Tanzania

Demographic and Health Survey 1996

Bureau of Statistics
Planning Commission

DHS
Demographic and Health Surveys
Macro International Inc.

World Summit for Children Indicators: Tanzania 1996

		Value
	BASIC INDICATORS	
Childhood mortality	Infant mortality rate	88 per 1,000
	Under-five mortality rate	137 per 1,000
Maternal mortality	Maternal mortality rate	529 per 100,000
Childhood undernutrition	Percent stunted	43.2
	Percent wasted	7.2
	Percent underweight	30.6
Clean water supply	Percent of households within 15 minutes of a safe water supply[1]	30.4
Sanitary excreta disposal	Percent of households with flush toilets or VIP latrines	2.8
Basic education	Percent of women 15-49 with completed primary education	51.7
	Percent of men 15-49 with completed primary education	60.5
	Percent of girls 6-12 attending school	39.6
	Percent of boys 6-12 attending school	36.5
	Percent of women 15-49 who are literate	65.4
Children in especially difficult situations	Percent of children who are orphans (both parents dead)	0.6
	Percent of children who do not live with their natural mother	19.4
	Percent of children who live in single adult households	6.1
	SUPPORTING INDICATORS	
Women's Health		
Birth spacing	Percent of births within 24 months of a previous birth	17.5
Safe motherhood	Percent of births with medical prenatal care	89.3
	Percent of births with prenatal care in first trimester	11.1
	Percent of births with medical assistance at delivery	46.7
	Percent of births in a medical facility	46.5
	Percent of births at high risk	57.9
Family planning	Contraceptive prevalence rate (any method, currently married women)	18.4
	Percent of currently married women with an unmet demand for family planning	23.9
	Percent of currently married women with an unmet need for family planning to avoid a high-risk birth	19.8
Nutrition		
Maternal nutrition	Percent of mothers with low BMI	9.2
Low birth weight	Percent of births at low birth weight (of those reporting numeric weight)	11.2
Breastfeeding	Percent of children under 4 months who are exclusively breastfed	38.5
Child Health		
Vaccinations	Percent of children whose mothers received tetanus toxoid vaccination during pregnancy	91.4
	Percent of children 12-23 months with measles vaccination	80.9
	Percent of children 12-23 months fully vaccinated	70.5
Diarrhea control	Percent of children with diarrhea in preceding 2 weeks who received oral rehydration therapy (sugar-salt-water solution)	50.4
Acute respiratory infection	Percent of children with acute respiratory infection in preceding 2 weeks who were seen by medical personnel	69.6

[1] Piped, well, and bottled water.

Tanzania Demographic and Health Survey 1996

Bureau of Statistics
Planning Commission
Dar es Saalam, Tanzania

Macro International Inc.
Calverton, Maryland USA

August 1997

This report summarises the findings of the 1996 Tanzania Demographic and Health Survey (TDHS) conducted by the Bureau of Statistics, in collaboration with the Ministry of Health. Macro International Inc. provided technical assistance. Fundings for the TDHS were provided by the U.S. Agency for International Development (USAID) through the worldwide Demographic and Health Surveys programme.

The TDHS is part of the worldwide Demographic and Health Surveys (DHS) programme, which is designed to collect data on fertility, family planning, and maternal and child health.

Additional information about the TDHS may be obtained from the Bureau of Statistics, P.O. Box 796, Dar es Salaam, Tanzania (Telephone 051-111993). Additional information about the DHS programme may be obtained by writing to: DHS, Macro International Inc., 11785 Beltsville Drive, Suite 300, Calverton, MD 20705, USA (Telephone 301-572-0200; Fax 301-572-0999).

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FOREWORD

Similar to the 1991-92 Tanzania Demographic and Health Survey and the 1994 Tanzania Knowledge, Attitudes and Practices Survey (a subsample of the 1991-92 survey), the 1996 TDHS was a truly representative survey that utilised the sample frame and the same sample clusters that were covered in the first survey.

This report summarises basic information on fertility, mortality (infant, child, and maternal), contraceptive knowledge and use, and child bearing. It also looks at key maternal and child health indicators including the extent to which mothers utilise the available medical care during pregnancy and at the time of delivery, and for the young children, the immunisation coverage and the prevalence and treatment of malaria. Compared to the 1991-92 survey, the present survey was significantly expanded to cover areas on the sexual behaviour and awareness regarding AIDS. For the first time, data on maternal mortality and prevalence of female circumcision were collected and national estimates are presented in this report.

Before the 1991-92 survey, Tanzania had been relying on censuses as the principal source of demographic data. Vital registration which is a very important source of fertility and mortality information has been run on a small scale and could not be used to generate national estimates. Data on maternal and child health were obtained from health facility records alone and hence any information that could have been included from outside this source was not obtainable. These surveys represent a big step forward, which has enabled this country to collect high-quality data on demographic situations, family planning, and health.

The availability of data on a periodic basis provides policymakers, planners and analysts with the relevant information to monitor trends. The challenge that remains is to use the information collected in the two rounds of the TDHS as a basis for monitoring and improving the health status and reproductive child health service delivery programmes in Tanzania.

N.K. Mbalilaki
GOVERNMENT STATISTICIAN

ACKNOWLEDGMENTS

The 1996 TDHS is another successful undertaking by the Bureau of Statistics. The successful completion of this volume is an indication of the dedication and commitment of various individuals and institutions to which the Bureau of Statistics will remain indebted. I would like to extend my thanks to the Family Planning Unit in the Ministry of Health for their total commitment in proving logistical support particularly female interviewers and transport. My sincere appreciation is extended to various Government departments that participated in the design of the questionnaires. Tanzania Food and Nutrition Centre (TFNC), UMATI, and Maternal and Child Health Unit in the Iringa Regional Hospital are also acknowledged for providing training services to the interviewers. To the nurses who worked tirelessly throughout the survey period, my sincere thanks for their very valuable participation in the survey. They left their homes and family to endure the difficult logistical and technical difficulties in the field. Likewise, I thank staff in the Census Office under the supervision of Mr. S.A.M. Ngallaba who supervised the entire work of the survey.

I wish to express my deep appreciation to USAID for their continuing financial support to the data collection efforts, and sincere gratitude to Dr. F.M. Mburu for his encouraging support in the project during the entire period of the survey.

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The contribution of Government Officials at the national, regional, district, ward, and village levels for their vital role in ensuring the smooth and successful completion of the survey fieldwork is also appreciated. Last but not least, I wish to extend my sincere thanks to the women and men who agreed to give their time to attend to the interviews that were sometimes time consuming.

There are many who also put long hours to ensure the successful completion of this work; I thank them all for their valuable contributions.

N.K. Mbalilaki
GOVERNMENT STATISTICIAN

SUMMARY OF FINDINGS

The 1996 Tanzania Demographic and Health Survey (TDHS) is a nationally representative survey of 8,120 women age 15-49 and 2,256 men age 15-59. The main purpose of the 1996 TDHS is to provide detailed information on fertility, family planning, infant and child mortality, maternal and child health and nutrition, knowledge and attitudes of AIDS, and female circumcision. The 1996 TDHS is the third national sample survey of its kind to be undertaken. The first survey was done in 1991-92, which was followed by the Tanzania Knowledge, Attitudes and Practices Survey (TKAPS) in 1994.

Fertility

Fertility Trends

TDHS data show that fertility in Tanzania may be starting to decline. The total fertility rate (TFR) has declined from the level of 6.3 births per woman that prevailed in 1989-92 to 5.8 births for the period 1993-1996. The crude birth rate (CBR) for the period 1993-1996 is 41 live births per 1,000 population, lower than those from the 1991-92 TDHS (43 live births per 1,000 population) and the 1988 Census (46 births).

Fertility Differentials

Some women are apparently leading the fertility decline. Fertility levels are much higher in rural areas (TFR 6.3 children) than in urban areas (4.1) on the mainland. Total fertility rates are lowest in the Coastal and Southern zones (4.9 children per woman) and higher in the Lake and Central zones (7.0 and 6.1 children per woman, respectively). Women who have received some secondary education have the lowest level of fertility, with a total fertility rate of 4.8 compared with a rate of 7.1 children per women from those with either no education or incomplete primary education, a difference of more than two children.

Age at First Birth

Childbearing begins early in Tanzania, with just under half of the women becoming mothers by the time they reach age 18 and more than two-thirds having had a child by the time they reach age 20. Twenty-six percent of women age 15-19 are already mothers or pregnant with their first child, with teenage childbearing more common among mainland women (26 percent) than Zanzibar women (17 percent). The Southern zone has the highest prevalence of teenage childbearing (35 percent) while the Coastal zone has the lowest level (23 percent).

Birth Intervals

The majority of Tanzanian children (83 percent) are born after a "safe" birth interval (24 or more months apart), with 43 percent born at least 35 months after a prior birth. Nevertheless, 17 percent of non-first births occur less than 24 months after the preceding birth, with 7 percent occurring less than 18 months since the previous birth. The overall median birth interval is 34 months.

Fertility Preferences

Survey data indicate that there is a strong desire for children and a preference for large families. Among those with six or more children, almost one in five women wants to have more children compared to 43 percent of men. Overall, women report a mean ideal number of children of 5.5, compared with 5.9 children for men; ideal family size is higher among currently married women and men (5.9 and 6.7,

respectively). Only 5 percent of women and men regard a two-child family as ideal. Despite high fertility preferences, the data show that there has been a decline in ideal family size among women in Tanzania, from an average of 6.1 children in 1991-92 to 5.5 in 1996.

Unplanned Fertility

Despite the increasing level of contraceptive use, the 1996 TDHS data show that unplanned pregnancies are still common. About one-fourth of the births in the three years prior to the survey were reported to be unplanned; 15 percent were mistimed (wanted later) and 9 percent were unwanted. If unwanted births could be eliminated altogether, the total fertility rate in Tanzania would be 5.1 births per woman instead of the actual level of 5.8.

Family Planning

Knowledge of Contraceptive Use

More than 80 percent of women and men know of at least one modern method for family planning. Knowledge of at least one method mentioned by both spouses is high (86 percent). Among women, the pill is the best known method (78 percent), while among men, the condom is the best known method (86 percent). Seventy-one percent of women and 67 percent of men know at least three modern methods. The proportion of all women who have heard of at least one modern method increased from 72 percent in 1991-92 to 77 percent in 1994 and to 83 percent in 1996.

Use of Contraception

Sixteen percent of all women in Tanzania are currently using a contraceptive method and 12 percent are using modern methods. The most widely used methods are the pill (5 percent) and injectables (4 percent). Current use among men is higher than among women. Twenty-two percent of men in Tanzania are currently using contraception, 14 percent using modern and 8 percent using traditional methods. Contraceptive use in 1996 has increased since the 1991-92 TDHS, from 10 to 16 percent of all women using any method and from 6 to 12 percent using modern methods. Injectables had the highest increase from less than 1 percent to 4 percent in the same time period. Among men, use of modern methods increased from 8 percent to 14 percent for the same period.

However, the 1996 TDHS data show a slight decline in the contraceptive use rate since the 1994 TKAPS (from 18 to 16 percent of all women), which is due to a decline in the use of traditional methods; use of modern methods has slightly increased since 1994.

Differentials in Family Planning Use

There are differences in current use between the mainland and Zanzibar and more notably by regions, educational levels, and number of living children. Use of modern family planning methods is lower in Zanzibar (8 percent) than on the mainland (12 percent). In the mainland, urban women are much more likely to be using modern contraceptive methods (24 percent) than rural women (8 percent). Levels of current use of modern family planning methods are highest in the Kilimanjaro, Coast, and Dar es Salaam regions (23-24 percent) and lowest in the Shinyanga, Kagera, and Mara regions (4-5 percent). Twenty-six to 30 percent of men in the Mbeya, Singida, Dar es Salaam, and Coast regions are using modern family planning methods, compared with only 1 to 5 percent in the Mwanza and Shinyanga regions. Women with some secondary and higher education are five times more likely to use modern methods than women with no education (23 vs. 5 percent). Greater contraceptive use was also found to be associated with increasing level of education for men. Contraceptive use in Tanzania rises with the number of living children.

Sources of Contraceptives

About three-fourths of women currently using modern contraceptives obtained the method from the public sector, including government and district hospitals (24 percent), government health centres (22 percent), and government dispensaries or parastatal facilities (28 percent). Private medical sources account for 18 percent of current users. Community-based (CBD) workers supply nearly 2 percent of modern methods.

Family Planning Messages

Sixty-one percent of men and 45 percent women report that they have heard or seen a family planning message on the radio or television in the previous six months. Younger respondents are more exposed to family planning messages through radio and television than older respondents. Access to the media is much higher in Zanzibar than on the mainland. The proportion of respondents who have been exposed to family planning messages on the radio or television varies across regions and is by far the highest among respondents in Dar es Salaam.

Unmet Need for Family Planning

Overall, 24 percent of currently married women have unmet need for family planning services—15 percent for spacing and 9 percent for limiting births. The unmet need for family planning among currently married women in Tanzania has declined from 30 percent in 1991-92 to 24 percent in 1996 and the total demand satisfied has increased from 26 percent to 44 percent during the same period.

Maternal And Child Health

Childhood Mortality

At current mortality levels, one in every seven children born in Tanzania will die before the fifth birthday, with two-thirds of the deaths occurring during the first year of life. Results from the 1996 TDHS suggest a marked decline in child mortality over the years. All of the mortality rates, with the exception of postneonatal mortality, have declined steadily over the 15 years before the survey, with an 18 percent decline in under-five mortality, a 24 percent decline in child mortality, and a 14 percent decline in infant mortality. However, the biggest improvement was made in neonatal mortality with a decline of 32 percent. There is evidence of a decline when mortality rates in the 1996 TDHS are compared with the 1991-92 TDHS. For example, the infant mortality rate has declined from 92 to 88 deaths per 1,000 births and under-five mortality has declined from 141 to 137.

Mortality is consistently lower in urban than rural areas. In the 10 years preceding the survey, infant mortality is about 14 percent lower and under-five mortality is 19 percent lower in urban than in rural areas on the mainland. There are considerable variations in mortality by zones. Infant mortality rates are the lowest (41 per 1,000 live births) in the Northern Highlands. With the exception of this zone, infant mortality is about 100 per 1,000 live births in all other zones. Children born to mothers with no education suffer the highest mortality. The under-five mortality of children born to mothers with incomplete primary education is 7 percent lower than that for children whose mothers have no education.

Childhood Vaccination Coverage

The 1996 TDHS results show that 71 percent of children age 12-23 months have received all of the recommended vaccinations, while only 3 percent have not received any vaccination. The remaining 26 percent of children were partially vaccinated. Vaccination coverage is higher in Zanzibar than in the mainland. Less than half of the children age 12-23 months were fully vaccinated in the Shinyanga region in comparison with 94 percent coverage in the Kilimanjaro region. Immunisation coverage improves substantially as mothers' level of education increases, from 58 percent for children whose mothers have no formal education to 77 percent for children whose mothers have completed primary education or higher.

Childhood Health

Diarrhoeal and respiratory illnesses are common causes of child death. In the two weeks before the survey, 14 percent of children suffered from diarrhoea and 13 percent were ill with acute respiratory infections (ARI). About 60 percent of children with diarrhoea and 70 percent of children with ARI were taken to a health facility. Of all children with diarrhoea, 48 percent were treated with a solution prepared from packets of oral rehydration salts (ORS), 3 percent received recommended home fluids (RHF), and 50 percent received either ORS or RHF. In addition, 57 percent of mothers reported that they increased the amount of fluids given to their children who had diarrhoea.

Breastfeeding Practises

The 1996 TDHS results suggest that breastfeeding is almost universally practised in Tanzania, with a median duration of 22 months. Data show that about 60 percent of the children were breastfed within an hour of birth and 88 percent in the first 24 hours after delivery. Though exclusive breastfeeding is recommended until 4-6 months of age, 77 percent of children age 4-5 months receive complementary foods.

Childhood Nutritional Status

Overall, 43 percent of Tanzanian children under five are classified as stunted (low height-for-age) and 18 percent are severely stunted. Seven percent of children under five are wasted (low weight-for-height); 1 percent are severely wasted. Comparison with the 1991-92 TDHS shows little change in chronic undernutrition or stunting or acute undernutrition or wasting.

Maternal Health Care

The results of the survey indicate very high utilisation of antenatal care in Tanzania for most pregnancies (97 percent). In most cases antenatal care was provided by a trained nurse or midwife (43 percent), or a health aide (40 percent). Doctors provided about 7 percent of antenatal care, while traditional birth attendants (TBAs) provided 8 percent of antenatal care. In Tanzania, almost all women (91 percent) received tetanus toxoid vaccination during pregnancy, with women receiving two or more doses of vaccine for almost three-fourths of births and only one dose of tetanus toxoid vaccine for 17 percent of births. Overall, 47 percent of births were delivered in a health facility, while about half of the births occurred at home. More than 40 percent of births were assisted by medically trained personnel.

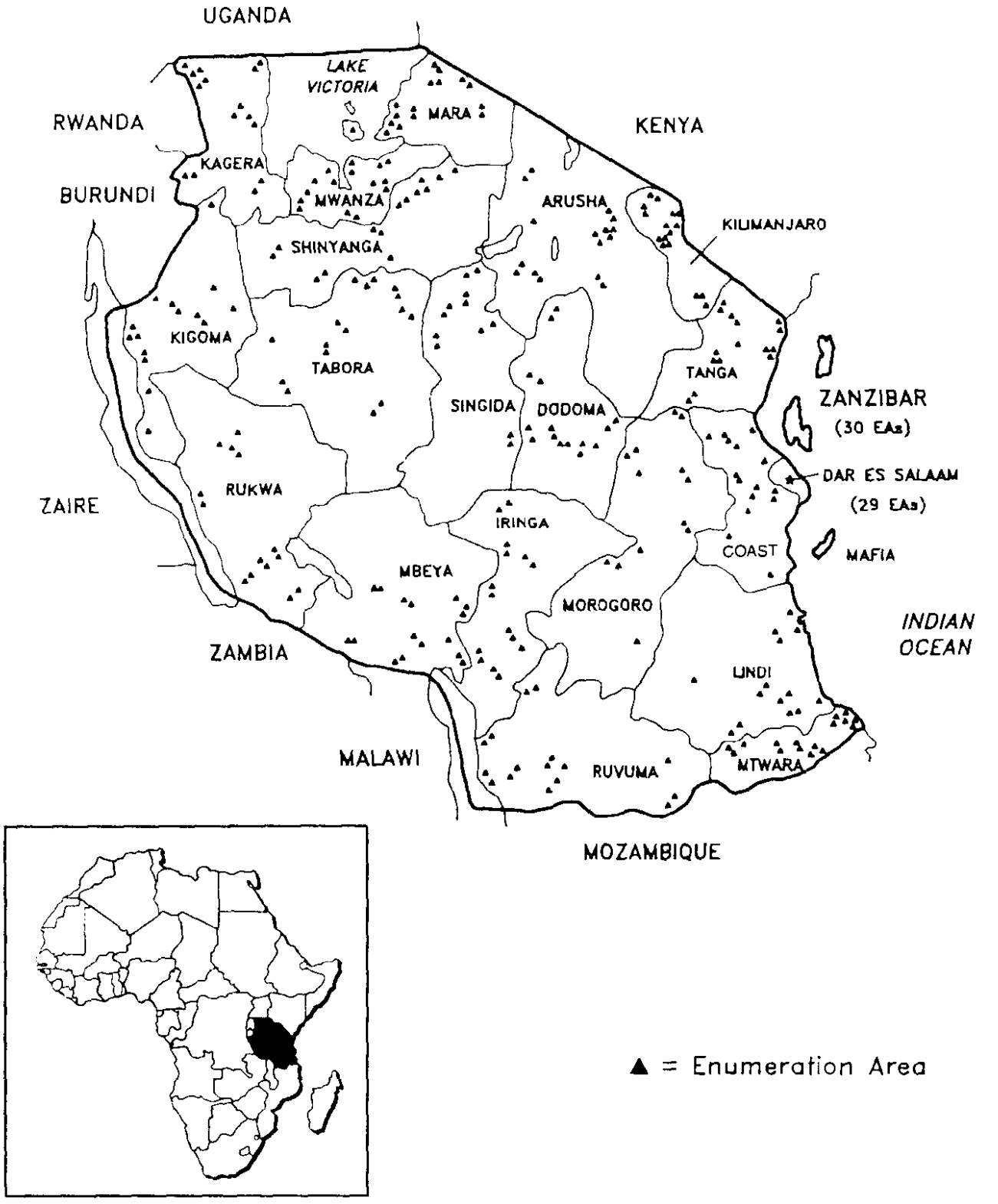
AIDS

Most women and men in Tanzania are aware of AIDS. Radio and friends or relatives are the main sources for knowledge of AIDS among both women and men. Thirty-nine percent of women and 55 percent of men cite use of condoms as a way to avoid AIDS. One-fourth say that having only one partner can help to prevent the spread of the disease, and 20 percent of women and 17 percent of men report that limiting the number of sexual partners can prevent AIDS. Twenty-nine percent of women and 41 percent of men say that they have no chance of being infected. Eighty-two percent of women and 91 percent of men reported changing their sexual behaviour to prevent getting AIDS.

Female Circumcision

The 1996 TDHS data show that 18 percent of women in Tanzania are circumcised. Younger women (age 15-19 years), women living in Zanzibar, and in urban areas on the mainland are less likely to be circumcised than other women. A higher proportion of women in the Arusha (81 percent), Dodoma (68 percent), and Mara (44 percent) regions are circumcised. About 7 percent of the eldest daughters of respondents were reported to have been circumcised.

TANZANIA


UGANDA
LAKE VICTORIA
RWANDA
MARA
KENYA
KAGERA
BURUNDI
MWANZA
ARUSHA
KILIMANJARO
SHINYANGA
KIGOMA
TABORA
TANGA
ZANZIBAR
(30 EAs)
SINGIDA
DODOMA
DAR ES SALAAM
(29 EAs)
RUKWA
ZAIRE
IRINGA
COAST
MAFIA
MBEYA
MOROGORO
INDIAN OCEAN
ZAMBIA
LINDI
MALAWI
RUVUMA
MTWARA
MOZAMBIQUE
▲ = Enumeration Area

CHAPTER 1

INTRODUCTION

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 is inland water. Tanzania lies south of the Equator and borders eight countries: Kenya and Uganda to the north; Rwanda, Burundi, Zaire, 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 is the world's second largest lake and drains into the Nile River. The Rufiji river is Tanzania's largest river and drains into the Indian Ocean south of Dar es Salaam. Although there are many rivers, only the Rufiji and Kagera are navigable by vessels larger than canoes.

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

Except for a narrow belt of 900 square kilometres along the coast, most of Tanzania lies above 200 metres, and much of the country is higher than 1,000 metres above sea level. In the north, Mount Kilimanjaro rises to more than 5,000 metres with the highest peak, Kibo, reaching 5,895 metres above sea level. This is the highest point in Africa. In all, this shows that Tanzania has a diversity of landscape.

The main climatic feature for most of the country is the long dry spell from May to October, followed by a period of rainfall from November to April. The main rainy season along the coast and the areas around Mount Kilimanjaro is from March to May, with short rains 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 between March and May.

Administratively, the mainland of Tanzania is divided into 20 regions and Zanzibar into 5 regions. Each region is subdivided into districts. To estimate geographic differentials for certain demographic characteristics, this report collapsed the administrative regions of mainland Tanzania into six ecological/geographical zones. This strategy allowed the necessary geographical comparisons to be made because it provided relatively large numbers of cases in each zone and thereby reduced sampling error. However, it should be noted that these "zones" do not conform to the administrative zones of the United Republic of Tanzania. The classification of regions into the zones is shown below:

Coastal Zone :	Tanga, Morogoro, Coast, Dar es Salaam, and Zanzibar.
Northern Highland Zone:	Arusha and Kilimanjaro.
Lake Zone:	Tabora, Kigoma, Shinyanga, Kagera, Mwanza, and Mara.
Central Zone:	Dodoma and Singida.
Southern Highland Zone:	Iringa, Mbeya, and Rukwa.
Southern Zone:	Lindi, Mtwara, and Ruvuma.

History

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

Economy

Tanzania has a mixed economy in which agriculture plays a key role. Agriculture which comprises crop, animal husbandry, forestry, fishery and hunting subsectors, contributes the largest share of any sector to the Gross Domestic Product (GDP).

The GDP increased by 3.9 percent in 1995 according to 1985 prices, compared with 3 percent recorded in 1994. However, this growth did not reach the targeted growth of 5 percent that was predicted in the 1995-98 Economic Recovery Programmes. The economic growth rate attained in 1995 is higher than the predicted population growth rate of 3 percent.

1.2 Demographic Statistics

The 1967 population Census of Tanzania reported a total population of 12.3 million. According to the 1988 census, the population had increased to 23.1 million as shown in Table 1.1. Tanzania is still sparsely populated, though the 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 1988 it had increased to 26 persons per square kilometre. Although the population is still predominantly rural, the proportion of urban residents has been increasing steadily, increasing from 6 percent in 1967 to 18 percent in 1988. While crude death rates in Tanzania may be decreasing, the total fertility rate—among the highest in Africa—is beginning to decline.

Although many small-scale surveys have been conducted in the country, censuses and the 1991-92 Tanzania Demographic and Health Survey (TDHS) have been the main sources of national-level demographic statistics in Tanzania. Civil registration has never been used as a source of demographic statistics because its coverage is incomplete. Table 1.1 gives the demographic indices as compiled from the censuses since 1967.

Table 1.1 Demographic characteristics

Selected demographic indicators, Tanzania: 1967-1988

	Census year		
Index	1967	1978	1988
Population (millions)	12.3	17.5	23.1
Intercensal growth rate	2.6	3.2	2.8
Sex ratio	95.2	96.2	94.2
Crude birth rate	47	49	46
Total fertility rate	6.6	6.9	6.5
Crude death rate	24	19	15
Infant mortality rate	155	137	115
Percent urban	6.4	13.8	18.3
Density (pop/km^2)	14	20	26

Source: Bureau of Statistics, 1967; 1978; 1988.

1.3 Population and Family Planning Policies and Programmes

Population Policy

The population of Tanzania has trebled from 7.7 million in 1948 to 23.1 million in 1988. It is estimated that the population increase is at present roughly more than 600,000 persons per year. It is, therefore, projected that by the year 2000, the population will be about 33 million on an assumption of a slight decline in fertility offset by the continued decline in mortality. However, the national economy did not grow significantly in the past decade due to various constraints, and therefore the resources available per head increased by 1 percent per annum between 1985 and 1991. During 1988-91, the economy grew at an average of 5.2 percent per year and the per capita income increased by 2 percent. However, in 1992-95, the economy grew at an average of 3.7 percent and the per capita income grew at an average of 0.8 percent per year. On the other hand, the population continued to grow at a high rate, the consequences of which are felt acutely and visibly in the public budgets for health, education, and related fields of human resource development. It is evident, therefore, that improvement in the quality and expansion of these services is unlikely to happen without controlling rapid population growth and strengthening the national economy.

It is against this background that Tanzania adopted the 1992 National Population Policy. The principal objective of the policy is to reinforce national development through developing available resources to improve the quality of life of its people. Special emphasis is placed on regulating the population growth rate, enhancing population quality, and improving the health and welfare of women and children. The primary concerns of the National Population Policy are to safeguard, as much as possible, the satisfaction of the basic needs of vulnerable groups in the population, and to develop human resources for current and future national socioeconomic progress. Since Tanzania was concerned with population and development issues before the adoption of an explicit population policy, the country has the tradition of taking population issues into account in its development plans.

With specific reference to family planning, the goals of the policy are to strengthen family planning services to promote the health and welfare of the family, the community and the nation, and eventually reduce the rate of population growth. Other specific objectives related to population regulation include making family planning services available to all who want them, encouraging every family to space births at least two years apart, and supporting family life education programmes for youth and family planning for men and women.

Family Planning

The Family Planning Association of Tanzania (UMATI) introduced family planning services to Tanzania in 1959. During the early years the services were mostly provided in few urban areas with little support from the government. With the expansion of UMATI in the early 70s, services were extended to cover more areas in the country. The government became actively involved in providing family planning services following the launching of the integrated Maternal and Child Health (MCH) programme in 1974. Currently, family planning services are provided by both governmental and nongovernmental organisations under the coordination of the Family Planning Unit (FPU) in the Ministry of Health. Clinical services are complemented by community-based services. A social marketing programme is being considered.

1.4 Health Priorities and Programmes

The Tanzania government emphasises equity in the distribution of health services and views access to services as a basic human right. To respond to the worldwide efforts to attain the social goal of "Health to All" by the year 2000, Tanzania's health strategy focuses on the delivery of primary health care services. In

1991 a new Primary Health Care (PHC) strategy was developed by the Ministry of Health. The primary objective of the PHC focuses on strengthening district management capacity, multisectoral collaboration, and community involvement.

The government provides more than 60 percent of health services; the remainder is provided by nongovernmental organisations. The top of the extensive network of health facilities consists at the national level of four referral hospitals, one of which is the university teaching hospital. Most regions have a regional hospital and there are 183 hospitals in the country. At the divisional level, there are 291 health centres and at the ward level there are 3,286 dispensaries. At the village level, village health posts have been established, staffed with at least two village health workers. There are more than 5,550 village health workers in Tanzania.

1.5 Objectives and Organisation of the 1996 Tanzania Demographic and Health Survey

The 1996 TDHS is the third national sample survey of its kind to be undertaken. The first survey was done in 1991-92 followed by the Tanzania Knowledge, Attitudes and Practices Survey (TKAPS) in 1994. In addition to most of the same questions included in these two surveys, the 1996 TDHS added more detailed questions on AIDS, maternal mortality, and female circumcision.

The general objectives of the 1996 TDHS are to:

- Provide national-level data that will allow the calculation of demographic rates, particularly fertility and childhood mortality rates
- Analyze the direct and indirect factors which determine the level and trends of fertility
- Measure the level of contraceptive knowledge and practice (of both women and men) by method, by urban-rural residence, and by region
- Collect reliable data on maternal and child health indicators; immunisation, prevalence, and treatment of diarrhoea and other diseases among children under age five; antenatal visits; assistance at delivery; and breastfeeding
- Assess the nutritional status of children under age five and their mothers by means of anthropometric measurements (weight and height), and child feeding practices
- Assess among women and men the prevailing level of specific knowledge and attitudes regarding AIDS and evaluate patterns of recent behaviour regarding condom use
- Measure maternal mortality and collect data on female circumcision.

Survey Organisation

The 1996 TDHS, like the previous similar surveys, involved various institutions and individuals. The Bureau of Statistics in the Planning Commission had the overall responsibility of running the survey while the Ministry of Health provided technical and logistical support.

Financial support was provided by the USAID and administered by Macro International Inc., which also rendered technical advice. The funds were used to meet expenses related to allowances for field personnel, data processing, anthropometric equipment, printing of questionnaires, fuel and maintenance of field vehicles, and dissemination of the survey results. The Government of Tanzania provided local professional staff, accommodation, transport, and other field logistics.

Sample Design

The TDHS sample was a three-stage design consisting of the same 357 enumeration areas (EAs) that were used in tbe 1991-92 TDHS (262 EAs in rural and 95 EAs in urban areas). The selection of EAs was made in two stages: first, wards/branches and then EAs within wards/branches were selected. Lists of all households were prepared for the selected EAs and, at the third sampling stage, households were selected from these lists. The TDHS was designed to provide estimates (based on the results of the Woman's Questionnaire) for the whole country, for urban and rural areas in the country, and groups of regions (zones). In addition, the sample will provide certain estimates for each of the 20 regions in the mainland and 2 subgroups in Zanzibar: Pemba Island and Ungaja. In most regions, one in every four households was selected for the men's survey, and in six regions (Dar es Salaam, Dodoma, Iringa, Kilimanjaro, Morogoro, and Shinyanga), men in every second household were selected for the interview. The sample of men was designed to provide estimates for the country as a whole and for urban and rural areas.

Unlike most other DHS surveys, households in Tanzania were selected from the household listing for each ward (or branch) on the basis of contiguity, beginning with a randomly selected start number. This selection process was used to minimise the difficulty encountered in moving from one selected household to another given the scattered nature of housebolds.

Questionnaires

Three types of questionnaires were used during the survey. The Household Questionnaire was used to list the names of the household members and certain individual characteristics of all usual members of the household and visitors who had spent the previous night in the household. Certain basic information was collected on characteristics of each person listed, including relationship, age, sex, education, and place of residence. Furthermore, the Household Questionnaire collected information on characteristics relating to the household. These included the source of water, type of toilet facilities, materials used for the floor of the house, and ownership of various durable goods. However, the main purpose of the Household Questionnaire was to identify women and men who were eligible for the individual interview.

The Female Questionnaire was used to collect information from eligible women age 15-49. The topics covered in this questionnaire included the following:

- Background characteristics of the woman including age, education, residential history
- Reproductive history
- Knowledge and use of family planning methods
- Fertility preferences and attitudes about family planning
- Antenatal and delivery care
- Breastfeeding and weaning practices
- Vaccinations and health status of children under age five
- Marriage and sexual activity
- Husband's occupation and education
- Woman's employment, occupation, and earnings
- Awareness and behaviour regarding AIDS and other sexually transmitted diseases
- Maternal mortality
- Female circumcision
- Height and weight of children under five years and their mothers.

The Male Questionnaire was used to collect information from a subsample of men age 15-59, namely, those living in every fourth household except in Dar es Salaam, Dodoma, Kilimanjaro, Morogoro, Shinyanga, and Iringa regions where every second household was selected for the male interview. The Male Questionnaire collected much of the same information found in the Women's Questionnaire, but was shorter because it did

not contain questions on reproductive history and maternal and child health. All questionnaires were translated and printed in Kiswahili. The final versions of the English questionnaires are provided in Appendix F.

Before the design of the questionnaires could be finalised, a pretest was done in May-June, 1996 to assess the viability of the questions, the flow and logical sequence of the skip pattern, and the field organisation. It covered an area outside Dar es Salaam and took about a week to complete. Modifications to the questionnaires were then made based on lessons drawn from the exercise.

Training and Fieldwork

As in the 1991-92 TDHS, the need to find competent interviewers was the guiding factor in recruiting interviewers. The Ministry of Health was again requested to secure the services of trained nurses to be interviewers in the 1996 TDHS. For Zanzibar, a similar request was made to the Zanzibar Ministry of Health to provide nurses for the interview work.

The 1996 TDHS field staff consisted of eight teams, each composed of six female interviewers, one male interviewer, a field editor, a supervisor, and a driver. Sixty female nurses and 12 male nurses were recruited and 8 statisticians were selected as supervisors. After three weeks of intensive training, 50 female and 8 male interviewers were selected for the fieldwork. During training, a series of assessment tests were given to the class. These tests were graded and the results were used to select interviewers. Those who showed extra understanding of the questionnaires and were also able to detect errors in completed questionnaires were later chosen to be field editors. The list of persons who were involved in the survey is presented in Appendix E.

The training of field staff for the main survey was conducted over a three-week period in early July 1996, at the Vocational Training Institute (VETA) in Iringa. Permanent staff from the Bureau of Statistics and staff from Macro International conducted the training with the support of guest lecturers from the UMATI, MCH personnel from the Iringa regional hospital, and staff from the Tanzania Food and Nutrition Centre. Trial interviews were conducted in nearby villages and some parts of the city of Iringa. Computer operators participated in the training to acquaint themselves with the questionnaires. The training course consisted of instructions in interviewing techniques, field procedures, a detailed review of items on the questionnaires, training and practice in weighing and measuring children, mock interviews between participants in the classroom, and practice interviews with real respondents in areas in and around Iringa.

Supervisors and editors were trained exclusively for three days to discuss their duties and responsibilities. Emphasis was given to the importance of ensuring data quality. The supervisor was required to act as the leader of the field team and be responsible for the well-being and safety of team members, completion of the assigned workload, and maintenance of data quality. The duties and responsibilities of the editor were to monitor interviewer performance and take anthropometric measurements of children and women. Close supervision of the interviewers and editing of completed questionnaires were emphasised to ensure that data collection was accurate and complete.

The fieldwork for the main survey began in late July 1996 and lasted until November 1996. Women and men for the individual interviews were identified during the household interview. It was stressed that the household interview had to be done by an interviewer other than the one who would conduct the individual interview. This was intended to reduce the error due to the age shifting particularly among women or men at the youngest or oldest age groups. Team supervisors located the households and assigned them to the interviewers. Completed household and individual questionnaires were handed over to the field editors who checked them to ensure that all relevant questions were properly recorded, that the skip pattern instructions were followed, and that responses were internally consistent. Each team was instructed to complete the editing work and resolve all errors found in the questionnaires before the team left the cluster. Supervisors were required to ensure that all the selected households and eligible women and men in a cluster were interviewed, and that assignment sheets for the interviewers and supervisors were filled out completely and correctly. The questionnaires and the control sheets were dispatched to the head office in Dar es Salaam for data processing.

Data Processing

The data processing staff for the survey initially consisted of four clerks and one supervisor who were staff of the Bureau of Statistics. However, to speed up the data processing work, an additional four data processing staff were recruited.

All questionnaires for the TDHS were returned to the Bureau of Statistics for data processing, which consisted of office editing, coding of open-ended questions, data entry, and editing of computer-identified errors. All data were processed on microcomputers with a software programme developed for DHS surveys, called the Integrated System for Survey Analysis (ISSA). Data entry was 100 percent verified. Office editing and data processing activities were initiated immediately after the beginning of fieldwork and completed in mid-December, 1996.

Response Rates

A summary of response rates from the household and individual interviews is shown in Table 1.2. In all, 8,900 households were selected, out of which 8,141 were occupied. Of the households found, 7,969 were interviewed, representing a response rate of 98 percent. The shortfall between the selected and the interviewed households was largely because many dwellings were either vacant or no competent respondents were present at the time of the visit.

In the interviewed households, 8,501 eligible women (i.e. women age 15-49) were identified for the individual interview, and 8,120 women were actually interviewed, yielding a response rate of 96 percent. In the subsample of households selected for the male interview, 2,658 eligible men (i.e., men age 15-59) were identified, 2,256 were interviewed, representing a response rate of 85 percent. The principal reason for nonresponse among both eligible men and women was the failure to find them at home despite repeated visits to the household. The lower response rates among men than women were due to the more frequent and longer absences of men.

Table 1.2 Results of the household and individual interviews

Number of households, number of interviews, and response rates, Tanzania *1996*

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households sampled	2,228	6,672	8,900
Households occupied	1,989	6,152	8,141
Households interviewed	1,912	6,057	7,969
Household response rate	96.1	98.5	97.9
Individual interviews			
Number of eligible women	2,186	6,315	8,501
Number of eligible women interviewed	2,088	6,032	8,120
Eligible women response rate	95.5	95.5	95.5
Number of eligible men	773	1,885	2,658
Number of eligible men interviewed	616	1,640	2,256
Eligible men response rate	79.7	87.0	84.9

The response rates are lower in urban areas. One-member households are more common in urban areas and are more difficult to interview because they keep their houses locked up most of the time. In urban settings, neighbours often do not know the whereabouts of such people.

CHAPTER 2

CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

This chapter presents information on selected socioeconomic characteristics of the household population and the individual survey respondents, such as age, sex, marital status, urban-rural residence, and regional distribution. The chapter also considers the conditions surrounding the households in which the survey population live, including sources of drinking water, availability of electricity, sanitation facilities, building materials, and persons per sleeping room.

The 1996 TDHS collected information on individual socioeconomic characteristics of all usual residents and visitors who had spent the previous night preceding the survey interview. This was done by using a questionnaire which was completed for each household. A household was defined as a person or group of persons who live together and share a common source of food.

2.1 Population by Age and Sex

Table 2.1 shows the distribution of the household population by five-year age groups, according to sex and urban-rural residence. As was observed in the censuses and the 1991-92 TDHS, the distribution conforms to the pattern typical of high-fertility populations, that is, a much higher proportion of the population is in the younger age groups than in the older age groups as clearly seen in the population pyramid (Figure 2.1). The slight irregular bulge of women at age 50-54 indicates that some women from ages 45-49 were shifted to the 50-54 age group, perhaps to reduce the workload of the interviewer. There is also an unusually large

Table 2.1 Household population by age, residence, and sex

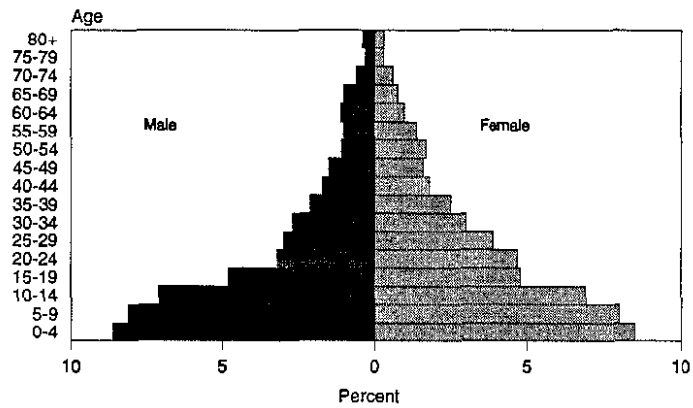
Percent distribution of the de facto household population by five-year age group, according to urban-rural residence and sex, Tanzania 1996

	Urban			Rural			Total		
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	16.4	13.8	15.1	18.1	17.1	17.6	17.8	16.4	17.1
5-9	13.5	13.0	13.2	17.5	16.0	16.7	16.7	15.4	16.0
10-14	12.6	13.1	12.8	15.3	13.5	14.4	14.8	13.4	14.1
15-19	10.8	11.3	11.1	9.8	8.8	9.3	10.0	9.3	9.6
20-24	9.4	12.2	10.8	5.9	8.2	7.1	6.6	9.0	7.8
25-29	8.4	9.8	9.1	5.6	7.1	6.4	6.2	7.6	6.9
30-34	6.6	6.3	6.4	5.2	5.6	5.4	5.5	5.8	5.6
35-39	5.8	5.9	5.8	4.0	4.5	4.3	4.4	4.8	4.6
40-44	4.4	3.5	3.9	3.3	3.5	3.4	3.5	3.5	3.5
45-49	3.2	2.3	2.7	3.2	3.3	3.2	3.2	3.1	3.1
50-54	2.0	2.4	2.2	2.2	3.4	2.9	2.2	3.2	2.7
55-59	1.8	1.8	1.8	2.1	2.9	2.5	2.0	2.7	2.4
60-64	2.1	1.7	1.9	2.4	2.0	2.2	2.3	2.0	2.1
65-69	1.3	1.3	1.3	2.2	1.6	1.9	2.0	1.5	1.8
70-74	0.9	0.7	0.8	1.3	1.2	1.2	1.2	1.1	1.1
75-79	0.3	0.4	0.4	0.8	0.6	0.7	0.7	0.6	0.6
80 +	0.3	0.5	0.4	0.9	0.7	0.8	0.8	0.7	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	3,690	3,876	7,567	14,775	15,931	30,714	18,464	19,807	38,281

Note: Total includes 9 persons whose sex was not stated.

number of girls age 14 relative to the number age 15 (see Appendix Table C.1), which presumably is due to the same phenomenon. This pattern of age shifting has also been observed in other DHS surveys.

Figure 2.1
Distribution of the Household Population by Age



2.2 Population by Age from Selected Sources

Table 2.2 shows that the population age structure is similar to that found in the 1967, 1978, and 1988 censuses as well as that observed in the 1991-92 TDHS. The proportion of the population under age 15 is about 47 percent and the population in age group 15-64 accounts for 49 percent, with the remaining 4 percent above age 65. The population has a low median age of 16.4 years. A dependency ratio is also presented in Table 2.2. The age dependency ratio is the ratio of the total number of persons below age 15 years and age 65 and above divided by the number of persons age 15 to 64. This is simply an indicator of the dependency responsibility of adults in their productive years. In 1996, the dependency ratio is 106 which means that there are 106 persons less than 15 years old or more than 64 years of age in Tanzania for every 100 persons age 15-64.

2.3 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 2.3. This table also shows the percentage of households with foster children. The data show that 78 percent of the households in Tanzania are headed by men, which is higher than that found in the 1988 Census (70 percent), but lower than the 1991-92 TDHS figure (81 percent).

Table 2.2 Population by age from selected sources

Percent distribution of the population by age group, according to selected sources, Tanzania 1967-1996

Age group	1967 Census	1978 Census	1988 Census	1991-92 TDHS	1994 TKAPS	1996 TDHS
<15	43.9	46.1	45.8	46.8	49.3	47.2
15-64	50.5	49.9	49.9	49.3	46.4	48.5
65+	5.6	4.0	4.3	3.9	4.3	4.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Median age	U	U	U	16.4	15.4	16.4
Dependency ratio	98	100	100	103	115	106

Sources: Bureau of Statistics, 1967-1996
U = Unknown

Households with one or two members constitute 21 percent of all households. This category of households is more common in urban areas (30 percent) than in rural areas (19 percent). Rural households are larger than urban households—the mean household size is 5.1 in rural areas and 4.3 in urban areas. The average household size is 4.9 persons which is higher than the 1988 Census figure of 4.2 (Bureau of Statistics, 1994).

About one in five households has foster children, that is, children under age 15 living in a household with neither their biological mother nor father present. Although figures show a slight decline in foster children (from 23.1 percent in 1991-92 to 21 percent in 1996), the proportion is still high. The high proportion of households with foster children certainly intensifies the economic burden on these households. With the current high prevalence of AIDS, the percentage of households with foster children in Tanzania is likely to rise.

Table 2.3 Household composition

Percent distribution of households by sex of head of household, household size, and presence of foster children, according to urban-rural residence, Tanzania 1996

Characteristic	Residence		
	Urban	Rural	Total
Household headship			
Male	76.7	78.7	78.2
Female	23.3	21.3	21.8
Number of usual members			
1	14.6	7.4	9.0
2	15.4	11.5	12.4
3	16.7	13.0	13.8
4	12.4	14.5	14.0
5	12.8	14.2	13.9
6	9.1	13.4	12.4
7	6.4	10.2	9.3
8	4.8	6.1	5.8
9+	7.8	9.7	9.3
Total	100.0	100.0	100.0
Mean size	4.3	5.1	4.9
Percentage of households with foster children	20.1	21.2	21.0

Note: Table is based on de jure members; i.e., usual residents.
Note: By convention, *foster* children are those who are not living with either biological parent. This includes *orphans*, i.e., children with both parents dead.

2.4 Fosterhood and Orphanhood

Information regarding fosterhood and orphanhood of children under 15 years of age is presented in Table 2.4. Sixty-three percent of children under 15 years of age are living with both parents, 18 percent are living with their mothers (but not with their fathers), 4 percent are living with their fathers (but not with their mothers) and 14 percent are living with neither their natural father nor natural mother. Of children under 15 years of age, 6 percent have lost their fathers and 3 percent have lost their mothers. Less than 1 percent of children have lost both their natural parents.

2.5 Educational Level of Household Population

In the three decades since independence, the education sector has expanded to reach most parts of the country and phenomenal growth has been recorded in both enrolment and the number of new institutions. For example, in 1970, a nationwide literacy programme was launched and in 1975 a national policy of Universal Primary Education was adopted. This programme gave every child the right to free primary education. In the mainland, primary education which includes seven years of schooling was made compulsory for all children 7 to 14 years of age in 1978. There are six years of secondary education. Entry into the fifth year of secondary education (Form V) is based on open competitive examination results. In Zanzibar, although education incorporates two stages, it differs slightly from the mainland system. Primary education begins at age 6-8 years and takes 8 years to complete. It is followed by two three-year cycles of secondary education.

In the 1996 TDHS, information on educational attainment was collected for every member of the household. Tables 2.5.1 and 2.5.2 show the percent distribution of the de facto female and male household population age six and over, respectively, by the highest level of education attended, and the median number of years of schooling completed, according to selected background characteristics.

Table 2.4 Fosterhood and orphanhood

Percent distribution of de jure children under age 15 by survival status of parents and child's living arrangements, according to child's age, sex, residence, and region, Tanzania 1996

Background characteristic	Living with both parents	Living with mother but not father		Living with father but not mother		Not living with either parent				Missing information on father/ mother	Total	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Father only alive	Mother only alive	Both dead			
Age												
<2	74.1	19.1	1.6	0.5	0.1	3.0	0.2	0.1	0.0	1.2	100.0	3,932
3-5	66.7	13.9	3.0	2.1	0.6	11.1	0.7	0.8	0.3	0.9	100.0	3,868
6-9	61.3	11.8	4.1	3.6	1.1	12.5	1.2	1.9	0.7	1.6	100.0	4,892
10-14	54.2	10.8	6.2	4.5	2.3	13.4	2.0	2.9	1.1	2.6	100.0	5,384
Sex												
Male	63.2	13.6	3.8	3.1	1.3	10.1	1.1	1.6	0.6	1.6	100.0	9,110
Female	63.1	13.5	4.1	2.6	1.0	10.6	1.1	1.5	0.6	1.8	100.0	8,962
Residence												
Mainland	63.2	13.5	4.0	2.9	1.2	10.3	1.1	1.6	0.6	1.6	100.0	17,503
Total urban	58.6	16.0	2.9	3.2	1.5	12.1	0.8	1.9	0.9	2.1	100.0	2,935
Dar es Salaam city	61.0	13.3	2.4	3.2	1.3	11.1	1.3	2.1	1.3	3.2	100.0	787
Other urban	57.7	17.0	3.1	3.2	1.6	12.5	0.7	1.8	0.8	1.7	100.0	2,148
Total rural	64.1	13.0	4.2	2.8	1.1	9.9	1.2	1.5	0.6	1.6	100.0	14,568
Zanzibar	60.8	15.7	2.6	2.9	0.2	13.5	0.6	1.4	0.4	1.9	100.0	573
Pemba	64.0	15.7	3.4	2.6	0.3	10.3	1.3	0.8	0.1	1.5	100.0	269
Unguja	58.1	15.6	1.9	3.0	0.1	16.3	0.0	1.9	0.7	2.2	100.0	305
Region[1]												
Dodoma	63.0	14.6	5.0	2.3	1.9	9.0	1.4	2.0	0.0	0.9	100.0	803
Arusha	74.8	9.8	4.5	1.2	0.8	6.2	0.9	0.9	0.4	0.5	100.0	1,466
Kilimanjaro	54.5	20.6	2.6	1.5	0.5	14.5	1.1	1.8	0.4	2.7	100.0	843
Tanga	62.9	15.6	3.4	3.9	1.0	8.4	1.5	0.9	0.5	2.0	100.0	948
Morogoro	59.1	19.1	4.6	3.0	2.0	8.6	1.5	1.6	0.2	0.4	100.0	870
Coast	53.5	21.8	1.7	4.2	0.7	11.0	1.3	1.5	1.2	3.3	100.0	344
Dar es Salaam	61.8	11.8	2.7	3.1	1.3	11.1	1.3	2.0	1.4	3.3	100.0	952
Lindi	47.0	21.0	3.1	5.3	2.4	14.9	1.0	2.8	0.4	2.1	100.0	404
Mtwara	48.4	19.0	3.3	5.5	1.5	15.4	0.5	3.0	0.4	2.9	100.0	628
Ruvuma	62.5	18.2	2.2	3.8	1.2	6.0	1.1	1.0	0.3	3.7	100.0	689
Iringa	62.3	18.2	7.1	0.6	0.8	6.3	0.8	1.4	0.6	1.8	100.0	1,009
Mbeya	60.7	11.5	6.4	3.6	1.8	11.6	2.8	0.7	0.2	0.8	100.0	929
Singida	66.7	11.3	2.6	3.0	0.5	12.0	1.3	0.8	0.3	1.5	100.0	763
Tabora	55.2	14.9	1.6	3.6	1.4	19.1	0.0	0.5	0.9	2.9	100.0	502
Rukwa	68.9	14.1	2.1	3.0	1.4	7.9	0.9	1.5	0.0	0.4	100.0	571
Kigoma	77.5	8.1	2.9	3.3	0.9	3.5	1.0	0.8	0.2	1.9	100.0	850
Shinyanga	66.4	11.1	3.7	3.5	0.9	10.3	1.2	1.3	0.5	1.2	100.0	1,587
Kagera	62.8	8.0	6.7	3.5	1.9	9.9	0.7	2.5	2.4	1.7	100.0	1,240
Mwanza	67.4	10.2	1.7	1.4	0.4	14.7	1.4	1.6	0.8	0.4	100.0	1,425
Mara	54.5	10.9	9.3	2.9	2.2	12.8	0.3	4.0	0.4	2.7	100.0	681
Total	63.1	13.6	4.0	2.9	1.2	10.4	1.1	1.6	0.6	1.7	100.0	18,076

Note: By convention, *foster* children are those who are not living with either biological parent. This includes *orphans*, i.e., children with both parents dead.

[1] This table and subsequent tables show 20 regions from Mainland and do not include any region from Zanzibar. Dar es Salaam region includes Dar es Salaam city and rural areas in Dar es Salaam region.

Table 2.5.1 Educational level of the female household population

Percent distribution of the de facto female household population age six and over by highest level of education attended, and median number of years of schooling, according to selected background characteristics, Tanzania 1996

Background characteristic	Level of education					Total	Median years of schooling	Total number
	No education	Primary incomplete	Completed primary	Some secondary and higher	Don't know/ missing			
Age								
6-9	75.4	23.2	0.0	0.0	1.4	100.0	0.0	2,409
10-14	21.4	76.0	1.9	0.2	0.6	100.0	1.6	2,650
15-19	16.0	32.6	45.5	5.6	0.4	100.0	6.0	1,840
20-24	16.6	13.6	61.2	8.2	0.4	100.0	6.3	1,781
25-29	19.2	11.9	62.6	5.7	0.6	100.0	6.3	1,508
30-34	28.1	16.0	50.2	5.4	0.3	100.0	6.1	1,140
35-39	44.1	19.1	33.1	3.2	0.6	100.0	2.1	943
40-44	54.1	25.2	16.9	2.9	0.9	100.0	0.0	688
45-49	62.7	26.1	8.5	1.8	0.9	100.0	0.0	614
50-54	71.7	22.3	2.9	0.3	2.8	100.0	0.0	641
55-59	79.2	15.3	2.2	0.5	2.7	100.0	0.0	528
60-64	83.5	12.6	0.5	0.2	3.2	100.0	0.0	388
65+	88.1	6.9	1.2	0.0	3.8	100.0	0.0	761
Residence								
Mainland	41.7	29.0	25.8	2.6	1.1	100.0	1.2	15,417
Total urban	24.7	29.0	37.0	8.3	1.0	100.0	4.4	3,069
Dar es Salaam city	22.0	25.4	38.2	12.6	1.8	100.0	6.0	878
Other urban	25.8	30.5	36.5	6.6	0.6	100.0	3.9	12,191
Total rural	45.9	29.0	23.0	1.1	1.1	100.0	0.2	2,348
Zanzibar	43.4	30.4	9.5	15.5	1.2	100.0	1.0	484
Pemba	49.6	32.6	6.5	10.4	0.9	100.0	0.0	200
Unguja	39.1	28.8	11.7	19.0	1.3	100.0	2.2	283
Region								
Dodoma	46.6	24.9	25.7	2.3	0.5	100.0	0.0	741
Arusha	50.9	20.1	24.8	2.0	2.1	100.0	0.0	1,113
Kilimanjaro	21.5	40.1	31.9	5.7	0.8	100.0	3.7	819
Tanga	39.6	30.9	28.8	0.4	0.3	100.0	1.9	903
Morogoro	45.0	30.6	23.3	0.8	0.4	100.0	0.5	857
Coast	47.6	25.9	24.0	1.1	1.4	100.0	0.1	357
Dar es Salaam	23.5	25.8	37.8	11.2	1.7	100.0	5.6	1,019
Lindi	40.8	29.7	25.0	2.2	2.3	100.0	1.1	387
Mtwara	48.5	27.0	22.9	0.4	1.3	100.0	0.0	709
Ruvuma	28.7	36.6	31.8	1.9	1.1	100.0	3.2	623
Iringa	42.9	31.7	21.8	3.1	0.5	100.0	0.8	905
Mbeya	35.8	31.6	29.4	2.1	1.1	100.0	2.1	858
Singida	44.1	29.7	23.4	1.8	1.1	100.0	0.6	604
Tabora	44.4	25.4	26.1	2.1	1.9	100.0	0.4	476
Rukwa	50.5	28.4	19.1	1.7	0.3	100.0	0.0	460
Kigoma	44.3	28.0	25.7	0.4	1.6	100.0	0.1	697
Shinyanga	49.1	25.6	20.7	3.3	1.3	100.0	0.0	1,285
Kagara	42.4	30.7	25.0	1.0	0.9	100.0	0.7	965
Mwanza	49.7	28.4	19.6	2.0	0.3	100.0	0.0	1,123
Mara	36.7	33.5	28.1	0.9	0.9	100.0	1.7	517
Total	41.7	29.0	25.3	3.0	1.1	100.0	1.2	15,901

Note: Total includes 11 women with age missing.

Table 2.5.2 Educational level of the male household population

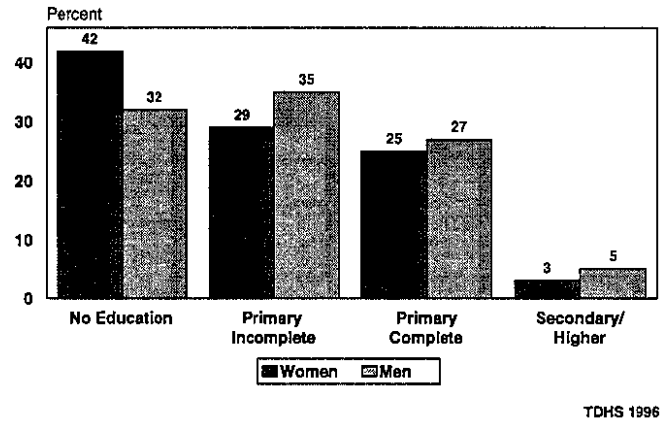
Percent distribution of the de facto male household population age six and over by highest level of education attended, and median number of years of schooling, according to selected background characteristics, Tanzania 1996

Background characteristic	Level of education					Total	Median years of schooling	Total number
	No education	Primary incomplete	Completed primary	Some secondary and higher	Don't know/ missing			
Age								
6-9	79.1	19.0	0.0	0.0	1.9	100.0	0.0	2,462
10-14	23.4	74.7	1.2	0.1	0.6	100.0	1.1	2,729
15-19	9.9	47.9	36.9	5.0	0.3	100.0	5.3	1,853
20-24	9.3	15.4	61.3	13.3	0.7	100.0	6.4	1,223
25-29	10.8	11.2	66.1	11.3	0.5	100.0	6.4	1,143
30-34	11.2	12.0	66.0	10.4	0.4	100.0	6.4	1,018
35-39	16.6	17.3	54.7	10.5	0.9	100.0	6.3	810
40-44	21.7	31.4	34.4	11.7	0.7	100.0	4.2	641
45-49	26.9	34.2	28.3	9.6	1.0	100.0	3.7	589
50-54	29.8	45.8	17.2	6.6	0.6	100.0	3.3	407
55-59	39.8	41.9	11.2	5.5	1.6	100.0	2.6	378
60-64	52.1	36.5	7.4	1.5	2.5	100.0	0.0	427
65+	64.7	27.5	3.9	1.5	2.4	100.0	0.0	863
Residence								
Mainland	31.6	35.2	27.3	4.9	1.0	100.0	2.9	14,109
Total urban	18.7	31.2	35.3	13.8	1.0	100.0	5.7	2,831
Dar es Salaam city	14.6	26.3	38.6	18.3	2.2	100.0	6.2	904
Other urban	20.6	33.5	33.7	11.7	0.5	100.0	4.6	1,927
Total rural	34.8	36.2	25.3	2.7	1.0	100.0	2.1	11,278
Zanzibar	33.0	34.4	12.1	18.7	1.8	100.0	2.5	450
Pemba	41.9	36.2	7.9	13.3	0.7	100.0	0.7	187
Unguja	26.6	33.2	15.1	22.6	2.6	100.0	3.6	263
Region								
Dodoma	39.5	32.4	23.2	4.2	0.7	100.0	1.7	648
Arusha	40.3	27.1	26.5	4.5	1.7	100.0	1.4	1,038
Kilimanjaro	13.8	43.5	33.9	8.1	0.7	100.0	4.7	741
Tanga	27.6	41.0	28.9	1.5	1.0	100.0	3.1	796
Morogoro	34.2	35.8	26.3	3.1	0.6	100.0	2.9	704
Coast	33.4	33.8	26.6	4.7	1.5	100.0	2.5	313
Dar es Salaam	15.8	27.0	37.5	17.2	2.4	100.0	6.1	1,058
Lindi	36.3	36.1	23.1	3.1	1.5	100.0	2.4	367
Mtwara	35.7	39.0	23.2	1.3	0.8	100.0	1.9	590
Ruvuma	24.1	37.8	33.4	3.6	1.1	100.0	3.4	549
Iringa	36.1	36.3	24.1	3.1	0.3	100.0	2.2	710
Mbeya	29.6	33.0	30.0	7.1	0.4	100.0	3.4	817
Singida	37.1	35.2	23.8	2.5	1.4	100.0	1.5	552
Tabora	32.4	30.7	32.2	3.9	0.7	100.0	2.9	460
Rukwa	34.9	33.8	29.0	2.2	0.0	100.0	2.8	440
Kigoma	35.6	34.6	26.8	2.4	0.6	100.0	2.2	616
Shinyanga	38.4	33.9	21.4	5.3	1.1	100.0	1.2	1,221
Kagera	28.8	38.3	26.2	5.5	1.2	100.0	2.5	931
Mwanza	35.5	38.1	23.7	2.1	0.5	100.0	2.1	1,076
Mara	26.7	42.0	26.9	2.9	1.5	100.0	2.6	481
Total	31.6	35.1	26.9	5.3	1.0	100.0	2.8	14,559

Note: Total includes 17 men with age missing

There is a strong differential in educational attainment between the sexes, especially as age increases. About 42 percent of women and 32 percent of men in Tanzania have never been to school (Figure 2.2). The proportions with no education increase with age. For example, the proportion of women who have never attended any formal schooling increases with age from 16 percent (age group 15-19) to 88 percent (age group 65 and over); for men, the proportion increases from 10 percent (age group 15-19) to 65 percent (age group 65 and over). Fifty-four percent of women and 62 percent of men have attained some primary education and only 3 percent of women and 5 percent of men have attained some secondary education. There are more men with completed primary education than women at almost all age groups except the younger age groups (below 20 years). The median number of years of schooling is 1.2 for women and 2.8 for men.

Figure 2.2
Level of Education for Men and Women



Overall, educational attainment is higher in urban areas than in rural areas on the mainland. The proportion of women with no education in urban areas is lower (25 percent) than in rural areas (46 percent); among men, the proportion with no education in urban areas is 19 percent compared to 35 percent in rural areas. The percentage with primary and secondary education is higher for urban than for rural women and men.

In Zanzibar, the proportions of both males and females with no education are higher than those observed in the mainland. However, Zanzibar records the highest proportion of the population with secondary or higher education. This is due to the fact that compulsory primary education incorporates three years of secondary education.

The highest proportions of women with no education (above 40 percent) and men (above 35 percent) are concentrated in the Dodoma, Arusha, Lindi, Mtwara, Iringa, Singida, Kigoma, Shinyanga and Mwanza regions. Dar es Salaam and Kilimanjaro regions have the lowest proportions of male and female respondents with no education (below 20 and 25 percent, respectively).

2.6 School Enrolment

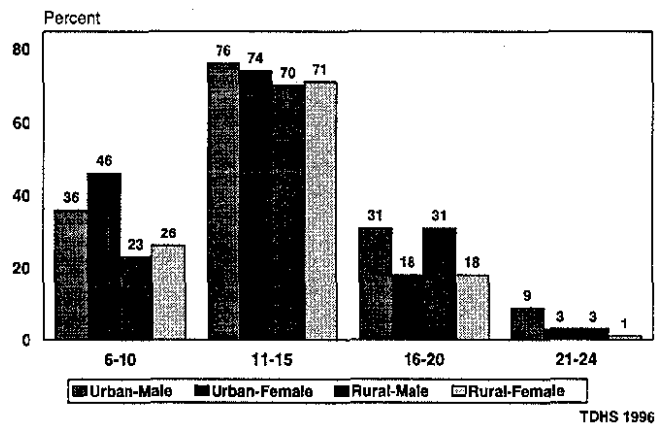
Table 2.6 and Figure 2.3 present the percentage of the de facto household population 6-24 years of age enrolled in schools by age, sex, and urban-rural residence. The school enrolment ratio is the number enrolled in a specific age group per hundred persons in that particular age group. As shown in this table, enrolment of children age 11-15 is higher than for children age 6-10 (71 vs. 27 percent) suggesting that many children start primary education after age 6 or 7. In age group 6-15 there is a remarkable urban-rural difference in enrolment with 45 percent of rural children and 57 percent of urban children enrolled. This is in contrast with enrolment ratios observed in the 1991-92 TDHS in which an urban-rural difference of 6 percent was recorded. Enrolment drops after age 15 with about 31 percent of male children and 18 percent of females age 16-20 years old, and 5 percent of males and 1 percent of females in their early 20s still in school.

Table 2.6 School enrolment

Percentage of the de facto household population age 6-24 years enrolled in school, by age, sex, and residence, Tanzania 1996

	Male			Female			Total		
Age	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6-10	36.3	23.0	25.1	45.9	26.0	29.5	41.2	24.5	27.3
11-15	76.3	70.3	71.3	73.9	70.6	71.2	75.1	70.4	71.3
Total 6-15	54.8	44.0	45.8	58.5	45.4	47.7	56.6	44.7	46.8
16-20	31.1	31.1	31.1	17.6	17.8	17.8	23.7	24.3	24.1
21-24	9.4	3.0	4.8	2.7	0.9	1.4	5.5	1.7	2.7

Figure 2.3
School Enrolment by Age and Place of Residence



2.7 Housing Characteristics

To assess the economic and environmental conditions in which respondents live, women were asked questions about certain characteristics of their households, including electricity, sources of drinking water, time to water sources, type of toilet facility, floor materials, and number of rooms used for sleeping. Information on these characteristics is useful from a public health point of view, as well as indirectly in reflecting the household's socioeconomic status. This information on housing characteristics is given in Table 2.7.

Only 9 percent of households in Tanzania have electricity. Access to electricity is concentrated in urban areas where 36 percent of the households have electricity, compared to a mere 2 percent of rural households.

Table 2.7 Housing characteristics

Percent distribution of households by housing characteristics, according to residence, Tanzania 1996

Characteristic	Residence		
	Urban	Rural	Total
Electricity			
No	63.9	97.5	90.0
Yes	35.5	1.8	9.4
Missing/Don't know	0.7	0.6	0.6
Total	100.0	100.0	100.0
Source of drinking water			
Piped into residence	31.5	2.0	8.6
Public tap	46.3	23.1	28.3
Well in residence	0.8	1.3	1.2
Public well	13.6	31.6	27.6
Spring	1.8	15.1	12.1
River/stream	3.2	20.5	16.6
Pond/lake	1.1	4.5	3.7
Dam	0.0	1.0	0.8
Rainwater	0.0	0.1	0.1
Other	1.0	0.0	0.2
Missing/Don't know	0.6	0.7	0.7
Total	100.0	100.0	100.0
Time to water source (in minutes)			
<15 minutes	63.6	31.5	38.7
Median time to source	6.0	20.8	16.0
Sanitation facility			
Own flush toilet	3.6	0.5	1.2
Shared flush toilet	1.4	0.3	0.5
Traditional pit toilet	89.3	81.9	83.5
Vent. imp. pit latrine	3.3	0.4	1.1
No facility/bush	1.7	16.0	12.8
Missing/Don't know	0.7	0.9	0.8
Total	100.0	100.0	100.0
Floor material			
Earth/sand	35.4	90.6	78.2
Cement	63.4	8.5	20.8
Carpet/other	0.3	0.2	0.2
Missing/Don't know	0.9	0.7	0.8
Total	100.0	100.0	100.0

Table 2.7—*Continued*

Percent distribution of households by housing characteristics, according to residence, Tanzania 1996

Characteristic	Residence		
	Urban	Rural	Total
Persons per room			
1-2	65.0	56.6	58.5
3-4	27.0	28.9	28.5
5-6	5.2	9.0	8.1
7+	1.1	4.1	3.4
Missing/Don't know	1.7	1.3	1.4
Total	100.0	100.0	100.0
Mean number of persons per room	2.4	2.8	2.7
Level of houshold food consumption			
Always surplus	54.3	40.3	43.4
Sometimes deficit	39.2	52.0	49.2
Frequently deficit	3.3	4.9	4.5
Always deficit	2.3	2.0	2.1
Missing/Don't know	0.9	0.8	0.8
Total	100.0	100.0	100.0
Number of households	1,783	6,186	7,969

The source of drinking water is important because waterborne diseases, including diarrhoea and dysentery, are numerous in the country. Sources of water expected to be relatively free of these diseases are piped water, springs, and rainwater. Other sources like wells, rivers and streams, ponds and lakes, and gravity water are more likely to carry the bacteria that bring about these diseases. Table 2.7 shows that 37 percent of all households in Tanzania have access to piped water—78 percent of urban households and about 25 percent of rural households. About half of the rural households get their drinking water from wells and springs, while one-fourth use less safe sources such as rivers, ponds, and lakes. In urban areas, 16 percent of households get their drinking water from wells and springs, but only 4 percent use less safe sources such as rivers, ponds, and lakes. In urban areas, 64 percent of the households have access to water within 15 minutes, compared to 32 percent of rural households.

Modern sanitation facilities are not yet available to large proportions of the households. The use of traditional pit toilets is still common in both urban and rural areas, accounting for about 89 percent of urban households and 82 percent of rural households. Households with no toilet facilities are more exposed to the risk of diseases such as dysentery, diarrhoea, and typhoid fever. Overall, about 13 percent of the households in

Tanzania have no toilet facilities. This problem is more common in rural areas, where 16 percent of the households have no toilet facilities, compared to 2 percent of households in urban areas.

The type of material used for the floor in these households is an indicator of the quality of housing as well as an indicator of health risk. Some flooring materials like earth and sand may pose a health problem because they may be breeding grounds for parasites such as ticks and jiggers and also may be a source of dust. They are also difficult to keep clean since they are not washable. Seventy-eight percent of Tanzanian households have floors made of earth or sand and only 21 percent are made of cement. One-third of households in urban areas and 91 percent of rural households have floors made of earth or sand. On the other hand, 63 percent of households in urban areas have cement floors, compared to only 9 percent of households in rural areas. In general, rural households have poorer quality floors than urban households.

Information on the number of rooms a household uses for sleeping was collected to determine the extent of crowding. On average, there are 2.7 persons per sleeping room, and this varies very slightly between urban and rural households.

In the 1996 TDHS, respondents were asked whether they thought their household was a surplus or deficit household in terms of food consumption. Forty-three percent of Tanzanian households indicated that they always have a surplus of food, while 56 percent of the households mentioned that they have food deficits. Food deficits are more common among rural than urban households (59 compared to 45 percent).

2.8 Household Durable Goods

Respondents were asked about ownership of particular durable goods. Ownership of a radio and a television set is a measure of access to mass media; refrigerator ownership indicates the capacity for hygienic food storage; and ownership of a bicycle, motorcycle, or private car shows the means of transport available to the household. Information on ownership of these items is presented in Table 2.8.

The results indicate that 41 percent of households own a radio, compared to only 2 percent with a television. Both radio and television ownership is higher in urban than rural households. Bicycles are the most common means of transport owned by households; 25 percent of urban households and 34 percent of rural households own a bicycle. Only 1 percent of the households owns a car and most of them are located in urban areas. Half the rural households surveyed and 29 percent of urban households do not own any of the above durable goods.

Table 2.8 Household durable goods

Percentage of households possessing various durable consumer goods, by residence, Tanzania 1996

Characteristic	Residence		Total
	Urban	Rural	
Radio	65.4	33.8	40.9
Television	6.0	0.4	1.6
Refrigerator	7.5	0.4	2.0
Bicycle	25.0	33.8	31.9
Motorcycle	1.7	0.6	0.8
Private car	4.3	0.6	1.4
None of the above	29.4	50.3	45.6
Number of households	1,783	6,186	7,969

Ownership of radios, televisions, and bicycles has increased since 1991-92. For example, the proportion of households with radios has increased from 33 to 41 percent and the proportion with bicycles has increased from 22 to 32 percent. The proportion of households with a television in urban areas has increased from a mere 1 percent in the 1991-92 TDHS to about 6 percent in 1996. The increase reflects the introduction of three television stations in the country during the period between the two surveys.

2.9 Background Characteristics of Respondents

Table 2.9 presents the percentage distribution of women and men by age, marital status, residence, level of education, and religion. Women and men were asked two questions to determine their ages, "In what month and year were you born?" and "How old were you at your last birthday?" Interviewers were trained in probing techniques for situations in which respondents were not able to state their ages or date of birth, and as a last resort, interviewers were trained to record their best estimate of the respondent's age. Results show that about 42 percent of women and 38 percent of men are in the age group 15-24, and 32 percent of women and 26 percent of men are in the 25-34 age group.

The vast majority of women and men live on the Mainland (97 percent), while only 3 percent live in Zanzibar. On the mainland, 22 percent of women and men live in urban areas, and three- fourths of women and men live in rural areas.

Data on marital status at the time of the survey show that 23 percent of women and 38 percent of men have never married, 67 percent of women and 57 percent of men were currently in unions, while 10 percent of women and 5 percent of men were divorced, separated, or widowed.

The proportion of women who have never attended school is more than twice that of men (29 vs. 14 percent). About 46 percent of women and 47 percent of men have completed primary education only, while 5 percent of women and 10 percent of men have gone beyond primary education.

Thirty-one percent of respondents are Moslems, an equal proportion are Catholics, one-fourth are Protestants, and 12 percent of women and 14 percent of men either adhere to traditional religions or have no religion.

2.10 Characteristics of Couples

Because the men who were interviewed individually in the TDHS were selected from the same households in which women were interviewed, it is possible to match married men with their wives to form a sample of couples. The result does not exactly represent all married couples in Tanzania, since not all couples live together. Nevertheless, the sample of 1,125 couples can be viewed as a reasonable reflection of men and women who are living together. Table 2.10 presents the distribution of couples by age difference between spouses and level of education.

According to the 1996 TDHS, among 30 percent of Tanzanian couples, the husband is 0-4 years older than his wife, while among 38 percent of couples, the husband is 5-9 years older than his wife. Among only 3 percent of couples, the wife is older than her husband. On average, men are almost eight years older than their wives.

Among 61 percent of couples, both spouses have at least some education. Among 22 percent of couples, the husband has some education and the wife has none, while the wife has some education and the husband none among only 6 percent of couples. Cases in which neither spouse has been to school make up 11 percent of all couples.

2.11 Educational Level of Survey Respondents

Tables 2.11.1 and 2.11.2 show the percent distribution of female and male respondents by highest level of education attended, respectively, according to age, residence, and region. As mentioned before, men are generally better educated than women. While 29 percent of women age 15-49 have had no formal education, only 14 percent of men age 15-59 have had no schooling. The proportion of respondents who

Table 2.9 Background characteristics of respondents

Percent distribution of women and men by selected background characteristics, Tanzania 1996

Background characteristic	Women			Men		
		Number of women			Number of men	
	Weighted percent	Weighted	Un-weighted	Weighted percent	Weighted	Un-weighted
Age						
15-19	21.3	1,732	1,729	21.6	488	493
20-24	20.6	1,676	1,694	16.4	371	375
25-29	17.7	1,440	1,415	13.4	301	293
30-34	13.8	1,118	1,135	12.1	272	267
35-39	10.9	888	896	11.1	251	248
40-44	8.4	680	670	9.1	206	216
45-49	7.2	585	581	6.6	149	145
50-54	NA	NA	NA	5.2	118	119
55-59	NA	NA	NA	4.4	100	100
Residence						
Mainland	97.1	7,881	7,479	96.9	2,187	2,148
Total urban	22.3	1,811	1,853	22.6	509	579
Dar es Salaam city	6.9	563	666	7.6	171	272
Other urban	15.4	1,248	1,187	15.0	338	307
Total rural	74.7	6,070	5,626	74.4	1,678	1,569
Zanzibar	2.9	239	641	3.1	69	108
Pemba	1.1	92	295	1.2	28	54
Unguja	1.8	148	346	1.8	41	54
Region						
Dodoma	4.4	355	315	4.2	96	140
Arusha	7.2	589	469	6.9	156	94
Kilimanjaro	4.8	390	393	5.3	119	195
Tanga	5.7	464	398	4.8	108	75
Morogoro	5.0	408	377	4.2	95	143
Coast	2.0	159	277	2.0	45	62
Dar es Salaam	8.0	646	764	8.5	191	304
Lindi	2.3	187	318	2.4	54	71
Mtwara	4.4	355	441	4.2	96	101
Ruvuma	3.8	305	466	3.6	82	102
Iringa	5.7	466	389	4.5	100	137
Mbeya	5.8	473	314	6.1	137	72
Singida	3.5	283	394	3.6	80	84
Tabora	2.8	225	198	3.6	82	54
Rukwa	3.0	242	353	3.1	71	78
Kigoma	4.3	351	367	4.2	95	70
Shinyanga	8.4	686	375	8.9	202	164
Kagera	5.8	467	284	6.1	139	69
Mwanza	7.1	573	310	7.8	176	78
Mara	3.2	257	277	2.9	64	55
Marital status						
Never married	23.2	1,887	1,899	37.5	847	861
Married	59.9	4,864	4,787	53.0	1,196	1,161
Living together	6.7	548	617	4.1	91	107
Widowed	3.1	250	250	0.9	20	21
Divorced	4.9	399	400	1.8	40	43
Not living together	2.1	172	166	2.5	57	60
Missing	0.0	1	1	0.2	4	3
Education						
No education	28.5	2,316	2,241	13.5	304	292
Primary incomplete	20.1	1,630	1,636	29.4	664	654
Primary complete	46.0	3,732	3,685	47.2	1,066	1,059
Secondary+	5.4	441	558	9.8	222	251
Currently attending school						
Yes	6.6	534	553	10.4	235	238
No	93.0	7,552	7,532	88.9	2,006	2,004
Religion						
Moslem	31.2	2,531	3,200	30.8	694	839
Catholic	31.4	2,546	2,418	31.0	698	693
Protestant	25.4	2,065	1,792	23.9	538	491
Traditional/none	11.7	951	682	13.3	300	211
Other	0.1	7	7	0.4	10	10
Missing	0.2	20	21	0.6	15	12
Total	100.0	8,120	8,120	100.0	2,256	2,256

NA = Not applicable

completed secondary education is higher among men than women. Education is inversely related to age; older women and men are generally less educated than younger women and men. The percentage of women with no education rises with age, from 16 percent in the 15-19 age group to 64 percent in the age group 45-49. This means that younger women have had better educational opportunities than older women. This is again reflected in the higher percentage of women in the age group 15-19 who completed primary education (46 percent), compared to women age 45-49 (8 percent).

Urban women and men in mainland Tanzania are much more likely than rural women and men to go to school. One-third of rural women age 15-49 have no education, compared to only 14 percent of urban women in the mainland. Conversely, 58 percent of urban women on the mainland have completed primary education and 13 percent have been to secondary school, while 44 percent of rural women completed primary education and only 2 percent have been to secondary school. Seven percent of urban men have no education compared with 16 percent of rural men.

As a result of the difference in the secondary education system between the mainland and Zanzibar, a higher proportion of women with some secondary education is observed in Zanzibar (33 percent) compared to the mainland (5 percent). The proportion of men with some secondary education is also higher in Zanzibar (32 percent) than in the mainland (9 percent).

