTHS 2 YEARS 3
631B	How many times during the last 12 months did you have sexual intercourse with this person:	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
638	Apart from [this person/these two people], have you had sexual intercourse with any other person in the last 12 months?	YES . . . . 1 (GO BACK TO 627 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 640)	YES . . . . 1 (GO BACK TO 627 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 640)	
639	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.'			NUMBER OF PARTNERS LAST 12 MONTHS . . . DON'T KNOW . . . 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
640	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.'	NUMBER OF PARTNERS IN LIFETIME . . . . . [ ][ ] DON'T KNOW 98	
641	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	644
642	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**GOVERNMENT/PARASTATAL** REFERAL/SPEC. HOSPITAL . . . . . A REGIONAL HOSPITAL . . . . . B DISTRICT HOSPITAL . . . . . C HEALTH CENTRE . . . . . D DISPENSARY . . . . . E VILLAGE HEALTH POST (WORKER) . . . F CBD WORKER . . . . . G **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSPITAL . . . . . H DISTRICT HOSPITAL . . . . . I GOVT. HEALTH CENTRE . . . . . J DISPENSARY . . . . . K **PRIVATE** DISTRICT HOSPITAL . . . . . L HEALTH CENTRE . . . . . M DISPENSARY . . . . . N **OTHER** PHARMACY . . . . . O NGO . . . . . P VCT CENTRE . . . . . Q SHOP/KIOSK . . . . . R BAR . . . . . S GUEST HOUSE/HOTEL . . . . . T FRIEND/RELATIVE/NEIGHBOUR . . . U OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
643	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	
644	Do you know of a place where a person can get female condoms?	YES . . . . . 1 NO 2	701
645	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. (NAME OF PLACE(S)) _____	**GOVERNMENT/PARASTATAL** REFERAL/SPEC. HOSPITAL . . . . . A REGIONAL HOSPITAL . . . . . B DISTRICT HOSPITAL . . . . . C HEALTH CENTRE . . . . . D DISPENSARY . . . . . E VILLAGE HEALTH POST (WORKER) . . . F CBD WORKER . . . . . G **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSPITAL . . . . . H DISTRICT HOSPITAL . . . . . I GOVT. HEALTH CENTRE . . . . . J DISPENSARY . . . . . K **PRIVATE** DISTRICT HOSPITAL . . . . . L HEALTH CENTRE . . . . . M DISPENSARY . . . . . N **OTHER** PHARMACY . . . . . O NGO . . . . . P VCT CENTRE . . . . . Q SHOP/KIOSK . . . . . R BAR . . . . . S GUEST HOUSE/HOTEL . . . . . T FRIEND/RELATIVE/NEIGHBOUR . . . U OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
646	If you wanted to, could you yourself get a female condom?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	

SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 304: NEITHER STERILIZED HE OR SHE STERILIZED → 713		
702	CHECK 226: PREGNANT NOT PREGNANT OR UNSURE → 702B		
702A	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have anymore children?	HAVE (A/ANOTHER) CHILD . . . . . 1 → 703 NO MORE/NONE . . . . . 2 → 709 UNDECIDED/DON'T KNOW . . . . . 3 → 709	
702B	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 → 705 SAYS SHE CAN'T GET PREGNANT . 3 → 713 UNDECIDED/DON'T KNOW . . . . . 8 → 708	
703	CHECK 702: NOT PREGNANT OR UNSURE: How long would you like to wait from now before the birth of (a/another) child? PREGNANT: After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 → 708 SAYS SHE CAN'T GET PREGNANT 994 → 713 AFTER MARRIAGE . . . . . 995 OTHER . . . . . 996 → 708 DON'T KNOW 998	
704	CHECK 702: NOT PREGNANT OR UNSURE PREGNANT → 709		
705	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED NOT CURRENTLY USING CURRENTLY USING → 713		
706	CHECK 703: NOT ASKED 24 OR MORE MONTHS OR 02 OR MORE YEARS 00-23 MONTHS OR 00-01 YEAR → 709		
707	CHECK 702A,702B AND 703: WANTS TO HAVE A/ANOTHER CHILD: You have said that you do not want (a/another) child soon, Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/NONE: You have said that you do not want any (more) children, Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	**NOT MARRIED** . . . . . A **FERTILITY-RELATED REASONS** NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY . D SAYS SHE CANT GET PREGNANT E NOT MENSTRUATED SINCE LAST BIRTH . . . . . F BREASTFEEDING . . . . . G UP TO GOD/FATALISTIC . . . . . H **OPPOSITION TO USE** RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L **LACK OF KNOWLEDGE** KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N METHOD-RELATED REASONS HEALTH CONCERNS . . . . . O CONCERN ABOUT SIDE EFFECTS P LACK OF ACCESS/TOO FAR . . . Q COSTS TOO MUCH . . . . . R INCONVENIENT TO USE . . . . . S INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . T OTHER _____ (SPECIFY) X DON'T KNOW . . . . . Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
708	CHECK 310: USING A CONTRACEPTIVE METHOD? NOT ASKED ⚑ NO, NOT CURRENTLY USING ⚑ YES, CURRENTLY USING → 713		
709	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
713	CHECK 216: HAS LIVING CHILDREN ⚑ NO LIVING CHILDREN ⚑ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 715A NUMBER . . . . . [ ][ ] OTHER _____ 96 → 715A (SPECIFY)	
714	How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?	BOYS GIRLS EITHER NUMBER [ ][ ] [ ][ ] [ ][ ] OTHER _____ 96 (SPECIFY)	
715A	If you wanted to get information on family planning, who would you like to talk to most:	CBD WORKER . . . . . 01 CLINIC STAFF . . . . . 02 TBA . . . . . 03 HUSBAND/PARTNER . . . . . 04 FRIEND . . . . . 05 RELATIVE . . . . . 06 RELIGIOUS LEADERS . . . . . 07 OTHER _____ 96 (SPECIFY)	
715B	Is it acceptable to you for information on family planning to be provided: On the radio? On the television? In a newspaper or magazine?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2	
715C	In the last six months have you heard about family planning: a) On the radio? b) On the television? c) In a newspaper or magazine? d) From a poster? e) From billboards? f) At community events? g) From live drama? h) From a doctor or nurse? i) From a community health worker?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2 POSTER . . . . . 1 2 BILLBOARD . . . . . 1 2 COMMUNITY EVENT . . . . . 1 2 DRAMA . . . . . 1 2 DOCTOR/NURSE . . . . . 1 2 HEALTH WORKER 1 2	
715D	In the past six months, what drama series have you listened to on the radio? CIRCLE THE SERIES MENTIONED SPONTANEOUSLY. FOR SERIES NOT MENTIONED, ASK: In the last 6 months, have you listened to: a) Zinduka? b) Twende na Wakati? c) Other?	YES SPONTANEOUS / YES PROBED / NO ZINDUKA . . . . . 1 2 3 TWENDE NA WAKATI . . . . . 1 2 3 OTHER 1 2 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
715E	CHECK 715D: LISTENED TO ZINDUKA (CODE '1' OR 2' CIRCLED) ↓ HAS NOT LISTENED TO ZINDUKA (CODE '3' CIRCLED) → 715I		
715F	How often do you listen to Zinduka?	TWICE A WEEK . . . . . 1 ONCE A WEEK . . . . . 2 ONCE OR TWICE A MONTH . . . . . 3 RARELY . . . . . 4 DON'T KNOW 8	
715G	As a result of listening to Zinduka, did you do anything or take any action related to family planning?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	715I
715H	What did you do as a result of listening to Zinduka? RECORD ALL MENTIONED.	TALKED TO PARTNER . . . . . A TALKED TO A HEALTH WORKER . . . B TALKED TO SOMEONE ELSE . . . . . C VISITED A CLINIC FOR FAM. PLAN. . D BEGAN USING A MOD. METHOD . . . E CONTINUED USING A MOD. METH . . . F OTHER _____ X (SPECIFY)	
715I	CHECK 715D: LISTENED TO TWENDA NA WAKATI (CODE '1' OR '2' CIRCLED) ↓ HAS NOT LISTENED TO TWENDA NA WAKATI (CODE '3' CIRCLED) → 717		
715J	How often do you listen to Twenda na Wakati?	TWICE A WEEK . . . . . 1 ONCE A WEEK . . . . . 2 ONCE OR TWICE A MONTH . . . . . 3 RARELY . . . . . 4 OTHER 8	
717	CHECK 601: YES, CURRENTLY MARRIED ↓ YES, LIVING WITH A MAN ↓ NO, NOT IN UNION → 801		
718	CHECK 304: CODE B, G, OR M CIRCLED → 720 NO CODE CIRCLED → 722 OTHER ↓		
719	Does your husband/partner know that you are using a method of family planning?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
720	Would you say that using contraception is mainly your decision, mainly your husband's/partner's decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
721	CHECK 304: NEITHER STERILIZED ↓ HE OR SHE STERILIZED → 801		
722	Does your husband/partner want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 601 AND 602: CURRENTLY MARRIED/ LIVING WITH A MAN FORMERLY MARRIED/ LIVED WITH A MAN NEVER MARRIED AND NEVER LIVED WITH A MAN		→ 803 → 807
802	How old was your husband/partner on his last birthday?	AGE IN COMPLETED YEARS ☐☐	
803	Did your (last) husband/partner ever attend school?	YES . . . . . 1 NO 2	→ 806
804	What was the highest level of school he attended: primary, secondary, or higher?	PREPRIMARY . . . . . 0 PRIMARY . . . . . 1 POST-PRIMARY TRAINING . . . . . 2 SECONDARY . . . . . 3 POST-SECONDARY TRAINING . . . . . 4 UNIVERSITY . . . . . 5 DON'T KNOW 8	→ 806
805	What was the highest (grade/form/year) he completed at that level?	GRADE . . . . . ☐☐ DON'T KNOW 98	
806	CHECK 801: CURRENTLY MARRIED/ LIVING WITH A MAN: What is your husband's/partner's occupation? That is, what kind of work does he mainly do? FORMERLY MARRIED/ LIVED WITH A MAN: What was your (last) husband's/ partner's occupation? That is, what kind of work did he mainly do?	_____ ☐☐☐ _____ _____	
807	Aside from your own housework, have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 811
808	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ 811
809	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave or any other such reason?	YES . . . . . 1 NO 2	→ 811
810	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 818
811	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐☐ _____ _____	
814	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	
816	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . 2 ONCE IN A WHILE 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
817	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
818	CHECK 601: CURRENTLY MARRIED/LIVING WITH A MAN ☐ NOT IN UNION ☐ → 826A		
819	CHECK 817: CODE 1 OR 2 CIRCLED ☐ OTHER ☐ → 823		
820	Who usually decides how the money you earn will be used: mainly you, mainly your husband/partner, or you and your husband/partner jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 OTHER _____ 6 (SPECIFY)	
821	Would you say that the money that you earn is more than what your husband/partner earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER DOESN'T BRING IN ANY MONEY . . . . . 4 DON'T KNOW 8	
823	Who usually makes decisions about health care for yourself: you, your husband/partner, you and your husband/partner jointly, or someone else?	RESPONDENT = 1 HUSBAND/PARTNER = 2 RESPONDENT & HUSBAND/PARTNER JOINTLY = 3 SOMEONE ELSE = 4 OTHER = 6 1 2 3 4 6	
824	Who usually makes decisions about making major household purchases?	1 2 3 4 6	
826	Who usually makes decisions about visits to your family or relatives?	1 2 3 4 6	
826A	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
826B	Do you own any land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
827	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 2 3 HUSBAND . . . . . 1 2 3 OTHER MALES . . . . . 1 2 3 OTHER FEMALES . . . 1 2 3	
828	In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	YES / NO / DK GOES OUT . . . . . 1 2 8 NEGL. CHILDREN . . . 1 2 8 ARGUES . . . . . 1 2 8 REFUSES SEX . . . . . 1 2 8 BURNS FOOD 1 2 8	