Table 2.10 Differential of characteristics between spouses

Percent distribution of couples by differences between spouses in age and level of education, Tanzania 1996

Difference between spouses	Percent/ Years	Number of couples
Wife older	3.2	36
Husband older by:		
0-4 years	29.8	335
5-9 years	38.4	432
10-14 years	17.5	196
15 years +	11.1	125
Mean age difference (years)		
1st wife	7.5	1,087
2nd wife	(11.5)	38
All wives	7.6	1,125
Education (percent)		
Both husband and wife not educated	10.7	120
Wife educated, husband not	5.8	65
Husband educated, wife not	22.4	252
Both husband and wife educated	61.1	688
Total	100.0	1,125

Note: Figures in parentheses are based on 25-49 unweighted cases.

A comparison of regions shows that the Arusha, Shinyanga, Mwanza, and Rukwa regions have the highest proportions of women with no education, while the Kilimanjaro region has the lowest proportion of women with no education. The highest percentages of men who have no education are recorded in the Dodoma, Coast, and Shinyanga regions, while again Kilimanjaro recorded about 2 percent of men with no education. The proportion of women with secondary education is high in Dar es Salaam (16 percent) and Kilimanjaro (11 percent), but lowest in the Tanga, Mtwara, and Kigoma regions (less than 1 percent).

2.12 Exposure to Mass Media

Women and men were asked how often they read newspapers and listen to the radio and watch television. This information is important to programme planners seeking to reach people with family planning and health messages through the media. Table 2.12 shows the percentage of female and male respondents exposed to different types of mass media by age, residence, region, and level of education.

Results show that 13 percent of women and 26 percent of men read newspapers or magazines weekly, while 44 percent of women and 68 percent of men listen to the radio at least once a week, and only 9 percent of women and 18 percent of men watch television at least once a week. Five percent of women and 12 percent of men have access to all three mass media. However, 55 percent of women and 29 percent of men do not use any of these mass media. Access to media is somewhat higher among younger respondents and among those

living in urban as opposed to rural areas. As expected, educated persons are more likely to read newspapers or magazines, watch television, and listen to the radio than less educated persons.

Table 2.11.1 Level of education: women

Percent distribution of women by the highest level of education attended, according to selected background characteristics, Tanzania 1996

Background characteristic	Level of education: women					Number of women
	No education	Primary incomplete	Primary complete	Secondary+	Total	
Age						
15-19	16.4	32.3	45.9	5.5	100.0	1,732
20-24	17.5	13.4	60.5	8.6	100.0	1,676
25-29	18.8	11.8	63.3	6.0	100.0	1,440
30-34	28.3	15.7	50.5	5.5	100.0	1,118
35-39	45.7	18.9	32.4	2.9	100.0	888
40-44	54.7	25.8	16.8	2.6	100.0	680
45-49	63.7	26.8	7.6	1.8	100.0	585
Residence						
Mainland	28.5	20.1	46.9	4.6	100.0	7,881
Total urban	13.5	15.6	57.8	13.1	100.0	1,811
Dar es Salaam city	14.4	13.4	54.5	17.7	100.0	563
Other urban	13.1	16.7	59.3	11.0	100.0	1,248
Total rural	32.9	21.4	43.6	2.1	100.0	6,070
Zanzibar	30.9	20.7	15.2	33.2	100.0	239
Pemba	44.4	20.0	10.8	24.7	100.0	92
Unguja	22.5	21.1	17.9	38.4	100.0	148
Region						
Dodoma	30.5	16.5	48.6	4.4	100.0	355
Arusha	38.2	13.2	44.1	4.5	100.0	589
Kilimanjaro	7.4	19.6	61.8	11.2	100.0	390
Tanga	18.3	29.4	51.5	0.8	100.0	464
Morogoro	30.8	23.1	45.1	1.1	100.0	408
Coast	31.8	15.5	51.6	1.1	100.0	159
Dar es Salaam	15.7	13.5	54.7	16.1	100.0	646
Lindi	24.8	22.6	48.1	4.4	100.0	187
Mtwara	34.5	22.2	42.9	0.5	100.0	355
Ruvuma	13.7	22.7	60.3	3.2	100.0	305
Iringa	34.4	20.6	39.3	5.7	100.0	466
Mbeya	23.2	22.3	50.6	3.8	100.0	473
Singida	29.7	20.8	45.9	3.6	100.0	283
Tabora	29.3	13.6	52.5	4.5	100.0	225
Rukwa	35.4	26.3	36.0	2.3	100.0	242
Kigoma	31.9	18.5	48.8	0.8	100.0	351
Shinyanga	43.2	17.1	33.9	5.9	100.0	686
Kagera	26.8	22.9	48.9	1.4	100.0	467
Mwanza	37.4	22.3	37.1	3.2	100.0	573
Mara	20.9	24.9	52.3	1.8	100.0	257
Total	28.5	20.1	46.0	5.4	100.0	8,120

Table 2.11.2 Level of education: men

Percent distribution of men by the highest level of education attended, according to selected background characteristics, Tanzania 1996

Background characteristic	Level of education: men					Number of men
	No education	Primary incomplete	Primary complete	Secondary+	Total	
Age						
15-19	9.2	47.4	37.3	6.1	100.0	488
20-24	7.6	15.3	64.1	13.0	100.0	371
25-29	8.2	12.3	68.3	11.1	100.0	301
30-34	8.1	15.4	66.5	9.9	100.0	272
35-39	16.9	17.3	56.4	9.4	100.0	251
40-44	19.4	36.6	29.0	15.1	100.0	206
45-49	22.6	41.7	25.5	10.3	100.0	149
50-54	28.2	55.0	9.9	6.8	100.0	118
55-59	35.2	51.1	8.3	5.4	100.0	100
Residence						
Mainland	13.5	29.4	48.0	9.1	100.0	2,187
Total urban	6.8	22.3	50.1	20.8	100.0	509
Dar es Salaam city	8.1	15.4	51.8	24.6	100.0	171
Other urban	6.2	25.8	49.2	18.8	100.0	338
Total rural	15.5	31.5	47.4	5.6	100.0	1,678
Zanzibar	13.4	31.5	22.9	32.1	100.0	69
Pemba	27.8	37.0	13.0	22.2	100.0	28
Unguja	3.7	27.8	29.6	38.9	100.0	41
Region						
Dodoma	22.1	29.3	41.4	7.1	100.0	96
Arusha	17.0	19.1	54.3	9.6	100.0	156
Kilimanjaro	1.5	24.1	60.5	13.8	100.0	119
Tanga	4.0	36.0	60.0	0.0	100.0	108
Morogoro	13.3	37.8	43.4	5.6	100.0	95
Coast	22.6	19.4	46.8	11.3	100.0	45
Dar es Salaam	8.2	15.8	51.3	24.7	100.0	191
Lindi	16.9	31.0	46.5	5.6	100.0	54
Mtwara	10.9	51.5	36.6	1.0	100.0	96
Ruvuma	5.9	30.4	59.8	3.9	100.0	82
Iringa	13.1	32.1	44.5	10.2	100.0	100
Mbeya	8.3	25.0	55.6	11.1	100.0	137
Singida	13.1	27.4	54.8	4.8	100.0	80
Tabora	11.1	24.1	51.9	13.0	100.0	82
Rukwa	19.2	37.2	38.5	5.1	100.0	71
Kigoma	18.6	28.6	47.1	5.7	100.0	95
Shinyanga	22.6	32.3	36.0	9.1	100.0	202
Kagera	14.5	27.5	47.8	10.1	100.0	139
Mwanza	17.9	35.9	42.3	3.8	100.0	176
Mara	9.1	36.4	41.8	12.7	100.0	64
Total	13.5	29.4	47.2	9.8	100.0	2,256

Table 2.12 Access to mass media

Percentage of women and men who usually read a newspaper once a week, watch television once a week, or listen to the radio weekly, by selected background characteristics, Tanzania 1996

Background characteristic	Women						Men					
	No mass media	Read newspaper weekly	Watch television weekly	Listen to radio weekly	All three media	Number of women	No mass media	Read newspaper weekly	Watch television weekly	Listen to radio weekly	All three media	Number of men
Age												
15-19	54.1	15.2	10.2	43.0	5.8	1,732	30.9	23.7	19.9	66.2	12.6	488
20-24	47.7	16.7	11.7	49.9	6.2	1,676	23.2	33.1	25.5	74.3	18.0	371
25-29	52.2	15.1	10.1	45.9	6.0	1,440	23.7	30.1	23.4	72.7	16.3	301
30-34	55.6	11.8	7.9	42.1	3.8	1,118	26.2	29.8	17.6	71.8	12.2	272
35-39	56.5	9.3	6.4	42.3	3.9	888	30.3	22.5	15.3	68.3	11.6	251
40-44	60.1	7.9	4.7	39.0	1.3	680	28.8	29.8	16.0	66.8	10.9	206
45-49	68.7	5.3	3.8	30.3	1.5	585	31.7	20.7	11.4	67.2	7.8	149
50-54	NA	NA	NA	NA	NA	NA	41.9	13.1	3.5	57.6	2.4	118
55-59	NA	NA	NA	NA	NA	NA	50.0	14.0	2.6	45.9	1.9	100
Residence												
Mainland	55.5	13.0	8.1	42.5	4.6	7,881	30.1	25.3	16.5	67.3	11.4	2,187
Total urban	22.5	39.2	25.6	73.6	16.6	1,811	7.8	63.6	42.7	89.3	36.6	509
Dar es Salaam city	7.7	60.7	47.4	88.7	35.0	563	1.5	82.4	69.5	94.1	59.9	171
Other urban	29.3	29.5	15.8	66.7	8.3	1,248	11.0	54.2	29.1	86.9	24.8	338
Total rural	65.3	5.2	2.8	33.3	1.0	6,070	36.9	13.7	8.6	60.6	3.8	1,678
Zanzibar	21.1	14.8	34.4	75.1	9.4	239	4.1	49.4	63.7	92.9	40.5	69
Pemba	29.2	6.4	18.6	68.5	1.7	92	7.4	24.1	18.5	90.7	7.4	28
Unguja	16.2	19.9	44.2	79.2	14.2	148	1.9	66.7	94.4	94.4	63.0	41
Region												
Dodoma	55.6	12.7	10.2	40.6	4.8	355	35.0	16.4	18.6	59.3	7.1	96
Arusha	58.0	15.6	7.9	39.9	4.5	589	41.5	28.7	19.1	57.4	16.0	156
Kilimanjaro	33.6	13.2	9.2	64.4	4.6	390	24.6	21.0	15.9	72.3	8.7	119
Tanga	61.6	5.0	8.8	36.2	2.0	464	41.3	14.7	13.3	57.3	10.7	108
Morogoro	62.9	10.9	5.8	36.6	3.4	408	45.5	18.2	14.0	50.3	5.6	95
Coast	33.9	18.1	6.5	65.0	2.5	159	12.9	22.6	29.0	82.3	9.7	45
Dar es Salaam	8.0	58.6	44.1	88.4	32.5	646	2.0	79.6	65.8	93.1	55.9	191
Lindi	49.7	8.2	4.4	48.1	1.6	187	14.1	19.7	2.8	85.9	1.4	54
Mtwara	70.1	2.3	3.4	27.7	0.7	355	14.9	13.9	1.0	84.2	0.0	96
Ruvuma	57.3	4.5	2.8	41.4	1.1	305	27.5	24.5	2.0	72.5	1.0	82
Iringa	70.7	4.9	2.6	28.8	0.8	466	48.2	12.4	2.9	48.9	1.5	100
Mbeya	54.1	12.4	1.6	42.4	1.0	473	31.9	25.0	6.9	66.7	5.6	137
Singida	65.2	9.9	3.8	31.5	1.3	283	35.7	16.7	11.9	60.7	3.6	80
Tabora	57.1	9.1	7.6	40.9	3.5	225	25.9	33.3	11.1	72.2	7.4	82
Rukwa	73.4	5.1	3.4	24.9	1.4	242	50.0	12.8	11.5	48.7	10.3	71
Kigoma	58.9	4.6	2.5	40.3	0.5	351	24.3	14.3	5.7	72.9	1.4	95
Shinyanga	69.1	9.1	4.0	29.6	2.9	686	47.0	21.3	9.1	52.4	8.5	202
Kagera	51.4	7.7	5.6	45.1	1.1	467	23.2	20.3	17.4	73.9	10.1	139
Mwanza	67.7	8.1	1.6	31.9	1.0	573	26.9	17.9	14.1	70.5	9.0	176
Mara	59.6	8.7	0.4	39.7	0.4	257	23.6	25.5	18.2	69.1	7.3	64
Education												
No education	76.3	0.2	2.3	23.2	0.1	2,316	60.8	2.4	5.9	37.5	0.8	304
Primary incomplete	61.1	6.1	4.8	36.9	1.2	1,630	35.5	17.5	11.4	61.5	6.1	664
Primary complete	43.6	18.9	10.4	53.7	5.8	3,732	21.6	29.9	19.6	76.1	14.0	1,066
Secondary+	7.1	57.0	45.1	87.9	33.0	441	5.0	65.6	46.2	91.4	38.6	222
Total women/men	54.5	13.1	8.8	43.5	4.8	8,120	29.3	26.1	18.0	68.1	12.3	2,256

NA = Not applicable

2.13 Employment and Occupation

In the 1996 TDHS, information was collected from women regarding their current employment situation. Table 2.13 shows that 46 percent of women were unemployed; the proportion not working was higher among younger women and those residing in Zanzibar and the Mtwara region.

Women who reported to be working at the time of the survey were asked if they were working for pay, selling things, or working on a family farm or in a family business. Forty-eight percent reported being self-employed, with 39 percent working on a family farm, 17 percent engaged in the food processing business, and a small proportion selling wild products or engaged in crafts or skilled work. Fifteen percent of women combine agriculture with other economic activities of their own. Another 15 percent of women were working for others and 7 percent were working in agriculture jobs.

In the 1996 TDHS, men were asked to state their occupation or the kind of work they were mainly doing. Table 2.14 gives the percent distribution of men age 15-59 by current occupation according to background characteristics. Twelve percent of men were not working. Most men (64 percent) are occupied in agriculture and other related activities. About 3 percent are in a professional job, while an equal proportion are employed in sales or services, and 16 percent are in skilled or unskilled manual work.

As expected, employment in nonagricultural occupations is relatively more common among men in urban areas and among those with formal education. More than 60 percent of men on the mainland are employed in an agricultural occupation.

Table 2.13 Employment: women

Percentage of women in various employment categories, according to selected background characteristics, Tanzania 1996

		Working for self							Working for others				
	Not working	Any work	Agri-culture	Wild product	Food process-ing	Craft	Shop/ taxi	Agri-culture and any other	Any work	Agri-culture	Agri-culture self and other	Missing	Number of women
Age													
15-19	62.3	30.0	23.5	1.4	9.3	2.0	0.4	7.1	19.7	9.9	3.5	0.0	1,732
20-24	47.5	47.1	36.7	1.6	15.9	3.1	1.5	12.5	14.3	5.8	2.7	0.1	1,676
25-29	42.7	52.8	42.8	1.8	17.5	4.6	1.8	16.1	12.2	4.7	2.5	0.0	1,440
30-34	40.3	53.6	41.6	2.3	20.3	4.0	2.4	16.7	14.0	5.4	1.6	0.3	1,118
35-39	35.9	58.2	46.3	3.2	25.0	4.1	0.9	20.8	14.8	5.6	2.0	0.0	888
40-44	35.0	60.3	50.6	2.5	24.7	4.1	0.6	20.9	11.5	6.6	1.7	0.1	680
45-49	40.2	56.4	48.2	2.4	20.1	3.5	0.5	17.3	9.4	5.5	2.5	0.0	585
Residence													
Mainland	45.7	48.6	39.1	1.9	17.7	3.3	1.2	14.7	14.6	6.6	2.6	0.1	7,881
Total urban	47.7	37.7	16.6	1.8	16.1	3.9	2.6	6.7	31.6	7.0	1.2	0.1	1,811
Dar es Salaam city	56.9	29.0	4.1	0.9	17.4	2.3	2.6	1.5	30.0	2.3	0.3	0.0	563
Other urban	43.5	41.6	22.3	2.1	15.5	4.6	2.6	9.0	32.2	9.1	1.6	0.1	1,248
Total rural	45.2	51.8	45.8	1.9	18.2	3.2	0.8	17.2	9.6	6.4	3.0	0.1	6,070
Zanzibar	53.7	41.2	24.6	5.6	6.8	7.8	1.2	6.9	11.0	2.8	0.3	0.0	239
Pemba	55.9	42.4	33.9	3.1	8.5	6.4	0.3	8.8	4.1	0.7	0.7	0.0	92
Unguja	52.3	40.5	18.8	7.2	5.8	8.7	1.7	5.8	15.3	4.0	0.0	0.0	148
Region													
Dodoma	42.2	51.1	41.6	3.8	26.0	4.1	1.6	21.9	14.3	7.0	0.6	0.0	355
Arusha	54.2	37.1	26.4	2.6	3.8	1.9	1.9	3.2	18.3	4.5	1.1	0.2	589
Kilimanjaro	46.3	41.0	33.6	0.8	3.8	2.3	1.3	1.8	28.5	14.8	2.3	0.5	390
Tanga	56.3	39.4	25.9	0.5	7.8	5.3	0.3	2.0	10.8	3.3	1.3	0.0	464
Morogoro	41.9	50.1	42.2	2.7	21.5	1.1	0.8	17.2	15.9	9.5	0.5	0.3	408
Coast	58.5	40.1	21.7	1.4	15.5	4.3	0.4	4.3	5.8	1.4	1.1	0.0	159
Dar es Salaam	57.2	30.0	3.8	1.4	17.3	2.4	2.5	1.3	27.2	2.2	0.3	0.0	646
Lindi	53.8	42.5	30.8	5.7	19.2	4.1	0.3	14.8	14.5	9.4	5.3	0.0	187
Mtwara	72.8	24.5	18.4	2.9	9.3	1.8	0.2	6.8	15.2	10.2	8.2	0.0	355
Ruvuma	49.6	45.7	36.9	1.7	29.2	1.9	1.3	24.0	18.9	12.0	7.7	0.0	305
Iringa	31.9	59.6	56.0	1.5	42.9	5.9	1.8	44.5	23.1	11.1	5.4	0.0	466
Mbeya	22.6	72.6	57.0	2.2	32.8	2.9	0.6	26.4	11.5	8.9	1.9	0.0	473
Singida	19.5	74.4	64.5	3.0	40.9	9.4	1.8	37.8	15.2	9.6	2.5	0.3	283
Tabora	54.5	41.4	33.3	1.0	21.7	4.0	2.0	19.2	13.1	9.1	5.1	0.0	225
Rukwa	34.3	64.3	59.8	1.1	32.3	1.1	0.8	31.2	12.2	10.8	8.5	0.0	242
Kigoma	55.3	43.9	37.6	1.6	11.4	2.5	1.1	11.4	6.8	5.2	4.1	0.0	351
Shinyanga	29.6	66.7	63.7	0.8	6.4	2.9	1.6	8.5	8.3	3.5	0.8	0.0	686
Kagera	46.1	52.1	44.7	3.5	14.4	3.2	1.1	13.4	8.5	3.2	3.2	0.4	467
Mwanza	48.1	47.7	43.5	0.0	12.3	2.9	1.0	12.9	9.0	2.9	0.3	0.0	573
Mara	56.7	41.9	39.4	2.9	11.9	6.5	0.7	17.7	3.2	2.5	0.4	0.0	257
Education													
No education	44.3	54.2	48.2	2.4	16.6	2.1	0.4	14.8	5.2	3.9	2.1	0.1	2,316
Primary incomplete	52.4	43.8	35.7	2.0	17.5	2.8	0.7	14.7	10.6	7.2	2.8	0.1	1,630
Primary complete	44.3	48.9	37.1	1.9	19.2	4.2	1.4	15.4	17.6	6.9	2.8	0.1	3,732
Secondary+	45.2	29.6	12.8	1.3	6.6	6.9	6.2	5.4	52.2	12.9	0.9	0.4	441
Total	46.0	48.3	38.7	2.0	17.4	3.5	1.2	14.5	14.5	6.5	2.5	0.1	8,120

Table 2.14 Occupation: men

Percent distribution of men by current occupation and type of nonagricultural employment, according to selected background characteristics, Tanzania 1996

Background characteristic	Not currently employed	Occupation							Total	Number of men
		Agri-culture	Pro-fessional/ technical	Sales/ service	Skilled manual	Unskilled manual	Other	Missing		
Age										
15-19	45.2	39.5	0.7	0.9	4.1	4.9	3.6	1.2	100.0	488
20-24	8.6	60.1	0.3	2.1	12.5	14.9	1.2	0.2	100.0	371
25-29	1.6	71.6	2.4	2.7	10.9	9.9	0.7	0.2	100.0	301
30-34	0.2	72.4	4.4	2.6	6.8	13.1	0.5	0.0	100.0	272
35-39	0.0	70.7	7.7	6.6	8.4	5.7	0.6	0.3	100.0	251
40-44	0.7	67.2	7.7	4.5	7.0	9.5	2.7	0.7	100.0	206
45-49	0.0	74.8	4.1	4.4	9.1	7.1	0.5	0.0	100.0	149
50-54	0.5	87.2	5.6	1.4	3.7	1.5	0.0	0.0	100.0	118
55-59	0.0	88.8	1.2	1.9	4.2	1.9	0.0	1.9	100.0	100
Residence										
Mainland	11.3	64.8	3.2	2.9	7.7	8.3	1.4	0.5	100.0	2,187
Total urban	14.1	24.4	5.9	6.8	21.5	24.5	2.3	0.5	100.0	509
Dar es Salaam city	13.6	4.0	6.6	12.5	25.0	33.5	3.3	1.5	100.0	171
Other urban	14.3	34.7	5.6	3.9	19.8	19.9	1.9	0.0	100.0	338
Total rural	10.4	77.0	2.4	1.7	3.5	3.4	1.1	0.5	100.0	1,678
Zanzibar	19.6	44.5	4.1	0.0	11.5	15.9	3.3	1.1	100.0	69
Education										
No education	1.4	89.8	0.2	1.7	1.8	3.3	1.2	0.6	100.0	304
Primary incomplete	25.3	60.6	0.6	1.3	3.6	5.7	2.4	0.6	100.0	664
Primary complete	3.7	67.5	2.4	3.6	10.9	10.7	0.7	0.4	100.0	1,066
Secondary+	21.7	23.3	19.6	5.0	13.4	13.7	2.8	0.6	100.0	222
Total	11.5	64.2	3.2	2.8	7.8	8.5	1.5	0.5	100.0	2,256

CHAPTER 3

FERTILITY

A major objective of the 1996 TDHS was to estimate fertility levels, trends, and differentials. Like the 1991-92 TDHS, detailed information from all women on current, cumulative, and past levels of fertility was collected for the 1996 TDHS. Each woman age 15-49 was asked to provide information on the total number of sons and daughters to whom she had given birth who were living with her, the number living elsewhere, and the number who had died. She was then asked for each birth, the month and year of birth, name, sex, and survival status of the child and for those who died, age at death. This information was used to obtain various measures of fertility. It should be noted that the birth history method collects responses from surviving women and assumes that women's fertility does not differ significantly with survival status.

3.1 Current Fertility

Current fertility is important because of its direct relevance to population policies and programmes. The indices used to study current fertility include age-specific fertility rates (ASFR), the total fertility rate (TFR), the general fertility rate (GFR), and the crude birth rate (CBR). ASFRs are calculated by dividing the number of live births during a specified period to women in a particular age group at the time of the birth by the number of woman-years lived in that age group during the specified period. The TFR is five times the sum of the ASFRs and is considered as a useful means of summarizing the overall level of fertility. The TFR can be interpreted as the number of children a woman would have at the end of her reproductive life if she experienced the current age-specific fertility. Other summary measures of fertility include the GFR which is the number of live births per 1,000 women of reproductive age and CBR which is the annual number of live births per 1,000 population.

Measures of current fertility are estimated for the three-year period preceding the survey, which corresponds roughly to 1993-1996. The choice of the estimation period is a compromise between providing the most recent information, avoiding problems of omission or displacement of births due to a recall lapse, and obtaining enough cases to reduce the sampling errors.

Table 3.1 presents several fertility measures including ASFRs, TFRs, CBR, GFR, for all of Tanzania, and for urban and rural areas. ASFRs by residence are shown also in Figure 3.1. The TFR indicates that if fertility were to remain constant at current levels, the average Tanzanian woman would bear 5.8 children in her lifetime, a decline from 6.3 in the 1991-92 TDHS. As seen in Table 3.1, Tanzanian women bear children early in the reproductive period. A Tanzanian woman would give birth to two children by age 25 and to more than three children by age 30.

Table 3.1 Current fertility

Age-specific and cumulative fertility rates and crude birth rate for the three years preceding the survey, by urban-rural residence, Tanzania 1996

	Residence		
Age group	Urban	Rural	Total
Age			
15-19	115	143	135
20-24	183	288	260
25-29	209	270	255
30-34	138	239	217
35-39	82	192	167
40-44	41	97	87
45-49	(54)	40	42
TFR 15-49	4.11	6.34	5.82
TFR 15-44	3.84	6.14	5.61
General fertility rate	145	216	199
Crude birth rate	36.3	41.9	40.8

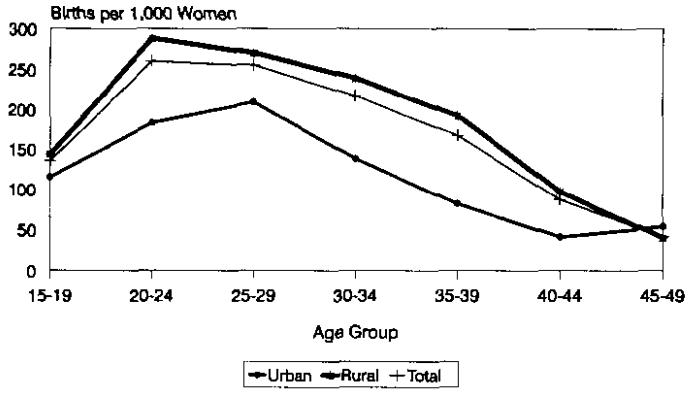
Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation. Rates in parentheses are based on 125 to 249 women years of exposure.
TFR: Total fertility rate expressed per woman.
GFR: General fertility rate (births divided by number of women 15-49), expressed per 1,000 women.
CBR: Crude birth rate expressed per 1,000 population.

The childbearing peak occurs in the ages 20-29 when women have almost half their lifetime births. However, fertility declines sharply after the mid-30s, with the ASFRs being only 42 births per 1,000 women at age group 45-49 (see Figure 3.1).

Fertility levels are much higher in rural areas (TFR of 6.3 children) than in urban areas (4.1). This pattern of fertility differentials by urban-rural residence is evident at every age but is more prominent at ages 30-34, 35-39, and 40-44.

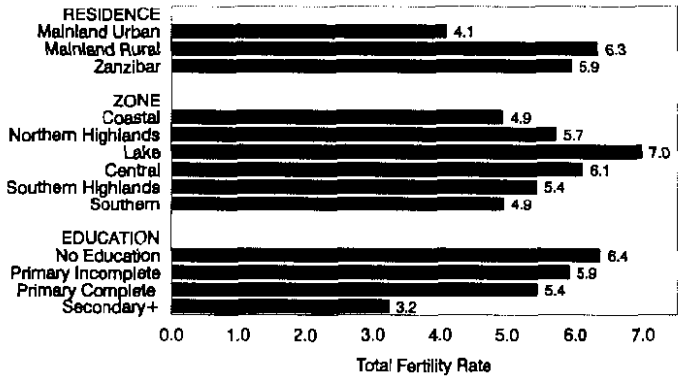
The results show a GFR for the three-year period of 199 births per 1,000 women and a CBR of 41 live births per 1,000 population. The CBR is lower than those from the 1991-92 TDHS (43 live births per 1,000 population) and the 1988 Census (46 births per 1,000 population). However, it should be noted that the census estimates were obtained using indirect methods, thus part of the difference may be due to a difference in methodology.

Figure 3.1
Age-Specific Fertility Rates by Urban-Rural Residence



TDHS 1996

Figure 3.2
Total Fertility Rates by Background Characteristics



TDHS 1996

3.2 Fertility Differentials

Table 3.2 presents total fertility rates, percentage of women currently pregnant and the mean number of children ever born to women ages 40-49 years (completed fertility) for major sub-groups of the population. The measure of completed fertility is vulnerable to understatement of parity by older women, most of whose births took place longer ago and who consequently may omit children who died young.

Various differentials in current fertility are notable from Table 3.2 and Figure 3.2.TFRs are lowest in the Coastal and Southern zones (4.9 children per woman). Southern Highlands and Northern Highlands zones have TFRs of 5.4 and 5.7 children per woman, respectively. The Lake and Central zones have the highest level of fertility (7.0 and 6.1 children per woman, respectively).

Women with secondary education have a total fertility rate of 3.2 children per woman, which is much less than that of other women. Women who have completed primary education have a total fertility of 5.4; women with incomplete primary education and women with no formal education have a total fertility rate of 5.9 and 6.4, respectively. The gap in fertility between women with no education and those with some secondary education has widened significantly in the five years between 1991-92 and 1996. In 1991-92, women who had never gone to school had an average of 2.3 children more than women who had attended secondary education. In 1996, the difference was 3.2 children.

Table 3.2 also allows a general assessment of trends in fertility over time among population subgroups. The comparison of completed fertility (mean number of children ever born) with the TFR provides an indicator of the direction and magnitude of fertility change in the country during the past 20-25 years. The results suggest that there has been a major decline in fertility (more prominent in urban areas) in the country during the period as shown by a TFR of 5.8 births, compared with a mean number of children ever born to women in their 40s (age 40-49) of 7.0 children. This decline is confirmed by looking at trends in TFRs obtained from previous surveys (see next section).

Table 3.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage currently pregnant and mean number of children ever born to women age 40-49, by selected background characteristics, Tanzania 1996

Background characteristic	Total fertility rate 15-49	Percentage currently pregnant 15-49[1]	Mean number of children ever born to women age 40-49
Residence			
Mainland	5.81	9.74	6.95
Total urban	4.09	7.13	6.07
Dar es Salaam city	3.43	5.71	5.48
Other urban	4.36	7.77	6.28
Total Rural	6.33	10.52	7.13
Zanzibar	(5.93)	10.17	7.65
Zones			
Coastal	4.93	8.92	6.53
Northern Highlands	5.71	10.05	6.65
Lake	6.97	11.54	7.63
Central	6.10	9.45	6.90
Southern Highlands	5.42	9.17	6.80
Southern	4.94	6.95	6.55
Education			
No education	6.36	9.82	7.13
Primary incomplete	5.90	7.14	7.11
Primary complete	5.43	11.10	6.31
Secondary+	3.24	7.66	4.79
Total	5.82	9.75	6.97

Note: Total fertility rates in parentheses are based on 500-999 women age 15-49.
[1]Rate for women age 15-49 years

At the time of the survey, 10 percent of interviewed women reported that they were pregnant. This may be an underestimate of the true percent pregnant because many women at early stages of pregnancy will not yet know for sure that they are pregnant.

3.3 Fertility Trends

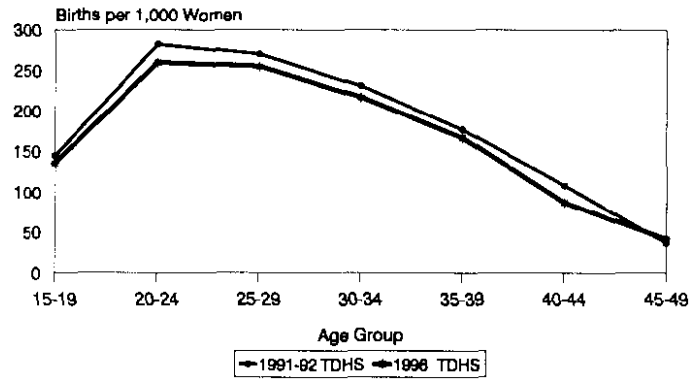
Table 3.3 examines trends in fertility in Tanzania by comparing the results of the 1996 TDHS with the earlier 1991-92 TDHS. This comparison is appropriate because the methods of data collection and rate calculation were identical in the two surveys. The TFR calculated from the 1991-92 TDHS was 6.3 children per woman, compared with 5.8 derived from the 1996 TDHS, showing a decline in fertility of 7 percent during the period between 1989-92 and 1993-96. Examination of changes in age-specific fertility rates in Figure 3.3 shows a roughly equal declines at all ages.

Table 3.3 Trends in current fertility rates

Age specific fertility rates and total fertility rates, Tanzania, 1989-1996

Age group	1991-92 TDHS 1989-92	1996 TDHS 1993-96
15-19	144	135
20-24	282	260
25-29	270	255
30-34	231	217
35-39	177	167
40-44	108	87
45-49	37	42
Total fertility rate	6.25	5.82

Figure 3.3
Age-Specific Fertility Rates
1991-92 TDHS and 1996 TDHS



TDHS 1996

A second way to analyze fertility trends is by using the 1996 TDHS data alone for successive five-year periods preceding the survey as given in Table 3.4. Because women age 50 and above were not interviewed in the survey, the rates are successively truncated as the number of years before the survey increases. According to the table, there has been a gradual decline in fertility during the past 20 years, e.g., the cumulative fertility of women ages 15-34 decreased from 5.4 to 4.3 during this period.

Table 3.5 gives fertility rates for ever-married women by duration since first marriage. Like the rates by age, these are also truncated as the duration and period before the survey increase. The data show that fertility rates among women married less than 10 years have not changed significantly over time, perhaps because newly married couples tend to start their families right after marriage.

Table 3.4 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by woman's age at the time, Tanzania 1996

Woman's age	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
15-19	130	151	153	174
20-24	261	284	290	295
25-29	258	278	302	299
30-34	218	248	269	[305]
35-39	174	202	[228]	-
40-44	90	[148]	-	-
45-49	[42]	-	-	-
TFR 15-34	4.3	4.8	5.0	5.4

Note: Age-specific fertility rates per 1,000 women.
Estimates enclosed in brackets are truncated.

Table 3.5 Trends in fertility by marital status

Fertility rates for ever-married women by duration (years) since first marriage for five-year periods preceding the survey, Tanzania 1996

Marriage duration	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
0-4	319	347	342	356
5-9	275	298	327	309
10-14	242	276	290	304
15-19	199	226	251	[261]
20-24	139	190	[212]	-
25-29	65	[116]	-	-

Note: Fertility rates per 1,000 women.
Estimates enclosed in brackets are truncated.

3.4 Retrospective Fertility

Measures of lifetime fertility reflect the accumulation of births over the past 30 years or so, and therefore have limited relevance to current fertility levels, especially if the country has experienced a decline in fertility. Information on lifetime fertility is useful for examining average family size across age groups as well as estimating levels of primary infertility. Lifetime fertility is also useful in understanding changes that have taken place in the age pattern of current fertility.

The percent distribution of women by age and number of children ever born is given in Table 3.6 for all women as well as for currently married women. The mean number of children ever born for all women is 3.1, which means that, on average, Tanzanian women age 15-49 had 3.1 births, while currently married women in Tanzania have on average 3.9 births. In contrast, women at the end of their reproductive life have given birth to an average of 7.3 children, of whom 5.8 survived. Therefore, women at the end of their reproductive period have lost one-fifth of their children to mortality. A comparison of the mean number of children ever born reported in the 1996 TDHS and the 1991-92 TDHS shows a decline in completed fertility over time at all ages except among women age 45-49 where it shows a slight increase.

Table 3.6 Children ever born and living

Percent distribution of all women and of currently married women by number of children ever born (CEB) and mean number ever born and living, according to five-year age groups, Tanzania 1996

Age group	Number of children ever born											Total	Mean number of CEB	Mean number of living children	Number of women
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	79.1	18.6	1.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.23	0.21	1,732
20-24	25.6	35.4	23.9	11.2	3.0	0.7	0.1	0.0	0.0	0.0	0.0	100.0	1.33	1.15	1,676
25-29	8.2	13.2	20.9	24.5	19.3	9.8	3.3	0.7	0.1	0.0	0.0	100.0	2.80	2.43	1,440
30-34	3.9	7.0	9.9	15.2	18.9	18.4	12.9	9.0	3.3	1.3	0.4	100.0	4.21	3.59	1,118
35-39	3.7	4.4	5.3	7.5	12.4	13.7	17.7	14.5	10.2	6.3	4.3	100.0	5.46	4.59	888
40-44	1.8	3.5	4.6	3.1	7.2	10.6	14.1	14.5	14.1	10.4	16.1	100.0	6.70	5.52	680
45-49	1.9	2.8	4.8	4.4	4.7	5.9	8.3	13.6	16.2	12.2	25.2	100.0	7.29	5.76	585
Total	24.8	15.6	11.7	10.2	8.9	7.2	6.1	5.1	3.9	2.6	3.7	100.0	3.09	2.58	8,120
CURRENTLY MARRIED WOMEN															
15-19	42.5	49.2	6.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.67	0.60	401
20-24	13.9	35.9	29.9	14.9	4.3	1.0	0.2	0.0	0.0	0.0	0.0	100.0	1.63	1.41	1,131
25-29	4.9	10.5	20.7	26.4	21.7	10.9	3.9	0.8	0.1	0.0	0.0	100.0	3.03	2.62	1,184
30-34	2.4	5.6	9.0	14.5	19.5	19.5	13.7	10.1	3.8	1.5	0.4	100.0	4.44	3.80	947
35-39	3.1	4.1	5.2	6.8	11.8	13.3	17.8	15.2	11.1	6.5	5.2	100.0	5.62	4.75	740
40-44	1.2	3.1	4.2	3.2	6.8	10.6	12.8	15.3	14.7	10.6	17.5	100.0	6.87	5.65	561
45-49	1.2	2.0	3.5	4.1	3.8	5.4	8.0	14.5	16.9	11.7	28.8	100.0	7.63	6.07	447
Total	8.2	15.5	14.3	13.1	11.7	9.4	7.7	6.8	5.1	3.2	5.0	100.0	3.94	3.31	5,411

The distribution of children ever born by age shows that early childbearing is quite common in Tanzania; 21 percent of all women age 15-19 have already had at least one birth.

The percent childless among women at the end of the reproductive period is an indirect measure of *primary infertility*—the proportion of women who are unable to bear children at all. Table 3.6 shows that primary sterility is low, about 2 percent. The incidence of primary sterility seems to have declined from about 4 percent in the 1991-92 TDHS to 2 percent in the 1996 TDHS.

3.5 Birth Intervals

Information on the length of the birth interval provides insight into birth spacing patterns. Previous research has shown that short birth intervals are closely associated with poor health of children, especially during infancy. This is particularly true for babies born at an interval of less than 24 months. Thus, the study of birth intervals is important in understanding the health status of mothers, infants, and young children. Table 3.7 shows the distribution of births in the five years before the survey by the interval since previous birth, according to various demographic and background characteristics (first births have been excluded).

As with the 1991-92 TDHS, the 1996 TDHS indicates that most Tanzanian children (83 percent) are born after a "safe" birth interval (24 or more months apart), with about 43 percent born at least 36 months after a prior birth. Nevertheless, 17 percent of non-first births occur less than 24 months after the preceding birth, with 7 percent occurring less than 18 months since the previous birth. The overall median birth interval is 34 months.

Expectedly, younger women tend to have shorter birth intervals than older women. On the other hand, there is no significant difference in median birth interval by birth order or sex of the previous child.

The survival status of the previous birth is strongly associated with the length of the preceding birth interval. The median birth interval is six months shorter for children whose previous sibling died compared with children whose previous sibling survived. Twenty-two percent of children whose preceding sibling died are born after an interval of less than 18 months, compared with only 4 percent among children whose preceding sibling survived.

The median birth interval in urban areas is four months longer than that for rural areas on the mainland. Thirteen percent of the births in urban areas occur at intervals which are "too short" (less than 24 months), compared with 18 percent of births in the rural areas. The percentage of births with an interval of four years or more is higher for urban than rural births (30 percent vs. 17 percent). Births in the Southern zone exhibit a higher median birth interval (38 months) than the other zones.

3.6 Age at First Birth

The age at which childbearing starts has important consequences for the overall level of fertility and also the health and welfare of the mother and the child. Today, teenage pregnancy and motherhood are a major health and social concern. In some societies, postponement of first births due to an increase in age at marriage has contributed to overall fertility decline. However, in many societies, premarital childbearing is common.

Table 3.8 shows the percent distribution of women by age at first birth, according to current age at the time of the survey. The distribution is similar to that in the 1991-92 TDHS, and shows that the prevalence of early childbearing has declined slightly over time. While about 12 percent of older women (45-49) had their first birth before reaching age 15, only 3 percent of the younger women (20-24) did so. Among older women (45-49), 61 percent had their first birth before reaching age 20, compared to 52 percent of the young women (20-24). The median age at first birth has increased nearly one year across cohorts age 45-49 to 20-24.

Table 3.7 Birth intervals

Percent distribution of births in the five years preceding the survey by number of months since previous birth, according to demographic and socioeconomic characteristics, Tanzania 1996

Background characteristic	Number of months since previous birth					Total	Median number of months since previous birth	Number of births
	7-17	18-23	24-35	36-47	48+			
Age of mother								
15-19	16.3	23.5	34.3	24.7	1.3	100.0	26.2	44
20-29	7.5	12.8	45.6	21.3	12.8	100.0	31.2	2,583
30-39	5.6	9.2	36.0	26.0	23.2	100.0	35.8	2,174
40 +	5.8	7.6	31.9	22.2	32.6	100.0	38.1	633
Birth order								
2-3	6.6	11.7	39.7	23.2	18.8	100.0	33.4	2,264
4-6	6.3	9.8	41.4	23.9	18.7	100.0	33.8	2,014
7 +	7.4	11.0	38.3	22.4	20.9	100.0	33.9	1,157
Sex of prior birth								
Male	6.5	10.8	40.6	22.9	19.2	100.0	33.6	2,786
Female	6.7	10.9	39.5	23.6	19.2	100.0	33.7	2,649
Survival of prior birth								
Dead	22.0	14.1	31.2	15.8	17.0	100.0	28.1	755
Living	4.1	10.3	41.5	24.5	19.6	100.0	34.2	4,680
Residence								
Mainland	6.6	10.8	40.0	23.3	19.3	100.0	33.7	5,250
Total urban	4.1	8.7	34.0	23.3	29.9	100.0	37.1	808
Dar es Salaam city	1.2	8.2	33.7	22.4	34.5	100.0	39.1	215
Other urban	5.2	8.9	34.1	23.6	28.2	100.0	36.6	592
Total rural	7.1	11.2	41.1	23.3	17.4	100.0	33.1	4,442
Zanzibar	7.1	11.6	42.1	23.5	15.7	100.0	33.3	185
Zones								
Coastal	4.6	8.9	38.4	25.1	23.0	100.0	35.4	1,049
Northern Highlands	7.3	12.5	34.3	25.1	20.8	100.0	34.3	654
Lake	9.1	13.7	43.7	19.0	14.5	100.0	30.8	2,051
Central	7.4	8.7	42.5	22.1	19.3	100.0	33.7	453
Southern Highlands	3.9	8.7	41.1	26.4	19.8	100.0	34.9	765
Southern	3.1	5.6	31.8	31.3	28.1	100.0	38.4	462
Education								
No education	6.6	11.0	37.5	24.6	20.3	100.0	34.5	1,787
Primary incomplete	7.0	11.0	38.8	21.9	21.3	100.0	33.9	919
Primary complete	6.6	10.8	42.6	22.6	17.4	100.0	33.0	2,581
Secondary+	6.1	8.8	34.6	26.7	23.8	100.0	36.2	147
Total	6.6	10.8	40.1	23.3	19.2	100.0	33.7	5,435

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

Table 3.8 Age at first birth

Percent distribution of women 15-49 by age at first birth, according to current age, Tanzania 1996

Current age	Women with no births	Age at first birth						Total	Median age at first birth	Number of women
		<15	15-17	18-19	20-21	22-24	25+			
15-19	79.1	1.1	12.4	7.4	NA	NA	NA	100.0	a	1,732
20-24	25.6	3.2	22.1	27.0	17.3	4.7	NA	100.0	19.8	1,676
25-29	8.2	4.2	24.1	30.1	19.0	10.9	3.5	100.0	19.4	1,440
30-34	3.9	6.8	27.3	25.0	17.0	13.9	6.3	100.0	19.2	1,118
35-39	3.7	8.2	31.7	22.6	16.0	10.7	7.1	100.0	18.9	888
40-44	1.8	10.4	33.4	24.8	13.5	9.1	7.0	100.0	18.5	680
45-49	1.9	11.6	27.4	22.3	12.5	13.2	11.1	100.0	19.0	585

NA = Not applicable.
[a] Omitted because less than 50 percent of the women in the age group 15-19 have had a birth by age 15.

To study differentials in age at first birth, Table 3.9 gives the median age at first birth for different subgroups of the population. There is little variation in age at first birth by urban and rural residence. The median age at first birth shows an inverse relationship with educational attainment, being as low as 18 years for women with no education or incomplete primary and increasing to 20 years for women with completed primary and 23 years for women with secondary or higher education.

Table 3.9 Median age at first birth by background characteristics

Median age at first birth among women 20-49 years, by current age and selected background characteristics, Tanzania 1996

Background characteristic	Current age						Ages 20-49	Ages 25-49
	20-24	25-29	39-34	35-39	40-44	45-49		
Urban/Rural								
Urban	a	19.9	19.4	18.7	18.3	19.1	19.6	19.3
Rural	19.7	19.3	19.2	19.0	18.6	18.9	19.2	19.1
Education								
No education	18.6	18.8	17.8	18.5	18.3	18.7	18.5	18.4
Primary incomplete	18.6	19.2	17.9	18.1	17.9	19.0	18.4	18.4
Primary complete	19.9	19.5	19.9	19.7	19.8	20.5	19.8	19.7
Secondary+	b	23.7	22.8	22.1	22.1	22.3	b	23.0
Total	19.8	19.4	19.2	18.9	18.5	19.0	19.3	19.1

[a] Omitted because less than 50 percent of the women in age group 20-24 had a birth by age 20.
[b] Omitted because less than 50 percent of the women in the age group 20-24 and 20-49 had a birth by age 20.

3.7 Teenage Pregnancy and Motherhood

The issue of fertility among women aged 15-19 is vital because teenage mothers and their children are at high risk for social and health problems. Children born to young mothers are more prone to illness and higher mortality during childhood than children born to older mothers.

Table 3.10 and Figure 3.4 present the proportion of women age 15-19 years who have begun childbearing, separating those who are already mothers from those who are pregnant with their first child. Overall, 26 percent of teenagers covered by this survey have already begun childbearing with 21 percent having had a child already and 5 percent carrying their first child. This represents a decline in teen childbearing—the 1991-92 TDHS showed that 23 percent of women 15-19 were already mothers and 6 percent were pregnant with their first child (Ngallaba et al., 1993:30). As expected, the percentage who have started the reproductive process increases with age, from 1 percent among the 15 year olds to 61 percent by age 19.

Table 3.10 further shows that overall teenage childbearing is higher among rural women (27 percent) than their urban counter-parts (24 percent) on the Mainland. This is true for both the proportion who are already mothers and the proportion who are pregnant with their first child. The Southern zone has the highest prevalence of teenage childbearing (35 percent) while the Coastal zone has the lowest level (23 percent).

Figure 3.4
Adolescent Childbearing

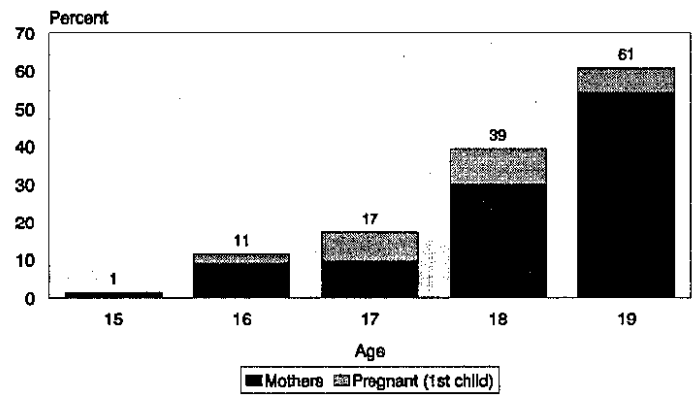


Table 3.10 Teenage pregnancy and motherhood

Percentage of women 15-19 who are mothers or pregnant with their first child, by selected background characteristics, Tanzania 1996

Background characteristic	Percentage of women who are:		Percentage who have begun child-bearing	Number of women
	Mothers	Pregnant with first child		
Age				
15	0.9	0.4	1.3	288
16	9.0	2.3	11.2	408
17	9.7	7.4	17.1	343
18	30.0	9.2	39.2	358
19	54.3	6.3	60.6	335
Residence				
Mainland	21.1	5.2	26.3	1,683
Total urban	19.6	4.6	24.2	393
Dar es Salaam city	19.3	4.7	24.0	127
Other urban	19.7	4.6	24.2	266
Total rural	21.6	5.3	27.0	1,290
Zanzibar	11.5	5.9	17.4	49
Zones				
Coastal	17.9	5.1	23.0	444
Northern Highlands	18.2	6.0	24.2	206
Lake	23.0	4.2	27.2	538
Central	22.5	4.8	27.3	125
Southern Highlands	18.7	5.2	23.9	247
Southern	26.9	8.0	34.8	173
Education				
No education	33.1	6.5	39.6	284
Primary incomplete	14.1	2.0	16.1	559
Primary complete	23.1	7.2	30.2	795
Secondary+	5.9	3.5	9.4	95
Total	20.9	5.2	26.1	1,732

CHAPTER 4

FERTILITY REGULATION

Knowledge of family planning methods and sources to obtain them are necessary in deciding whether to adopt a contraceptive method and the choice of method to use. A positive attitude toward family planning affects use. This chapter presents data on contraceptive knowledge, attitudes, behaviour, and sources. While the focus is placed on women of reproductive age, some results from the men's survey will also be presented, since men play an important role in the realisation of reproductive goals.

4.1 Knowledge of Family Planning Methods

Information about knowledge of family planning methods was obtained in two ways in the 1996 TDHS. Respondents were first asked to name ways or methods by which a couple could delay or avoid pregnancy. When a respondent failed to mention a particular method spontaneously, the interviewer described the method and asked if the respondent knew it. Information was collected for eight modern methods: the pill, IUD, injectables, Norplant, vaginal methods (foam, jelly, or diaphragm), condom, and female and male sterilisation, and three traditional methods: the calendar (rhythm) method, mucus method, and withdrawal. In addition, provision was made in the questionnaire to record any other methods named spontaneously by respondents. Both prompted and unprompted knowledge are combined in the report.

Table 4.1 shows the percentage of all women and men, currently married women and men, and sexually active unmarried women and men, and women with no sexual experience who know specific contraceptive methods. Almost all of the women who have heard of any method have heard of a modern method, while about half of the women have heard of a traditional or folk method. Results show that 84 percent of women age 15-49 have heard of at least one method of family planning. The level is higher among currently married women (88 percent). The most commonly recognised methods in Tanzania are the pills (78 percent), condoms (72 percent), injectables (71 percent), female sterilisation (61 percent), and IUD (49 percent). Only 31 percent of all women know of diaphragm/foam/jelly, and about one-fourth know of male sterilisation and implants (Norplant). Of the traditional methods, similar proportions of women have knowledge of withdrawal and calendar or mucus methods (recognised by 31 to 32 percent of women, respectively).

Knowledge of family planning methods is higher among men than women. Almost 90 percent of all men interviewed know of at least one method. The difference in knowledge between men and women is especially notable for male sterilisation and condom: 35 percent of men compared with 25 percent of women know of male sterilisation and 86 percent of men compared with 72 percent of women know about condoms. While women are generally more likely than men to know the methods used by women, it is surprising to note that the proportion of men who know of the calendar or mucus method is higher than among women (45 vs. 31 percent). Overall, knowledge of contraceptive methods is higher among married respondents. Seventy-one percent of women and 67 percent of men know of at least these modern methods (Table 4.1). On average, women and men know of five methods, four of which are modern methods.

Table 4.2 shows the correspondence between the contraceptive knowledge of husbands and wives for the 1,125 couples interviewed in the TDHS sample. Knowledge of at least one method by both spouses is high (86 percent). For couples where only one partner knows of a method, husbands are more likely to know the method than their wives; exceptions are the pill, IUD, injectables, implants and folk methods, which wives are more likely to know about than their husbands.

Table 4.1 Knowledge of contraceptive methods

Percentage of all women, of currently married women, and of sexually active unmarried women and of women with no sexual experience, and the percentage of all men 15-59, of currently married men, and of sexually active unmarried men who know specific contraceptive methods, Tanzania 1996

Contraceptive method	Women who know method				Men who know method		
	All women	Currently married women	Sexually active unmarried women	No sexual experience	All men	Currently married men	Sexually active unmarried men
Any method	84.2	88.5	85.5	55.1	89.2	93.4	90.8
Any modern method	83.6	87.7	85.2	55.1	88.8	92.8	90.8
Pill	78.4	84.0	79.5	41.4	71.1	82.2	66.6
IUD	48.8	52.8	55.7	17.8	34.9	43.8	32.1
Injectables	70.8	76.8	72.1	31.0	55.6	67.1	52.2
Diaphragm/foam/jelly	30.7	34.2	32.0	8.5	35.3	42.5	33.8
Condom	72.2	75.2	78.9	45.6	85.8	89.8	89.8
Female sterilisation	60.7	66.2	63.8	25.8	63.3	74.7	58.9
Male sterilisation	24.8	27.6	24.8	8.0	35.1	42.9	32.7
Implant	23.5	25.4	29.5	7.7	17.0	21.4	17.6
Any traditional/folk method	47.0	51.8	50.3	14.4	56.1	69.1	55.0
Calendar/mucus	30.7	32.1	35.9	12.1	45.2	56.4	42.4
Withdrawal	31.6	36.3	29.2	6.2	42.5	52.6	43.9
Abstinence	0.3	0.3	0.0	0.1	0.4	0.5	0.2
Other	12.6	14.8	12.1	1.4	6.2	9.3	2.8
Number of respondents	8,120	5,411	671	1,048	2,256	1,288	355
Mean number of methods known	5.0	5.4	5.3	2.1	5.1	6.1	4.9
Percent knowing three or more modern methods	70.9	76.6	73.5	31.9	66.8	78.2	64.3
Mean number of modern methods known	4.1	4.4	4.4	1.9	4.0	4.6	3.8

Table 4.2 Knowledge of contraceptive methods among couples

Percent distribution of couples by contraceptive knowledge, according to specific methods, Tanzania, 1996

Contraceptive method	Both know method	Only husband knows method	Only wife knows method	Neither knows method	Total
Any method	86.3	7.3	3.9	2.5	100.0
Any modern method	85.6	7.7	3.8	3.0	100.0
Pill	74.6	8.2	10.2	7.0	100.0
IUD	29.7	14.8	22.4	33.1	100.0
Injectables	59.0	8.8	19.5	12.7	100.0
Diaphragm/foam/jelly	18.0	24.8	15.5	41.8	100.0
Condom	71.8	18.5	4.0	5.7	100.0
Female sterilisation	56.4	18.6	12.5	12.5	100.0
Male sterilisation	16.9	27.3	15.5	44.3	100.0
Implant	10.1	11.4	14.7	63.8	100.0
Any traditional/folk method	44.2	25.9	10.2	19.7	100.0
Calendar/mucus	23.4	34.0	9.1	33.5	100.0
Withdrawal	25.8	26.7	13.1	34.4	100.0
Abstinence	0.0	0.5	0.4	99.1	100.0
Other	3.6	5.9	10.6	79.9	100.0

Note: Table is based on 1,125 couples.

Table 4.3 presents the percentage of all respondents who know any method or any modern method according to background characteristics. Knowledge of contraceptive methods is highest among women 20-34, urban women, women in the Dar es Salaam, Coast, Lindi, Tabora, and Mbeya regions, and among women with completed primary or secondary education. Similar patterns are also observed for men.

4.2 Trends in Contraceptive Knowledge

There has been some increase over time in the proportion of women and men who have heard of methods of family planning (Figure 4.1). The proportion of all women who have heard of at least one method has increased from 74 percent in 1991-92, to 80 percent in 1994 and to 84 percent in 1996. The proportion who have heard of a modern method increased from 72 percent in 1991-92 to 77 percent in 1994 and to 83 percent in 1996. Knowledge of specific methods has increased even more dramatically. For example, in 1991-92, only 40 percent of women had heard of the injectable contraceptive; by 1996, this figure had increased to 71 percent. Similarly, the proportion of women who know of condoms grew from 51 percent of married women in 1991-92 to 72 percent in 1996.

4.3 Ever Use of Family Planning Methods

All women and men interviewed in the 1996 TDHS who said that they had heard of a method of family planning were asked if they had ever used that method. Ever use of family planning methods thus refers to use of a method at any time with no distinction between past and current use. Table 4.4.1 shows the percentage of women who have ever used family planning, according to method and age. Modern methods have been more frequently used (23 percent) than traditional/folk methods (15 percent). The modern methods commonly used by women are pills (15 percent), condoms (7 percent), and injectables (6 percent); while traditional methods frequently used are withdrawal (9 percent) and calendar/mucus (8 percent). Ever use of contraception is higher for sexually active unmarried women than currently married women.

Table 4.4.2 shows that ever use of contraception among men is almost equal for modern (26 percent) and traditional methods (24 percent). The most frequently used methods among men are condoms (18 percent), calendar/mucus (17 percent), and withdrawal (14 percent). Ever use of modern methods is higher for sexually active unmarried men than currently married men (36 vs. 29 percent). This is due to the higher use of condoms by unmarried men than married men (35 vs. 16 percent).

As with contraceptive knowledge, ever use of modern contraceptive methods has increased moderately since 1991-92. In 1991-92, 14 percent of all women had ever used any modern method, compared to 21 percent in 1994 and 23 percent in 1996. Increases in ever use were greatest for injectables. Among men, ever use of modern methods increased from 24 to 26 percent during 1994-96.

Table 4.3 Knowledge of contraceptive methods by background characteristics

Percentage of women and men who know at least one contraceptive method and at least one modern method by selected background characteristics, Tanzania 1996

Background characteristic	Women			Men		
	Know any method	Know modern method	Number of women	Know any method	Know modern method	Number of men
Age						
15-19	65.5	65.4	1,732	76.3	76.3	488
20-24	91.1	90.8	1,676	91.9	91.9	371
25-29	92.5	92.1	1,440	96.0	95.5	301
30-34	91.2	91.0	1,118	95.7	94.4	272
35-39	88.5	87.6	888	93.9	93.9	251
40-45	85.8	84.7	680	96.2	96.2	206
45-49	77.1	74.6	585	88.5	88.5	149
50-54	NA	NA	NA	91.1	89.7	118
55-59	NA	NA	NA	77.1	75.2	100
Residence						
Mainland	84.0	83.4	7,881	89.2	88.8	2,187
Total urban	93.9	93.9	1,811	95.8	95.8	509
Dar es Salaam city	95.9	95.9	563	98.2	98.2	171
Other urban	93.0	92.9	1,248	94.6	94.6	338
Total rural	81.0	80.2	6,070	87.2	86.7	1,678
Zanzibar	90.8	90.7	239	90.4	90.4	69
Pemba	86.8	86.8	92	92.6	92.6	28
Unguja	93.4	93.1	148	88.9	88.9	41
Region						
Dodoma	85.1	84.4	355	87.9	87.9	96
Arusha	62.3	59.7	589	74.5	71.3	156
Kilimanjaro	86.3	86.3	390	80.0	80.0	119
Tanga	78.9	78.9	464	74.7	74.7	108
Morogoro	86.7	86.5	408	87.4	87.4	95
Coast	95.3	94.2	159	93.5	93.5	45
Dar es Salaam	96.1	96.1	646	98.0	98.0	191
Lindi	92.1	91.5	187	98.6	98.6	54
Mtwara	87.5	86.4	355	98.0	98.0	96
Ruvuma	89.7	89.5	305	91.2	91.2	82
Iringa	81.0	80.5	466	87.6	87.6	100
Mbeya	90.1	89.5	473	98.6	98.6	137
Singida	83.2	81.7	283	96.4	95.2	80
Tabora	90.4	90.4	225	98.1	98.1	82
Rukwa	82.2	81.6	242	96.2	94.9	71
Kigoma	86.6	86.4	351	94.3	94.3	95
Shinyanga	73.9	73.6	686	82.3	82.3	202
Kagera	88.4	87.0	467	97.1	95.7	139
Mwanza	84.2	84.2	573	85.9	85.9	176
Mara	84.1	84.1	257	78.2	78.2	64
Education						
No education	72.4	70.7	2,316	78.4	76.7	304
Primary incomplete	78.6	78.3	1,630	82.5	82.2	664
Primary complete	92.5	92.4	3,732	94.5	94.3	1,066
Secondary+	96.6	96.6	441	99.1	99.1	222
Total	84.2	83.6	8,120	89.2	88.8	2,256

NA = Not applicable

Table 4.4.1 Ever use of contraception: women

Percentage of all women, of currently married women, and of sexually active unmarried women who have ever used any contraceptive method, by specific method and age, Tanzania 1996

Age	Any method	Modern method									Traditional/folk method					Number of women
		Any modern method	Pill	IUD	Injectables	Diaphragm/ foam/ jelly	Condom	Female sterilisation	Male sterilisation	Implant	Any traditional/ folk method	Calendar/ mucus	Withdrawal	Abstinence	Other	
ALL WOMEN																
15-19	8.7	5.9	2.7	0.4	0.7	0.1	3.5	0.0	0.0	0.0	3.8	2.6	1.6	0.0	0.2	1,732
20-24	35.6	25.5	15.3	1.1	5.4	0.2	10.7	0.1	0.0	0.1	17.8	9.0	11.0	0.1	1.5	1,676
25-29	40.3	29.3	21.1	1.6	7.9	0.2	8.9	0.2	0.1	0.0	19.4	8.8	12.0	0.1	2.4	1,440
30-34	40.2	29.4	21.8	2.5	9.2	0.8	8.3	0.8	0.0	0.1	20.0	10.3	12.3	0.0	1.8	1,118
35-39	38.1	30.4	21.6	3.2	10.1	0.4	6.7	3.0	0.0	0.2	20.1	9.0	12.4	0.2	3.2	888
40-44	35.3	26.7	17.2	2.7	9.9	0.8	5.0	6.7	0.1	0.0	16.8	7.5	10.8	0.1	2.7	680
45-49	26.9	17.0	9.9	1.5	5.0	0.3	1.9	5.2	0.0	0.0	15.9	6.5	9.5	0.2	3.1	585
Total	30.9	22.5	15.0	1.6	6.2	0.3	7.0	1.4	0.0	0.0	15.4	7.5	9.4	0.1	1.8	8,120
CURRENTLY MARRIED WOMEN																
15-19	15.9	9.9	5.7	1.2	1.1	0.2	5.0	0.2	0.0	0.0	8.1	4.9	3.7	0.0	0.6	401
20-24	36.2	25.6	15.9	1.3	6.0	0.2	8.8	0.1	0.0	0.1	18.9	8.7	12.3	0.1	1.7	1,131
25-29	41.8	30.1	21.8	1.7	8.8	0.2	8.7	0.2	0.0	0.0	20.6	8.9	13.0	0.1	2.5	1,184
30-34	38.3	28.3	21.4	2.7	8.5	0.9	6.4	1.0	0.0	0.1	19.1	9.1	12.0	0.0	2.0	947
35-39	38.3	30.2	20.4	3.3	10.1	0.5	5.8	3.3	0.0	0.1	19.9	7.8	12.7	0.2	3.6	740
40-44	34.7	25.5	15.3	2.8	10.2	0.8	4.3	7.1	0.2	0.0	17.7	7.9	11.3	0.2	2.8	561
45-49	26.0	15.2	9.0	1.4	5.0	0.3	0.3	5.2	0.0	0.0	16.2	6.8	9.9	0.2	2.9	447
Total	35.6	25.6	17.4	2.1	7.6	0.4	6.5	1.9	0.0	0.1	18.3	8.2	11.5	0.1	2.3	5,411
SEXUALLY ACTIVE UNMARRED WOMEN																
Total	40.1	34.1	21.6	1.9	6.4	0.5	18.4	0.6	0.1	0.1	14.3	8.9	8.1	0.0	1.2	671

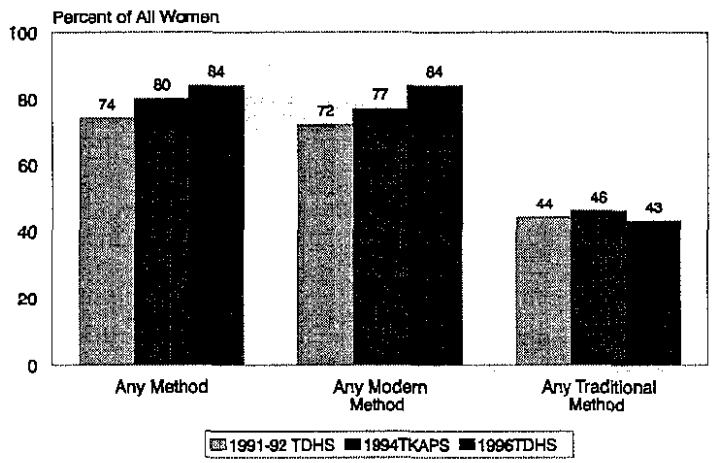
Table 4.4.2 Ever use of contraception: men

Percentage of all men, of currently married men, and of sexually active unmarried men who have ever used any contraceptive method, by specific method and age, Tanzania 1996

Age	Any method	Modern method								Traditional/folk method					Number of men
		Any modern method	Pill	IUD	Injectables	Diaphragm/ foam/ jelly	Condom	Female sterilisation	Implant	Any traditional folk method	Calendar/ mucus	Withdrawal	Abstinence	Other	
ALL MEN															
15-19	11.7	10.2	0.4	0.0	0.1	0.9	10.0	0.0	0.0	3.7	1.5	2.6	0.0	0.0	488
20-24	38.0	28.9	5.6	0.0	1.2	0.6	26.8	0.0	0.2	19.3	13.9	9.6	0.0	0.8	371
25-29	51.2	32.2	9.5	0.2	5.2	0.6	26.6	0.0	0.0	33.1	24.1	19.0	0.0	1.2	301
30-34	53.8	37.2	16.3	2.3	6.1	0.0	25.7	0.0	0.0	37.2	26.5	23.3	0.3	0.6	272
35-39	53.7	35.2	17.2	2.7	7.9	0.0	20.5	0.8	0.0	36.5	25.0	20.0	0.3	2.4	251
40-44	47.3	31.1	19.9	1.3	5.5	0.7	14.3	4.0	0.6	31.8	19.0	22.5	0.6	1.5	206
45-49	37.6	20.3	13.4	1.7	7.6	0.4	8.1	0.4	0.0	27.8	17.1	12.5	1.6	3.3	149
50-54	40.3	20.3	7.5	1.6	5.2	0.0	9.6	2.7	0.0	31.3	25.8	14.2	0.5	3.1	118
55-59	29.7	13.1	7.8	0.0	0.9	0.0	5.5	2.1	0.0	24.3	14.2	9.2	0.0	5.5	100
Total	38.3	25.5	9.6	0.9	3.9	0.5	18.1	0.7	0.1	24.4	16.7	13.7	0.2	1.4	2,256
CURRENTLY MARRIED MEN															
15-19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6
20-24	51.2	26.5	11.9	0.0	1.5	0.7	22.2	0.0	0.7	37.7	26.6	17.5	0.0	1.0	91
25-29	52.3	25.9	10.5	0.3	4.8	1.0	17.4	0.0	0.0	37.4	28.7	19.5	0.0	1.8	196
30-34	55.6	37.5	17.0	2.0	6.9	0.0	24.5	0.0	0.0	39.9	28.8	24.6	0.3	0.7	232
35-39	54.7	35.5	18.4	2.9	8.6	0.0	19.5	0.9	0.0	37.9	26.2	20.6	0.3	2.6	230
40-44	48.2	31.1	21.1	1.4	5.9	0.3	13.2	4.3	0.7	33.2	20.1	23.4	0.6	1.6	194
45-49	39.2	20.4	14.6	1.8	8.2	0.4	7.2	0.5	0.0	30.2	18.6	13.6	1.7	3.5	137
50-54	41.7	20.4	8.0	1.7	5.5	0.0	9.0	2.9	0.0	32.1	26.3	13.9	0.6	3.4	110
55-59	31.6	13.3	8.7	0.0	1.0	0.0	4.8	2.4	0.0	26.4	15.1	9.6	0.0	6.1	90
Total	48.7	28.6	14.8	1.5	5.9	0.3	16.1	1.3	0.1	35.2	24.5	19.2	0.4	2.3	1,288
SEXUALLY ACTIVE UNMARRIED MEN															
Total	40.7	36.0	4.2	0.4	2.7	1.7	35.2	0.0	0.0	17.4	11.8	11.5	0.0	0.4	355

Note: An asterisk indicates a figure is based on fewer than 25 men and has been suppressed.

Figure 4.1
Trends in Contraceptive Knowledge among Women 15-49



4.4 Current Use of Family Planning

The level of current use of family planning is one of the indicators most frequently used to assess the success of family planning programme activities. It is widely used as a measure in the analysis of the determinants of fertility. This section focuses on the levels and differentials in family planning use with particular emphasis on the method mix among users. Trends in family planning use in Tanzania are also described. Information on the service providers from which users obtained methods is also presented.

Sixteen percent of all women in Tanzania are currently using a contraceptive method and 12 percent are using modern methods (Table 4.5.1). The most widely used methods are the pills (5 percent) and injectables (4 percent). Female sterilisation and condoms are used by 1 percent of women. About 2 percent of women each use the calendar/mucus method or withdrawal. The use of contraception increases with age, reaching a peak at age 30-44 among all women. The pill is the most commonly used method among women under 35, while injectables is the most common method among women 35-39. Female sterilisation tends to be used by older women (women in their 40s).

Current contraceptive use among men is slightly higher than among women (Table 4.5.2). Twenty-two percent of men in Tanzania are currently using contraception, 14 percent using modern and 8 percent using traditional methods. The condom is the method most used by men (7 percent), followed by the calendar/mucus method (6 percent). The use of traditional methods is proportionately higher for men than women. The major difference in contraceptive use reported by men and women is higher use of the calendar/mucus method and of condoms by men.

Current use of contraception is higher among the sexually active unmarried population than among all women and men. Condom use among sexually active unmarried respondents is notably higher especially among men (22 vs. 7 percent). In fact, condom use accounts for 86 percent of all use among sexually active unmarried men. This suggests that the intention of premarital contraceptive use involves more than pregnancy prevention and probably indicates motivation to avoid sexually transmitted diseases, especially human immunodeficiency virus (HIV).

Table 4.5.1 Current use of contraception: women

Percentage of all women, of currently married women, and of sexually active unmarried women who are currently using a contraceptive method, by specific method, according to age, Tanzania 1996

Age	Any method	Modern method: Any modern method	Pill	IUD	Injectables	Condom	Female sterilisation	Traditional/folk method: Any trad. or folk method	Calendar/ mucus	Withdrawal	Abstinence	Other methods	Not currently using	Total	Number of women
ALL WOMEN															
15-19	4.7	3.1	1.3	0.2	0.6	1.0	0.0	1.6	1.1	0.4	0.0	0.0	95.3	100.0	1,732
20-24	18.0	13.0	6.6	0.3	3.8	2.2	0.1	4.9	2.1	2.7	0.0	0.1	82.0	100.0	1,676
25-29	19.8	14.4	8.1	0.4	4.2	1.6	0.2	5.3	2.7	2.2	0.0	0.4	80.2	100.0	1,440
30-34	21.0	14.8	6.2	1.0	5.9	0.9	0.8	6.1	2.8	2.9	0.0	0.4	79.0	100.0	1,118
35-39	21.1	15.8	4.6	1.1	6.2	0.7	3.0	5.3	2.6	1.9	0.0	0.7	78.9	100.0	888
40-44	20.7	15.9	3.0	0.3	4.8	1.0	6.7	4.7	1.9	1.7	0.1	0.9	79.3	100.0	680
45-49	12.8	9.9	1.5	0.7	1.9	0.7	5.2	2.8	0.8	1.2	0.0	0.8	87.2	100.0	585
Total	16.1	11.7	4.8	0.5	3.7	1.3	1.4	4.3	2.1	1.9	0.0	0.4	83.9	100.0	8,120
CURRENTLY MARRIED WOMEN															
15-19	7.4	4.4	2.2	0.5	0.8	0.7	0.2	3.0	1.6	1.4	0.0	0.0	92.6	100.0	401
20-24	18.0	12.7	6.9	0.4	4.0	1.2	0.1	5.3	1.5	3.6	0.0	0.2	82.0	100.0	1,131
25-29	19.9	14.5	8.0	0.3	4.6	1.3	0.2	5.4	2.6	2.5	0.0	0.3	80.1	100.0	1,184
30-34	20.2	14.0	6.1	1.2	5.3	0.3	1.0	6.2	2.4	3.3	0.0	0.4	79.8	100.0	947
35-39	21.2	15.9	4.3	0.9	6.6	0.7	3.3	5.2	2.2	2.1	0.0	0.9	78.8	100.0	740
40-44	22.1	17.1	3.5	0.4	5.1	0.8	7.1	5.0	2.0	2.1	0.2	0.7	77.9	100.0	561
45-49	12.6	9.2	1.5	0.3	2.3	0.0	5.2	3.4	1.0	1.6	0.0	0.8	87.4	100.0	447
Total	18.4	13.3	5.5	0.6	4.5	0.8	1.9	5.1	2.0	2.6	0.0	0.4	81.6	100.0	5,411
SEXUALLY ACTIVE UNMARRIED WOMEN															
Total	26.2	21.4	9.5	1.0	3.8	6.3	0.6	4.8	4.0	0.5	0.0	0.2	73.8	100.0	671

Some women are more likely to use contraception than others (see Table 4.6.1 and Figure 4.2). There are differences in the level of current use between the mainland and Zanzibar and more notably by regions, educational levels, and number of living children. Use of modern family planning methods is lower in Zanzibar (8 percent) than on the mainland (12 percent). Between the two islands, use of modern family planning methods is slightly higher in Unguja (9 percent) than Pemba (6 percent). In the mainland, urban women are much more likely to be using modern contraceptive methods (24 percent) than rural women (8 percent). Levels of current use of modern family planning methods are highest in the Kilimanjaro, Coast, and Dar es Salaam regions (23-24 percent) and lowest in the Shinyanga, Kagera, and Mara Regions (4-5 percent). Current use of modern family planning methods is less than 10 percent in 6 regions and more than 10 percent in 14 regions.

Education is clearly related to the use of family planning. Women with some secondary and higher education are five times more likely to use modern methods than women without education (23 vs. 5 percent). The educational differentials are similar for any method use.

As expected, contraceptive use rises with the number of living children. The percentage of women using any modern family planning method increases rapidly from 3 percent among women with no children to 16 percent among those with three or more children. The results show that few women in Tanzania adopt contraception until after they have had at least one child.

Table 4.5.2 Current use of contraception: men

Percentage of all men, of currently married men, and of sexually active unmarried men who are currently using a contraceptive method, by specific method, according to age, Tanzania 1996

		Modern method						Traditional/folk method							
Age	Any method	Any modern method	Pill	IUD	Injectables	Condom	Female sterilisation	Any trad. or folk method	Calendar/ mucus	Withdrawal	Abstinence	Other methods	Not currently using	Total	Number of men
							ALL MEN								
15-19	7.3	6.6	0.0	0.0	0.0	6.6	0.0	0.7	0.4	0.3	0.0	0.0	92.7	100.0	488
20-24	19.9	15.0	2.3	0.0	0.3	12.2	0.0	4.9	3.7	1.0	0.0	0.2	80.1	100.0	371
25-29	27.7	15.5	4.1	0.2	1.1	10.1	0.0	12.1	7.8	3.9	0.0	0.5	72.3	100.0	301
30-34	33.9	20.3	6.8	0.5	3.8	9.1	0.0	13.6	9.2	4.2	0.3	0.0	66.1	100.0	272
35-39	37.6	20.4	6.9	0.5	4.7	7.5	0.8	17.2	11.1	4.9	0.6	0.6	62.4	100.0	251
40-44	26.8	16.9	7.4	0.6	2.4	2.4	3.7	9.8	6.1	3.7	0.0	0.0	73.2	100.0	206
45-49	22.7	13.6	5.4	0.8	3.3	3.6	0.4	9.1	5.7	1.2	0.4	1.8	77.3	100.0	149
50-54	20.7	10.2	1.5	0.0	2.5	3.5	2.7	10.6	6.8	2.7	0.5	0.5	79.3	100.0	118
55-59	12.3	7.2	5.1	0.0	0.0	0.0	2.1	5.0	3.8	1.2	0.0	0.0	87.7	100.0	100
Total	22.4	14.0	3.9	0.2	1.8	7.3	0.7	8.4	5.5	2.4	0.2	0.3	77.6	100.0	2,256
							CURRENTLY MARRIED MEN								
15-19	*	*	*	*	*	*	*	*	*	*	*	*	*	100.0	6
20-24	27.1	14.8	7.3	0.0	0.0	7.5	0.0	12.3	11.7	0.7	0.0	0.0	72.9	100.0	91
25-29	30.0	12.1	6.3	0.3	1.7	3.8	0.0	17.8	11.5	5.6	0.0	0.7	70.0	100.0	196
30-34	35.4	19.7	7.7	0.6	4.5	6.9	0.0	15.7	10.8	4.6	0.3	0.0	64.6	100.0	232
35-39	39.1	21.0	7.5	0.5	5.1	7.0	0.9	18.0	11.8	4.9	0.6	0.7	60.9	100.0	230
40-44	28.4	17.9	7.9	0.6	2.6	2.6	4.0	10.4	6.5	3.9	0.0	0.0	71.6	100.0	194
45-49	24.2	14.3	5.9	0.9	3.6	3.4	0.5	9.9	6.2	1.3	0.4	1.9	75.8	100.0	137
50-54	20.9	9.5	1.6	0.0	2.6	2.4	2.9	11.3	7.3	2.9	0.6	0.6	79.1	100.0	110
55-59	13.7	8.1	5.7	0.0	0.0	0.0	2.4	5.6	4.2	1.4	0.0	0.0	86.3	100.0	90
Total	29.4	15.8	6.6	0.4	3.0	4.6	1.2	13.6	9.2	3.7	0.3	0.5	70.6	100.0	1,288
							SEXUALLY ACTIVE UNMARRIED MEN								
Total	25.2	22.5	0.5	0.0	0.2	21.6	0.0	2.8	1.4	1.2	0.0	0.2	74.8	100.0	355

Note: An asterisk indicates a figure is based on fewer than 25 men and has been suppressed.

Table 4.6.2 shows the percent distribution of all men age 15-59 by the contraceptive method currently used, according to background characteristics. The differentials in contraceptive use by men resemble those among women. Men in urban areas are more likely to use contraception, especially modern methods, than their counterparts in rural areas on the mainland. There are quite large differences in the use of contraceptives among men in the various regions on the mainland. For example, 26 to 30 percent of men in the Mbeya, Singida, Dar es Salaam, and Coast regions are using modern family planning methods, compared with only 1 to 5 percent in the Mwanza and Shinyanga regions. Greater contraceptive use was found to be associated with increasing level of education. Use of modern contraceptive methods increases from 4 percent among men with no formal education to 28 percent among those with at least some secondary education.