SECTION 9. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 942
902	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
903	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
904	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
905	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
907	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
908	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
909	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY . 1 2 8 BREASTFEEDING . . . 1 2 8	
910	CHECK 909: AT LEAST ONE 'YES' ☐ OTHER ☐		→ 913
911	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
913	CHECK 208 AND 215: NO BIRTHS ☐ LAST BIRTH SINCE JANUARY 2007 ☐ LAST BIRTH BEFORE JANUARY 2007 ☐		→ 922 → 922
914	CHECK 407 FOR LAST BIRTH: HAD ANTENATAL CARE ☐ NO ANTENATAL CARE ☐		→ 922
914A	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
915	During any of the antenatal visits for your last birth, did anyone talk to you about: Babies getting the AIDS virus from their mother? Things that you can do to prevent getting the AIDS virus? Getting tested for the AIDS virus?	YES NO DK AIDS FROM MOTHER 1 2 8 THINGS TO DO . 1 2 8 TESTED FOR AIDS . 1 2 8	
916	Were you offered a test for the AIDS virus as part of your antenatal care?	YES . . . . . 1 NO 2	
917	I don't want to know the results, but were you tested for the AIDS virus as part of your antenatal care?	YES . . . . . 1 NO 2	→ 922

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
917A	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT/PARASTATAL** REFERAL/SPEC. HOSPITAL ..... 11 REGIONAL HOSPITAL ..... 12 DISTRICT HOSPITAL ..... 13 HEALTH CENTRE ..... 14 DISPENSARY ..... 15 VILLAGE HEALTH POST (WORKER) 16 CBD WORKER ..... 17 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSPITAL ..... 21 DISTRICT HOSPITAL ..... 22 GOVT. HEALTH CENTRE ..... 23 DISPENSARY ..... 24 **PRIVATE** HOSPITAL ..... 31 HEALTH CENTRE ..... 32 DISPENSARY ..... 33 **OTHER** PRIVATE PHARMACY ..... 41 NGO ..... 42 VCT CENTRE ..... 43 OTHER _____ 96 (SPECIFY)	
918	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO 2	
918A	Regardless of the result, all women who are tested are supposed to receive counselling after getting the result. Did you receive post-test counselling?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
920	Have you been tested for the AIDS virus since that time you were tested during your pregnancy?	YES ..... 1 NO 2	→ 923
921	When was the last time you were tested for the AIDS virus?	LESS THAN 12 MONTHS AGO ..... 1 12 - 23 MONTHS AGO ..... 2 2 OR MORE YEARS AGO 3	→ 929
922	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES ..... 1 NO 2	→ 927
923	When was the last time you were tested?	LESS THAN 12 MONTHS AGO ..... 1 12 - 23 MONTHS AGO ..... 2 2 OR MORE YEARS AGO 3	
925	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
926	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT/PARASTATAL** REFERAL/SPEC. HOSPITAL ..... 11 REGIONAL HOSPITAL ..... 12 DISTRICT HOSPITAL ..... 13 HEALTH CENTRE ..... 14 DISPENSARY ..... 15 VILLAGE HEALTH POST (WORKER) 16 CBD WORKER ..... 17 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC. HOSPITAL ..... 21 DISTRICT HOSPITAL ..... 22 GOVT. HEALTH CENTRE ..... 23 DISPENSARY ..... 24 **PRIVATE** HOSPITAL ..... 31 HEALTH CENTRE ..... 32 DISPENSARY ..... 33 **OTHER** PRIVATE PHARMACY ..... 41 NGO ..... 42 VCT CENTRE ..... 43 OTHER _____ 96 (SPECIFY)	→ 929
927	Do you know of a place where people can go to get tested for the AIDS virus?	YES ..... 1 NO 2	→ 929
928	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL ..... A REGIONAL HOSP. ..... B DISTRICT HOSP. ..... C HEALTH CENT. ..... D DISPENSARY ..... E VILLAGE HEALTH POST ..... F VILLAGE HEALTH WORKER ..... G **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL ..... H DISTRICT HOSP. ..... I HEALTH CENT. ..... J DISPENSARY ..... K **PRIVATE** SPECIALISED HOSPITAL ..... L HEALTH CENT. ..... M DISPENSARY ..... N **OTHER** PRIVATE PHARMACY ..... O NGO ..... P VCT CENTRE ..... Q OTHER _____ X (SPECIFY)	
929	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
930	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS 8	
931	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
932	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DK/NOT SURE/DEPENDS 8	
942	CHECK 901: HEARD ABOUT AIDS → Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS → Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
943	CHECK 618: HAS HAD SEXUAL INTERCOURSE HAS NOT HAD SEXUAL INTERCOURSE → 951		
944	CHECK 942: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES NO → 946		
945	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
946	Sometimes women experience a bad smelling abnormal genital discharge. During the last 12 months, have you had a bad smelling abnormal genital discharge?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
947	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
948	CHECK 945, 946, AND 947: HAS HAD AN INFECTION (ANY 'YES') ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW → 951		
949	The last time you had (PROBLEM FROM 945/946/947), did you seek any kind of advice or treatment?	YES . . . . . 1 NO . . . . . 2 → 951	
950	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL . . . . . A REGIONAL HOSP. . . . . B DISTRICT HOSP. . . . . C HEALTH CENT. . . . . D DISPENSARY . . . . . E VILLAGE HEALTH POST . . . . . F VILLAGE HEALTH WORKER . . . . . G **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL . . . . . H DISTRICT HOSP. . . . . I HEALTH CENT. . . . . J DISPENSARY . . . . . K **PRIVATE** SPECIALISED HOSPITAL . . . . . L HEALTH CENT. . . . . M DISPENSARY . . . . . N **OTHER** PRIVATE PHARMACY . . . . . O NGO . . . . . P VCT CENTRE . . . . . Q OTHER _____ X (SPECIFY)	
951	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in refusing to have sex with him?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
952	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
955	CHECK 601: CURRENTLY MARRIED/ LIVING WITH A MAN ↓ NOT IN UNION → 1001		
956	Can you say no to your husband/partner if you do not want to have sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	
957	Could you ask your husband/partner to use a condom if you wanted him to?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	