Table 4.6.1 Current use of contraception by background characteristics: women

Percent distribution of all women by contraceptive method currently used, according to selected background characteristics, Tanzania 1996

Background characteristic	Any method	Modern method						Traditional/folk method				Not currently using	Total	Number of women
		Any modern method	Pill	IUD	Injectables	Condom	Female sterilisation	Any trad. or folk method	Calendar/ mucus	Withdrawal	Other methods			
Residence														
Mainland	16.2	11.9	4.8	0.5	3.7	1.3	1.4	4.4	2.1	1.9	0.4	83.8	100.0	7,881
Total urban	29.0	23.7	9.0	1.2	7.4	3.5	2.4	5.3	3.9	1.1	0.3	71.0	100.0	1,811
Dar es Salaam city	30.8	23.9	8.3	2.0	6.3	4.4	2.6	6.9	5.1	1.5	0.3	69.2	100.0	563
Other urban	28.2	23.6	9.3	0.8	7.8	3.1	2.4	4.6	3.4	0.9	0.4	71.8	100.0	1,248
Total rural	12.4	8.3	3.6	0.3	2.6	0.7	1.2	4.1	1.5	2.2	0.4	87.6	100.0	6,070
Zanzibar	9.9	7.9	3.8	0.2	2.6	0.3	1.1	1.9	1.2	0.4	0.4	90.1	100.0	239
Pemba	7.1	5.8	2.0	0.0	2.0	0.3	1.4	1.4	0.7	0.7	0.0	92.9	100.0	92
Unguja	11.6	9.2	4.9	0.3	2.9	0.3	0.9	2.3	1.4	0.3	0.6	88.4	100.0	148
Region														
Dodoma	13.0	11.4	5.1	0.6	4.4	0.3	1.0	1.6	1.0	0.6	0.0	87.0	100.0	355
Arusha	17.3	11.3	4.3	1.3	2.6	1.3	1.9	6.0	1.9	3.8	0.2	82.7	100.0	589
Kilimanjaro	37.7	23.7	8.1	2.5	4.6	2.5	5.6	14.0	7.4	6.1	0.5	62.3	100.0	390
Tanga	22.4	12.6	5.0	0.3	4.8	1.8	0.8	9.8	2.5	6.3	1.0	77.6	100.0	464
Morogoro	16.2	13.3	6.6	0.0	4.8	1.1	0.8	2.9	1.6	0.8	0.5	83.8	100.0	408
Coast	26.7	23.5	9.4	0.4	9.4	2.5	1.4	3.2	1.1	1.8	0.4	73.3	100.0	159
Dar es Salaam	29.8	23.0	8.4	2.0	6.3	3.8	2.2	6.8	5.2	1.3	0.3	70.2	100.0	646
Lindi	18.6	15.7	8.8	0.3	3.8	1.3	1.6	2.8	2.2	0.0	0.6	81.4	100.0	187
Mtwara	13.2	11.3	5.9	0.0	3.4	0.7	1.4	1.8	0.5	0.2	1.1	86.8	100.0	355
Ruvuma	18.5	15.2	7.5	0.0	4.5	1.7	1.5	3.2	1.9	0.4	0.9	81.5	100.0	305
Iringa	11.1	7.7	4.1	0.3	1.8	0.8	0.8	3.3	1.5	1.3	0.5	88.9	100.0	466
Mbeya	18.8	11.5	5.4	0.0	3.5	1.0	1.6	7.3	0.6	6.1	0.6	81.2	100.0	473
Singida	14.2	12.9	5.3	0.3	5.6	0.8	1.0	1.3	0.5	0.8	0.0	85.8	100.0	283
Tabora	16.7	11.1	4.5	0.0	4.5	1.0	1.0	5.6	5.6	0.0	0.0	83.3	100.0	225
Rukwa	13.3	7.6	4.0	0.0	2.3	0.3	1.1	5.7	0.3	4.5	0.8	86.7	100.0	242
Kigoma	13.6	10.4	3.3	0.3	4.4	0.3	1.9	3.3	2.7	0.3	0.0	86.4	100.0	351
Shinyanga	4.3	4.0	0.8	0.3	1.3	0.3	1.3	0.3	0.0	0.3	0.0	95.7	100.0	686
Kagera	9.5	5.3	2.5	0.0	1.1	0.7	1.1	4.2	2.8	1.1	0.4	90.5	100.0	467
Mwanza	9.4	8.4	2.3	0.0	3.2	2.6	0.3	1.0	1.0	0.0	0.0	90.6	100.0	573
Mara	6.9	5.4	1.4	0.0	3.6	0.4	0.0	1.4	0.7	0.4	0.4	93.1	100.0	257
Education														
No education	6.8	4.7	1.6	0.0	1.9	0.2	0.9	2.1	0.5	1.2	0.4	93.2	100.0	2,316
Primary incomplete	12.5	9.6	3.8	0.3	2.7	0.7	2.2	2.9	0.9	1.5	0.5	87.5	100.0	1,630
Primary complete	21.5	15.7	6.8	0.7	5.1	1.7	1.3	5.9	2.9	2.6	0.4	78.5	100.0	3,732
Secondary+	31.5	23.1	8.0	2.1	4.5	5.5	2.8	8.4	7.4	1.0	0.0	68.5	100.0	441
No. of living children														
0	3.9	2.5	0.8	0.0	0.1	1.4	0.0	1.5	1.4	0.1	0.0	96.1	100.0	2,197
1	17.0	12.6	7.2	0.6	2.8	1.7	0.2	4.3	2.3	2.0	0.0	83.0	100.0	1,367
2	21.2	15.0	7.5	0.7	4.7	1.5	0.5	6.2	3.1	2.6	0.5	78.8	100.0	1,065
3	22.3	16.3	7.6	1.0	5.0	1.7	0.8	6.0	2.2	3.1	0.7	77.7	100.0	947
4+	21.6	16.2	4.7	0.6	6.3	0.7	3.9	5.3	2.0	2.6	0.7	78.4	100.0	2,545
Total	16.1	11.7	4.8	0.5	3.7	1.3	1.4	4.3	2.1	1.9	0.4	83.9	100.0	8,120

Table 4.6.2 Current use of contraception by background characteristics: men

Percent distribution of all men by contraceptive method currently used, according to selected background characteristics, Tanzania 1996

Background characteristic	Any method	Modern method						Traditional/folk method				Not currently using	Total	Number of men
		Any modern method	Pill	IUD	Injectables	Condom	Female sterilisation	Any trad. or folk method	Calendar/ mucus	Withdrawal	Other methods			
Residence														
Mainland	22.6	14.2	3.9	0.3	1.7	7.5	0.7	8.4	5.6	2.4	0.3	77.4	100.0	2,187
Total urban	29.6	23.9	5.2	0.6	1.6	15.2	1.0	5.7	4.2	1.3	0.1	70.4	100.0	509
Dar es Salaam city	32.0	27.2	5.1	1.1	2.2	16.9	1.5	4.8	3.3	1.1	0.4	68.0	100.0	171
Other urban	28.4	22.2	5.2	0.4	1.3	14.4	0.7	6.2	4.7	1.3	0.0	71.6	100.0	338
Total rural	20.5	11.3	3.4	0.1	1.8	5.2	0.6	9.3	6.0	2.8	0.4	79.5	100.0	1,678
Zanzibar	14.0	7.0	4.1	0.0	1.9	1.1	0.0	7.0	4.8	2.2	0.0	86.0	100.0	69
Pemba	7.4	3.7	1.9	0.0	1.9	0.0	0.0	3.7	3.7	0.0	0.0	92.6	100.0	28
Unguja	18.5	9.3	5.6	0.0	1.9	1.9	0.0	9.3	5.6	3.7	0.0	81.5	100.0	41
Region														
Dodoma	16.4	13.6	2.9	0.0	1.4	9.3	0.0	2.9	1.4	0.7	0.0	83.6	100.0	96
Arusha	20.2	10.6	3.2	0.0	1.1	4.3	2.1	9.6	4.3	5.3	0.0	79.8	100.0	156
Kilimanjaro	26.7	15.4	3.1	1.5	1.5	8.2	1.0	11.3	4.6	5.6	0.0	73.3	100.0	119
Tanga	28.0	17.3	4.0	0.0	1.3	12.0	0.0	10.7	4.0	6.7	0.0	72.0	100.0	108
Morogoro	17.5	13.3	4.9	0.7	1.4	5.6	0.0	4.2	0.7	2.1	1.4	82.5	100.0	95
Coast	30.6	25.8	9.7	0.0	4.8	11.3	0.0	4.8	1.6	3.2	0.0	69.4	100.0	45
Dar es Salaam	31.9	27.0	5.3	1.0	2.3	16.4	1.6	4.9	3.3	1.0	0.7	68.1	100.0	191
Lindi	22.5	16.9	5.6	0.0	4.2	7.0	0.0	5.6	2.8	0.0	1.4	77.5	100.0	54
Mtwara	14.9	12.9	10.9	0.0	1.0	1.0	0.0	2.0	0.0	2.0	0.0	85.1	100.0	96
Ruvuma	29.4	19.6	12.7	0.0	2.9	2.9	1.0	9.8	6.9	2.0	1.0	70.6	100.0	82
Iringa	16.8	10.9	2.2	0.0	0.7	5.8	2.2	5.8	1.5	3.6	0.0	83.2	100.0	100
Mbeya	38.9	30.6	1.4	0.0	4.2	25.0	0.0	8.3	2.8	4.2	1.4	61.1	100.0	137
Singida	36.9	29.8	4.8	0.0	4.8	19.0	1.2	7.1	4.8	1.2	1.2	63.1	100.0	80
Tabora	16.7	5.6	1.9	0.0	1.9	1.9	0.0	11.1	11.1	0.0	0.0	83.3	100.0	82
Rukwa	52.6	17.9	5.1	0.0	3.8	7.7	1.3	34.6	23.1	11.5	0.0	47.4	100.0	71
Kigoma	32.9	10.0	5.7	0.0	2.9	1.4	0.0	22.9	22.9	0.0	0.0	67.1	100.0	95
Shinyanga	6.1	4.9	0.6	0.6	0.0	3.0	0.6	1.2	0.6	0.6	0.0	93.9	100.0	202
Kagera	27.5	7.2	4.3	0.0	0.0	1.4	1.4	20.3	20.3	0.0	0.0	72.5	100.0	139
Mwanza	1.3	1.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	98.7	100.0	176
Mara	14.5	7.3	0.0	0.0	1.8	5.5	0.0	7.3	5.5	1.8	0.0	85.5	100.0	64
Education														
No education	12.5	4.4	1.0	0.0	0.5	2.4	0.5	8.1	6.3	1.8	0.0	87.5	100.0	304
Primary incomplete	11.8	6.8	1.7	0.1	0.9	3.5	0.6	5.1	3.4	1.2	0.2	88.2	100.0	664
Primary complete	28.5	18.4	5.8	0.2	2.7	9.3	0.3	10.1	6.4	3.0	0.5	71.5	100.0	1,066
Secondary+	38.3	27.6	5.3	1.1	1.8	16.0	3.2	10.7	6.8	3.9	0.0	61.7	100.0	222
No. of living children														
0	10.9	9.2	0.4	0.0	0.1	8.7	0.0	1.7	1.0	0.6	0.1	89.1	100.0	974
1	27.0	16.8	3.9	0.3	1.3	11.1	0.3	10.2	6.9	2.3	0.6	73.0	100.0	228
2	27.6	15.2	5.9	1.5	1.1	6.7	0.0	12.4	7.7	4.7	0.0	72.4	100.0	206
3	42.8	26.0	11.6	0.0	3.2	10.4	0.7	16.8	13.4	3.4	0.0	57.2	100.0	188
4+	30.2	16.2	6.1	0.3	4.2	3.4	2.1	14.1	8.8	4.1	0.7	69.8	100.0	661
Total	22.4	14.0	3.9	0.2	1.8	7.3	0.7	8.4	5.5	2.4	0.3	77.6	100.0	2,256

Trends in Contraceptive Use

Contraceptive use in 1996 has increased since the 1991-92 TDHS from 10 to 16 percent of all women using any method and from 6 to 12 percent using modern methods (Figure 4.3). Injectables had the highest increase from less than 1 percent to 4 percent in the same time period. Among men, use of modern methods increased from 8 percent to 14 percent for the same period of time. However, the 1996 TDHS data show a slight decline in the contraceptive use rate since the 1994 Tanzania Knowledge, Attitudes and Practices Survey (TKAPS) (from 18 to 16 percent of all women) which is due to a decline in the use of traditional methods; use of modern methods has slightly increased since 1994. Thus, it appears as if use of modern methods of contraception increased rapidly between 1991-92 and 1994 and has leveled off since then.

Figure 4.2
Modern Contraceptive Method Use among all Women 15-49 by Background Characteristics

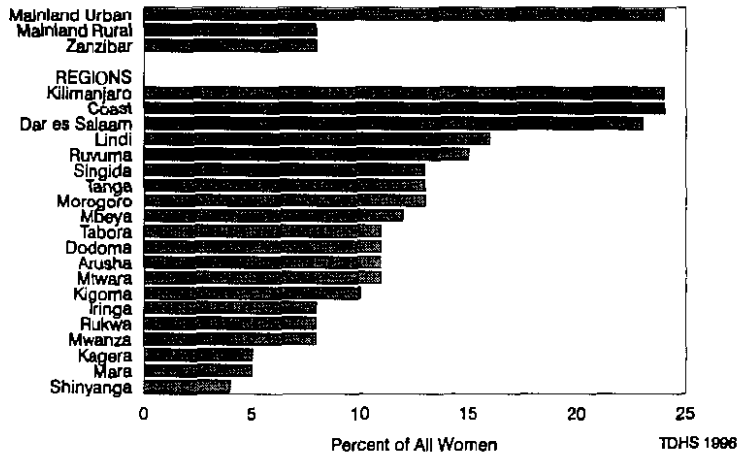
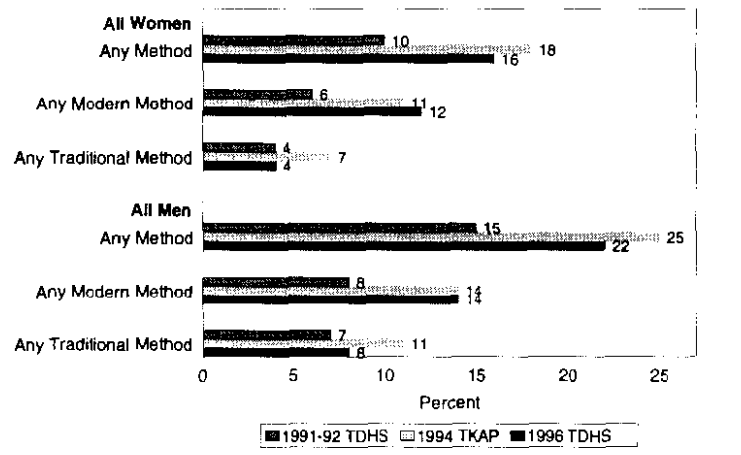


Figure 4.3
Trends in Contraceptive Use 1991-1996



4.5 Number of Children at First Use of Family Planning

Family planning methods may be used for either spacing births or limiting family size. The 1996 TDHS included questions on the number of children the woman had when she first used contraception. These data enable an examination of the cohort changes in the timing of adopting contraceptive use. Table 4.7 shows the distribution of ever-married women and the number of children the women had when they first used contraception, according to age group.

The results indicate that Tanzanian women are adopting family planning at an earlier stage of the family building process than before. Younger women report first use at lower parity than older women. For example, older (age 40-49) ever-married women reported first using contraception after having a median of 3.3-3.5 births, compared with about one living child among the youngest women (under age 30). This pattern may also be a reflection of a recent increase in the availability of family planning services.

Table 4.7 Number of children at first use of contraception

Percent distribution of ever-married women by number of living children at the time of first use of contraception, and median number of children at first use, according to current age, Tanzania 1996

Current age	Never used contra-ception	Number of living children at time of first use of contraception						Total	Median number of children at first use	Number of women
		0	1	2	3	4+	Missing			
15-19	83.8	3.7	11.8	0.5	0.0	0.0	0.2	100.0	0.4	441
20-24	62.5	6.1	22.2	6.7	1.8	0.3	0.4	100.0	0.6	1,266
25-29	59.3	2.9	16.1	11.9	6.0	3.5	0.3	100.0	1.1	1,334
30-34	60.5	1.1	13.6	9.4	5.7	9.1	0.6	100.0	1.5	1,067
35-39	61.9	0.6	8.4	7.3	7.1	14.2	0.4	100.0	2.4	873
40-44	65.0	1.0	4.0	5.9	4.7	19.4	0.1	100.0	3.5	670
45-49	73.0	0.4	5.5	3.5	3.2	13.9	0.5	100.0	3.3	582
Total	64.2	2.5	13.3	7.5	4.4	7.7	0.4	100.0	1.3	6,233

4.6 Effect of Breastfeeding on Conception

Information on knowledge of the contraceptive effect of breastfeeding as perceived by women is shown in Table 4.8. Twenty-seven percent of currently married Tanzanian women believe that breastfeeding increases the chance of a woman becoming pregnant. Fourteen percent correctly report that breastfeeding can reduce the risk of pregnancy, while 12 percent say that it depends on the situation. Differentials in knowledge of the contraceptive effect of breastfeeding by age group and place of residence are not large. Large differentials are observed by regions. For example 29 percent of currently married women in the Kagera region correctly reported that breastfeeding can reduce the risk of pregnancy, compared with only 2 percent in the Ruvuma region.

Only 8 percent of currently married women have used breastfeeding in the past to avoid pregnancy and 4 percent are currently relying on breastfeeding as a contraceptive method. Five percent of women meet the criteria for use of the lactational amenorrhoeic method (LAM)[1] of family planning.

4.7 Sources of Family Planning Methods

Women who reported using a modern method of contraception at the time of the survey were asked where they obtained the method the last time. It is likely that some women may misreport the type of place where they obtained the method, since the distinction between hospitals, clinics, and sometimes between public and private sources may not be clear to them. Table 4.9 and Figure 4.4 show that overall family planning users in Tanzania are more likely to obtain their methods from the public sector than from a private provider. About three-fourths of women currently using modern contraceptives obtained the method from the public sector, including government and districts hospitals (24 percent), government health centres (22 percent), and government dispensaries or parastatal facilities (28 percent).

[1]LAM users are women who are breastfeeding a child under six months of age, are still postpartum amenorrhoeic, and are not feeding the child anything but breast milk and plain water.

Table 4.8 Perceived contraceptive effect of breastfeeding

Percent distribution of currently married women by perceived risk of pregnancy associated with breastfeeding and percentage who rely on breastfeeding to avoid pregnancy, and percentage who meet lactational amenorrhoeic method (LAM) criteria, according to selected background characteristics, Tanzania 1996

Background characteristic	Perceived risk of pregnancy associated with breastfeeding							Reliance on breastfeeding to avoid pregnancy		Meet LAM criteria	Number of women
	Un-changed	In-creased	De-creased	Depends	Don't know	Missing	Total	Previ-ously	Cur-rently		
Age											
15-19	12.7	17.9	6.9	5.0	57.2	0.2	100.0	2.3	1.7	8.2	401
20-24	17.4	27.6	13.3	9.7	32.0	0.1	100.0	4.9	2.6	6.6	1,131
25-29	19.5	29.6	15.0	10.6	25.2	0.1	100.0	8.1	4.4	5.8	1,184
30-34	17.5	28.8	16.1	15.2	22.5	0.0	100.0	9.6	4.8	5.0	947
35-39	18.7	27.2	14.7	15.6	23.7	0.0	100.0	10.1	5.2	3.3	740
40-44	16.8	24.2	17.5	13.1	28.0	0.4	100.0	12.3	3.3	1.1	561
45-49	13.2	28.6	13.9	15.6	28.5	0.2	100.0	8.1	1.3	1.2	447
Residence											
Mainland	16.9	27.2	14.6	12.3	28.8	0.1	100.0	8.1	3.7	4.8	5,245
Total urban	23.7	29.7	10.9	11.8	23.8	0.1	100.0	6.1	2.7	2.3	1,073
Dar es Salaam city	36.6	20.9	10.0	7.7	24.6	0.2	100.0	5.2	2.2	0.7	340
Other urban	17.7	33.8	11.3	13.7	23.5	0.0	100.0	6.6	3.0	3.1	733
Total rural	15.2	26.6	15.6	12.5	30.1	0.1	100.0	8.6	4.0	5.4	4,172
Zanzibar	28.8	27.5	6.0	6.9	30.8	0.0	100.0	3.4	1.4	5.5	166
Region											
Dodoma	17.9	20.5	16.6	17.0	27.9	0.0	100.0	13.1	7.0	5.7	258
Arusha	11.8	10.3	15.0	15.0	48.0	0.0	100.0	6.2	1.9	6.2	403
Kilimanjaro	13.9	14.8	15.7	20.6	34.5	0.4	100.0	8.5	2.2	4.9	221
Tanga	9.1	15.3	10.7	15.7	48.8	0.4	100.0	3.7	0.4	3.7	282
Morogoro	15.2	26.2	8.0	17.3	33.3	0.0	100.0	3.4	1.3	3.8	257
Coast	40.4	19.3	6.4	5.3	28.7	0.0	100.0	3.5	1.2	1.8	98
Dar es Salaam	38.6	20.6	9.1	7.8	23.7	0.2	100.0	5.1	2.1	1.5	399
Lindi	24.8	28.1	7.6	5.7	33.8	0.0	100.0	2.4	1.4	3.8	123
Mtwara	19.5	37.0	6.5	8.1	28.9	0.0	100.0	0.0	0.0	5.2	248
Ruvuma	17.6	31.3	2.2	9.3	39.3	0.3	100.0	0.6	0.3	2.6	205
Iringa	15.2	26.3	8.2	18.1	32.1	0.0	100.0	4.9	3.3	5.8	291
Mbeya	12.8	46.9	9.5	5.2	25.6	0.0	100.0	7.1	1.9	3.3	318
Singida	13.0	30.4	14.1	8.9	33.7	0.0	100.0	11.1	3.7	4.8	194
Tabora	15.9	23.9	19.6	10.9	29.0	0.7	100.0	16.7	7.2	5.1	157
Rukwa	6.2	39.4	11.6	19.3	23.6	0.0	100.0	15.1	6.9	5.0	177
Kigoma	13.9	14.3	20.9	12.7	37.3	0.8	100.0	16.8	11.1	7.8	233
Shinyanga	14.2	37.4	27.2	8.7	12.6	0.0	100.0	12.2	4.7	6.3	464
Kagera	15.6	19.0	29.3	17.1	19.0	0.0	100.0	17.1	8.3	6.3	337
Mwanza	14.0	42.1	18.7	7.9	17.3	0.0	100.0	5.6	4.7	5.1	395
Mara	20.3	37.1	13.7	15.7	13.2	0.0	100.0	7.1	3.6	4.1	183
Education											
No education	13.0	24.4	14.4	11.9	36.1	0.2	100.0	8.4	3.9	4.6	1,829
Primary incomplete	17.1	25.7	16.7	12.7	27.7	0.1	100.0	10.0	4.7	4.4	920
Primary complete	19.2	29.5	13.5	12.2	25.5	0.1	100.0	7.1	3.2	5.3	2,462
Secondary +	33.6	30.9	13.8	11.4	10.4	0.0	100.0	5.7	2.0	2.1	200
Total	17.3	27.2	14.4	12.2	28.9	0.1	100.0	8.0	3.6	4.8	5,411

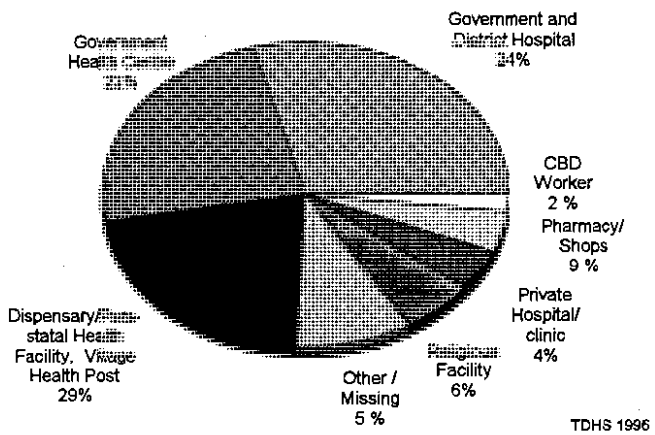
Table 4.9 Source of supply for modern contraceptive methods

Percent distribution of women currently using modern contraceptive methods by most recent source of the method, according to specific methods, Tanzania 1996

Source of supply	Contraceptive method					
	Pill	IUD	Inject-ables	Condom	Female sterili-sation	All modern methods
Public	77.4	90.8	88.4	22.8	68.4	74.2
Government hospital	2.7	14.6	6.1	0.3	37.6	8.3
District hospital	11.7	35.5	16.0	10.9	22.0	15.4
Health centre	25.5	28.6	28.6	4.6	3.7	21.6
Dispensary/parastatal facility	35.9	12.2	36.6	6.5	5.1	28.0
Village health post	1.5	0.0	1.1	0.5	0.0	1.0
Medical private	17.9	5.0	8.4	36.4	28.1	17.7
Religious organisation facility	4.0	5.0	1.5	3.8	23.8	5.7
Private hospital/clinic	4.7	0.0	5.9	0.0	4.3	4.3
Pharmacy/medical store	6.6	0.0	0.0	29.3	0.0	5.9
CBD worker	2.6	0.0	1.1	3.4	0.0	1.8
Other private	2.0	2.1	1.7	30.8	0.7	4.9
Shop/kiosk	0.8	0.0	0.4	24.7	0.0	3.2
Church	0.3	0.0	0.0	0.8	0.0	0.2
Friends/relatives	0.4	0.0	0.0	4.6	0.0	0.7
Other	0.5	2.1	1.2	0.7	0.7	0.9
Don't know	0.3	0.0	0.0	2.0	0.0	0.3
Not stated	2.4	2.1	1.6	8.0	2.7	2.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of users	389	40	298	105	116	954

CBD = Community-based distribution.
Note: The total includes 3 implant users, one diaphragm/foam/jelly user, and one male sterilisation user.

Figure 4.4
Distribution of Current Users of Modern Contraceptive Methods by Source of Contraceptive



Private medical sources account for 18 percent of current users. Community-based distribution (CBD) workers supply nearly 2 percent of modern methods. The source of family planning methods varies according to the type of method used. The public sector is the principal source of the pill, IUD, injectables, and female sterilisation, while the private sector is the principal source for condom users; more than half of the condom users reported obtaining condoms from pharmacies and shops. There is little change in the sources of contraception since the 1991-92 TDHS.

4.8 Intention to Use Family Planning Among Nonusers

An important indicator of the changing demand for family planning is the extent to which nonusers of contraception intend to use family planning in the future. Respondents who were not using contraception at the time of the survey were asked if they intended to use family planning methods in the future. The results are presented in Table 4.10.

Almost half (48 percent) of women nonusers say they intend to use family planning at some time in the future, with 33 percent saying they intend to use in the next 12 months and 13 percent saying they intend to use later. Thirty-eight percent of women say that they do not intend to use, while 13 percent are unsure about their intention to use. Men are more likely than women to intend to use contraception in future. Fifty-six percent of men who are not using a method say that they intend to use family planning in the future (see last column in Table 4.10).

Table 4.10 Future use of contraception

Percent distribution of all women and men who are not using a contraceptive method by intention to use in the future, according to number of living children, Tanzania 1996

Future intentions	Number of living children[1]					Total women	Total men
	0	1	2	3	4+		
Intend to use in next 12 months	18.9	42.8	40.0	36.7	36.0	33.0	26.2
Intend to use later	21.1	13.9	10.1	11.7	6.7	12.9	26.8
Unsure as to timing	2.6	1.6	1.1	1.6	1.7	1.8	3.2
Unsure as to intention	27.0	10.4	8.6	8.5	6.4	13.4	13.7
Do not intend to use	30.2	30.6	39.7	40.9	48.3	38.3	29.0
Missing	0.2	0.6	0.5	0.7	1.0	0.6	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women/men	1,905	1,179	874	758	2,100	6,816	1,751

[1] Includes current pregnancy.

The proportion of nonusers intending to use, and especially the timing of use, varies with the number of living children. For example, the proportion of women who intend to use within the next 12 months is much lower among childless women (19 percent) than among those with one child (43 percent). The proportion who do not intend to use at all is higher among women with four or more children (48 percent) than among women with one child (31 percent).

4.9 Reasons for Nonuse

Table 4.11 presents the main reasons for not using family planning given by currently married women and men who do not intend to use contraception in the future. Desire for more children was the most important reason for nonuse among women (23 percent) and men (25 percent) followed by opposition to contraception by the individual.

Table 4.11 Reasons for not using contraception

Percent distribution of all women and men who are not using a contraceptive method and who do not intend to use in the future, by main reason for not intending to use, according to age, Tanzania 1996

Reason for not using contraception	Women			Men		
	Age			Age		
	<30	30-49	Total	<30	30-49	Total
Not married	19.2	1.0	8.9	40.9	3.0	15.9
Want children	26.1	20.8	23.1	18.8	28.6	25.2
Side effects	5.0	3.9	4.3	1.6	1.8	1.7
Health concerns	0.8	1.7	1.3	0.5	1.1	0.9
Interferes with body	1.0	3.1	2.2	0.0	0.0	0.0
No method known	10.6	9.5	10.0	12.7	9.3	10.5
No source known	0.7	1.1	0.9	1.7	2.3	2.1
Lack of access	0.2	0.1	0.1	0.0	0.2	0.1
Costs too much	0.1	0.0	0.0	0.0	0.0	0.0
Religion	2.1	1.9	2.0	1.9	3.3	2.8
Respondent opposed	15.2	21.4	18.7	11.1	16.1	14.4
Partner opposed	5.6	4.4	4.9	0.0	0.0	0.0
Others opposed	0.1	0.4	0.3	0.0	0.0	0.0
Infrequent sex	1.2	2.9	2.2	0.4	6.2	4.2
Menopausal/hysterectomy	0.0	18.1	10.3	0.0	19.0	12.5
Subfecund/infecund	0.8	1.6	1.3	0.0	1.1	0.7
Inconvenient	0.4	0.7	0.5	0.8	0.5	0.6
Other	6.5	5.8	6.1	2.8	3.9	3.5
Don't know/Missing	3.9	1.1	2.3	6.8	0.5	2.7
Not stated	0.5	0.6	0.6	0.0	3.2	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women/men	1,125	1,483	2,608	173	335	509

Ten percent of men and women do not intend to use any method due to lack of knowledge about family planning methods. Younger women and older men are more likely than older women and younger men to cite desire for more children as the main reason for not intending to use. Another important reason cited by nonusers age 30 years and older is menopause and hysterectomy.

4.10 Preferred Method of Contraception for Future Use

Nonusers who indicated their intention to use family planning methods in the future were asked which method they would prefer to use. One-third of the women say they prefer to use the pill, and just over one-third say they prefer injectables (Table 4.12). Sterilisation is the third method preferred by women adopting family planning in the future. Women who intend to use in the next 12 months have similar method preferences as women who intend to use after 12 months.

4.11 Exposure to Family Planning Messages in the Electronic Media

Radio and television are major potential sources of information about family planning. To assess the effectiveness of such media for the dissemination of family planning information, all female and male respondents in the survey were asked if they had heard or seen messages about family planning on the radio or on television during the six months preceding the interview.

Table 4.13 shows that a higher proportion of men than women are exposed to the major electronic media. Sixty-one percent of men and 45 percent women report that they have heard or seen a family planning message on the radio or television in the previous six months. Radio is by far the more prominent of the two media; less than 1 percent of respondents had seen a family planning message on the television.

Table 4.12 Preferred method of contraception for future use

Percent distribution of all women who are not using a contraceptive method but who intend to use in the future by preferred method, according to timing of intended use, Tanzania 1996

Preferred method of contraception	Timing of intended use: In next 12 months	Timing of intended use: After 12 months	Timing of intended use: Unsure when	All women
Pill	34.3	33.5	25.7	33.8
IUD	2.9	2.2	0.0	2.6
Injectables	38.4	30.3	27.0	35.7
Diaphragm/foam/jelly	0.2	0.2	0.0	0.2
Condom	2.1	1.9	1.3	2.0
Female sterilisation	5.3	3.1	4.5	4.7
Implant	1.7	1.8	2.6	1.8
Calendar/mucus	1.5	2.2	2.9	1.8
Withdrawal	0.9	0.4	0.0	0.7
Other method (Folk)	2.1	2.4	3.5	2.2
Missing	10.6	22.0	32.5	14.5
Total	100.0	100.0	100.0	100.0
Number of women	2,248	882	126	3,256

Younger respondents are more exposed to family planning messages through radio and television than older respondents. A sharp contrast in access to family planning messages is observed between urban and rural residence on the mainland; 64 percent of rural women and 46 percent of rural men have not been reached through the electronic media in the past six months, compared to 28 percent of urban women and 22 percent of urban men. Access to the media is much higher in Zanzibar than on the mainland. The proportion of respondents who have been exposed to family planning messages on the radio or television varies across regions and is by far the highest among respondents in Dar es Salaam. Education of respondents is closely correlated with media exposure. Seventy-six percent of women and 68 percent of men with no formal schooling have not heard or seen a family planning messages on the radio or television, compared with 19 percent of women and 9 percent of men with some secondary or higher education.

4.12 Acceptability of Media Messages on Family Planning

To determine the level of acceptability of dissemination of family planning information through the media, women and men interviewed in the 1996 TDHS were asked whether they thought it was acceptable for family planning information to be provided on the radio or television. Overall, 76 percent of women and 86 percent of men feel it is acceptable to use radio or television to disseminate family planning information (Table 4.14).

Urban respondents are more likely to accept the electronic media as a vehicle for family planning information than their rural counterparts. The acceptability of family planning messages on electronic media is higher for women living in the Dar es Salaam, Coast, and Kilimanjaro regions and for men living in the Mwanza, Rukwa, and Mbeya regions. Women and men who have attained higher levels of education are much more likely to accept family planning messages on the radio or on television than those with no education.

Table 4.13 Heard about family planning on radio and television

Percent distribution of women and men by whether they heard a radio and/or television message about family planning in the six months preceding the interview, according to selected background characteristics, Tanzania 1996

Background characteristic	Heard about family planning on radio or television											
	Women						Men					
	Heard on neither	Radio only	Tele-vision only	Heard on both	Total	Number of women	Heard on neither	Radio only	Tele-vision only	Heard on both	Total	Number of men
Age												
15-19	62.9	31.4	0.2	5.4	100.0	1,732	53.1	40.4	0.2	6.2	100.0	488
20-24	45.5	46.8	0.5	7.1	100.0	1,676	31.7	54.9	0.0	12.9	100.0	371
25-29	50.6	42.8	0.3	6.2	100.0	1,440	31.4	55.9	0.9	11.7	100.0	301
30-34	49.2	46.0	0.2	4.4	100.0	1,118	32.9	55.8	0.5	10.8	100.0	272
35-39	52.8	42.0	0.3	4.9	100.0	888	31.0	57.5	0.0	11.5	100.0	251
40-44	60.1	36.6	0.2	3.1	100.0	680	35.4	57.3	0.0	6.5	100.0	206
45-49	72.8	24.8	0.1	2.4	100.0	585	44.9	45.4	0.4	7.5	100.0	149
50-54	NA	NA	NA	NA	NA	NA	40.6	57.7	0.0	1.7	100.0	118
55-59	NA	NA	NA	NA	NA	NA	60.5	38.2	0.7	0.6	100.0	100
Residence												
Mainland	55.3	39.8	0.2	4.5	100.0	7,881	40.2	51.9	0.3	7.4	100.0	2,187
Total urban	28.0	58.1	0.6	13.2	100.0	1,811	22.2	57.9	0.4	19.2	100.0	509
Dar es Salaam city	14.7	54.2	1.1	29.6	100.0	563	19.5	39.0	1.1	40.1	100.0	171
Other urban	34.0	59.8	0.3	5.8	100.0	1,248	23.6	67.5	0.0	8.6	100.0	338
Total rural	63.5	34.4	0.1	2.0	100.0	6,070	45.7	50.0	0.2	3.8	100.0	1,678
Zanzibar	32.1	35.6	2.3	29.8	100.0	239	10.0	32.6	0.7	54.5	100.0	69
Pemba	38.3	41.4	0.3	19.7	100.0	92	5.6	77.8	1.9	14.8	100.0	28
Unguja	28.3	32.1	3.5	36.1	100.0	148	13.0	1.9	0.0	81.5	100.0	41
Region												
Dodoma	51.4	45.1	0.0	3.5	100.0	355	41.4	50.7	0.7	7.1	100.0	96
Arusha	58.0	39.0	0.2	2.8	100.0	589	42.6	51.1	0.0	6.4	100.0	156
Kilimanjaro	33.3	63.1	0.0	3.6	100.0	390	32.8	58.5	0.0	8.2	100.0	119
Tanga	46.0	47.5	0.3	6.3	100.0	464	33.3	61.3	0.0	5.3	100.0	108
Morogoro	45.9	51.2	0.0	2.7	100.0	408	41.3	54.5	0.0	3.5	100.0	95
Coast	36.5	60.3	0.4	2.9	100.0	159	33.9	58.1	3.2	4.8	100.0	45
Dar es Salaam	15.4	55.8	1.0	27.4	100.0	646	18.1	41.8	1.0	38.8	100.0	191
Lindi	50.9	45.6	0.0	3.5	100.0	187	18.3	74.6	0.0	7.0	100.0	54
Mtwara	59.2	40.4	0.0	0.5	100.0	355	29.7	67.3	0.0	3.0	100.0	96
Ruvuma	57.1	41.8	0.0	1.1	100.0	305	29.4	68.6	0.0	1.0	100.0	82
Iringa	69.9	29.8	0.0	0.3	100.0	466	49.6	49.6	0.0	0.7	100.0	100
Mbeya	58.6	38.9	0.6	1.9	100.0	473	37.5	61.1	0.0	1.4	100.0	137
Singida	63.2	33.8	0.8	2.3	100.0	283	33.3	58.3	0.0	8.3	100.0	80
Tabora	59.1	37.9	0.0	3.0	100.0	225	44.4	51.9	0.0	3.7	100.0	82
Rukwa	76.5	21.8	0.0	1.7	100.0	242	42.3	53.8	0.0	1.3	100.0	71
Kigoma	63.2	34.3	0.3	1.6	100.0	351	51.4	47.1	0.0	1.4	100.0	95
Shinyanga	69.9	25.9	0.0	4.3	100.0	686	65.2	30.5	0.0	3.7	100.0	202
Kagera	65.5	31.3	0.4	2.8	100.0	467	39.1	47.8	1.4	11.6	100.0	139
Mwanza	70.0	29.4	0.0	0.6	100.0	573	51.3	47.4	0.0	1.3	100.0	176
Mara	61.7	36.5	0.4	1.4	100.0	257	43.6	54.5	0.0	1.8	100.0	64
Education												
No education	75.9	22.5	0.1	1.5	100.0	2,316	67.7	29.1	0.2	2.7	100.0	304
Primary incomplete	60.7	36.2	0.1	2.9	100.0	1,630	49.1	45.9	0.0	4.2	100.0	664
Primary complete	43.0	50.8	0.4	5.7	100.0	3,732	31.3	59.0	0.5	9.1	100.0	1,066
Secondary+	18.5	49.9	0.9	30.4	100.0	441	9.3	60.9	0.3	29.5	100.0	222
Total	54.6	39.7	0.3	5.3	100.0	8,120	39.3	51.3	0.3	8.8	100.0	2,256

NA = Not applicable

Table 4.14 Acceptability of media messages on family planning

Percent distribution of women and men by acceptability of messages about family planning on the radio or television, by selected background characteristics, Tanzania 1996

Background characteristic	Acceptability of family planning messages on radio or television									
	Women					Men				
	Acceptable	Not acceptable	Unsure	Total	Number of women	Acceptable	Not acceptable	Unsure	Total	Number of men
Age										
15-19	70.0	7.0	23.0	100.0	1,732	79.7	3.5	16.8	100.0	488
20-24	83.3	5.2	11.5	100.0	1,676	89.7	4.9	5.5	100.0	371
25-29	80.0	7.2	12.8	100.0	1,440	92.4	3.8	3.8	100.0	301
30-34	78.4	6.9	14.7	100.0	1,118	89.3	6.3	4.4	100.0	272
35-39	75.6	8.1	16.3	100.0	888	89.9	5.1	5.0	100.0	251
40-44	72.7	7.8	19.4	100.0	680	84.8	8.9	6.2	100.0	206
45-49	63.4	7.2	29.4	100.0	585	82.5	6.4	11.1	100.0	149
50-54	NA	NA	NA	NA	NA	90.0	6.6	3.4	100.0	118
55-59	NA	NA	NA	NA	NA	70.9	11.3	17.9	100.0	100
Residence										
Mainland	75.9	6.6	17.5	100.0	7,881	86.1	5.4	8.5	100.0	2,187
Total urban	90.9	3.7	5.4	100.0	1,811	90.3	6.7	3.0	100.0	509
Dar es Salaam city	95.8	3.0	1.2	100.0	563	86.0	11.0	2.9	100.0	171
Other urban	88.7	4.0	7.3	100.0	1,248	92.4	4.6	3.0	100.0	338
Total rural	71.4	7.5	21.1	100.0	6,070	84.8	5.0	10.2	100.0	1,678
Zanzibar	81.5	14.6	3.9	100.0	239	88.2	7.0	4.8	100.0	69
Pemba	73.6	22.4	4.1	100.0	92	92.6	3.7	3.7	100.0	28
Unguja	86.4	9.8	3.8	100.0	148	85.2	9.3	5.6	100.0	41
Region										
Dodoma	67.6	7.3	25.1	100.0	355	75.0	10.0	15.0	100.0	96
Arusha	61.8	11.5	26.7	100.0	589	73.4	9.6	17.0	100.0	156
Kilimanjaro	90.1	4.3	5.6	100.0	390	87.7	3.1	9.2	100.0	119
Tanga	82.4	3.8	13.8	100.0	464	74.7	5.3	20.0	100.0	108
Morogoro	77.2	2.7	20.2	100.0	408	86.0	4.2	9.8	100.0	95
Coast	90.6	6.9	2.5	100.0	159	87.1	3.2	9.7	100.0	45
Dar es Salaam	95.4	3.3	1.3	100.0	646	86.8	10.2	3.0	100.0	191
Lindi	86.2	9.1	4.7	100.0	187	91.5	4.2	4.2	100.0	54
Mtwara	77.8	14.5	7.7	100.0	355	91.1	7.9	1.0	100.0	96
Ruvuma	78.1	10.3	11.6	100.0	305	81.4	7.8	10.8	100.0	82
Iringa	66.8	4.1	29.0	100.0	466	73.0	5.8	21.2	100.0	100
Mbeya	77.4	2.5	20.1	100.0	473	95.8	4.2	0.0	100.0	137
Singida	70.6	7.9	21.6	100.0	283	82.1	14.3	3.6	100.0	80
Tabora	70.2	12.6	17.2	100.0	225	92.6	0.0	7.4	100.0	82
Rukwa	68.0	7.9	24.1	100.0	242	96.2	2.6	1.3	100.0	71
Kigoma	63.2	7.4	29.4	100.0	351	87.1	1.4	11.4	100.0	95
Shinyanga	76.5	4.0	19.5	100.0	686	86.0	6.1	7.9	100.0	202
Kagera	71.8	8.1	20.1	100.0	467	85.5	0.0	14.5	100.0	139
Mwanza	72.9	6.1	21.0	100.0	573	98.7	0.0	1.3	100.0	176
Mara	74.4	9.4	16.2	100.0	257	90.9	7.3	1.8	100.0	64
Education										
No education	58.0	11.0	31.1	100.0	2,316	71.7	10.5	17.7	100.0	304
Primary incomplete	73.3	6.5	20.2	100.0	1,630	81.5	5.7	12.9	100.0	664
Primary complete	86.1	4.9	9.0	100.0	3,732	91.4	4.0	4.6	100.0	1,066
Secondary +	95.7	3.1	1.2	100.0	441	94.4	4.9	0.6	100.0	222
Total	76.0	6.9	17.1	100.0	8,120	86.1	5.5	8.4	100.0	2,256

NA = Not applicable

4.13 Exposure to Family Planning Messages Through the Print Media

Female respondents were asked if they had been exposed to a family planning message through a newspaper or magazine article, a poster, or a billboard during the six months preceding the interview. The results are presented in Table 4.15. Only 30 percent of the women reported that they had been exposed to family planning information through print media. The most commonly reported source of a family planning message in the print media was posters (22 percent), and newspapers/magazines (21 percent), followed by billboards (19 percent).

Women in rural areas were less likely to have been exposed to family planning messages from print media (newspapers, magazines, posters, and billboards) than their urban counterparts (21 vs. 57 percent) on the mainland. Women living in the Dar es Salaam region are more likely to have seen a family planning message in the print media than women in other regions. The proportion of women exposed to messages in any print media increases directly with educational level, from 8 percent among women with no formal education to 73 percent among women with at least some secondary education.

4.14 Contact of Nonusers with Family Planning Providers

Family planning field workers who are largely based in rural areas are expected to visit women and men of reproductive age who are not using modern family planning methods to discuss the options and when indicated, motivate them to adopt a method of family planning. Health facility and extension workers are also expected to visit or discuss and motivate families for family planning while providing other health services. To get an indication of the frequency of such visits or discussions, women were asked whether they had been visited by a family planning field worker within the previous 12 months. Table 4.16 shows that only 3 percent of nonusers were visited by a family planning field worker during the 12 months preceding the survey.

To get an insight into the level of "missed opportunities"—i.e., contacts between nonusers and health workers which were not utilised to motivate nonusers to adopt family planning—nonusers were also asked whether they had visited a health facility in the past 12 months and whether anyone at the health facility had discussed family planning with them during their visit. Of the 38 percent of women who visited a health facility in the previous 12 months, 29 percent (11 percent of all nonusers) said that someone at the facility spoke to them about family planning.

Overall, 87 percent of nonusers were neither visited by a family planning worker nor discussed family planning with a health facility staff in the 12 months preceding the survey. This represents a large pool of potential users of family planning that could be targeted for family planning counselling. To reach these women, a vigorous outreach programme is needed and all health workers should be sensitised to discuss the issues of fertility preferences and the option of family planning whenever the opportunity arises.

4.15 Attitudes Toward Family Planning

Use of effective contraceptive methods is facilitated when couples have a positive attitude toward family planning. Attitudinal data were collected by asking currently married women whether they approve of couples using family planning and what they perceive as their husband's attitude toward family planning. This information is useful in the formulation of family planning policies, since it indicates the extent to which further education and publicity are needed to gain or increase acceptance of family planning. Widespread disapproval of contraception acts as a barrier to adoption of methods.

Table 4.15 Family planning messages in print

Percentage of women who received a message about family planning through the print media in the six months preceding the interview, according to selected background characteristics, Tanzania 1996

Background characteristic	Type of print media containing family planning message				Number of women
	Any source	Newspaper/ magazine	Poster	Billboard	
Age					
15-19	25.8	20.0	17.9	15.5	1,732
20-24	37.7	27.2	28.1	23.7	1,676
25-29	31.7	23.1	25.1	21.7	1,440
30-34	32.8	23.3	24.6	19.4	1,118
35-39	30.4	20.1	22.6	18.4	888
40-44	23.7	14.5	20.2	15.1	680
45-49	12.3	8.4	9.2	8.6	585
Residence					
Mainland	29.5	21.1	22.1	18.5	7,881
Total urban	56.5	44.8	44.4	39.4	1,811
Dar es Salaam city	70.6	59.0	57.8	45.5	563
Other urban	50.1	38.3	38.4	36.7	1,248
Total rural	21.4	14.1	15.5	12.3	6,070
Zanzibar	34.2	24.8	26.4	21.0	239
Pemba	20.3	16.3	11.5	11.9	92
Unguja	42.8	30.1	35.5	26.6	148
Region					
Dodoma	34.6	25.1	29.2	19.4	355
Arusha	32.0	27.1	23.7	19.0	589
Kilimanjaro	41.0	34.9	21.6	21.9	390
Tanga	33.4	29.1	16.8	19.3	464
Morogoro	26.3	19.4	23.1	18.0	408
Coast	28.2	21.3	19.9	17.0	159
Dar es Salaam	69.6	56.8	57.2	43.3	646
Lindi	35.5	19.2	31.8	29.9	187
Mtwara	21.5	11.1	18.4	19.7	355
Ruvuma	18.0	10.7	14.4	19.1	305
Iringa	13.4	8.7	9.0	7.2	466
Mbeya	24.8	12.4	21.7	22.6	473
Singida	31.5	19.5	26.1	25.6	283
Tabora	25.8	12.6	21.2	8.1	225
Rukwa	12.5	5.7	10.8	12.7	242
Kigoma	21.5	10.9	18.8	11.4	351
Shinyanga	24.8	20.5	14.9	12.8	686
Kagera	23.9	12.7	21.5	10.2	467
Mwanza	22.3	14.2	14.2	12.3	573
Mara	21.7	15.5	13.4	13.0	257
Education					
No education	8.3	3.3	6.3	4.1	2,316
Primary incomplete	21.9	13.0	16.8	12.8	1,630
Primary complete	41.0	30.6	30.3	25.4	3,732
Secondary+	73.4	65.6	58.3	58.9	441
Total	29.6	21.2	22.3	18.6	8,120

Table 4.16 Contact of nonusers with family planning providers

Percent distribution of nonusers by whether they were visited by a family planning (FP) field worker or spoke with a health facility staff member about family planning methods during the 12 months preceding the interview, according to background characteristics, Tanzania 1996

Background characteristic	Visited by family planning field worker			Not visited by family planning field worker			Missing	Total	No FP services or information provided	Number of nonusers
	Visited health facility		Did not visit health facility	Visited health facility		Did not visit health facility				
	Dis-cussed FP	Did not discuss FP		Dis-cussed FP	Did not discuss FP					
Age										
15-19	0.1	0.7	0.6	2.8	25.3	70.3	0.3	100.0	95.6	1,651
20-24	1.2	0.8	1.4	11.9	30.1	54.4	0.2	100.0	84.5	1,375
25-29	1.8	0.9	1.6	17.5	28.6	49.2	0.4	100.0	77.8	1,156
30-34	2.3	1.5	1.4	12.8	25.6	56.3	0.0	100.0	82.0	883
35-39	1.9	0.7	0.4	12.0	24.4	59.9	0.6	100.0	84.3	701
40-44	1.8	0.6	1.3	8.0	20.8	67.3	0.3	100.0	88.0	539
45-49	0.6	0.6	1.5	5.1	19.8	72.3	0.1	100.0	92.1	511
Residence										
Mainland	1.3	0.8	1.1	10.0	25.8	60.8	0.3	100.0	86.6	6,600
Total urban	2.1	1.6	2.1	11.8	32.7	49.6	0.2	100.0	82.3	1,286
Dar es Salaam city	2.4	2.2	2.0	11.9	38.8	42.5	0.2	100.0	81.3	390
Other urban	1.9	1.3	2.1	11.7	30.0	52.6	0.2	100.0	82.6	896
Total rural	1.1	0.6	0.8	9.6	24.1	63.6	0.3	100.0	87.7	5,314
Zanzibar	1.1	2.1	3.9	8.0	33.1	51.3	0.5	100.0	84.5	216
Pemba	2.2	1.8	3.3	7.7	22.3	62.4	0.4	100.0	84.7	85
Unguja	0.3	2.3	4.2	8.2	40.2	44.1	0.7	100.0	84.3	131
Region										
Dodoma	0.7	0.4	0.0	12.4	18.6	67.9	0.0	100.0	86.5	308
Arusha	1.3	1.3	1.0	8.5	29.9	57.2	0.8	100.0	87.1	487
Kilimanjaro	1.2	0.8	3.7	10.6	26.1	57.6	0.0	100.0	83.7	243
Tanga	1.3	0.3	2.9	14.2	23.6	57.6	0.0	100.0	81.2	360
Morogoro	1.3	0.3	1.6	14.6	22.8	59.5	0.0	100.0	82.3	342
Coast	5.4	1.5	2.5	21.2	23.2	45.3	1.0	100.0	68.5	117
Dar es Salaam	2.1	1.9	1.7	12.9	38.1	43.1	0.4	100.0	81.2	453
Lindi	1.2	0.4	0.0	10.0	33.6	54.4	0.4	100.0	88.0	152
Mtwara	1.0	0.5	0.3	8.1	37.1	53.0	0.0	100.0	90.1	309
Ruvuma	1.1	1.3	0.3	12.6	28.4	56.1	0.3	100.0	84.5	249
Iringa	2.3	0.3	0.9	11.8	16.8	67.9	0.0	100.0	84.7	415
Mbeya	1.2	0.0	0.4	11.8	23.1	63.5	0.0	100.0	86.7	384
Singida	1.5	1.2	1.2	8.3	28.1	59.5	0.3	100.0	87.6	243
Tabora	0.0	2.4	0.6	8.5	19.4	68.5	0.6	100.0	87.9	188
Rukwa	1.3	1.0	1.0	7.5	27.8	61.1	0.3	100.0	88.9	209
Kigoma	0.0	0.9	0.9	8.8	20.5	67.8	0.9	100.0	88.3	303
Shinyanga	0.6	0.6	0.3	4.7	24.5	69.1	0.3	100.0	93.6	656
Kagera	1.6	1.2	0.8	8.2	23.7	64.2	0.4	100.0	87.9	423
Mwanza	0.7	0.0	1.1	8.5	23.1	66.5	0.0	100.0	89.7	519
Mara	1.9	1.6	1.6	7.0	29.8	58.1	0.0	100.0	88.0	240
Education										
No education	0.8	0.5	0.8	6.4	20.5	70.8	0.2	100.0	91.3	2,159
Primary incomplete	1.1	0.9	0.9	8.7	23.4	64.9	0.2	100.0	88.3	1,427
Primary complete	1.6	1.0	1.4	13.2	30.1	52.4	0.3	100.0	82.5	2,928
Secondary+	1.0	1.8	2.5	10.2	38.1	45.6	0.7	100.0	83.7	302
Total	1.2	0.8	1.2	9.9	26.0	60.5	0.3	100.0	86.5	6,816

Table 4.17 shows that approval of family planning in Tanzania is higher among currently married women (78 percent) than men (51 percent). Only 48 percent of women reported that both they and their husbands approve of family planning, while 10 percent say that both they and their husbands disapprove and 17 percent did not know their husband's opinion. Among couples in which the wife reports a difference of opinion, the husbands were more likely to disapprove (15 percent compared with 1 percent).

The likelihood that a woman will report that both she and her husband approve of family planning is higher among women in their 20s and 30s and declines among women age 45-49. Couples in urban areas (62 percent) are more likely to jointly approve of family planning than those in rural areas (45 percent). Approval by both husband and wife was highest in the Tanga and Coast regions (more than 60 percent) and lowest in the Mara region (31 percent). Less educated women are more likely than more educated women to disapprove of family planning and are also likely to say that their spouse disapproves or they do not know their spouse's views.

The fact that both women and men in the same household were interviewed provides an opportunity to link responses obtained from currently married women with those obtained independently from their husbands. Table 4.18 shows the percent distribution of 1,125 couples by both spouses' approval of family planning, according to the age difference between husband and wife and couple's education. The table indicates that 65 percent of couples are in agreement about family planning. Husbands and wives differ on approval of family planning in only 20 percent of cases. Fifty-nine percent of couples reported that they both approve of family planning and only 6 percent of the couples both disapprove. Generally, an age difference of less than 15 years between husband and wife does not change the likelihood that either approves or disapproves of family planning; however joint approval of family planning is lower among couples in which the husband is 15 or more years older than his wife. Couples are more likely to approve of family planning when both spouses are educated.

Because both men and women interviewed in the 1996 TDHS were asked whether they approved of family planning and, if married, whether they thought their spouse approved of family planning, it is possible to examine the extent to which wives and husbands report accurately on their spouse's attitude. Table 4.19 shows the percent distribution of couples by husband's and wife's actual attitude toward family planning, according to their spouse's perception of their attitude. When husbands and wives report that their spouses approve of family planning, they are generally accurate. For example, in 88 percent of the couples in which the wife reported that her husband approved of family planning, the husband also said he approved. Similarly, for 78 percent of couples in which the husband said his wife approved of family planning, she also said she approved. However, when husbands and wives reported that their spouse disapproved of family planning, in 60 percent of cases the opposite was true, and in about 30 percent of cases, the spouse did disapprove of family planning. Any conclusion from these data that there is considerable lack of communication between spouses and attitudes toward family planning should be taken with caution. It is also likely that at least some respondents report more favourable attitudes toward family planning than they in fact hold, perhaps in an attempt to please the interviewer or to appear more sophisticated.

4.16 Knowledge of Family Planning Logo

The family planning programme recently developed a logo—a Green Star—to promote utilisation of family planning services. Over the past few years the programme has launched Green Star logo campaigns throughout the country. To measure the success of the campaigns, respondents in the 1996 TDHS were asked if they had seen or heard about the Green Star, sources of that information, and their understanding of the logo. Tables 4.20.1 and 4.20.2 show that 36 percent of women and 38 percent of men know the Green Star. Among those who know the Green Star, about 80 percent know that it is related to family planning. Most women learned about the Green Star from the radio (57 percent) and clinics (54 percent).

Table 4.17 Wives' perceptions of their husbands' attitudes toward family planning

Percent distribution of currently married non-sterilised women who know of a contraceptive method by wife's attitude toward family planning and wife's perception of her husband's attitude toward family planning, according to selected background characteristics, Tanzania 1996

Background characteristic	Both approve	*Wife approves*		*Wife disapproves*		Both disapprove	Wife unsure	Missing	Total	Wife approves	Husband approves[1]	Total
		Husband disapproves	Husband's attitude unknown	Husband approves	Husband's attitude unknown							
Age												
15-19	44.6	10.2	24.0	0.3	5.1	8.3	7.5	0.0	100.0	78.9	45.3	320
20-24	53.7	15.4	13.7	1.4	2.8	7.5	5.3	0.3	100.0	83.0	56.3	1,025
25-29	51.7	15.1	12.9	1.2	2.6	10.6	5.8	0.1	100.0	79.7	53.3	1,093
30-34	47.3	17.7	12.9	1.9	3.3	10.4	6.5	0.1	100.0	78.0	49.9	853
35-39	48.1	15.2	13.3	1.1	2.8	12.0	7.5	0.0	100.0	76.6	49.9	630
40-44	46.1	15.2	13.6	0.7	4.7	10.3	9.1	0.2	100.0	75.1	47.4	437
45-49	30.9	15.3	14.0	1.7	6.1	14.1	17.7	0.2	100.0	60.4	34.4	327
Residence												
Mainland	48.5	15.1	14.2	1.3	3.4	9.9	7.5	0.1	100.0	78.0	50.6	4,529
Total urban	62.2	15.2	11.1	0.7	2.4	5.3	3.1	0.1	100.0	88.6	63.4	1,010
Dar es Salaam city	61.3	17.4	9.5	0.3	1.8	5.3	4.2	0.3	100.0	88.4	61.6	321
Other urban	62.6	14.2	11.9	0.8	2.6	5.3	2.6	0.0	100.0	88.7	64.3	689
Total rural	44.6	15.1	15.1	1.4	3.7	11.2	8.7	0.2	100.0	74.9	46.9	3,519
Zanzibar	45.4	20.6	9.0	1.5	4.0	17.2	2.3	0.0	100.0	75.0	47.5	156
Region												
Dodoma	43.4	18.5	6.8	3.9	2.9	15.1	8.8	0.5	100.0	69.3	48.3	231
Arusha	59.1	10.5	7.7	2.8	3.9	8.3	7.7	0.0	100.0	77.3	63.5	227
Kilimanjaro	76.8	8.8	4.6	0.0	3.1	2.1	4.6	0.0	100.0	90.2	78.4	193
Tanga	62.2	12.9	14.4	1.4	1.0	4.3	3.8	0.0	100.0	89.5	64.6	243
Morogoro	49.1	13.1	20.3	0.5	3.2	5.9	7.7	0.5	100.0	82.9	49.5	241
Coast	61.2	15.2	10.9	1.2	2.4	4.2	4.8	0.0	100.0	87.3	62.4	95
Dar es Salaam	58.9	16.3	10.9	0.4	1.6	6.7	4.9	0.2	100.0	86.4	59.4	379
Lindi	48.7	21.1	13.6	2.5	5.0	5.5	3.5	0.0	100.0	83.4	51.3	117
Mtwara	46.8	14.4	17.3	1.8	7.9	3.6	7.6	0.7	100.0	78.8	48.9	224
Ruvuma	52.7	16.0	11.6	0.3	5.1	8.8	5.1	0.3	100.0	80.6	54.1	193
Iringa	36.6	17.6	20.4	1.4	4.6	5.6	13.9	0.0	100.0	74.5	38.9	259
Mbeya	52.8	19.1	18.1	0.0	3.0	2.5	4.5	0.0	100.0	89.9	53.3	300
Singida	50.4	9.8	12.5	0.4	3.1	10.7	12.9	0.0	100.0	72.8	51.8	161
Tabora	41.9	9.7	16.9	0.8	9.7	12.1	8.9	0.0	100.0	68.5	44.4	141
Rukwa	38.7	12.6	27.9	0.0	4.5	6.3	9.9	0.0	100.0	79.3	39.2	152
Kigoma	45.0	10.9	18.6	1.8	5.9	7.3	10.0	0.5	100.0	75.0	48.6	210
Shinyanga	40.1	13.5	13.5	0.0	1.0	19.3	12.5	0.0	100.0	67.2	41.1	351
Kagera	46.8	16.1	18.3	1.1	2.2	12.4	3.2	0.0	100.0	81.2	48.4	306
Mwanza	34.9	17.2	12.9	1.6	2.2	22.6	8.6	0.0	100.0	65.1	37.1	344
Mara	30.5	27.7	5.1	5.1	2.8	24.3	4.5	0.0	100.0	63.3	37.3	164
Education												
No education	29.1	15.7	16.9	1.3	6.2	17.1	13.5	0.1	100.0	61.9	31.8	1,363
Primary incomplete	46.6	16.7	14.8	1.0	2.2	10.9	7.8	0.1	100.0	78.2	48.3	802
Primary complete	57.9	15.1	12.8	1.4	2.4	6.3	4.0	0.1	100.0	85.8	59.8	2,521
Secondary+	77.8	9.7	5.8	0.6	1.3	3.8	0.7	0.4	100.0	93.8	78.4	190
Total	48.4	15.3	14.0	1.3	3.4	10.1	7.3	0.1	100.0	77.9	50.5	4,686

[1] Includes women who are unsure about their own attitude, but know their husbands' attitudes

Table 4.18 Attitudes of couples toward family planning

Percent distribution of couples by approval of family planning, according to age difference between spouses and level of education, Tanzania 1996

Age difference/ education	Both approve	Both disap-prove	Wife approves, husband dis-approves	Husband approves, wife dis-approves	Don't know/ Missing	Total	Percent in agree-ment	Number
Wife older	(73.0)	(0.0)	(9.3)	(13.7)	(4.0)	100.0	(73.0)	36
Husband older by:								
0-4 years	61.7	3.8	9.2	9.7	15.7	100.0	65.5	335
5-9 years	60.4	4.1	8.5	11.1	15.9	100.0	64.6	432
10-14 years	58.4	10.0	10.6	7.5	13.4	100.0	68.4	196
15 or more years	43.8	11.3	16.5	7.6	20.8	100.0	55.1	125
Education								
Neither educated	18.3	22.4	15.6	11.7	31.9	100.0	40.7	120
Wife educated, husband not	37.6	3.0	20.5	17.5	21.3	100.0	40.6	65
Husband educated, wife not	46.5	7.9	6.1	14.7	24.8	100.0	54.4	252
Both educated	72.8	2.2	9.4	6.8	8.8	100.0	75.0	688
Total	59.0	5.7	10.0	9.7	15.6	100.0	64.7	1,125

Note: Figures in parentheses are based on 25-49 respondents.

Table 4.19 Spouses' actual and perceived attitudes toward family planning

Percent distribution of couples by husband's and wife's actual attitude towards family planning according to their spouse's perception of their attitude, Tanzania 1996

	Spouse's actual attitude toward family planning				
Perception	Approves	Disap-proves	Unsure	Total	Number
Wife's perception of husband's attitude					
Approves	87.7	8.6	3.7	100.0	547
Disapproves	61.2	32.4	6.4	100.0	302
Don't know	70.1	18.0	11.9	100.0	276
Total	76.3	17.3	6.4	100.0	1,125
Husband's perception of wife's attitude					
Approves	78.1	12.6	9.3	100.0	751
Disapproves	60.0	28.4	11.5	100.0	158
Don't know	63.5	21.8	14.8	100.0	216
Total	72.7	16.6	10.7	100.0	1,125

Table 4.20.1 Green Star logo - family planning symbol: women

Percentage of women who know the Green Star logo, and of those, the percentage who can describe logo meaning, and the percentage who cited various sources where they heard of Green Star, by selected background characteristics, Tanzania 1996

Background characteristic	Know Green Star	Know whether Green Green Star logo is family planning related			Total	Source of knowledge of Green Star logo								Number of women
		Yes	No	Don't know		Bill-board	Bus	Poster	Leaflet	Radio	Clinic sign	Service provider	Other	
Age														
15-19	29.5	70.3	0.7	29.0	100.0	21.7	5.9	19.8	10.4	59.8	35.9	10.8	2.2	1,732
20-24	45.0	82.9	1.2	15.9	100.0	20.7	3.2	15.6	8.0	56.3	58.5	19.5	1.3	1,676
25-29	42.0	83.8	1.0	15.2	100.0	23.9	3.6	15.9	8.7	49.4	61.1	23.5	1.4	1,440
30-34	37.5	89.4	0.4	10.2	100.0	25.5	5.2	15.3	11.6	58.6	58.4	22.8	1.3	1,118
35-39	36.4	83.4	1.7	15.0	100.0	22.2	6.9	16.7	10.5	60.4	54.8	25.0	2.1	888
40-44	27.6	85.2	0.5	14.3	100.0	20.9	3.7	16.1	9.2	54.9	56.7	25.3	1.2	680
45-49	20.5	77.3	0.0	22.7	100.0	16.4	1.9	8.5	2.9	66.6	39.4	22.7	0.0	585
Residence														
Mainland	36.4	82.1	0.9	17.0	100.0	22.5	4.5	16.4	9.3	56.6	54.2	20.6	1.4	7,881
Total urban	68.5	86.9	0.8	12.3	100.0	28.5	4.0	17.0	9.5	68.2	53.6	18.2	1.4	1,811
Dar es Salaam city	82.1	85.7	1.3	13.0	100.0	34.6	5.1	15.4	6.0	85.6	46.4	6.8	2.2	563
Other urban	62.3	87.6	0.6	11.8	100.0	24.8	3.3	18.0	11.6	57.9	57.9	25.0	0.9	1,248
Total rural	26.9	78.4	0.9	20.7	100.0	17.9	4.9	15.9	9.1	47.7	54.7	22.4	1.4	6,070
Zanzibar	21.2	63.9	4.3	31.8	100.0	9.0	0.6	7.5	5.4	59.2	29.0	8.8	7.3	239
Pemba	12.5	59.5	18.9	21.6	100.0	2.7	2.7	10.8	5.4	64.9	35.1	5.4	2.7	92
Unguja	26.6	65.2	0.0	34.8	100.0	10.9	0.0	6.5	5.4	57.6	27.2	9.8	8.7	148
Zones														
Coastal	60.6	83.2	0.8	16.0	100.0	22.5	3.3	11.1	5.1	69.2	45.6	17.4	1.5	1,916
Northern Highlands	35.0	85.4	1.5	13.2	100.0	17.5	3.1	10.1	9.9	62.2	55.9	12.9	1.3	979
Lake	20.7	83.6	2.0	14.4	100.0	26.5	6.5	25.8	14.8	31.1	65.5	26.6	1.1	2,559
Central	30.8	77.9	0.0	22.1	100.0	28.5	2.8	18.0	8.5	58.0	47.7	20.3	1.9	638
Southern Highlands	23.4	77.2	0.5	22.2	100.0	23.5	1.6	25.7	4.6	45.3	58.6	27.4	0.4	1,181
Southern	49.0	77.3	0.1	22.5	100.0	16.2	8.9	16.1	16.4	56.2	59.5	22.4	2.7	847
Education														
No education	15.4	71.5	0.5	28.0	100.0	11.4	3.8	9.5	4.6	54.0	49.4	19.5	0.9	2,316
Primary incomplete	28.3	75.5	0.5	24.0	100.0	17.6	4.0	12.1	5.0	52.2	47.0	18.7	1.7	1,630
Primary complete	47.8	83.7	1.0	15.2	100.0	21.9	4.7	16.5	9.8	55.6	56.8	21.7	1.4	3,732
Secondary+	72.4	91.4	1.4	7.3	100.0	42.6	4.6	28.4	17.2	71.2	51.4	16.6	2.8	441
No. of living children[1]														
0	32.2	74.0	0.7	25.3	100.0	23.3	4.9	18.1	8.8	66.9	31.8	8.2	2.3	1,991
1	46.9	82.5	1.0	16.5	100.0	21.6	4.6	16.0	8.8	57.9	57.3	21.1	1.0	1,411
2	41.8	85.0	1.6	13.4	100.0	26.4	5.6	16.5	10.2	55.4	61.4	23.9	1.4	1,100
3	36.1	86.4	1.2	12.4	100.0	21.0	3.3	16.2	9.9	53.3	62.7	25.6	1.5	969
4	38.1	84.2	0.8	14.9	100.0	23.0	3.7	13.4	10.4	51.6	63.7	26.2	1.6	784
5	32.5	83.9	0.0	16.1	100.0	20.2	4.2	14.0	7.7	45.0	63.4	28.4	0.9	607
6+	24.9	82.6	0.6	16.8	100.0	17.2	3.5	16.5	8.6	50.3	54.6	22.4	1.6	1,257
Total	36.0	81.8	0.9	17.3	100.0	22.2	4.4	16.2	9.2	56.6	53.8	20.4	1.5	8,120

[1] Includes current pregnancy.

Table 4.20.2 Green Star logo - family planning symbol: men

Percentage of men who know the Green Star logo, and of those, the percentage who can describe logo meaning, and the percentage who cited various sources where they heard of Green Star, by selected background characteristics, Tanzania 1996

Background characteristic	Know Green Star	Know whether Green Green Star logo is family planning related			Total	Source of knowledge of Green Star logo								Number of men
		Yes	No	Don't know		Bill-board	Bus	Poster	Leaflet	Radio	Clinic sign	Service provider	Other	
Age														
15-19	29.0	79.1	0.0	20.9	100.0	30.5	3.7	22.2	13.6	70.9	20.1	5.6	3.9	488
20-24	42.5	83.2	1.1	15.7	100.0	34.8	5.0	26.5	12.3	70.7	25.1	7.5	4.9	371
25-29	45.9	81.5	0.0	18.5	100.0	39.7	8.6	25.1	11.9	77.9	28.8	9.5	3.6	301
30-34	42.2	82.4	0.0	17.6	100.0	33.4	14.9	21.1	13.2	79.2	19.1	8.8	4.6	272
35-39	45.6	79.0	0.0	21.0	100.0	33.0	8.6	17.1	19.3	60.9	24.4	8.3	0.6	251
40-44	39.7	83.6	0.6	15.8	100.0	33.9	7.7	26.0	12.8	74.0	23.1	6.5	2.5	206
45-49	32.4	73.5	0.0	26.5	100.0	32.2	1.3	22.4	13.5	58.0	32.0	2.8	1.3	149
50-54	22.9	67.8	0.0	32.2	100.0	31.8	0.0	22.7	15.2	57.1	15.2	0.0	5.6	118
55-59	22.1	66.8	0.0	33.2	100.0	35.7	0.0	14.9	0.0	78.7	16.1	0.0	0.0	100
Residence														
Mainland	38.0	79.9	0.2	19.9	100.0	33.9	6.8	22.6	13.4	71.2	23.8	7.0	3.4	2,187
Total urban	66.4	82.7	0.0	17.3	100.0	41.5	9.9	25.3	15.3	73.6	19.3	7.1	4.9	509
Dar es Salaam city	83.8	84.2	0.0	15.8	100.0	46.9	17.1	22.8	16.7	78.5	7.9	3.1	7.9	171
Other urban	57.5	81.7	0.0	18.3	100.0	37.4	4.6	27.2	14.2	70.1	27.8	10.0	2.6	338
Total rural	29.3	77.9	0.3	21.7	100.0	28.6	4.7	20.8	12.1	69.4	26.8	6.9	2.4	1,678
Zanzibar	22.5	93.3	3.3	3.3	100.0	49.3	16.4	32.7	14.7	68.9	16.4	8.2	0.0	69
Pemba	14.8	75.0	12.5	12.5	100.0	75.0	25.0	12.5	0.0	75.0	25.0	12.5	0.0	28
Unguja	27.8	100.0	0.0	0.0	100.0	40.0	13.3	40.0	20.0	66.7	13.3	6.7	0.0	41
Zones														
Coastal	58.0	83.4	0.2	16.4	100.0	33.9	10.1	20.4	13.3	75.6	13.0	7.9	5.2	508
Northern Highlands	34.1	88.9	1.8	9.4	100.0	22.6	7.3	10.8	20.8	70.9	32.9	6.3	0.6	275
Lake	25.9	82.5	0.0	17.5	100.0	47.3	7.8	27.4	18.5	62.0	28.4	6.8	2.2	757
Central	29.3	68.8	0.0	31.2	100.0	19.0	1.9	18.8	6.9	73.3	17.2	7.1	2.6	176
Southern Highlands	31.1	62.4	0.0	37.6	100.0	43.7	4.0	24.8	11.0	68.8	31.6	0.8	3.1	309
Southern	49.1	80.5	0.0	19.5	100.0	20.5	2.1	31.5	3.7	76.4	31.5	10.7	3.4	231
Education														
No education	13.5	57.6	0.0	42.4	100.0	12.5	7.6	14.4	7.7	55.1	11.8	2.3	3.1	304
Primary incomplete	23.1	68.7	0.0	31.3	100.0	25.8	1.6	15.1	8.2	71.5	21.2	8.1	1.0	664
Primary complete	45.4	80.7	0.3	18.9	100.0	33.1	4.8	21.6	12.9	70.9	25.4	7.5	2.9	1,066
Secondary+	75.7	94.5	0.3	5.2	100.0	50.2	17.8	35.4	21.1	75.3	23.6	5.8	6.9	222
No. of living children[1]														
0	34.6	82.2	0.0	17.8	100.0	34.4	6.6	23.8	13.4	71.9	21.7	6.5	4.0	974
1	46.5	75.3	0.0	24.7	100.0	40.7	11.3	20.4	16.4	68.9	21.3	9.7	3.6	228
2	47.1	80.0	1.7	18.2	100.0	37.8	7.6	32.8	14.5	81.8	25.5	8.5	4.1	206
3	44.1	79.9	0.0	20.1	100.0	28.4	6.9	20.4	8.0	74.0	27.0	5.5	1.8	188
4	39.3	75.9	0.8	23.3	100.0	22.7	9.3	18.8	13.9	56.1	31.7	6.2	4.3	158
5	29.8	69.0	0.0	31.0	100.0	21.1	4.8	13.1	12.6	74.2	26.5	12.1	2.0	127
6+	32.8	84.5	0.0	15.5	100.0	38.6	3.5	21.0	13.6	67.1	22.2	4.6	1.7	375
Total	37.5	80.1	0.3	19.6	100.0	34.1	7.0	22.8	13.4	71.1	23.6	7.0	3.4	2,256

[1] Includes current pregnancy.

It is interesting to note that the billboards erected during the recent campaigns were a source of knowledge for 22 percent of the women. Sixteen percent learned about the Green Star from a poster. Most men on the other hand learned about the Green Star from the radio (71 percent) and billboards (34 percent).

Urban women and men are more likely than rural residents to have correct knowledge of the Green Star family planning logo. Similarly, residents in the Coast zone are more likely to have been exposed to the family planning logo than those in other zones. Education is also related to knowledge of the logo; more than 70 percent of women and men with secondary or more education have seen or heard of the logo, compared with 15 percent or less of those with no education.

4.17 Exposure to Family Planning Drama

Recently a number of radio drama programmes have been launched to promote family planning messages in Tanzania. As a measure of success of the radio campaigns, respondents in the survey were asked to mention the radio programmes they had listened to in the last six months. Table 4.21 shows that in general more men (43 percent) than women (29 percent) have listened to any of the family planning dramas on the radio. Two radio programmes *Zinduka* and *Twende na Wakati* are equally popular among men and women. *Ukweli Kuhusu Maisha* has the lowest percentage of listeners among the three programmes. As expected, respondents from urban areas are more likely to be exposed to radio drama than their rural counterparts. Listenership to any radio programme is positively associated with levels of education of both men and women.

4.18 Knowledge of "Salama" Condoms

Women and men respondents in the TDHS 1996 were asked if they had ever heard of a condom called "Salama", the brand that is sold through the social marketing programme. Results in Table 4.22 show that more men (65 percent) than women (43 percent) are aware of "Salama" condoms. Awareness of the "Salama" brand varies considerably across regions of the country. Among women the highest levels of awareness are found in the Dar es Salaam (84 percent) and Coast (72 percent) regions and lowest levels of knowledge are found in the Iringa (24 percent) region. Differentials by region among men are much lower. Highest levels of awareness are found in Dar es Salaam (92 percent), Coast (84 percent), and Mtwara (82 percent) regions and the lowest levels of knowledge among men are found in Kagera and Mara (46 percent) regions. Awareness of "Salama" condoms increases with educational levels.

Table 4.21 Exposure to family planning drama

Percentage of all women and men who have listened to family planning drama on the radio during the last 6 months, by selected background characteristics, Tanzania 1996

Background characteristic	Women						Men					
	Zinduka	Twenda Na Wakati	Ukweli Kuhusu Maisha	Other	Any drama	Number of women	Zinduka	Twenda Na Wakati	Ukweli Kuhusu Maisha	Other	Any drama	Number of men
Age												
15-19	23.5	21.4	13.7	8.6	27.7	1,732	29.5	25.3	14.3	9.8	35.0	488
20-24	31.1	28.2	20.0	11.4	36.5	1,676	45.4	43.3	31.6	19.2	53.8	371
25-29	27.6	26.3	19.2	10.1	31.4	1,440	50.6	46.3	30.9	20.8	57.9	301
30-34	26.8	25.3	17.4	11.4	30.0	1,118	50.5	48.1	31.6	19.3	55.5	272
35-39	22.9	21.4	17.2	11.5	25.6	888	44.7	43.7	34.5	21.2	51.1	251
40-44	18.0	17.8	12.6	5.4	21.2	680	37.2	40.0	30.0	14.3	44.2	206
45-49	10.4	9.4	6.0	3.2	11.4	585	34.4	32.4	22.0	13.5	39.6	149
50-54	NA	NA	NA	NA	NA	NA	25.4	26.3	17.8	7.5	32.2	118
55-59	NA	NA	NA	NA	NA	NA	15.8	15.2	9.5	4.5	15.8	100
Residence												
Mainland	24.6	22.9	16.3	9.4	28.3	7,881	39.6	37.4	25.7	15.8	45.7	2,187
Total urban	53.3	50.9	34.4	20.9	58.8	1,811	58.4	54.0	36.3	26.8	66.2	509
Dar es Salaam city	73.0	71.5	48.0	35.9	79.4	563	69.1	63.2	39.7	43.7	76.1	171
Other urban	44.4	41.6	28.2	14.1	49.6	1,248	52.9	49.3	34.6	18.2	61.2	338
Total rural	16.1	14.6	10.9	6.0	19.2	6,070	33.9	32.4	22.4	12.4	39.5	1,678
Zanzibar	28.7	27.2	13.4	13.4	36.4	239	31.7	32.1	24.0	8.1	40.6	69
Regional zones												
Coastal	45.4	42.7	28.8	20.5	49.0	1,916	52.7	47.4	31.9	27.9	58.7	508
Northern Highlands	28.2	25.4	20.2	5.8	31.2	979	35.6	35.9	24.0	23.5	45.2	275
Lake	10.0	9.7	8.6	4.5	14.8	2,559	27.6	26.8	20.1	11.1	33.2	757
Central	23.8	24.6	15.0	6.4	29.0	638	39.4	39.1	26.6	7.7	49.5	176
Southern Highlands	16.1	14.7	8.2	4.0	18.7	1,181	36.3	35.3	23.2	4.7	39.8	309
Southern	31.4	26.4	18.2	14.0	34.1	847	56.9	52.3	34.0	13.6	62.2	231
Education												
No education	9.1	7.7	5.2	3.8	10.3	2,316	17.4	17.7	10.4	6.0	22.3	304
Primary incomplete	18.4	16.7	11.6	6.3	21.1	1,630	27.4	26.0	18.7	10.7	32.0	664
Primary complete	33.6	31.4	22.8	12.5	38.8	3,732	48.6	45.3	31.4	20.1	55.9	1,066
Secondary+	55.8	55.8	35.7	25.7	64.9	441	60.7	59.3	39.3	20.8	68.4	222
Total	24.8	23.0	16.2	9.5	28.5	8,120	39.4	37.3	25.6	15.5	45.6	2,256

NA = Not applicable.

Table 4.22 Knowledge of "Salama" condom

Percentage of women and men who have heard of "Salama" condom, by selected background characteristics, Tanzania 1996

Background characteristic	Women		Men	
	Percentage	Number of women	Percentage	Number of men
Residence				
Mainland	43.2	7,881	65.1	2,187
Total urban	73.3	1,811	87.2	509
Dar es Salaam city	84.7	563	92.6	171
Other urban	68.2	1,248	84.5	338
Total rural	34.1	6,070	58.4	1,678
Zanzibar	23.4	239	48.2	69
Region				
Dodoma	42.9	355	57.9	96
Arusha	40.1	589	60.6	156
Kilimanjaro	55.2	390	66.7	119
Tanga	47.0	464	72.0	108
Morogoro	36.3	408	59.4	95
Coast	72.2	159	83.9	45
Dar es Salaam	84.3	646	92.1	191
Lindi	56.3	187	80.3	54
Mtwara	36.7	355	82.2	96
Ruvuma	37.6	305	71.6	82
Iringa	24.4	466	54.0	100
Mbeya	43.0	473	73.6	137
Singida	36.3	283	58.3	80
Tabora	42.9	225	57.4	82
Rukwa	28.0	242	65.4	71
Kigoma	27.5	351	47.1	95
Shinyanga	36.3	686	59.1	202
Kagera	38.7	467	46.4	139
Mwanza	34.5	573	64.1	176
Mara	44.0	257	45.5	64
Education				
No education	22.2	2,316	42.0	304
Primary incomplete	37.1	1,630	53.6	664
Primary complete	53.1	3,732	73.7	1,066
Secondary +	80.7	441	84.4	222
Marital status				
Never	45.9	1,887	66.4	847
Currently married	41.1	5,411	63.3	1,288
Past marriage	44.5	822	66.4	117
Total	42.6	8,120	64.6	2,256

Note: Total includes 4 male respondents with missing marital information.

CHAPTER 5

PROXIMATE DETERMINANTS OF FERTILITY

This chapter addresses the principal factors other than contraception that affect a woman's risk of becoming pregnant and thus helps to determine the fertility level in Tanzania. These factors are marriage (including consensual union) and sexual intercourse, postpartum amenorrhoea and abstinence from sexual relations, and termination of exposure to pregnancy. Marriage and the beginning of sexual activity signal the onset of women's exposure to the risk of childbearing; postpartum amenorrhoea and abstinence affect the interval between births. These factors determine the length and pace of reproductive activity and are, therefore, important in understanding fertility.

5.1 Current Marital Status

The report defines marriage to include informal as well as formal unions. Informal unions are those in which a man and woman stay together intending to have a lasting relationship, even if a formal civil or religious ceremony has not yet occurred. Although shown separately in Table 5.1, the categories of "married" and "living together" are combined in all other tables and referred to as "currently married." Respondents who are currently married, widowed, divorced, or no longer living together (separated) are called "ever married."

Table 5.1 Current marital status

Percent distribution of women and men by current marital status, according to age, Tanzania 1996

Age	Current marital status						Missing	Total	Number of women/men
	Never married	Married	Living together	Widowed	Divorced	Not living together			
				WOMEN					
15-19	74.6	20.1	3.0	0.1	1.2	0.9	0.0	100.0	1,732
20-24	24.5	59.4	8.1	1.2	4.6	2.3	0.0	100.0	1,676
25-29	7.4	74.7	7.6	1.5	6.5	2.5	0.0	100.0	1,440
30-34	4.5	75.4	9.3	3.5	4.9	2.5	0.0	100.0	1,118
35-39	1.7	75.3	8.0	5.3	8.0	1.7	0.0	100.0	888
40-44	1.4	75.4	7.1	8.2	5.6	2.3	0.0	100.0	680
45-49	0.7	71.8	4.6	11.1	7.6	4.0	0.2	100.0	585
Total	23.2	59.9	6.7	3.1	4.9	2.1	0.0	100.0	8,120
				MEN					
15-19	96.6	1.1	0.1	0.3	0.6	0.7	0.5	100.0	488
20-24	70.5	20.6	3.9	1.1	0.2	3.4	0.3	100.0	371
25-29	26.9	57.9	7.2	0.8	3.2	3.9	0.0	100.0	301
30-34	6.1	80.4	5.0	1.2	3.4	3.9	0.0	100.0	272
35-39	3.5	86.1	5.6	0.5	1.4	2.8	0.0	100.0	251
40-44	1.7	88.1	6.4	0.7	1.6	1.6	0.0	100.0	206
45-49	2.9	88.9	3.1	2.2	1.9	1.1	0.0	100.0	149
50-54	0.0	90.2	3.4	1.2	3.8	1.4	0.0	100.0	118
55-59	0.0	85.0	4.9	2.0	3.4	4.7	0.0	100.0	100
Total	37.5	53.0	4.1	0.9	1.8	2.5	0.2	100.0	2,256

Note: Figures may not add to 100.0 due to rounding.

The distribution of women according to their marital status is shown in the upper panel of Table 5.1. The data show that 23 percent of women of childbearing age in Tanzania have never married, 67 percent either are currently married or living with a man, and 10 percent are widowed, divorced, or separated. The proportion of women who have never married declines sharply with age, from 75 percent among teenagers (age 15-19) to less than 2 percent among women age 35 and older. The universality of marriage in Tanzania is evident in these data and was also observed in the 1991-92 TDHS and 1994 TKAPS.

The proportion of women who are currently married increases with age until age group 40-44 and is relatively constant among women age 25-44, after which it declines because of the increasing levels of widowhood. The proportions widowed increase with age, while the proportions divorced and those who are no longer living with a man show no clear age pattern. Overall, more marital disruption among women is due to divorce and separation than to widowhood.

The lower panel of Table 5.1 shows that 38 percent of men age 15-59 have never been married, 57 percent are currently married, and 5 percent are widowed, divorced, or separated. Men tend to marry at older ages than women and 14 percent more men than women have never been married. The proportion never married among teenage males is 97 percent, but decreases to 3 percent at ages 45-49.

5.2 Sexual Relationships Among Unmarried Women

Table 5.2 presents information about the sexual relationships of women who are not currently married or living with a man. This information is important for the study of sexual relationships, adolescent pregnancy, and risk factors relating to AIDS and other sexually transmitted diseases. In this report, nonmarital sexual relationships include those of both never-married and formerly married women with either regular or occasional partners.

Data show that among women who are not currently married, 19 percent are never-married women with a regular sexual partner and 12 percent are formerly married women who have a regular partner. Four percent consist of never married and formally married women who have an occasional partner. Almost half of the women who are not currently married are women who never married and have no sexual partners, while 16 percent were previously married and have no sexual partners. These figures show that the prevalence of nonmarital sexual relationships is not high in Tanzania. About two-thirds of women currently unmarried do not have sexual partners.

The prevalence of nonmarital sexual relationships is higher (56 percent) in the age group 25-29. Nonmarital sex is more common in urban areas than rural areas (44 vs. 33 percent) on the mainland. The prevalence of these relationships is relatively high in the Southern zone (51 percent) and lowest in the Southern Highland zone (29 percent).

5.3 Polygyny

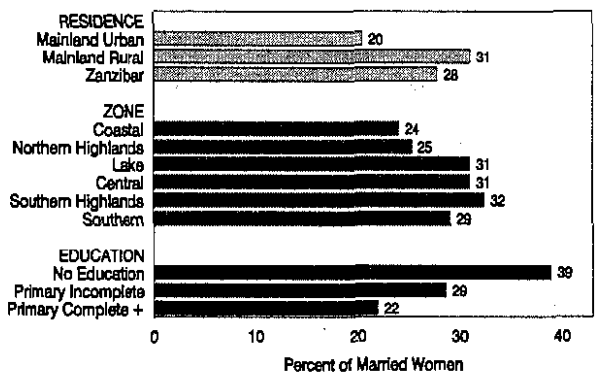
The extent of polygyny in Tanzania was measured by asking all currently married female respondents the questions: "Does your husband/partner have any other wives besides yourself?"and if so, "How many co-wives do you have?" Currently married male respondents were asked, "How many wives do you have?" The proportion of currently married respondents who were in polygynous unions according to age groups and selected background characteristics is shown in Table 5.3 and Figure 5.1.

Table 5.2 Sexual relationships of non-married women

Percent distribution of women who are not currently married or living with a man by type of current sexual relationships, according to selected background characteristics, Tanzania 1996

Age	Never-married women			Formerly married women			Missing	Total	Number of women
	Regular partner	Occasional partner	No partner	Regular partner	Occasional partner	No partner			
Age									
15-19	18.8	3.0	75.2	1.1	0.4	1.5	0.1	100.0	1,331
20-24	31.9	2.4	41.0	10.5	2.3	11.7	0.1	100.0	545
25-29	19.8	1.4	20.2	31.1	3.6	24.0	0.0	100.0	256
30-34	14.3	0.7	14.4	29.8	2.4	38.3	0.0	100.0	171
35-39	4.9	0.0	5.2	42.5	5.1	42.3	0.0	100.0	149
40-44	2.6	0.8	4.6	29.9	3.0	59.1	0.0	100.0	119
45-49	0.9	0.0	2.0	24.4	3.0	68.8	0.9	100.0	138
Residence									
Mainland	19.3	2.2	47.9	12.6	1.7	16.1	0.1	100.0	2,636
Total urban	25.1	2.8	43.9	13.7	2.2	12.1	0.2	100.0	738
Dar es Salaam city	27.7	3.0	46.6	11.0	1.9	9.8	0.0	100.0	223
Other urban	24.0	2.7	42.7	14.9	2.3	13.1	0.2	100.0	515
Total rural	17.1	2.0	49.5	12.2	1.5	17.6	0.1	100.0	1,897
Zanzibar	1.7	0.0	72.4	3.4	1.2	20.8	0.4	100.0	73
Zones									
Coastal	19.4	3.0	48.2	12.4	2.0	14.9	0.0	100.0	714
Northern Highlands	21.0	1.0	55.4	8.2	0.7	13.3	0.4	100.0	355
Lake	17.8	0.6	48.0	14.6	0.8	18.0	0.1	100.0	789
Central	15.0	2.0	51.8	13.7	0.8	16.7	0.0	100.0	186
Southern Highlands	15.3	2.2	55.9	9.0	2.3	15.4	0.0	100.0	394
Southern	25.3	6.1	29.6	15.0	4.8	18.9	0.2	100.0	271
Education									
None	13.3	1.8	29.0	19.1	3.5	33.0	0.3	100.0	488
Primary incomplete	12.3	3.1	60.5	10.0	1.3	12.8	0.0	100.0	710
Primary complete	22.7	2.0	47.7	12.6	1.5	13.5	0.0	100.0	1,270
Secondary +	28.9	1.3	57.9	4.6	0.4	6.3	0.6	100.0	241
Total	18.8	2.2	48.6	12.4	1.7	16.2	0.1	100.0	2,709

Figure 5.1
Percent of Married Women in Polygynous Unions by Background Characteristics



TDHS 1996

Table 5.3 Polygyny

Percentage of currently married women age 15-49 years and of currently married men 15-59 years in a polygynous union, by age and selected background characteristics, Tanzania 1996

Background characteristic	Age of respondent							All women 15-49	All men 15-59
	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
Residence									
Mainland	21.4	20.2	27.3	30.8	35.6	35.4	37.8	28.8	14.8
Total urban	13.2	12.1	18.8	23.5	28.6	28.5	27.7	20.4	12.7
Dar es Salaam city	10.3	8.8	22.2	17.9	29.0	25.0	30.8	18.9	7.6
Other urban	14.7	13.9	17.5	26.2	28.4	29.9	27.0	21.1	15.0
Total rural	23.3	22.5	29.9	32.5	37.6	36.8	39.3	31.0	15.4
Zanzibar	38.1	19.2	27.5	26.2	26.4	35.8	46.7	27.8	21.3
Zone									
Coastal	14.6	12.0	26.4	22.7	31.2	30.4	42.6	24.0	12.6
Northern Highlands	27.0	20.6	25.8	27.1	33.3	22.6	17.5	25.3	13.1
Lake	23.5	25.3	26.9	35.8	37.8	37.7	36.7	31.0	16.7
Central	24.1	21.7	31.3	33.2	36.2	34.0	38.2	31.0	12.4
Southern Highlands	29.7	18.8	26.2	36.1	42.3	43.2	43.1	32.4	16.8
Southern	13.7	21.3	31.7	26.3	30.3	40.4	42.4	29.1	15.5
Education									
No education	29.9	32.8	35.4	43.6	41.9	39.8	41.2	38.9	20.0
Primary incomplete	23.3	22.8	32.6	25.0	31.7	31.0	33.0	28.6	17.1
Primary complete+	16.9	15.7	24.1	24.8	28.4	28.2	27.9	21.9	12.5
Women 15-49	21.8	20.1	27.3	30.6	35.3	35.4	38.0	28.8	NA
Men 15-59	*	0.7	13.5	9.9	13.2	17.8	23.0	NA	15.0

Note: An asterisk indicates that a figure is based on fewer than 25 respondents and has been suppressed. For men in the age group 50-59, 23.1 percent are in a polygynous union.
NA = Not applicable.

Overall, 29 percent of married women and 15 percent of all men are in polygynous unions. The practice of polygyny increases with age among women from 22 percent among teenagers to 38 percent among those age 45-49. Overall, older women are more likely to be in polygynous unions than younger women, reflecting either a genuine trend away from polygyny among younger couples or a life-cycle effect. The proportion of rural women and men in polygynous unions is higher than that for urban women and men on the mainland. The proportion of women in polygynous unions is slightly higher on the mainland than in Zanzibar (29 vs. 28 percent), whereas the proportion of men in polygynous unions is higher in Zanzibar than on the mainland (21 vs. 15 percent). The highest level of polygynous unions is found in the Southern Highland zone.

There is an inverse relationship between education and polygyny. The proportion of currently married women in a polygynous union decreases from 39 percent among women with no formal education to 22 percent among those who have completed primary education.

Table 5.4 shows that 71 percent of currently married women have no other co-wives. Of the 29 percent of women who are in polygynous unions, the majority have only one co-wife (18 percent of all currently married women), while 10 percent report having two or more co-wives. The Arusha, Mbeya, and Shinyanga regions have the highest proportion of currently married women with more than one co-wife. Not only is polygyny more common among less educated women, but the propensity for those in polygynous unions to have more than one co-wife is less common among less educated women. The proportion of men in polygynous unions is much lower (12 percent having two wives and 2 percent having three or more wives) than that of women.

Table 5.4 Number of co-wives

Percent distribution of currently married women by number of co-wives and men by number of wives, according to background characteristics, Tanzania 1996

Background characteristic	Women						Men					
	Number of co-wives					Number of women	Number of wives					Number of men
	0	1	2+	Missing	Total		1	2	3+	Missing	Total	
Age												
15-19	78.2	9.7	11.2	0.9	100.0	401	*	*	*	*	100.0	6
20-24	79.9	12.2	6.7	1.2	100.0	1,131	99.3	0.0	0.0	0.7	100.0	91
25-29	72.7	17.7	8.8	0.8	100.0	1,184	86.5	10.6	0.6	2.2	100.0	196
30-34	69.4	20.2	10.0	0.4	100.0	947	90.1	8.3	1.1	0.5	100.0	232
35-39	64.7	24.0	10.6	0.7	100.0	740	86.8	12.1	1.1	0.0	100.0	230
40-44	64.6	24.3	10.8	0.3	100.0	561	82.2	14.9	1.6	1.4	100.0	194
45-49	62.0	22.3	15.2	0.5	100.0	447	77.0	16.6	6.0	0.4	100.0	137
50-54	NA	NA	NA	NA	NA	NA	76.2	17.6	6.2	0.0	100.0	110
55-59	NA	NA	NA	NA	NA	NA	77.8	14.0	5.6	2.6	100.0	90
Residence												
Mainland	71.2	18.4	9.8	0.7	100.0	5,245	85.2	11.6	2.3	0.9	100.0	1,253
Total urban	79.6	14.6	5.2	0.6	100.0	1,073	87.3	9.1	2.3	1.3	100.0	260
Dar es Salaam city	81.1	10.9	6.7	1.2	100.0	340	92.4	3.0	1.5	3.0	100.0	83
Other urban	78.9	16.3	4.5	0.3	100.0	733	85.0	11.9	2.7	0.5	100.0	177
Total rural	69.0	19.3	11.0	0.7	100.0	4,172	84.6	12.2	2.3	0.9	100.0	992
Zanzibar	72.2	18.2	7.3	2.2	100.0	166	78.7	19.8	1.5	0.0	100.0	35
Region												
Dodoma	71.6	18.3	9.6	0.4	100.0	258	86.7	9.3	2.7	1.3	100.0	51
Arusha	66.7	15.9	16.8	0.6	100.0	403	83.6	9.1	5.5	1.8	100.0	92
Kilimanjaro	89.2	9.9	0.9	0.0	100.0	221	92.2	4.4	1.1	2.2	100.0	55
Tanga	72.3	21.5	5.4	0.8	100.0	282	(88.4)	(11.6)	(0.0)	(0.0)	100.0	62
Morogoro	72.6	20.3	6.8	0.4	100.0	257	81.7	15.9	2.4	0.0	100.0	54
Coast	78.9	13.5	7.6	0.0	100.0	98	(90.3)	(9.7)	(0.0)	(0.0)	100.0	22
Dar es Salaam	81.6	10.2	7.2	1.1	100.0	399	92.7	2.7	2.0	2.7	100.0	94
Lindi	68.1	19.5	9.5	2.9	100.0	123	(76.1)	(21.7)	(2.2)	(0.0)	100.0	35
Mtwara	72.1	19.2	8.1	0.6	100.0	248	87.5	12.5	0.0	0.0	100.0	61
Ruvuma	71.2	24.0	4.2	0.6	100.0	205	86.6	10.4	1.5	1.5	100.0	54
Iringa	63.4	24.7	11.9	0.0	100.0	291	78.7	17.5	3.7	0.0	100.0	59
Mbeya	72.0	12.3	15.6	0.0	100.0	318	(85.4)	(9.8)	(4.9)	(0.0)	100.0	78
Singida	65.6	20.7	12.6	1.1	100.0	194	88.5	9.6	1.9	0.0	100.0	50
Tabora	72.5	17.4	10.1	0.0	100.0	157	*	*	*	*	100.0	32
Rukwa	66.8	24.3	8.9	0.0	100.0	177	85.2	14.8	0.0	0.0	100.0	49
Kigoma	70.5	23.8	4.5	1.2	100.0	233	(85.7)	(10.2)	(2.0)	(2.0)	100.0	67
Shinyanga	62.2	22.0	15.4	0.4	100.0	464	77.1	18.8	4.2	0.0	100.0	118
Kagera	71.7	15.6	9.8	2.9	100.0	337	(86.7)	(6.7)	(4.4)	(2.2)	100.0	90
Mwanza	71.5	19.2	9.3	0.0	100.0	395	(81.8)	(18.2)	(0.0)	(0.0)	100.0	99
Mara	70.6	18.8	10.7	0.0	100.0	183	(88.9)	(11.1)	(0.0)	(0.0)	100.0	32
Education												
No education	61.1	24.1	14.1	0.7	100.0	1,829	80.0	15.9	3.2	0.9	100.0	213
Primary incomplete	71.4	19.1	8.6	0.9	100.0	920	82.9	12.6	3.7	0.9	100.0	342
Primary complete +	78.1	14.1	7.2	0.6	100.0	2,662	87.5	10.2	1.4	0.9	100.0	733
Total	71.2	18.3	9.7	0.7	100.0	5,411	85.0	11.8	2.3	0.9	100.0	1,288

Note: Figures in parentheses are based on 25 to 49 respondents; an asterisk indicates that a figure is based on fewer than 25 respondents and has been suppressed.
NA = not applicable

5.4 Age at First Marriage

Marriage is highly associated with fertility, especially in societies with low levels of contraceptive use. Women who marry early will, on average, have longer exposure to reproductive risk. Therefore, early marriage tends to lead to early childbearing and subsequently high fertility levels. The percentage of women and men ever married by specific ages and the median age at first marriage according to current age is shown in Table 5.5.

Table 5.5 Age at first marriage

Percentage of women age 15-49 and men age 25-59 who were first married by selected exact ages, and median age at first marriage, according to current age, Tanzania 1996

WOMEN

Current age	Percentage who were first married by exact age: 15	18	20	22	25	Percentage who had never married	Median age at first marriage	Number of women
15-19	3.9	NA	NA	NA	NA	74.6	a	1,732
20-24	7.3	38.1	60.3	NA	NA	24.5	19.0	1,676
25-29	8.3	40.0	63.2	77.7	88.0	7.4	18.7	1,440
30-34	12.8	44.7	63.5	76.9	86.6	4.5	18.5	1,118
35-39	18.2	53.6	70.3	82.0	89.9	1.7	17.6	888
40-44	18.9	56.8	74.7	85.2	90.4	1.4	17.4	680
45-49	22.2	52.7	70.1	82.0	90.0	0.7	17.7	585
Women 20-49	12.6	45.2	65.3	77.7	85.2	9.3	18.4	6,387
Women 25-49	14.5	47.7	67.1	80.0	88.6	3.9	18.2	4,711

MEN

Current age	Percentage who were first married by exact age: 20	22	25	28	30	Percentage who had never married	Median age at first marriage	Number of men
25-29	15.3	28.4	56.7	NA	NA	26.9	24.4	301
30-34	13.3	28.4	54.6	76.9	86.9	6.1	24.4	372
35-39	9.5	23.6	47.7	69.0	82.7	3.5	25.3	251
40-44	13.4	24.7	55.2	68.4	76.4	1.7	24.5	206
45-49	17.7	32.1	52.4	70.6	78.5	2.9	24.6	149
50-54	20.3	30.7	54.4	74.3	84.5	0.0	24.0	118
55-59	10.7	30.0	38.9	52.5	58.6	0.0	27.6	100
Men 25-59	13.9	27.7	52.5	70.5	78.5	8.2	24.7	1,397

NA = Not applicable.
[a] Less than 50 percent of women in age group 15-19 were first married by age 15.

The median age at first marriage for women in Tanzania has risen steadily from less than 18 years among women age 45-49 to 19 years among women age 20-24 (representing recent marital patterns). The proportion of women married by age 15 declined from 22 percent among those age 45-49 to only 4 percent among women age 15-19 years. Overall, two-thirds of Tanzanian women currently age 25-49 were married by age 20. Between 1991-92 and 1996, the median age at first marriage increased from 17.9 to 18.2 among women age 25-49.

Men enter first union at a much later age than women; the median age at first marriage among men 25-59 is 25 years, compared with 18 years for women 25-49. Only 14 percent of men are married by age 20, compared with 67 percent of women age 25-49. By age 25, which is the median age at first marriage for men, 89 percent of women have married.

Table 5.6 shows median ages at first marriage for women age 20-49 and 25-49, and men 30-59 by selected background characteristics. It can be seen that in most age groups, urban women marry later than their rural counterparts. The median age at first marriage among women age 25-49 on the mainland is 2.4 years higher than that of Zanzibar.

There is a strong relationship between female education and median age at first marriage. The median age at first marriage for women age 25-49 with no formal education is 17.0 years, compared with 19.3 years for those with completed primary or higher education. Median age at first marriage for men 30-59 is about one year higher on the mainland than in Zanzibar. The median age at first marriage for men is higher in the Northern Highland zone than in other zones.

Table 5.6 Median age at first marriage

Median age at first marriage among women age 20-49 years, by current age and selected background characteristics, and among men age 30-59 years by selected background characteristics, Tanzania 1996

Background characteristic	Current age						Women age 20-49	Women age 25-49	Men age 30-59
	20-24	25-29	30-34	35-39	40-44	45-49			
Residence									
Mainland	19.1	18.8	18.7	17.7	17.5	17.8	18.5	18.3	24.8
Total urban	a	19.8	19.1	17.6	17.4	18.4	19.2	18.7	25.6
Dar es Salaam city	a	19.7	19.5	17.9	18.3	16.5	19.3	18.8	27.6
Other urban	a	20.0	19.1	17.4	17.2	18.9	19.2	18.7	24.8
Total rural	18.7	18.6	18.5	17.7	17.5	17.7	18.3	18.2	24.7
Zanzibar	18.7	18.1	15.8	15.7	14.6	15.0	16.8	15.9	23.9
Zones									
Coastal	19.1	19.0	17.7	17.4	16.9	16.8	18.2	17.9	25.4
Northern Highlands	a	19.9	20.2	18.9	18.9	19.2	19.8	19.5	26.2
Lake	18.6	18.6	18.6	17.3	17.6	17.3	18.3	18.2	24.8
Central	19.0	19.3	18.6	17.3	16.9	18.2	18.4	18.3	24.2
Southern Highlands	19.4	18.8	19.2	17.0	17.3	17.6	18.5	18.2	24.0
Southern	18.7	17.9	18.1	18.1	16.7	18.0	18.1	17.9	23.8
Education									
No education	17.4	18.0	16.6	16.8	17.1	17.0	17.1	17.0	24.8
Primary incomplete	17.7	18.3	17.6	16.7	16.8	17.8	17.5	17.4	24.5
Primary complete+	19.7	19.0	19.7	19.4	19.5	20.6	19.5	19.3	25.0
Total	19.0	18.7	18.5	17.6	17.4	17.7	18.4	18.2	24.8

[a] Omitted because less than 50 percent of women in the age groups 20-24 were first married by age 20.

5.5 Age at First Sexual Intercourse

Age at first marriage is often used as a proxy for the onset of women's exposure to the risk of pregnancy. However, since some women are sexually active before marriage, the age at which women initiate sexual intercourse more precisely marks the beginning of their exposure to reproductive risk.

The 1996 TDHS collected data on the age at which men and women had their first sexual encounters. As the upper panel of Table 5.7 shows, the median age at first intercourse of Tanzanian women age 20-49 is 16.9, about one and half years lower than the median age at first marriage (18.4 years, Table 5.5). By age 15, 19 percent of women have had sexual intercourse, and by age 18, 62 percent of women have had sexual intercourse, whereas only 45 percent have married by this age. Unlike age at first marriage, the median age at first intercourse has not changed over the various age groups of women.

Table 5.7 Age at first sexual intercourse

Percentage of women and percentage of men who had first sexual intercourse by select exact ages, and median age at first intercourse, according to current age, Tanzania 1996

Current age	Percentage who had first intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Median age at first intercourse	Number of women/ men
				WOMEN				
15-19	12.3	NA	NA	NA	NA	51.5	a	1,732
20-24	14.5	57.5	77.1	NA	NA	7.4	b	1,676
25-29	18.8	62.0	79.9	86.3	89.7	1.5	16.9	1,440
30-34	18.9	61.7	77.1	84.7	87.8	0.6	16.9	1,118
35-39	22.8	67.6	81.7	86.7	89.1	0.2	16.4	888
40-44	20.6	67.7	80.3	86.8	88.0	0.0	16.5	680
45-49	24.1	63.1	78.7	85.2	88.6	0.2	16.6	585
Women 20-49	18.9	62.2	78.9	85.8	88.2	2.4	16.9	6,388
Women 25-49	20.5	63.9	79.5	85.9	88.8	0.7	16.7	4,712
				MEN				
15-19	10.4	NA	NA	NA	NA	58.9	a	488
20-24	10.2	52.0	76.9	NA	NA	13.0	17.8	371
25-29	14.1	56.3	82.3	91.8	97.1	1.7	17.6	301
30-34	8.9	48.6	72.6	83.0	89.6	1.0	18.1	272
35-39	9.8	47.4	76.8	87.8	91.3	1.4	18.2	251
40-44	6.0	47.9	73.4	90.3	94.4	0.0	18.1	206
45-49	7.7	47.7	74.5	90.7	95.8	0.0	18.1	149
50-54	6.0	42.7	70.0	80.0	88.3	0.0	18.4	118
55-59	6.3	32.3	56.8	82.1	85.0	0.0	19.2	100
Men 25-59	9.2	48.2	74.4	87.3	92.5	0.8	18.1	1,397

NA = Not applicable.
[a] Omitted because less than 50 percent of respondents in the age group 15 to 19 were first married by age 15.
[b] Omitted because less than 50 percent of women in the age group 20 to 24 were first married by age 20.

More than half of the teenage women have never had sexual intercourse. However, this proportion falls dramatically to only 7 percent among women age 20-24 and by age group 40-49 almost all women have been sexually active.

Overall, women become sexually active earlier than men. The median age at first sex for men age 25-59 is 18.1 years, compared with 16.7 years for women age 25-49. Although men enter marriage six years later than women on average, they start sexual relations only one year later than women. Unlike women, the median age at first intercourse among men may be declining slightly over time, from 19.2 years among those age 55-59 to 17.8 among those age 20-24.

Table 5.8 shows differentials in the median age at first sexual intercourse by background characteristics for women age 20-49 years and men age 25-59. With respect to the place of residence, rural women on the mainland generally start sexual relations 16 months (1.3 years) earlier than urban women, especially those in Dar es Salaam (which has the highest median age at first sex). Women with secondary or higher education generally initiate sexual relations four years later, than those with no formal education.

Table 5.8 Median age at first intercourse

Median age at first sexual intercourse among women age 20-49 years, by age groups and background characteristics, and among men age 25-59 by background characteristics, Tanzania 1996

Background characteristic	Current age						Women age 20-49	Women age 25-49	Men age 25-59
	20-24	25-29	30-34	35-39	40-44	45-49			
Residence									
Mainland	17.4	16.9	17.0	16.4	16.5	16.7	16.9	16.7	18.1
Total urban	17.7	17.8	17.7	16.9	16.8	17.2	17.5	17.4	17.9
Dar es Salaam city	17.8	18.2	18.2	18.1	17.8	17.8	18.0	18.1	17.9
Other urban	17.6	17.6	17.5	16.6	16.7	16.8	17.3	17.0	18.0
Total rural	17.3	16.7	16.8	16.2	16.4	16.6	16.7	16.6	18.1
Zanzibar	19.2	18.2	16.3	15.5	14.7	15.1	17.1	16.2	20.5
Education									
No education	15.9	16.1	15.9	15.9	16.0	16.2	16.0	16.0	18.2
Primary incomplete	16.5	16.2	16.4	16.0	16.5	17.0	16.4	16.4	18.2
Primary complete	17.7	17.0	17.7	17.3	18.2	18.8	17.5	17.4	17.8
Secondary+	19.9	20.1	19.3	19.0	16.9	18.0	19.7	19.5	18.6
All men/women	17.4	16.9	16.9	16.4	16.5	16.6	16.9	16.7	18.1

5.6 Recent Sexual Activity

In societies where contraceptive use is low, the chance of becoming pregnant is closely related to the frequency of sexual intercourse. Thus, information on recent sexual activity further refines the measure of exposure to pregnancy. Although the 1996 TDHS data show that the majority of women have had sexual intercourse, not all those who have ever had sex are currently sexually active. Men and women were asked how long ago their last sexual activity occurred.

Tables 5.9.1 and 5.9.2 give data on levels of sexual activity of women and men in the four weeks before the survey by background characteristics. Fifty-six percent of women 15-49 were sexually active in the four weeks preceding the survey, while 14 percent were practicing postpartum abstinence, 16 percent were abstaining for reasons other than recent delivery and 13 percent had never had sexual intercourse.

Recent sexual activity is lower among younger women as well as those who have never married; only 20 percent of unmarried women have had sexual intercourse in the four weeks before the survey. The proportion of sexually active women is higher on the mainland than in Zanzibar. The proportion of sexually active is higher in urban areas than rural areas, while among the regions the proportion varies between 31 percent (Iringa region) and 70 percent (Mwanza region). The proportion of women who are sexually active in the four weeks before the survey are highest among women with no education. Not surprising, women who are using a contraceptive method are more likely to be sexually active than those who are not.

Table 5.9.1 Recent sexual activity: women

Percent distribution of women by sexual activity in the four weeks preceding the survey, and among those not sexually active, the length of time they have been abstaining and whether postpartum or not postpartum, according to selected background characteristics and contraceptive method currently used, Tanzania 1996

Background characteristic/ contraceptive method	Sexually active in past 4 weeks	Not sexually active in past four weeks: Abstaining (postpartum) 0-1 years	Abstaining (postpartum) 2+ years	Abstaining (not postpartum) 0-1 years	Abstaining (not postpartum) 2+ years	Never had sex	Missing	Total	Number of women
Age									
15-19	28.2	8.4	0.4	8.0	2.7	51.5	0.8	100.0	1,732
20-24	58.3	15.7	1.6	11.8	3.6	7.4	1.7	100.0	1,676
25-29	66.9	15.2	2.3	10.3	2.8	1.5	0.9	100.0	1,440
30-34	65.0	15.2	2.5	11.7	3.5	0.6	1.5	100.0	1,118
35-39	63.3	11.7	3.1	15.1	4.9	0.2	1.7	100.0	888
40-44	64.3	8.7	3.0	14.2	8.4	0.0	1.3	100.0	680
45-49	63.7	2.5	1.6	15.4	15.3	0.2	1.2	100.0	585
Duration of union (years)									
Never married	19.7	6.8	1.3	10.1	5.7	55.6	0.9	100.0	1,887
0-4	67.8	17.5	1.1	10.1	1.9	0.0	1.6	100.0	1,453
5-9	68.2	15.9	1.8	11.2	1.8	0.0	1.1	100.0	1,357
10-14	67.7	14.6	2.8	10.2	3.0	0.0	1.7	100.0	1,047
15-19	65.9	13.9	2.5	12.8	3.7	0.0	1.2	100.0	817
20-24	62.5	10.7	3.5	15.4	6.5	0.0	1.4	100.0	731
25-29	65.9	5.5	1.9	13.8	11.4	0.0	1.6	100.0	524
30+	64.7	1.2	0.6	16.7	15.8	0.0	1.0	100.0	304
Residence									
Mainland	56.0	12.0	1.9	11.5	4.6	12.6	1.3	100.0	7,881
Total urban	58.7	9.5	0.7	11.7	6.0	12.2	1.1	100.0	1,811
Dar es Salaam city	62.9	7.4	0.5	9.5	6.0	12.6	1.2	100.0	563
Other urban	56.8	10.5	0.8	12.8	6.1	12.0	1.1	100.0	1,248
Total rural	55.2	12.8	2.3	11.4	4.2	12.8	1.3	100.0	6,070
Zanzibar	48.2	10.6	0.4	13.8	4.4	21.9	0.7	100.0	239
Region									
Dodoma	45.7	17.5	4.8	16.8	4.1	9.2	1.9	100.0	355
Arusha	47.8	17.5	4.1	11.7	3.8	13.2	1.9	100.0	589
Kilimanjaro	51.1	7.9	0.8	13.7	5.3	20.1	1.0	100.0	390
Tanga	56.5	7.8	0.8	10.8	4.0	18.1	2.0	100.0	464
Morogoro	52.8	16.2	1.3	13.3	5.6	10.3	0.5	100.0	408
Coast	58.1	11.2	0.4	13.0	3.2	13.0	1.1	100.0	159
Dar es Salaam	62.4	8.5	0.4	9.6	5.8	12.0	1.3	100.0	646
Lindi	56.9	19.5	3.1	11.3	2.8	5.3	0.9	100.0	187
Mtwara	51.7	22.7	3.6	11.6	3.9	5.7	0.9	100.0	355
Ruvuma	56.0	20.8	2.4	9.0	3.2	7.1	1.5	100.0	305
Iringa	31.4	19.0	6.4	15.2	8.5	18.5	1.0	100.0	466
Mbeya	54.8	14.0	1.6	7.6	6.1	14.6	1.3	100.0	473
Singida	46.4	16.2	1.3	14.5	4.1	16.0	1.5	100.0	283
Tabora	64.6	12.1	0.5	10.6	5.1	6.6	0.5	100.0	225
Rukwa	59.5	9.6	1.1	17.0	2.0	10.2	0.6	100.0	242
Kigoma	56.1	7.9	1.6	6.5	5.2	20.2	2.5	100.0	351
Shinyanga	64.0	5.3	0.8	10.9	4.3	13.1	1.6	100.0	686
Kagera	66.5	4.6	0.7	8.8	4.2	13.7	1.4	100.0	467
Mwanza	70.0	6.8	0.3	11.0	3.9	7.4	0.6	100.0	573
Mara	63.2	8.7	2.9	11.9	4.0	9.0	0.4	100.0	257
Education									
No education	60.4	13.0	2.5	12.8	5.3	4.6	1.3	100.0	2,316
Primary incomplete	50.4	8.6	1.6	9.6	5.0	23.9	1.0	100.0	1,630
Primary complete	56.6	13.5	1.7	11.1	3.8	12.0	1.4	100.0	3,732
Secondary+	44.6	6.6	0.8	16.1	7.0	23.7	1.1	100.0	441
Contraceptive method									
No method	51.5	13.6	2.0	11.3	5.0	15.3	1.3	100.0	6,816
Modern method	80.5	3.3	1.0	11.6	2.3	0.1	1.2	100.0	954
Traditional/folk method	72.1	4.9	0.8	16.1	3.9	0.3	1.8	100.0	350
Total	55.8	12.0	1.9	11.5	4.6	12.9	1.3	100.0	8,120

Table 5.9.2 Recent sexual activity: men

Percent distribution of men by sexual activity in the four weeks preceding the survey, according to selected background characteristics and contraceptive method currently used, Tanzania 1996

Background characteristic/ contraceptive method	Sexually active in past 4 weeks	Not sexually active in past 4 weeks	Never had sex	Total	Number of men
Age					
15-19	26.9	14.1	58.9	100.0	488
20-24	53.2	33.8	13.0	100.0	371
25-29	71.5	26.8	1.7	100.0	301
30-34	69.8	29.2	1.0	100.0	272
35-39	77.5	21.1	1.4	100.0	251
40-44	79.7	20.3	0.0	100.0	206
45-49	73.9	26.1	0.0	100.0	149
50-54	73.7	26.3	0.0	100.0	118
55-59	72.0	28.0	0.0	100.0	100
Marital Status					
Never married	36.1	23.1	40.8	100.0	847
Polygynous union	86.5	13.5	0.0	100.0	181
Monogamous union	76.8	23.2	0.0	100.0	1,107
Formally married	39.8	60.2	0.0	100.0	117
Residence					
Mainland	61.1	24.2	14.7	100.0	2,187
Total urban	59.7	28.3	12.0	100.0	509
Dar es Salaam city	56.6	33.8	9.6	100.0	171
Other urban	61.2	25.6	13.2	100.0	338
Total rural	61.5	22.9	15.5	100.0	1,678
Zanzibar	37.1	26.3	36.6	100.0	69
Region					
Dodoma	57.1	25.7	17.1	100.0	96
Arusha	62.8	19.1	18.1	100.0	156
Kilimanjaro	58.5	30.3	11.3	100.0	119
Tanga	73.3	14.7	12.0	100.0	108
Morogoro	60.8	26.6	12.6	100.0	95
Coast	54.8	29.0	16.1	100.0	45
Dar es Salaam	57.2	32.6	10.2	100.0	191
Lindi	62.0	25.4	12.7	100.0	54
Mtwara	56.4	30.7	12.9	100.0	96
Ruvuma	56.9	29.4	13.7	100.0	82
Iringa	46.7	33.6	19.7	100.0	100
Mbeya	76.4	9.7	13.9	100.0	137
Singida	65.5	22.6	11.9	100.0	80
Tabora	57.4	29.6	13.0	100.0	82
Rukwa	75.6	7.7	16.7	100.0	71
Kigoma	68.6	22.9	8.6	100.0	95
Shinyanga	65.2	17.7	17.1	100.0	202
Kagera	59.4	27.5	13.0	100.0	139
Mwanza	50.0	28.2	21.8	100.0	176
Mara	58.2	23.6	18.2	100.0	64
Education					
No education	64.5	22.5	13.0	100.0	304
Primary incomplete	51.5	21.0	27.5	100.0	664
Primary complete	64.9	25.3	9.8	100.0	1,066
Secondary +	59.4	31.7	8.9	100.0	222
Contraceptive method					
No method	54.0	26.1	19.8	100.0	1,751
Modern method	83.2	16.8	0.0	100.0	315
Traditional/ folk method	80.9	19.1	0.0	100.0	190
Total	60.4	24.3	15.4	100.0	2,256

Note: Total includes four men whose marital status was missing.

The proportion of women who have been postpartum abstaining for less than two years decline at older ages and at longer marital durations. Women in rural areas on the mainland and those who are not using any form of contraception are more likely to be postpartum abstaining. Abstinence unrelated to childbirth is observed to be higher among women between the ages of 35 and 49 years and women married more than 20 years. There are substantial differences in level of abstinence unrelated to childbirth among regions, ranging from 12 percent (Kigoma and Ruvuma) to 24 percent (Iringa).

Sixty percent of the men interviewed were sexually active in the four weeks preceding the survey, while 15 percent had never had sex and the remaining 24 percent had had sex but not recently (Table 5.9.2). The likelihood of sexual activity increases with age to 80 percent among men age 40-44 and declines thereafter. As expected, sexual activity is higher among men in polygynous unions (87 percent) than among men in monogamous unions (77 percent). About 40 percent of the formerly married men and 36 percent of the unmarried men were sexually active in the four weeks preceding the survey.

5.7 Postpartum Amenorrhoea, Abstinence, and Insusceptibility

For women who are not using contraceptives, exposure to the risk of pregnancy in the period following a birth is influenced by two factors; breastfeeding and sexual abstinence. Postpartum protection from conception can be prolonged by breastfeeding through its effect on the length of amenorrhoea (the period after birth prior to the return of menstruation). Protection can also be prolonged by delaying the resumptions of sexual relations. Women are considered insusceptible if they are not exposed to the risk of pregnancy, either because they are amenorrhoeic or still abstaining from sex following a birth. The percentages of women who gave birth in the three years before the survey and who are still amenorrhoeic, abstaining and insusceptible are presented in Table 5.10. The data are grouped in intervals of two months to minimise fluctuations in the estimates. The estimates of median and mean duration are also shown.

Table 5.10 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 1996

Months since birth	Amenor-rhoeic	Abstaining	Insus-ceptible	Number of births
<2	93.9	92.0	98.7	206
2-3	85.5	62.8	90.6	247
4-5	72.5	52.9	81.8	253
6-7	73.2	49.9	85.9	256
8-9	64.4	32.6	70.9	240
10-11	57.9	31.3	64.8	253
12-13	46.5	24.3	57.6	277
14-15	41.9	26.3	51.7	257
16-17	39.9	25.8	48.7	223
18-19	33.1	20.6	44.2	267
20-21	20.7	14.6	30.4	219
22-23	14.8	15.5	25.3	213
24-25	12.7	13.4	18.9	230
26-27	10.5	13.1	19.3	204
28-29	10.8	9.9	17.6	229
30-31	8.9	5.5	12.6	212
32-33	7.3	3.4	9.7	209
34-35	4.5	4.1	7.1	217
Total	40.0	28.1	47.8	4,214
Median	12.1	5.6	15.7	-
Mean	14.3	10.3	17.0	-
Prevalence/incidence mean[1]	14.2	10.0	17.0	-

[1] The prevalence-incidence mean is defined as the number of children whose mothers are amenorrhoeic (prevalence) divided by the average number of births per month (incidence).

Within the first two months after birth, nearly all women are insusceptible to the risk of pregnancy. The period of postpartum amenorrhoea is considerably longer than the period of abstinence and is a major determinant of postpartum insusceptibility to pregnancy. By 6-7 months following birth, 86 percent of the women are still insusceptible, while 50 percent are still abstaining from sexual relations. The table shows that Tanzanian women are

insusceptible to the risk of pregnancy—either due to amenorrhoea or to abstinence—for a median period to 16 months. The proportion of women experiencing postpartum insusceptibility falls from 99 percent in the period less than two months after birth to 65 percent at 10-11 months and to 25 percent among women who had a birth 22-23 months before to the survey.

Table 5.11 Median duration of postpartum insusceptibility by background characteristics

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility, by selected background characteristics, Tanzania 1996

Background characteristic	Median duration of postpartum: Amenorrhoea	Abtinence	Insusceptibility	Number of births
Age				
<30	10.5	5.4	13.3	2,665
30+	16.8	6.0	19.1	1,549
Residence				
Mainland	12.1	5.6	15.9	4,088
Total urban	8.6	6.0	11.8	709
Dar es Salaam city	6.7	6.8	8.3	199
Other urban	9.8	5.6	14.8	510
Total rural	13.0	5.5	16.4	3,379
Zanzibar	12.8	3.8	13.8	126
Education				
No education	16.0	7.0	18.2	1,215
Primary incomplete	11.6	4.2	13.7	685
Primary complete	11.2	5.6	14.7	2,166
Secondary +	5.6	4.9	6.5	148
Total	12.1	5.6	15.7	4,214

Note: Medians are based on current status.

The median durations of postpartum amenorrhoea, abstinence, and insusceptibility are presented in Table 5.11 by various background characteristics. Women age 30 or older have a much longer median duration of postpartum amenorrhoea (17 months) than women under 30 (11 months); a similar pattern is observed for postpartum insusceptibility by age. Rural mothers on the mainland wait longer than urban mothers for their menstrual periods to return after birth (13 months vs. 9 months). Postpartum amenorrhoea is inversely related to mother's education; decreases from 16 months for women with no education to about 11 months for those with at least primary education. Women with no education have a median period of insusceptibility of 18 months, compared with 14 for those who have completed primary education.

5.8 Termination of Exposure to Pregnancy

The onset of infertility with increasing age reduces the proportion of women who are exposed to the risk of pregnancy. Although the onset of infecundity is difficult to determine, there are ways of estimating its effect on the population. Table 5.12 presents data on menopause.

A woman is considered menopausal if she is not pregnant, not amenorrhoeic, and either declared herself as being menopausal or did not have a menstrual period for six or more months before the survey. As expected, the proportion of menopausal women rises with age, particularly among women age 44 years or older. It rises from 8 percent among those age 42-43 years to 44 percent in the age group 48-49.

Table 5.12 Termination of exposure to the risk of pregnancy

Indicators of menopause among women age 30-49, by age, Tanzania 1996

Age	Menopause[1] Percent	Number
30-34	1.5	1,118
35-39	2.3	888
40-41	6.7	291
42-43	8.3	260
44-45	16.1	295
46-47	33.6	188
48-49	43.9	231
Total	8.9	3,271

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

CHAPTER 6

FERTILITY PREFERENCES

A number of questions were included in the 1996 TDHS to ascertain fertility preferences. Women who were not pregnant or were unsure of their status were asked whether they would like to have (a/another) child and if so, after how long a period of time. Similarly, pregnant women were asked whether they would like to have another child after the one they were expecting and if so, when. Women were also asked how many children they would want in total if they could start afresh. Since men's preferences presumably affect fertility, the male questionnaire also included questions on fertility preferences.

The data on fertility preferences produce an indication of the direction that future fertility will take, as well as an assessment of the need for family planning. If the necessary family planning services are available, accessible, and affordable, it is assumed that individuals and couples will act in such a way as to achieve their preferred family size. Of course, individuals may not always be able to act on their preferences due to other pressures, particularly the preferences of their spouse.

6.1 Reproductive Preferences

Future reproductive preferences among women and men according to the number of living children are shown in Table 6.1. Although 60 percent of women and 74 percent of men say that they want more children, 33 percent of women and 39 percent of men say they want to wait two or more years before having their next child and thus can be considered as potential contraception users for the purpose of spacing (Figure 6.1).

Twenty-two percent of women and 24 percent of men say they want another child soon, while 15 percent of women and 21 percent of men are either unsure about whether they want another child or want another but are undecided on the timing of the next birth. Twenty-six percent of women and 13 percent of men say they want no more children and can be considered potential contraceptive users for the purpose of limiting their family size. A small proportion (3 percent of women and 1 percent of men) believe they cannot have any more children.

As expected, the proportion of women who want to stop childbearing rises with the number of living children, from 7 percent of childless women to more than 60 percent of women with six or more children (Figure 6.2). Among men, the proportion who want to stop childbearing similarly rises with the number of living children from less than 3 percent for men without children to more than 40 percent of men with six or more children.

For those who want to space (i.e., those who want another child later), the pattern is different. Seventeen percent of childless women want to postpone having a child, compared to 53 percent of those with one child. Thereafter, as the number of living children rises, the desire to space children increases markedly. For instance, the proportion of women who want to space their next birth declines steadily to a low of about 12 percent among women with six or more children. A similar pattern is displayed by men. Thirty-five percent of childless men want to postpone having a child, compared to 57 percent of those with one child. Thereafter, the proportion of men who want to space declines steadily to a low of 25 percent. This pattern confirms that most individuals want to space their children, and at higher parities, prefer to stop childbearing altogether.

As expected, the desire to have a child soon, that is, within two years of the time of interview, also declines as the number of children increases. While 30 percent of childless women want to have a child soon,

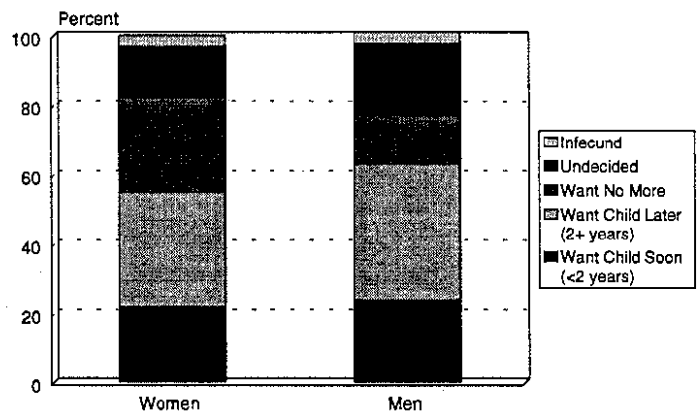
Table 6.1 Fertility preferences by number of living children

Percent distribution of women and men by desire for more children, according to number of living children, Tanzania 1996

Desire for children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
WOMEN								
Have another soon[2]	30.3	27.0	26.7	22.7	14.8	7.9	6.8	21.5
Have another later[3]	17.3	52.6	49.2	45.0	35.9	29.8	11.8	32.9
Have another, undecided when	19.0	3.6	2.0	1.3	1.0	1.8	0.4	6.0
Undecided	24.8	3.6	3.0	4.4	6.7	3.4	3.8	9.1
Want no more	6.7	10.9	16.4	23.8	36.7	48.9	63.6	25.6
Sterilised	0.0	0.2	0.5	0.8	2.3	2.9	5.2	1.4
Declared infecund	1.8	1.8	2.3	2.1	2.4	5.2	7.9	3.2
Missing	0.1	0.2	0.0	0.0	0.2	0.1	0.5	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,991	1,411	1,100	969	784	607	1,257	8,120
MEN								
Have another soon[2]	20.9	34.0	30.9	27.1	33.5	22.1	17.6	24.0
Have another later[3]	34.5	56.7	56.0	52.8	46.1	34.4	24.7	39.4
Have another, undecided when	20.9	3.6	5.5	3.0	2.2	3.1	0.6	10.6
Undecided	20.4	1.9	2.2	1.6	2.9	1.7	6.0	10.7
Want no more	2.4	2.8	4.1	14.0	12.9	32.7	43.1	12.8
Sterilised	0.0	0.3	0.0	0.7	0.0	0.6	3.5	0.7
Declared infecund	0.6	0.6	0.6	0.8	1.4	4.7	3.7	1.4
Missing	0.3	0.0	0.8	0.0	1.0	0.6	0.7	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	974	228	206	188	158	127	375	2,256

[1] Includes current pregnancy.
[2] Want next birth within two years.
[3] Want to delay next birth for two or more years.

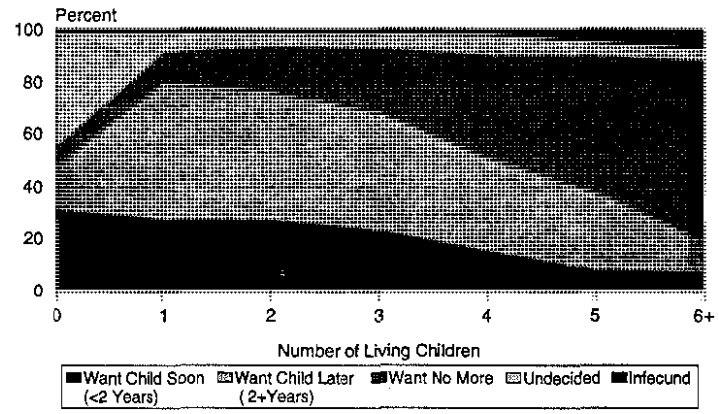
Figure 6.1
Fertility Preferences of Women 15-49 and Men 15-59



Note: "Want no more" includes sterilised persons.

the proportion decreases to 7 percent for women with six or more children. Twenty-one percent of childless men want to have a child within the next two years. This proportion decreases steadily to 18 percent for those with six or more children. Among those with six or more children, 19 percent of women want to have more children compared to 43 percent of men, suggesting that men are considerably more pronatalist than women.

Figure 6.2
Fertility Preferences of All Women by Number of Living Children

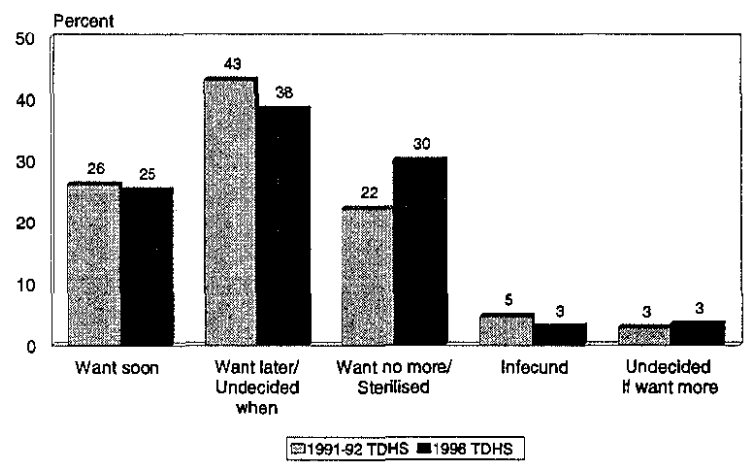


Note: "Want no more" includes sterilised women. TDHS 1996

A comparison with data from the 1991-92 TDHS indicates that there has been a downward trend in the desire for more children. The proportion of married women who want no more children increased from 21 percent to 28 percent (Figure 6.3)[1]. Among married women with six or more children, the proportion who want to have another child declined from 28 percent in 1991-92 to 20 percent in 1996.

Table 6.2 presents the distribution of all women by reproductive preferences according to age. The desire to have another child soon increases from 14 percent for women age 15-19 to 28 percent for those ages 25-29 and then decreases progressively with age. Overall, the proportion of women who express a desire to limit childbearing increases as the age of the woman increases. Likewise, the proportion of women who declare themselves infecund is less than 1 percent at the youngest four age groups; however, it increases to 27 percent among all women age 45-49 years.

Figure 6.3
Trends in Fertility Preferences Among Currently Married Women



[1] To be comparable with tables from the 1991-92 TDHS, the proportions are based on currently married women.

and in 12 percent of couples, neither wants more children; only 18 percent of couples disagree in their fertility desires. The proportion of couples in which the husband wants more children and his wife does not (14 percent) is almost three times the proportion in which the wife wants more and her husband does not (5 percent). Agreement among couples who have children is highest when they have between one and three children, with only 14 percent expressing different desires; disagreement is highest among couples with four to six children. Not surprisingly, as the number of living children increases, the proportion of couples who want more children declines and the proportion who want no more children increases. Moreover, as the number of children increases, disagreement between couples rises with husbands more likely than wives to want more children.

Table 6.2 Fertility preferences by age

Percent distribution of women by desire for more children, according to age, Tanzania 1996

	Age of woman							
Desire for children	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total
Have another soon[1]	14.4	24.4	27.8	26.1	23.8	18.5	10.1	21.5
Have another later[2]	32.3	51.7	45.7	33.3	18.1	5.3	3.7	32.9
Have another, undecided when	17.4	5.9	2.7	2.3	1.5	1.0	0.6	6.0
Undecided	25.0	6.2	4.4	5.2	4.9	3.6	2.5	9.1
Want no more	10.1	11.5	19.0	31.4	45.7	57.1	50.3	25.6
Sterilised	0.0	0.1	0.2	0.8	3.0	6.8	5.2	1.4
Declared infecund	0.6	0.3	0.1	0.8	2.7	7.5	26.9	3.2
Missing	0.2	0.0	0.0	0.2	0.3	0.3	0.8	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,732	1,676	1,440	1,118	888	680	585	8,120

[1] Want next birth within two years.
[2] Want to delay next birth for two or more years.

Table 6.3 Desire for more children among monogamous couples

Percent distribution of monogamously married couples by desire for more children, according to number of living children, Tanzania 1996

Number of living children	Both want more	Husband more/ wife no more	Wife more/ husband no more	Both want no more	Husband/ wife infecund	One or both undecided/ missing	Total	Number of couples
Same number								
0	96.1	0.0	0.0	0.0	0.0	3.9	100.0	53
1-3	77.8	10.5	3.8	2.9	1.5	3.5	100.0	297
4-6	42.0	18.9	7.6	15.1	4.6	11.8	100.0	159
7+	8.5	16.1	8.4	46.3	15.8	4.9	100.0	74
Different number								
Husband > wife	60.5	11.8	4.5	13.6	3.3	6.5	100.0	196
Wife > husband	50.7	24.4	1.0	11.9	6.9	5.0	100.0	95
Total	59.7	13.6	4.5	12.0	4.2	6.0	100.0	874

Table 6.4 shows the percentage of women and men who want no more children according to the number of children they already have and according to selected background characteristics. Although the difference between the proportion of women who want no more children on the mainland and Zanzibar is small, the difference between men is quite significant. On the mainland, 14 percent of men want no more children, compared to only 3 percent of those in Zanzibar.

Overall there is an inverse relationship between the proportion of women wanting no more children and respondent's level of education. However, among women with a given number of children, the data in Table 6.4 show a generally positive relationship between education and the proportion who want to stop childbearing. For example, among women with three children, 21 percent of those with no education want no more children, compared to 26 percent of those who have completed primary education. Among men, the relationship is inconsistent.

Table 6.4 Desire to limit childbearing by background characteristics

Percentage of all women and men who want no more children, by number of living children and selected background characteristics, Tanzania 1996

Background characteristic	Number of living children[1]							All women	All men
	0	1	2	3	4	5	6+		
Residence									
Mainland	6.6	11.1	16.6	24.6	39.1	52.3	69.4	27.1	13.8
Total urban	6.3	13.8	25.0	37.2	54.3	67.7	81.3	28.3	15.9
Dar es Salaam city	8.7	16.8	27.3	33.9	60.3	59.4	88.9	27.8	11.0
Other urban	4.9	12.4	23.9	38.2	51.8	71.0	78.9	28.5	18.3
Total rural	6.8	10.0	13.8	21.2	34.8	49.4	67.6	26.7	13.1
Zanzibar	8.5	12.3	28.2	21.9	(32.0)	38.9	56.5	27.8	3.3
Education									
No education	5.0	6.8	13.4	20.5	35.4	45.7	61.7	32.0	15.4
Primary incomplete	10.6	15.6	20.1	22.4	37.5	52.9	76.6	31.4	17.6
Primary complete	5.3	11.5	16.6	25.7	40.2	56.2	79.0	22.9	9.7
Secondary+	5.0	11.9	29.5	46.2	(58.9)	(74.9)	(63.8)	21.1	16.2
Total women	6.7	11.1	16.9	24.6	38.9	51.8	68.8	27.1	NA
Total men	2.4	3.1	4.1	14.7	12.9	33.3	46.6	NA	13.5

Note: Figures in parentheses are based on 25-49 cases.
NA = Not applicable.
[1] Includes current pregnancy.

6.2 Need for Family Planning Services

The data in this section address the extent of need for family planning services. *Unmet need* for family planning refers to the category of fecund women who either wish to postpone the next birth (spacers) or wish to stop childbearing altogether (limiters) but are not using a contraceptive method. Pregnant women are considered to have unmet need for spacing or limiting if their pregnancy was mistimed or unwanted, respectively. Similarly, amenorrhoeic women are classified as having unmet need if their last birth was mistimed or unwanted. Women who are currently using a family planning method are said to have a met need for family planning. The total demand for family planning comprises those who fall in the *met need* and *unmet need* categories.

Table 6.5 presents estimates for unmet need, met need, and total demand for family planning services for all women, currently married women, and unmarried women and presents data by selected background

Table 6.5 Need for family planning services among all women

Percentage of women with unmet need for family planning, met need for family planning, and the total demand for family planning services, by selected background characteristics, Tanzania 1996

Background characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			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	8.7	1.9	10.5	4.1	0.6	4.7	12.8	2.5	15.2	30.8	1,732
20-24	17.7	3.3	21.0	14.8	3.1	18.0	32.6	6.4	38.9	46.2	1,676
25-29	18.1	3.7	21.7	14.9	4.9	19.8	33.0	8.5	41.5	47.6	1,440
30-34	12.6	7.8	20.4	11.6	9.3	21.0	24.2	17.1	41.3	50.7	1,118
35-39	10.0	13.7	23.6	6.4	14.7	21.1	16.4	28.3	44.7	47.2	888
40-44	4.6	18.1	22.8	1.8	18.9	20.7	6.4	37.0	43.4	47.6	680
45-49	2.2	9.6	11.8	1.0	11.8	12.8	3.1	21.4	24.5	52.0	585
Residence											
Mainland	11.8	6.5	18.2	9.2	7.1	16.2	21.0	13.5	34.5	47.1	7,881
Total urban	9.9	5.2	15.1	16.6	12.4	29.0	26.5	17.6	44.1	65.7	1,811
Dar es Salaam city	9.6	4.8	14.4	19.1	11.7	30.8	28.7	16.5	45.2	68.1	563
Other urban	10.0	5.4	15.4	15.5	12.7	28.2	25.6	18.1	43.6	64.6	1,248
Total rural	12.3	6.8	19.2	7.0	5.5	12.4	19.3	12.3	31.6	39.4	6,070
Zanzibar	22.1	7.4	29.5	6.6	3.3	9.9	28.7	10.7	39.4	25.0	239
Region											
Dodoma	12.4	8.9	21.3	7.6	5.4	13.0	20.0	14.3	34.3	38.0	355
Arusha	11.3	4.9	16.2	9.2	8.1	17.3	20.5	13.0	33.5	51.6	589
Kilimanjaro	7.9	5.9	13.7	18.3	19.3	37.7	26.2	25.2	51.4	73.3	390
Tanga	13.8	5.3	19.1	12.6	9.8	22.4	26.4	15.1	41.5	53.9	464
Morogoro	14.3	2.9	17.2	11.1	5.0	16.2	25.5	8.0	33.4	48.4	408
Coast	11.6	5.1	16.6	17.0	9.7	26.7	28.5	14.8	43.3	61.7	159
Dar es Salaam	9.9	5.0	14.9	18.2	11.6	29.8	28.1	16.6	44.8	66.7	646
Lindi	11.0	8.2	19.2	11.0	7.5	18.6	22.0	15.7	37.7	49.2	187
Mtwara	9.1	8.6	17.7	7.5	5.7	13.2	16.6	14.3	30.8	42.6	355
Ruvuma	13.7	6.7	20.4	9.7	8.8	18.5	23.4	15.5	38.8	47.5	305
Iringa	8.0	6.7	14.7	6.7	4.4	11.1	14.7	11.1	25.7	43.0	466
Mbeya	10.5	4.8	15.3	11.5	7.3	18.8	22.0	12.1	34.1	55.1	473
Singida	13.5	8.1	21.6	8.4	5.8	14.2	21.8	14.0	35.8	39.7	283
Tabora	10.1	6.6	16.7	8.6	8.1	16.7	18.7	14.6	33.3	50.0	225
Rukwa	14.7	4.0	18.7	9.6	3.7	13.3	24.4	7.6	32.0	41.6	242
Kigoma	10.6	4.4	15.0	6.3	7.4	13.6	16.9	11.7	28.6	47.6	351
Shinyanga	13.3	5.3	18.7	1.3	2.9	4.3	14.7	8.3	22.9	18.6	686
Kagera	15.1	8.8	23.9	4.6	4.9	9.5	19.7	13.7	33.5	28.4	467
Mwanza	11.0	10.6	21.6	5.2	4.2	9.4	16.1	14.8	31.0	30.2	573
Mara	15.9	11.2	27.1	5.1	1.8	6.9	20.9	13.0	33.9	20.2	257
Education											
No education	10.3	8.8	19.1	2.9	4.0	6.8	13.1	12.8	25.9	26.3	2,316
Primary incomplete	10.9	8.1	19.0	4.6	7.9	12.5	15.5	16.0	31.5	39.7	1,630
Primary complete	13.9	4.6	18.6	13.5	8.0	21.5	27.5	12.6	40.1	53.6	3,732
Secondary+	10.2	3.9	14.1	21.1	10.4	31.5	31.3	14.3	45.6	69.1	441
All women	12.1	6.5	18.6	9.1	6.9	16.1	21.2	13.4	34.6	46.4	8,120
Currently married women	15.4	8.5	23.9	10.0	8.4	18.4	25.4	16.9	42.3	43.5	5,411
Unmarried women	5.4	2.5	7.9	7.4	4.0	11.3	12.8	6.5	19.2	58.9	2,709

[1] Unmet need for *spacing* includes pregnant women whose pregnancy was mistimed, amenorrhoeic women whose last birth was mistimed, and women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning but say they want to wait two or more years for their next birth. Also included in unmet need for spacing are women who are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for *limiting* refers to pregnant women whose pregnancy was unwanted, amenorrhoeic women whose last child was unwanted, and women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning but want no more children. Excluded from the unmet need category are menopausal or infecund women and unmarried women who have not had sexual intercourse in the four weeks prior to the interview.

[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.

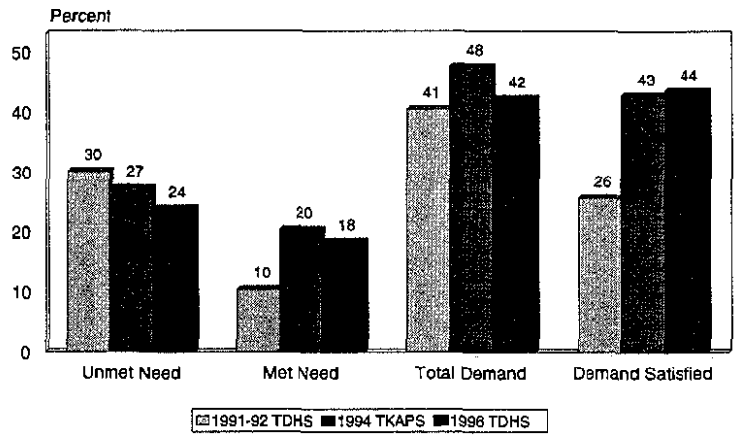
characteristics for all women. Although fertility desires remain high in Tanzania, there still exists a substantial need for family planning. The total demand for family planning for all women is 35 percent and 46 percent of the demand is satisfied. Overall, 19 percent of women have unmet need for family planning services—12 percent for spacing and 7 percent for limiting births. Among 16 percent of women using a method (met need for family planning), 9 percent are spacing and 7 percent are limiting births.

Twenty-four percent of currently married women in Tanzania are in need of family planning services: 15 percent for spacing births and 9 percent for limiting births (see lower panel). On the other hand, 18 percent of married women are using a method (met need for family planning); 10 percent for spacing and 8 percent for limiting births. If all unmet need were satisfied, 42 percent of married women would be using a contraceptive method.

Interest in spacing births is largely concentrated among younger women (under age 30), while unmet need for limiting childbirth is higher among older women. Unmet need is greater among rural than urban women and is considerably higher among women in Zanzibar than women on the mainland (30 vs. 18 percent). Women in the Mara region show the greatest unmet need (27 percent), while those in the Kilimanjaro region have the lowest unmet need (14 percent). Unmet need for limiting childbirth is higher for women with no education or less educated women, and the percentage of demand satisfied increases with educational level.

Figure 6.4 shows that unmet need for family planning among currently married women in Tanzania has declined from 30 percent in 1991-92 to 24 percent in 1996 and the total demand satisfied has increased from 26 percent to 44 percent during the same period.

Figure 6.4
Trends in Need for Family Planning Among Currently Married Women



6.3 Ideal Number of Children

Information on what women and men consider the ideal family size was elicited through two questions. Respondents who had no children were asked, *"If you could choose exactly the number of children to have in your whole life, how many would that be?"* For respondents who had children the question was rephrased as follows: *"If you could go back to the time when 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?"* Some respondents, especially those for whom fertility control was an unfamiliar concept, might have had some difficulty in answering this hypothetical question.

Table 6.6 presents the distribution of respondents by ideal number of children, according to the actual number of living children (including current pregnancy). It should be noted that respondents were not forced to give an exact number of children, and only 8 percent of women and 7 percent of men gave a nonnumeric response to the question on ideal family size. This failure to specify an ideal family size could perhaps be due to lack of knowledge on how best to control their family sizes, to the belief that family size control is beyond them, or to indifference to any specific family size.

Those who gave numeric responses generally want to have large families. More than half of all women report five or more children as ideal and another 23 percent want to have four children. Overall, women report a mean ideal number of 5.5 children, compared to 5.9 for men.

Despite the high fertility preferences, the data indicate that there has been a gradual decline in the mean ideal family size among all women in Tanzania, from 6.1 children reported in 1991-92 to 5.5 in the 1996 TDHS.

Table 6.6 Ideal and actual number of children

Percent distribution of all women and men by ideal number of children, and mean ideal number of children for all women and men and for currently married women and men, according to number of living children, Tanzania 1996

	Number of living children[1]							
Ideal number of children	0	1	2	3	4	5	6+	Total
				WOMEN				
0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1	0.8	1.2	0.2	0.1	0.1	0.0	0.0	0.5
2	10.4	6.2	5.4	1.2	2.1	1.5	1.7	5.1
3	15.7	16.4	7.2	6.3	1.6	2.0	2.4	9.1
4	26.7	29.7	30.8	23.0	20.6	10.4	11.6	23.2
5	15.0	17.1	19.6	18.2	14.0	16.5	7.1	15.2
6+	19.8	24.5	33.1	43.9	55.2	59.0	67.3	39.0
Non-numeric response	11.3	4.8	3.6	7.3	6.3	10.7	9.8	7.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,991	1,411	1,100	969	784	607	1,257	8,120
Mean ideal number of children:								
For all women	4.5	4.7	5.2	5.7	6.0	6.5	7.1	5.5
Number of women	1,767	1,344	1,060	899	735	542	1,134	7,480
For currently married women	5.1	5.0	5.3	5.7	6.1	6.5	7.1	5.9
Number of women	380	905	873	767	636	472	996	5,029
				MEN				
1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2	7.6	4.7	2.2	3.8	0.9	0.5	0.9	4.5
3	13.5	13.4	7.9	7.7	0.8	1.2	1.4	8.9
4	29.5	32.7	28.2	22.1	11.4	11.5	12.7	24.0
5	18.4	20.9	17.6	22.7	14.3	14.1	8.4	16.8
6+	23.5	23.9	39.2	39.4	65.6	63.5	65.1	38.4
Non-numeric response	7.2	4.5	4.9	4.4	7.0	9.2	11.5	7.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	974	228	206	188	158	127	375	2,256
Mean ideal number of children:								
For all men	4.8	4.8	5.4	6.0	7.1	7.3	8.7	5.9
Number of men	904	218	195	179	147	116	332	2,091
For currently married men	5.0	4.8	5.6	6.0	7.1	7.4	8.7	6.7
Number of men	103	168	172	168	146	113	327	1,198
Monogamous men	5.0	4.8	5.5	5.7	7.0	7.1	7.4	6.1
Number of men	98	162	163	151	131	94	227	1,026

Note: The means exclude respondents who gave nonnumeric responses.
[1] Includes current pregnancy.

The ideal number of children increases with the actual number of living children for both men and women. The mean ideal number of children increases from 4.5 among childless women to 7.1 among women with six or more children. This correlation between actual and ideal number is driven by at least two phenomena. First, to the extent that women and men implement their preferences, those who want smaller families will tend to achieve small families. Second, women and men may "adjust" their ideal number of children upward, as the actual number of children increases (i.e., rationalisation). It is interesting to note that the mean number of children considered ideal by men is consistently higher than the mean number considered ideal by women.

The mean ideal number of children by age and selected background characteristics is given in Table 6.7 for all women and men. Ideal family size increases substantially with age, from 4.5 for women age 15-19 to 6.9 for women 45-49; the pattern is similar for men (Figure 6.5). Urban women want one child fewer on average than rural women (4.4 vs. 5.7); this holds true for every age group. Similarly, the mean ideal family size for urban men is one child fewer than that of rural men. The ideal number of children for women in Zanzibar is higher than that for women on the mainland (6.9 vs. 5.4).

Table 6.7 Mean ideal number of children by background characteristics

Mean ideal number of children for all women and all men by age and selected background characteristics, and for all men, Tanzania 1996

Background characteristic	Age of woman							Total women	Total men
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	15-49	15-59
Residence									
Mainland	4.5	4.8	5.3	5.8	6.3	6.6	6.9	5.4	5.8
Total urban	3.7	3.9	4.3	4.8	5.2	5.5	6.3	4.4	4.8
Dar es Salaam city	3.6	3.8	4.3	4.5	5.0	5.6	6.6	4.3	4.4
Other urban	3.7	4.0	4.3	4.9	5.3	5.4	6.2	4.5	4.9
Total rural	4.7	5.2	5.6	6.1	6.6	6.8	7.0	5.7	6.2
Zanzibar	5.9	6.5	6.3	8.0	8.5	(7.4)	(8.0)	6.9	7.5
Zone									
Coastal	4.3	4.5	4.9	5.6	5.7	6.1	6.6	5.1	5.5
Northern Highlands	4.5	4.7	5.5	5.5	5.9	6.1	5.2	(5.2)	6.3
Lake	5.0	5.6	5.8	6.5	6.9	7.1	7.3	6.0	6.2
Central	4.3	4.9	5.4	5.7	6.7	6.4	6.3	5.4	5.9
Southern Highlands	4.2	4.5	5.0	5.7	6.7	6.6	7.4	5.3	5.4
Southern	4.1	4.4	4.8	5.3	5.7	6.5	7.5	5.1	5.9
Education									
No education	5.4	6.0	6.4	7.1	7.2	7.2	7.5	6.8	7.9
Primary incomplete	4.5	5.4	5.7	5.9	6.4	6.3	6.2	5.5	6.4
Primary complete	4.4	4.6	5.1	5.3	5.3	5.3	5.3	4.9	5.3
Secondary+	3.6	3.7	3.8	5.0	(4.8)	*	*	4.0	4.7
Total women	4.5	4.9	5.3	5.9	6.3	6.6	6.9	5.5	NA
Total men	4.9	4.6	5.2	5.6	6.2	7.3	7.7	NA	5.9

Note: The ideal number of children for men 50-59 is 8.8. Figures in parentheses are based on 25-49 cases; an asterisk indicates that a figure is based on fewer than 25 cases and has been suppressed.
NA = Not applicable.

Zonal variations reveal that women in the Coastal and Southern zones have the lowest mean ideal family size (5.1), while those in the Lake zone have the highest (6.0). Highly educated women exhibit a lower mean ideal number of children of 4.0, while those with no education report a higher mean of 6.8 children. As far as education is concerned, men display a similar pattern to that of women.

6.4 Wanted and Unwanted Fertility

The level of unwanted fertility can be measured using the 1996 TDHS questions for each child born in the five years preceding the survey and any current pregnancy to determine whether the pregnancy was planned (wanted then), wanted but at a later time (mistimed) or unwanted (wanted no more children). The answers to these questions provide some insight into the degree to which couples can control fertility. The validity of the answers depends on the extent to which respondents were conscious of how they viewed the pregnancy at the time and how honestly they report. The limitation of such measures is that mistimed or unwanted pregnancies may turn out to be wanted children after birth and lead to rationalisation. Therefore, the proportion of births that are unwanted at the time of conception are likely to be underestimated.

Figure 6.5
Ideal Family Size Among Women and Men by Age

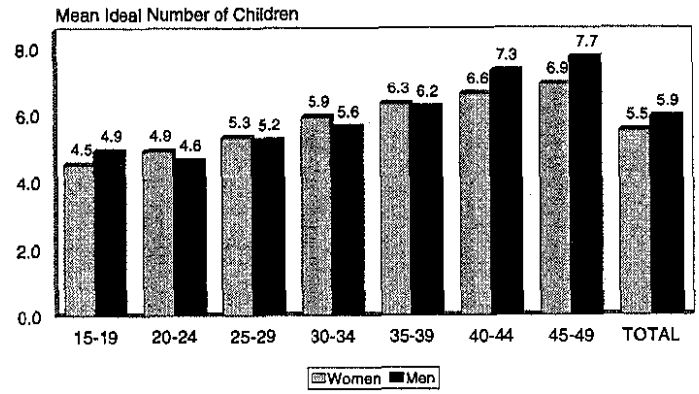


Table 6.8 shows the percent distribution of births (including current pregnancy) in the five years preceding the survey by fertility planning status, according to birth order, and mother's age at birth. Seventy-five percent of the births in the past five years were wanted at the time of conception, while 15 percent were mistimed, and 9 percent were not wanted at the time they were conceived. The percentage of births that were mistimed or unwanted increases from 18 percent for first order births to 28 percent for fourth or higher order births. A much larger proportion of births to women more than 35 years old than births to younger women are unwanted.