SECTION 10. DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	CHECK HH Q.200 AND COVER PAGE OF WOMAN'S QUESTIONNAIRE: WOMAN SELECTED FOR THIS SECTION ↓ WOMAN NOT SELECTED →		1101
1002	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL EFFECTIVE PRIVACY IS ENSURED. PRIVACY OBTAINED . . . . . 1 ↓ PRIVACY NOT POSSIBLE . . . . . 2 →		1035
	READ TO THE RESPONDENT Now I would like to ask you questions about some other important aspects of a woman's life. I know that some of these questions are very personal. However, your answers are crucial for helping to understand the condition of women in Tanzania. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else will know that you were asked these questions.		
1003	CHECK 601 AND 602: CURRENTLY MARRIED/ LIVING WITH A MAN ↓ FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE) ↓ NEVER MARRIED/ NEVER LIVED WITH A MAN →		1015
1004	First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) husband/partner?	YES NO DK	
	a) He (is/was) jealous or angry if you (talk/talked) to other men?	JEALOUS 1 2 8	
	b) He frequently (accuses/accused) you of being unfaithful?	ACCUSES 1 2 8	
	c) He (does/did) not permit you to meet your female friends?	NOT MEET FRIENDS . . . 1 2 8	
	d) He (tries/tried) to limit your contact with your family?	NO FAMILY 1 2 8	
	e) He (insists/insisted) on knowing where you (are/were) at all times?	WHERE YOU ARE . . . 1 2 8	
	f) He (does/did) not trust you with any money?	MONEY 1 2 8	
1005	Now if you will permit me, I need to ask some more questions about your relationship with your (last) husband/partner. If we should come to any question that you do not want to answer, just let me know and we will go on to the next question.		
	A (Does/did) your (last) husband/partner ever:	B How often did this happen during the last 12 months: often, only sometimes, or not at all?	
	a) say or do something to humiliate you in front of others?	YES 1 → / NO 2 ↓ — OFTEN 1 / SOMETIMES 2 / NOT AT ALL 3	
	b) threaten to hurt or harm you or someone close to you?	YES 1 → / NO 2 ↓ — OFTEN 1 / SOMETIMES 2 / NOT AT ALL 3	
	c) insult you or make you feel bad about yourself?	YES 1 → / NO 2 ↓ — OFTEN 1 / SOMETIMES 2 / NOT AT ALL 3	

1006	A (Does/did) your (last) husband/partner ever do any of the following things to you:		B How often did this happen during the last 12 months: often, only sometimes, or not at all?			
			OFTEN	SOME-TIMES	NOT AT ALL	
	a) push you, shake you, or throw something at you?	YES 1 → NO 2 ↓	1	2	3	
	b) slap you?	YES 1 → NO 2 ↓	1	2	3	
	c) twist your arm or pull your hair?	YES 1 → NO 2 ↓	1	2	3	
	d) punch you with his fist or with something that could hurt you?	YES 1 → NO 2 ↓	1	2	3	
	e) kick you, drag you or beat you up?	YES 1 → NO 2 ↓	1	2	3	
	f) try to choke you or burn you on purpose?	YES 1 → NO 2 ↓	1	2	3	
	g) threaten or attack you with a knife, gun, or any other weapon?	YES 1 → NO 2 ↓	1	2	3	
	h) physically force you to have sexual intercourse with him even when you did not want to?	YES 1 → NO 2 ↓	1	2	3	
	i) force you to perform any sexual acts you did not want to?	YES 1 → NO 2 ↓	1	2	3	

1007	CHECK1006 (a-i): AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →	→ 1010
1008	How long after you first (got married to/started living with) your (last) husband/partner did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS . . . . . ☐☐ BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95
1009	Did the following ever happen as a result of what your (last) husband/partner did to you:	
	a) You had cuts, bruises or aches?	YES . . . . . 1 NO 2
	b) You had eye injuries, sprains, dislocations, or burns?	YES . . . . . 1 NO 2
	c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES . . . . . 1 NO 2
1010	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) husband/partner at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO . . . . . 2 → 1013
1011	CHECK 603: RESPONDENT IS **NOT** A WIDOW ☐ ↓ RESPONDENT IS A WIDOW ☐ →	→ 1013
1012	In the last 12 months, how often have you done this to your husband/partner: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3
1013	(Does/Did) your husband/partner drink alcohol?	YES . . . . . 1 NO . . . . . 2 → 1015
1014	How often (does/did) he get drunk: often, only sometimes, or never?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NEVER 3

1015	CHECK 601 AND 602: EVER MARRIED/LIVED WITH A MAN: From the time you were 15 years old has anyone other than your (current/last) husband/partner hit, slapped, kicked, or done anything else to hurt you physically? NEVER MARRIED/ NEVER LIVED WITH A MAN: From the time you were 15 years old has anyone ever hit, slapped, kicked, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1018
1016	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D OTHER RELATIVE . . . . . E FORMER HUSBAND/ LIVE-IN PARTNER . . . . . F CURRENT BOYFRIEND . . . . . G FORMER BOYFRIEND . . . . . H MOTHER-IN-LAW . . . . . I FATHER-IN-LAW . . . . . J OTHER IN-LAW . . . . . K TEACHER . . . . . L EMPLOYER/SOMEONE AT WORK . . M POLICE/SOLDIER . . . . . N OTHER _____ (SPECIFY) X	
1017	In the last 12 months, how often have you been hit, slapped, kicked, or physically hurt by this/these person(s): often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1018	CHECK 201, 226, AND 229: EVER BEEN PREGNANT (YES ON 201 OR 226 OR 229) ↓ NEVER BEEN PREGNANT →		→ 1021
1019	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO 2	→ 1021
1020	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/ LIVE-IN PARTNER . . . . . A MOTHER/STEP-MOTHER . . . . . B FATHER/STEP-FATHER . . . . . C SISTER/BROTHER . . . . . D DAUGHTER/SON . . . . . E OTHER RELATIVE . . . . . F FORMER HUSBAND/ LIVE-IN PARTNER . . . . . G CURRENT BOYFRIEND . . . . . H FORMER BOYFRIEND . . . . . I MOTHER-IN-LAW . . . . . J FATHER-IN-LAW . . . . . K OTHER IN-LAW . . . . . L TEACHER . . . . . M EMPLOYER/SOMEONE AT WORK . . N POLICE/SOLDIER . . . . . O OTHER _____ (SPECIFY) X	
1021	CHECK 618: EVER HAD SEX? HAS EVER HAD SEX ↓ NEVER HAD SEX →		→ 1026
1022	The first time you had sexual intercourse, would you say that you had it because you wanted to, or because you were forced to have it against your will?	WANTED TO . . . . . 1 FORCED TO . . . . . 2 REFUSED TO ANSWER/ NO RESPONSE 3	

1023	CHECK 601 AND 602: EVER MARRIED/LIVED WITH A MAN: In the last 12 months, has anyone other than your (current/last) husband/ partner forced you to have sexual intercourse against your will? NEVER MARRIED/ NEVER LIVED WITH A MAN: In the last 12 months has anyone forced you to have sexual intercourse against your will?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	
1024	CHECK 1022 AND 1023: 1022 ='1' OR '3' **AND** 1023 ='2' OR '3' ↓ OTHER →		1027
1025	CHECK 1006(h) and1006(i): 1006(h) IS NOT '1' **AND** 1006(i) IS NOT '1' ↓ OTHER →		1029
1026	At any time in your life, as a child or as an adult, has anyone ever <u>forced you in any way</u> to have sexual intercourse or perform any other sexual acts?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	1029
1027	How old were you the first first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS . . . ☐☐ DON'T KNOW 98	
1028	Who was the person who was forcing you at that time?	CURRENT HUSBAND/ LIVE-IN PARTNER . . . . . 01 FORMER HUSBAND/ LIVE-IN PARTNER . . . . . 02 CURRENT/FORMER BOYFRIEND . . 03 FATHER . . . . . 04 STEP-FATHER . . . . . 05 OTHER RELATIVE . . . . . 06 IN-LAW . . . . . 07 OWN FRIEND/ACQUAINTANCE . . 08 FAMILY FRIEND . . . . . 09 TEACHER . . . . . 10 EMPLOYER/SOMEONE AT WORK . 11 POLICE/SOLDIER . . . . . 12 PRIEST/RELIGIOUS LEADER . . . . . 13 STRANGER . . . . . 14 OTHER _____ 96 (SPECIFY)	
1029	CHECK 1006A (a-i), 1015, 1019, 1023 AND 1026: AT LEAST ONE 'YES' OR 1022=2 ↓ NOT A SINGLE 'YES' AND 1022 IS NOT EQUAL TO 2 →		1033
1030	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help to stop (the/these) person(s) from doing this to you again?	YES . . . . . 1 NO 2	1032
1031	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND/LIVE-IN PARTNER'S FAMILY . . . . . B CURRENT/LAST/LATE HUSBAND/LIVE-IN PARTNER . . C CURRENT/FORMER BOYFRIEND . . D FRIEND . . . . . E NEIGHBOR . . . . . F RELIGIOUS/LOCAL LEADER . . . . . G DOCTOR/MEDICAL PERSONNEL . . H POLICE . . . . . I LAWYER . . . . . J SOCIAL SERVICE ORGANIZATION . K OTHER _____ X (SPECIFY)	1033

1032	Have you ever told any one else about this?	YES . . . . . 1 NO 2	
1033	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.

1034	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?		YES ONCE	YES, MORE THAN ONCE	NO
		HUSBAND	1	2	3
		OTHER MALE ADULT	1	2	3
		FEMALE ADULT	1	2	3
1035	INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE				

SECTION 11. MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died. How many children did your mother give birth to, including you?	NUMBER OF BIRTHS TO NATURAL MOTHER	
1102	CHECK 1101: TWO OR MORE BIRTHS ☐ ONLY ONE BIRTH (RESPONDENT ONLY) ☐ → 1201		
1103	How many of these births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS	

1104	What was the name given to your oldest (next oldest) brother or sister?	(1) _____	(2) _____	(3) _____	(4) _____	(5) _____	(6) _____
1105	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
1106	Is (NAME) still alive?	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (2)	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (3)	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (4)	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (5)	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (6)	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (7)
1107	How old is (NAME)?	☐☐ GO TO (2)	☐☐ GO TO (3)	☐☐ GO TO (4)	☐☐ GO TO (5)	☐☐ GO TO (6)	☐☐ GO TO (7)
1108	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1109	How old was (NAME) when he/she died?	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (2)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (3)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (4)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (5)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (6)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (7)
1110	Was (NAME) pregnant when she died?	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO 1113 NO . . . 2	YES . . . 1 GO TO 1113 NO . . . 2
1111	Did (NAME) die during childbirth?	YES . . . 1 GO TO 1113 NO . . . 2	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO 1113 NO . . . 2	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO 1113 NO . . . 2	YES . . . 1 GO TO 1113 NO . . . 2
1112	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2
1113	How many live born children did (NAME) give birth to during her lifetime (before this pregnancy)?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐

IF NO MORE BROTHERS OR SISTERS, GO TO 1114.

1104	What was the name given to your oldest (next oldest) brother or sister?	(7) _____	(8) _____	(9) _____	(10) _____	(11) _____	(12) _____
1105	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
1106	Is (NAME) still alive?	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (8)	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (9)	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (10)	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (11)	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (12)	YES . . . 1 NO . . . 2 GO TO 1108 DK . . . 8 GO TO (13)
1107	How old is (NAME)?	GO TO (8)	GO TO (9)	GO TO (10)	GO TO (11)	GO TO (12)	GO TO (13)
1108	How many years ago did (NAME) die?						
1109	How old was (NAME) when he/she died?	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (8)	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (9)	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (10)	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (11)	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (12)	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (13)
1110	Was (NAME) pregnant when she died?	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO 1113 NO . . . 2	YES . . . 1 GO TO 1113 NO . . . 2
1111	Did (NAME) die during childbirth?	YES . . . 1 GO TO 1113 NO . . . 2	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO 1113 NO . . . 2	YES . . . 1 GO TO1113 NO . . . 2	YES . . . 1 GO TO 1113 NO . . . 2	YES . . . 1 GO TO 1113 NO . . . 2
1112	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2
1113	How many live born children did (NAME) give birth to during her lifetime (before this pregnancy)?						

IF NO MORE BROTHERS OR SISTERS, GO TO 1114.

1114 CHECK Q1110, 1111 AND 1112 FOR ALL SISTERS

☐ ANY YES

ALL NO OR BLANK ☐ → 1201

Just to make sure I have this right, you told me that your sister(s) _____ (NAME) died when she was (pregnant/delivering/just delivered). Is that correct?
IF CORRECT, CONTINUE TO 1201.
IF NOT, CORRECT QUESTIONNAIRE AND CONTINUE TO 1201.

SECTION 12. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1201	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . ☐☐ NONE 00	→ 1203
1202	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE 00	→ 1203
1202A	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1203	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 1205
1204	In the last 24 hours, how many cigarettes did you smoke?	CIGARETTES . . . . . ☐☐	
1205	Do you currently smoke or use any other type of tobacco?	YES . . . . . 1 NO 2	→ 1207
1206	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO . . . . . B SNUFF . . . . . C OTHER _____ X (SPECIFY)	
1207	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not? Getting permission to go? Getting money needed for advice treatment? The distance to the health facility? Not wanting to go alone?	BIG PROB-LEM / NOT A BIG PROB-LEM / NOT A PROB-LEM AT ALL PERMISSION TO GO . . . . . 1 2 3 GETTING MONEY . . . 1 2 3 DISTANCE . . . 1 2 3 GO ALONE . . . 1 2 3	
1208	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 1210
1209	What type of health insurance? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE. D OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1210	Have you ever heard of female circumcision?	YES . . . . . 1 NO 2	→ 1213
1211	In a number of countries, there is a practice in which a girl may have part of her genitals cut. Have you heard about this practice?	YES . . . . . 1 NO 2	→ 1301
1213	Have you been circumcised?	YES . . . . . 1 NO 2	→ 1221
1214	Now I would like to ask you what was done to you at this time. Was any flesh removed from the genital area?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1218
1217	Was the genital area just nicked without removing any flesh?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1218	Was your genital area sewn?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1219	How old were you when this occurred? IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS ☐☐ DURING INFANCY . . . . . 95 DON'T KNOW 98	
1220	Who cut (or nicked) the genitals?	**TRADITIONAL** TRAD. "CIRCUMCISER" . . . . . 11 TRAD. BIRTH ATTENDANT . . . . . 12 OTHER TRAD. _____ 16 (SPECIFY) **HEALTH PROFESSIONAL** DOCTOR . . . . . 21 TRAINED NURSE/MIDWIFE . . . . . 22 OTHER PROF. _____ 26 (SPECIFY) DON'T KNOW 98	
1221	CHECK 213 AND 216: HAS AT LEAST ONE LIVING DAUGHTER ☐ ↓ HAS NO LIVING DAUGHTER ☐ →		1230
1222	Has one of your daughters been circumcised? IF YES: How many?	NUMBER CIRCUMCISED . . . ☐☐ NO DAUGHTER CIRCUMCISED 95	→ 1229
1223	To which of your daughters did this happen most recently? _____ (DAUGHTER'S NAME) INTERVIEWER: CHECK 212 AND RECORD THE BIRTH HISTORY NUMBER FOR THE DAUGHTER.	DAUGHTER'S BIRTH HISTORY NUMBER FROM Q212 . . . . . ☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1224	Now I would like to ask you what was done to (NAME OF THE DAUGHTER FROM (Q1223) at this time. Was any flesh removed from her genital area?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1226
1225	Was her genital area just nicked without removing any flesh?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1226	Was her genital area sewn?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1227	How old was (NAME OF DAUGHTER FROM Q1223) when this occurred? IF THE RESPONDENT DOES NOT KNOW THE AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS ☐☐ DURING INFANCY . . . . . 95 DON'T KNOW 98	
1228	Who cut (or nicked) the genitals?	**TRADITIONAL** TRAD. "CIRCUMCISER" . . . . . 11 TRAD. BIRTH ATTENDANT . . . . . 12 OTHER TRAD. _____ 16 (SPECIFY) **HEALTH PROFESSIONAL** DOCTOR . . . . . 21 TRAINED NURSE/MIDWIFE . . . . . 22 OTHER PROF. _____ 26 (SPECIFY) DON'T KNOW 98	→ 1230
1229	Do you intend to have any of your daughters circumcised in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1230	Do you think that this practice should be continued, or should it be discontinued?	CONTINUED . . . . . 1 DISCONTINUED . . . . . 2 DEPENDS . . . . . 3 DON'T KNOW 8	