Table 6.9 shows the total wanted fertility rates and the actual total fertility rates for the three years preceding the survey, by selected background characteristics. The wanted fertility rate is calculated in the

Table 6.8 Fertility planning status

Percent distribution of births in the five years preceding the survey and current pregnancies by fertility planning status, according to birth order and mother's age at birth, Tanzania 1996

Birth order and mother's age at birth	Planning status of conception			Missing	Total	Number of births[1]
	Wanted then	Wanted later	Not wanted			
Birth order						
1	81.1	8.0	9.7	1.2	100.0	1,651
2	76.5	16.8	6.2	0.5	100.0	1,365
3	74.3	20.0	4.7	1.0	100.0	1,162
4+	70.7	16.7	11.5	1.1	100.0	3,530
Age at birth						
<20	77.1	10.8	11.0	1.1	100.0	1,251
20-24	76.1	16.5	6.3	1.1	100.0	2,298
25-29	74.3	18.5	6.4	0.8	100.0	1,833
30-34	76.2	14.3	8.6	0.9	100.0	1,229
35-39	69.4	14.6	14.7	1.3	100.0	731
40-44	63.4	12.8	22.8	0.9	100.0	302
45-49	47.1	12.2	38.1	2.6	100.0	64
Total	74.5	15.3	9.2	1.0	100.0	7,708

[1] Includes current pregnancies.

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. A comparison of the two rates suggests the potential impact of the elimination of unwanted births.

Overall, the wanted total fertility rate is 12 percent lower than the actual total fertility rate. If all unwanted births were to be eliminated, the total fertility rate in Tanzania would be 5.1 children per woman which is consistent with the reported ideal family size. The wanted fertility rate reported by women interviewed in the 1996 TDHS is 0.5 (half a child) lower than it was at the time of the TDHS 1991-92 (5.1 in 1996 vs. 5.6 in 1991-92) suggesting a move towards smaller family norms. Women in the Lake zone present both the highest total wanted fertility (6.0) as well as the highest total fertility rate (7.0). The gap between the wanted and actual total fertility rates is also somewhat larger among women in the Lake zone. The gap is smaller for women with secondary or higher education than those with lower education.

Table 6.9 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by selected background characteristics, Tanzania 1996

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Mainland	5.1	5.8
Total urban	3.5	4.1
Dar es Salaam city	3.0	3.4
Other urban	3.7	4.4
Total rural	5.5	6.3
Zanzibar	(5.2)	(5.9)
Zone		
Coastal	4.3	4.9
Northern Highlands	4.9	5.7
Lake	6.0	7.0
Central	5.3	6.1
Southern Highlands	4.9	5.4
Southern	4.4	4.9
Education		
No education	5.6	6.4
Primary incomplete	5.0	5.9
Primary complete	4.6	5.4
Secondary+	3.0	3.2
Total	5.1	5.8

Note: Rates are based on births to women 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 3.2. The total fertility rates in parentheses are based on 500-999 women age 15-49.

CHAPTER 7

INFANT AND CHILD MORTALITY

This chapter presents estimates of levels, trends, and differentials of neonatal, postneonatal, infant, and childhood mortality among children under five years of age in Tanzania. In addition, information is presented on high-risk fertility behaviour among Tanzanian women. The data presented here are important not only in the understanding of the demographic profile, but also in the design of policies and programmes aimed at the reduction of infant and child mortality and the high risk to mothers arising out of childbirth.

7.1 Assessment of Data Quality

The rates of childhood mortality presented in this chapter are defined as follows:

- Neonatal mortality (NN): the probability of dying within the first month of life
- Postneonatal mortality (PNN): the arithmetic difference between infant and neonatal mortality
- Infant mortality ($_1q_0$): the probability of dying between birth and the first birthday
- Child mortality ($_4q_1$): the probability of dying between exact age one and the fifth birthday
- Under-five mortality ($_5q_0$): the probability of dying between birth and the fifth birthday.

All rates are expressed as deaths per 1,000 live births, except child mortality which is expressed as deaths per 1,000 children surviving to the first birthday.

The mortality rates presented in this chapter are calculated from information drawn from questions asked in the birth history section of the female questionnaire. Preceding the birth history, probing questions are posed on the aggregate childbearing experience of respondents (i.e., the number of sons and daughters who live with the mother, the number who live elsewhere, and the number who have died). In the birth history, for each live birth, information is collected on sex, month and year of birth, survivorship status and current age, and age at death if the child died.

In theory, information from birth histories gives the most robust estimates of infant and child mortality, short of an actual birth and death registration. However, in practice, this information may suffer from problems. Prominent among these are the omissions of some births and deaths, especially infants that died shortly after birth, and the misstatement of date of birth and age at death. Omission of infant deaths is usually most severe for deaths which occur early in infancy. An examination of the 1996 TDHS data on infant and child mortality indicates that the data are of good quality and that there are no serious biases in reporting. Detailed discussions on data quality are given in Appendix C.

7.2 Levels and Trends in Infant and Child Mortality

Table 7.1 presents neonatal, postneonatal, infant, child, and under-five mortality rates for three five-year periods, namely, 0-4, 5-9, and 10-14 years before the survey. Looking at the most recent period (0-4 years before the survey or mid-1991 to mid-1996), approximately two-thirds of the deaths among children under five occurred during the first year of life: the infant mortality rate stands at 88 per 1,000 births. The neonatal

mortality rate (mortality in the first month of life) is low, 32 per 1,000 live births, while postneonatal mortality is 56 deaths per 1,000 live births. Under-five mortality in Tanzania is 137 per 1,000 live births. This is quite a high level of mortality because almost one in every seven children dies before the fifth birthday.

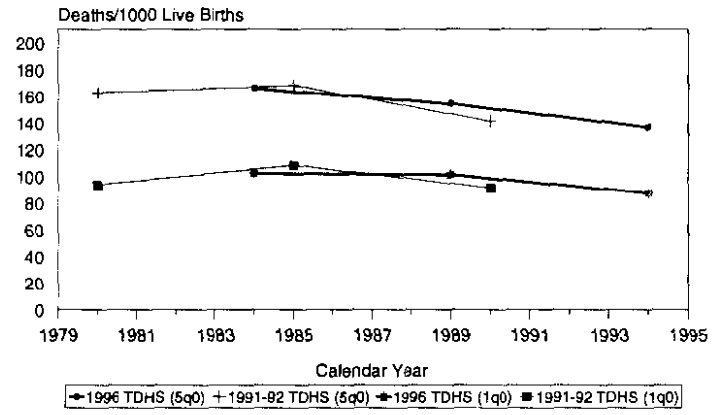
Table 7.1 Infant and child mortality

Infant and child mortality rates by five-year periods preceding the survey, Tanzania 1996

Years preceding survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
0-4	31.7	55.7	87.5	53.7	136.5
5-9	41.5	60.1	101.5	58.5	154.1
10-14	46.8	55.4	102.3	70.8	165.9

Results from the 1996 TDHS suggest a marked decline in child mortality over the years. All mortality rates in Table 7.1, with the exception of postneonatal mortality, have declined steadily over the 15 years before the survey, with an 18 percent decline in under-five mortality, a 24 percent decline in child mortality, and a 14 percent decline in infant mortality. However, the biggest improvement was made in neonatal mortality with a decline of 32 percent. There is evidence of a decline when mortality rates in the 1996 TDHS are compared with the 1991-92 TDHS. For example, the infant mortality rate has declined from 92 to 88 deaths per 1,000 births and under-five mortality has declined from 141 to 137 (Figure 7.1).

Figure 7.1
Trends in Infant and Under-five Mortality Rates 1979-1994



1q0 = Infant mortality, 5q0 = Under-five mortality

TDHS 1996

7.3 Socioeconomic Differentials in Childhood Mortality

Differentials in the various mortality rates by selected background characteristics are presented in Table 7.2. The table focuses largely on basic socioeconomic characteristics, including urban-rural areas, zones, mother's educational level, and maternal care prior to birth. A 10-year period (1987-1996) is used to calculate the mortality estimates in order to have a sufficient number of cases in each category, except maternity care, for which a three-year period is used. The rates are based on a sufficient number of cases in each category to ensure statistically reliable estimates.

Mortality is consistently lower in urban than rural areas (Figures 7.2 and 7.3). In the 10 years preceding the survey, infant mortality is about 14 percent lower and under-five mortality is 19 percent lower in urban than in rural areas on the mainland. There are considerable variations in mortality by zones. Infant mortality rates are the lowest (41 per 1,000 live births) in the Northern Highlands. Except for this zone, infant mortality is about 100 per 1,000 live births in all other zones.

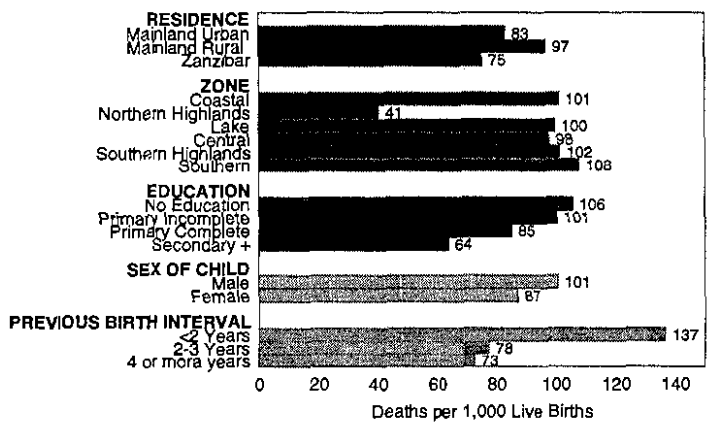
Table 7.2 Infant and child mortality by background characteristics

Infant and child mortality rates for the 10-year period preceding the survey, by residence, zone, education, and medical maternity care, Tanzania 1996

Background characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Residence					
Mainland	36.4	58.4	94.7	56.6	146.0
Total Urban	33.5	49.6	83.1	42.6	122.2
Dar es Salaam city	28.4	42.5	70.9	42.0	110.0
Other Urban	35.5	52.3	87.8	42.8	126.8
Total Rural	37.0	60.2	97.1	59.6	150.9
Zanzibar	(34.6)	40.7	75.3	34.8	107.5
Zone					
Coastal	40.7	60.5	101.3	61.0	156.0
Northern Highlands	18.5	22.1	40.6	30.0	69.3
Lake	36.9	63.1	100.0	52.4	147.1
Central	39.8	58.3	98.1	60.6	152.7
Southern Highlands	41.5	60.0	101.5	71.7	165.9
Southern	36.0	71.9	107.9	63.2	164.2
Education					
No education	39.9	66.0	105.9	62.6	161.9
Primary incomplete	35.8	64.7	100.6	55.6	150.6
Primary complete	33.9	51.1	85.0	52.2	132.7
Secondary+	(36.9)	27.0	63.9	26.6	88.8
Medical maternity care[1]					
No antenatal or delivery care	49.7	102.7	152.4	NA	NA
Either antenatal or delivery care	29.4	57.5	86.9	NA	NA
Both antenatal and delivery care	31.9	47.5	79.3	NA	NA
Total	36.3	57.8	94.1	55.9	144.8

Note: Figures in parentheses are rates based on 250-499 births.
[1] Refers to births in the three years before the survey.
NA = Not applicable.

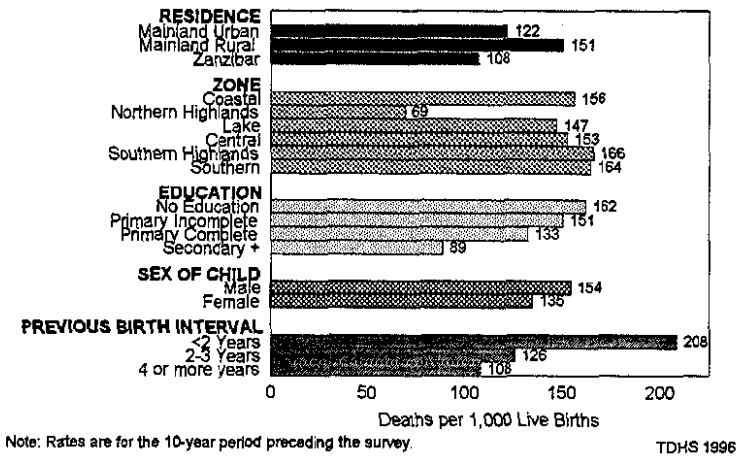
Figure 7.2
Infant Mortality by Selected Background Characteristics



Note: Rates are for the 10-year period preceding the survey. TDHS 1996

As expected, education of the mother displays a strong negative relationship with infant and child mortality. Children born to mothers with no education suffer the highest mortality. The under-five mortality of children born to mothers with incomplete primary education is 7 percent lower than that for children whose mothers have no education. At higher levels of education the effect is even more dramatic. It can be observed that educating women up to secondary and higher level reduces under-five mortality rates by nearly half.

Figure 7.3
Under-Five Mortality by Selected Background Characteristics



Note: Rates are for the 10-year period preceding the survey. TDHS 1996

It is also clear from Table 7.2 that the type of maternity care women receive is crucial in infant and child survival. Mothers who receive neither antenatal nor delivery care experience the highest neonatal and infant mortality. Receiving any medical care, whether antenatal or delivery care, reduces mortality substantially. The information suggests that if all Tanzanian women today were to receive medical care either during pregnancy or at delivery, early childhood mortality would be reduced by more than 40 percent. On the other hand, if Tanzanian mothers received medical care both during the antenatal period and during delivery, postneonatal and infant mortality would be cut in half and neonatal mortality would be cut by more than one-third.

7.4 Demographic Differentials in Mortality

Besides the socioeconomic differentials, demographic factors of both mother and child have been found to influence infant and child mortality to a great extent. These include sex of the child, age of mother, birth order, length of previous birth interval, and the mother's perception of the size of the child at birth. The relationship between these demographic characteristics and mortality is shown in Table 7.3.

Male children experience higher mortality than their female counterparts. Under-five mortality rates for males and females are 154 and 135 deaths per 1,000 live births, respectively. The excess mortality among male children does not diminish after infancy as expected.

The relationship between maternal age (at birth) and childhood mortality is U-shaped, being much higher among children born to mothers age less than 20 or more than 40 years of age. As expected first births and higher order births (order 7 or higher) experience higher mortality. For example, infant mortality rate for first births and births of order seven and higher is around 110, compared with 82-86 for births of order 2-6.

A marked relationship exists between the length of the preceding birth interval and risk of early childhood mortality. The 1996 TDHS data show that short birth intervals significantly reduce a child's chance of survival (Figures 7.2-7.3). Children born less than two years after a preceding sibling are almost twice as likely to die in infancy as those born four or more years after a preceding sibling (137 vs. 73 per 1,000). During ages one to four years, children born after a short interval are more than twice as likely to die as their counterparts born after an interval of four or more years (83 vs. 38 per 1,000). These findings suggest the need to reduce mortality risks for Tanzanian children by promoting family planning use and traditional practices such as breastfeeding, to space births further apart.

Table 7.3 Infant and child mortality by biodemographic characteristics

Infant and child mortality rates for the 10-year period preceding the survey, by selected biodemographic characteristics, Tanzania 1996

Biodemographic characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Sex of child					
Male	39.9	60.9	100.8	59.3	154.2
Female	32.6	54.5	87.1	52.4	134.9
Age of mother at birth					
< 20	52.2	67.7	120.0	63.7	176.1
20-29	28.9	56.5	85.4	54.1	134.9
30-39	39.2	54.1	93.4	50.3	139.0
40-49	43.0	52.2	95.2	86.2	173.2
Birth order					
1	44.1	64.2	108.3	50.4	153.2
2-3	30.7	55.4	86.1	60.9	141.7
4-6	29.5	52.8	82.3	51.0	129.1
7+	49.0	62.9	111.9	62.5	167.4
Previous birth interval					
< 2 years	54.9	81.9	136.8	82.7	208.2
2-3 years	29.7	47.8	77.5	52.3	125.8
4 or more years	20.6	52.1	72.7	38.2	108.2
Size at birth[1]					
Small or very small	73.7	74.7	148.4	NA	NA
Average or larger	26.6	50.7	77.3	NA	NA
Total	36.3	57.8	94.1	55.9	144.8

[1] Refers to births in the three years before the survey.
NA = Not applicable.

A child's size at birth is an important determinant of its survival during infancy. In the 1996 TDHS, mothers were asked whether their young children were very small, small, average, large, or very large at birth. This type of subjective assessment has been shown to correlate closely with actual birth weight. Newborns perceived by their mothers to be small or very small are much more likely to die in the first month of life than those perceived as average or larger in size. Neonatal and infant mortality is very high for children who are reported being small at birth by their mothers.

7.5 High-Risk Fertility Behaviour

This section examines the relative importance of under-five mortality risk factors. Research has shown that infants and children have a greater probability of dying if they are born to mothers who are too young or too old, if they are born after a short birth interval, or if they are of high birth order. In the analysis of the effects of high-risk fertility behaviour on child survival, a mother is classified as "too young" if she is less than 18 years of age, and "too old" if she is more than 34 years of age at the time of delivery. A "short birth interval" is defined as a birth occurring less than 24 months after the previous birth, and a child is of "high birth order" if the mother had previously given birth to three or more children (i.e., if the child is of birth order four or higher). Children can be further cross-classified by combinations of these characteristics. Column one of Table 7.4 shows the percentage of births occurring in the five years before the survey that fall into these various risk categories.

Results show that about 58 percent of the children born in the five years before the survey fall into at least one risk category; 20 percent of births are characterised by two or more risk factors. The most serious single mortality risk is being born to mothers more than 34 years of age (risk is 1.6), however very few births fall into this single category. Also at elevated risk of early mortality are children who are born to mothers under age 18 or after a short birth interval (<24 months). These births suffer a mortality risk about 37 percent higher than births not in any high-risk category. In all, 6 percent of births occur to mothers below age 18 and another 6 percent occur less than 24 months after a prior birth.

Although higher birth orders do not constitute any increased mortality risk for the children, it is important to note that when this phenomenon is combined with short birth intervals, the risk of mortality rises by more than 39 percent. A combination of young age at birth and short birth interval contributes to the highest risk of mortality (risk is 2.4).

The third column of Table 7.4 shows that about three-fourths of currently married women have the potential for a high-risk birth. Three in ten women are at risk from a single risk, while 44 percent are at risk from multiple risk factors.

Similar patterns of high-risk fertility behaviour were also found in the 1991-92 TDHS.

Table 7.4 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 percent distribution of currently married women at risk of conceiving a child with an elevated risk of mortality, by category of increased risk, Tanzania 1996

Risk category	Births in 5 years preceding the survey: Percentage of births	Births in 5 years preceding the survey: Risk ratio	Percentage of currently married women
Not in any high-risk category	25.9	1.00	18.8[b]
Unavoidable risk category			
First births to women 18-34	16.1	1.16	6.8
Single high-risk category			
Mother's age <18	5.6	1.37	0.8
Mother's age >34	0.4	1.58	3.2
Birth interval <24 months	5.6	1.36	9.6
Birth order >3	26.3	0.84	17.2
Subtotal	37.9	1.00	30.7
Multiple high-risk category			
Age <18 & birth interval <24[c] months	0.4	2.38	0.5
Age >34 & birth interval <24 months	0.0	-	0.1
Age >34 & birth order >3	11.9	1.07	24.0
Age >34 & birth interval <24 months & birth order >3	1.9	2.28	5.7
Birth interval <24 months & birth order >3	5.9	1.39	13.3
Subtotal	20.0	1.30	43.7
In any high-risk category	57.9	1.10	74.4
Total	100.0	-	100.0
Number of births	6,916	-	5,411

Note: Risk ratio is the ratio of the proportion dead of births in a specific high-risk category to the proportion dead of births *not in any high-risk category*.

[a] Women were assigned to risk categories according to the status they would have at the birth of a child, if the child were conceived at the time of the survey: age less than 17 years and 3 months, age older than 34 years and 2 months, latest birth less than 15 months ago, and latest birth of order 3 or higher.

[b] Includes sterilised women.

[c] Includes the combined categories *Age <18 and birth order >3*.

CHAPTER 8

MATERNAL AND CHILD HEALTH

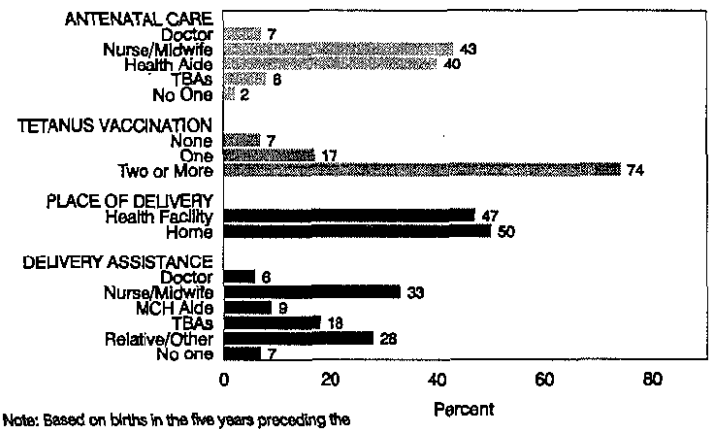
This chapter presents findings from the 1996 TDHS in three areas of importance to maternal and child health. These are maternal care and characteristics of the newborn, childhood vaccinations, and common childhood illnesses and their treatment. One of the priorities of the Ministry of Health of the Tanzania Government is the provision of medical care during pregnancy and at delivery which is essential for the survival of both the mother and infant. The 1996 TDHS results provide another opportunity to assess progress in the implementation of child survival programmes and to identify the characteristics of nonusers of maternal and child health services and hence identify women whose babies are at risk. In this way, the information will assist policymakers in the planning of appropriate strategies to improve maternal and child care.

8.1 Antenatal Care

Prevalence and Source of Antenatal Checkup

Table 8.1 shows the percent distribution of live births in the five years preceding the survey by source of antenatal care received during pregnancy, according to maternal and background characteristics. Interviewers recorded all persons a woman may have seen for care, but in the table, only the provider with the highest qualification is considered (if more than one person was seen). The results of the survey indicate very high utilisation of antenatal care in Tanzania for most pregnancies (97 percent). In most cases, antenatal care was provided by a trained nurse or midwife (43 percent), or a health aide (40 percent). Doctors provided about 7 percent of antenatal care, while traditional birth attendants (TBAs) provided 8 percent of antenatal care. During the five-year period preceding the survey, mothers who did not receive antenatal care accounted for only 2 percent of live births (Figure 8.1).

Figure 8.1
Percent Distribution of Births by Antenatal Care and Delivery Characteristics



Note: Based on births in the five years preceding the survey.

TDHS 1996

Source of antenatal care by women's age and birth order of the child varies slightly. Younger women are more likely to receive antenatal care from a more medically skilled provider than older women. For example, 51 percent of women below age 20 were seen by a doctor, trained nurse, or midwife, compared to 43 percent of women 35 years or older. Similarly, lower order births are more likely to receive antenatal care from a doctor, trained nurse, or trained midwife.

Women in urban areas were more likely to receive antenatal care from a doctor, trained nurse, or midwife, while women in rural areas were more likely to receive antenatal care from health aides and TBAs.

Table 8.1 Antenatal care

Percent distribution of births in the five years preceding the survey by source of antenatal care during pregnancy, according to selected background characteristics, Tanzania 1996

Background characteristic	Antenatal care provider[1]						Total	Number of births
	Doctor	Nurse/ Trained midwife	Health aide	Traditional birth attendant[2]	No one	Missing		
Mother's age at birth								
< 20	8.8	42.1	38.7	7.4	1.8	1.2	100.0	1,142
20-34	6.6	43.8	39.3	7.3	2.0	0.9	100.0	4,796
35+	4.5	38.9	43.3	9.3	3.4	0.6	100.0	979
Birth order								
1	10.0	42.3	38.7	6.3	1.7	1.0	100.0	1,474
2-3	6.8	43.9	38.8	7.4	2.2	0.8	100.0	2,271
4-5	6.1	44.6	39.4	6.9	1.9	1.2	100.0	1,502
6+	4.2	40.3	42.3	9.7	2.7	0.8	100.0	1,669
Residence								
Mainland	6.8	43.1	39.2	7.8	2.2	0.9	100.0	6,693
Total urban	14.5	62.9	18.8	2.7	0.4	0.8	100.0	1,165
Dar es Salaam city	24.0	64.1	10.1	0.8	0.8	0.3	100.0	327
Other urban	10.7	62.4	22.3	3.4	0.2	1.0	100.0	838
Total rural	5.2	38.9	43.4	8.9	2.6	0.9	100.0	5,529
Zanzibar	2.5	34.9	58.6	2.6	0.1	1.3	100.0	223
Region								
Dodoma	14.4	39.7	38.6	2.5	4.3	0.4	100.0	312
Arusha	11.9	36.0	28.4	11.7	11.2	0.7	100.0	547
Kilimanjaro	6.4	36.4	44.9	11.3	0.4	0.7	100.0	281
Tanga	2.2	21.1	56.2	19.5	0.3	0.6	100.0	365
Morogoro	4.3	52.3	33.4	6.3	3.0	0.7	100.0	327
Coast	13.2	50.5	33.5	2.2	0.0	0.5	100.0	104
Dar es Salaam	22.2	66.1	10.1	0.7	0.7	0.2	100.0	377
Lindi	12.7	63.2	20.9	0.0	0.5	2.7	100.0	129
Mtwara	3.8	60.5	34.7	0.3	0.0	0.7	100.0	235
Ruvuma	1.0	52.4	41.1	4.5	0.5	0.5	100.0	250
Iringa	2.0	35.1	52.7	8.4	1.4	0.3	100.0	355
Mbeya	5.8	73.4	17.4	1.7	1.2	0.4	100.0	363
Singida	7.5	50.7	39.3	0.0	2.2	0.3	100.0	258
Tabora	0.7	13.3	69.3	13.3	0.7	2.7	100.0	171
Rukwa	2.8	53.5	35.1	3.4	5.1	0.0	100.0	242
Kigoma	4.2	14.5	63.4	14.5	1.4	2.0	100.0	342
Shinyanga	1.2	42.9	41.5	12.4	1.2	0.9	100.0	635
Kagera	8.2	19.2	61.0	8.8	0.6	2.1	100.0	540
Mwanza	2.9	51.3	35.4	8.9	1.6	0.0	100.0	580
Mara	15.2	56.4	18.2	5.3	1.3	3.6	100.0	281
Mother's education								
No education	4.7	35.9	42.7	10.2	5.0	1.4	100.0	2,048
Primary incomplete	6.7	42.9	37.9	10.1	1.9	0.6	100.0	1,138
Primary complete	7.2	46.2	39.3	5.8	0.7	0.8	100.0	3,493
Secondary+	15.4	51.8	30.8	0.7	0.4	0.9	100.0	236
Total	6.7	42.8	39.8	7.6	2.1	0.9	100.0	6,916

[1] If the respondent mentioned more than one provider, only the most qualified provider was considered.
[2] Traditional midwife.

In the mainland urban areas, 15 percent of births received antenatal care from a doctor, compared with 5 percent in rural areas. Moreover, 63 percent of births to women in urban areas received antenatal care from a trained nurse or midwife compared to 39 percent in rural areas. These differences reflect the fact that doctors, trained nurses, and midwives are concentrated mainly in urban areas, making them more accessible to urban women. Doctors, nurses, and midwives are prominent in the city of Dar es Salaam where they provided antenatal care for 24 percent and 64 percent of births, respectively. In Zanzibar, only 3 percent of births received antenatal care from a doctor and 35 percent from a trained nurse or midwife. There are regional variations in the utilisation of antenatal care. Apart from the Dar es Salaam region, which is predominantly urban, more than 10 percent of births in Mara (15 percent), Dodoma (14 percent), Coast and Lindi (13 percent), and Arusha (12 percent) received antenatal care from a doctor. Regions which recorded the highest percentages of antenatal care from a nurse or midwife include Mbeya (73 percent), Dar es Salaam (66 percent), Lindi (63 percent), Mtwara (60 percent), Mara (56 percent), Rukwa (54 percent), Morogoro and Ruvuma (52 percent), and Coast, Singida, and Mwanza (51 percent). At the other end, Arusha (11 percent) had the highest percentage of births that did not receive antenatal care, followed by Rukwa (5 percent), and Dodoma (4 percent).

Births to women with no education were less likely to receive antenatal care than births to women who had at least completed primary education. The proportion of births to women who obtained antenatal care from a doctor increases from 5 percent among women with no education to 15 percent among women with secondary or higher education. Likewise, antenatal care from a nurse or midwife increases from 36 percent of births to women with no education to 52 percent of births to women with secondary or higher education. Births to women with no education were more likely to receive antenatal care from a health aide (43 percent) or birth attendant (10 percent) than births to women with secondary or higher education (31 percent and 1 percent, respectively).

Number and Timing of Antenatal Visits

Pregnancy monitoring and detection of complications are the main objectives of antenatal care. The advantage of starting antenatal care within the first three months of pregnancy is that a woman's normal baseline health can be assessed and monitoring can be done regularly. Obstetricians generally recommend that antenatal visits be made monthly for the first seven months of pregnancy, fortnightly in the eighth month, and then weekly until birth. If the first visit is made during the third month of pregnancy, this schedule translates to a total of about 12 to 13 visits. To detect possible delivery complications at least one visit is required during the last week of pregnancy.

Table 8.2 presents data on the number of antenatal care visits made and stages of pregnancy at the first visit. For 70 percent of the births in the five years before the survey, mothers made four or more antenatal care visits and for 23 percent of births, mothers made between two and three visits. For two percent of the births, women did not make any antenatal visits. The median number of antenatal care visits was 3.9 which suggests that many women make fewer than the recommended number of 12 visits. This may be related to the stage of pregnancy at the first antenatal care visit. For 61 percent of births, women received antenatal care before the sixth month of gestation and for 35 percent of births, women did not receive antenatal care until the sixth or seventh month of pregnancy. The median time at which mothers started antenatal visits is 5.6 months.

Table 8.2 Number of antenatal care visits and stage of pregnancy

Percent distribution of live births in the past five years by number of antenatal care visits, and by the stage of pregnancy at the time of the first visit, Tanzania 1991-1996

Characteristic	TDHS 1991-92	TDHS 1996
Number of visits		
None	3.6	2.1
1	1.1	1.5
2-3 visits	23.5	22.5
4+ visits	69.5	69.5
Don't know/missing	2.4	4.4
Total	100.0	100.0
Median	5.0	3.9
Number of months pregnant at first visit		
No antenatal care	3.6	2.1
< 6 months	60.1	60.5
6-7 months	34.0	34.7
8+ months.	1.7	1.7
Don't know/missing	0.5	1.0
Total	100.0	100.0
Median	5.6	5.6
Number of births	8,032	6,916

When the 1996 TDHS data on antenatal care are compared with the 1991-92 results, the proportion of births for whom the mother received antenatal care and timing of the first visit have remained constant except that the median number of visits has declined by one (Table 8.2).

Tetanus Toxoid Vaccination

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus, a common cause of death among infants in many settings around the world. For full protection, a pregnant woman needs two doses of the toxoid. However, if a woman has been vaccinated during a previous pregnancy, she may only require one dose for a current pregnancy. Five doses are considered adequate to provide lifetime protection. To estimate the extent of tetanus toxoid coverage during pregnancy, women were asked to report if they received these injections against tetanus during pregnancy for all births in the five-year period preceding the survey. The results are presented in Table 8.3 (also in Figure 8.1).

In Tanzania, almost all women (91 percent) received tetanus toxoid vaccination during pregnancy, with women receiving two or more doses of vaccine for almost 75 percent of births and only one dose of tetanus toxoid vaccine for 17 percent of births. Younger women and women with low parity are more likely to have received two or more doses of tetanus toxoid than their counterparts. Compared with rural births, births occurring in urban areas are slightly more likely to have received two or more doses of tetanus toxoid. In the mainland, 82 percent of births to urban mothers received two or more tetanus toxoid injections during pregnancy compared to 73 percent of births to rural mothers. Mothers in Zanzibar were much less likely to receive two doses of tetanus toxoid (68 percent of births) than their counterparts in the mainland (75 percent).

Tetanus vaccination status varies among regions. In three regions—Arusha, Morogoro, and Rukwa—more than 10 percent of births had no tetanus toxoid injections during pregnancy. In all regions, more than 60 percent of all births in the five-year period preceding the survey received at least two doses of tetanus toxoid, but the Coast, Dar es Salaam, Lindi, Mtwara, Tabora and Tanga regions exceeded 80 percent coverage. There is a positive relationship between mothers' education and tetanus toxoid coverage. The proportion of births whose mothers received two or more doses of tetanus toxoid during pregnancy increases from 69 percent among women with no education to 77 percent among those with secondary or higher education.

8.2 Medical Care at Delivery

Place of Delivery

An important element in reducing health risks for mothers and children are increasing the proportion of babies that are delivered in medical facilities. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause death or serious illness to either the mother or the baby. Table 8.4 presents the distribution of births in the five years preceding the survey by place of delivery.

Overall, 47 percent of births were delivered in a health facility, while about half of the births were delivered at home. The proportion of births delivered in a health facility decreases with mothers' age and birth order. Urban births were much more likely to take place in health facilities than rural births. Births in the mainland were also more likely to take place in health facilities than those in Zanzibar (47 and 31 percent, respectively). Four out of five births in the Dar es Salaam and Ruvuma regions were delivered at a health facility, compared with three out of five in Kilimanjaro and Tabora, and one out of two births in the Morogoro, Mtwara, and Coast regions. Mother's education is strongly related to place of delivery. The proportion of births delivered at health facilities increases from 29 percent among mothers with no education to 79 percent among mothers with secondary or higher education.

Table 8.3 Tetanus toxoid vaccinations

Percent distribution of births in the five years preceding the survey by number of tetanus toxoid injections received during pregnancy, according to selected background characteristics, Tanzania 1996

Background characteristic	Number of tetanus toxoid injections				Total	Number of births
	None	One dose	Two doses or more	Don't know/ missing		
Mother's age at birth						
< 20	5.9	14.1	78.5	1.4	100.0	1,142
20-34	6.6	17.7	74.0	1.7	100.0	4,796
35+	10.1	18.0	70.7	1.1	100.0	979
Birth order						
1	4.7	13.4	80.4	1.5	100.0	1,474
2-3	7.1	17.0	74.5	1.4	100.0	2,271
4-5	7.4	18.5	72.0	2.2	100.0	1,502
6+	8.6	19.5	70.6	1.3	100.0	1,669
Residence						
Mainland	7.0	16.9	74.5	1.6	100.0	6,693
Total urban	2.9	14.0	81.9	1.1	100.0	1,165
Dar es Salaam city	1.8	13.7	83.5	1.0	100.0	327
Other urban	3.3	14.1	81.3	1.2	100.0	838
Total rural	7.9	17.5	72.9	1.6	100.0	5,529
Zanzibar	5.3	24.4	68.0	2.3	100.0	223
Region						
Dodoma	9.0	12.6	77.6	0.7	100.0	312
Arusha	13.5	18.6	65.6	2.3	100.0	547
Kilimanjaro	3.9	19.4	76.3	0.4	100.0	281
Tanga	2.2	10.9	84.0	2.9	100.0	365
Morogoro	10.9	17.5	70.9	0.7	100.0	327
Coast	3.3	13.2	80.2	3.3	100.0	104
Dar es Salaam	1.6	13.9	83.6	0.9	100.0	377
Lindi	5.9	9.5	80.9	3.6	100.0	129
Mtwara	3.4	15.5	80.1	1.0	100.0	235
Ruvuma	6.5	17.3	74.3	1.8	100.0	250
Iringa	7.8	20.3	71.3	0.7	100.0	355
Mbeya	6.2	13.3	79.7	0.8	100.0	363
Singida	9.7	18.7	70.5	1.1	100.0	258
Tabora	0.7	12.7	86.7	0.0	100.0	171
Rukwa	10.5	13.3	75.9	0.3	100.0	242
Kigoma	9.5	17.0	71.5	2.0	100.0	342
Shinyanga	9.8	24.2	64.6	1.4	100.0	635
Kagera	5.2	21.3	70.7	2.7	100.0	540
Mwanza	5.7	15.9	78.0	0.3	100.0	580
Mara	5.3	14.5	74.6	5.6	100.0	281
Mother's education						
No education	12.1	16.9	69.0	2.1	100.0	2,048
Primary incomplete	6.2	16.7	75.9	1.2	100.0	1,138
Primary complete	4.5	17.5	76.7	1.4	100.0	3,493
Secondary+	3.0	17.3	77.0	2.7	100.0	236
Total	7.0	17.2	74.3	1.6	100.0	6,916

Table 8.4 Place of delivery

Percent distribution of births in the five years preceding the survey by place of delivery, according to selected background characteristics, Tanzania 1996

Background characteristic	Place of delivery			Total	Number of births
	Health facility	Home	Don't know/ missing		
Mother's age at birth					
< 20	53.3	43.5	3.2	100.0	1,142
20-34	46.9	49.2	3.9	100.0	4,796
35+	37.1	58.1	4.8	100.0	979
Birth order					
1	62.1	34.9	3.0	100.0	1,474
2-3	47.6	49.3	3.2	100.0	2,271
4-5	41.7	53.7	4.6	100.0	1,502
6+	35.7	59.1	5.2	100.0	1,669
Residence					
Mainland	47.0	48.9	4.0	100.0	6,693
Total urban	80.7	17.0	2.3	100.0	1,165
Dar es Salaam city	86.3	11.6	2.1	100.0	327
Other urban	78.6	19.0	2.4	100.0	838
Total rural	40.0	55.7	4.4	100.0	5,529
Zanzibar	31.2	67.4	1.4	100.0	223
Region					
Dodoma	41.5	57.4	1.1	100.0	312
Arusha	41.3	54.1	4.6	100.0	547
Kilimanjaro	64.3	31.1	4.6	100.0	281
Tanga	45.0	54.3	0.6	100.0	365
Morogoro	54.0	44.7	1.3	100.0	327
Coast	51.1	44.0	4.9	100.0	104
Dar es Salaam	85.9	12.3	1.8	100.0	377
Lindi	49.5	42.3	8.2	100.0	129
Mtwara	51.5	47.8	0.7	100.0	235
Ruvuma	79.8	17.8	2.4	100.0	250
Iringa	46.6	53.0	0.3	100.0	355
Mbeya	46.9	52.7	0.4	100.0	363
Singida	47.1	51.5	1.4	100.0	258
Tabora	63.3	28.7	8.0	100.0	171
Rukwa	45.6	53.5	0.8	100.0	242
Kigoma	35.5	61.7	2.8	100.0	342
Shinyanga	38.9	50.4	10.7	100.0	635
Kagera	29.6	67.7	2.7	100.0	540
Mwanza	37.6	53.8	8.6	100.0	580
Mara	31.7	58.7	9.6	100.0	281
Mother's education					
No education	29.2	64.9	5.9	100.0	2,048
Primary incomplete	40.4	56.3	3.3	100.0	1,138
Primary complete	56.6	40.4	3.0	100.0	3,493
Secondary+	78.5	18.0	3.5	100.0	236
Antenatal care visits					
None	7.0	75.9	17.1	100.0	149
1-3 visits	35.7	60.0	4.3	100.0	1,656
4 or more visits	51.5	45.8	2.7	100.0	4,805
Don't know/missing	46.6	38.0	15.4	100.0	307
Total	46.5	49.5	3.9	100.0	6,916

Assistance During Delivery

The type of assistance a woman receives during childbirth has important health consequences for both mother and child. Therefore, in addition to the place of delivery, the 1996 TDHS collected data on the type of personnel who assisted during delivery. Table 8.5 shows the percent distribution of live births in the five years before the survey by type of assistance received during delivery, according to background characteristics. Overall, 6 percent were assisted by a doctor, 33 percent by a trained nurse or midwife, 9 percent by a health aide, 18 percent by a birth attendant (TBA), 28 percent by a relative or some other person, and 7 percent of all births were delivered without assistance. Maternal age and child's birth order are associated with type of assistance at delivery; births to older women and those of higher order are more likely to be delivered without any assistance, whereas first births and births to younger women tend to receive better care during delivery. This is encouraging, since first births pose greater risks than subsequent births.

As might be expected, births in urban areas are more likely to be assisted by medical personnel (doctor, trained nurse, or midwife) than rural births. Regional differences in types of assistance at delivery are also prominent. Lake regions, that is Shinyanga, Kagera, Mwanza and Mara, are least likely to receive assistance during delivery. Regions which recorded the highest proportions of births assisted by a doctor, nurse, or midwife during delivery are Dar es Salaam (87 percent), Ruvuma (68 percent), and Kilimanjaro (56 percent).

Again, mother's education is closely related to better supervision at delivery. The percentage of births assisted by doctors, nurses, and midwives increases from 21 percent of births to women with no education to 79 percent of births to women with secondary or higher education.

Not surprisingly, the more antenatal visits a woman makes while pregnant, the greater the likelihood that her baby will be delivered with assistance from medically trained staff. Among births for which mothers made no antenatal visit, only 7 percent were assisted by either doctors or nurses/midwives, compared with 42 percent of babies for whom mothers had four or more antenatal visits.

8.3 Characteristics of Delivery

In addition to the information regarding place of and assistance during delivery, the 1996 TDHS collected information on several other aspects relating to the delivery of births. Questions on birth weight and size of the baby at birth were included to estimate the proportion of low birth weight infants.

Table 8.6 presents the percentage of live births in the past five years that were delivered by caesarean section, and the distribution by birth weight and the mother's estimate of baby's size at birth. Based on the reports of mothers, only 2 percent of babies born in Tanzania are delivered by caesarean section. Caesarean sections are less common amongst older women, women with more children, rural women, women from Zanzibar, and those with little or no education. The Dar es Salaam and Kilimanjaro regions have the highest percentage of caesarean deliveries (5 percent), followed by Arusha (4 percent), and Tabora and Ruvuma (3 percent), while Lindi, Rukwa and Mara have less than one percent of births with caesarean deliveries.

A birth weight was reported for about half of births. Among the births for which a birth weight is reported, 89 percent (44 percent of all births) were reported to have a weight of more than 2.5 kg. Only 11 percent (5 percent of all births) were reported to have a weight of less than 2.5 kg, which is considered low birth weight.

Table 8.5 Assistance during delivery

Percent distribution of births in the five years preceding the survey by type of assistance during delivery, according to selected background characteristics, Tanzania 1996

Background characteristic	Attendant assisting during delivery[1]								Number of births
	Doctor	Nurse/ trained midwife	Health aide	Traditional birth attendant[2]	Relative/ other	No one	Don't know/ missing	Total	
Mother's age at birth									
< 20	6.4	38.4	9.0	14.0	29.0	2.6	0.7	100.0	1,142
20-34	5.8	32.5	8.4	18.2	27.5	6.7	0.8	100.0	4,796
35+	4.5	25.3	8.1	19.5	29.6	12.6	0.3	100.0	979
Birth order									
1	9.0	43.2	10.2	13.5	22.4	1.1	0.7	100.0	1,474
2-3	5.9	33.1	8.5	17.8	28.6	5.3	0.8	100.0	2,271
4-5	4.6	29.7	7.7	18.2	29.6	9.2	0.9	100.0	1,502
6+	3.7	24.5	7.5	20.7	30.9	12.0	0.5	100.0	1,669
Residence									
Mainland	5.8	32.6	8.7	16.4	28.8	7.1	0.7	100.0	6,693
Total urban	12.0	66.0	3.7	3.5	12.6	1.5	0.6	100.0	1,165
Dar es Salaam city	16.0	71.6	0.0	3.6	7.8	0.5	0.5	100.0	327
Other urban	10.5	63.8	5.1	3.5	14.5	1.9	0.7	100.0	838
Total rural	4.5	25.6	9.7	19.1	32.2	8.2	0.7	100.0	5,529
Zanzibar	3.8	27.9	2.7	57.2	6.5	0.6	1.3	100.0	223
Region									
Dodoma	6.5	26.4	5.4	28.2	33.2	0.0	0.4	100.0	312
Arusha	8.9	28.0	4.1	17.9	39.0	1.8	0.2	100.0	547
Kilimanjaro	11.0	44.9	9.5	10.6	21.9	1.1	1.1	100.0	281
Tanga	1.9	24.0	13.1	21.1	39.6	0.0	0.3	100.0	365
Morogoro	7.0	37.4	7.9	27.2	20.2	0.0	0.3	100.0	327
Coast	6.6	44.5	4.4	24.2	19.8	0.0	0.5	100.0	104
Dar es Salaam	15.0	71.7	0.2	4.0	7.8	0.7	0.4	100.0	377
Lindi	6.4	41.4	5.9	10.9	31.8	0.9	2.7	100.0	129
Mtwara	4.8	35.7	10.7	20.3	25.1	2.7	0.7	100.0	235
Ruvuma	5.5	62.8	9.9	5.5	14.1	1.6	0.5	100.0	250
Iringa	5.4	31.4	8.8	30.1	22.0	2.0	0.3	100.0	355
Mbeya	9.5	34.9	2.1	11.2	31.1	10.8	0.4	100.0	363
Singida	7.5	27.0	13.1	8.1	38.7	5.0	0.6	100.0	258
Tabora	2.7	46.0	15.3	4.7	24.7	5.3	1.3	100.0	171
Rukwa	1.4	34.8	11.3	29.7	16.1	6.5	0.0	100.0	242
Kigoma	3.6	19.3	13.4	15.1	40.2	7.8	0.6	100.0	342
Shinyanga	1.2	24.5	17.0	4.0	38.0	15.3	0.0	100.0	635
Kagera	3.7	15.9	7.6	25.6	33.5	11.6	2.1	100.0	540
Mwanza	4.8	26.1	7.6	13.1	26.1	22.3	0.0	100.0	580
Mara	5.0	25.4	4.3	21.1	23.8	16.5	4.0	100.0	281
Mother's education									
No education	3.0	18.2	8.4	21.2	36.4	11.9	0.9	100.0	2,048
Primary incomplete	5.5	26.8	7.3	18.2	33.4	8.1	0.6	100.0	1,138
Primary complete	6.8	40.5	9.3	15.8	23.0	4.0	0.7	100.0	3,493
Secondary+	14.9	64.3	3.2	12.7	4.3	0.0	0.6	100.0	236
Antenatal care visits									
None	2.0	4.5	0.8	23.8	58.0	10.1	0.8	100.0	149
1-3 visits	3.8	24.8	7.8	20.9	32.7	9.7	0.3	100.0	1,656
4 or more visits	6.5	35.9	9.0	16.6	25.9	5.9	0.1	100.0	4,805
Don't know/missing	5.3	33.4	8.2	14.0	22.1	4.8	12.2	100.0	307
Total	5.7	32.5	8.5	17.7	28.0	6.9	0.7	100.0	6,916

[1] If the respondent mentioned more than one attendant, only the most qualified attendant was considered.
[2] Traditional midwife.

Table 8.6 Delivery characteristics: caesarean section, birth weight and size

Among births in the five years preceding the survey, the percentage of deliveries by caesarean section, and the percent distribution by birth weight and by the mother's estimate of baby's size at birth, according to selected background characteristics, Tanzania 1996

Background characteristic	Delivery by C-section	Birth weight			Size of child at birth				Total
		Less than 2.5 kg	2.5 kg or more	Don't know	Very small	Smaller than average	Average or larger	Don't know	
Mother's age at birth									
<20	3.1	8.3	45.9	45.9	4.0	8.0	86.1	1.9	1,142
20-34	2.0	4.8	44.5	50.6	3.4	7.4	87.6	1.7	4,796
35+	1.8	3.5	35.6	60.9	3.6	6.6	88.1	1.7	979
Birth order									
1	3.8	9.3	53.8	36.9	4.3	9.3	84.7	1.7	1,474
2-3	1.8	4.4	45.1	50.6	3.1	7.1	87.9	1.9	2,271
4-5	1.5	4.3	40.4	55.3	3.1	7.6	87.6	1.7	1,502
6+	1.5	3.5	35.0	61.5	3.7	5.7	89.0	1.6	1,669
Residence									
Mainland	2.2	5.3	44.1	50.6	3.4	7.3	87.5	1.7	6,693
Total urban	4.2	8.4	74.1	17.5	2.0	7.2	89.4	1.4	1,165
Dar es Salaam city	5.4	9.0	78.8	12.1	2.3	5.9	91.0	0.8	327
Other urban	3.7	8.2	72.2	19.6	1.8	7.6	88.9	1.7	838
Total rural	1.7	4.7	37.8	57.5	3.7	7.3	87.1	1.8	5,529
Zanzibar	1.2	1.7	24.2	74.0	5.6	8.8	83.7	1.9	223
Region									
Dodoma	1.8	7.2	34.7	58.1	6.9	6.5	84.8	1.8	312
Arusha	3.9	3.9	39.4	56.7	11.5	4.6	82.8	1.1	547
Kilimanjaro	4.6	3.2	68.9	27.9	5.7	2.8	90.1	1.4	281
Tanga	1.9	5.4	39.0	55.6	4.5	7.0	87.5	1.0	365
Morogoro	1.7	8.3	44.4	47.4	4.0	8.9	85.1	2.0	327
Coast	2.7	4.9	48.9	46.2	1.1	4.9	88.5	5.5	104
Dar es Salaam	4.7	9.0	78.5	12.6	2.2	5.8	91.0	0.9	377
Lindi	0.9	5.5	45.5	49.1	4.1	4.5	88.2	3.2	129
Mtwara	2.1	7.6	48.1	44.3	4.8	4.8	89.7	0.7	235
Ruvuma	2.9	11.5	66.8	21.7	2.9	11.5	84.8	0.8	250
Iringa	1.7	10.1	41.2	48.6	4.1	15.5	78.7	1.7	355
Mbeya	3.3	5.4	42.3	52.3	2.1	7.5	90.0	0.4	363
Singida	2.2	3.1	38.4	58.5	2.5	6.1	90.0	1.4	258
Tabora	3.3	6.7	60.7	32.7	1.3	13.3	83.3	2.0	171
Rukwa	0.6	4.0	33.1	62.9	1.1	7.4	90.9	0.6	242
Kigoma	1.1	4.5	45.3	50.3	1.4	10.3	82.4	5.9	342
Shinyanga	1.2	3.5	35.7	60.8	1.4	4.6	93.9	0.0	635
Kagera	1.2	3.4	34.1	62.5	2.1	10.7	83.5	3.7	540
Mwanza	1.3	1.9	37.6	60.5	1.0	5.7	92.0	1.3	580
Mara	0.7	4.6	34.3	61.1	1.0	4.6	90.4	4.0	281
Mother's education									
No education	1.2	3.6	26.4	70.0	4.5	7.2	85.9	2.5	2,048
Primary incomplete	1.2	6.3	37.3	56.4	4.1	8.3	86.7	0.9	1,138
Primary complete	2.7	5.7	53.5	40.8	2.8	7.2	88.4	1.6	3,493
Secondary+	6.0	6.0	73.6	20.4	3.4	6.2	89.1	1.3	236
Total	2.1	5.2	43.5	51.3	3.5	7.3	87.4	1.8	6,916

According to the respondent's own assessment of her infant's size, the majority of births (87 percent) are classified as average or large. Only 11 percent births were reported to be either small (7 percent) or very small (4 percent).

8.4 Childhood Vaccinations

To obtain information about vaccination coverage, the 1996 TDHS collected information on vaccination coverage for all children born in the five years preceding the survey, although the data presented in this chapter are restricted to children who were alive at the time of the survey. The immunisation programme in Tanzania is implemented by the Ministry of Health through the Expanded Programme on Immunisation (EPI) which started in 1975. By 1986, the operation of the programme was established throughout the country (Ministry of Health, 1989). EPI in Tanzania follows the World Health Organisation's (WHO) guidelines for vaccinating children. To be considered fully vaccinated, a child should receive one dose of BCG vaccine, three doses each of DPT and polio vaccines (excluding polio 0), and one dose of measles vaccine. BCG confers protection against tuberculosis and should be given at birth or at first clinical contact; DPT protects against diphtheria, pertussis, and tetanus. DPT and polio require three vaccinations at approximately three, four, and five months of age; measles should be given at or soon after reaching nine months. WHO recommends that children receive the complete schedule of vaccinations before 12 months of age.

Information on vaccination status was collected from vaccination cards shown to the interviewer and from mothers' verbal reports. All MCH clinics in Tanzania provide "road to health" cards (MCH form No. 3) which include dates of vaccinations. If the cards were available, the interviewers recorded vaccination dates directly. If a vaccination card was presented but a vaccine had not been recorded on the card as having been given, the mother was asked to recall whether that particular vaccine had been given. The mother was then asked if the child had received other vaccinations that were not recorded on the card, and if so, they too were noted on the questionnaire. If the mother was not able to provide a card for the child, she was asked to recall whether or not the child had received BCG, polio, DPT (including the number of doses for each), and measles vaccinations.

Table 8.7 presents the vaccination coverage among children age 12-23 months, according to the source of the information used to determine coverage. The data presented in this table are for children age 12-23 months, thereby including only those children who have reached the age by which they should be fully vaccinated. According to information from both the vaccination cards and mothers' recall (i.e., either source), 96 percent of children age 12-23 months have received a BCG vaccination. Coverage of the polio vaccine at birth is low, with about 55 percent of children having received polio 0. Though a high percentage of children have received the first dose of DPT, there is a steady decline between the first and the third dose of DPT, from 95 percent to 85 percent of children. Likewise, there is a drop in coverage between the first dose of polio (not polio at birth), from 96 percent to 80 percent for the third dose of polio. This represents a dropout rate[1] of 10 percent for DPT and 17 percent for polio. Eighty-one percent of children age 12-23 months have been vaccinated against measles, 68 percent having received it before their first birthday.

Based on both the health card and the mother's report, 71 percent of children age 12-23 months have received all of the recommended vaccinations, while only 3 percent have not received any vaccinations. The remaining 26 percent of children were partially vaccinated.

[1] Dropout rate = [(Dose 1 - Dose 3)/Dose 1] multiplied by 100

Table 8.7 Vaccinations by source of information

Percentage of children 12-23 months who had received specific vaccines at any time before the survey, by source of information about vaccination, and the percentage vaccinated by 12 months of age, Tanzania 1996

Background characteristic	Percentage of children who received: BCG	DPT 1	DPT 2	DPT 3	Polio 0[1]	Polio 1	Polio 2	Polio 3	Measles	All[2]	None	Number of children
Vaccinated at any time before the survey												
Vaccination card	76.4	75.9	74.6	72.1	46.8	76.0	74.6	72.2	66.3	65.1	0.0	1,022
Mother's report	19.8	18.8	16.4	13.1	8.4	19.7	17.4	7.4	14.5	5.4	3.3	313
Either source	96.2	94.7	90.9	85.2	55.2	95.7	92.0	79.6	80.9	70.5	3.3	1,335
Vaccinated by 12 months of age	95.9	94.4	89.6	82.0	55.1	95.4	90.2	77.1	68.0	59.6	3.5	1,335

Note: 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.
[1] Polio 0 is given at birth.
[2] Children who are fully vaccinated (i.e., those who have received BCG, measles, and three doses of DPT and polio (excluding polio 0).

Although overall vaccination coverage has not changed since 1991-92, the dropout rate between the first and third dose of DPT has declined from 15 to 10 percent (Figure 8.2).

Differentials in Vaccination Coverage

Table 8.8 presents vaccination coverage (according to information from the card and mother's report) among children age 12-23 months by selected background characteristics. This table also includes information on the percentage of children for whom a vaccination card was shown to the interviewer. Vaccination status does not differ much by sex of the child. There is a decline in the proportion of children vaccinated as the birth order increases. As was observed in the 1991-92 TDHS, vaccination coverage is higher in Zanzibar than in the mainland. Less than half the children age 12-23 months were fully vaccinated in the Shinyanga region in comparison with 94 percent coverage in the Kilimanjaro region. It must be noted that in some instances the number of observations is too small to give a meaningful representation. Immunisation coverage improves substantially as mothers' level of education increases, from

Figure 8.2
Vaccination Coverage Among Children Age 12-23 Months 1991-92 and 1996 TDHS

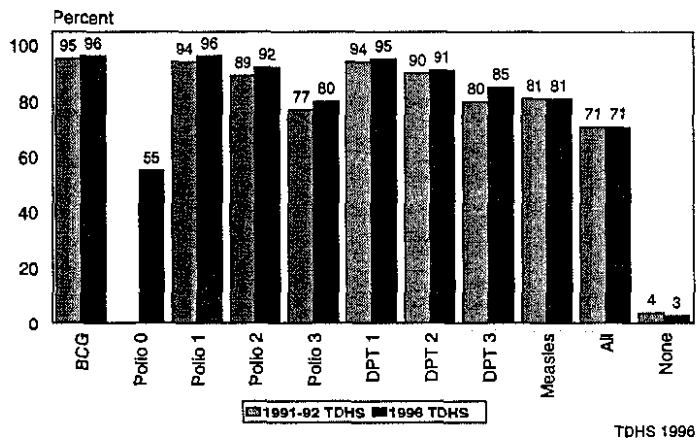


Table 8.8 Vaccinations by background characteristics

Percentage of children 12-23 months who had received specific vaccines by the time of the survey (according to the vaccination card or the mother's report), and the percentage with a vaccination card, according to selected background characteristics, Tanzania 1996

Background characteristic	Percentage of children who received:											Percentage with a card	Number of children
		DPT			Polio								
	BCG	1	2	3	0[1]	1	2	3	Measles	All[2]	None		
Child's sex													
Male	97.3	95.2	91.5	85.6	55.3	96.4	92.1	81.3	80.7	71.5	2.7	77.9	680
Female	95.1	94.2	90.4	84.8	55.1	95.0	91.9	77.8	81.0	69.4	3.9	75.1	655
Birth order													
1	97.4	97.0	91.9	87.1	61.4	97.2	93.2	78.5	88.8	75.8	2.6	77.1	293
2-3	97.1	96.5	92.6	86.0	57.1	97.3	94.2	81.4	80.8	72.4	2.1	78.0	446
4-5	94.3	91.4	88.5	82.1	49.5	93.5	88.8	76.8	76.0	64.4	5.1	73.2	256
6+	95.4	93.0	89.9	85.0	51.7	94.0	90.5	80.2	77.8	68.1	4.0	76.7	340
Residence													
Mainland	96.1	94.6	90.9	85.2	54.3	95.6	91.9	79.4	80.9	70.3	3.4	76.2	1,293
Total urban	99.6	99.6	97.7	94.6	83.3	99.3	96.8	83.7	95.1	80.6	0.4	80.1	238
Dar es Salaam city	98.9	98.9	95.6	92.3	90.1	97.8	94.5	82.4	93.4	79.1	1.1	76.9	77
Other urban	100.0	100.0	98.7	95.7	80.0	100.0	97.9	84.2	95.9	81.2	0.0	81.6	161
Total rural	95.3	93.5	89.3	83.1	47.8	94.8	90.8	78.5	77.7	68.0	4.0	75.3	1,055
Zanzibar	99.3	99.3	92.5	85.1	82.9	99.3	94.6	85.1	78.9	75.4	0.7	88.9	42
Region													
Dodoma	(95.7)	(95.7)	(93.5)	(91.3)	(52.2)	(93.5)	(93.5)	(87.0)	(89.1)	(82.6)	(4.3)	(84.8)	52
Arusha	91.5	88.7	88.7	84.5	40.8	91.5	90.1	76.1	81.7	71.8	8.5	57.7	89
Kilimanjaro	100.0	100.0	100.0	100.0	84.6	100.0	100.0	94.2	98.1	94.2	0.0	84.6	52
Tanga	98.1	96.2	88.7	86.8	64.2	96.2	90.6	79.2	83.0	71.7	1.9	71.7	62
Morogoro	94.6	91.1	89.3	82.1	60.7	92.9	91.1	83.9	82.1	69.6	5.4	83.9	61
Coast	(100.0)	(96.7)	(96.7)	(90.0)	(86.7)	(100.0)	(96.7)	(86.7)	(86.7)	(76.7)	(0.0)	(80.0)	17
Dar es Salaam	99.0	99.0	95.1	91.3	91.3	98.1	94.2	81.6	94.2	78.6	1.0	77.7	87
Lindi	(100.0)	(100.0)	(97.5)	(92.5)	(70.0)	(100.0)	(95.0)	(87.5)	(92.5)	(80.0)	(0.0)	(87.5)	23
Mtwara	100.0	100.0	100.0	92.0	72.0	100.0	98.0	84.0	78.0	68.0	0.0	78.0	40
Ruvuma	98.4	96.8	95.2	90.3	77.4	98.4	93.5	82.3	90.3	80.6	1.6	82.3	41
Iringa	100.0	100.0	100.0	94.2	51.9	100.0	100.0	88.5	94.2	80.8	0.0	82.7	62
Mbeya	(97.9)	(97.9)	(95.8)	(93.8)	(45.8)	(97.9)	(97.9)	(89.6)	(87.5)	(81.2)	(2.1)	(83.3)	72
Singida	90.6	85.9	81.3	70.3	34.4	84.4	78.1	64.1	70.3	54.7	9.4	67.2	46
Tabora	(100.0)	(97.1)	(97.1)	(94.1)	(82.4)	(100.0)	(97.1)	(85.3)	(79.4)	(67.6)	(0.0)	(82.4)	39
Rukwa	94.1	92.6	91.2	82.4	36.8	94.1	91.2	70.6	70.6	54.4	5.9	60.3	47
Kigoma	100.0	98.8	96.3	95.1	52.4	98.8	98.8	91.5	86.6	82.9	0.0	85.4	78
Shinyanga	93.6	88.5	76.9	64.1	32.1	91.0	83.3	62.8	56.4	46.2	6.4	71.8	143
Kagera	95.4	96.9	95.4	92.3	63.1	98.5	90.8	76.9	90.8	70.8	1.5	69.2	107
Mwanza	92.3	90.8	84.6	73.8	27.7	93.8	89.2	72.3	69.2	61.5	4.6	73.8	120
Mara	95.0	95.0	86.7	85.0	53.3	95.0	88.3	83.3	76.7	73.3	5.0	88.3	56
Mother's education													
No education	92.2	89.3	83.4	75.1	39.7	90.7	85.4	69.4	69.7	57.9	7.3	66.5	368
Primary incomplete	93.3	93.2	88.5	82.6	52.3	94.0	89.0	77.2	77.6	68.8	5.1	76.0	206
Primary complete+	98.9	97.8	95.2	90.9	63.5	98.6	96.0	85.2	87.2	77.0	0.8	81.5	761
Total	96.2	94.7	90.9	85.2	55.2	95.7	92.0	79.6	80.9	70.5	3.3	76.6	1,335

Note: 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.

[1] Polio 0 is given at birth.

[2] Children who are fully vaccinated (i.e., those who have received BCG, measles, and three doses of DPT and polio (excluding polio 0)).

Numbers in parentheses are based on 25-49 unweighted children.

58 percent for children whose mothers have no formal education to 77 percent for children whose mothers have completed primary education or higher.

Trends in Vaccination Coverage

In addition to data from multiple surveys, trends in coverage can be assessed from the 1996 TDHS data. Data on vaccination status of children age 12-59 months allow for an evaluation of coverage in the first year of life among different age groups. Table 8.9 shows the percentage of children by current age group who had been vaccinated by 12 months of age (in order to maintain comparability). The information is derived from either vaccination cards or the mothers' reports. For children whose information was based on the mother's recall, the distribution of vaccinations during the first year of life was assumed to be the same as that for children for whom a vaccination record was available.

Table 8.9 Vaccinations in first year of life by current age

Among children one year to five years old, the percentage with a vaccination card and the percentage who had received each vaccine before their first birthday, according to current age of the child, Tanzania 1996

Vaccine	Current age of child in months				All children 12-59 months
	12-23	24-35	36-47	48-59	
Vaccination card seen by interviewer	76.6	66.7	58.9	52.3	64.2
Percentage vaccinated at 0-11 months[1]					
BCG	95.9	92.5	91.5	90.5	92.7
DPT 1	94.4	92.0	90.4	88.7	91.5
DPT 2	89.6	86.3	84.2	84.1	86.2
DPT 3	82.0	77.2	75.5	74.9	77.6
Polio 0[2]	55.1	47.9	43.6	44.3	48.0
Polio 1	95.4	92.1	91.0	89.5	92.1
Polio 2	90.2	86.3	83.1	83.3	85.9
Polio 3	77.1	72.0	67.6	61.8	70.0
Measles	68.0	70.3	66.3	66.1	67.7
All vaccinations[3]	59.6	56.8	52.2	47.5	54.3
No vaccinations	3.5	5.7	7.1	8.1	6.0
Number of children	1,335	1,188	1,157	1,131	4,812

[1] Information was obtained either from a vaccination card or from the mother if there was no written record. 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 that for children with a written vaccination record.
[2] Polio 0 is given at birth.
[3] Children who have received BCG, measles, and three doses each of DPT and polio vaccines (excluding polio 0)

The coverage estimates for each age group refer to a specific period of time before the survey. For instance, coverage by 12 months among children 12-23 months roughly refers to the programme performance the year before the survey (i.e., 1995), data on children 24-35 months refer roughly to 1994, data on children 36-47 months refer roughly to 1993, and data on children 48-59 months refer roughly to 1992. Hence, these results may be used to assess the immunisation coverage during the first year of life for the period 1992-1995.

Overall, vaccination cards were produced for 64 percent of the children. Expectedly, the percentage of children for whom a vaccination card was seen decreases with age, from 77 percent of children 12-23 months to 52 percent of those age 48-59 months.

The proportion of children who were fully immunised by their first birthday rose from 48 percent among those age 48-59 months at the time of the survey to 60 percent among those age 12-23 months. Over the same time, the proportion of children not receiving any vaccination decreased from 8 percent of children age 48-59 months to 4 percent of children age 12-23 months.

8.5 Acute Respiratory Infection

Acute respiratory infection (ARI) is one of the major causes of morbidity and mortality among children in Tanzania. Common symptoms associated with severe respiratory infection include fever, cough, and difficult or rapid breathing. ARI involves the upper respiratory tract and may progress to involve the lower respiratory tract, leading to lung infection. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths from respiratory infection, especially pneumonia.

To estimate the prevalence and magnitude of ARI, mothers were asked if their children under age five had been ill with coughing accompanied by short, rapid breathing during the two weeks before the survey. Mothers whose children had experienced these symptoms were asked what they had done to treat the illness. Information on disease prevalence is highly dependent on correct reporting and interpretation of symptoms, while information on treatment practices depends on how much mothers know about the medicines their children receive. Mothers may not know whether the tablets or syrups their children receive contain antibiotics or not. Thus, the reporting may vary widely within the country due to differences in reporting.

As Table 8.10 shows, 13 percent of children under five years of age had a cough and fast breathing in the two weeks before the survey. Prevalence of respiratory illness varies by age of the child, rising to a peak at 6-11 months of age (20 percent) then falling slowly to a low at 48-59 months of age (8 percent). There is no significant difference in ARI prevalence by sex, birth order, residence, or education of mother.

Overall, 70 percent of children who had symptoms of ARI were taken to a health facility. Children from urban areas, especially from the city of Dar es Salaam were more likely to be taken to a health facility than those in rural areas.

8.6 Fever

Malaria is a leading cause of mortality and morbidity among children in Tanzania. Since the major manifestation of malaria is fever, mothers were asked whether their children under age five have fever in the two weeks preceding the survey.

Table 8.10 shows that 30 percent of children under five years of age were reported to have had fever in the two weeks prior to the survey. Fever is more prevalent among children age 6-23 months and those who live in Zanzibar. No pronounced differences were observed in the prevalence of fever by either sex or birth order.

8.7 Diarrhoea

In the 1996 TDHS, mothers were asked whether their children under age five had diarrhoea in the two weeks preceding the survey. Table 8.11 presents data about the prevalence of diarrhoea and bloody diarrhoea among children under five years of age. Fourteen percent of children experienced diarrhoea at some time in the two weeks preceding the survey; 3 percent of children experienced bloody diarrhoea, often a symptom of

dysentery. As with fever and respiratory infection, diarrhoea is more common among children age 6 to 23 months than among older or younger children. Diarrhoea prevalence is slightly higher among children whose mothers have primary education than among those with no education or those with at least secondary education. The Coast region experienced the lowest proportion of children with diarrhoea, while Kigoma had the highest.

Dehydration due to severe diarrhoea is a major cause of morbidity and mortality among children in Tanzania. A simple and effective response to a child's dehydration is a prompt increase in fluid intake, i.e., oral rehydration therapy (ORT). ORT consists of giving the child either a solution made by mixing a commercially produced packet of oral rehydration salts (ORS) with water or a recommended home fluid made

Table 8.10 Prevalence and treatment of acute respiratory infection and prevalence of fever

Among all children under five years of age, the percentage who were ill with a cough accompanied with fast breathing and the percentage who were ill with fever during the two weeks before the survey, according to socioeconomic and demographic characteristics, Tanzania 1996

Characteristic	Percentage of children with cough accompanied by fast breathing (ARI)	Among children with ARI, percentage taken to a health facility or provider	Percentage of children ill with fever	Number of children
Child's age				
< 6 months	12.8	63.8	28.1	675
6-11 months	20.3	70.3	41.5	700
12-23 months	16.6	73.7	38.2	1,335
24-35 months	12.2	69.0	31.0	1,188
36-47 months	10.0	62.7	25.7	1,157
48-59 months	8.1	73.6	19.4	1,313
Child's sex				
Male	13.0	70.2	30.9	3,136
Female	12.9	69.0	29.7	3,051
Birth order				
1	12.1	74.2	29.2	1,299
2-3	12.4	67.0	29.4	2,034
4-5	14.2	69.6	31.5	1,374
6+	13.3	69.3	31.4	1,480
Residence				
Mainland	13.0	69.5	30.0	5,983
Total urban	12.0	80.9	30.0	1,066
Dar es Salaam city	13.3	85.1	29.4	299
Other urban	11.5	79.0	30.2	767
Total rural	13.2	67.2	30.0	4,917
Zanzibar	11.8	74.2	40.1	204
Mother's education				
No education	11.6	73.6	29.4	1,812
Primary incomplete	13.5	68.4	33.8	1,006
Primary complete	13.7	67.3	30.1	3,149
Secondary+	11.6	82.8	25.3	220
Total	13.0	69.6	30.3	6,188

of sugar, salt, and water. In Tanzania, the use of ORS and home fluids is being promoted by the Ministry of Health. Increasing the amount of any type of fluids during a diarrhoeal episode can be considered ORT.

Women interviewed in the 1996 TDHS who had a birth in the five years preceding the survey were asked questions regarding their knowledge of sugar-salt-water solution and treatment of diarrhoea in general. The results are presented in Table 8.12. Almost 90 percent of mothers know about the use of sugar-salt-water-solutions. When asked about specific eating and drinking regimes for children ill with diarrhoea, two-thirds of women recommended giving more fluids than before the illness, while 56 percent said children with diarrhoea should get more food. The level of knowledge of ORS and treatment of diarrhoea is lowest among young mothers 15-19 years of age and increases with age before it drops for older women. Urban women, those living in the Mbeya region and women who have completed primary education or higher tend to be more knowledgeable on the use of sugar-salt-water solution and on the appropriate feeding and drinking practices for children with diarrhoea.

Table 8.13 presents information regard-ing treatment of recent episodes of diarrhoea among children under age five. About 56 percent of children under five years whose mothers reported that they had diarrhoea in the two weeks before the survey were taken to a health facility for treatment. Of all children with diarrhoea, 48 percent were given a solution prepared from ORS packets, 3 percent received recommended home fluids (RHF), and 50 percent received either ORS or RHF. About 57 percent of mothers reported that they increased the amount of fluids given to their children with diarrhoea, 40 percent were given antibiotics while 6 percent of mothers reported receiving injections, and 20 percent provided home remedies. One in four were given neither ORT nor increased fluids to treat the diarrhoea.

Table 8.11 Prevalence of diarrhoea

Percentage of children under five years of age with diarrhoea and diarrhoea with blood during the two weeks preceding the survey, by selected background characteristics, Tanzania 1996

Background characteristic	Diarrhoea in the preceding 2 weeks		Number of children
	All diarrhoea	Diarrhoea with blood	
Child's age			
< 6 months	12.1	1.7	675
6-11 months	27.3	3.9	700
12-23 months	22.9	4.7	1,335
24-35 months	13.2	3.7	1,188
36-47 months	6.4	1.6	1,157
48-59 months	3.3	0.9	1,131
Child's sex			
Male	14.2	2.4	3,136
Female	13.2	3.3	3,051
Birth order			
1	14.5	2.6	1,299
2-3	14.4	2.7	2,034
4-5	11.4	2.8	1,374
6+	14.0	3.2	1,480
Residence			
Mainland	13.5	2.8	5,983
Total urban	11.9	1.4	1,066
Dar es Salaam city	9.3	1.1	299
Other urban	12.9	1.5	767
Total rural	13.9	3.2	4,917
Zanzibar	17.4	2.2	204
Region			
Dodoma	14.7	3.9	260
Arusha	14.8	2.7	518
Kilimanjaro	9.6	1.5	268
Tanga	13.5	1.8	320
Morogoro	12.9	6.3	276
Coast	4.7	2.4	97
Dar es Salaam	10.0	1.5	346
Lindi	13.0	1.6	108
Mtwara	11.2	1.2	202
Ruvuma	7.4	1.4	229
Iringa	12.0	3.5	310
Mbeya	18.7	5.0	330
Singida	18.2	2.7	236
Tabora	18.5	3.0	154
Rukwa	22.2	6.3	207
Kigoma	25.2	4.6	312
Shinyanga	7.3	2.2	580
Kagera	20.3	3.6	463
Mwanza	7.8	1.8	523
Mara	11.0	0.0	244
Mother's education			
No education	12.6	2.7	1,812
Primary incomplete	16.3	4.4	1,006
Primary complete	13.7	2.5	3,149
Secondary+	10.1	1.3	220
Total	13.7	2.8	6,188

Table 8.12 Knowledge of diarrhoea care

Percentage of women with births in the five years preceding the survey who know about the use of oral rehydration salts (ORS) for treatment of diarrhoea, and the percent distribution by opinion on appropriate feeding practices during diarrhoea, according to selected background characteristics, Tanzania 1996

Background characteristic	Know about ORS packets	Compared with usual feeding practices, appropriate feeding during diarrhoea: Liquids				Solid foods				Number of women
		Less	Same	More	Don't know/ missing	Less	Same	More	Don't know/ missing	
Age										
15-19	75.3	19.2	13.6	59.2	8.0	19.2	19.7	52.5	8.6	361
20-24	87.0	16.4	14.5	64.1	5.1	18.2	22.7	53.6	5.4	1,194
25-29	88.1	14.0	13.9	67.9	4.2	18.1	21.3	56.7	4.0	1,153
30-34	89.6	11.1	15.0	71.0	3.0	16.1	21.7	58.5	3.7	827
35+	88.3	11.3	16.0	67.7	4.9	17.6	21.4	56.0	5.0	1,043
Residence										
Mainland	87.1	13.6	14.8	66.9	4.7	17.2	21.3	56.5	4.9	4,441
Total urban	93.7	8.1	10.6	79.0	2.3	9.5	19.2	68.1	3.2	870
Dar es Salaam city	90.6	8.4	15.1	74.2	2.3	6.0	21.1	69.9	3.0	253
Other urban	95.0	8.0	8.7	81.0	2.3	11.0	18.4	67.4	3.2	617
Total rural	85.4	15.0	15.8	63.9	5.3	19.1	21.8	53.7	5.4	3,571
Zanzibar	90.0	22.4	12.4	62.6	2.6	35.4	32.1	29.1	3.5	136
Region										
Dodoma	91.2	17.6	16.6	58.0	7.8	22.3	14.5	56.5	6.7	217
Arusha	75.9	16.2	28.5	46.0	9.3	18.6	34.4	38.5	8.6	365
Kilimanjaro	90.8	3.6	10.2	82.1	4.1	5.1	29.1	60.2	5.6	195
Tanga	93.7	9.7	12.6	73.8	3.9	11.2	22.8	60.2	5.8	240
Morogoro	93.4	10.8	12.7	73.6	2.8	15.1	17.5	64.6	2.8	230
Coast	90.4	6.7	10.4	76.3	6.7	5.2	18.5	73.3	3.0	77
Dar es Salaam	90.5	8.6	15.8	73.0	2.6	6.0	21.6	69.0	3.4	294
Lindi	93.5	14.2	13.0	66.3	6.5	15.4	25.4	52.7	6.5	99
Mtwara	92.4	10.7	18.2	69.8	1.3	12.0	30.7	53.3	4.0	181
Ruvuma	94.0	12.8	12.4	71.1	3.8	13.9	16.9	64.3	4.9	174
Iringa	91.4	15.8	10.5	67.9	5.7	15.8	14.4	64.6	5.3	250
Mbeya	94.5	9.8	9.8	77.3	3.1	20.9	21.5	54.0	3.7	245
Singida	86.1	19.0	10.1	67.9	3.0	31.2	18.1	47.7	3.0	170
Tabora	81.6	13.6	8.7	69.9	7.8	11.7	19.4	61.2	7.8	117
Rukwa	91.8	11.4	13.6	70.5	4.5	19.5	21.4	55.0	4.1	151
Kigoma	76.9	11.8	10.0	68.3	10.0	17.6	14.5	57.5	10.4	211
Shinyanga	81.8	20.1	17.2	60.8	1.9	22.5	19.6	55.0	2.9	382
Kagera	78.9	23.2	13.4	57.7	5.7	27.8	12.9	53.6	5.7	319
Mwanza	83.1	13.2	17.5	65.6	3.7	19.6	24.3	52.9	3.2	349
Mara	90.8	9.2	14.6	73.5	2.7	15.1	25.4	57.8	1.6	172
Education										
No education	78.1	19.5	20.8	52.9	6.8	24.3	25.1	44.5	6.1	1,338
Primary incomplete	88.7	14.2	13.9	67.5	4.4	20.2	20.5	54.4	5.0	742
Primary complete	91.5	11.0	11.8	73.3	3.9	13.3	20.0	62.3	4.4	2,321
Secondary+	91.8	8.2	9.5	82.1	0.2	17.3	21.3	59.1	2.4	177
Total	87.1	13.9	14.7	66.8	4.7	17.7	21.6	55.7	4.9	4,577

Table 8.13 Treatment of diarrhoea

Among children under five years who had diarrhoea in the two weeks preceding the survey, the percentage taken for treatment to a health facility or provider, the percentage who received oral rehydration therapy (ORT) (either a solution prepared from oral rehydration salts (ORS), recommended home fluids (RHF), or increased fluids), the percentage who received neither ORT nor increased fluids, and the percentage given other treatments, according to selected background characteristics, Tanzania 1996

Background characteristic	Percentage taken to a health facility or provider[1]	Oral rehydration therapy				Received neither ORT nor increased fluids	Other treatments			None	Missing	Number of children
		ORS packets	RHF at home	Either ORS or RHF	Received increased fluids		Anti-biotics	Injection	Home remedy/ other			
Child's age												
< 6 months	41.4	34.2	0.0	34.2	50.6	37.3	25.7	5.0	13.3	24.3	0.0	81
6-11 months	59.2	52.5	4.6	56.0	55.8	24.6	42.1	5.4	21.7	8.7	0.8	191
12-23 months	59.2	50.3	3.9	53.3	56.3	24.4	40.5	7.2	22.5	10.0	0.8	306
24-35 months	55.1	49.6	1.7	50.1	56.5	26.7	41.3	5.3	18.6	12.5	0.7	157
36-47 months	61.3	45.4	0.6	45.4	67.6	19.6	39.1	6.3	19.9	9.8	0.0	74
48-59 months	(46.7)	(40.4)	(4.1)	(44.5)	(56.0)	(36.7)	(40.4)	(5.8)	(19.5)	(8.4)	(2.5)	37
Child's sex												
Male	58.7	50.7	3.0	52.9	56.7	24.9	39.9	6.7	19.7	10.5	0.2	444
Female	53.7	45.6	3.0	47.6	56.6	27.8	38.9	5.5	21.0	12.5	1.2	402
Birth order												
1	53.9	47.4	1.4	48.8	54.0	30.5	40.5	3.1	15.1	17.0	0.0	188
2-3	59.0	49.6	1.8	51.1	55.2	25.2	40.2	7.6	19.7	9.0	1.1	293
4-5	50.5	47.5	5.0	51.7	54.8	26.9	37.4	6.5	22.0	9.9	1.8	157
6+	59.2	47.7	4.6	49.9	62.4	23.4	39.0	6.5	24.9	11.1	0.0	208
Residence												
Mainland	56.5	48.6	3.0	50.7	55.9	26.6	39.7	6.3	20.5	11.4	0.7	811
Total urban	70.0	55.0	4.2	57.4	65.3	18.1	47.6	9.7	19.6	5.7	0.0	127
Dar es Salaam city	78.8	60.6	3.0	63.6	60.6	18.2	66.7	12.1	21.2	0.0	0.0	28
Other urban	67.6	53.4	4.5	55.7	66.6	18.1	42.2	9.0	19.2	7.3	0.0	99
Total rural	54.0	47.4	2.8	49.4	54.2	28.2	38.3	5.7	20.7	12.4	0.9	684
Zanzibar	52.2	41.5	3.6	43.9	72.6	17.6	33.3	0.9	17.6	14.0	0.0	36
Mother's education												
No education	54.6	42.7	3.4	44.8	48.4	30.6	35.1	6.6	23.8	13.9	0.0	228
Primary incomplete	60.6	47.6	1.8	48.7	55.2	27.1	44.5	7.2	20.8	8.9	1.1	164
Primary complete+	55.7	57.3	3.2	53.8	61.3	23.8	39.8	5.5	18.5	11.2	0.9	454
Total	56.3	48.3	3.0	50.4	56.6	26.3	39.5	6.1	20.4	11.5	0.7	846

Note: Figures in parentheses are based on 25 to 49 children who had diarrhoea.
[1] Includes health centre, hospital and private doctor.