13.FISTULA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1301	Sometimes a woman can have a problem such that she experiences a constant leakage of urine or stool from her vagina during the day and night. This problem usually occurs after a difficult childbirth, but may also occur after a sexual assault or after a pelvic surgery. Have you ever experienced a constant leakage of urine or stool from your vagina during the day and night?	YES . . . . . 1 NO 2	→ 1303
1302	Have you ever heard of this kind of problem, such that a woman experiences a constant leakage of urine or stool from her vagina during the day and night?	YES . . . . . 1 NO 2	→ 1310
1303	Did this problem occur: After a delivery? After a sexual assault? After pelvic surgery? After some other event?	DELIVERY YES . . . . . 1 → 1303A NO . . . . . 2 SEXUAL ASSAULT YES . . . . . 1 → 1305 NO . . . . . 2 PELVIC SURGERY YES . . . . . 1 → 1305 NO . . . . . 2 OTHER _____ 6 → 1305 (SPECIFY)	
1303A	Did this problem occur after a normal labor and delivery, or after a very difficult labor and delivery?	NORMAL LABOR/DELIVERY . . . 1 VERY DIFFICULT DELIVERY . . . 2	
1303B	Was this baby born alive?	YES, BABY BORN ALIVE . . . . . 1 NO, BABY NOT BORN ALIVE 2	
1304	After which delivery did this occur?	DELIVERY NUMBER: ☐☐	
1305	How many days after (ANSWER TO Q. 1303) did the leakage start?	NUMBER OF DAYS AFTER PRECIPITATING EVENT ☐☐ (ENTER 95 IF MORE THAN 95 DAYS)	
1306	Have you sought treatment for this condition?	YES . . . . . 1 → 1308 NO 2	
1307	Why have you not sought treatment?	DID NOT KNOW COULD BE FIXED 1 DO NOT KNOW WHERE TO GO . 2 TOO EXPENSIVE . . . . . 3 TOO FAR . . . . . 4 POOR QUALITY OF CARE . . . . . 5 COULD NOT GET PERMISSION . 6 EMBARRASSMENT . . . . . 7 OTHER _____ 8 (SPECIFY)	→ 1310
1308	From whom did you last seek treatment?	**HEALTH PROFESSIONAL** DOCTOR/CLINICAL OFFICER . 1 NURSE/MIDWIFE . . . . . 2 PATIENT ATTENDANT . . . . . 3 **OTHER PERSON** UNTRAINED VILLAGE DOCTOR 4 OTHER _____ 5 (SPECIFY)	
1309	Did the treatment stop the problem?	YES, NO MORE LEAKAGE AT ALL 1 YES, BUT STILL SOME LEAKAGE 2 NO, STILL HAVE PROBLEM 3	
1310	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐ MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING, NIGHT 3	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____

INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
ALL MONTHS SHOULD BE FILLED IN.

INFORMATION TO BE CODED FOR EACH COLUMN

BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 IUD
- 4 INJECTABLES
- 5 IMPLANTS
- 6 PILL
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 DIAPHRAGM
- J FOAM OR JELLY
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM METHOD
- M WITHDRAWAL
- X OTHER _____ (SPECIFY)

	12	DEC	01		
	11	NOV	02		
	10	OCT	03		
	09	SEP	04		
2	08	AUG	05		2
0	07	JUL	06		0
1	06	JUN	07		1
0	05	MAY	08		0
	04	APR	09		
	03	MAR	10		
	02	FEB	11		
	01	JAN	12		
	12	DEC	13		
	11	NOV	14		
	10	OCT	15		
	09	SEP	16		
2	08	AUG	17		2
0	07	JUL	18		0
0	06	JUN	19		0
9	05	MAY	20		9
	04	APR	21		
	03	MAR	22		
	02	FEB	23		
	01	JAN	24		
	12	DEC	25		
	11	NOV	26		
	10	OCT	27		
	09	SEP	28		
2	08	AUG	29		2
0	07	JUL	30		0
0	06	JUN	31		0
8	05	MAY	32		8
	04	APR	33		
	03	MAR	34		
	02	FEB	35		
	01	JAN	36		
	12	DEC	37		
	11	NOV	38		
	10	OCT	39		
	09	SEP	40		
2	08	AUG	41		2
0	07	JUL	42		0
0	06	JUN	43		0
7	05	MAY	44		7
	04	APR	45		
	03	MAR	46		
	02	FEB	47		
	01	JAN	48		
	12	DEC	49		
	11	NOV	50		
	10	OCT	51		
	09	SEP	52		
2	08	AUG	53		2
0	07	JUL	54		0
0	06	JUN	55		0
6	05	MAY	56		6
	04	APR	57		
	03	MAR	58		
	02	FEB	59		
	01	JAN	60		
	12	DEC	61		
	11	NOV	62		
	10	OCT	63		
	09	SEP	64		
2	08	AUG	65		2
0	07	JUL	66		0
0	06	JUN	67		0
5	05	MAY	68		5
	04	APR	69		
	03	MAR	70		
	02	FEB	71		
	01	JAN	72		

UNITED REPUBLIC OF TANZANIA
TANZANIA DEMOGRAPHIC AND HEALTH SURVEY 2009-10
NATIONAL BUREAU OF STATISTICS

MEN'S QUESTIONNAIRE **CONFIDENTIAL**

IDENTIFICATION

REGION _____

DISTRICT _____

WARD . . . . . .

ENUMERATION AREA . . . . . .

NAME OF HEAD OF HOUSEHOLD _____

TDHS NUMBER . . . . . .

HOUSEHOLD NUMBER . . . . . .

LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE . . . . . .
(LARGE CITY=1, SMALL CITY=2, TOWN=3, COUNTRYSIDE=4)

NAME AND LINE NUMBER OF MAN _____

LARGE CITIES ARE : DAR ES SALAAM, MWANZA, MBEYA AND TANGA. **SMALL CITIES ARE**: MOROGORO, DODOMA, MOSHI, IRINGA, SHINYANGA, SINGIDA, SONGEA ,MTWARA, TABORA, MUSOMA, SUMBAWANGA, BUKOBA, KIGOMA NA MJINI MAGHARIBI . MIJI MINGINE NI MIJI MIDOGO

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR (2 0)
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:

1	COMPLETED	4	REFUSED		
2	NOT AT HOME	5	PARTLY COMPLETED	7	OTHER _____ (SPECIFY)
3	POSTPONED	6	INCAPACITATED		

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		

INFORMED CONSENT

Hello. My name is _____. I am working with the National Bureau of Statistics. We are conducting a survey about health all over Tanzania. The information we collect will help the government to plan health services.
Your household was selected for the survey. The survey usually takes about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Do you have any questions?
May I begin the interview now?

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2→ END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ] MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING, NIGHT 3	
104	In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away?	NUMBER OF TRIPS . . . . . [ ][ ] NONE 00	→ 106
105	In the last 12 months, have you been away from your home community for more than one month at a time?	YES . . . . . 1 NO 2	
106	In what month and year were you born?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	
107	How old were you at your last birthday? COMPARE AND CORRECT 106 AND/OR 107 IF INCONSISTENT.	AGE IN COMPLETED YEARS [ ][ ]	
108	Have you ever attended school?	YES . . . . . 1 NO 2	→ 112
109	What is the highest level of school you attended: primary, secondary, or higher?	PREPRIMARY . . . . . 0 PRIMARY . . . . . 1 POST-PRIMARY TRAINING . . . . . 2 SECONDARY . . . . . 3 POST-SECONDAY TRAINING . . . . . 4 UNIVERSITY 5	
110	What is the highest grade you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL RECORD '00'.	GRADE . . . . . [ ][ ]	
111	CHECK 109: PRIMARY ☐ ↓ SECONDARY OR HIGHER ☐ →		115
112	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PARTS OF SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE. . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	

114	CHECK 112: CODE '2', '3' OR '4' CIRCLED ↓ CODE '1' OR '5' CIRCLED → 116		
115	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	ALMOST EVERYDAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
116	Do you listen to the radio at least once a week, less than once a week or not at all?	ALMOST EVERYDAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
117	Do you watch television at least once a week, less than once a week or not at all?	ALMOST EVERYDAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	

PARENTS LOVE THEIR CHILDREN.
FARMING IS HARD WORK.
THE CHILD IS READING A BOOK.
CHILDREN WORK HARD AT SCHOOL.