The proportion of children with diarrhoea who were taken to a health facility was slightly lower among younger and older children and was more or less the same regardless of sex or birth order. The proportion of children with diarrhoea who are taken to health facilities is expectedly higher in urban areas than in rural areas.

In the 1996 TDHS, all mothers who had a child with diarrhoea were also asked whether they had changed the feeding practices during the diarrhoeal episode. Table 8.14 shows that about 57 percent of children ill with diarrhoea were given more solid foods to eat during the illness, and 38 percent received more to drink. These results suggest that, as the benefits of increasing fluid intake during a diarrhoeal episode are quite widely understood, a reasonable proportion of mothers have decided to increase fluid intake when their children have diarrhoea. Still, it is discouraging to note that 27 percent of mothers say they gave their children less to drink. This is an increase from the 13 percent reported in the 1991-92 TDHS.

Table 8.14 Feeding practices during diarrhoea

Percent distribution of children under five years who had diarrhoea in the past two weeks by amount of solid foods given and amount of fluids given, Tanzania 1996

Feeding practice	Total
Amount of solid foods given	
Same	25.1
More	56.6
Less	16.0
Don't know/missing	2.2
Amount of fluids given	
Same	33.0
More	37.8
Less	27.3
Don't know/missing	1.9
Total	100.0
Number of children	846

CHAPTER 9

MATERNAL AND CHILD NUTRITION

The 1996 TDHS collected data from mothers regarding the feeding patterns of all of their children under five years of age. In this chapter, the data are used to evaluate infant feeding practices, including breastfeeding, introduction of complementary and supplementary weaning foods, and the use of feeding bottles. As part of the survey, the height and weight of all children under five and their mothers were also measured, allowing a cross-sectional assessment of maternal and child nutritional status.

9.1 Breastfeeding and Supplementation

Early childhood feeding practices and patterns are important determinants of the nutritional status of children which in turn influence their health status. A mother's nutritional well-being before and during pregnancy influences the health of her baby at birth, her own ability to breastfeed successfully, as well as her general health. The health benefits of breastfeeding for both mother and child are undisputed and are influenced by both the duration and intensity of breastfeeding and by the age at which the child receives supplementary foods and other liquids.

Prevalence and Initiation of Breastfeeding

The data presented in Table 9.1 confirm that breastfeeding in Tanzania is almost universal, with 97 percent of the children born in the five years preceding the survey having been breastfed at some time. The proportion of children ever breastfed was high across all residential areas and regions, and did not vary significantly by other background characteristics. The results are similar to those of the 1991-92 TDHS.

Early initiation of breastfeeding is beneficial for mother and child. From the mother's perspective, early suckling stimulates the release of a hormone that helps her uterus to maintain a contracted state. From the child's perspective, the first breast milk is important because it contains colostrum which is rich in antibodies. Data show that about 60 percent of the children in Tanzania were breastfed within an hour of birth and 88 percent in the first 24 hours after delivery. Babies in the Arusha and Kilimanjaro regions are more likely to start breastfeeding within one hour of birth than their counterparts in other regions. Children are less likely to receive early breastfeeding if their mothers have no education, if the delivery was assisted by a traditional midwife, or if they were delivered at home.

Age Pattern of Breastfeeding and Introduction of Supplementary Foods

In the TDHS, children who received only breast milk in the 24 hours before the survey are defined as being *exclusively breastfed*, and children who are *fully breastfed* receive only plain water in addition to breast milk. The timing of introduction of supplementary foods besides breast milk has important implications for the child and the mother. Early supplementation, especially under unhygienic conditions, can result in infection with foreign organisms and lower immunity to disease. The timing of introduction of food supplements also has an impact on the length of the mother's postpartum amenorrhoea. Early initiation of supplementation results in earlier resumption of the mother's menstrual periods, since supplementation diminishes infants' dependence on breast milk and reduces the frequency of suckling.

Table 9.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and the percentage who started breastfeeding within one hour of birth and within one day of birth, by selected background characteristics, Tanzania 1996

Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding: Within one hour of birth	Percentage who started breastfeeding: Within one day of birth[1]	Number of children
Child's sex				
Male	97.2	59.9	87.9	3,552
Female	97.3	57.7	87.5	3,364
Residence				
Mainland	97.2	58.6	87.6	6,693
Total urban	98.2	67.3	92.3	1,165
Dar es Salaam city	98.2	61.1	93.4	327
Other urban	98.1	69.8	91.9	838
Total rural	97.1	56.8	86.6	5,529
Zanzibar	98.7	65.7	92.0	223
Region				
Dodoma	95.7	58.5	94.3	312
Arusha	98.9	86.5	96.5	547
Kilimanjaro	98.2	88.8	96.0	281
Tanga	98.1	75.6	88.9	365
Morogoro	98.7	65.4	98.7	327
Coast	100.0	37.9	83.0	104
Dar es Salaam	98.0	61.3	93.6	377
Lindi	98.6	48.8	90.3	129
Mtwara	96.6	47.0	91.1	235
Ruvuma	98.7	59.7	96.8	250
Iringa	96.3	68.1	98.6	355
Mbeya	99.2	52.7	85.8	363
Singida	98.3	59.5	88.7	258
Tabora	88.7	51.9	79.7	171
Rukwa	97.7	44.1	82.9	242
Kigoma	93.3	49.4	84.7	342
Shinyanga	99.4	57.1	75.4	635
Kagera	95.7	35.0	70.7	540
Mwanza	97.1	54.4	86.6	580
Mara	94.4	38.5	81.8	281
Mother's education				
No education	97.3	56.1	85.4	2,048
Primary incomplete	96.3	58.2	88.2	1,138
Primary complete	97.7	60.4	88.9	3,493
Secondary+	97.2	63.0	88.2	236
Assistance at delivery				
Health professional	97.6	66.9	91.1	3,229
Traditional midwife	96.6	55.9	89.8	1,223
Other or none	97.2	50.5	83.6	2,414
Place of delivery				
Health facility	97.5	67.3	91.3	3,218
At home	97.1	52.0	86.1	3,425
Total	97.3	58.8	87.7	6,916

Note: Total includes 50 children for whom data on assistance at delivery and 272 children for whom information on place of delivery are missing.
[1] Includes children who started breastfeeding within one hour of birth.

Mothers were asked if they had given various types of liquids or solid foods to their children under three in the past 24 hours (Table 9.2). Virtually all infants under one year of age were breastfed (96-99 percent). The prevalence of breastfeeding declines to 88 percent at age 16-17 months to 46 percent at age 22-23 months.

Table 9.2 Breastfeeding status

Percent distribution of living children under three years of age by current breastfeeding status, according to child's current age in months, Tanzania 1996

Age in months	Not breast-feeding	Exclusively breastfed	Breastfeeding and: Plain water only	Breastfeeding and: Complementary foods	Total	Number of living children
0-1	0.6	55.2	24.3	19.9	100.0	202
2-3	1.3	27.4	21.1	50.2	100.0	235
4-5	2.7	8.0	12.3	77.0	100.0	238
6-7	0.7	4.1	3.9	91.3	100.0	240
8-9	2.3	1.7	0.8	95.1	100.0	226
10-11	3.6	2.0	0.6	93.8	100.0	234
12-13	4.6	0.0	0.1	95.3	100.0	250
14-15	8.5	0.0	0.7	90.8	100.0	229
16-17	12.4	0.0	0.2	87.5	100.0	202
18-19	18.8	0.7	0.1	80.4	100.0	245
20-21	39.4	0.0	0.0	60.6	100.0	205
22-23	54.4	0.0	0.0	45.6	100.0	205
24-25	71.8	0.0	0.3	27.9	100.0	215
26-27	75.9	0.0	0.0	24.1	100.0	184
28-29	82.1	0.0	0.0	17.9	100.0	208
30-31	90.3	0.0	0.0	9.7	100.0	191
32-33	94.6	0.0	0.0	5.4	100.0	187
34-35	95.0	0.0	0.0	5.0	100.0	203
0-3 months	1.0	40.3	22.6	36.2	100.0	437
4-6 months	1.8	6.9	10.1	81.3	100.0	367
7-9 months	2.0	2.3	1.1	94.6	100.0	338
0-5 months	1.6	28.9	19.0	50.6	100.0	675

Note: Breastfeeding status refers to 24 hours preceding the survey. Children classified as *breastfeeding and plain water only* receive no complementary foods.

Overall, 29 percent of infants under five months of age were exclusively breastfed. The prevalence of exclusive breastfeeding declines from 55 percent for infants under age two months to 27 percent among those age two to three months to only 8 percent among children age four to five months. Many Tanzanian (young) infants appeared to receive water only in addition to breast milk.

By six to seven months of age, 91 percent of children are given breast milk and complementary foods other than plain water. This rises to 95 percent by eight to nine months of age and by the time they reach 34-35 months of age, 95 percent of all children have been fed solid foods.

Table 9.3 shows the differentials in duration and frequency of breastfeeding by background characteristics of the child and mother. At the national level, the median duration of any breastfeeding is around 22 months. The median duration of exclusive breastfeeding is around one month and full breastfeeding (breastfeeding plus plain water only) around two months. There is very little variation between the breastfeeding duration by sex of the children and by residence. Duration of breastfeeding is the longest in the Southern zone (24 months) and the shortest in the Lake zone (20 months). Breastfeeding seems to decrease slightly as educational level rises.

Table 9.3 Median duration and frequency of breastfeeding by background variables

Median duration of any breastfeeding, exclusive breastfeeding, and full breastfeeding among children under three years of age, and the percentage of children under six months of age who were breastfed six or more times in the 24 hours preceding the interview, according to background characteristics, Tanzania 1996

Background characteristic	Children under 3 years of age[1]				Children under six months	
	Median breastfeeding duration					
	Any breast-feeding	Exclusive breast-feeding	Full breast-feeding[2]	Number of children	Breastfed 6 or more times in preceding 24 hours	Number of children
Child's sex						
Male	21.2	1.2	2.3	2,191	91.0	345
Female	21.8	0.7	2.2	2,095	91.9	330
Residence						
Mainland	21.5	1.1	2.2	4,156	91.5	648
Total urban	21.2	0.6	1.5	720	95.8	117
Dar es Salaam city	20.6	0.5	1.9	203	(96.4)	24
Other urban	21.6	0.6	1.3	517	95.7	94
Total rural	21.6	1.3	2.4	3,436	90.5	530
Zanzibar	21.0	0.4	2.0	130	90.7	27
Zones						
Coastal	21.4	0.6	1.9	864	87.7	130
Northern Highlands	21.5	2.0	2.2	510	93.4	88
Lake	20.2	1.3	2.6	1,598	89.3	238
Central	22.9	1.6	2.0	350	92.9	57
Southern Highlands	23.3	0.6	2.0	583	96.7	102
Southern	24.4	1.0	2.3	380	94.9	60
Mother's education						
No education	22.2	0.7	2.5	1,236	90.8	185
Primary incomplete	21.0	1.2	2.2	699	85.6	113
Primary complete	21.3	1.2	2.2	2,202	93.6	351
Secondary+	20.3	0.4	1.5	149	(91.6)	25
Assistance at delivery						
Health professional	21.4	0.7	2.1	1,955	94.5	278
Traditional midwife	22.0	0.7	2.1	764	84.0	141
Other or none	21.4	1.6	2.5	1,544	92.2	255
Total	21.5	1.0	2.2	4,286	91.4	675
Mean	21.2	2.5	3.6	97.4	NA	NA
Prevalence/Incidence mean	21.3	1.8	3.0	NA	NA	NA

Note: Figures in parentheses are based on 25 to 49 children. Total includes 24 children under 3 years of age for whom data on assistance at delivery are missing.
NA = Not applicable.
[1] Medians and means are based on current status and durations are in months.
[2] Either exclusive breastfeeding or breastfeeding and plain water only.

Frequent breastfeeding must be practised in order for mothers (and children) to reap all its benefits. The data in Table 9.3 indicate that 91 percent of children under six months of age were breastfed six or more times in the 24 hours preceding the interview.

Types of Supplemental Foods

Table 9.4 presents information on the types of food received by children under age three in the 24 hours before the survey interview, according to whether or not the child is still being breastfed. Infant formula is not commonly used in Tanzania. Overall, only 9 percent of children are given infant formula. Mothers seem to prefer giving other milk and liquids to giving infant formula. Meat, poultry, fish, and eggs contain protein and other nutrients that are important for growth, recovery from illness, and mental development. The proportion of children receiving these foods rises from 4 percent at age two to three months to 53 percent at age 14-17 months. Foods made from grains, flour, or cereals (such as porridge) are common foods for children from age two to three months, while tubers and plantains are common foods for children. By age eight to nine months, more than 90 percent are getting grains, flour, or cereals and 14 percent are getting tubers and plantains.

Table 9.4 Types of food received by children in preceding 24 hours

Percentage of children under three years of age who received specific types of food in the 24 hours before the interview, and the percentage using a bottle with a nipple, by breastfeeding status and child's age in months, Tanzania 1996

Age (in months)	Breast milk only	Liquids			Solid/mushy food				Use of bottle with a nipple	Number of children
		Infant formula	Other milk	Other liquids	Meat/ poultry/ fish/ eggs	Grain/ flour/ cereal	Tubers/ plantain	Other		
BREASTFEEDING CHILDREN										
0-1	55.5	0.9	6.6	6.9	0.6	9.4	0.8	1.5	3.6	201
2-3	27.8	2.3	18.4	12.9	3.9	29.6	0.3	1.8	13.6	232
4-5	8.2	7.0	25.9	26.8	7.7	63.7	3.9	8.4	10.7	232
6-7	4.2	9.2	36.0	24.0	17.8	81.6	7.3	27.4	9.0	238
8-9	1.8	12.9	38.1	32.3	34.8	93.9	14.4	45.1	5.7	221
10-11	2.1	9.6	33.5	36.3	38.0	93.1	17.9	55.3	7.7	226
12-13	0.0	7.3	35.4	34.9	47.4	93.8	19.9	65.8	8.1	238
14-15	0.0	10.7	33.7	33.8	52.9	92.5	20.4	64.1	7.1	210
16-17	0.0	13.6	33.7	35.2	52.9	93.7	23.4	70.5	2.7	177
18-23	0.4	10.3	29.8	36.7	48.9	96.7	21.8	70.3	5.5	417
24-29	0.0	12.6	38.2	37.3	47.6	97.3	20.0	68.6	9.1	142
30-35	0.0	16.2	44.7	20.2	36.5	90.3	16.2	66.7	8.4	39
0-3 months	40.7	1.7	12.9	10.1	2.3	20.2	0.5	1.7	9.0	432
4-6 months	7.0	7.4	26.9	26.0	10.1	70.3	4.3	13.8	9.1	360
7-9 months	2.3	12.1	40.3	29.3	30.4	89.6	12.9	40.7	7.9	331
0-5 months	29.3	3.5	17.4	15.9	4.2	35.4	1.7	4.0	9.6	664
Total	8.4	8.8	30.0	29.0	32.5	78.0	13.9	44.7	7.5	2,572
NON-BREASTFEEDING CHILDREN										
18-23	NA	10.5	36.7	37.4	54.6	93.1	30.6	74.7	8.7	238
24-29	NA	8.5	30.2	31.9	50.9	89.2	28.4	75.7	5.0	465
30-35	NA	7.4	28.9	32.7	50.8	88.9	26.6	76.9	3.9	542

NA = Not applicable.

Bottle feeding is not commonly practised in Tanzania. Four percent of breastfed children under age two months were given a bottle with a nipple. Among children still breastfeeding, bottle feeding peaks at age two to three months (14 percent).

9.2 Nutritional Status of Children

The nutritional status of children is an outcome of many interrelated factors. These include environmental, economic, political, biological, educational, cultural, and food security factors. Feeding practices and infections also affect nutritional status. The nutritional status of children can thus be used as an indicator of the socioeconomic development of a community or nation.

Measures of Nutritional Status in Childhood

Evaluation of nutritional status is based on the rationale that in a well-nourished population, one observes a statistically predictable distribution of children of a given age with respect to height and weight. In the 1996 TDHS, the nutritional status of children is analysed and evaluated in comparison with the commonly used U.S. National Centre for Health Statistics (NCHS) standard, which is recommended by the World Health Organisation (WHO). The use of this reference population is based on the finding that well-nourished young children of all population groups follow very similar growth patterns. Although variations in height and weight exist, these approximate a normal distribution when the population under study is large.

Height and weight data as well as information on the child's age in months were used to construct the three standard indices of physical growth that describe the nutritional status of children: height-for-age, weight-for-height and weight-for-age. Each of these indices provides somewhat different information about the nutritional status of a population of children.

Height-for-age is a measure of linear growth. Children who are more than two standard deviations below (-2 SD) the median of the NCHS reference population are considered short for their age or "stunted," a condition reflecting the cumulative effect of chronic malnutrition. If the child is below minus three standard deviations (-3 SD) from the median of the reference population, the child is considered to be severely stunted. Stunting is a condition that reflects failure to receive adequate food intake over a long period of time and is also affected by repeated episodes of illness. Height-for-age thus represents a measure of the long-term effects of malnutrition in a population and does not vary appreciably according to the season of data collection.

The weight-for-height index describes current nutritional status. Children who are below -2 SD from the median of the reference population are considered "wasted" or too thin for their height, a condition reflecting acute or recent nutritional deficit. As with stunting, children whose weight-for-height is below -3 SD of the reference median are considered severely wasted. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of recent episodes of illness. Severe wasting is closely linked to mortality risk and may reflect acute shortage of food.

Weight-for-age is a composite index of weight-for-height and height-for-age and, thus does not distinguish between acute malnutrition (wasting) and chronic malnutrition (stunting). A child can be underweight for his/her age because he/she is stunted, wasted, or both. Children whose weight-for-age is below -2 SD from the median of the reference population are classified as "underweight," and those below -3 SD are classified as severely underweight.

Anthropometric Data Collection

In the TDHS, all children whose mothers were interviewed and who had been born since January 1991 were weighed using a digital scale with an accuracy of 100 grams. Their standing height (for children age 24 months and older) or recumbent length (for children under age 24 months) was also measured using the Shorr height board. Of the 6,188 children (age 0-59 months at the time of the survey) eligible for measurement, 92 percent were weighed and measured (see Table C.3 in Appendix). The reason most commonly reported for not measuring a child was that the child was not at home. Of the children who were both weighed and

measured, there was a very small percentage of children for whom age data were not usable or who were considered to have implausibly low or high values for height-for-age or weight-for-height. The following analysis focuses on the 5,344 children (or 86 percent of children) age 0-59 months, for whom complete age and anthropometric data were collected.

In a population in which children are healthy and well fed, only 2.3 percent of children are expected to fall below -2 SD for each of the three indices, whereas less than 1 percent are expected to fall below -3 SD.

Levels of Childhood Malnutrition

Table 9.5 shows the proportions of children classified as malnourished according to each of the three measures of nutritional status by selected demographic characteristics of the child. Table 9.6 shows the same measures according to socioeconomic characteristics of the mother.

Table 9.5 Nutritional status of children by demographic characteristics

Percentage of children under five years of age who are classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, and mean Z-score, by selected demographic characteristics, Tanzania 1996

	Height-for-age			Weight-for-height			Weight-for-age			
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[1]	Z score	Percentage below -3 SD	Percentage below -2 SD[1]	Z-score	Percentage below -3 SD	Percentage below - 2 SD[1]	Mean Z-score	Number of children
Child's age										
<6 months	2.8	10.7	-0.6	2.4	5.5	0.2	1.4	7.0	-0.2	597
6-11 months	7.3	26.6	-1.2	1.6	6.6	-0.3	7.8	27.1	-1.2	647
12-23 months	20.9	52.3	-2.0	2.1	13.4	-0.7	11.8	40.9	-1.7	1,236
24-35 months	23.2	51.6	-2.0	1.3	6.1	-0.4	10.7	38.1	-1.6	1,018
36-47 months	22.2	51.9	-2.1	0.5	5.0	-0.3	6.4	30.7	-1.5	955
48-59 months	20.6	46.9	-1.9	0.3	4.2	-0.2	4.6	26.3	-1.3	892
Child's sex										
Male	18.6	44.9	-1.8	1.5	8.1	-0.4	8.4	30.8	-1.4	2,727
Female	17.1	41.9	-1.7	1.2	6.4	-0.3	7.1	30.4	-1.3	2,617
Birth order										
1	15.5	43.1	-1.7	2.3	8.3	-0.3	8.1	29.3	-1.3	1,078
2-3	18.0	42.7	-1.7	1.1	7.0	-0.3	7.2	28.4	-1.3	1,758
4-5	18.6	41.5	-1.7	0.9	5.5	-0.3	6.7	28.5	-1.3	1,209
6+	18.8	46.5	-1.9	1.3	8.4	-0.5	9.2	36.8	-1.5	1,299
Previous birth interval										
First birth	15.7	43.2	-1.8	2.3	8.3	-0.3	8.3	29.4	-1.3	1,080
< 24 months	22.6	46.8	-1.9	1.1	6.6	-0.4	8.4	34.8	-1.5	679
24-47 months	18.0	44.3	-1.8	0.9	6.9	-0.3	7.5	30.5	-1.3	2,739
48+ months	16.3	38.3	-1.6	1.7	7.5	-0.4	7.4	29.3	-1.3	846
Total	17.8	43.4	-1.7	1.3	7.2	-0.4	7.8	30.6	-1.4	5,344

Note: Figures are for children born in the period 0-59 months preceding the survey. Each index is expressed in terms of the number of standard deviation (SD) units from the median of the NCHS/CDC/WHO international reference population. Children are classified as malnourished if their z-scores are below minus two or minus three standard deviations (-2 SD or -3 SD) from the median of the reference population.
[1] Includes children who are below -3 SD.

An examination of Table 9.5 on height-for-age suggests that there is considerable chronic malnutrition among Tanzanian children. Overall, 43 percent of Tanzanian children are classified as stunted and 18 percent are severely stunted. Stunting increases sharply from 11 percent among children less than six months old to more than 50 percent among children 12-47 months old. Male children are slightly more likely to be stunted (45 percent) or severely stunted (19 percent) than female children (42 percent and 17 percent, respectively). Stunting is more prevalent among children with a short birth interval.

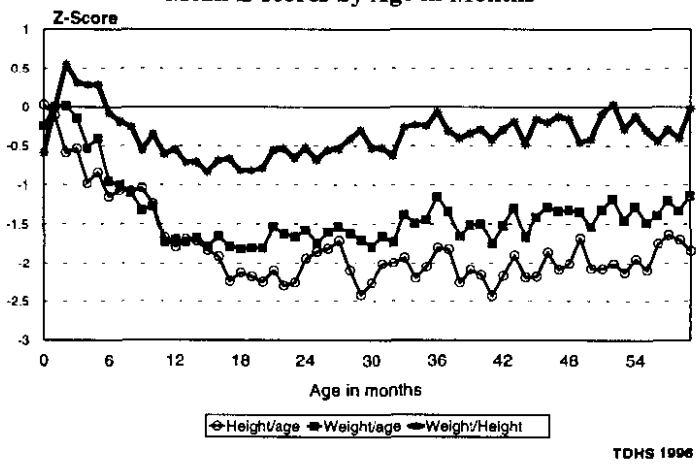
Stunting is more prevalent among children in rural areas than among their urban counterparts on the mainland (Table 9.6). Forty-six percent of rural children are stunted, compared with 33 percent of urban children. The proportion of stunted children is highest in the Iringa region (71 percent) and lowest in the Tabora region (26 percent). The level of mother's education is associated with her children's nutritional status. The proportion of stunted children ranges from 49 percent among children whose mothers have no education to 24 percent among those whose mothers have some secondary education.

Overall, 7 percent of children under five in Tanzania are wasted (low weight-for-height); 1 percent are severely wasted. Variations in the level of wasting by demographic characteristics show that wasting increases from 6 percent among children under six months of age, to 13 percent among children 12-23 months of age, indicating that food supplementation during the weaning period may be inadequate. There are no significant differences in the prevalence of acute malnutrition between rural and urban children on the mainland, however acute malnutrition is highest in Zanzibar. The lowest prevalence of wasting is reported in the Morogoro and Tabora regions (4 percent) and highest in the Coast and Kagera regions (11 percent). Prevalence of wasting among children is inversely related to the educational level of their mothers (Table 9.6).

More than 30 percent of Tanzanian children under five are underweight for their age, which may reflect stunting, wasting, or both. Low weight-for-age is most common during the second year of life (ages 12-23 months). The prevalence of low weight-for-age is higher among children living in rural areas on the mainland and in Zanzibar than among urban children. Underweight children are more common among those whose mothers have less education.

Figure 9.1 shows the distribution of children by age and by the extent to which they deviate from the reference population in terms of the Z-scores for the three anthropometric indices. This shows the remarkable deterioration in nutritional status that begins shortly after birth, continuing through the first year and a half, and then leveling off or improving slightly thereafter to the third birthday.

Figure 9.1
Nutritional Status of Children Under Five Years, Mean Z-scores by Age in Months



Trends in Malnutrition in Tanzania

The anthropometric data collected in the 1996 TDHS are similar to those obtained during the 1991-92 TDHS. Trends in the

Table 9.6 Nutritional status of children by background characteristics

Percentage of children under five years of age who are classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, and mean Z-scores, by selected background characteristics, Tanzania 1996

Background characteristic	Height-for-age			Weight-for-height			Weight-for-age			Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Z score	Percentage below -3 SD	Percentage below -2 SD[1]	Z-score	Percentage below -3 SD	Percentage below - 2 SD[1]	Mean Z-score	
Residence										
Mainland	17.9	43.6	-1.8	1.3	7.1	-0.3	7.7	30.5	-1.3	5,180
Total urban	12.0	32.9	-1.4	1.6	7.6	-0.2	4.1	19.5	-1.0	898
Dar es Salaam city	13.4	31.1	-1.4	1.4	8.8	-0.2	3.5	23.0	-1.1	239
Other urban	11.5	33.5	-1.4	1.7	7.2	-0.1	4.4	18.3	-1.0	659
Total rural	19.2	45.9	-1.8	1.3	7.0	-0.4	8.5	32.9	-1.4	4,282
Zanzibar	14.7	37.1	-1.6	1.8	11.0	-0.6	8.8	33.8	-1.5	163
Region										
Dodoma	23.0	48.1	-2.0	0.5	8.0	-0.4	7.5	34.2	-1.6	210
Arusha	19.8	43.7	-1.7	1.1	7.2	-0.4	9.2	35.1	-1.4	451
Kilimanjaro	14.9	33.5	-1.4	1.2	5.6	-0.2	4.0	21.0	-1.0	246
Tanga	23.2	55.3	-2.1	0.8	4.9	-0.4	8.1	36.2	-1.6	287
Morogoro	19.1	52.7	-2.1	0.9	4.1	-0.1	7.3	25.5	-1.4	238
Coast	23.8	51.7	-2.0	2.1	11.2	-0.4	8.4	34.3	-1.6	82
Dar es Salaam	12.0	30.6	-1.3	1.5	8.1	-0.2	4.2	22.2	-1.0	281
Lindi	31.2	58.6	-2.2	1.3	7.0	-0.4	13.4	41.4	-1.7	92
Mtwara	26.9	58.0	-2.2	0.5	5.9	-0.3	8.7	35.6	-1.6	177
Ruvuma	22.6	53.5	-2.0	0.6	5.2	-0.2	7.1	29.4	-1.4	203
Iringa	35.3	70.5	-2.5	0.9	6.2	-0.4	14.7	48.2	-1.9	268
Mbeya	17.2	46.9	-1.8	2.1	6.2	-0.1	6.8	20.8	-1.2	289
Singida	16.8	38.6	-1.6	1.8	7.0	-0.3	9.8	28.4	-1.2	205
Tabora	8.0	25.7	-1.2	2.7	4.4	-0.1	2.7	14.2	-0.8	129
Rukwa	17.1	42.0	-1.7	1.9	9.7	-0.4	9.7	30.5	-1.4	184
Kigoma	19.2	52.5	-2.0	1.4	7.6	-0.6	7.6	43.1	-1.7	264
Shinyanga	11.0	31.3	-1.4	0.7	6.8	-0.5	5.0	27.8	-1.3	514
Kagera	15.6	41.6	-1.7	3.2	10.8	-0.6	11.2	36.0	-1.5	412
Mwanza	12.7	33.8	-1.5	0.4	7.6	-0.3	6.3	27.0	-1.1	438
Mara	9.7	32.6	-1.4	2.2	8.4	-0.2	5.7	18.9	-1.0	211
Education										
No education	20.8	49.4	-1.9	1.2	8.5	-0.5	10.0	36.9	-1.5	1,541
Primary incomplete	17.6	44.0	-1.8	1.3	7.4	-0.4	9.5	32.9	-1.4	845
Primary complete	16.9	41.2	-1.7	1.4	6.6	-0.3	6.4	27.7	-1.3	2,773
Secondary +	7.5	24.1	-1.0	1.1	5.2	-0.2	2.3	11.9	-0.8	184
Total	17.8	43.4	-1.7	1.3	7.2	-0.4	7.8	30.6	-1.4	5,344

Note: Figures are for children born in the period 0-59 months preceding the survey. Each index is expressed in terms of the number of standard deviation (SD) units from the median of the NCHS/CDC/WHO international reference population. Children are classified as malnourished if their z-scores are below minus two or minus three standard deviations (-2 SD or -3 SD) from the median of the reference population.

[1] Includes children who are below -3 SD.

nutritional status for children under five are presented in Table 9.7. One factor that could not be controlled was the difference in the timing of the surveys—the 1991-92 TDHS fieldwork took place from October 1991 to March 1992, while the 1996 survey was conducted from July to November 1996. Nutritional status is known to be subject to seasonal variations, often deteriorating just before the peak harvest time and improving after harvest; it also varies with fluctuations in disease prevalence. However, it is difficult to assess what effect, if any, the difference timing in data collection between the two surveys might have on the results concerning nutritional status of children.

Results show that the proportion of children under age five who have chronic malnutrition or stunting (low height-for-age) was stable at 43 percent between the two surveys, while acute malnutrition or wasting (low weight-for-height) rose from 6 to 7 percent. Since the change in wasting refers to conditions immediately preceding the two surveys, the overall trend in nutrition using this measure may be misleading. The percentage of children who are underweight (low weight-for-age) increased slightly from 29 to 31 percent.

Table 9.7 Trends in nutritional status of children

Among children under five years of age, the percentage classified as malnourished according to height-for-age, weight-for-height, and weight-for-age, 1991-92 TDHS and 1996 TDHS, Tanzania 1996

Index	1991-92 TDHS	1996 TDHS
Height-for-age		
< -2 SD	42.6	43.4
< -3 SD	16.7	17.8
Weight-for-height		
< -2 SD	6.0	7.2
< -3 SD	1.2	1.3
Weight-for-age		
< -2 SD	28.8	30.6
< -3 SD	7.1	7.8
Number of children	6,097	5,344

9.3 Maternal Nutritional Status

All mothers of children born since January 1991 were eligible to be weighed and measured[1] in the 1996 TDHS. The objective was to obtain a picture of the nutritional status of women of reproductive age, but in considering the cost and length of the survey, a decision was made to limit the anthropometric section to women with young children who would be measured anyway.[2] In reviewing the results of the maternal anthropometric data collection, it is important to remember that the sample of women is not representative of all women age 15-49 and will overrepresent high fertility age groups, for example, women 25-34 years old.

Several measures must be used to assess the nutritional status of women (Krasovec and Anderson, 1991). In this report, two indices are presented: height, and body mass index (BMI). Maternal height is associated with past socioeconomic status and nutritional status in childhood and adolescence. It is related to the risk of difficult delivery, since small stature is often associated with small pelvic size. Short women also often stand the risk of bearing infants with low birth weight. The cut off point below which a woman can be identified as at risk is in the range of 140-150 centimetres (cm).

Table 9.8 shows that the mean height of mothers measured in the 1996 TDHS is 156 cm. Less than 3 percent of mothers are shorter than 145 cm.

In addition to height, the other commonly used index is the BMI, which is derived by dividing the weight in kilograms (kg) by the square height in metres (m^2). This indicator is used to assess thinness or obesity. A cut off point of 18.5 (kg/m^2) has been recommended for defining short term or acute nutritional

[1] The measuring boards and scales used to measure the mothers were the same as those used to collect anthropometric measurements of children.

[2] Interviewers were instructed to weigh and measure all women who had had a birth since January 1991, regardless of whether or not the child was still living.

status, while a level below 16 classifies severe malnutrition (James et al., 1988) which is associated with increased mortality. The results of the 1996 TDHS show that the mean BMI among nonpregnant mothers was 22; 9 percent of mothers had a BMI below the 18.5 cut-off point, reflecting the prevalence of acute malnutrition among nonpregnant women.

Table 9.8 Maternal nutritional status by background characteristics

Among women who had a birth in the five years preceding the survey, percentage of women under 145 centimetres, mean body mass index (BMI) of women, and percentage of women whose BMI is less than 18.5 (kg/m^2), and mean DHS z-score and percentage of Tanzanian mothers who are more than -2 SD below the median of the DHS population, by selected background characteristics, Tanzania 1996

	Height			BMI			BMI (DHS)		
Background characteristics	Mean	Percent-age < 145	Number of women	Mean	Percent-age < 18.5	Number of women	Mean DHS z-score	Z-score below -2 SD	Z-score number
Age									
15-19	155.9	3.0	328	21.5	8.6	272	-0.4	3.4	272
20-24	156.1	3.5	1,122	21.6	9.5	913	-0.4	2.1	911
25-29	156.6	1.8	1,104	22.0	8.5	903	-0.6	4.7	900
30-34	157.0	2.4	791	22.3	7.6	658	-0.7	7.1	657
35-49	156.2	2.9	983	22.2	10.8	883	-1.0	14.4	881
Residence									
Mainland	156.4	2.7	4,198	22.0	9.0	3,524	-0.7	6.6	3,516
Total urban	156.4	2.1	809	23.1	8.1	710	-0.3	4.9	710
Dar es Salaam city	155.6	3.0	227	23.5	7.3	207	-0.2	4.5	207
Other urban	156.7	1.7	582	22.9	8.4	503	-0.4	5.0	503
Total rural	156.4	2.8	3,389	21.7	9.2	2,814	-0.8	7.0	2,806
Zanzibar	155.4	2.9	129	21.4	15.4	105	-0.9	13.1	105
Region									
Dodoma	156.0	2.8	198	21.2	12.2	167	-0.9	10.1	167
Arusha	158.2	1.4	355	22.0	15.4	285	-0.7	10.1	285
Kilimanjaro	156.5	1.6	191	23.0	9.5	168	-0.5	10.1	167
Tanga	154.6	5.0	234	21.2	11.3	196	-0.9	7.8	193
Morogoro	153.3	6.6	212	21.6	6.1	179	-0.8	6.7	179
Coast	153.7	4.8	72	21.8	8.3	62	-0.7	5.6	62
Dar es Salaam	155.5	2.8	267	23.5	7.3	242	-0.2	4.2	242
Lindi	152.9	7.9	89	21.7	8.8	80	-0.8	9.6	79
Mtwara	152.8	6.0	173	20.9	13.8	152	-1.0	9.6	152
Ruvuma	153.7	5.7	171	21.8	4.7	154	-0.8	3.0	154
Iringa	154.5	3.6	234	22.5	6.7	198	-0.7	5.5	198
Mbeya	155.8	2.0	221	22.8	3.2	187	-0.4	1.6	185
Singida	158.3	0.9	165	22.0	6.9	145	-0.7	5.4	145
Tabora	157.8	0.0	108	22.2	5.1	89	-0.5	5.1	89
Rukwa	156.7	2.3	146	22.3	3.0	115	-0.5	2.4	115
Kigoma	156.2	3.4	199	21.1	10.8	168	-0.9	5.7	167
Shinyanga	159.1	0.5	382	21.9	8.2	311	-0.6	5.3	311
Kagera	157.5	1.7	293	21.3	14.3	219	-0.9	12.9	217
Mwanza	158.5	1.1	331	22.2	8.1	275	-0.6	4.0	275
Mara	159.3	0.0	157	22.0	8.3	135	-0.5	5.5	135
Education									
No education	156.3	3.6	1,266	21.6	11.2	1,040	-0.9	9.3	1,039
Primary incomplete	155.7	2.8	698	21.8	10.1	586	-0.8	9.1	586
Primary complete	156.5	2.2	2,197	22.1	8.0	1,856	-0.6	4.8	1,851
Secondary +	158.2	1.4	167	24.3	6.5	147	-0.0	4.0	146
Total	156.4	2.7	4,327	22.0	9.2	3,629	-0.7	6.8	3,621

Note: Table includes only women who had a birth in the five years preceding the survey. The BMI index excludes pregnant women and those who are less than two months postpartum.

Overall, there is very little variation by background characteristics in maternal height and body mass measures among Tanzanian women. The percentage of women with height below 145 centimetres is higher among women in the Lindi region (8 percent) compared to other regions. Older women (35-49 years old), women from Zanzibar, women from the Arusha and Kagera regions, and women with low or no education are more likely to fall below the 18.5 BMI measure than other women.

CHAPTER 10

MATERNAL MORTALITY

Maternal mortality is recognised as a serious health problem in developing countries and Tanzania is no exception. These countries are characterised by high fertility, high incidence of infectious diseases, poverty, and scarcity of health services, which lead to high maternal mortality, among other things.

In Tanzania there have been deliberate efforts in the past to obtain maternal mortality estimates from small studies and hospital-based studies. Some estimates were derived from records of health facilities which also contained information about causes of deaths. Until now, such studies have estimated maternal mortality in Tanzania at 200-400 deaths per 100,000 live births (Ministry of Health, 1996). However, hospital records can over or underestimate maternal mortality. On the one hand, hospital records do not include those who do not deliver in hospitals (e.g., the poor, those in remote areas who are less likely to deliver babies in hospitals). On the other hand, hospital records are likely to overstate the true maternal mortality rate because women who develop complications during pregnancy or delivery are more likely to deliver in a hospital.

The estimates presented in this chapter are therefore important; they fill a vacuum for reliable, national estimates of maternal mortality. However, these estimates have no parallel against which they can be compared. Therefore, there is a need for further national-level investigation of this problem.

In the 1996 TDHS, both female and male respondents were requested to list all their siblings, that is, all the children born to their mother starting with the first born, and whether or not each of these siblings was still alive at the time of survey. The current age was collected for those who were still alive, and additional information was sought on the year of death and age at death of deceased siblings.

To establish whether deaths were maternity-related, respondents were further asked questions for all sisters who died at age 12 or older: "Was [NAME OF SISTER] pregnant when she died?"; and if not, "Did she die during childbirth?"; and if not, "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 person-years of exposure to the risk of mortality for the adult population being investigated.

The direct approach used in this chapter to estimate adult and maternal mortality maximises use of data collected in the 1996 TDHS on the survivorship, the age of surviving siblings, the age at death of siblings who died, and the number of years since the sibling died. This allows the data to be aggregated to determine the number of person-years of exposure to mortality and the number of deaths which have occurred to siblings in a particular calender year. According to Rutenberg and Sullivan (1991), it is possible to compute maternal mortality rates by dividing maternal (or all female or male adult) deaths by person-years of exposure.

10.1 Assessment of Data Quality

Techniques presented in this report have been employed under the presumption of the existence of both accurate and complete data pertaining to the number of siblings, their survival status, and the circumstances concerning the cause of their deaths. Hence, it is important to see at the outset how well these data meet this assumption. A brief description of data quality will be presented here and a more detailed discussion appears in Appendix C. One measure of quality is the completeness of information on siblings. Overall, the TDHS data on siblings is nearly complete. The distribution of the year of birth of respondents in

relation to their[1] siblings is another way to measure the quality of the data on maternal mortality. The median year of birth of respondents (1969) almost coincides with the median year of birth of siblings (1970), implying that there is no substantial underreporting of siblings (Appendix Table C.8). The sex ratio of reported siblings (the ratio of brothers to sisters) was a little low (100.7), possibly showing slight underreporting of brothers (Appendix Table C.9).

10.2 Adult Mortality

Another way of assessing the quality of maternal mortality data is to look at estimates of adult mortality on the theory that if the overall mortality estimates show a generally stable and plausible pattern, this gives greater weight to the maternal mortality estimates derived thereafter. Estimates of male and female adult mortality can be obtained from information collected in the sibling history. Age-specific death rates are computed by dividing the number of deaths in each age group by the total person-months of exposure in that age group during the specified reference period. Age-specific death rates are then adjusted by the current age distribution of the *de facto* female population age 15-49 from the household schedule, by taking the sum of each age-specific mortality rate multiplied by the percentage of women in that age group, to obtain an overall age-standardized female adult mortality rate. It is assumed that the age distribution of respondents is the same as that of siblings. The same procedure is applied to obtain the male adult mortality rate using the age distribution of the male population obtained from the household schedule. Table 10.1 presents age-specific mortality estimates for females and males for the period 0-9 years before the survey.

In total, female respondents enumerated 47,727 siblings, of whom 23,775 were sisters and 23,952 were brothers. The number of sibling deaths during 1987-1996 is fairly small. Age-specific rates are based on relatively few occurrences and therefore subject to sampling variability. As such, it is preferable to aggregate the data over the age range 15-49. The number of reported female and male deaths in the age group 15-49 were 501 and 601, respectively. The female adult mortality rate is 21 percent lower than the male adult mortality rate.

Table 10.1 Adult mortality rates

Direct estimates of female and male adult mortality for the period 0-9 years prior to the survey, Tanzania 1996

Age	Deaths	Exposure	Mortality rates
WOMEN			
15-19	64	30,867	2.06
20-24	94	30,743	3.05
25-29	108	26,243	4.11
30-34	84	20,220	4.13
35-39	70	13,980	4.99
40-44	51	8,239	6.24
45-49	30	4,356	6.88
15-49	501	134,649	3.93[a]
MEN			
15-19	57	29,599	1.92
20-24	90	30,506	2.95
25-29	97	26,734	3.64
30-34	130	20,649	6.32
35-39	103	14,061	7.31
40-44	75	8,095	9.26
45-49	49	4,076	12.00
15-49	601	133,719	4.98[a]

Note: Mortality rates are expressed per 1,000 population.
[a] Age-adjusted rate.

The observed rates may be taken to be reasonably stable. For establishing their reliability it is useful to compare them to measures generated from other sources such as the 1988 Population Census (Bureau of Statistics, 1994). This comparison reveals that the adult mortality rates calculated from the 1996 TDHS data are generally too low compared to the 1988 Population Census data (not shown). These findings suggest that underreporting of deceased siblings in the TDHS data.

[1] Although data were collected from male respondents, the analysis here is restricted to female respondents

10.3 Maternal Mortality

The age specific estimates of maternal mortality are presented in Table 10.2. These are derived through the reported survivorship of sisters. Age-specific mortality rates are calculated by dividing the number of maternal deaths by years of exposure. The overall rate for women 15-49 is standardized by the age distribution of the survey respondents. Maternal deaths are defined as any death that occurred during pregnancy, childbirth, or within two months after the birth or termination of a pregnancy.

Table 10.2 Direct estimates of maternal mortality

Direct estimates of maternal mortality for the period 0-9 years prior to the survey, Tanzania 1996

Age	Maternal deaths	Exposure	Mortality rates[1]	Proportion of maternal deaths to female deaths
15-19	17	30,867	0.541	0.266
20-24	38	30,743	1.238	0.404
25-29	31	26,243	1.165	0.287
30-34	20	20,220	0.996	0.238
35-39	18	13,980	1.260	0.257
40-44	6	8,239	0.751	0.118
45-49	8	4,356	1.769	0.267
15-49	137	134,649	1.043	0.274
General Fertility Rate (GFR)			0.197	
Maternal Mortality Ratio (MMR)[2]			529	

[1] Expressed per 1,000 woman-years of exposure.
[2] Expressed per 100,000 live births; calculated as the maternal mortality rate divided by the general fertility rate.

In all, the number of maternal deaths for the period 1987-1996 is 137. The general pattern is of high maternal mortality particularly in the 20-24 and 25-29 age groups. This is probably due to the fact that more pregnancies occur in these age groups. However, the age-specific pattern should be interpreted with caution because of the small number of events. The maternal mortality rate, which is the annual number of maternal deaths per 1,000 women age 15-49 for the period 1987-1996 is 1.043. Maternal deaths accounted for 27 percent of all deaths to women age 15-49 during the 10 years preceding the survey.

The maternal mortality rate is conventionally converted to a maternal mortality ratio and expressed per 100,000 lives births by dividing the age-standardised maternal mortality rate by the age-standardised general fertility rate for the same reference period. The advantage of this type of conversion is that it highlights the obstetric risk, which has a high programmatic significance. Thus, for Tanzania between 1987-1996, the maternal mortality ratio is estimated at 529. In other words, for every 1,000 live births in Tanzania during this period, 5 women died of pregnancy-related causes.

CHAPTER 11

SEXUAL ACTIVITY AND KNOWLEDGE OF AIDS

11.1 Introduction

AIDS and HIV infection have been identified as serious health and socioeconomic problems in Tanzania. The AIDS virus was probably introduced in Tanzania in the early 1980s. The first three cases of AIDS were reported in 1983 in the Kagera region. Since then, cases continued to increase, and by 1986 all regions of the country had reported AIDS cases. Due to its fast spread, the control of AIDS has become a top government priority. The government set up the National Aids Control Programme (NACP) under the Ministry of Health.

It is estimated that about 1.2 million Tanzanians are infected with HIV, while about 400,000 have already developed AIDS (WHO, 1995). Data received from 10 antenatal clinics throughout the country show that HIV prevalence ranges up to 33 percent. The overall cumulative case rate by 1995 was 221 per 100,000 people, 228 for men and 214 for women. The highest case rates of more than 900 per 100,000 are in the age group 30-34 years among men and more than 700 per 100,000 in the same age group among women. Children age 10-14 have the lowest case rates (5.7 per 100,000 for boys and 8.0 per 100,000 for girls). The overall male-female case ratio and case rate ratio[1] were 1.01 and 1.07, respectively, showing a slight overall female case load during 1995 (NACP, 1996). Although all regions are affected, Dar es Salaam, Mbeya and Kagera are the most affected regions. These three regions have kept the same positions in the order of reporting high number of AIDS cases for the past four years.

Other sexually transmitted diseases (STD), apart from AIDS, have been identified as co-factors in HIV transmission. In 1995, there were 375 STD cases reported from 54 STD sentinel sites and in total, 28,463 STD cases were recorded up to 1995 (NACP, 1996). On average, 2,372 cases were reported in a month, ranging from 11,864 cases found in men who accounted for 42 percent compared with 58 percent in women. The largest diagnostic category was Genital Discharge Syndrome (23 and 27 percent for males and females, respectively).

The 1996 TDHS included questions to assess the knowledge of STDs, the proportion of respondents who have had an STD, whether they sought advice or treatment for the disease, and whether they took measures to protect their sexual partners. The TDHS also included questions on AIDS to assess the knowledge and attitudes of respondents regarding transmission mechanisms and prevention of infection with the AIDS virus. Female and male respondents were asked if they had heard of AIDS and if so, the source from which they had received the most information. To assess awareness, respondents were asked to name the modes of transmission of the AIDS virus. They were also asked if they thought it was possible to prevent AIDS and if so, how, and whether they had changed their sexual behaviour to prevent getting AIDS and if so, how.

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[1]The case rates have been calculated from the reported cumulative number of AIDS cases (as the numerator) and the corresponding total regional populations after projection (as the denominator).

Male-female case ratio = (Total male AIDS cases/Total female AIDS cases).

Male-female rate ratio = (Male case rate /Female case rate) (NACP, 1996).

11.2 Sexual Partners

Given the evidence that the vast majority of HIV infections in Tanzania are contracted through heterosexual contact, information on sexual behaviour is important in designing and monitoring intervention programmes to control the spread of the disease. Both male and female respondents were asked questions about sexual partners with whom they had sex in the 12 months preceding the survey. Respondents were asked about their spouses, and regular and nonregular sexual partners. Married respondents were asked whether they had sexual partners other than their spouse and if so, how many regular partners they had. They also were asked to state when they last had sexual intercourse with their spouse. Unmarried respondents were asked whether they had a regular sexual partner and if so, how many regular partners they had. They also were asked to state when they last had sex with a regular partner. Both married and unmarried respondents were also asked whether they had sexual intercourse with someone other than a regular partner within 12 months before the survey. They were then asked how many people they had sex with and when the most recent sexual encounter with a nonregular partner occurred.

Tables 11.1.1 and 11.1.2 present data on the number of sexual partners respondents had in the 12 months preceding the survey. The vast majority of currently married women (95 percent) had not had sex with anyone other than their spouse (or have not had sex at all) in the 12 months preceding the survey. In the 1994 TKAPS, the figure was 93 percent. Among married women, sex outside marriage is more likely to be higher for women from the Mtwara, Lindi, and Coast regions than other regions. Two-thirds (65 percent) of the unmarried women were not sexually active in the 12 months preceding the survey. Unmarried women living in Lindi region were most likely to have had more than one partner than their counterparts.

Seventy-four percent of married men reported having only one sexual partner in the previous 12 months. Only 7 percent of married men reported abstaining from sex in the past 12 months, whereas 19 percent reported having sex with two or more women. Among married men, sex outside marriage is higher among 20-29 age groups, among men married 0-4 years, among those living in the Southern zone, and among those who have some education. Forty percent of unmarried men had been sexually active in the previous 12 months. Twenty percent had one partner and about the same percent had two or more partners. A higher proportion of unmarried men had more than one partner among those age 25-29, among men living in urban areas, living in Coastal and Southern zones, and those with higher education.

11.3 Awareness of Sexually Transmitted Diseases

Table 11.2 shows the percentage of women and men who spontaneously mentioned knowing about specific STDs, by various background characteristics.

AIDS is by far the most widely known STD among respondents. Without probing, more than 80 percent of women and men cited AIDS. The next most commonly reported STD was gonorrhoea, with 57 percent of women and 78 percent of men spontaneously reporting knowledge of the disease. This gender difference in knowledge also occurs regarding knowledge of syphilis, with men more likely (72 percent) than women (51 percent) to mention this disease. Fifteen percent of women and 7 percent of men could not cite a single STD.

Both women and men are less likely to be informed about STDs if they lack formal education, if they live in rural areas on the mainland or live in Zanzibar, and if they are younger (15-19 years). Differences by regions were also observed; lack of knowledge of STDs was lowest in the Arusha region (27 percent of women and 14 percent of men could not cite a single STD). Being formerly or currently married and, if never married, having had sex significantly contributes to having knowledge of STDs.

Table 11.1.1 Number of sexual partners: women

Percent distribution of currently married and unmarried women, by number of persons with whom they had sexual intercourse in the past 12 months, according to background characteristics, Tanzania 1996

Background characteristic	Currently married women								Unmarried women							
	Number of partners (including spouse)								Number of partners							
	0	1	2-3	4+	Missing/ Don't know	Total	Mean	Number of women	0	1	2-3	4+	Missing/ Don't know	Total	Mean	Number of women
Age																
15-19	4.1	90.2	5.0	0.1	0.6	100.0	1.0	401	76.8	19.4	2.7	0.5	0.5	100.0	0.3	1,331
20-24	3.6	91.2	4.3	0.6	0.4	100.0	1.0	1,131	52.8	39.0	5.0	1.9	1.3	100.0	0.6	545
25-29	5.2	89.0	5.0	0.4	0.4	100.0	1.0	1,184	44.2	47.7	5.3	0.3	2.4	100.0	0.6	256
30-39	6.6	87.4	5.1	0.4	0.5	100.0	1.0	1,687	50.3	42.6	4.6	1.2	1.3	100.0	0.6	319
40-49	7.7	88.5	3.0	0.1	0.6	100.0	1.0	1,008	68.0	26.1	3.6	1.0	1.4	100.0	0.4	257
Marital duration																
Never married	NA	NA	NA	NA	NA	NA	NA	NA	69.9	25.7	2.7	0.9	0.9	100.0	0.4	1,887
0-4	3.6	92.0	3.7	0.4	0.3	100.0	1.0	1,312	53.6	36.7	7.8	1.3	0.6	100.0	0.6	141
5-9	4.4	89.4	5.4	0.4	0.4	100.0	1.0	1,203	40.0	49.6	8.0	1.3	1.2	100.0	0.7	154
10-14	7.6	85.8	5.5	0.2	0.8	100.0	1.0	919	47.6	41.9	7.8	0.7	2.0	100.0	0.6	128
15+	7.0	88.1	4.1	0.4	0.5	100.0	1.0	1,977	60.7	32.6	4.1	0.9	1.7	100.0	0.5	399
Residence																
Mainland	5.8	88.8	4.6	0.4	0.5	100.0	1.0	5,245	64.1	30.0	3.8	0.9	1.1	100.0	0.4	2,635
Total urban	3.7	88.8	6.2	0.5	0.7	100.0	1.1	1,073	56.1	36.5	4.7	1.4	1.3	100.0	0.5	738
Dar es Salaam city	3.7	86.1	9.0	0.5	0.7	100.0	1.1	340	56.4	36.0	4.9	2.3	0.4	100.0	0.6	223
Other urban	3.7	90.1	5.0	0.5	0.7	100.0	1.0	733	56.0	36.7	4.6	1.1	1.7	100.0	0.5	515
Total rural	6.3	88.7	4.2	0.3	0.4	100.0	1.0	4,172	67.2	27.5	3.5	0.7	1.0	100.0	0.4	1,897
Zanzibar	3.2	94.6	2.0	0.0	0.3	100.0	1.0	166	93.6	6.4	0.0	0.0	0.0	100.0	0.1	73
Region																
Dodoma	7.9	83.0	7.9	0.0	1.3	100.0	1.0	258	66.3	30.2	2.3	0.0	1.2	100.0	0.4	97
Arusha	11.8	86.0	0.9	0.3	0.9	100.0	0.9	403	68.2	25.0	2.7	0.7	3.4	100.0	0.3	186
Kilimanjaro	4.0	94.6	0.9	0.0	0.4	100.0	1.0	221	70.0	24.1	2.4	0.0	3.5	100.0	0.3	169
Tanga	3.3	88.0	6.2	0.0	2.5	100.0	1.0	282	64.7	24.4	7.7	1.3	1.9	100.0	0.5	181
Morogoro	4.6	91.6	3.0	0.4	0.4	100.0	1.0	257	62.9	32.9	3.6	0.0	0.7	100.0	0.4	151
Coast	4.1	81.9	11.7	1.8	0.6	100.0	1.2	98	51.9	34.9	8.5	4.7	0.0	100.0	0.8	61
Dar es Salaam	3.6	87.3	8.1	0.4	0.6	100.0	1.1	399	55.8	37.3	4.5	2.1	0.3	100.0	0.6	246
Lindi	11.4	72.4	11.9	3.3	1.0	100.0	1.2	123	43.5	41.7	13.0	1.9	0.0	100.0	0.8	63
Mtwara	12.3	73.7	11.7	1.6	0.6	100.0	1.1	248	56.4	30.1	8.3	3.0	2.3	100.0	0.7	107
Ruvuma	8.3	83.4	7.0	1.0	0.3	100.0	1.0	205	44.4	49.0	4.6	2.0	0.0	100.0	0.7	100
Iringa	17.3	81.9	0.8	0.0	0.0	100.0	0.8	291	78.8	19.2	1.4	0.7	0.0	100.0	0.3	175
Mbeya	4.7	91.5	3.3	0.5	0.0	100.0	1.0	318	69.9	25.2	4.9	0.0	0.0	100.0	0.4	155
Singida	5.9	88.9	4.4	0.4	0.4	100.0	1.0	194	71.0	23.4	1.6	2.4	1.6	100.0	0.4	89
Tabora	4.3	87.0	8.7	0.0	0.0	100.0	1.1	157	58.3	31.7	8.3	1.7	0.0	100.0	0.6	68
Rukwa	0.8	93.4	5.4	0.4	0.0	100.0	1.1	177	54.3	41.5	2.1	2.1	0.0	100.0	0.5	64
Kigoma	4.5	94.3	1.2	0.0	0.0	100.0	1.0	233	85.4	11.4	2.4	0.8	0.0	100.0	0.2	117
Shinyanga	1.2	95.3	3.1	0.0	0.4	100.0	1.0	464	65.3	30.6	3.3	0.0	0.8	100.0	0.4	221
Kagera	2.0	95.6	2.4	0.0	0.0	100.0	1.0	337	78.5	21.5	0.0	0.0	0.0	100.0	0.2	130
Mwanza	1.9	96.7	1.4	0.0	0.0	100.0	1.0	395	46.9	50.0	1.0	0.0	2.1	100.0	0.5	177
Mara	5.6	87.3	6.6	0.5	0.0	100.0	1.0	183	70.0	27.5	2.5	0.0	0.0	100.0	0.3	74
Educational																
No education	7.1	88.5	3.7	0.4	0.4	100.0	1.0	1,829	62.2	32.1	3.5	1.4	0.7	100.0	0.5	488
Primary incomplete	5.7	88.0	5.3	0.6	0.4	100.0	1.0	921	73.4	21.3	3.4	1.0	0.8	100.0	0.3	710
Completed primary	5.0	89.2	5.0	0.3	0.5	100.0	1.0	2,461	61.2	32.4	4.3	0.7	1.5	100.0	0.5	1,270
Secondary +	2.4	94.3	2.4	0.0	0.8	100.0	1.0	200	64.8	31.9	2.3	0.7	0.3	100.0	0.4	241
Total	5.7	88.9	4.5	0.4	0.5	100.0	1.0	5,411	64.9	29.4	3.7	0.9	1.0	100.0	0.4	2,709

NA = Not applicable.

Table 11.1.2 Number of sexual partners: men

Percent distribution of currently married and unmarried men, by number of persons with whom they had sexual intercourse in the past 12 months, according to background characteristics, Tanzania 1996

Background characteristic	Currently married men								Unmarried men							
	Number of partners (including spouse)								Number of partners							
	0	1	2-3	4+	Missing/ don't know	Total	Mean	Number of men	0	1	2-3	4+	Missing/ don't know	Total	Mean	Number of men
Age																
15-19	*	*	*	*	*	100.0	*	6	73.6	13.7	8.7	3.3	0.6	100.0	0.6	482
20-24	9.0	52.1	22.1	14.8	2.0	100.0	2.1	91	45.5	26.9	20.1	6.5	1.0	100.0	1.2	280
25-29	6.2	68.3	19.7	4.8	1.0	100.0	1.4	196	33.9	26.1	17.4	17.2	5.5	100.0	1.9	105
30-39	5.9	74.1	14.1	4.9	1.1	100.0	1.4	463	44.1	21.1	16.5	10.4	7.9	100.0	1.5	60
40-49	6.8	75.3	13.7	3.6	0.6	100.0	1.3	332	(60.1)	(10.8)	(11.9)	(13.1)	(4.0)	100.0	(1.1)	23
50-59	6.6	85.7	6.8	0.9	0.0	100.0	1.1	200	*	*	*	*	*	100.0	*	17
Marital duration																
Never married	NA	NA	NA	NA	NA	NA	NA	NA	60.4	19.2	13.3	5.7	1.4	100.0	0.9	851
0-4	7.1	64.1	20.0	7.5	1.3	100.0	1.6	293	(44.0)	(21.3)	(20.0)	(13.2)	(1.6)	100.0	(1.5)	39
5-9	4.6	74.5	14.1	4.7	2.1	100.0	1.3	275	*	*	*	*	*	100.0	*	29
10-14	6.8	73.1	14.7	5.4	0.0	100.0	1.5	219	*	*	*	*	*	100.0	*	22
15+	7.2	79.2	10.9	2.6	0.2	100.0	1.2	501	(49.8)	(23.1)	(10.2)	(16.9)	(0.0)	100.0	(1.4)	27
Residence																
Mainland	6.6	73.2	14.6	4.8	0.8	100.0	1.4	1,253	57.3	20.1	14.0	6.9	1.8	100.0	1.0	934
Total urban	3.9	73.9	17.3	3.9	1.0	100.0	1.3	260	51.9	21.8	18.4	6.3	1.6	100.0	1.1	248
Dar es Salaam city	7.6	64.4	17.4	8.3	2.3	100.0	1.5	83	34.3	34.3	21.4	8.6	1.4	100.0	1.4	88
Other urban	2.2	78.3	17.3	1.9	0.4	100.0	1.2	177	61.6	14.9	16.8	5.0	1.7	100.0	0.9	160
Total rural	7.3	73.1	13.8	5.0	0.8	100.0	1.4	992	59.2	19.5	12.3	7.1	1.9	100.0	1.0	686
Zanzibar	3.6	90.5	4.3	0.0	1.5	100.0	1.0	35	89.5	8.2	2.2	0.0	0.0	100.0	0.1	33
Zone																
Coastal	6.1	70.2	17.2	4.6	1.9	100.0	1.4	268	48.7	23.6	20.5	5.4	1.7	100.0	1.1	240
Northern highlands	7.9	80.4	6.6	4.2	0.8	100.0	1.3	146	58.4	21.9	10.0	7.0	2.7	100.0	1.0	129
Lake	2.7	76.4	15.6	4.4	0.8	100.0	1.4	437	58.1	19.3	15.2	7.0	0.4	100.0	1.0	320
Central	7.8	71.7	17.9	2.6	0.0	100.0	1.3	101	67.6	16.2	6.4	7.1	2.7	100.0	0.8	75
Southern highlands	9.2	84.1	2.9	3.7	0.0	100.0	1.1	186	79.8	12.4	3.9	3.8	0.0	100.0	0.6	122
Southern	12.9	53.9	24.4	8.2	0.6	100.0	1.6	149	47.4	19.9	13.1	12.0	7.5	100.0	1.6	82
Education																
No education	7.0	80.3	8.4	4.3	0.0	100.0	1.2	213	66.6	11.4	12.2	6.4	3.4	100.0	1.0	92
Primary incomplete	7.2	75.2	13.9	3.3	0.4	100.0	1.3	342	75.0	13.6	5.9	4.2	1.2	100.0	0.6	322
Primary complete	6.4	70.3	16.4	5.6	1.2	100.0	1.5	612	48.4	23.8	18.3	7.8	1.6	100.0	1.2	454
Secondary +	4.3	75.2	14.8	4.2	1.5	100.0	1.3	121	42.8	28.1	17.8	8.8	2.6	100.0	1.2	100
Total	6.5	73.7	14.3	4.6	0.8	100.0	1.4	1,288	58.4	19.7	13.5	6.6	1.8	100.0	1.0	968

Note: Figures in parentheses are based on 25-49 men; and asterisk indicates that a figure is based on fewer than 25 men and has been suppressed.
NA = Not applicable.

Table 11.2 Knowledge of STDs

Percent of respondents who know of specific sexually transmitted diseases according to background characteristics, Tanzania 1996

Background characteristic	Women							Men						
	Syphilis	Gonorrhoea	AIDS	Genital warts	Other	Don't know any	Number of women	Syphilis	Gonorrhoea	AIDS	Genital warts	Other	Don't know any	Number of men
Age														
15-19	35.5	40.1	71.6	0.5	4.2	25.2	1,732	49.6	57.2	73.6	1.4	3.9	17.9	488
20-24	55.9	61.6	83.1	1.5	6.7	11.8	1,676	74.7	78.5	80.8	4.6	6.8	4.3	371
25-29	57.9	64.0	84.0	0.5	6.7	10.8	1,440	83.7	84.0	84.8	2.5	8.6	4.1	301
30-39	57.0	63.7	83.8	1.4	6.5	11.6	2,006	81.1	86.7	87.6	3.0	7.7	4.0	523
40-49	50.7	58.2	80.5	0.8	6.2	15.4	1,265	78.2	86.5	90.7	4.0	7.5	1.9	355
50-59	NA	NA	NA	NA	NA	NA	NA	73.3	77.8	85.2	0.7	8.1	5.4	218
Marital status														
Currently in union	52.9	59.4	81.9	1.0	6.6	13.6	5,411	80.2	84.9	88.8	3.2	7.8	3.0	1,288
Formerly in union	60.1	69.2	85.2	1.4	8.9	9.5	822	79.7	83.0	86.3	0.5	12.7	2.9	117
Never married	43.2	46.5	74.9	0.7	3.3	21.4	1,887	59.3	66.0	74.8	2.5	4.7	13.5	847
Had sex	60.0	64.2	84.3	1.0	3.9	10.6	839	69.9	78.7	80.3	4.1	5.6	6.1	501
Never had sex	29.9	32.3	67.4	0.5	2.8	30.0	1,048	43.9	47.5	66.7	0.2	3.5	24.1	346
Residence														
Mainland	52.4	58.2	80.6	1.0	6.2	14.9	7,881	73.6	78.2	83.1	2.9	7.1	6.8	2,187
Total urban	68.4	73.8	88.7	1.1	6.3	6.0	1,811	81.5	85.6	83.1	5.3	5.6	3.7	509
Dar es Salaam city	65.0	76.4	92.3	1.1	3.9	3.8	563	77.6	84.6	83.1	8.1	8.1	1.5	171
Other urban	69.9	72.6	87.1	1.1	7.4	7.0	1,248	83.4	86.1	83.2	3.8	4.4	4.8	338
Total rural	47.6	53.6	78.2	0.9	6.2	17.5	6,070	71.2	76.0	83.1	2.1	7.5	7.7	1,678
Zanzibar	17.3	30.9	80.3	1.1	0.2	19.0	239	33.9	61.5	89.7	0.0	0.0	10.3	69
Pemba	12.2	17.3	71.9	2.0	0.0	28.1	92	13.0	59.3	96.3	0.0	0.0	3.7	28
Unguja	20.5	39.3	85.5	0.6	0.3	13.3	148	48.1	63.0	85.2	0.0	0.0	14.8	41
Regions														
Dodoma	37.8	46.7	73.3	0.6	3.5	20.3	355	42.1	62.1	79.3	0.0	4.3	12.9	96
Arusha	43.5	50.1	66.3	0.9	1.3	27.1	589	55.3	62.8	75.5	1.1	2.1	13.8	156
Kilimanjaro	59.0	68.7	84.7	0.3	0.5	13.7	390	71.8	80.0	85.1	0.5	1.0	8.2	119
Tanga	46.0	63.3	76.9	0.3	4.5	20.4	464	61.3	74.7	85.3	4.0	8.0	8.0	108
Morogoro	50.7	56.8	84.9	0.0	1.1	12.5	408	63.6	72.0	86.7	0.0	2.8	8.4	95
Coast	56.7	71.8	92.1	1.4	5.8	6.1	159	77.4	88.7	80.6	0.0	16.1	6.5	45
Dar es Salaam	63.6	74.9	91.8	1.0	4.1	4.2	646	77.3	83.6	82.6	8.2	9.9	2.0	191
Lindi	65.4	71.4	91.2	0.0	15.4	6.6	187	93.0	98.6	97.2	1.4	12.7	1.4	54
Mtwara	56.2	67.1	84.4	0.2	18.6	12.7	355	87.1	94.1	94.1	1.0	19.8	4.0	96
Ruvuma	62.9	76.6	83.7	0.4	2.8	10.5	305	78.4	90.2	90.2	1.0	17.6	1.0	82
Iringa	58.1	47.6	77.6	1.3	4.9	14.9	466	73.0	72.3	83.9	0.7	13.9	5.1	100
Mbeya	62.1	64.6	77.4	0.3	26.1	14.0	473	88.9	81.9	76.4	15.3	8.3	9.7	137
Singida	53.6	65.2	82.5	0.3	1.0	16.0	283	72.6	86.9	88.1	6.0	2.4	3.6	80
Tabora	51.5	55.6	82.8	3.5	4.5	13.6	225	61.1	68.5	83.3	5.6	0.0	5.6	82
Rukwa	53.3	66.0	74.2	0.0	10.2	19.5	242	84.6	82.1	85.9	2.6	12.8	5.1	71
Kigoma	34.3	47.4	78.7	1.4	1.9	19.6	351	77.1	67.1	90.0	2.9	1.4	4.3	95
Shinyanga	63.5	60.8	78.4	0.5	9.1	14.7	686	78.7	78.7	78.7	0.6	7.9	9.1	202
Kagera	34.9	29.9	86.6	5.3	0.7	13.4	467	58.0	59.4	89.9	0.0	4.3	5.8	139
Mwanza	51.9	44.8	77.4	0.6	4.8	16.5	573	91.0	93.6	73.1	0.0	3.8	5.1	176
Mara	37.9	59.9	83.0	1.1	8.3	11.6	257	85.5	85.5	81.8	1.8	3.6	10.9	64
Education														
No education	40.8	44.6	70.3	0.8	6.2	24.8	2,316	59.8	65.3	72.5	1.7	9.9	14.3	304
Primary incomplete	44.9	50.0	78.2	1.0	5.7	18.4	1,630	65.9	69.8	81.7	2.3	6.6	10.5	664
Primary complete	58.6	66.1	87.2	1.1	6.6	8.8	3,732	76.8	83.1	86.0	2.7	6.5	3.8	1,066
Secondary +	69.7	78.7	87.9	0.7	2.2	3.0	441	87.8	92.4	90.5	5.9	5.1	0.7	222
Total	51.4	57.4	80.6	1.0	6.1	15.0	8,120	72.4	77.7	83.3	2.8	6.9	6.9	2,256

NA = Not applicable.

11.4 Prevalence of Sexually Transmitted Diseases

Respondents were asked whether they had had any sexually transmitted disease in the 12 months preceding the survey. As Table 11.3 shows, 2 percent of women and 8 percent of men reported having an STD in the year preceding the survey. These levels are likely to be underestimates of the true prevalence for two reasons. First, many STD cases are unrecognised and perhaps more importantly, many respondents fail to report a recent STD because of the social stigma.

Those who report having an STD are more likely to be in the more sexually active age groups (20 - 39) and to have been formerly married than currently married or never married. Urban men are more likely to have had an STD than their rural counterparts on the mainland. Men from the Mtwara region and women from the Rukwa region are more likely to have had an STD than respondents from other regions. The prevalence of STDs has remained the same for women and has increased from 4 to 8 percent for men since the 1994 TKAPS.

Table 11.4 presents information on the 178 women and 174 men who report having had an STD in the 12 months preceding the survey. The vast majority of respondents (84 percent of both women and men) who report having any STD sought treatment, but a smaller proportion of men (58 percent) than women (83 percent) informed their partners of the infection. When asked what, if anything, was done to prevent infecting the respondent's partner, 7 percent of women and 18 percent of men said that they did nothing, while 38 percent of women and 5 percent of men reported that their partners were already infected. One-fourth of the women who had an STD said they avoided sex, another fourth (24 percent) said that they took medicine, and less than 1 percent reported using condoms. Among men who reported having had an STD, 52 percent mentioned that they avoided sex, while 18 percent took medicine. Four percent of men said they used condoms to avoid infecting their partners.

11.5 AIDS Knowledge and Awareness

Dissemination of AIDS information is a joint effort among government agencies such as the National Aids Control Programme, nongovernment organisations, and donor agencies. The messages channeled to the public include information about basic transmission modes and prevention strategies. Respondents in the 1996 TDHS were asked about sources of information from which they had learned most about AIDS.

Awareness and Sources of AIDS Information

Tables 11.5.1 and 11.5.2 show that nearly all women (97 percent) and men (99 percent) in Tanzania know of AIDS. Similar to the findings in the 1994 TKAPS, the most common sources of information mentioned are radio, and friends, or relatives with 64 percent of women and 87 percent of men citing radio as a source, and 65 percent of women and 55 percent of men mentioning friends or relatives as a source of AIDS information (Figure 11.1). Men are more likely than women to cite newspapers and pamphlets or posters as sources of AIDS information. On the other hand, women are more likely to receive information about AIDS from health workers than men. Religious institutions such as churches and mosques are also sources of information on AIDS, as are schools. About 7-9 percent of respondents have received information from religious institutions or from school. Respondents from the city of Dar es Salaam tend to receive information about AIDS more from radio, television, newspapers, and pamphlets than other urban and rural respondents. These media are also more widely cited as sources of AIDS information by more educated women and men.

Table 11.3 Self-reporting of sexually transmitted diseases in the past year

Percent of respondents who report having sexually transmitted diseases (STD) during the 12 months prior to the survey, by specific sexually transmitted disease, and background characteristics, Tanzania 1996

	Women							Men							
Background characteristic	Any STD	Syphilis	Gonorrhoea	AIDS	Genital warts	Other	Number of women	Any STD	Syphilis	Gonorrhoea	Genital warts	Discharge from penis	Sore/ ulcer on penis	Other	Number of men
Age															
15-19	0.8	0.4	0.4	0.0	0.0	0.0	1,732	2.9	0.5	0.6	0.2	1.4	1.1	0.5	488
20-24	2.3	0.3	1.5	0.0	0.1	0.4	1,676	8.6	3.6	4.0	0.0	5.7	2.9	0.3	371
25-29	3.0	0.8	2.1	0.0	0.0	0.0	1,440	12.2	1.4	7.9	0.2	9.6	4.1	0.4	301
30-39	2.7	0.9	1.7	0.0	0.1	0.0	2,006	11.1	2.0	7.1	0.0	5.9	2.1	0.5	523
40-49	2.1	0.4	1.5	0.0	0.0	0.2	1,265	7.5	1.5	5.8	0.0	5.2	2.3	0.3	355
50-59	NA	NA	NA	NA	NA	NA	NA	3.1	0.7	2.1	0.0	0.8	0.0	0.0	218
Marital status															
Currently in union	2.6	0.7	1.6	0.0	0.0	0.2	5,411	8.1	1.5	5.1	0.0	5.0	2.2	0.4	1,288
Formerly in union	2.9	0.4	2.2	0.0	0.2	0.2	822	19.2	3.2	13.2	0.0	13.2	2.6	1.4	117
Never married	0.8	0.3	0.6	0.0	0.0	0.0	1,887	5.6	1.7	2.7	0.1	3.4	2.0	0.2	847
Residence															
Mainland	2.2	0.6	1.5	0.0	0.0	0.1	7,881	7.9	1.7	4.8	0.1	4.9	2.2	0.4	2,187
Total urban	2.1	0.4	1.3	0.0	0.2	0.2	1,811	11.3	2.0	7.4	0.1	7.6	2.8	0.0	509
Dar es Salaam city	1.5	0.2	0.8	0.2	0.3	0.2	563	12.9	1.1	8.5	0.4	9.2	2.6	0.0	171
Other urban	2.4	0.6	1.5	0.0	0.1	0.2	1,248	10.5	2.5	6.8	0.0	6.7	2.9	0.0	338
Total rural	2.3	0.6	1.5	0.0	0.0	0.1	6,070	6.9	1.6	4.0	0.1	4.1	2.0	0.5	1,678
Zanzibar	0.4	0.2	0.2	0.0	0.0	0.0	239	1.1	0.0	0.0	0.0	1.1	0.0	0.0	69
Pemba	0.0	0.0	0.0	0.0	0.0	0.0	92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28
Unguja	0.6	0.3	0.3	0.0	0.0	0.0	148	1.9	0.0	0.0	0.0	1.9	0.0	0.0	41
Regions															
Dodoma	1.3	0.0	1.3	0.0	0.0	0.0	355	11.4	0.0	10.7	0.0	8.6	2.9	0.0	96
Arusha	3.2	0.4	2.3	0.0	0.2	0.0	589	8.5	1.1	4.3	0.0	2.1	2.1	0.0	156
Kilimanjaro	0.5	0.0	0.5	0.0	0.0	0.0	390	9.7	1.5	6.7	0.0	3.6	2.1	0.0	119
Tanga	1.3	0.3	1.0	0.0	0.0	0.0	464	6.7	1.3	5.3	0.0	5.3	5.3	0.0	108
Morogoro	1.3	0.3	1.1	0.0	0.0	0.0	408	7.7	4.2	3.5	0.0	5.6	2.8	0.0	95
Coast	0.4	0.4	0.0	0.0	0.0	0.0	159	9.7	0.0	4.8	0.0	6.5	1.6	1.6	45
Dar es Salaam	1.4	0.1	0.8	0.1	0.3	0.1	646	12.2	1.0	7.9	0.3	8.2	2.6	0.0	191
Lindi	1.9	0.6	1.6	0.0	0.0	0.0	187	15.5	1.4	12.7	0.0	7.0	1.4	0.0	54
Mtwara	2.5	0.5	2.0	0.0	0.0	0.0	355	22.8	6.9	9.9	0.0	11.9	9.9	6.9	96
Ruvuma	1.1	0.2	0.6	0.0	0.0	0.2	305	9.8	0.0	8.8	0.0	6.9	2.9	0.0	82
Iringa	1.8	1.0	0.5	0.0	0.0	0.3	466	0.7	0.7	0.0	0.0	0.0	0.0	0.0	100
Mbeya	4.5	1.0	3.2	0.0	0.0	0.3	473	9.7	2.8	6.9	0.0	8.3	1.4	0.0	137
Singida	1.3	0.3	1.0	0.0	0.0	0.0	283	9.5	2.4	6.0	1.2	8.3	0.0	0.0	80
Tabora	2.5	1.5	1.0	0.0	0.0	0.0	225	5.6	5.6	1.9	0.0	3.7	3.7	0.0	82
Rukwa	6.8	1.7	4.8	0.0	0.0	0.3	242	3.8	1.3	0.0	0.0	2.6	1.3	0.0	71
Kigoma	0.5	0.0	0.5	0.0	0.0	0.0	351	5.7	0.0	5.7	0.0	5.7	0.0	0.0	95
Shinyanga	3.5	0.8	2.1	0.0	0.0	0.5	686	6.1	3.0	1.2	0.0	2.4	1.2	0.6	202
Kagera	0.7	0.7	0.0	0.0	0.0	0.0	467	2.9	0.0	0.0	0.0	1.4	1.4	0.0	139
Mwanza	2.9	1.3	1.6	0.0	0.0	0.0	573	1.3	0.0	1.3	0.0	1.3	0.0	0.0	176
Mara	5.4	1.1	3.6	0.0	0.0	0.7	257	7.3	1.8	5.5	0.0	5.5	3.6	0.0	64
Education															
No education	2.1	0.5	1.3	0.0	0.0	0.2	2,316	9.8	1.4	5.5	0.2	6.3	2.5	0.0	304
Primary incomplete	2.2	0.5	1.5	0.0	0.0	0.2	1,630	5.4	1.6	2.8	0.1	3.8	1.4	0.7	664
Primary complete	2.4	0.7	1.6	0.0	0.1	0.1	3,732	9.0	1.9	5.6	0.0	5.5	2.6	0.4	1,066
Secondary +	0.4	0.0	0.4	0.0	0.0	0.0	441	5.7	1.0	4.2	0.0	2.0	1.5	0.0	222
Total	2.2	0.6	1.4	0.0	0.0	0.1	8,120	7.7	1.7	4.6	0.1	4.8	2.1	0.4	2,256

NA = Not applicable.