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . [ ][ ] DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . [ ][ ] DAUGHTERS ELSEWHERE . . . . [ ][ ]	
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . [ ][ ] GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN . . . . . [ ][ ]	
209	CHECK 208: HAS HAD MORE THAN ONE CHILD HAS HAD ONLY ONE CHILD → 212 HAS NOT HAD ANY CHILDREN → 301		
210	Did all of the children you have fathered have the same biological mother?	YES . . . . . 1 NO 2	→ 212
211	In all, how many women have you fathered children with?	NUMBER OF WOMEN . . . . . [ ][ ]	
212	How old were you when your (first) child was born?	AGE IN YEARS . . . . . [ ][ ]	
213	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD NO LIVING CHILDREN → 301		
214	How many years old is your (youngest) child?	AGE IN YEARS . . . . . [ ][ ]	
215	CHECK 214: (YOUNGEST) CHILD IS AGE 0-2 YEARS OTHER → 301		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
216	What is the name of your (youngest) child? WRITE NAME OF (YOUNGEST) CHILD _____ (NAME OF (YOUNGEST) CHILD)		
217	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 219
218	Were you ever present during any of those antenatal check-ups?	PRESENT . . . . . 1 NOT PRESENT 2	
219	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY . . . . . 1 OTHER . . . . . 6 DON'T KNOW 8	
221	When a child has diarrhea, how much should he or she be given to drink: more than usual, the same amount as usual, less than usual, or should he or she not be given anything to drink at all?	MORE THAN USUAL . . . . . 1 ABOUT THE SAME . . . . . 2 LESS THAN USUAL . . . . . 3 NOTHING TO DRINK . . . . . 4 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)? PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD . CIRCLE CODE '1' IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED.	
01	**Female Sterilization** PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	**Male Sterilization** PROBE : Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	**IUD** PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2
04	**Injectables** PROBE: Women can have an injection by a health provider that stopsthem from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
05	**Implants** PROBE: Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
06	**PILL** PROBE : Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	**Condom** PROBE: Men can put a rubber sheath on their penis before sexual Intercourse.	YES . . . . . 1 NO 2
08	**Female Condom** PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	**Lactational Amenorrhea Method (LAM)**	YES . . . . . 1 NO 2
10	**Rhythm Method** PROBE : Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES . . . . . 1 NO 2
11	**Withdrawal** PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
12	**Emergency Contraception** PROBE : As an emergency measure after sexual intercourse, women can take special pills at any time within 5 days to prevent pregnancy.	YES . . . . . 1 NO 2
13	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) NO 2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
303	In the last few months have you: Heard about family planning on the radio? Seen about family planning on the television? Read about family planning in a newspaper or magazine?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE 1 2	
305	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 308
306	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
308	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. a) Contraception is women's business and a man should not have to worry about it. b) Women who use contraception may become promiscuous.	AGREE / DISAGREE / DK CONTRACEPTION IS WOMEN'S BUSINESS . 1 2 8 WOMAN MAY BECOME PROMISCUOUS . . . 1 2 8	
309	CHECK 301 (07) KNOWS MALE CONDOM YES ☐ NO ☐		→ 313
310	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 313
311	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE IF UNABLE TO DETERMINE IS PUBLIC OR PRIVATE MEDICAL SECTOR , WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**GOVERNMENT/PARASTATAL** REFERRAL/SPEC.HOSPITAL . . . . . A REGIONAL HOSPITAL . . . . . B DISTRICT HOSPITAL . . . . . C HEALTH CENTRE . . . . . D DISPENSARY . . . . . E VILLAGE HEALTH POST . . . . . F CBD WORKER . . . . . G **RELIGIOUS/VOLUNTARY** REFERAL/SPEC.HOSPITAL . . . . . H DISTRICT HOSPITAL . . . . . I GOVT.HEALTH CENTRE . . . . . J DISPENSARY . . . . . K **PRIVATE** DISTRICT HOSPITAL . . . . . L HEALTH CENTRE . . . . . M DISPENSARY . . . . . N **OTHER** PHARMACY . . . . . O NGO . . . . . P VCT CENTRE . . . . . Q SHOP/KIOSK . . . . . R BAR . . . . . S GUEST HOUSE/HOTEL . . . . . T FRIEND/RELATIVE/NEIGHBOUR . . . U OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
312	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO 2	
313	CHECK 301 (08) KNOWS FEMALE CONDOM YES ☐ NO ☐ → 401		
314	Do you know of a place where a person can get female condoms?	YES . . . . . 1 NO 2	→ 401
315	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**GOVERNMENT/PARASTATAL** REFERRAL/SPEC.HOSPITAL . . . . . A REGIONAL HOSPITAL . . . . . B DISTRICT HOSPITAL . . . . . C HEALTH CENTRE . . . . . D DISPENSARY . . . . . E VILLAGE HEALTH POST . . . . . F CBD WORKER . . . . . G **RELIGIOUS/VOLUNTARY** REFERAL/SPEC.HOSPITAL . . . . . H DISTRICT HOSPITAL . . . . . I GOVT.HEALTH CENTRE . . . . . J DISPENSARY . . . . . K **PRIVATE** DISTRICT HOSPITAL . . . . . L HEALTH CENTRE . . . . . M DISPENSARY . . . . . N **OTHER** PHARMACY . . . . . O NGO . . . . . P VCT CENTRE . . . . . Q SHOP/KIOSK . . . . . R BAR . . . . . S GUEST HOUSE/HOTEL . . . . . T FRIEND/RELATIVE/NEIGHBOUR . . . U OTHER _____ X (SPECIFY)	
316	If you wanted to, could you yourself get a female condom?	YES . . . . . 1 NO 2	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A WOMAN . . . . . 2 NO, NOT IN UNION 3	→ 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A WOMAN . . . . . 2 NO 3	→ 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 410
404	Is your wife/partner living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	
405	Do you have more than one wife or woman you live with as if married?	YES (MORE THAN ONE) . . . . . 1 NO (ONLY ONE) 2	→ 407
406	Altogether, how many wives do you have or other partners you are living with as if married?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . .	
407	CHECK 405: ONE WIFE/ PARTNER Please tell me the name of your wife (the woman you are living with as if married). MORE THAN ONE WIFE/ PARTNER Please tell me the name of each of your wives or of each woman you are living with as if married. RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER. IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. ASK 408 FOR EACH PERSON.	NAME _____ LINE NUMBER ☐☐ 408. How old was (NAME) on her last birthday? AGE ☐☐ _____ ☐☐ ☐☐ _____ ☐☐ ☐☐ _____ ☐☐ ☐☐ _____ ☐☐ ☐☐	
409	CHECK 407: ONE WIFE/ PARTNER ↓ MORE THAN ONE WIFE/ PARTNER →		→ 411A
410	Have you been married or lived with a woman only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	→ 411A
411	In what month and year did you start living with your (wife/ partner)?	MONTH . . . . . ☐☐	
411A	Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living with her?	AGE . . . . . ☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
413	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
414	Now I would like to ask you some questions about sexual activity in order to gain a better understanding of some important life issues. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . ☐☐ FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER 95	→ 501
417	CHECK 107: AGE 15-24 ↓ AGE 25-49 ☐		→ 419
418	The first time you had sexual intercourse, was a condom used?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER . 8	
419	When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 ☐☐ WEEKS AGO . . . . . 2 ☐☐ MONTHS AGO . . . . . 3 ☐☐ YEARS AGO . . . . . 4 ☐☐	→ 435