Table 11.4 Action taken by respondents who reported a sexually transmitted diseases in the past year

Among respondents who had a sexually transmitted disease during the 12 months prior to the survey, the percent who sought advice or treatment, the percent who informed their partner(s), and the percent who took measures to avoid infecting their partner(s), according to background characteristics, Tanzania 1996

Background characteristic	Among respondents who had an STD		Percentage who took action to avoid infecting partner						
	Percent who sought treatment	Percent who informed partners	Avoided sex	Used condoms	Took medicine	Other	Partner infected/ no measure taken	No measure taken	Number of women/ men
WOMEN									
Age									
<30	86.3	75.2	22.6	1.2	18.4	26.1	36.8	5.6	96
30+	81.5	92.3	27.8	0.0	30.1	32.5	38.2	7.7	82
Marital status									
Currently married	83.5	91.2	28.0	0.8	25.6	30.5	42.8	7.5	138
Not currently married	86.0	54.7	14.8	0.0	17.3	24.1	18.6	3.0	39
Urban/Rural									
Urban	97.8	67.0	20.1	0.0	30.0	34.7	19.4	13.2	39
Rural	80.3	87.6	26.4	0.8	22.1	27.5	42.5	4.7	139
Education									
No education	67.0	78.4	24.1	0.0	20.6	11.8	47.1	8.5	50
Primary incomplete	91.6	82.5	16.1	0.0	36.2	32.5	34.8	5.4	35
Primary complete +	90.3	85.9	28.9	1.2	20.8	37.0	33.3	5.9	93
Total	84.1	83.1	25.0	0.6	23.8	29.1	37.5	6.5	178
MEN									
Age									
<30	78.6	54.5	40.3	6.5	16.3	22.9	6.7	23.5	83
30+	89.2	60.5	62.9	1.4	19.0	19.0	4.2	13.8	92
Marital status									
Currently married	86.2	63.0	58.6	4.8	17.8	22.3	4.6	12.6	105
Not currently married	81.1	49.7	42.6	2.4	17.5	18.7	6.6	27.1	70
Urban/Rural									
Urban	81.9	55.7	48.4	2.5	17.7	19.1	6.6	25.6	58
Rural	85.3	58.6	54.1	4.5	17.7	21.7	4.8	14.9	117
Education									
No education	82.8	62.0	65.4	0.0	3.9	10.8	12.4	17.9	30
Primary incomplete	81.9	60.4	42.6	5.2	21.1	27.5	1.8	20.2	36
Primary complete +	85.3	55.6	51.7	4.5	20.4	21.4	4.7	18.0	109
Total	84.2	57.7	52.2	3.9	17.7	20.8	5.4	18.4	174

Table 11.5.1 Knowledge of AIDS and sources of AIDS information: women

Percent of women who have ever heard of AIDS, percent who have received information about AIDS from specific sources, and mean number of sources of information about AIDS, by background characteristics, Tanzania 1996

Background characteristic	Knows AIDS	Sources of AIDS information											Mean number of sources	Number of women
		Radio	TV	News-papers	Pamph-lets	Health worker	Mosque/ church	School	Com-munity meeting	Friend/ relative	Work place	Other source		
Age														
15-19	95.8	58.2	4.5	17.5	4.5	11.9	6.8	24.8	5.0	58.4	1.2	4.1	2.1	1,732
20-24	97.9	72.2	5.8	26.3	5.7	26.4	7.6	6.8	7.8	63.0	1.1	4.8	2.3	1,676
25-29	97.2	67.0	4.7	20.5	6.3	30.1	7.8	3.5	9.8	64.2	2.2	4.8	2.3	1,440
30-39	96.7	65.1	4.5	17.2	5.6	28.9	8.9	2.0	10.6	66.5	2.1	4.9	2.2	2,006
40-49	97.6	55.5	1.9	8.3	3.7	24.5	10.4	2.1	12.6	73.6	3.1	5.1	2.1	1,265
Marital status														
Currently in union	97.0	63.6	3.8	16.2	5.1	27.2	8.1	3.2	10.2	67.7	1.8	5.0	2.2	5,411
Formerly in union	97.4	65.9	4.7	17.6	6.1	26.0	8.8	3.1	9.4	68.2	3.8	4.5	2.2	822
Never married	96.8	63.9	6.1	24.8	5.1	15.3	8.5	24.6	5.5	54.7	1.2	4.2	2.2	1,887
Residence														
Mainland	96.9	63.4	3.8	18.3	5.2	24.4	8.5	8.3	9.0	65.4	1.9	4.9	2.2	7,881
Total urban	99.6	86.8	11.4	39.3	10.6	27.9	12.8	10.3	8.4	56.3	4.4	6.0	2.8	1,811
Dar es Salaam city	99.8	96.8	25.8	52.0	14.3	18.5	22.8	15.6	7.7	47.3	4.5	11.4	3.2	563
Other urban	99.5	82.2	4.9	33.6	8.9	32.1	8.3	7.9	8.7	60.4	4.4	3.6	2.6	1,248
Total rural	96.1	56.4	1.5	12.0	3.6	23.4	7.2	7.7	9.2	68.1	1.2	4.5	2.0	6,070
Zanzibar	99.8	82.6	25.2	19.8	4.6	18.9	0.4	4.0	10.2	43.4	0.6	1.0	2.1	239
Pemba	100.0	78.0	8.1	13.6	1.7	21.0	0.0	3.4	12.5	51.9	0.7	0.7	1.9	92
Unguja	99.7	85.5	35.8	23.7	6.4	17.6	0.6	4.3	8.7	38.2	0.6	1.2	2.2	148
Region														
Dodoma	97.8	68.3	2.5	17.5	7.3	21.0	5.7	7.0	12.4	54.9	2.2	3.8	2.1	355
Arusha	84.0	50.7	2.8	23.2	2.8	17.7	16.2	10.4	4.1	34.3	1.5	3.6	2.0	589
Kilimanjaro	98.7	86.5	3.6	27.2	1.3	21.9	16.5	11.2	5.1	42.5	1.8	2.5	2.2	390
Tanga	98.5	71.1	1.5	15.6	2.8	19.8	5.0	9.3	3.3	55.0	0.8	1.3	1.9	464
Morogoro	97.9	71.6	1.1	16.4	7.4	26.8	4.8	4.2	4.2	73.2	1.3	3.2	2.2	408
Coast	99.6	83.4	5.1	18.1	2.5	19.5	16.6	16.6	7.9	66.1	1.4	9.7	2.5	159
Dar es Salaam	99.9	96.5	23.4	49.5	13.7	18.7	22.0	15.4	7.6	49.3	4.3	10.7	3.1	646
Lindi	99.4	77.0	1.9	22.6	5.7	46.9	1.9	7.2	5.7	61.6	1.6	4.1	2.4	187
Mtwara	99.1	67.3	2.5	11.1	2.9	31.1	2.0	6.6	6.1	70.3	0.9	2.5	2.1	355
Ruvuma	99.6	69.3	0.4	14.4	2.8	41.8	3.9	7.9	7.5	67.8	2.4	3.2	2.2	305
Iringa	96.9	55.0	0.3	10.5	5.1	26.0	6.7	9.3	20.6	71.7	3.3	6.4	2.2	466
Mbeya	98.7	64.6	1.3	15.0	10.2	31.5	6.7	4.5	11.8	78.7	2.9	1.3	2.3	473
Singida	95.2	55.1	2.5	17.8	6.3	29.2	7.9	9.6	17.0	65.2	1.3	1.5	2.2	283
Tabora	96.0	53.0	2.5	18.2	4.0	31.3	7.6	4.0	4.5	67.2	1.0	12.1	2.1	225
Rukwa	97.5	47.9	2.3	6.2	6.5	20.1	4.0	4.5	4.5	88.4	2.0	4.8	2.0	242
Kigoma	96.7	49.0	2.7	8.4	4.4	15.8	8.7	7.9	9.8	67.3	1.1	13.6	2.0	351
Shinyanga	96.0	48.0	1.3	13.3	5.1	19.2	2.4	7.7	15.5	84.3	1.3	0.5	2.1	386
Kagera	98.6	52.1	3.5	14.4	4.9	23.9	15.5	8.1	15.5	69.4	2.8	15.1	2.3	467
Mwanza	97.7	46.5	1.0	10.6	1.0	27.1	2.9	4.8	4.8	82.9	1.3	0.3	1.9	573
Mara	97.5	69.3	2.5	18.8	2.2	22.4	2.5	5.8	3.2	67.1	0.7	1.8	2.0	257
Education														
No education	92.1	41.4	0.8	1.9	1.3	17.1	7.1	1.3	9.8	75.2	0.8	3.6	1.7	2,316
Primary incomplete	97.9	59.8	2.4	10.2	4.7	20.4	6.9	12.5	7.9	66.1	1.3	4.4	2.0	1,630
Primary complete	99.3	76.3	4.7	27.1	6.2	29.5	9.1	9.1	8.8	59.9	2.3	5.4	2.4	3,732
Secondary +	99.6	93.0	27.9	60.3	18.8	32.0	12.2	19.1	11.0	45.7	6.1	6.2	3.3	441
Total	97.0	63.9	4.4	18.3	5.2	24.3	8.2	8.1	9.0	64.8	1.9	4.7	2.2	8,120

Table 11.5.2 Knowledge of AIDS and sources of AIDS information: men

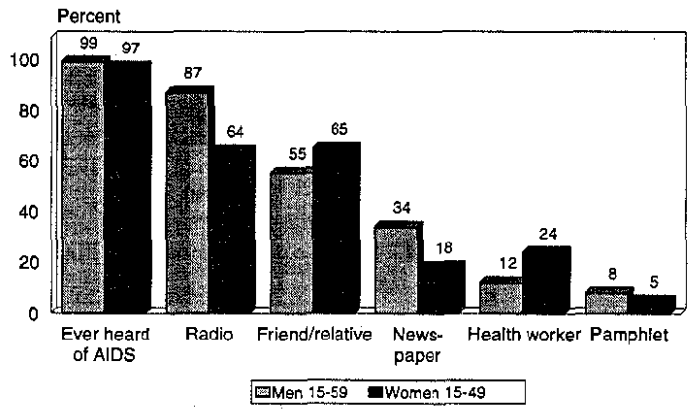
Percent of men who have ever heard of AIDS, percent who have received information about AIDS from specific sources, and mean number of sources of information about AIDS, by background characteristics, Tanzania 1996

Background characteristic	Knows AIDS	Sources of AIDS information											Mean number of sources	Number of men
		Radio	TV	News-papers	Pamph-lets	Health worker	Mosque/ church	School	Com-munity meeting	Friend/ relative	Work place	Other source		
Age														
15-19	97.0	76.6	8.3	26.1	4.3	5.4	6.2	22.1	3.7	55.2	1.2	4.0	2.2	488
20-24	99.4	91.9	14.4	35.8	7.3	11.4	8.6	7.9	3.0	52.8	2.9	9.1	2.5	371
25-29	99.4	91.4	13.7	39.5	12.3	15.7	10.1	2.8	7.9	54.6	4.6	5.5	2.6	301
30-39	99.3	92.2	12.5	40.1	10.2	13.9	8.7	1.3	8.2	48.9	3.3	8.8	2.5	523
40-49	99.5	88.1	10.0	37.1	6.0	15.9	9.6	1.6	6.6	56.7	5.5	5.0	2.4	355
50-59	98.9	79.9	2.2	21.9	6.9	14.4	14.3	0.4	13.6	66.7	3.9	8.6	2.4	218
Marital status														
Currently in union	99.7	90.0	9.6	36.1	9.3	15.2	9.9	1.7	8.5	55.9	4.0	7.3	2.5	1,288
Formerly in union	99.4	87.9	11.4	29.7	7.0	12.6	9.7	0.0	5.5	58.0	3.9	6.4	2.3	117
Never married	97.4	81.9	12.2	31.6	5.4	7.7	7.5	16.2	3.9	52.1	2.3	5.9	2.3	847
Residence														
Mainland	98.8	86.5	9.2	33.7	7.7	12.1	9.3	7.2	6.8	55.8	3.1	6.9	2.4	2,187
Total urban	99.8	93.9	21.0	53.4	10.9	10.6	9.2	6.8	7.3	49.2	6.9	7.2	2.8	509
Dar es Salaam city	100.0	96.3	42.3	63.6	14.3	8.1	8.8	7.4	10.7	37.5	7.7	6.6	3.0	171
Other urban	99.7	92.7	10.3	48.2	9.2	11.9	9.3	6.5	5.5	55.1	6.4	7.4	2.6	338
Total rural	98.5	84.3	5.7	27.8	6.7	12.5	9.3	7.3	6.6	57.8	2.0	6.9	2.3	1,678
Zanzibar	100.0	97.0	55.3	43.9	9.6	18.5	0.0	2.6	1.5	17.5	10.4	0.0	2.6	69
Pemba	100.0	92.6	16.7	24.1	1.9	18.5	0.0	3.7	3.7	29.6	20.4	0.0	2.1	28
Unguja	100.0	100.0	81.5	57.4	14.8	18.5	0.0	1.9	0.0	9.3	3.7	0.0	2.9	41
Region														
Dodoma	98.6	85.0	3.6	28.6	4.3	12.9	2.9	9.3	12.1	41.4	3.6	5.7	2.1	96
Arusha	92.6	76.6	9.6	31.9	6.4	16.0	11.7	7.4	6.4	34.0	2.1	1.1	2.2	156
Kilimanjaro	99.0	92.3	8.2	45.6	4.6	6.2	7.2	7.2	5.1	28.2	1.5	1.0	2.1	119
Tanga	98.7	89.3	5.3	32.0	5.3	14.7	4.0	8.0	1.3	32.0	2.7	1.3	2.0	108
Morogoro	99.3	86.7	2.8	20.3	8.4	11.9	5.6	8.4	4.2	53.8	2.1	5.6	2.1	95
Coast	98.4	90.3	14.5	29.0	3.2	14.5	3.2	9.7	4.8	37.1	8.1	16.1	2.3	45
Dar es Salaam	100.0	96.7	40.5	63.5	14.8	8.6	8.6	7.2	10.5	38.5	7.9	5.9	3.0	191
Lindi	100.0	94.4	4.2	26.8	16.9	19.7	11.3	4.2	7.0	63.4	2.8	22.5	2.7	54
Mtwara	100.0	85.1	6.9	25.7	8.9	23.8	9.9	4.0	11.9	53.5	2.0	7.9	2.4	96
Ruvuma	100.0	89.2	2.0	31.4	9.8	26.5	5.9	5.9	7.8	44.1	8.8	6.9	2.4	82
Iringa	99.3	79.6	0.7	27.7	5.8	10.2	8.0	9.5	21.2	67.2	3.6	2.9	2.4	100
Mbeya	98.6	88.9	2.8	27.8	5.6	2.8	9.7	13.9	2.8	91.7	4.2	2.8	2.6	137
Singida	100.0	81.0	10.7	32.1	9.5	3.6	8.3	4.8	4.8	57.1	0.0	3.6	2.2	80
Tabora	98.1	79.6	3.7	38.9	7.4	1.9	1.9	3.7	1.9	53.7	3.7	29.6	2.3	82
Rukwa	100.0	85.9	0.0	10.3	2.6	2.6	28.2	25.6	6.4	92.3	12.8	0.0	2.7	71
Kigoma	100.0	85.7	2.9	28.6	7.1	17.1	4.3	4.3	5.7	61.4	0.0	22.9	2.4	95
Shinyanga	98.2	80.5	7.3	32.9	9.1	14.6	7.3	5.5	7.3	73.8	1.2	0.6	2.4	202
Kagera	100.0	81.2	11.6	21.7	7.2	10.1	2.9	5.8	4.3	66.7	1.4	26.1	2.4	139
Mwanza	100.0	93.6	10.3	39.7	5.1	16.7	12.8	2.6	3.8	62.8	0.0	0.0	2.5	176
Mara	98.2	90.9	5.5	45.5	9.1	7.3	47.3	1.8	5.5	58.2	0.0	0.0	64	2.8
Education														
No education	96.2	68.9	6.5	4.7	1.8	10.8	6.5	0.0	7.8	73.1	1.6	6.3	2.0	304
Primary incomplete	98.2	80.8	5.2	23.8	5.2	9.6	8.8	9.6	5.5	60.0	2.8	4.3	2.2	664
Primary complete	99.8	93.6	10.5	41.1	8.2	13.2	9.1	7.1	6.7	48.5	3.4	7.8	2.5	1,066
Secondary +	100.0	97.1	33.5	71.1	21.4	17.6	12.6	8.7	7.9	42.4	7.7	9.5	3.3	222
Total	98.8	86.8	10.7	34.1	7.7	12.2	9.0	7.0	6.6	54.6	3.4	6.7	2.4	2,256

Knowledge of Ways to Avoid HIV/AIDS

To ascertain the depth of knowledge about AIDS, respondents who have ever heard of AIDS were asked whether a person can do something to avoid getting AIDS and if so, what. Tables 11.6.1 and 11.6.2 show the percentage of women and men who know of specific ways to avoid getting AIDS. Among respondents who have ever heard of AIDS, 35 percent of women and 34 percent of men believe that there is no way to avoid AIDS or that they do not know if there is any way to avoid AIDS. Thirty-nine percent of women and 55 percent of men cite use of condoms as a way to avoid AIDS; this is an improvement since 1994, when only 36 percent of women and 49 percent of men cited condoms as an AIDS prevention mechanism. One-fourth say that having only one partner can help to prevent the spread of the disease, and 20 percent of women and 17 percent of men report that limiting the number of sexual partners can prevent AIDS. Fifteen percent of women and 22 percent of men say that abstaining from sex can protect against getting the AIDS virus. Thirteen percent of women and one-fourth of the men mention that avoiding sex with a prostitute can prevent getting the disease. Urban respondents are more likely to report safe patterns of sexual behaviour (condom use, staying with one partner) than their rural counterparts.

Figure 11.1
Knowledge of AIDS and Sources of AIDS Information



TDHS 1996

Knowledge of AIDS-related Health Issues

Additional questions were asked to learn whether respondents are aware of the levels of risk involved in contracting AIDS. Respondents were asked whether it is possible for a healthy-looking person to have the AIDS virus. Seventy percent of women and 79 percent of men reported knowing it is possible for a healthy looking person to have AIDS (Tables 11.7.1 and 11.7.2). This knowledge has not changed significantly since the 1994 TKAPS in which 69 percent of women and 78 percent of men reported knowing it is possible for a healthy looking person to have the AIDS virus. However, this knowledge varies by educational background and residence. As many as 46 percent of women with no education and 41 percent of uneducated men reported either that a heathy looking person cannot have the AIDS virus or that they did not know. In the mainland, 34 percent of rural women and 25 percent of rural men reported the same.

Most respondents (95 percent) know that AIDS cannot be cured. Seventy-five percent of women and 77 percent of men know that AIDS can be transmitted from mother to child. Better educated respondents and those from urban areas are more likely than less educated and rural residents to know that AIDS can be transmitted from mother to child.

Table 11.6.1 Knowledge of ways to avoid AIDS: women

Percent of women who have ever heard of AIDS, who know of specific ways to avoid HIV/AIDS, and percent with misinformation, by background characteristics, Tanzania 1996

Background characteristic	There is no way to avoid	Does not know if any way to avoid	Ways to avoid AIDS: Abstain from sex	Use condoms	Have only one sex partner	Not many partners	Avoid sex with prostitutes	Avoid sex with homosexuals	Avoid transfusions	Avoid injections	Don't know specific way	Percent with misinformation[1]	Number of women
Age													
15-19	13.0	34.9	14.8	29.8	16.4	13.9	8.7	1.0	1.1	3.5	0.8	1.1	1,659
20-24	12.6	19.0	13.7	48.1	24.5	20.5	13.8	1.5	1.1	4.4	0.4	2.3	1,641
25-29	12.3	18.8	13.8	46.5	26.9	20.3	12.5	1.9	1.5	4.6	0.5	2.2	1,400
30-39	10.8	19.8	15.1	41.9	28.7	23.9	16.5	2.4	2.2	5.5	0.2	1.7	1,941
40-49	10.3	26.1	18.2	27.9	26.9	22.3	15.6	1.8	1.3	4.5	0.1	2.2	1,235
Marital status													
Currently in union	11.8	21.8	13.2	40.0	26.7	22.3	14.8	2.0	1.4	4.2	0.4	1.9	5,249
Formerly in union	12.6	19.8	18.6	44.2	25.0	20.5	12.4	1.2	2.3	6.0	0.3	2.3	801
Never married	11.7	30.6	18.7	35.1	18.7	13.9	10.0	1.1	1.5	4.8	0.6	1.5	1,826
Residence													
Mainland	11.6	23.7	14.8	39.7	25.2	20.5	13.3	1.8	1.5	4.6	0.4	1.8	7,637
Total urban	9.9	13.0	18.5	56.8	31.9	23.8	15.1	1.8	3.3	6.4	0.1	2.7	1,804
Dar es Salaam city	13.5	9.5	22.3	60.2	37.9	20.3	13.4	0.3	3.0	5.1	0.2	2.4	562
Other urban	8.3	14.6	16.7	55.3	29.3	25.4	15.8	2.5	3.5	6.9	0.1	2.8	1,242
Total rural	12.1	27.1	13.7	34.4	23.1	19.5	12.8	1.8	1.0	4.0	0.5	1.6	5,832
Zanzibar	19.3	20.4	19.9	24.7	7.5	10.9	17.2	0.0	0.7	3.1	0.9	3.5	239
Pemba	22.0	25.8	25.8	10.8	4.7	8.8	11.9	0.0	0.0	2.0	1.0	2.7	92
Unguja	17.7	17.1	16.2	33.3	9.3	12.2	20.6	0.0	1.2	3.8	0.9	4.1	147
Region													
Dodoma	13.0	26.3	20.1	29.5	19.5	20.5	19.5	0.6	2.9	6.5	1.3	1.3	347
Arusha	15.7	33.8	9.4	24.9	23.1	12.2	8.6	0.3	0.5	4.3	0.0	0.3	495
Kilimanjaro	17.8	14.4	16.0	41.0	20.4	14.9	12.4	0.3	1.0	5.2	0.5	0.8	385
Tanga	18.6	19.9	7.1	37.5	13.5	18.1	16.3	0.3	1.0	2.6	0.3	0.5	457
Morogoro	8.9	21.4	27.9	39.6	19.0	24.1	25.5	8.1	4.9	6.5	0.0	3.0	400
Coast	16.3	13.0	20.7	58.3	30.4	15.6	10.1	0.0	0.4	4.7	0.4	4.7	158
Dar es Salaam	13.9	10.0	20.8	59.2	38.1	19.5	13.6	0.4	3.0	4.7	0.1	3.3	645
Lindi	12.0	21.8	13.6	51.3	13.6	21.5	25.3	1.6	1.6	3.8	0.3	1.3	185
Mtwara	9.6	35.5	17.6	33.6	9.2	16.2	15.8	0.5	0.7	1.6	1.4	1.8	352
Ruvuma	6.3	26.9	11.9	40.5	23.5	23.7	19.8	4.3	2.4	4.5	0.6	1.5	304
Iringa	13.3	30.5	14.3	24.9	19.1	21.8	19.1	10.3	1.9	3.4	0.0	2.7	452
Mbeya	6.5	20.6	21.3	42.6	31.6	21.9	9.4	0.3	0.3	2.6	0.3	0.6	467
Singida	10.7	28.8	15.2	34.7	24.0	18.9	17.3	0.5	0.3	5.6	1.1	1.6	270
Tabora	9.5	21.6	16.8	40.0	22.1	26.3	5.8	0.5	2.1	7.9	0.5	1.6	216
Rukwa	13.7	20.9	11.9	32.3	33.4	21.2	2.9	0.3	0.6	2.3	0.6	1.2	235
Kigoma	9.6	35.2	14.6	28.7	19.7	13.5	13.0	0.3	0.8	5.1	0.3	1.1	339
Shinyanga	6.1	24.7	13.3	47.8	41.4	21.1	6.9	0.8	1.1	2.8	0.0	0.8	658
Kagera	10.4	22.5	18.2	32.1	25.4	23.6	12.5	2.9	2.9	8.2	0.0	3.6	461
Mwanza	9.9	25.1	2.6	48.8	33.3	26.7	9.2	0.7	0.0	4.0	0.7	1.7	560
Mara	14.4	22.2	6.3	43.3	13.3	30.4	8.5	1.5	1.1	9.3	0.7	5.6	251
Educational													
No education	13.3	34.7	12.3	21.4	22.8	17.7	12.1	1.4	0.5	1.4	0.5	1.3	2,135
Primary incomplete	11.5	28.6	14.6	34.9	20.6	17.7	12.5	1.7	1.2	4.8	0.2	2.2	1,595
Primary complete	11.6	17.3	15.1	48.7	26.1	22.1	14.3	1.9	1.9	5.3	0.4	1.8	3,706
Secondary +	8.0	5.5	29.1	62.5	36.4	25.3	16.1	2.1	4.3	11.8	0.4	4.0	439
Total	11.8	23.6	15.0	39.3	24.6	20.2	13.4	1.7	1.5	4.5	0.4	1.9	7,876

[1] Includes avoiding kissing, mosquito hites, seeking protection from traditional healer, and other types of misinformation.

Table 11.6.2 Knowledge of ways to avoid AIDS: men

Percent of men who have ever heard of AIDS, who know of specific ways to avoid HIV/AIDS, and percent with misinformation, by background characteristics, Tanzania 1996

Background characteristic	There is no way to avoid	Does not know any way to avoid	Ways to avoid AIDS: Abstain from sex	Use condoms	Have only one sex partner	Not many partners	Avoid sex with prostitutes	Avoid sex with homosexuals	Avoid transfusions	Avoid injections	Don't know specific way	Percent with misinformation[1]	Number of men
Age													
15-19	10.5	21.4	17.7	51.1	18.2	11.6	18.9	1.1	1.4	4.9	0.1	2.0	473
20-24	8.5	23.4	23.2	64.2	26.6	14.1	26.6	1.4	1.9	5.3	0.2	3.4	369
25-29	9.8	21.6	22.3	59.5	25.9	19.0	26.3	4.9	4.2	8.6	0.0	6.5	300
30-39	9.9	25.7	24.9	60.7	26.2	19.3	27.8	2.8	1.7	7.7	0.1	4.5	519
40-49	10.5	24.9	24.3	47.6	31.0	24.8	26.6	0.8	2.4	6.3	0.0	2.2	353
50-59	9.0	27.4	20.0	35.6	26.9	13.9	29.4	0.4	0.6	4.3	0.5	0.0	215
Marital status													
Currently in union	9.9	25.1	23.1	52.6	27.9	19.8	29.2	2.4	2.2	7.3	0.1	3.7	1,285
Formerly in union	8.6	23.4	28.2	63.1	27.2	13.0	13.0	0.0	1.2	2.9	0.0	1.3	117
Never married	9.9	22.2	19.8	56.3	21.2	13.3	21.3	1.6	1.8	5.2	0.2	2.8	825
Residence													
Mainland	9.8	24.0	22.5	55.7	24.7	16.3	24.4	2.0	2.1	6.4	0.1	3.3	2,161
Total urban	6.5	17.4	32.7	66.4	31.0	15.4	18.8	2.0	3.3	8.1	0.0	4.6	508
Dar es Salaam city	5.5	14.7	40.4	68.7	31.2	12.1	8.5	0.4	3.7	13.2	0.0	8.8	171
Other urban	7.0	18.8	28.7	65.1	30.9	17.0	24.1	2.8	3.1	5.5	0.0	2.5	336
Total rural	10.8	26.0	19.3	52.5	22.8	16.6	26.1	2.0	1.7	5.9	0.2	2.9	1,653
Zanzibar	9.6	20.5	13.4	18.5	44.2	41.1	60.0	0.0	0.0	3.0	0.7	2.2	69
Pemba	1.9	31.5	16.7	13.0	57.4	38.9	61.1	0.0	0.0	1.9	1.9	5.6	28
Unguja	14.8	13.0	11.1	22.2	35.2	42.6	59.3	0.0	0.0	3.7	0.0	0.0	41
Region													
Dodoma	12.3	23.9	23.2	49.3	13.8	15.2	16.7	1.4	1.4	3.6	0.0	2.2	94
Arusha	13.8	33.3	14.9	41.4	17.2	20.7	10.3	0.0	1.1	3.4	0.0	2.3	145
Kilimanjaro	12.4	16.1	19.7	47.2	19.7	16.1	10.9	0.0	4.1	4.1	0.0	1.0	117
Tanga	18.9	20.3	12.2	39.2	23.0	20.3	4.1	0.0	1.4	1.4	0.0	0.0	107
Morogoro	12.0	26.8	28.9	53.5	18.3	14.8	15.5	7.7	4.9	7.0	1.4	1.4	94
Coast	6.6	16.4	39.3	65.6	45.9	14.8	4.9	0.0	1.6	3.3	0.0	1.6	44
Dar es Salaam	5.3	14.5	40.5	68.7	32.9	12.2	8.2	0.3	3.6	12.2	0.0	8.6	191
Lindi	0.0	25.4	62.0	78.9	11.3	18.3	16.9	0.0	0.0	4.2	0.0	2.8	54
Mtwara	2.0	34.7	59.4	68.3	11.9	11.9	4.0	0.0	0.0	4.0	0.0	4.0	96
Ruvuma	6.9	21.6	43.1	56.9	21.6	15.7	7.8	3.9	2.9	3.9	0.0	3.9	82
Iringa	16.2	27.2	19.1	40.4	22.1	16.9	24.3	8.1	5.1	5.1	0.0	2.2	100
Mbeya	35.2	15.5	16.9	36.6	15.5	14.1	12.7	5.6	0.0	1.4	0.0	0.0	135
Singida	17.9	27.4	14.3	46.4	13.1	8.3	15.5	0.0	0.0	3.6	0.0	0.0	80
Tabora	3.8	15.1	5.7	62.3	9.4	1.9	52.8	0.0	3.8	11.3	0.0	5.7	80
Rukwa	15.4	26.9	12.8	20.5	20.5	17.9	12.8	0.0	0.0	0.0	0.0	0.0	71
Kigoma	2.9	28.6	8.6	48.6	10.0	1.4	61.4	2.9	4.3	17.1	0.0	17.1	95
Shinyanga	5.0	30.4	15.5	68.9	46.0	26.7	34.8	3.1	0.0	6.8	0.0	1.2	198
Kagera	1.4	17.4	8.7	60.9	5.8	4.3	63.8	1.4	5.8	18.8	0.0	8.7	139
Mwanza	2.6	33.3	19.2	75.6	59.0	25.6	51.3	2.6	0.0	0.0	0.0	0.0	176
Mara	3.7	18.5	11.1	70.4	40.7	44.4	25.9	0.0	0.0	13.0	1.9	0.0	63
Education													
No education	14.2	27.8	16.0	32.8	18.0	13.5	22.3	1.0	0.0	2.5	0.4	2.4	293
Primary incomplete	10.4	26.1	19.2	48.0	21.8	14.5	27.2	0.8	0.8	2.2	0.0	1.7	652
Primary complete	9.3	22.6	23.6	62.4	26.0	18.6	22.7	2.4	2.0	7.4	0.2	3.6	1,063
Secondary +	4.1	18.5	32.7	65.1	42.0	22.5	37.9	4.8	7.9	18.1	0.0	7.3	222
Total	9.8	23.9	22.2	54.6	25.3	17.1	25.5	2.0	2.0	6.3	0.1	3.3	2,230

[1] Includes avoiding kissing, mosquito bites, seeking protection from traditional healer, and other misinformation.

Table 11.7.1 Knowledge and perception about AIDS: women

Percent distribution of women who have heard of AIDS by their knowledge and perception about AIDS, according to background characteristics, Tanzania 1996

Background characteristic	Can a healthy person have AIDS virus?			Can AIDS be cured?			Can AIDS virus be transmitted from mother to child?			Knows someone with AIDS/died of AIDS			Total	Number of women
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know		
Age														
15-19	62.7	19.5	17.8	2.6	93.0	4.4	65.0	12.6	22.4	41.3	52.8	5.0	100.0	1,659
20-24	74.9	15.6	9.3	1.8	96.5	1.8	80.4	8.7	10.8	49.5	45.7	4.2	100.0	1,641
25-29	74.3	14.9	10.5	1.7	96.2	2.0	80.5	8.4	11.1	49.0	45.8	5.0	100.0	1,400
30-39	73.4	13.6	12.9	1.9	95.0	3.1	79.7	7.8	12.4	51.7	43.8	4.2	100.0	1,941
40-49	64.3	14.4	21.1	2.2	93.4	4.3	69.2	10.9	19.8	49.1	45.9	4.5	100.0	1,235
Marital status														
Currently in union	71.1	15.1	13.6	2.0	94.8	3.1	76.9	9.1	14.0	49.0	46.1	4.5	100.0	5,249
Formerly in union	69.4	16.2	14.4	1.6	96.2	2.1	78.5	9.4	12.0	53.6	42.1	3.9	100.0	801
Never married	68.1	16.8	15.1	2.2	94.2	3.5	69.2	11.2	19.5	43.4	50.8	4.9	100.0	1,826
Residence														
Mainland	70.6	15.1	14.1	2.0	94.8	3.2	75.0	9.7	15.3	48.5	46.3	4.6	100.0	7,637
Total urban	84.7	8.6	6.6	2.0	97.2	0.8	83.7	7.8	8.4	58.6	35.4	5.6	100.0	1,804
Dar es Salaam city	84.8	9.5	5 6	2.3	96.8	0.9	83.9	6.9	9.2	52.3	39.4	8.0	100.0	562
Other urban	84.6	8.1	7.0	1.9	97.3	0.8	83.6	8.2	8.1	61.4	33.5	4.5	100.0	1,242
Total rural	66.2	17.1	16.4	2.0	94.1	3.9	72.2	10.3	17.4	45.4	49.7	4.3	100.0	5,832
Zanzibar	57.5	31.1	11.3	2.1	96.4	1.4	85.0	7.2	7.8	35.8	60.7	3.0	100.0	239
Pemba	49.8	33.2	16.9	1.4	96.3	2.4	82.7	8.1	9.2	39.7	59.0	1.4	100.0	92
Unguja	62.3	29.9	7.8	2.6	96.5	0.9	86.4	6.7	7.0	33.3	61.7	4.1	100.0	147
Region														
Dodoma	64.3	16.2	19.5	2.3	93.8	3.9	71.1	13.3	15.6	49.4	45.5	4.2	100.0	347
Arusha	66.5	14.5	18.5	3.6	89.6	6.9	72.8	9.9	17.3	34.3	59.6	5.3	100.0	495
Kilimanjaro	84.0	8.8	7.0	1.3	98.2	0.5	76.5	9.8	13.7	49.5	47.4	2.8	100.0	385
Tanga	75.8	11.5	12.8	1.5	95.9	2.6	64.3	16.1	19.6	48.2	48.0	3.1	100.0	457
Morogoro	69.1	16.3	14.4	1.6	95.4	3.0	74.0	10.8	15.2	49.9	47.4	1.6	100.0	400
Coast	76.1	13.8	10.1	2.5	93.5	3.6	77.5	7.2	15.2	47.8	42.0	8.7	100.0	158
Dar es Salaam	84.7	9.4	5.8	2.2	96.5	1.3	83.6	7.1	9.3	51.4	40.5	7.6	100.0	645
Lindi	71.2	18.7	10.1	1.3	96.2	2.5	69.0	14.6	16.1	60.1	30.7	9.2	100.0	185
Mtwara	63.4	18.5	18.1	0.7	95.9	3.4	69.3	14.0	16.5	56.5	131.6	1.4	100.0	352
Ruvuma	71.1	14.4	14.2	0.9	97.0	2.2	72.6	12.3	15.1	50.4	136.2	3.4	100.0	304
Iringa	58.9	15.4	25.7	0.5	94.4	4.8	66.8	9.0	24.1	48.3	47.7	4.0	100.0	452
Mbeya	80.0	8.7	11.3	3.5	93.9	2.6	77.4	7.7	14.8	59.7	34.5	5.8	100.0	467
Singida	65.9	15.5	18.7	9.9	84.0	6.1	71.7	9.9	18.1	54.1	42.4	3.5	100.0	270
Tabora	66.3	16.3	17.4	1.1	95.3	3.7	79.5	11.6	8.4	58.4	40.0	1.1	100.0	216
Rukwa	72.7	14.5	12.8	0.9	97.4	1.7	68.9	11.3	19.8	56.1	38.1	4.9	100.0	235
Kigoma	67.9	11.5	20.6	1.7	92.7	5.6	76.3	6.5	17.2	47.3	49.0	3.4	100.0	339
Shinyanga	62.8	21.9	15.0	0.8	96.7	2.5	76.1	8.3	15.6	32.8	65.8	1.1	100.0	658
Kagera	69.6	17.1	12.5	3.9	91.4	4.6	83.9	4.3	11.8	72.1	21.8	4.6	100.0	461
Mwanza	64.7	23.4	11.9	0.3	98.3	1.3	77.2	8.3	14.5	30.4	68.3	0.7	100.0	560
Mara	78.5	13.3	7.0	1.9	96.7	1.5	83.0	8.5	8.5	42.2	55.2	2.2	100.0	251
Education														
No education	53.4	20.5	25.6	2.6	90.5	6.9	62.6	11.7	25.7	36.8	57.4	5.0	100.0	2,135
Primary incomplete	67.0	16.9	15.9	2.2	94.9	2.9	70.5	12.0	17.5	46.5	48.3	4.9	100.0	1,595
Primary complete	78.7	13.2	8.0	1.7	97.0	1.3	82.3	8.2	9.5	53.8	41.6	4.2	100.0	3,706
Secondary +	91.5	6.9	1.6	2.2	97.3	0.5	94.7	3.1	2.2	62.3	33.4	4.0	100.0	439
Total	70.2	15.6	14.0	2.0	94.8	3.1	75.3	9.6	15.1	48.2	46.8	4.5	100.0	7,876

Table 11.7.2 Knowledge and perceptions about AIDS: men

Percent distribution of men who have heard of AIDS, by their knowledge and perception about AIDS, according to background characteristics, Tanzania 1996

Background characteristic	Can a healthy person have AIDS virus?			Can AIDS be cured?			Can AIDS virus be transmitted from mother to child?			Knows someone with AIDS/died of AIDS			Total	Number of men
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know		
Age														
15-19	67.9	16.6	14.9	1.2	94.9	3.7	67.0	9.7	23.2	37.9	56.7	4.9	100.0	473
20-24	85.9	7.0	6.4	1.3	97.4	1.3	82.4	8.4	8.8	51.8	44.8	3.5	100.0	369
25-29	82.8	11.0	5.8	2.5	96.3	1.3	82.6	7.2	9.7	54.8	40.6	3.2	100.0	300
30-39	84.2	8.5	6.8	1.5	95.7	2.8	82.1	7.8	9.8	56.3	37.0	5.4	100.0	519
40-49	78.6	10.4	10.8	2.6	95.5	1.8	77.1	0.6	12.4	59.5	36.0	4.0	100.0	353
50-64	70.1	9.5	19.5	3.7	92.6	3.7	70.4	9.6	19.0	52.3	40.6	6.8	100.0	215
Marital status														
Currently in union	80.4	9.6	9.4	2.1	95.6	2.4	80.4	7.7	11.5	56.4	37.7	5.0	100.0	1,285
Formerly in union	81.8	11.0	7.3	2.0	95.8	2.2	71.3	4.7	14.0	52.9	43.6	1.2	100.0	117
Never married	75.2	12.4	11.8	1.7	95.5	2.7	72.6	9.9	17.2	44.0	51.3	4.4	100.0	825
Residence														
Mainland	78.3	11.0	10.2	1.9	95.5	2.6	77.1	8.9	13.6	52.4	42.3	4.6	100.0	2,161
Total urban	90.2	4.2	5.3	2.7	95.5	1.7	82.7	7.7	8.5	60.4	33.1	5.7	100.0	508
Dar es Salaam city	89.3	4.0	5.5	3.3	95.2	1.1	82.7	7.7	9.2	57.4	34.6	7.0	100.0	171
Other urban	90.6	4.2	5.1	2.4	95.6	2.0	82.7	7.7	8.1	62.0	32.3	5.0	100.0	336
Total rural	74.7	13.1	11.7	1.7	95.5	2.8	75.4	9.3	15.2	50.0	45.1	4.2	100.0	1,653
Zanzibar	87.0	1.9	8.9	2.2	97.8	0.0	76.0	6.6	17.4	23.6	70.8	4.8	100.0	69
Pemba	87.0	1.9	11.1	5.6	94.4	0.0	81.5	0.0	18.5	14.8	79.6	3.7	100.0	28
Unguja	87.0	1.9	7.4	10.0	00.0	0.0	72.2	1.1	16.7	29.6	64.8	5.6	100.0	41
Region														
Dodoma	62.3	21.7	15.9	2.2	95.7	2.2	61.6	0.3	18.1	46.4	50.7	2.9	100.0	94
Arusha	69.0	16.1	14.9	2.3	92.0	5.7	74.7	0.3	12.6	39.1	57.5	3.4	100.0	145
Kilimanjaro	86.5	8.3	5.2	1.6	97.4	1.0	81.3	8.3	10.4	59.1	36.8	3.6	100.0	117
Tanga	77.0	6.8	16.2	2.7	95.9	1.4	67.6	0.8	21.6	60.8	33.8	2.7	100.0	107
Morogoro	74.6	13.4	12.0	2.1	96.5	1.4	66.9	6.9	16.2	49.3	42.3	6.3	100.0	94
Coast	90.2	3.3	6.6	1.6	91.8	6.6	85.2	9.8	4.9	47.5	45.9	4.9	100.0	44
Dar es Salaam	89.1	4.3	5.6	3.0	95.7	1.0	83.2	6.9	9.5	55.9	35.9	7.2	100.0	191
Lindi	83.1	11.3	5.6	1.4	97.2	1.4	81.7	8.5	9.9	46.5	46.5	7.0	100.0	54
Mtwara	77.2	10.9	11.9	2.0	93.1	5.0	68.3	5.8	15.8	42.6	50.5	6.9	100.0	96
Ruvuma	79.4	8.8	11.8	0.0	99.0	1.0	84.3	4.9	10.8	52.0	42.2	5.9	100.0	82
Iringa	73.5	9.6	16.9	0.0	97.1	2.9	78.7	7.4	14.0	54.4	38.2	7.4	100.0	100
Mbeya	70.4	23.9	5.6	7.0	91.5	1.4	80.3	9.9	9.9	50.7	39.4	9.9	100.0	135
Singida	59.5	19.0	21.4	3.6	91.7	4.8	76.2	1.9	11.9	53.6	39.3	7.1	100.0	80
Tabora	81.1	5.7	13.2	0.0	98.1	1.9	71.7	5.7	22.6	79.2	18.9	1.9	100.0	80
Rukwa	76.9	7.7	15.4	1.3	98.7	0.0	65.4	1.5	23.1	43.6	48.7	7.7	100.0	71
Kigoma	87.1	2.9	5.7	0.0	98.6	1.4	74.3	4.3	20.0	62.9	31.4	1.4	100.0	95
Shinyanga	72.0	16.1	11.8	1.2	95.7	3.1	76.4	6.2	17.4	39.1	59.6	0.6	100.0	198
Kagera	82.6	7.2	8.7	0.0	98.6	1.4	82.6	5.8	11.6	75.4	21.7	2.9	100.0	139
Mwanza	91.0	5.1	3.8	1.3	93.6	5.1	85.9	3.8	9.0	43.6	51.3	3.8	100.0	176
Mara	79.6	14.8	1.9	3.7	94.4	1.9	87.0	9.3	3.7	59.3	40.7	0.0	100.0	63
Education														
No education	58.6	18.3	22.5	0.6	91.6	7.7	60.4	2.0	27.6	38.9	55.1	4.4	100.0	293
Primary incomplete	71.2	12.4	16.1	1.9	95.0	3.0	69.2	1.1	19.3	43.3	49.1	6.5	100.0	652
Primary Complete	85.4	9.0	5.0	1.9	96.9	1.2	83.9	7.1	8.6	55.5	40.2	3.9	100.0	1,063
Secondary +	94.4	3.8	1.5	3.8	95.9	0.3	89.6	6.4	4.1	73.5	23.6	2.6	100.0	222
Total	78.6	10.7	10.2	1.9	95.6	2.5	77.1	8.8	13.7	51.6	43.1	4.6	100.0	2,230

Personal Knowledge of Someone with AIDS

The 1996 TDHS included a question on whether respondents personally know somebody who has AIDS or who has died of AIDS. Results in Tables 11.7.1 and 11.7.2 show that personal experience with AIDS patients is common in Tanzania. About half the respondents report knowing someone who has AIDS or has died of AIDS. Personal acquaintance with AIDS on the mainland is higher than in Zanzibar. The data show that more than 70 percent of respondents from the Kagera region know someone with AIDS or who died of AIDS.

11.6 Perception of the Risk of Getting HIV/AIDS

Respondents who have heard of AIDS were asked whether they thought that their chances of getting the AIDS virus were great, moderate, small, or nil. Interviewers then asked respondents why they thought their chances were great/moderate or small/nil. Table 11.8 shows that 32 percent of women and 25 percent of men were unable to classify their own risk. Twenty-nine percent of women and 41 percent of men say that they have no chance of being infected. This is similar to the results from the 1994 TKAPS. Women are more likely than men to report that their chances of getting AIDS are great (13 vs. 7 percent).

As might be expected, the proportion who feel that they have no chance of getting AIDS is higher among young women and men, among those who are never married, and those who had no sexual partners other than their spouses in the preceding 12 months. The proportion reporting no risk is also higher among rural residents on the mainland and residents in Zanzibar. Women who reported that they have no risk at all of getting AIDS are more likely to be from the Kigoma and Kilimanjaro regions and men are more likely to be from the Mwanza region.

Perceptions of risk may or may not accurately reflect one's true risk of AIDS. However, causes of concern arise when an individual at moderate or great risk of contracting AIDS has a spouse who considers himself or herself at little or no risk. This situation may arise from a person engaging in high-risk activities without his or her spouse's knowledge. It is possible to compare spouses' views of their risks to assess whether couples have similar or desperate levels of perceived risk of contracting AIDS. The 1996 TDHS used the fact that in some households, both women and men were interviewed, making it possible to link data on currently married men and their wives living in the same household and look at couples in Tanzania as units of study. Data regarding couple's perception of their risk of getting AIDS are presented in Table 11.9.

The results show that there is a considerable difference of opinion between spouses couples as to their risk of getting AIDS. Among 19 percent of couples, both spouses report the same level of risk (13 percent say no risk at all, 4 percent say a small risk, and 1 percent say either a moderate or great risk of getting AIDS). A higher proportion of husbands (40 percent) than wives (25 percent) reported that they have no risk of getting AIDS and more wives (13 percent) than husbands (7 percent) think that they have a great risk of getting AIDS. This disproportionate perception of risk among couples is probably based on information about marital relations not captured in these data.

Respondents who classified themselves to be at no risk or to have a small risk of getting AIDS were asked why they perceive themselves so. Table 11.10 shows information on reasons why individual women and men state that their risk is low or nil. Roughly equal proportions of women and men state that their risk is low or nil because they were abstaining from sex altogether (29 and 25 percent, respectively). More than half the women and 45 percent of men report that sticking to one sexual partner or limiting the number of sexual partners is the reason for their low risk. Although low (15 percent), men are more likely than women (4 percent) to report that condom use is the reason for their low risk of getting AIDS. More respondents now think that their risk of getting AIDS is low or nil because of abstaining from sex than found in the 1994 TKAPS.

Table 11.8 Perception of risk of getting AIDS

Percent distribution of respondents who have heard of AIDS, by their perception of the risk of getting AIDS, according to background characteristics, Tanzania 1996

Background characteristic	Women: Personal chance of getting AIDS								Men: Personal chance of getting AIDS							
	No risk at all	Small	Moderate	Great	Has AIDS	Don't know	Total	Number	No risk at all	Small	Moderate	Great	Has AIDS	Don't know	Total	Number
Age																
15-19	38.9	15.5	5.9	7.6	0.2	31.9	100.0	1,659	47.9	15.8	4.4	5.3	0.1	26.5	100.0	473
20-24	26.8	17.4	11.4	13.0	0.1	31.4	100.0	1,641	41.2	19.3	9.0	7.8	0.0	22.8	100.0	369
25-29	23.5	15.2	14.6	14.4	0.0	32.4	100.0	1,400	38.4	18.2	11.2	11.0	0.0	21.2	100.0	300
30-39	23.7	15.0	12.6	16.5	0.2	32.1	100.0	1,941	37.3	19.6	11.8	7.3	0.0	24.0	100.0	519
40-49	30.7	14.4	9.2	11.5	0.0	34.2	100.0	1,235	35.6	19.2	10.7	6.5	0.0	28.0	100.0	353
50-59	NA	NA	NA	NA	NA	NA	NA	NA	45.5	13.8	4.8	4.2	0.0	31.7	100.0	215
Marital status																
Currently in union	25.4	15.0	12.0	14.4	0.0	33.3	100.0	5,249	39.3	18.4	10.7	6.3	0.0	25.2	100.0	1,285
Formerly in union	27.1	14.4	11.9	14.2	0.1	32.3	100.0	801	38.2	21.1	5.0	13.9	0.0	21.8	100.0	117
Never married	38.6	17.6	6.7	7.4	0.3	29.4	100.0	1,826	43.5	16.8	6.3	7.2	0.1	26.1	100.0	825
No. of sexual partners other than spouse in past 12 months																
0	30.4	15.1	10.2	11.8	0.1	32.3	100.0	6,661	45.8	17.0	6.4	4.6	0.0	26.1	100.0	1,563
1	18.8	18.3	13.6	17.4	0.0	31.8	100.0	1,001	31.7	21.0	15.1	9.6	0.0	22.6	100.0	342
2-3	16.1	16.9	14.5	20.5	0.0	32.0	100.0	142	29.0	20.5	17.1	12.1	0.0	21.2	100.0	198
4+	(11.4)	(8.9)	(15.7)	(22.0)	(3.3)	(38.8)	100.0	37	18.6	15.4	10.0	25.3	0.0	30.8	100.0	109
Residence																
Mainland	27.7	15.7	10.9	13.0	0.1	32.6	100.0	7,637	40.0	18.0	9.1	7.2	0.0	25.8	100.0	2,161
Total urban	24.7	18.4	11.9	12.1	0.2	32.6	100.0	1,804	34.6	24.5	9.2	5.9	0.1	25.6	100.0	508
Dar es Salaam city	20.8	22.0	11.1	9.8	0.2	36.2	100.0	562	25.7	32.4	9.9	4.8	0.4	26.8	100.0	171
Other urban	26.5	16.8	12.3	13.2	0.2	31.0	100.0	1,242	39.1	20.5	8.8	6.5	0.0	25.0	100.0	336
Total rural	28.6	14.8	10.6	13.3	0.1	32.6	100.0	5,832	41.6	15.9	9.1	7.6	0.0	25.8	100.0	1,653
Zanzibar	58.3	10.5	6.1	3.5	0.0	21.6	100.0	239	68.6	16.6	0.0	3.0	0.0	11.8	100.0	69
Pemba	62.0	6.4	4.7	2.7	0.0	24.1	100.0	92	85.2	5.6	0.0	1.9	0.0	7.4	100.0	28
Unguja	55.9	13.0	7.0	4.1	0.0	20.0	100.0	147	57.4	24.1	0.0	3.7	0.0	14.8	100.0	41
Region																
Dodoma	37.3	13.3	12.0	8.8	0.0	28.6	100.0	347	48.6	13.8	10.1	5.8	0.0	21.7	100.0	94
Arusha	36.0	13.2	5.6	6.9	0.0	38.3	100.0	495	40.2	13.8	9.2	8.0	0.0	28.7	100.0	145
Kilimanjaro	38.4	10.6	5.4	4.6	0.3	40.7	100.0	385	35.8	15.0	6.7	4.7	0.0	37.8	100.0	117
Tanga	32.4	9.9	6.6	5.9	0.3	44.9	100.0	457	32.4	10.8	6.8	8.1	0.0	41.9	100.0	107
Morogoro	27.4	8.7	17.6	10.3	0.0	36.0	100.0	400	44.4	7.7	7.0	8.5	0.0	32.4	100.0	94
Coast	14.9	22.8	8.3	9.4	0.0	44.6	100.0	158	39.3	24.6	1.6	8.2	0.0	26.2	100.0	44
Dar es Salaam	20.8	21.8	10.4	10.2	0.1	36.7	100.0	645	24.3	32.6	10.5	4.3	0.3	28.0	100.0	191
Lindi	16.8	15.2	20.3	21.5	0.0	26.3	100.0	185	46.5	28.2	14.1	2.8	0.0	8.5	100.0	54
Mtwara	27.5	13.7	8.9	15.6	0.0	34.3	100.0	352	50.5	14.9	10.9	8.9	0.0	14.9	100.0	96
Ruvuma	19.2	11.2	11.4	15.3	0.0	42.9	100.0	304	47.1	18.6	4.9	8.8	0.0	20.6	100.0	82
Iringa	27.9	12.2	11.4	15.1	0.3	33.2	100.0	452	43.4	17.6	9.6	8.8	0.0	20.6	100.0	100
Mbeya	24.2	11.6	7.1	9.7	0.6	46.8	100.0	467	22.5	16.9	5.6	5.6	0.0	49.3	100.0	135
Singida	35.2	14.9	8.0	7.5	0.0	34.4	100.0	270	31.0	20.2	16.7	15.5	0.0	16.7	100.0	80
Tabora	30.0	7.9	7.4	16.8	0.0	37.9	100.0	216	18.9	9.4	7.5	3.8	0.0	60.4	100.0	80
Rukwa	27.0	7.3	14.2	11.9	0.0	39.5	100.0	235	25.6	14.1	5.1	6.4	0.0	48.7	100.0	71
Kigoma	40.0	14.6	8.2	10.7	0.3	26.2	100.0	339	45.7	11.4	10.0	5.7	0.0	27.1	100.0	95
Shinyanga	27.5	19.7	9.2	24.4	0.0	19.2	100.0	658	49.7	29.2	6.8	9.3	0.0	5.0	100.0	198
Kagera	26.8	20.0	14.3	16.1	0.0	22.9	100.0	461	30.4	13.0	21.7	5.8	0.0	29.0	100.0	139
Mwanza	19.1	28.1	18.2	18.8	0.0	15.8	100.0	560	66.7	17.9	3.8	5.1	0.0	6.4	100.0	176
Mara	18.9	26.3	18.5	18.9	0.0	17.4	100.0	251	51.9	13.0	14.8	14.8	0.0	5.6	100.0	63
Education																
No education	26.1	14.0	9.4	14.1	0.1	36.3	100.0	2,135	39.0	12.0	7.5	9.2	0.0	32.3	100.0	293
Primary incomplete	31.6	13.5	9.4	12.0	0.1	33.4	100.0	1,595	45.2	14.7	6.5	6.9	0.1	26.6	100.0	652
Primary complete	27.9	16.6	11.8	13.0	0.1	30.5	100.0	3,706	39.5	19.0	10.1	7.5	0.0	23.9	100.0	1,063
Seondary +	36.0	21.2	13.3	6.4	0.0	23.2	100.0	439	37.2	30.0	11.4	2.1	0.0	19.3	100.0	222
Total	28.6	15.5	10.8	12.7	0.1	32.3	100.0	7,876	40.9	17.9	8.8	7.0	0.0	25.3	100.0	2,230

Note: Total includes 34 women and 17 men who reported "Don't know" to number of sexual partners in past 12 months. Figures in parentheses are based on 25-49 unweighted cases.
NA = Not applicable.

Table 11.9 Perception of risk of getting HIV/AIDS among couples

Percent distribution of couples who know about AIDS, by husband's and wife's perception of risk of getting AIDS, Tanzania 1996

Chances of getting AIDS: wife	Chances of getting AIDS: Husband						
	No risk at all	Small	Moderate	Great	Don't know	Total	Number of couples
No risk at all	12.7	3.7	2.5	2.2	4.3	25.4	277
Small	6.7	3.6	2.2	0.7	3.2	16.4	179
Moderate	3.9	2.2	1.3	0.8	2.5	10.8	118
Great	5.2	2.9	1.4	1.2	2.0	12.6	137
Don't know	11.3	5.1	2.6	1.7	14.1	34.7	378
Total	39.8	17.4	10.1	6.6	26.1	100.0	-
Number of couples	433	190	110	72	284	-	1,089

Table 11.10 Reasons for perception of small/no risk of getting AIDS

Percent of women and men who think they have a small or no risk of getting AIDS, by reasons for that perception of risk, Tanzania 1996

Marital status	Abstain from sex	Use condoms	One sex partner/ limit partners	(Spouse) avoid prosti-tution	No blood trans-fusion	No in-jections	Other	Number
				WOMEN				
Never in union	70.4	5.2	10.0	14.1	1.3	3.3	4.4	1,027
Currently in union	4.9	2.3	78.3	20.2	0.9	2.2	7.2	2,117
Formerly in union	52.4	7.3	16.0	25.9	1.8	3.7	7.0	332
Total	28.8	3.6	52.2	18.9	1.1	2.7	6.4	3,476
				MEN				
Never in union	50.1	18.2	9.1	29.7	1.8	7.4	5.3	497
Currently in union	7.3	10.5	72.6	51.3	1.6	5.4	2.6	742
Formerly in union	30.8	39.6	14.3	47.1	1.0	3.5	1.0	69
Total	24.9	14.9	45.3	42.9	1.7	6.0	3.6	1,310

Respondents who classified themselves to be at moderate or great risk of contracting AIDS were also asked why they perceive themselves to be at such risk. Results are presented in Table 11.11. Sixty-one percent of women believe that they are at moderate or great risk because their spouses or regular partners have another sexual partner besides themselves. Twenty-eight percent of women say they are at moderate or great risk because they do not use condoms. The most common reasons given by men being at moderate or great risk are that they do not use condoms (34 percent), they have sex with prostitutes (21 percent), and they have many sex partners (20 percent). Eighteen percent of men perceive themselves to be at moderate or great risk because their spouse or regular partner has another sexual partner.

Women and men who have heard of AIDS and ever had sexual intercourse were asked if they had changed their sexual behaviour to prevent getting AIDS and if so, in what way. As shown in Tables 11.12.1 and 11.12.2 (and Figure 11.2), 82 percent of women and 91 percent of men reported changing their sexual

behaviour. By far the most common change among respondents was to restrict sex to one partner (49 percent of women and 45 percent of men), while 15 percent of women and 24 percent of men had reduced their number of sexual partners. Only 2 percent of women and 9 percent of men say they began using condoms to avoid AIDS. Respondents living in rural areas on the mainland and those with no education are more likely not to have changed their sexual behaviour in response to their perceived risk of AIDS than their counterparts.

Table 11.11 Reasons for perception of moderate/great risk of getting AIDS

Percent of women and men who think they have moderate or great risk of getting AIDS, reasons for that perception of risk, Tanzania 1996

Marital status	Don't use condoms	Multiple sex partners	Spouse has partner	Had sex with prosti-tute	Had blood trans-fusion	Had in-jections	Other	Number of women/ men
				WOMEN				
Never in union	31.8	11.8	37.0	7.8	2.3	8.8	21.0	257
Currently in union	25.6	3.7	67.4	6.0	0.8	5.7	17.1	1,384
Formerly in union	35.6	15.6	44.6	8.4	1.4	4.7	16.7	209
Total	27.6	6.1	60.6	6.5	1.1	6.1	17.6	1,849
				MEN[a]				
Never in union	30.9	20.8	13.5	23.7	4.7	11.7	7.2	112
Currently in union	34.2	18.4	21.9	19.6	2.7	13.2	15.7	219
Total	34.1	19.7	18.4	20.6	3.1	12.1	13.6	354

[a] Total includes 22 men formerly in union.

Figure 11.2
Changes in Behaviour after Hearing about HIV/AIDS, by Sex

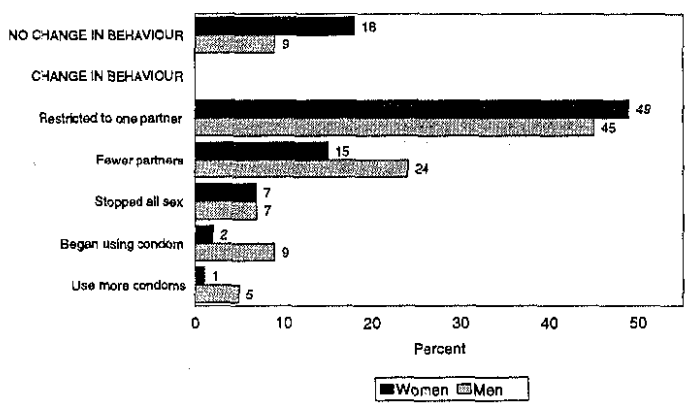


Table 11.12.1 AIDS prevention behaviour: women

Percent of women who have heard of AIDS, by specific changes in behaviour in order to avoid AIDS, and background characteristics, Tanzania 1996

Background characteristic	No change in sexual behaviour[1]	Changes in behaviour to avoid AIDS: Kept virginity	Stopped sex	Began using condom	Increased condom use	Restricted to one partner	Fewer partners	Avoided sex with prostitutes	Other sexual behaviour	Number of women
Perception of AIDS risk among those who have heard of AIDS										
No/small risk	14.9	19.2	8.5	2.2	1.4	45.7	12.5	4.4	1.5	3,476
Moderate risk	19.4	1.9	8.4	3.7	1.6	58.6	24.8	3.0	2.1	847
Great risk/has AIDS	24.5	3.0	4.7	1.7	0.8	55.8	23.4	4.8	1.3	1,011
Don't know/missing	19.5	11.6	4.0	1.2	0.7	47.2	10.2	3.6	1.5	2,542
Age										
15-19	10.8	51.5	3.8	1.8	1.1	24.4	8.4	1.9	1.3	1,659
20-24	18.5	7.3	6.5	3.1	1.3	51.9	17.3	4.7	1.8	1,641
25-29	18.6	1.6	4.8	2.4	0.6	61.5	16.3	3.4	1.8	1,400
30-39	19.8	0.5	6.3	1.5	1.6	58.4	18.1	5.9	1.5	1,941
40-49	24.3	0.1	12.6	0.7	0.6	48.5	11.2	3.9	1.5	1,235
Marital status										
Currently in union	22.2	0.0	3.7	1.2	0.6	60.0	16.1	4.5	1.8	5,249
Formerly in union	16.7	0.1	25.3	5.2	3.0	36.8	17.7	5.2	1.8	801
Never married	7.0	55.0	6.6	2.7	1.7	22.3	8.3	2.2	0.8	1,826
Residence										
Mainland	17.8	12.5	6.6	2.0	1.1	49.3	14.7	4.1	1.6	7,637
Total urban	10.9	12.2	8.2	4.4	3.1	55.6	15.9	5.7	2.0	1,804
Dar es Salaam city	11.6	12.8	8.1	6.9	2.6	58.0	12.5	7.8	3.6	562
Other urban	10.6	11.9	8.2	3.2	3.3	54.5	17.5	4.8	1.3	1,242
Total rural	19.9	12.6	6.1	1.3	0.5	47.3	14.4	3.6	1.4	5,832
Zanzibar	29.2	22.0	4.3	0.2	0.3	36.0	5.9	2.5	1.9	239
Pemba	40.7	22.4	3.4	0.0	0.3	25.8	2.7	2.7	0.7	92
Unguja	22.0	21.7	4.9	0.3	0.3	42.3	7.8	2.3	2.6	147
Region										
Dodoma	5.2	9.1	16.2	1.3	0.6	49.4	31.8	4.9	2.3	347
Arusha	7.9	15.5	4.3	0.5	1.0	50.5	8.1	1.3	1.3	495
Kilimanjaro	11.9	19.3	3.9	2.3	1.5	53.9	6.2	2.1	0.8	385
Tanga	19.9	17.9	3.1	1.8	2.0	46.4	5.9	1.5	0.5	457
Morogoro	9.5	9.5	9.8	1.9	2.7	62.3	10.0	2.2	0.5	400
Coast	16.3	12.7	5.8	5.8	1.4	48.9	10.9	13.4	6.2	158
Dar es Salaam	12.3	12.2	8.3	6.0	2.2	58.5	11.8	7.1	3.1	645
Lindi	14.9	4.7	5.4	5.7	1.6	38.0	39.6	13.0	1.6	185
Mtwara	21.1	5.7	5.3	2.1	0.2	47.8	26.1	11.0	1.8	352
Ruvuma	13.4	6.7	4.7	2.2	0.6	60.1	18.5	10.6	1.5	304
Iringa	10.3	17.8	9.3	0.5	0.3	53.3	7.7	1.9	0.8	452
Mbeya	12.9	14.2	4.2	1.6	0.6	54.2	8.7	1.6	0.6	467
Singida	6.7	16.0	6.4	1.6	0.3	56.0	13.6	4.8	4.0	270
Tabora	25.3	5.8	20.5	1.6	0.5	30.0	11.1	6.8	1.6	216
Rukwa	27.0	9.6	1.7	0.9	0.3	51.5	7.6	1.7	0.6	235
Kigoma	24.5	20.0	9.9	0.3	0.0	33.5	12.1	6.8	1.1	339
Shinyanga	35.6	13.3	4.2	0.6	1.1	40.8	16.4	0.0	0.0	658
Kagera	17.9	13.2	7.5	0.4	0.4	44.6	26.1	4.3	5.0	461
Mwanza	30.0	7.6	3.6	2.6	2.6	46.9	17.8	1.0	0.0	560
Mara	26.3	8.5	4.8	3.7	0.4	46.3	18.9	3.7	1.5	251
Education										
No education	26.4	4.2	7.4	0.4	0.3	45.5	13.4	3.4	1.2	2,135
Primary incomplete	19.4	23.3	5.9	1.7	0.8	39.6	10.7	3.3	0.8	1,595
Primary complete	14.0	12.0	6.0	2.8	1.3	54.9	17.0	4.8	2.0	3,706
Secondary +	7.9	23.4	9.6	3.9	4.5	48.2	12.4	4.1	2.0	439
Total	18.1	12.8	6.6	2.0	1.1	48.9	14.5	4.1	1.6	7,876

[1] Includes those who say "don't know".

Table 11.12.2 AIDS prevention behaviour: men

Percent of men who have heard of AIDS, by specific changes in behaviour in order to avoid AIDS, and background characteristics, Tanzania 1996

Background characteristic	No change in sexual behaviour[1]	Changes in behaviour to avoid AIDS: Kept virginity	Stopped sex	Began using condom	Increased condom use	Restricted to one partner	Fewer partners	Avoided sex with prostitutes	Other sexual behaviour	Number of men
Perception of AIDS risk among those who have heard of AIDS										
No/small risk	5.9	17.2	9.2	8.2	4.7	48.7	26.2	17.9	1.2	1,310
Moderate risk	10.5	1.8	6.5	11.2	7.6	42.8	33.7	22.3	3.6	197
Great risk /has AIDS	22.3	4.6	3.1	10.0	2.6	38.5	27.5	22.2	1.2	158
Don't know/missing	12.4	16.4	4.6	7.9	4.6	38.4	14.8	16.5	1.0	565
Age										
15-19	7.4	57.6	3.9	5.6	4.1	17.1	8.4	7.0	0.0	473
20-24	4.8	12.6	7.5	15.9	8.7	38.5	26.0	21.9	0.5	369
25-29	10.7	1.7	6.9	14.5	8.5	48.9	22.0	20.9	2.4	300
30-39	6.3	0.8	7.7	8.2	4.4	58.8	32.4	22.4	2.7	519
40-49	13.1	0.0	8.6	4.1	1.7	59.3	31.7	20.3	1.6	353
50-59	18.2	0.0	12.3	1.9	0.0	54.1	25.3	19.9	0.7	215
Marital status										
Currently in union	10.9	0.0	7.1	6.2	2.6	60.9	29.7	22.3	1.7	1,285
Formerly in union	9.8	0.0	20.8	10.5	14.9	24.4	31.4	20.6	0.5	117
Never married	6.3	39.7	5.7	11.8	6.8	22.9	14.2	11.6	0.9	825
Residence										
Mainland	9.3	14.0	7.5	8.7	4.9	45.0	24.3	17.9	1.4	2,161
Total urban	9.1	11.8	8.0	13.4	7.8	44.1	23.5	15.2	1.5	508
Dar es Salaam city	14.3	9.6	3.3	24.3	3.3	37.5	25.4	5.9	2.2	171
Other urban	6.4	12.9	10.4	7.9	10.1	47.4	22.6	19.9	1.1	336
Total rural	9.4	14.7	7.4	7.3	4.0	45.3	24.6	18.7	1.4	1,653
Zanzibar	2.2	36.6	1.1	1.1	1.1	39.3	15.5	30.7	0.0	69
Pemba	5.6	33.3	0.0	0.0	0.0	42.6	5.6	24.1	0.0	28
Unguja	0.0	38.9	1.9	1.9	1.9	37.0	22.2	35.2	0.0	41
Region										
Dodoma	5.1	15.9	5.8	10.1	4.3	40.6	28.3	11.6	0.7	94
Arusha	13.8	16.1	3.4	2.3	6.9	33.3	21.8	4.6	1.1	145
Kilimanjaro	13.0	10.9	6.2	7.8	7.8	43.5	17.1	4.1	0.5	117
Tanga	23.0	10.8	0.0	9.5	5.4	37.8	14.9	5.4	0.0	107
Morogoro	9.9	12.7	5.6	4.9	4.2	44.4	19.7	12.0	1.4	94
Coast	21.3	14.8	6.6	16.4	1.6	31.1	16.4	4.9	1.6	44
Dar es Salaam	14.8	10.2	3.6	24.0	3.9	37.2	24.3	5.9	2.3	191
Lindi	1.4	12.7	25.4	12.7	8.5	57.7	38.0	26.8	2.8	54
Mtwara	4.0	12.9	59.4	9.9	3.0	66.3	14.9	3.0	1.0	96
Ruvuma	4.9	13.7	32.4	5.9	9.8	52.0	17.6	2.0	1.0	82
Iringa	9.6	19.1	5.1	3.7	2.9	50.0	21.3	5.1	2.2	100
Mbeya	2.8	12.7	0.0	1.4	18.3	76.1	2.8	1.4	0.0	135
Singida	3.6	11.9	3.6	1.2	8.3	69.0	23.8	6.0	1.2	80
Tabora	11.3	11.3	0.0	24.5	1.9	11.3	13.2	52.8	3.8	80
Rukwa	11.5	16.7	0.0	1.3	3.8	60.3	1.3	1.3	0.0	71
Kigoma	11.4	8.6	1.4	12.9	1.4	42.9	15.7	48.6	4.3	95
Shinyanga	14.3	15.5	4.3	3.1	1.2	44.7	38.5	14.9	0.0	198
Kagera	5.8	13.0	4.3	17.4	2.9	23.2	14.5	53.6	4.3	139
Mwanza	0.0	21.8	3.8	1.3	0.0	46.2	61.5	50.0	0.0	176
Mara	1.9	16.7	3.7	9.3	3.7	46.3	55.6	33.3	1.9	63
Education										
No education	17.4	11.5	6.5	2.8	0.9	43.0	19.5	21.3	1.4	293
Primary incomplete	11.2	26.4	8.6	4.2	2.5	38.8	21.9	17.2	0.0	652
Primary complete	5.8	9.7	7.7	11.0	6.7	48.5	25.9	17.5	2.1	1,063
Secondary +	7.8	8.9	2.7	16.4	7.3	47.8	27.4	20.6	1.5	222
Total	9.1	14.7	7.3	8.5	4.8	44.9	24.1	18.3	1.4	2,230

[1] Includes those who say "don't know".

11.7 AIDS Testing

Tables 11.13.1 and 11.13.2 show the percentage of women and men who have been tested for AIDS or want to be tested and, of these, the percentage who know of a source of AIDS testing, according to selected background characteristics. Four percent of women and 11 percent of men have already been tested for AIDS and interestingly, about two-thirds of women and men express a desire to be tested for AIDS. Among those who have already been tested for the AIDS virus and those who express a desire for AIDS testing, more than half of them know a place where they can be tested for the AIDS virus.

11.8 Sources of Condom Supply

Because of the important role condom use plays in combating the transmission of HIV, respondents were asked if they knew of a source for condoms and if so, to name the source. Table 11.14 shows knowledge of condoms and knowledge of a source for condoms among women and men who have heard of AIDS and who have had sexual intercourse. While most of the respondents know about condoms, many do not know where they can obtain them. Eighty-seven percent of women and 95 percent of men know of condoms. Nevertheless, only 58 percent of women and 74 percent of men who have heard of condoms know where to get them. Among those who know a source, 81 percent of women and 72 percent men reported that they could obtain condoms from a public source, while 32 percent of women and 40 percent of men mentioned private pharmacies as a source for condoms. Knowledge of condoms and knowledge of a source for condoms are highest among respondents who live in urban areas and those who have some formal schooling.

11.9 Use of Condoms

Tables 11.15.1 and 11.15.2 show the percentage of women and men who had sex in the 12 months preceding the survey who have ever used condoms for contraceptive purposes, for STD prevention, or either reason. One-third of men and 13 percent of women report using a condom for either reason. Results show that both men and women are slightly more likely to use condoms for STD prevention than to use for fertility regulation.

Condom use rises with increasing education among both women and men; urban dwellers are more likely than rural dwellers to have ever used a condom. The tables also show the prevalence of condom use during the last sexual intercourse by type of sexual contact (i.e., spouse or nonspouse). Not surprisingly, the likelihood of a condom being used is higher when the respondent had sex with someone other than their spouses. Seventeen percent of women and more than one-third of men used a condom when they had sex with a partner other than their spouse. However, only 2 percent of women and 4 percent of men used a condom with their spouses.