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
420	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.	→ SKIP TO 422		
421	When was the last time you had sexual intercourse with this person?		DAYS . . . 1 [ ][ ] WEEKS 2 [ ][ ] MONTHS 3 [ ][ ]	DAYS . . . 1 [ ][ ] WEEKS 2 [ ][ ] MONTHS 3 [ ][ ]
422	The last time you had sexual intercourse (with this second/third person), was a condom used?	YES . . . . 1 NO . . . . 2 (SKIP TO 424)	YES . . . . 1 NO . . . . 2 (SKIP TO 424)	YES . . . . 1 NO . . . . 2 (SKIP TO 424)
423	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
424	What was your relationship to this (second/third) person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	WIFE . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER . . . . 6 (SKIP TO 425)	WIFE . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER . . . . 6 (SKIP TO 425)	WIFE . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER . . . . 6 (SKIP TO 425)
424A	CHECK 410:	MARRIED ONLY ONCE [ ] MARRIED MORE THAN ONCE [ ] (SKIP TO 425)	MARRIED ONLY ONCE [ ] MARRIED MORE THAN ONCE [ ] (SKIP TO 425)	MARRIED ONLY ONCE [ ] MARRIED MORE THAN ONCE [ ] (SKIP TO 425)
424B	CHECK 414:	1st TIME WHEN STARTED LIVING WITH 1st WIFE [ ] (SKIP TO 425A) OTHER [ ]	1st TIME WHEN STARTED LIVING WITH 1st WIFE [ ] (SKIP TO 425A) OTHER [ ]	1st TIME WHEN STARTED LIVING WITH 1st WIFE [ ] (SKIP TO 425A) OTHER [ ]
425	How long ago did you first have sexual intercourse with this (second/third) person? IF ONLY HAD SEXUAL RELATIONS WITH THIS PERSON ONCE, RECORD '01' DAYS.	DAYS . 1 [ ][ ] MONTHS 2 [ ][ ] YEARS 3 [ ][ ]	DAYS . 1 [ ][ ] MONTHS 2 [ ][ ] YEARS 3 [ ][ ]	DAYS . 1 [ ][ ] MONTHS 2 [ ][ ] YEARS 3 [ ][ ]
425A	How many times during the last 12 months did you have sexual intercourse with this person: once, twice, or more?	ONCE . . . . 1 TWICE . . . . 2 MORE 3	ONCE . . . . 1 TWICE . . . . 2 MORE 3	ONCE . . . . 1 TWICE . . . . 2 MORE 3
428	Apart from [this person/these two people], have you had sexual intercourse with any other person in the last 12 months?	YES . . . . 1 (GO BACK TO 421 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 430)	YES . . . . 1 (GO BACK TO 421 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 430)	
429	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.'			NUMBER OF PARTNERS LAST 12 MONTHS . [ ][ ] DON'T KNOW 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
430	CHECK 424 (ALL COLUMNS): AT LEAST ONE PARTNER IS PROSTITUTE ☐ NO PARTNERS ARE PROSTITUTES ☐ → 432		
431	CHECK 424 AND 422 (ALL COLUMNS): CONDOM USED WITH EVERY PROSTITUTE ☐ → 435 OTHER ☐ → 435		
432	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 433
432A	Have you ever paid anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 435
433	The last time you paid someone in exchange for having sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	→ 435
434	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
435	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.'	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
436	CHECK 422, MOST RECENT PARTNER (FIRST COLUMN): NOT ASKED ☐ → 440 CONDOM USED ☐ NO CONDOM USED ☐ → 440		
437	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF YOU DON'T KNOW BRAND, ASK TO SEE THE PACKAGE.	NAME _____ ☐☐ DON'T KNOW 98	
438	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE MEDICAL SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT/PARASTATAL** REFERRAL/SPEC.HOSPITAL . . . . . 11 REGIONAL HOSPITAL . . . . . 12 DISTRICT HOSPITAL . . . . . 13 HEALTH CENTRE . . . . . 14 DISPENSARY . . . . . 15 VILLAGE HEALTH POST . . . . . 16 CBD WORKER . . . . . 17 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC.HOSPITAL . . . . . 21 DISTRICT HOSPITAL . . . . . 22 GOVT.HEALTH CENTRE . . . . . 23 DISPENSARY . . . . . 24 **PRIVATE** DISTRICT HOSPITAL . . . . . 31 HEALTH CENTRE . . . . . 32 DISPENSARY . . . . . 33 **OTHER** PHARMACY . . . . . 41 NGO . . . . . 42 VCT CENTRE . . . . . 43 SHOP/KIOSK . . . . . 44 BAR . . . . . 45 GUEST HOUSE/HOTEL . . . . . 46 FRIEND/RELATIVE/NEIGHBOUR . . . 47 OTHER _____ 96 (OTHER)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
440	The last time you had sex did you or your partner use any method (other than a condom) to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 501
441	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F FEMALE CONDOM . . . . . G DIAPHRAGM . . . . . H FOAM/JELLY . . . . . I LAM . . . . . J RHYTHM METHOD . . . . . K WITHDRAWAL . . . . . L OTHER _____ X (SPECIFY)	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐ → 508		
502	CHECK 441: MAN NOT STERILIZED ☐ MAN STERILIZED ☐ → 508		
503	(Is your wife (partner)/Are any of your wives (partners)) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
504	CHECK 503: NO WIFE/PARTNER PREGNANT OR DON'T KNOW ☐ WIFE(WIVES)/ PARTNER(S) PREGNANT ☐ Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children? Now I have some questions about the future. After the child(ren) you and your (wife(wives)/partner(s)) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 COUPLE CANT GET PREGNANT . . . . . 3 WIFE (WIVES)/PARTNER(S) STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 508
505	CHECK 405: ONE WIFE/ PARTNER ☐ MORE THAN ONE WIFE/ PARTNER ☐ → 507		
506	CHECK 503: WIFE/PARTNER NOT PREGNANT OR DON'T KNOW ☐ WIFE/PARTNER PREGNANT ☐ How long would you like to wait from now before the birth of (a/another) child? After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 COUPLE CANT GET PREGNANT . . . 994 OTHER . . . . . 996 DON'T KNOW 998	→ 508
507	How long would you like to wait from now before the birth of (a/another) child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 HE/ALL HIS WIVES/PARTNERS CANT GET PREGNANT . . . . . 994 OTHER . . . . . 996 DON'T KNOW 998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
508	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ NO LIVING CHILDREN ☐ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 NUMBER . . . . . ☐☐ OTHER 96	→ 509A → 509A
509	How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?	BOYS GIRLS EITHER NUMBER ☐☐ ☐☐ ☐☐ OTHER 96	
509A	If you wanted to get information on family planning, who would you like to talk to most:	CBD WORKER . . . . . 01 CLINIC STAFF . . . . . 02 TBA . . . . . 03 HUSBAND/PARTNER . . . . . 04 FRIEND . . . . . 05 RELATIVE . . . . . 06 RELIGIOUS LEADERS . . . . . 07 OTHER _____ 96 (SPECIFY)	
509B	Is it acceptable to you for information on family planning to be provided: On the radio? On the television? In a newspaper or magazine?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2	
509C	In the last six months have you heard about family planning: a) On the radio? b) On the television? c) In a newspaper or magazine? d) From a poster? e) From billboards? f) At community events? g) From live drama? h) From a doctor or nurse? i) From a community health worker?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2 POSTER . . . . . 1 2 BILLBOARD . . . . . 1 2 COMMUNITY EVENT . . . . . 1 2 DRAMA . . . . . 1 2 DOCTOR/NURSE . . . . . 1 2 HEALTH WORKER 1 2	
509D	In the past six months, what drama series have you listened to on the radio? CIRCLE THE SERIES MENTIONED SPONTANEOUSLY. FOR SERIES NOT MENTIONED, ASK: In the last 6 months, have you listened to: a) Zinduka? b) Twende na Wakati? c) Other?	YES SPONTANEOUS / YES PROBED / NO ZINDUKA . . . . . 1 2 3 TWENDE NA WAKATI . . . . . 1 2 3 OTHER 1 2 3	
509E	CHECK 509D: LISTENED TO ZINDUKA (CODE '1' OR 2' CIRCLED) ☐ HAS NOT LISTENED TO ZINDUKA (CODE '3' CIRCLED) ☐		→ 509I

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
509F	How often do you listen to Zinduka?	TWICE A WEEK . . . . . 1 ONCE A WEEK . . . . . 2 ONCE OR TWICE A MONTH . . . . . 3 RARELY . . . . . 4 DON'T KNOW 8	
509G	As a result of listening to Zinduka, did you do anything or take any action related to family planning?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 509I
509H	What did you do as a result of listening to Zinduka? RECORD ALL MENTIONED.	TALKED TO PARTNER . . . . . A TALKED TO A HEALTH WORKER . . . B TALKED TO SOMEONE ELSE . . . . . C VISITED A CLINIC FOR FAM. PLAN. . D BEGAN USING A MOD. METHOD . . . E CONTINUED USING A MOD. METH. . . . F OTHER _____ X (SPECIFY)	
509I	CHECK 509D: LISTENED TO TWENDA NA WAKATI (CODE '1' OR '2' CIRCLED) →	HAS NOT LISTENED TO TWENDA NA WAKATI (CODE '3' CIRCLED) →	601
509J	How often do you listen to Twenda na Wakati?	TWICE A WEEK . . . . . 1 ONCE A WEEK . . . . . 2 ONCE OR TWICE A MONTH . . . . . 3 RARELY 4	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES . . . . . 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 613A
604	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
608	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . 2 ONCE IN A WHILE 3	
609	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
610	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ (↓) NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐ →		→ 701
611	CHECK 609: CODE 1 OR 2 CIRCLED ☐ (↓) OTHER ☐ →		→ 613A
612	Who usually decides how the money you earn will be used: mainly you, mainly your (wife (wives)/partner(s)), or you and your (wife (wives)/partner(s)) jointly?	RESPONDENT . . . . . 1 WIFE(WIVES)/PARTNER(S) . . . . . 2 RESPONDENT AND WIFE (WIVES)/ PARTNER(S) JOINTLY . . . . . 3 OTHER _____ 6 (SPECIFY)	
613A	Who usually makes decisions about health care for yourself: you, your wife/partner, you and your wife/partner jointly, or someone else?	RESPONDENT . . . . . 1 WIFE(WIVES)/PARTNER(S) . . . . . 2 RESPONDENT & WIFE (WIVES)/ PARTNER(S) JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 (SPECIFY)	
613B	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 WIFE(WIVES)/PARTNER(S) . . . . . 2 RESPONDENT & WIFE (WIVES)/ PARTNER(S) JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 (SPECIFY)	
615	In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	YES NO DK GOES OUT . . . . . 1 2 8 NEGL. CHILDREN . . . 1 2 8 ARGUES . . . . . 1 2 8 REFUSES SEX . . . . . 1 2 8 BURNS FOOD 1 2 8	
616	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 733
702	Can people reduce their chances of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
703	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
704	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
705	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
707	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
708	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
709	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING . . . 1 2 8	
710	CHECK 709: AT LEAST ONE 'YES' ↓	OTHER →	712A
711	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
712A	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
713	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO 2	→ 718
714	When was the last time you were tested?	LESS THAN 12 MONTHS AGO . . . . . 1 12 - 23 MONTHS AGO . . . . . 2 2 OR MORE YEARS AGO 3	
715	The last time you had the test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	ASKED FOR THE TEST . . . . . 1 OFFERED AND ACCEPTED . . . . . 2 REQUIRED 3	
716	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
717	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE MEDICAL SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOVERNMENT/PARASTATAL** REFERRAL/SPEC.HOSPITAL . . . . . 11 REGIONAL HOSPITAL . . . . . 12 DISTRICT HOSPITAL . . . . . 13 HEALTH CENTRE . . . . . 14 DISPENSARY . . . . . 15 VILLAGE HEALTH POST . . . . . 16 CBD WORKER . . . . . 17 **RELIGIOUS/VOLUNTARY** REFERAL/SPEC.HOSPITAL . . . . . 21 DISTRICT HOSPITAL . . . . . 22 GOVT.HEALTH CENTRE . . . . . 23 DISPENSARY . . . . . 24 **PRIVATE** DISTRICT HOSPITAL . . . . . 31 HEALTH CENTRE . . . . . 32 DISPENSARY . . . . . 33 **OTHER** PHARMACY . . . . . 41 NGO . . . . . 42 VCT CENTRE . . . . . 43 OTHER _____ 96	→720
718	Do you know of a place where people can go to get tested for the AIDS virus?	YES . . . . . 1 NO 2	→ 720
719	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE MEDICAL SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**GOV.PARASTATAL** REFERAL/SPEC. HOSPITAL . . . . . A REGIONAL HOSP. . . . . B DISTRICT HOSP. . . . . C HEALTH CENT. . . . . D DISPENSARY . . . . . E VILLAGE HEALTH POST . . . . . F CBD WORKER . . . . . G **RELIGIOUS/VOLUNTARY** REFERRAL/SPEC. HOSPITAL . . . . . H DISTRICT HOSP. . . . . I HEALTH CENT. . . . . J DISPENSARY . . . . . K **PRIVATE** SPECIALISED HOSPITAL . . . . . L HEALTH CENTRE . . . . . M DISPENSARY . . . . . N OTHER SOURCE SHOP . . . . . O CHURCH . . . . . P OTHER _____ X (SPECIFY)	
720	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
721	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
722	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
723	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DK/NOT SURE/DEPENDS 8	
733	CHECK 701: HEARD ABOUT AIDS → Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS → Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
734	CHECK 414: HAS HAD SEXUAL INTERCOURSE HAS NOT HAD SEXUAL INTERCOURSE →		742
735	CHECK 733: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES NO →		737
736	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
737	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
738	Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer near your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
739	CHECK 736, 737, AND 738: HAS HAD AN INFECTION (ANY 'YES') HAS NOT HAD AN INFECTION OR DOES NOT KNOW →		742
740	The last time you had (PROBLEM FROM 736/737/738), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 742

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
741	Where did you go? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**GOVERNMENT/PARASTATAL** REFERRAL/SPEC.HOSPITAL . . . . . A REGIONAL HOSPITAL . . . . . B DISTRICT HOSPITAL . . . . . C HEALTH CENTRE . . . . . D DISPENSARY . . . . . E VILLAGE HEALTH POST . . . . . F CBD WORKER . . . . . G **RELIGIOUS/VOLUNTARY** REFERAL/SPEC.HOSPITAL . . . . . H DISTRICT HOSPITAL . . . . . I GOVT.HEALTH CENTRE . . . . . J DISPENSARY . . . . . K **PRIVATE** DISTRICT HOSPITAL . . . . . L HEALTH CENTRE . . . . . M DISPENSARY . . . . . N **OTHER** PHARMACY . . . . . O NGO . . . . . P VCT CENTRE . . . . . Q OTHER _____ X (SPECIFY)	
742	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in refusing to have sex with him?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
743	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Some men are circumcised. Are you circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 805
802	How old were you when circumicision occurred?	AGE IN COMPLETED YEARS . ☐☐ DURING CHILDHOOD (<5 YEARS) . . . 96 DON'T KNOW 98	
803	Who did the circumcision?	TRADITIONAL PRACTITIONER/ FAMILY /FRIENDS . . . . . 1 HEALTH WORKER/PROFESSIONAL . 2 OTHER . . . . . 3 DON'T KNOW 8	
804	Where did you go to be circumcised?	HEALTH FACILITY . . . . . 1 HOME OF A HEALTH WORKER/ PROFESSIONAL . . . . . 2 CIRCUMCISION DONE AT HOME . . . 3 OTHER HOME/PLACE _____ 4 (SPECIFY) DON'T KNOW 8	
805	Are there any benefits to being circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 806
805A	What are the benefits? Any other?	CLEANLINESS . . . . . A PROTECTION FROM DISEASE . . . . . B PROTECTION FROM HIV/AIDS . . . . . C PREVENT URINARY TRACT INFECTION . . . . . D OTHER _____ X (SPECIFY)	
806	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE 00	→ 810
807	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE 00	→ 810

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
810	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 812
811	In the last 24 hours, how many cigarettes did you smoke?	CIGARETTES	
812	Do you currently smoke or use any other type of tobacco?	YES . . . . . 1 NO 2	→ 814
813	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO . . . . . B SNUFF . . . . . C OTHER _____ X (OTHER)	
814	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 820
815	What type of health insurance? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY BASED HEALTH INSURANCE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE. D OTHER _____ X (SPECIFY)	
820	RECORD THE TIME.	HOUR . . . . . MINUTES . . . . . MORNING . . . . . 1 AFTERNOON . . . . . 2 EVENING, NIGHT 3	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____

MILLENNIUM DEVLOPMENT GOAL INDICATORS *Appendix F*

Millennium Development Goal Indicators, Tanzania 2010			
Goal	Indicator	Value	
1. Eradicate extreme poverty and hunger	Prevalence of underweight children under age 5	Male: 17.3 Female: 14.3	Total: 15.8
2. Achieve universal primary education	Net attendance ratio in primary education[1]	Male: 78.0 Female: 82.0	Total: 80.0
	Literacy rate of 15-24-year olds[2]	Male: 83.0 Female: 76.9	
3. Promote gender equality and empower women	Ratio of girls to boys in primary, secondary education		0.96
	Ratio of literate women to literate men, 15-24 years old		0.93
4. Reduce child mortality	Under-5 mortality rate (per 1,000 live births)[3]		81 per 1,000
	Infant mortality rate (per 1,000 live births)[3]		51 per 1,000
	Proportion of 1-year-old children immunised against measles	Male: 86.4 Female: 82.7	Total: 84.5
5. Improve maternal health	Maternal Mortality Ratio (per 100,000 live births)[4]		454 per 100,000
	Proportion of births attended by skilled health personnel[5]		47.6
6. Combat HIV/AIDS, malaria, and other diseases	Percentage of current users of contraception who are using condoms (currently married women age 15-49)		7.1
	Condom use at last high-risk sex (population age 15-24)[6]	Male: 36.2 Female: 31.6	
	Percentage of population age 15-24 years with comprehensive correct knowledge of HIV/AIDS[7]	Male: 42.7 Female: 48.2	Total: 47.6
	Contraceptive prevalence rate (any modern method, currently married women age 15-49)		26.9
	Ratio of school attendance of orphans to school attendance of non-orphans age 10-14 years	Male: 0.8 Female: 1.0	Total: 0.9
	Proportion of population in malaria-risk areas using effective malaria prevention and treatment measures[8]		71.8
		Prevention:[9] Treatment:[10] Prompt treatment:[10]	16.0 58.2 51.0
7. Ensure environmental sustainability	Proportion of population using solid fuels[11]	Urban: 89.1 Rural: 99.6	Total: 97.2
	Proportion of population with sustainable access to an improved water source[12]	Urban: 81.4 Rural: 46.7	Total: 54.5
	Proportion of population with access to improved sanitation[13]	Urban: 29.3 Rural: 8.7	Total:13.3

[1] Excludes children with parental status missing. TDHS data are based on reported attendance, not enrolment.
[2] Refers to respondents who attended secondary school or higher and who can read a whole sentence
[3] For five-year period before the survey
[4] For 10-year period before the survey
[5] Among births in the past five years
[6] High-risk sex refers to sexual intercourse with more than one partner.
[7] A person is considered to have comprehensive knowledge about AIDS when they say that (1) use of condoms for every sexual intercourse and having just one uninfected, faithful partner can reduce the chance of getting the AIDS virus, (2) a healthy-looking person can have the AIDS virus, and (3) they reject the two most common local misconceptions. The most common misconceptions in Tanzania are that AIDS can be transmitted through mosquito bites and that a person can become infected with the AIDS virus by eating from the same plate as someone who is infected.
[8] The proportion of the population that owns an insecticide-treated net (ITN)
[9] Prevention of malaria is measured as the percentage of children age 0-59 months that slept under an insecticide-treated bednet the night before the interview.
[10] Treatment of malaria is measured as the percentage of children age 0-59 months that was ill with a fever in the two weeks preceding the interview and that received an antimalarial drug. The treatment is considered prompt if the child received the antimalarial drug on the same day as the onset of fever or the following day.
[11] Charcoal, firewood, straw, dung, or crop waste
[12] Proportion whose main source of drinking water is a household connection (piped), public standpipe, borehole, protected dug well, or rainwater collection
[13] Improved sanitation technologies are the following: flush toilet, pour flush toilet, traditional pit latrine, or ventilated, improved pit latrine.

NBS Vision

To be a preferable source of official statistics in Tanzania

NBS Mission

To facilitate informed decision-making process, through provision of relevant, timely and reliable user-driven statistical information, coordinating statistical activities and promoting the adherence to statistical methodologies and standards