Table 11.13.1 Testing for AIDS: women

Among women who know of AIDS, the percent who have been tested and the percent who would like to be tested, and for those respondents tested or who desired testing, the percent who know a source for testing, Tanzania 1996

Background characteristic	Know of AIDS			Tested for AIDS or want to be tested				
	Have been tested for AIDS	Want to be tested for AIDS	Number	Know source for test	Source of AIDS testing			Number
					Public	Private medical	Other	
Age								
15-19	2.3	64.6	1,659	42.2	38.5	6.4	0.2	1,109
20-24	5.3	70.4	1,641	54.7	49.6	8.8	0.5	1,243
25-29	5.3	69.1	1,400	57.3	50.5	12.2	0.3	1,041
30-39	4.7	67.8	1,941	57.4	51.8	10.6	0.6	1,408
40-49	2.7	62.5	1,235	46.0	39.8	10.1	0.7	805
Marital status								
Currently in union	4.0	68.4	5,249	52.2	46.7	9.8	0.4	3,804
Formerly in union	6.1	66.0	801	57.8	52.3	10.9	0.7	577
Never married	3.5	63.6	1,826	49.4	44.1	8.4	0.5	1,226
Residence								
Mainland	4.1	67.0	7,637	52.1	46.5	9.9	0.5	5,428
Total urban	7.3	66.8	1,804	65.3	61.5	8.6	1.0	1,336
Dar es Salaam city	10.1	60.9	562	60.4	58.1	8.1	1.1	399
Other urban	6.0	69.4	1,242	67.4	63.0	8.8	1.0	938
Total rural	3.1	67.0	5,832	47.7	41.6	10.3	0.3	4,092
Zanzibar	3.7	70.8	239	55.0	54.5	0.5	0.0	178
Region								
Dodoma	1.3	57.5	495	59.7	55.2	7.2	0.6	204
Arusha	4.1	72.8	385	32.7	25.7	10.9	0.3	380
Kilimanjaro	10.1	59.0	457	60.1	47.4	15.3	0.4	266
Tanga	2.3	61.5	400	40.8	38.4	3.2	0.4	291
Morogoro	3.0	66.1	158	54.9	48.6	8.6	0.0	276
Coast	2.9	65.6	645	39.2	38.6	0.5	0.5	108
Dar es Salaam	9.2	61.2	185	59.6	57.4	7.3	1.5	454
Lindi	8.5	73.1	352	66.3	58.9	14.3	0.4	151
Mtwara	1.8	75.3	304	54.3	54.0	10.4	0.0	272
Ruvuma	7.1	71.1	452	64.2	44.1	32.0	0.6	238
Iringa	4.8	61.0	467	54.4	37.9	21.8	2.0	297
Mbeya	4.5	66.8	270	51.6	43.9	11.8	0.5	333
Singida	3.2	64.0	216	51.2	49.2	5.2	1.6	181
Tabora	5.8	69.5	235	64.3	53.8	23.1	0.0	163
Rukwa	1.2	57.3	339	37.8	36.8	1.0	0.5	138
Kigoma	3.7	64.8	658	58.0	54.7	10.7	0.4	232
Shinyanga	1.9	69.7	461	48.1	47.3	1.6	0.0	472
Kagera	3.6	76.4	560	55.4	49.1	10.3	0.0	369
Mwanza	1.7	70.6	251	44.3	43.8	1.8	0.0	405
Mara	1.9	77.4		54.7	51.4	8.9	0.0	199
Education								
No education	1.6	64.4	2,135	36.0	32.9	5.8	0.3	1,408
Primary incomplete	3.4	66.6	1,595	46.2	39.6	9.2	0.4	1,117
Primary complete	5.1	69.6	3,706	59.4	53.3	11.5	0.5	2,769
Secondary +	10.6	60.5	439	81.7	76.2	11.4	1.4	312
Total	4.1	67.1	7,876	52.2	46.7	9.6	0.5	5,606

Table 11.13.2 Testing for AIDS: men

Among men who know of AIDS, the percent who have been tested and the percent who would like to be tested, and for those respondents tested or who desire testing, the percent who know a source for testing, Tanzania 1996

Background characteristic	Know of AIDS			Tested for AIDS or want to be tested				
	Have been tested for AIDS	Want to be tested for AIDS	Number	Source of AIDS testing				
				Know source for test	Public	Private medical	Other	Number
Age								
15-19	3.4	69.5	473	47.2	43.3	9.1	0.0	345
20-24	11.1	66.8	369	69.7	65.6	12.5	0.2	287
25-29	16.6	64.7	300	69.0	59.0	13.2	1.8	243
30-39	15.1	66.7	519	69.4	62.8	11.5	0.3	425
40-49	14.5	57.6	353	69.1	62.6	11.6	0.3	255
50-59	7.1	65.5	215	55.6	48.5	11.1	0.0	157
Marital status								
Currently in union	13.2	65.3	1,285	66.6	59.7	11.7	0.5	1,009
Formerly in union	15.8	57.5	117	78.4	70.5	15.4	0.7	86
Never married	7.7	66.8	825	57.0	52.1	10.3	0.2	615
Residence								
Mainland	11.4	65.9	2,161	63.1	56.8	11.7	0.4	1,670
Total urban	17.9	58.9	508	72.7	66.4	10.4	1.2	390
Dar es Salaam city	17.6	50.0	171	68.5	63.6	7.1	2.2	116
Other urban	18.1	63.4	336	74.5	67.6	11.8	0.7	274
Total rural	9.3	68.1	1,653	60.2	53.8	12.1	0.2	1,281
Zanzibar	9.3	51.4	69	84.2	84.2	0.0	0.0	42
Region								
Dodoma	6.5	65.9	94	63.0	59.0	8.0	0.0	68
Arusha	10.3	64.4	145	50.8	38.5	13.8	0.0	108
Kilimanjaro	18.7	64.8	117	59.6	49.7	11.2	1.9	98
Tanga	12.2	73.0	107	52.4	44.4	9.5	0.0	91
Morogoro	12.7	69.0	94	56.9	52.6	7.8	0.0	77
Coast	4.9	77.0	44	36.0	36.0	2.0	0.0	36
Dar es Salaam	16.4	51.0	191	66.8	62.0	6.8	2.0	129
Lindi	16.9	69.0	54	75.4	68.9	18.0	0.0	46
Mtwara	6.9	82.2	96	68.9	67.8	4.4	0.0	85
Ruvuma	23.5	52.9	82	80.8	53.8	33.3	1.3	62
Iringa	8.1	58.8	100	62.6	56.0	16.5	0.0	67
Mbeya	14.1	73.2	135	64.5	56.5	12.9	1.6	118
Singida	8.3	44.0	80	68.2	68.2	2.3	0.0	42
Tabora	5.7	69.8	80	70.0	57.5	25.0	0.0	61
Rukwa	14.1	64.1	71	54.1	54.1	0.0	0.0	55
Kigoma	8.6	68.6	95	64.8	59.3	16.7	0.0	73
Shinyanga	6.8	72.7	198	50.8	50.8	3.1	0.0	157
Kagera	11.6	66.7	139	75.9	66.7	13.0	0.0	108
Mwanza	6.4	65.4	176	73.2	69.6	16.1	0.0	126
Mara	18.5	77.8	63	69.2	65.4	21.2	0.0	61
Education								
No education	6.2	63.7	293	42.1	37.8	7.1	0.0	205
Primary incomplete	6.4	68.9	652	55.5	50.4	8.8	0.2	491
Primary complete	13.7	66.6	1,063	69.4	62.8	12.9	0.2	855
Secondary +	20.7	52.3	222	85.1	75.7	16.7	2.7	162
Total	11.3	65.5	2,230	63.6	57.4	11.4	0.4	1,712

Table 11.14 Knowledge of condoms

Among respondents who have heard of AIDS and have ever had sex, percent who know of condoms and know a source of condoms, according to background characteristics, and by specific sources, Tanzania 1996

Background characteristic	Source of condoms: women								Source of condoms: men						
	Knows condom	Knows any source	Public	Private medical	Pharm-acy	Other source	Missing	Number of women	Knows condom	Knows any source	Public	Private medical	Pharm-acy	Other source	Number of men
Age															
15-19	86.7	54.2	68.9	5.3	39.1	47.6	0.0	806	97.4	74.3	63.7	4.5	48.8	56.5	200
20-24	92.2	61.9	77.7	8.9	36.8	37.8	0.0	1,522	97.8	81.2	69.9	6.4	42.1	57.4	322
25-29	90.8	64.3	84.9	8.1	32.1	32.2	0.0	1,378	98.9	79.2	72.5	8.8	39.5	52.2	295
30-39	87.6	59.1	84.3	8.9	28.6	32.4	0.1	1,934	95.8	76.4	75.4	5.2	38.5	48.8	515
40-49	73.8	46.7	84.8	12.1	20.7	27.8	0.4	1,234	93.5	71.6	74.2	7.7	37.7	46.7	353
50-59	NA	NA	NA	NA	NA	NA	NA	NA	82.3	47.4	70.3	7.7	29.2	55.6	215
Marital status															
Currently in union	85.6	57.3	83.9	8.8	29.1	32.0	0.0	5,249	93.9	71.6	74.6	6.8	38.1	48.6	1,285
Formerly in union	88.4	60.2	77.4	9.8	30.9	38.5	0.4	801	91.0	75.4	69.4	3.9	33.8	54.4	117
Never married	91.8	63.3	69.9	7.4	46.1	46.7	0.0	823	98.0	78.7	67.1	6.8	44.9	58.9	498
Residence															
Mainland	86.7	58.6	80.8	8.9	32.2	35.3	0.1	6,687	94.9	73.6	71.4	6.7	40.6	53.2	1,858
Total urban	97.6	73.1	75.8	9.5	50.6	41.7	0.1	1,587	98.9	85.9	60.3	6.0	60.7	64.7	448
Dar es Salaam city	99.1	68.9	65.7	11.8	74.3	57.7	0.0	491	99.2	90.2	52.3	8.2	62.7	71.8	155
Other urban	96.9	75.1	80.1	8.5	40.6	35.0	0.1	1,096	98.8	83.7	64.8	4.7	59.6	60.7	293
Total rural	83.4	53.3	83.3	8.6	23.1	32.0	0.1	5,100	93.7	69.5	76.0	6.9	32.2	48.4	1,410
Zanzibar	84.2	49.0	95.8	1.7	5.5	14.6	0.0	186	89.4	79.8	98.3	4.1	4.9	1.7	44
Pemba	76.0	46.0	93.8	0.0	5.0	12.5	0.0	71	(83.3)	(93.3)	(96.4)	(3.6)	(0.0)	(3.6)	19
Unguja	89.3	50.6	96.7	2.5	5.7	15.6	0.0	115	(93.9)	(71.0)	(100.0)	(4.5)	(9.1)	(0.0)	25
Region															
Dodoma	83.2	62.2	91.7	7.6	28.3	9.0	0.0	315	93.1	73.1	78.5	8.9	44.3	22.8	79
Arusha	76.6	52.2	60.9	6.8	27.1	49.6	0.0	418	87.7	67.2	51.2	2.3	23.3	72.1	121
Kilimanjaro	96.2	66.9	55.9	20.3	21.8	46.0	0.5	312	93.6	77.0	41.1	11.3	28.2	56.5	105
Tanga	88.5	55.9	76.2	8.1	28.7	36.9	0.0	376	93.9	71.0	54.5	6.8	25.0	54.5	95
Morogoro	88.6	65.9	88.7	5.6	27.7	29.2	0.0	362	96.8	65.0	80.8	6.4	29.5	43.6	82
Coast	93.8	64.6	84.9	18.5	43.2	49.3	0.0	138	98.1	80.4	73.2	17.1	19.5	68.3	38
Dar es Salaam	99.1	66.6	67.0	11.5	73.4	56.0	0.2	567	99.3	90.0	52.5	8.6	62.7	71.3	172
Lindi	93.7	61.7	96.0	8.0	14.4	31.0	0.0	177	100.0	72.6	93.3	6.7	35.6	24.4	47
Mtwara	88.3	57.7	96.7	6.2	7.1	21.9	0.0	332	96.6	58.8	94.0	2.0	18.0	10.0	83
Ruvuma	93.1	62.5	78.2	9.1	25.8	40.5	0.0	284	95.5	75.0	63.5	4.8	36.5	47.6	70
Iringa	81.0	50.8	82.8	7.8	21.9	20.3	0.0	373	91.8	65.3	81.8	7.6	39.4	28.8	81
Mbeya	91.7	70.5	86.6	5.2	49.4	15.7	0.0	401	98.4	86.9	81.1	3.8	69.8	58.5	118
Singida	79.4	59.2	95.9	5.4	31.8	34.5	0.0	226	93.2	75.4	88.5	1.9	38.5	23.1	71
Tabora	90.5	66.0	80.4	14.0	9.3	52.3	0.0	204	100.0	76.6	69.4	2.8	13.9	72.2	71
Rukwa	85.5	58.3	82.6	3.2	43.2	16.8	0.6	213	95.4	62.9	89.7	0.0	82.1	51.3	59
Kigoma	86.0	45.3	85.6	9.9	5.4	34.2	0.0	272	100.0	71.9	89.1	10.9	17.4	39.1	87
Shinyanga	78.2	50.8	90.3	1.6	38.7	31.5	0.0	571	92.6	65.1	70.7	6.1	48.8	52.4	167
Kagera	87.2	50.5	63.6	20.6	14.0	58.9	0.0	400	95.0	78.9	66.7	11.1	13.3	71.1	120
Mwanza	77.9	49.1	95.3	5.6	35.5	23.4	0.0	517	91.8	71.4	82.5	0.0	55.0	67.5	137
Mara	87.9	61.3	86.5	4.5	22.6	36.1	0.0	229	91.1	70.7	96.6	20.7	75.9	44.8	53
Education															
No education	69.7	39.1	82.7	6.7	20.0	28.2	0.0	2,048	83.1	51.5	70.0	8.4	29.2	43.8	259
Primary incomplete	88.8	52.8	80.7	9.2	27.2	36.0	0.2	1,223	92.7	62.0	74.1	4.5	25.0	52.4	480
Primary complete	95.2	66.3	81.6	9.2	32.5	35.6	0.1	3,266	98.0	80.1	72.1	6.0	43.1	50.3	960
Secondary +	99.4	84.7	75.8	8.8	57.5	39.9	0.0	337	99.6	93.9	69.7	11.0	54.0	62.9	202
Total	86.7	58.4	81.2	8.7	31.6	34.8	0.1	6,873	94.8	73.7	72.0	6.6	39.7	52.0	1,901

Note: Figures in parentheses are based on 25-49 men.
NA = not applicable.

Table 11.15.1 Use of condoms: women

Percent of women who have had sex in the past year who ever used condoms and percent who used condoms during last sexual intercourse, according to perception of AIDS risk, background characteristics and changes in sexual behaviour, Tanzania 1996

Background characteristic	Ever used condom				Used condom during last sexual intercourse					
	Use condom for FP	Use condom to avoid STD	Either	Number	Last sex with spouse	Number	Last sex with other	Number	Last sex with any partner	Number
AIDS not always fatal or don't know										
No/small risk	7.9	10.8	13.2	2,282	1.8	1,978	25.5	390	5.9	2,282
Moderate risk	11.1	12.2	16.6	700	2.3	596	15.8	143	5.2	700
Great risk/has AIDS	9.8	10.2	13.9	877	1.8	732	10.9	188	3.8	877
Don't know/missing	8.2	6.8	10.2	1,905	1.4	1,637	11.7	335	3.3	1,905
Age										
15-19	7.4	13.4	15.6	620	1.5	362	18.7	276	9.2	620
20-24	12.4	13.8	17.5	1,291	2.6	1,065	21.9	273	6.8	1,291
25-29	9.9	10.9	14.7	1,205	2.0	1,084	15.6	177	4.1	1,205
30-39	8.1	7.5	11.0	1,667	1.4	1,525	15.5	226	3.4	1,667
40-49	4.0	3.5	5.2	981	1.0	907	7.2	105	1.7	981
Marital status										
Currently in union	6.9	6.3	9.5	4,954	1.7	4,943	17.0	247	2.6	4,954
Formerly in union	21.9	31.6	34.5	332	NA	0	15.5	332	15.5	332
Never married	17.6	28.6	30.8	478	NA	0	18.4	478	18.4	478
Residence										
Mainland	8.8	9.7	12.9	5,600	1.7	4,783	17.3	1,049	4.7	5,600
Total urban	17.8	21.1	26.1	1,318	3.6	1,022	29.4	358	10.8	1,318
Dar es Salaam city	18.3	24.1	29.4	411	5.7	324	34.3	118	14.4	411
Other urban	17.6	19.8	24.6	907	2.6	699	27.1	240	9.1	907
Total rural	6.0	6.2	8.9	4,282	1.2	3,761	11.0	690	2.9	4,282
Zanzibar	3.6	5.4	6.2	165	1.3	160	*	8	1.5	165
Zone										
Coastal	11.9	14.8	18.2	1,378	3.0	1,141	22.7	313	7.7	1,378
Northern highlands	14.2	9.2	16.5	596	2.8	505	22.7	98	6.1	596
Lake	4.8	6.2	7.9	1,909	1.0	1,674	13.5	284	2.8	1,909
Central	7.3	9.5	12.8	457	1.4	404	15.3	79	3.9	457
Southern highlands	9.3	7.1	11.0	802	1.4	710	13.5	113	3.1	802
Southern	8.3	12.2	14.2	623	0.9	509	13.5	170	4.4	623
Education										
No education	2.0	3.0	3.9	1,735	0.5	1,586	5.2	215	1.1	1,735
Primary incomplete	5.6	8.3	9.6	1,020	1.6	858	16.1	215	4.7	1,020
Primary complete	12.5	12.6	17.3	2,740	2.4	2,305	19.4	546	5.9	2,740
Secondary +	24.7	26.0	35.4	269	4.5	194	37.2	80	14.3	269
Changes in sexual behaviour										
No sexual behaviour change	4.2	3.7	5.9	1,263	0.4	1,108	7.2	222	1.6	1,263
Stopped sex	6.8	6.5	10.2	203	1.7	169	(10.3)	38	3.4	203
Began using condom	58.5	100.0	100.0	136	24.3	61	71.8	93	60.0	136
Used condom more	64.1	100.0	100.0	82	43.2	33	(83.3)	54	72.2	82
Restrict one partner	9.6	9.8	13.6	3,427	2.1	2,986	16.3	537	4.4	3,427
Fewer partners	9.3	12.3	15.7	942	1.7	796	15.4	221	5.0	942
Avoid sex with prostitute	9.8	13.2	15.1	270	2.1	225	9.7	63	4.0	270
Total	8.7	9.6	12.7	5,764	1.7	4,943	17.2	1,057	4.6	5,764

Note: Figures in parentheses are based on 25-49 women; an asterisk indicates a figure is based on fewer than 25 women and has been suppressed.
NA = not applicable.

Table 11.15.2 Use of condoms: men

Percent of men who have had sex in the past year who ever used condoms and percentage who used condoms during last sexual intercourse, according to perception of AIDS risk, background characteristics and changes in sexual behaviour, *Tanzania 1996*

Background characteristic	Ever used condom				Used condom during last sexual intercourse					
	Use condom for FP	Use condom to avoid STD	Either	Number	Last sex with spouse	Number	Last sex with other	Number	Last sex with any partner	Number
AIDS not always fatal *or don't know*										
No/small risk	22.8	29.3	32.2	880	3.3	664	39.0	312	16.0	880
Moderate risk	24.5	38.0	39.4	171	5.1	125	29.5	93	18.0	171
Great risk/has AIDS	26.8	27.5	32.4	130	2.2	71	20.7	83	14.5	130
Don't know/missing	18.1	27.6	31.0	391	4.3	295	37.1	152	16.8	391
Age										
15-19	23.3	36.5	37.5	129	*	5	25.4	125	24.6	129
20-24	35.9	49.6	51.5	226	6.3	75	40.3	180	33.1	226
25-29	27.4	40.2	44.2	248	4.5	177	45.8	116	23.8	248
30-39	25.1	30.8	34.3	462	5.7	416	38.6	125	14.6	462
40-49	12.0	16.1	18.7	314	1.9	297	19.0	69	5.9	314
50-64	8.0	7.9	11.7	193	0.3	184	15.1	24	2.2	193
Marital status										
Currently in union	16.7	22.2	25.4	1,190	3.7	1,154	30.2	258	9.4	1,190
Formerly in union	54.0	61.0	64.4	61	NA	0	35.3	61	35.3	61
Never Married	36.4	51.9	53.9	319	NA	0	38.5	319	38.5	319
Residence										
Mainland	22.6	30.3	33.3	1,535	3.8	1,122	35.1	634	16.7	1,535
Total urban	36.1	44.7	49.1	360	7.8	241	47.1	168	26.5	360
Dar es Salaam city	43.7	53.4	57.3	130	11.2	73	54.9	77	37.9	130
Other urban	31.8	39.7	44.5	230	6.3	168	40.5	92	20.1	230
Total rural	18.5	25.9	28.5	1,175	2.7	881	30.8	466	13.7	1,175
Zanzibar	2.1	6.2	6.2	37	0.0	32	*	6	0.0	37
Zone										
Coastal	30.7	37.7	40.6	368	6.1	238	42.3	184	24.1	368
Northern highlands	25.4	30.9	34.9	180	4.1	125	39.2	66	17.3	180
Lake	12.1	24.6	26.6	549	0.0	417	29.1	216	11.4	549
Central	25.2	31.9	35.6	116	5.4	90	35.5	44	17.2	116
Southern highlands	26.6	25.4	30.5	194	7.9	167	(48.5)	39	15.1	194
Southern	25.8	31.1	33.5	165	4.1	118	23.9	91	14.7	165
Education										
No education	7.8	11.7	12.4	222	2.2	191	13.8	54	4.9	222
Primary incomplete	11.8	17.9	20.3	391	1.4	306	18.1	138	7.5	391
Primary complete	26.6	36.0	39.4	789	5.0	550	39.7	366	20.9	789
Secondary +	44.2	50.9	56.6	170	6.0	107	55.0	82	29.8	170
Changes in sexual behaviour										
No sexual behaviour change	14.1	12.8	18.2	172	1.3	119	15.9	80	8.3	172
Stopped sex	13.5	18.1	19.4	99	3.2	77	(13.5)	43	7.6	99
Began using condom	60.5	100.0	100.0	167	10.2	68	69.3	142	61.7	167
Used condom more	83.4	100.0	100.0	78	49.2	29	82.2	64	79.1	78
Restrict one partner	18.6	22.7	26.1	858	3.8	706	30.7	236	11.0	858
Fewer partners	20.9	29.2	31.1	468	1.9	342	26.1	213	12.6	468
Avoid sex with prostitute	12.8	23.9	26.1	349	0.0	272	24.7	143	10.1	349
Total	22.2	29.7	32.7	1,572	3.7	1,154	34.8	640	16.3	1,572

Note: Figures in parentheses are based on 25-49 men; an asterisk indicates a figure is based on fewer than 25 men and has been suppressed.
NA = not applicable.

CHAPTER 12

FEMALE CIRCUMCISION

Female circumcision, also known as female genital mutilation, is practiced in various parts of Tanzania, but little is known about its prevalence. The practice of female circumcision in the country is based mainly on cultural tradition.

In the 1996 TDHS, every female respondent was asked a series of questions on female circumcision. First, she was asked if she had been circumcised. If circumcised, she was asked the type of circumcision[1], age at which the operation was performed, and who performed the operation. Whether a woman was circumcised or not, if she had a daughter, the same information was collected on the eldest living daughter.

12.1 Prevalence of Female Circumcision

Table 12.1 shows that 18 percent of women are circumcised. Younger women (age 15-19 years), women living in Zanzibar, and in urban areas on the mainland are less likely to be circumcised than other women. A higher proportion of circumcised women live in the Arusha (81 percent), Dodoma (68 percent), and Mara (44 percent) regions. Twenty to forty percent of circumcised women are found in the Kilimanjaro (37 percent), Iringa (27 percent), Singida and Tanga (25 percent), and Morogoro (20 percent) regions. In the rest of the regions, less than 5 percent of women are circumcised.

12.2 Type of Circumcision

Table 12.2 shows the percent distribution of circumcised women by the type of circumcision. Three types of female circumcision are presented in this table: clitoridectomy, excision, and infibulation. *Clitoridectomy* is the removal of the prepuce with or without excision of all or part of the clitoris. *Excision* is the removal of the prepuce with all or part of the labia minora. *Infibulation* is the most severe form of female circumcision. It involves removing not only the clitoris and adjacent tissues (labia minora), but the external labia as well. The raw edges of the wounds are then sewn together leaving only a tiny opening for urination and menstruation (WHO, 1996).

Among the circumcised women, 57 percent underwent clitoridectomy, 36 percent excision, and 5 percent infibulation. Sixty-five percent of urban women and 56 percent of rural women underwent clitoridectomy. Six percent of rural women and only 2 percent of urban women had infibulation. Nine out of 10 circumcised women in the Lake zone underwent clitoridectomy, in contrast to 1 out of 4 women in the Southern Highlands. Excision is more common among circumcised women in the Southern Highlands (70 percent), and infibulation accounts for 12 percent of all circumcised women in Central zone.

12.3 Age at Circumcision and Person who Performed Circumcision

Table 12.3 presents the percent distribution of all women who are circumcised, by age at circumcision. Nine percent of all women reported that they were circumcised before age six, 30 percent were between age 6-10, 32 percent were age 11-15 and 15 percent were age 16 years or older when they were circumcised.

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[1]In gathering information on the type of circumcision, women were asked : "What type of circumcision did you have? Did you have clitoridectomy, excision, or infibulation?" It is possible that some women may be misclassified, because the distinctions between these types are not always completely clear.

Fourteen percent of women did not know at what age they were circumcised. Women from the Central zone are circumcised at a younger age than in any other zone.

In Africa, female circumcision is usually performed by traditional birth attendants, midwives, or elderly women in the locality who have experience but not necessarily any medical training (Rushwan, 1990). Table 12.4 shows that only about 4 percent of all circumcisions were performed by a doctor or trained nurse/midwife, 9 percent by a traditional midwife, and 74 percent by a circumcision practitioner. More than 80 percent of all circumcisions were performed by a traditional practitioner in the Coastal and Lake zones.

12.4 Female Circumcision Among Daughters

Female respondents who had one or more daughters at the time of the survey were asked whether their eldest daughter was circumcised, and if so, the age at which she was circumcised, and the person who performed the circumcision.

As Table 12.5 shows that about 7 percent of eldest daughters were reported to have been circumcised. Although the percentage of daughters circumcised is lower than the percentage of circumcised respondents, it does not necessarily indicate a decline in female circumcision because some daughters were still too young to be circumcised. Among the eldest daughters, 23 percent were circumcised when they were less than six years old, 36 percent were between six and 10 years old, and 34 percent were 11 years or older. Women from the Northern Highland and Central zones are most likely to have their daughter(s) circumcised. There is a negative relationship between mother's education and the likelihood a daughter will be circumcised (Table 12.5).

Among circumcised daughters, 78 percent were circumcised by a circumcision practitioner, 9 percent by a traditional midwife, and only 4 percent were circumcised by a doctor or a trained nurse/midwife (Table 12.6).

Table 12.1 Prevalence of female circumcision

Percent of women circumcised, by background characteristics, Tanzania, 1996.

Background characteristic	Percent circumcised	Number
Age		
15-19	13.5	1,732
20-24	15.9	1,676
25-29	19.6	1,440
30-34	20.8	1,118
35-39	18.7	888
40-44	21.3	680
45-49	22.2	585
Residence		
Mainland	18.4	7,881
Total urban	10.4	1,811
Dar es Salaam city	6.2	563
Other urban	12.4	1,248
Total rural	20.8	6,070
Zanzibar	0.5	239
Pemba	0.3	92
Unguja	0.6	148
Zones		
Coastal	12.4	1,916
Northern Highlands	63.7	979
Lake	5.1	2,559
Central	49.0	638
Southern Highlands	11.3	1,181
Southern	1.8	847
Regions		
Dodoma	67.9	355
Arusha	81.4	589
Kilimanjaro	36.9	390
Tanga	25.1	464
Morogoro	20.2	408
Coast	1.8	159
Dar es Salaam	5.4	646
Lindi	1.9	187
Mtwara	2.9	355
Ruvuma	0.4	305
Iringa	27.0	466
Mbeya	1.0	473
Singida	25.4	283
Tabora	1.5	225
Rukwa	1.4	242
Kigoma	0.0	351
Shinyanga	0.5	686
Kagera	1.1	467
Mwanza	1.3	573
Mara	43.7	257
Total	17.9	8,120

Table 12.2 Types of female circumcision

Percent distribution of circumcised women, by the type of circumcision, according to background characteristic, Tanzania, 1996.

Background characteristic	Types of circumcision					Total	Number of women
	Clitori-dectomy	Excision	Infibu-lation	Other	Missing/ don't know		
Age							
15-19	57.6	32.9	7.0	0.3	2.0	100.0	233
20-24	66.1	28.9	3.5	0.0	1.5	100.0	267
25-29	51.9	39.6	7.5	0.0	1.1	100.0	282
30-34	58.0	37.6	2.6	0.5	1.3	100.0	233
35-39	54.1	36.9	7.1	0.0	1.9	100.0	166
40-44	50.0	44.0	5.4	0.5	0.0	100.0	145
45-49	63.0	33.3	2.8	0.0	1.0	100.0	130
Urban/Rural							
Urban	65.2	31.0	2.1	0.0	1.7	100.0	190
Rural	56.3	36.5	5.7	0.2	1.3	100.0	1,264
Zone							
Coastal	56.3	40.0	2.7	0.0	0.9	100.0	237
Northern Highlands	60.4	34.5	4.2	0.0	0.9	100.0	623
Lake	90.0	7.4	0.7	0.0	2.0	100.0	132
Central	53.8	32.5	12.1	0.6	0.9	100.0	313
Southern Highlands	23.9	70.2	3.6	0.0	2.3	100.0	134
Total	57.4	35.8	5.3	0.2	1.3	100.0	1,454

Note: Total includes 15 women in the Southern zone.

Table 12.3 Age at circumcision

Percent distribution of circumcised women, by age at circumcision, according to background characteristics, Tanzania, 1996

Background characteristic	Age at circumcision					Total	Number of women
	0-5	6-10	11-15	16 +	Missing/ don't know		
Urban/Rural							
Urban	12.6	33.1	26.1	12.5	15.7	100.0	190
Rural	8.0	29.5	33.2	15.7	13.6	100.0	1,264
Zone							
Coastal	3.5	22.3	33.8	27.2	13.2	100.0	237
Northern Highlands	8.2	32.5	28.8	16.3	14.3	100.0	623
Lake	1.4	11.6	61.1	18.3	7.6	100.0	132
Central	17.8	43.3	20.9	1.4	16.7	100.0	313
Southern Highlands	6.8	19.8	42.8	18.8	11.7	100.0	134
Total	8.6	29.9	32.3	15.3	13.9	100.0	1,454

Note: Total includes 15 women in the Southern zone.

Table 12.4 Person who performed the circumcision

Percent distribution of circumcised women, by person who performed the circumcision, according to background characteristics, Tanzania, 1996

Background characteristic	Person who performed circumcision						Total	Number of women
	Doctor	Trained nurse/ midwife	Traditional midwife	Circumcision practitioner	Other	Missing/ don't know		
Urban/Rural								
Urban	1.9	4.4	9.9	70.1	6.3	7.3	100.0	190
Rural	2.5	0.6	8.4	74.8	7.5	6.1	100.0	1,264
Zone								
Coastal	0.0	1.1	9.1	82.7	3.3	3.9	100.0	237
Northern Highlands	5.2	1.7	9.9	71.9	6.1	5.2	100.0	623
Lake	0.7	2.4	0.0	91.4	2.1	3.4	100.0	132
Central	0.5	0.0	7.4	69.7	12.6	9.8	100.0	313
Southern Highlands	0.0	0.0	13.8	64.6	14.3	7.2	100.0	134
Total	2.4	1.1	8.6	74.2	7.4	6.2	100.0	1,454

Note: Total includes 15 women in the Southern zone.

Table 12.5 Age at circumcision: eldest daughter

Among women with at least one daughter, percent whose eldest daughter has been circumcised, and percent distribution of circumcised eldest daughters, by age at circumcision, according to background characteristics of the mother, Tanzania, 1996

Background characteristics of mother	Percentage with eldest daughter circumcised	Number with daughter	Age at circumcision					Number of circumcised daughters
			0-5	6-10	11 +	Don't know/ missing	Total	
Urban/Rural								
Urban	2.6	967	*	*	*	*	100.0	25
Rural	7.8	3,786	22.1	36.1	34.2	7.6	100.0	296
Zone								
Coastal	4.8	1,040	(6.4)	(36.4)	(52.0)	(5.2)	100.0	50
Northern Highlands	21.2	563	34.4	32.7	28.1	4.8	100.0	119
Lake	1.7	1,570	(13.7)	(3.5)	(79.4)	(3.5)	100.0	27
Central	22.4	398	27.6	50.0	12.4	10.0	100.0	89
Southern Highlands	4.3	683	*	*	*	*	100.0	29
Southern	1.2	499	*	*	*	*	100.0	6
Education								
No education	10.7	1,669	17.5	34.9	40.8	6.8	100.0	178
Primary incomplete	9.1	879	19.0	40.2	37.8	3.1	100.0	80
Primary complete +	2.8	2,205	46.1	31.5	8.6	13.8	100.0	62
Total	6.7	4,753	23.4	35.6	33.8	7.2	100.0	321

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 12.6 Person who performed the circumcision: eldest daughter

Percent distribution of circumcised eldest daughters by person who performed the circumcision according to background characteristics, Tanzania, 1996

Background characteristics of mother	Doctor	Trained nurse/ midwife	Tradi-tional midwife	Circum-cision practi-tioner	Other	Don't know/ missing	Total	Number of circumcised daughters
Urban/Rural								
Urban	*	*	*	*	*	*	100.0	25
Rural	2.3	1.0	8.3	78.8	5.1	4.5	100.0	296
Education								
No education	3.7	0.6	9.5	77.1	6.5	2.6	100.0	178
Primary incomplete	1.2	1.2	9.8	82.5	4.4	0.9	100.0	80
Primary complete +	1.6	1.6	5.9	73.3	3.8	13.8	100.0	62
Total	2.7	0.9	8.9	77.7	5.5	4.3	100.0	321

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APPENDIX A

SAMPLE DESIGN

APPENDIX A

SAMPLE DESIGN

The sample developed for the 1996 TDHS survey was a probabilistic sample selected in three stages. The selection of EAs was made in two stages: first, wards/branches and then enumeration areas within wards/branches were selected. Lists of all households were prepared for the selected EAs and, at the third sampling stage, households were selected from these lists. The 1996 TDHS survey was designed to sustain a variety of analyses at the various domains of interest. The survey was planned to provide estimates (based on the results of the Woman's Questionnaire) for the whole country, for urban and rural areas in the country, and groups of regions (zones). In addition, the sample will provide certain estimates for each of the 20 regions in the mainland and 2 subgroups in Zanzibar: Pemba and Unguja. The sample was designed to be self-weighted in each of the 20 regions on the mainland and each of the 2 subgroups in Zanzibar. In each region (subgroup), the sample of EAs was proportionally distributed accordingly to its urban and rural size. However, the sample for any major domain was also weighted. In most regions, one in every four households was selected for the men's survey, and in six regions (Dar es Salaam, Dodoma, Iringa, Kilimanjaro, Morogoro, and Shinyanga), men in every second household were selected for the interview. The sample of men was designed to provide estimates for the country as a whole and for urban and rural areas.

A total sample of 8,900 households were selected with the objective to have 9,000 completed interviews of women 15 to 49 years old. A total of 8,141 households were occupied and in 7,969 households, interviews were completed. In those households interviewed, 8,501 women 15 to 49 years old were identified and 8,120 were completed interviews.

The sample for the 1996 TDHS was selected from the same primary sampling units used in the 1991-92 TDHS. The sample frame for the 1991-92 survey was based on the list of enumeration areas from the 1988 Population Census; therefore, this census is also implicitly a frame for the 1996 TDHS. The list of census enumeration areas for the 1996 TDHS survey was stratified by each of the 20 regions (for the mainland) and within each region by urban and rural areas. In total, 357 EAs were selected, 95 in the urban area and 262 in the rural. Table A1 shows the sample distribution of EAs.

The absolute probability of selecting an EA (product of the probability of selecting a ward/branch and the conditional probability of selecting an EA within a ward/branch) can be expressed as:

$$P_{1i} = (a * M_i) / (\Sigma M_i)$$

where

a = the number of designated EAs to be selected in the urban or rural areas in a particular region;

M_i = the number of households of the i^{th} EA according to the 1988 population census,

ΣM_i = the total number of households in the urban /rural region according to the 1988 population census.

In each of the selected EAs, a complete household listing operation was carried out and households were selected so as to maintain a self-weighting sample with the urban and rural areas of each of the 20 regions on the mainland and each of the 2 subgroups in Zanzibar. However, the total 1996 TDHS sample is a weighted one, and it will require a final weighing adjustment procedure to provide national estimates.

The overall probability of household selection or the sampling fractions (f) is given by the formula:
$f = P_{1i} * (c_i / L_i)$

where:

c_i = is the number of households selected (sample take); and
Li = the total number of households, listed in the i^{th} selected EA.

Accordingly, the sample take is calculated as:

$$c_i = (f * L_i) / P_{1i}$$

Table A.1 Sample allocation by enumeration areas

Region	Expected number of completed interviews	Urban EAs	Rural EAs	Total EAs
Dodoma	400	1	14	15
Arusha	400	4	12	16
Kilimanjaro	400	4	12	16
Tanga	400	4	12	16
Morogoro	400	4	12	16
Coast	400	4	12	16
Dar es Salaam	750	27	2	29
Lindi	400	4	12	16
Mtwara	400	4	12	16
Ruvuma	400	4	12	16
Iringa	400	1	14	15
Mbeya	400	4	12	16
Singida	400	1	14	15
Tabora	400	4	12	16
Rukwa	400	4	12	16
Kigoma	400	4	12	16
Shinyanga	400	1	14	15
Kagera	400	1	14	15
Mwanza	400	4	12	16
Mara	400	1	14	15
Zanzibar				
Pemba	350	0	5	5
Unguja	350	2	5	7
Total	9000	95	262	357

Table A.2.1 Sample Implementation: women

Percent distribution of households and eligible women in the DHS sample by result of the interview and household, eligible women and overall response rates, according to residence and zone, Tanzania 1996

Interview results	Residence					Zone									
	Mainland	Total urban	Dar es Salaam city	Other urban	Total rural	Zanzibar	Pemba	Unguja	Coastal	Northern high-lands	Lake	Central	Southern high-lands	Southern	Total
Selected households															
Completed (C)	89.7	85.3	83.3	86.4	91.1	88.1	82.9	93.6	86.3	87.7	91.8	89.5	91.1	93.1	89.5
Household present but no competent respondent at home (HP)	0.9	1.3	1.8	1.1	0.8	1.5	1.9	1.2	1.3	0.1	1.2	0.5	1.5	0.2	1.0
Refused (R)	0.1	0.1	0.1	0.1	0.1	0.6	1.1	0.0	0.2	0.0	0.1	0.4	0.0	0.1	0.1
Dwelling not found (DNF)	0.8	2.1	2.2	2.1	0.4	1.0	0.5	1.5	1.4	0.5	0.4	0.8	0.7	0.7	0.8
Household absent (HA)	3.3	4.5	5.5	4.0	2.9	1.1	0.0	2.3	3.4	9.6	0.8	3.6	2.4	1.4	3.1
Dwelling vacant (DV)	4.2	5.8	5.6	5.9	3.7	7.2	13.0	0.9	6.1	2.0	4.7	3.5	3.8	3.7	4.5
Dwelling destroyed (DD)	0.7	0.5	0.8	0.3	0.7	0.3	0.3	0.3	0.9	0.0	0.6	0.9	0.3	0.8	0.7
Other (O)	0.3	0.3	0.6	0.2	0.3	0.3	0.3	0.3	0.4	0.0	0.4	0.8	0.2	0.1	0.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	8,188	2,029	714	1,315	6,159	712	368	344	2,735	977	1,870	770	1,180	1,368	8,900
Household response rate (HRR)[1]	98.0	96.0	95.2	96.4	98.6	96.6	95.9	97.3	96.7	99.3	98.1	98.1	97.6	99.0	97.9
Eligible women															
Completed (EWC)	95.6	95.5	93.5	96.6	95.7	94.3	94.6	94.0	94.3	95.2	95.3	95.8	97.0	97.1	95.5
Not at Home (EWNH)	2.8	2.9	4.6	2.0	2.7	3.2	2.6	3.8	3.5	2.8	3.2	1.9	2.3	1.8	2.8
Refused (EWR)	0.3	0.6	0.8	0.5	0.2	1.0	1.6	0.5	0.6	0.3	0.4	0.7	0.0	0.1	0.4
Partly completed (EWPC)	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0
Incapacitated (EWI)	0.9	0.6	0.4	0.7	1.0	0.9	0.6	1.1	1.1	0.8	0.9	1.1	0.6	0.6	0.9
Other (EWO)	0.3	0.4	0.6	0.2	0.3	0.6	0.6	0.5	0.4	0.8	0.2	0.5	0.1	0.3	0.4
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	7,821	1,941	712	1,229	5,880	680	312	368	2,605	905	1,900	740	1,089	1,262	8,501
Eligible woman response rate (EWRR)[2]	95.6	95.5	93.5	96.6	95.7	94.3	94.6	94.0	94.3	95.2	95.3	95.8	97.0	97.1	95.5
Overall response rate (ORR)[3]	93.7	91.7	89.0	93.1	94.4	91.1	90.7	91.5	91.2	94.6	93.5	94.0	94.7	96.1	93.5

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, refused, and dwelling not found. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other."The overall response rate is the product of the household and woman response rates.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF} * 100$$

[2] Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{EWC}{EWC + EWNH + EWR + EWPC + EWI + EWO} * 100$$

[3] The overall response rate (ORR) is calculated as: ORR = (HRR * EWRR) ÷ 100

Table A.2.2 Sample Implementation: men

Percent distribution of households and eligible men in the DHS sample by result of the interview and household, eligible men and overall response rates, according to residence and zone, Tanzania 1996

Interview results	Residence					Zone									
	Mainland	Total urban	Dar es Salaam city	Other urban	Total rural	Zanzibar	Pemba	Unguja	Coastal	Northern high-lands	Lake	Central	Southern high-lands	Southern	Total
Selected households															
Completed (C)	88.7	83.1	81.1	84.8	90.9	87.6	82.3	93.3	84.9	86.9	93.1	91.6	88.6	91.8	88.7
Household present but no competent respondent at home (HP)	1.1	1.5	2.7	0.5	0.9	3.8	4.2	3.3	2.1	0.0	1.4	0.3	1.4	0.3	1.2
Refused (R)	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.1
Dwelling not found (DNF)	0.9	2.1	1.9	2.3	0.5	0.5	1.0	0.0	1.5	0.5	0.3	0.0	1.4	0.8	0.9
Household absent (HA)	3.8	5.7	7.1	4.4	3.1	1.1	0.0	2.2	4.0	10.4	0.7	2.7	3.5	1.6	3.7
Dwelling vacant (DV)	4.4	6.2	5.2	7.0	3.8	6.5	12.5	0.0	6.0	2.2	3.5	4.1	4.7	4.9	4.6
Dwelling destroyed (DD)	0.6	0.8	1.1	0.5	0.6	0.5	0.0	1.1	1.1	0.0	0.7	0.3	0.2	0.5	0.6
Other (O)	0.3	0.5	0.5	0.5	0.2	0.0	0.0	0.0	0.4	0.0	0.3	0.7	0.2	0.0	0.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,882	794	366	428	2,088	186	96	90	1,033	367	579	296	428	365	3,068
Household response rate (HRR)[1]	97.7	95.7	94.3	96.8	98.4	95.3	94.0	96.6	95.8	99.4	98.2	99.3	96.9	98.8	97.6
Eligible men															
Completed (EMC)	86.2	80.3	74.7	86.0	88.6	64.7	67.5	62.1	77.8	88.1	84.9	88.5	90.8	92.9	84.9
Not at Home (EMNH)	9.1	13.5	17.0	9.8	7.3	24.6	16.3	32.2	15.1	7.9	9.5	8.7	6.6	3.4	10.1
Refused (EMR)	0.9	0.8	1.4	0.3	1.0	0.6	0.0	1.1	1.0	1.2	1.6	0.4	0.3	0.0	0.9
Partly completed (EMPC)	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Incapacitated (EMI)	1.4	0.8	0.3	1.4	1.6	0.0	0.0	0.0	0.9	1.2	1.6	0.0	1.9	2.4	1.3
Other (EMO)	2.3	4.4	6.3	2.5	1.5	10.2	16.3	4.6	5.1	1.5	2.4	2.4	0.3	1.4	2.8
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,491	721	364	357	1,770	167	80	87	889	328	577	253	316	295	2,658
Eligible man response rate (EMRR)[2]	86.2	80.3	74.7	86.0	88.6	64.7	67.5	62.1	77.8	88.1	84.9	88.5	90.8	92.9	84.9
Overall response rate (ORR)[3]	84.3	76.8	70.5	83.2	87.3	61.6	63.5	59.9	74.6	87.6	83.4	87.9	88.0	91.8	82.8

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, refused, and dwelling not found. The eligible man response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other."The overall response rate is the product of the household and man response rates.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF} * 100$$

[2] Using the number of eligible men falling into specific response categories, the eligible man response rate (EWRR) is calculated as:

$$\frac{EMC}{EMC + EMNH + EMR + EMPC + EMI + EMO} * 100$$

[3] The overall response rate (ORR) is calculated as: ORR = (HRR * EMRR) ÷ 100

APPENDIX B

ESTIMATES OF SAMPLING ERRORS

APPENDIX B

ESTIMATES OF SAMPLING ERRORS

The estimates from a sample survey are affected by two types of errors: nonsampling errors, and 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 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 1996 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 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, straightforward formulae for calculating sampling errors could have been used. However, the TDHS sample is the result of a two-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software that calculated sampling errors for the TDHS was the ISSA Sampling Error Module (SAMPERR). 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:

$$var(r) = \frac{1-f}{x^2} \sum_{h=1}^{H} \left[\frac{m_h}{m_h - 1} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - r.x_{hi} \text{ , and } z_h = y_h - r.x_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of enumeration areas selected in the h^{th} stratum,
y_{hi} is the sum of the values of variable y in EA I in the h^{th} stratum,
x_{hi} is the sum of the number of cases in EA I 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 formulae. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the TDHS, there were 357 non-empty clusters. Hence, 357 replications were created. The variance of a rate r is calculated as follows:

$$var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 357 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 356 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, SAMPERR 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 due to the use of a more complex and less statistically efficient design. SAMPERR also computes the relative error and confidence limits for the estimates.

Sampling errors for the TDHS are calculated for selected variables considered to be of primary interest. Two sets of results, one for women and one for men, are presented in this appendix for the country as a whole, for urban and rural areas, for each of the six zones: Coastal, Northern Highlands, Lake, Central, Southern Highlands, and Southern, and six residential areas: Mainland, Zanzibar, Urban mainland, Rural mainland, Dar es Salaam urban, and rest of Urban mainland. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B2 to B16 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 considering simple random sample is zero (when the estimate is close to 0 or 1).

In general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. There are some differentials in the relative standard error for the estimates of sub-populations. For example, to estimate the proportion of *Using Contraceptive to Currently married women age 15-49*, the relative standard errors as a percent of the estimated mean for the whole country, for urban areas, and for rural areas are 3.9 percent, 6.8 percent, and 4.8 percent, respectively. The confidence interval (e.g., as calculated the proportion for *Using Contraceptive to currently married women age 15-49*)

can be interpreted as follows: the overall national sample proportion is 0.184 and its standard error is .007. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, ie. 0.184±2(.007). There is a high probability (95 percent) that the *true* average proportion of contraceptive use for currently married women age 15 to 49 is between 0.170 and 0.198.

Table B.2.1 Sampling errors - National sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.235	0.011	8120	8120	2.399	0.048	0.212	0.257
No education	0.285	0.008	8120	8120	1.530	0.027	0.270	0.301
Secondary education or more	0.054	0.005	8120	8120	1.953	0.090	0.045	0.064
Never in union	0.232	0.006	8120	8120	1.323	0.027	0.220	0.245
Currently married	0.666	0.007	8120	8120	1.366	0.011	0.652	0.681
Married before 20	0.654	0.008	6391	6388	1.382	0.013	0.637	0.670
First sex relationship before 18	0.622	0.009	6391	6388	1.422	0.014	0.605	0.640
Children ever born (15-49)	3.087	0.041	8120	8120	1.255	0.013	3.004	3.169
Children ever born (40-49)	6.970	0.092	1251	1265	1.109	0.013	6.786	7.153
Children surviving	2.584	0.036	8120	8120	1.306	0.014	2.511	2.657
Knowing any method	0.885	0.006	5404	5411	1.411	0.007	0.873	0.897
Knowing any modern method	0.877	0.006	5404	5411	1.410	0.007	0.865	0.890
Ever use any method	0.356	0.010	5404	5411	1.534	0.028	0.336	0.376
Using any method	0.184	0.007	5404	5411	1.355	0.039	0.170	0.199
Using any modern method	0.133	0.006	5404	5411	1.299	0.045	0.121	0.145
Using pill	0.055	0.004	5404	5411	1.129	0.064	0.048	0.062
Using IUD	0.006	0.001	5404	5411	1.126	0.200	0.004	0.008
Using injectables	0.045	0.003	5404	5411	1.053	0.066	0.039	0.050
Using condom	0.008	0.001	5404	5411	1.087	0.162	0.006	0.011
Using female sterilisation	0.019	0.002	5404	5411	1.328	0.131	0.014	0.024
Using periodic abstinence	0.020	0.002	5404	5411	1.172	0.111	0.016	0.025
Using withdrawal	0.026	0.002	5404	5411	1.094	0.091	0.021	0.031
Using public sector source	0.742	0.018	1018	954	1.312	0.024	0.706	0.778
Want no more children	0.280	0.007	5404	5411	1.157	0.025	0.266	0.294
Want to delay child at least 2 years	0.372	0.008	5404	5411	1.217	0.022	0.356	0.388
Ideal number of children	5.462	0.044	7474	7480	1.576	0.008	5.374	5.550
Mother received tetanus injection	0.914	0.006	6789	6916	1.489	0.006	0.903	0.926
Received medical care at delivery	0.467	0.013	6789	6916	1.806	0.028	0.441	0.493
Had diarrhoea in the past 2 weeks	0.137	0.005	6080	6188	1.107	0.036	0.127	0.147
Treated with ORS packets	0.483	0.022	850	846	1.224	0.045	0.439	0.526
Sought medical treatment	0.563	0.021	850	846	1.167	0.037	0.522	0.605
Having health card	0.766	0.013	1297	1335	1.139	0.017	0.739	0.792
Received BCG vaccination	0.962	0.007	1297	1335	1.311	0.007	0.948	0.976
Received DPT vaccination (3 doses)	0.852	0.011	1297	1335	1.087	0.012	0.831	0.874
Received polio vaccination (3 doses)	0.796	0.012	1297	1335	1.099	0.015	0.772	0.820
Received measles vaccination	0.809	0.014	1297	1335	1.250	0.017	0.781	0.836
Fully immunised	0.705	0.015	1297	1335	1.212	0.022	0.674	0.736
Weight-for-height (below -2 SD)	0.072	0.004	5226	5344	1.010	0.051	0.065	0.080
Height-for-age (below -2 SD)	0.434	0.010	5226	5344	1.408	0.023	0.414	0.454
Weight-for-age (below -2SD)	0.306	0.008	5226	5344	1.206	0.026	0.290	0.322
Total fertility rate (3 years)	5.818	0.133	NA	22758	1.604	0.023	5.551	6.084
Neonatal mortality rate (5 years)	31.741	2.715	6908	7039	1.215	0.086	26.311	37.172
Infant mortality rate (5 years)	87.471	4.689	6931	7065	1.279	0.054	78.093	96.850
Child mortality rate (5 years)	53.675	3.485	7026	7154	1.166	0.065	46.705	60.645
Under-five mortality rate (5 years)	136.452	5.841	7051	7182	1.302	0.043	124.769	148.134
Postneonatal mortality rate (5 years)	55.730	3.696	6929	7062	1.244	0.066	48.337	63.123

NA = Not applicable.

Table B.2.2 Sampling errors - National sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.237	0.012	2256	2256	1.372	0.052	0.213	0.262
No education	0.135	0.009	2256	2256	1.238	0.066	0.117	0.153
Secondary education or more	0.098	0.008	2256	2256	1.253	0.080	0.083	0.114
Never in union	0.375	0.012	2256	2256	1.166	0.032	0.352	0.399
Currently married	0.571	0.012	2256	2256	1.151	0.021	0.547	0.595
Knowing any method	0.934	0.009	1268	1288	1.224	0.009	0.917	0.951
Knowing any modern method	0.928	0.009	1268	1288	1.197	0.009	0.911	0.946
Ever use any method	0.487	0.017	1268	1288	1.183	0.034	0.454	0.520
Using any method	0.294	0.016	1268	1288	1.221	0.053	0.263	0.326
Using any modern method	0.158	0.012	1268	1288	1.164	0.075	0.134	0.182
Using pill	0.066	0.007	1268	1288	1.041	0.110	0.051	0.080
Using IUD	0.004	0.002	1268	1288	0.866	0.368	0.001	0.008
Using injectables	0.030	0.005	1268	1288	1.016	0.163	0.020	0.039
Using condom	0.046	0.007	1268	1288	1.167	0.150	0.032	0.059
Using female sterilisation	0.012	0.004	1268	1288	1.175	0.296	0.005	0.020
Using periodic abstinence	0.092	0.011	1268	1288	1.360	0.120	0.070	0.114
Using withdrawal	0.037	0.007	1268	1288	1.253	0.180	0.024	0.050
Want no more children	0.194	0.013	1268	1288	1.145	0.065	0.169	0.220
Want to delay child at least 2 years	0.412	0.015	1268	1288	1.091	0.037	0.382	0.442
Ideal number of children	5.882	0.104	2047	2091	1.338	0.018	5.674	6.091

Table B.3.1 Sampling errors - Urban sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	1.000	0.000	2088	1906	NA	0.000	1.000	1.000
No education	0.138	0.012	2088	1906	1.625	0.089	0.113	0.162
Secondary education or more	0.149	0.016	2088	1906	2.010	0.105	0.118	0.181
Never in union	0.294	0.016	2088	1906	1.585	0.054	0.262	0.325
Currently married	0.593	0.016	2088	1906	1.529	0.028	0.560	0.625
Married before 20	0.573	0.016	1632	1492	1.309	0.028	0.541	0.605
First sex relationship before 18	0.552	0.019	1632	1492	1.532	0.034	0.514	0.590
Children ever born (15-49)	2.366	0.085	2088	1906	1.520	0.036	2.197	2.535
Children ever born (40-49)	6.072	0.203	235	218	1.075	0.033	5.666	6.479
Children surviving	2.044	0.075	2088	1906	1.558	0.037	1.893	2.195
Knowing any method	0.976	0.005	1245	1130	1.215	0.005	0.965	0.986
Knowing any modern method	0.975	0.006	1245	1130	1.241	0.006	0.964	0.986
Ever use any method	0.562	0.029	1245	1130	2.027	0.051	0.505	0.619
Using any method	0.327	0.022	1245	1130	1.669	0.068	0.282	0.371
Using any modern method	0.266	0.019	1245	1130	1.498	0.070	0.229	0.304
Using pill	0.102	0.010	1245	1130	1.198	0.101	0.081	0.122
Using IUD	0.014	0.004	1245	1130	1.077	0.253	0.007	0.022
Using injectables	0.095	0.009	1245	1130	1.139	0.100	0.076	0.114
Using condom	0.020	0.005	1245	1130	1.213	0.241	0.010	0.029
Using female sterilisation	0.033	0.008	1245	1130	1.496	0.231	0.018	0.048
Using periodic abstinence	0.041	0.008	1245	1130	1.470	0.201	0.025	0.058
Using withdrawal	0.015	0.004	1245	1130	1.192	0.272	0.007	0.023
Using public sector source	0.682	0.031	463	437	1.432	0.046	0.619	0.744
Want no more children	0.290	0.014	1245	1130	1.102	0.049	0.262	0.319
Want to delay child at least 2 years	0.335	0.017	1245	1130	1.265	0.050	0.302	0.369
Ideal number of children	4.491	0.077	1972	1798	1.767	0.017	4.337	4.646
Mother received tetanus injection	0.959	0.007	1351	1235	1.142	0.007	0.945	0.972
Received medical care at delivery	0.801	0.024	1351	1235	1.862	0.030	0.753	0.850
Had diarrhoea in the past 2 weeks	0.123	0.012	1234	1132	1.245	0.096	0.099	0.147
Treated with ORS packets	0.543	0.055	154	139	1.318	0.101	0.434	0.653
Sought medical treatment	0.678	0.042	154	139	1.095	0.062	0.594	0.763
Having health card	0.806	0.025	277	252	1.068	0.032	0.755	0.857
Received BCG vaccination	0.997	0.003	277	252	0.965	0.003	0.990	1.000
Received DPT vaccination (3 doses)	0.942	0.014	277	252	0.983	0.015	0.915	0.970
Received polio vaccination (3 doses)	0.838	0.026	277	252	1.162	0.031	0.786	0.890
Received measles vaccination	0.944	0.014	277	252	1.016	0.015	0.916	0.972
Fully immunised	0.804	0.026	277	252	1.068	0.032	0.753	0.855
Weight-for-height (below -2 SD)	0.077	0.010	1026	950	1.251	0.134	0.056	0.097
Height-for-age (below -2 SD)	0.324	0.018	1026	950	1.162	0.054	0.289	0.360
Weight-for-age (below -2 SD)	0.196	0.013	1026	950	1.026	0.069	0.169	0.223
Total fertility rate (3 years)	4.108	0.223	NA	5403	1.370	0.054	3.662	4.554
Neonatal mortality rate (10 years)	33.410	5.101	2570	2329	1.246	0.153	23.209	43.612
Infant mortality rate (10 years)	81.653	7.227	2573	2331	1.219	0.089	67.198	96.108
Child mortality rate (10 years)	42.119	4.944	2587	2344	1.110	0.117	32.230	52.007
Under-five mortality rate (10 years)	120.332	8.521	2591	2347	1.207	0.071	103.290	137.375
Postneonatal mortality rate (10 years)	48.242	4.576	2572	2330	1.071	0.095	39.091	57.394

NA = Not applicable.

Table B.3.2 Sampling errors - Urban sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	1.000	0.000	616	535	NA	0.000	1.000	1.000
No education	0.068	0.012	616	535	1.167	0.174	0.045	0.092
Secondary education or more	0.219	0.027	616	535	1.604	0.122	0.166	0.273
Never in union	0.431	0.022	616	535	1.093	0.051	0.387	0.474
Currently married	0.504	0.024	616	535	1.196	0.048	0.456	0.552
Knowing any method	0.970	0.012	303	270	1.205	0.012	0.946	0.994
Knowing any modern method	0.970	0.012	303	270	1.205	0.012	0.946	0.994
Ever use any method	0.631	0.037	303	270	1.323	0.058	0.557	0.704
Using any method	0.361	0.033	303	270	1.177	0.090	0.296	0.426
Using any modern method	0.263	0.030	303	270	1.203	0.116	0.202	0.324
Using pill	0.094	0.015	303	270	0.872	0.156	0.065	0.123
Using IUD	0.012	0.005	303	270	0.829	0.438	0.001	0.022
Using injectables	0.028	0.009	303	270	0.993	0.339	0.009	0.046
Using condom	0.109	0.022	303	270	1.246	0.205	0.064	0.154
Using female sterilisation	0.018	0.008	303	270	1.075	0.451	0.002	0.035
Using periodic abstinence	0.071	0.014	303	270	0.977	0.204	0.042	0.100
Using withdrawal	0.022	0.013	303	270	1.570	0.608	0.000	0.048
Want no more children	0.243	0.027	303	270	1.104	0.112	0.188	0.297
Want to delay child at least 2 years	0.349	0.029	303	270	1.071	0.084	0.290	0.408
Ideal number of children	4.818	0.156	559	495	1.448	0.032	4.507	5.130

NA = Not applicable.

Table B.4.1 Sampling errors - Rural sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.000	0.000	6032	6214	NA	NA	0.000	0.000
No education	0.331	0.009	6032	6214	1.539	0.028	0.312	0.349
Secondary education or more	0.025	0.004	6032	6214	2.021	0.162	0.017	0.033
Never in union	0.214	0.007	6032	6214	1.269	0.031	0.200	0.227
Currently married	0.689	0.008	6032	6214	1.338	0.012	0.673	0.705
Married before 20	0.678	0.009	4759	4895	1.395	0.014	0.659	0.697
First sex relationship before 18	0.644	0.010	4759	4895	1.388	0.015	0.625	0.663
Children ever born (15-49)	3.308	0.048	6032	6214	1.227	0.015	3.211	3.404
Children ever born (40-49)	7.156	0.101	1016	1048	1.114	0.014	6.954	7.358
Children surviving	2.750	0.043	6032	6214	1.291	0.016	2.664	2.835
Knowing any method	0.861	0.008	4159	4282	1.418	0.009	0.846	0.876
Knowing any modern method	0.852	0.008	4159	4282	1.412	0.009	0.836	0.867
Ever use any method	0.301	0.010	4159	4282	1.405	0.033	0.281	0.321
Using any method	0.147	0.007	4159	4282	1.293	0.048	0.133	0.161
Using any modern method	0.098	0.006	4159	4282	1.282	0.060	0.086	0.110
Using pill	0.043	0.003	4159	4282	1.099	0.081	0.036	0.050
Using IUD	0.004	0.001	4159	4282	1.182	0.304	0.001	0.006
Using injectables	0.031	0.003	4159	4282	1.043	0.090	0.026	0.037
Using condom	0.005	0.001	4159	4282	1.047	0.224	0.003	0.008
Using female sterilisation	0.015	0.002	4159	4282	1.276	0.160	0.010	0.020
Using periodic abstinence	0.015	0.002	4159	4282	0.972	0.123	0.011	0.018
Using withdrawal	0.029	0.003	4159	4282	1.067	0.096	0.024	0.035
Using public sector source	0.794	0.019	555	517	1.095	0.024	0.756	0.831
Want no more children	0.277	0.008	4159	4282	1.165	0.029	0.261	0.293
Want to delay child at least 2 years	0.382	0.009	4159	4282	1.193	0.024	0.364	0.400
Ideal number of children	5.769	0.051	5502	5682	1.538	0.009	5.668	5.871
Mother received tetanus injection	0.905	0.007	5438	5681	1.510	0.008	0.891	0.919
Received medical care at delivery	0.394	0.014	5438	5681	1.841	0.037	0.365	0.423
Had diarrhoea in the past 2 weeks	0.140	0.005	4846	5056	1.073	0.039	0.129	0.151
Treated with ORS packets	0.471	0.024	696	707	1.220	0.051	0.422	0.519
Sought medical treatment	0.541	0.024	696	707	1.179	0.044	0.493	0.588
Having health card	0.756	0.015	1020	1083	1.145	0.020	0.726	0.787
Received BCG vaccination	0.954	0.008	1020	1083	1.296	0.009	0.937	0.971
Received DPT vaccination (3 doses)	0.831	0.013	1020	1083	1.082	0.015	0.806	0.857
Received polio vaccination (3 doses)	0.786	0.014	1020	1083	1.075	0.017	0.759	0.814
Received measles vaccination	0.777	0.016	1020	1083	1.262	0.021	0.744	0.810
Fully immunised	0.682	0.018	1020	1083	1.218	0.026	0.646	0.717
Weight-for-height (below -2 SD)	0.072	0.004	4200	4394	0.952	0.054	0.064	0.079
Height-for-age (below -2 SD)	0.458	0.011	4200	4394	1.430	0.025	0.435	0.481
Weight-for-age (below -2 SD)	0.330	0.009	4200	4394	1.205	0.028	0.312	0.349
Total fertility rate (3 years)	6.344	0.143	NA	17354	1.570	0.023	6.057	6.631
Neonatal mortality rate (10 years)	36.958	2.563	10494	10912	1.288	0.069	31.833	42.083
Infant mortality rate (10 years)	96.794	4.860	10517	10934	1.510	0.050	87.073	106.514
Child mortality rate (10 years)	58.926	3.176	10578	11006	1.123	0.054	52.574	65.277
Under-five mortality rate (10 years)	150.016	5.941	10602	11029	1.486	0.040	138.134	161.897
Postneonatal mortality rate (10 years)	59.836	3.542	10516	10933	1.385	0.059	52.751	66.920

NA = Not applicable.

Table B.4.2 Sampling errors - Rural sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.000	0.000	1640	1721	NA	NA	0.000	0.000
No education	0.156	0.011	1640	1721	1.238	0.071	0.133	0.178
Secondary education or more	0.061	0.006	1640	1721	1.059	0.103	0.048	0.073
Never in union	0.358	0.014	1640	1721	1.189	0.039	0.330	0.386
Currently married	0.592	0.014	1640	1721	1.141	0.023	0.564	0.619
Knowing any method	0.924	0.010	965	1018	1.208	0.011	0.904	0.945
Knowing any modern method	0.917	0.010	965	1018	1.179	0.011	0.896	0.938
Ever use any method	0.449	0.019	965	1018	1.159	0.041	0.412	0.486
Using any method	0.277	0.018	965	1018	1.233	0.064	0.241	0.312
Using any modern method	0.130	0.013	965	1018	1.168	0.097	0.105	0.156
Using pill	0.058	0.008	965	1018	1.098	0.142	0.042	0.075
Using IUD	0.002	0.001	965	1018	0.939	0.616	0.000	0.005
Using injectables	0.030	0.006	965	1018	1.016	0.185	0.019	0.041
Using condom	0.029	0.006	965	1018	1.201	0.224	0.016	0.042
Using female sterilisation	0.011	0.004	965	1018	1.213	0.377	0.003	0.019
Using periodic abstinence	0.097	0.013	965	1018	1.406	0.138	0.071	0.124
Using withdrawal	0.041	0.008	965	1018	1.194	0.186	0.026	0.056
Want no more children	0.182	0.014	965	1018	1.153	0.079	0.153	0.210
Want to delay child at least 2 years	0.429	0.017	965	1018	1.089	0.040	0.394	0.464
Ideal number of children	6.213	0.128	1488	1596	1.324	0.021	5.957	6.468

NA = Not applicable.

Table B.5.1 Sampling errors - Coastal zone sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.445	0.024	2457	1916	2.351	0.053	0.398	0.492
No education	0.228	0.013	2457	1916	1.570	0.058	0.201	0.254
Secondary education or more	0.101	0.010	2457	1916	1.609	0.097	0.081	0.120
Never in union	0.263	0.012	2457	1916	1.371	0.046	0.239	0.288
Currently married	0.627	0.013	2457	1916	1.322	0.021	0.601	0.653
Married before 20	0.662	0.013	1903	1472	1.195	0.020	0.636	0.687
First sex relationship before 18	0.616	0.014	1903	1472	1.253	0.023	0.588	0.643
Children ever born (15-49)	2.739	0.051	2457	1916	0.890	0.019	2.638	2.840
Children ever born (40-49)	6.526	0.195	331	261	1.186	0.030	6.137	6.916
Children surviving	2.265	0.043	2457	1916	0.911	0.019	2.179	2.351
Knowing any method	0.945	0.011	1565	1202	1.929	0.012	0.923	0.967
Knowing any modern method	0.943	0.011	1565	1202	1.919	0.012	0.920	0.965
Ever use any method	0.479	0.018	1565	1202	1.463	0.039	0.442	0.516
Using any method	0.263	0.016	1565	1202	1.400	0.059	0.232	0.295
Using any modern method	0.195	0.012	1565	1202	1.182	0.061	0.171	0.218
Using pill	0.080	0.008	1565	1202	1.118	0.096	0.065	0.096
Using IUD	0.009	0.002	1565	1202	0.973	0.257	0.004	0.014
Using injectables	0.068	0.006	1565	1202	0.977	0.091	0.056	0.081
Using condom	0.017	0.003	1565	1202	0.928	0.179	0.011	0.023
Using female sterilisation	0.018	0.004	1565	1202	1.276	0.237	0.010	0.027
Using periodic abstinence	0.030	0.006	1565	1202	1.446	0.207	0.018	0.043
Using withdrawal	0.032	0.006	1565	1202	1.335	0.186	0.020	0.044
Using public sector source	0.712	0.026	390	317	1.113	0.036	0.660	0.763
Want no more children	0.260	0.015	1565	1202	1.338	0.057	0.231	0.290
Want to delay child at least 2 years	0.366	0.017	1565	1202	1.381	0.046	0.333	0.400
Ideal number of children	5.052	0.080	2214	1703	1.566	0.016	4.892	5.212
Mother received tetanus injection	0.936	0.007	1851	1396	1.099	0.008	0.921	0.950
Received medical care at delivery	0.556	0.024	1851	1396	1.674	0.043	0.508	0.604
Had diarrhoea in the past 2 weeks	0.123	0.009	1668	1244	1.086	0.075	0.105	0.142
Treated with ORS packets	0.498	0.026	214	154	0.701	0.052	0.446	0.549
Sought medical treatment	0.558	0.028	214	154	0.742	0.049	0.503	0.613
Having health card	0.796	0.026	360	269	1.171	0.032	0.745	0.847
Received BCG vaccination	0.979	0.007	360	269	0.882	0.007	0.966	0.993
Received DPT vaccination (3 doses)	0.871	0.017	360	269	0.939	0.019	0.837	0.905
Received polio vaccination (3 doses)	0.824	0.024	360	269	1.166	0.029	0.776	0.872
Received measles vaccination	0.860	0.026	360	269	1.401	0.030	0.808	0.913
Fully immunised	0.744	0.031	360	269	1.294	0.041	0.683	0.805
Weight-for-height (below -2 SD)	0.070	0.007	1392	1052	0.942	0.096	0.057	0.083
Height-for-age (below -2 SD)	0.450	0.016	1392	1052	1.117	0.035	0.419	0.482
Weight-for-age (below -2 SD)	0.295	0.014	1392	1052	1.051	0.046	0.268	0.322
Total fertility rate (3 years)	4.929	0.231	NA	5359	1.404	0.047	4.466	5.391
Neonatal mortality rate (10 years)	40.745	4.934	3594	2717	1.338	0.121	30.876	50.614
Infant mortality rate (10 years)	101.262	8.188	3600	2721	1.442	0.081	84.886	117.638
Child mortality rate (10 years)	60.951	5.775	3621	2743	1.244	0.095	49.402	72.501
Under-five mortality rate (10 years)	156.041	9.858	3627	2748	1.434	0.063	136.325	175.757
Postneonatal mortality rate (10 years)	60.517	5.152	3600	2721	1.175	0.085	50.212	70.821

NA = Not applicable.

Table B.5.2 Sampling errors - Coastal zone sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.473	0.030	692	508	1.566	0.063	0.414	0.533
No education	0.102	0.011	692	508	0.969	0.109	0.080	0.125
Secondary education or more	0.157	0.018	692	508	1.334	0.118	0.120	0.194
Never in union	0.404	0.022	692	508	1.154	0.053	0.361	0.447
Currently married	0.528	0.022	692	508	1.172	0.042	0.483	0.572
Knowing any method	0.938	0.014	362	268	1.100	0.015	0.910	0.966
Knowing any modern method	0.938	0.014	362	268	1.100	0.015	0.910	0.966
Ever use any method	0.527	0.034	362	268	1.287	0.064	0.460	0.595
Using any method	0.319	0.030	362	268	1.235	0.095	0.258	0.379
Using any modern method	0.223	0.025	362	268	1.152	0.113	0.173	0.274
Using pill	0.091	0.016	362	268	1.045	0.174	0.059	0.122
Using IUD	0.010	0.005	362	268	0.911	0.489	0.000	0.019
Using injectables	0.035	0.010	362	268	1.024	0.283	0.015	0.055
Using condom	0.074	0.015	362	268	1.125	0.210	0.043	0.105
Using female sterilisation	0.012	0.006	362	268	1.046	0.505	0.000	0.024
Using periodic abstinence	0.047	0.012	362	268	1.117	0.265	0.022	0.072
Using withdrawal	0.042	0.012	362	268	1.135	0.286	0.018	0.066
Want no more children	0.162	0.026	362	268	1.355	0.162	0.110	0.215
Want to delay child at least 2 years	0.457	0.030	362	268	1.145	0.066	0.397	0.517
Ideal number of children	5.454	0.162	585	434	1.242	0.030	5.130	5.779

Table B.6.1 Sampling errors - Northern Highlands zone sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.209	0.030	862	979	2.189	0.145	0.149	0.270
No education	0.259	0.016	862	979	1.102	0.064	0.226	0.292
Secondary education or more	0.072	0.014	862	979	1.649	0.202	0.043	0.101
Never in union	0.280	0.018	862	979	1.208	0.066	0.243	0.317
Currently married	0.638	0.020	862	979	1.247	0.032	0.597	0.679
Married before 20	0.515	0.024	679	773	1.262	0.047	0.466	0.563
First sex relationship before 18	0.512	0.023	679	773	1.182	0.044	0.467	0.558
Children ever born (15-49)	2.852	0.112	862	979	1.194	0.039	2.627	3.076
Children ever born (40-49)	6.648	0.239	124	135	1.043	0.036	6.169	7.127
Children surviving	2.598	0.095	862	979	1.117	0.037	2.407	2.789
Knowing any method	0.721	0.020	544	624	1.030	0.028	0.681	0.760
Knowing any modern method	0.703	0.022	544	624	1.109	0.031	0.659	0.746
Ever use any method	0.483	0.027	544	624	1.244	0.055	0.429	0.536
Using any method	0.310	0.017	544	624	0.872	0.056	0.276	0.345
Using any modern method	0.199	0.018	544	624	1.071	0.092	0.162	0.235
Using pill	0.064	0.013	544	624	1.284	0.211	0.037	0.091
Using IUD	0.023	0.007	544	624	1.079	0.301	0.009	0.037
Using injectables	0.048	0.010	544	624	1.125	0.216	0.027	0.068
Using condom	0.016	0.008	544	624	1.466	0.500	0.000	0.031
Using female sterilisation	0.048	0.009	544	624	1.030	0.196	0.029	0.067
Using periodic abstinence	0.036	0.008	544	624	1.052	0.234	0.019	0.053
Using withdrawal	0.071	0.008	544	624	0.720	0.112	0.055	0.087
Using public sector source	0.575	0.060	146	159	1.472	0.105	0.454	0.695
Want no more children	0.257	0.012	544	624	0.656	0.048	0.232	0.281
Want to delay child at least 2 years	0.403	0.025	544	624	1.173	0.061	0.354	0.452
Ideal number of children	5.216	0.123	785	889	1.265	0.024	4.970	5.462
Mother received tetanus injection	0.881	0.016	719	828	1.151	0.018	0.849	0.913
Received medical care at delivery	0.493	0.035	719	828	1.583	0.071	0.423	0.563
Had diarrhoea in the past 2 weeks	0.130	0.014	683	786	1.072	0.108	0.102	0.158
Treated with ORS packets	0.334	0.062	87	102	1.189	0.184	0.211	0.458
Sought medical treatment	0.591	0.048	87	102	0.912	0.081	0.496	0.687
Having health card	0.676	0.034	123	141	0.798	0.050	0.609	0.743
Received BCG vaccination	0.946	0.021	123	141	1.038	0.022	0.905	0.988
Received DPT vaccination (3 doses)	0.902	0.018	123	141	0.678	0.020	0.866	0.938
Received polio vaccination (3 doses)	0.827	0.025	123	141	0.746	0.031	0.777	0.878
Received measles vaccination	0.877	0.030	123	141	1.014	0.034	0.817	0.937
Fully immunised	0.800	0.034	123	141	0.957	0.043	0.732	0.869
Weight-for-height (below -2 SD)	0.067	0.012	607	697	1.116	0.174	0.043	0.090
Height-for-age (below -2 SD)	0.401	0.026	607	697	1.258	0.066	0.348	0.454
Weight-for-age (below -2 SD)	0.301	0.021	607	697	1.075	0.069	0.260	0.343
Total fertility rate (3 years)	5.710	0.416	NA	2741	1.790	0.073	4.878	6.542
Neonatal mortality rate (10 years)	18.479	4.347	1357	1557	1.126	0.235	9.785	27.173
Infant mortality rate (10 years)	40.550	6.472	1358	1558	1.152	0.160	27.606	53.495
Child mortality rate (10 years)	29.976	6.383	1361	1562	1.220	0.213	17.210	42.743
Under-five mortality rate (10 years)	69.311	6.468	1363	1564	0.907	0.093	56.374	82.247
Postneonatal mortality rate (10 years)	22.071	4.034	1357	1557	0.961	0.183	14.003	30.139

NA = Not applicable.

Table B.6.2 Sampling errors - Northern Highlands zone sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.213	0.035	289	275	1.442	0.163	0.144	0.283
No education	0.103	0.028	289	275	1.552	0.269	0.048	0.159
Secondary education or more	0.114	0.025	289	275	1.345	0.221	0.064	0.165
Never in union	0.405	0.031	289	275	1.070	0.076	0.343	0.467
Currently married	0.532	0.027	289	275	0.924	0.051	0.477	0.586
Knowing any method	0.812	0.044	145	146	1.344	0.054	0.725	0.900
Knowing any modern method	0.790	0.043	145	146	1.277	0.055	0.703	0.876
Ever use any method	0.492	0.054	145	146	1.288	0.109	0.385	0.600
Using any method	0.354	0.048	145	146	1.196	0.135	0.259	0.450
Using any modern method	0.177	0.038	145	146	1.182	0.212	0.102	0.252
Using pill	0.059	0.020	145	146	1.013	0.337	0.019	0.099
Using IUD	0.012	0.007	145	146	0.751	0.557	0.000	0.026
Using injectables	0.024	0.014	145	146	1.115	0.594	0.000	0.052
Using condom	0.051	0.012	145	146	0.659	0.238	0.027	0.075
Using female sterilisation	0.031	0.017	145	146	1.208	0.562	0.000	0.066
Using periodic abstinence	0.075	0.027	145	146	1.237	0.363	0.020	0.129
Using withdrawal	0.094	0.033	145	146	1.373	0.355	0.027	0.161
Want no more children	0.265	0.047	145	146	1.276	0.177	0.172	0.359
Want to delay child at least 2 years	0.372	0.045	145	146	1.120	0.121	0.282	0.462
Ideal number of children	6.279	0.579	261	244	1.650	0.092	5.120	7.437

Table B.7.1 Sampling errors - Lake zone sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.130	0.017	1811	2559	2.141	0.130	0.096	0.164
No education	0.339	0.017	1811	2559	1.513	0.050	0.305	0.373
Secondary education or more	0.032	0.010	1811	2559	2.340	0.300	0.013	0.052
Never in union	0.205	0.011	1811	2559	1.110	0.051	0.184	0.226
Currently married	0.692	0.012	1811	2559	1.150	0.018	0.667	0.717
Married before 20	0.688	0.016	1428	2021	1.285	0.023	0.656	0.719
First sex relationship before 18	0.649	0.019	1428	2021	1.515	0.030	0.610	0.687
Children ever born (15-49)	3.405	0.100	1811	2559	1.334	0.029	3.204	3.605
Children ever born (40-49)	7.632	0.198	284	394	1.080	0.026	7.237	8.028
Children surviving	2.851	0.088	1811	2559	1.375	0.031	2.676	3.027
Knowing any method	0.870	0.014	1252	1771	1.449	0.016	0.842	0.897
Knowing any modern method	0.864	0.014	1252	1771	1.423	0.016	0.837	0.892
Ever use any method	0.195	0.020	1252	1771	1.757	0.101	0.155	0.234
Using any method	0.099	0.013	1252	1771	1.535	0.131	0.073	0.124
Using any modern method	0.073	0.011	1252	1771	1.546	0.156	0.050	0.095
Using pill	0.027	0.006	1252	1771	1.215	0.208	0.016	0.038
Using IUD	0.002	0.001	1252	1771	1.045	0.744	0.000	0.004
Using injectables	0.029	0.006	1252	1771	1.164	0.191	0.018	0.040
Using condom	0.003	0.001	1252	1771	1.028	0.580	0.000	0.005
Using female sterilisation	0.012	0.005	1252	1771	1.462	0.368	0.003	0.022
Using periodic abstinence	0.019	0.004	1252	1771	0.928	0.188	0.012	0.026
Using withdrawal	0.005	0.002	1252	1771	1.027	0.414	0.001	0.009
Using public sector source	0.768	0.053	131	175	1.421	0.069	0.662	0.873
Want no more children	0.296	0.014	1252	1771	1.114	0.049	0.267	0.324
Want to delay child at least 2 years	0.386	0.014	1252	1771	1.033	0.037	0.358	0.415
Ideal number of children	6.006	0.095	1700	2440	1.718	0.016	5.816	6.195
Mother received tetanus injection	0.914	0.012	1800	2549	1.594	0.014	0.889	0.938
Received medical care at delivery	0.381	0.024	1800	2549	1.735	0.063	0.333	0.429
Had diarrhoea in the past 2 weeks	0.136	0.009	1605	2275	0.997	0.065	0.119	0.154
Treated with ORS packets	0.437	0.044	238	310	1.267	0.102	0.348	0.526
Sought medical treatment	0.514	0.045	238	310	1.246	0.087	0.424	0.604
Having health card	0.762	0.025	384	543	1.138	0.033	0.711	0.812
Received BCG vaccination	0.952	0.014	384	543	1.252	0.014	0.924	0.979
Received DPT vaccination (3 doses)	0.806	0.021	384	543	1.014	0.025	0.765	0.847
Received polio vaccination (3 doses)	0.755	0.020	384	543	0.930	0.027	0.714	0.796
Received measles vaccination	0.741	0.026	384	543	1.134	0.035	0.689	0.793
Fully immunised	0.641	0.027	384	543	1.081	0.042	0.587	0.694
Weight-for-height (below -2 SD)	0.079	0.006	1384	1966	0.869	0.081	0.066	0.092
Height-for-age (below -2 SD)	0.366	0.018	1384	1966	1.300	0.048	0.331	0.402
Weight-for-age (below -2 SD)	0.295	0.014	1384	1966	1.072	0.047	0.268	0.323
Total fertility rate (3 years)	6.968	0.260	NA	7161	1.386	0.037	6.449	7.487
Neonatal mortality rate (10 years)	36.861	4.480	3355	4759	1.249	0.122	27.901	45.822
Infant mortality rate (10 years)	99.995	7.622	3364	4768	1.297	0.076	84.751	115.238
Child mortality rate (10 years)	52.366	4.649	3373	4789	0.964	0.089	43.068	61.664
Under-five mortality rate (10 years)	147.124	8.646	3383	4800	1.198	0.059	129.832	164.416
Postneonatal mortality rate (10 years)	63.133	5.372	3363	4767	1.166	0.085	52.390	73.876

NA = Not applicable.

Table B.7.2 Sampling errors - Lake zone sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.126	0.021	490	757	1.421	0.169	0.083	0.169
No education	0.171	0.019	490	757	1.101	0.109	0.134	0.209
Secondary education or more	0.084	0.012	490	757	0.969	0.145	0.060	0.108
Never in union	0.382	0.026	490	757	1.198	0.069	0.329	0.434
Currently married	0.578	0.027	490	757	1.193	0.046	0.524	0.631
Knowing any method	0.929	0.016	282	438	1.045	0.017	0.897	0.961
Knowing any modern method	0.925	0.017	282	438	1.056	0.018	0.891	0.958
Ever use any method	0.352	0.030	282	438	1.061	0.086	0.292	0.413
Using any method	0.222	0.029	282	438	1.178	0.132	0.164	0.280
Using any modern method	0.071	0.016	282	438	1.073	0.232	0.038	0.104
Using pill	0.032	0.013	282	438	1.218	0.397	0.007	0.058
Using IUD	0.003	0.003	282	438	0.902	1.013	0.000	0.009
Using injectables	0.012	0.006	282	438	0.920	0.491	0.000	0.024
Using condom	0.016	0.006	282	438	0.850	0.398	0.003	0.029
Using female sterilisation	0.007	0.005	282	438	1.037	0.716	0.000	0.018
Using periodic abstinence	0.146	0.027	282	438	1.285	0.186	0.091	0.200
Using withdrawal	0.005	0.004	282	438	0.899	0.722	0.000	0.013
Want no more children	0.163	0.022	282	438	1.008	0.136	0.118	0.207
Want to delay child at least 2 years	0.475	0.028	282	438	0.925	0.058	0.420	0.530
Ideal number of children	6.183	0.164	482	746	1.186	0.026	5.855	6.510

Table B.8.1 Sampling errors - Central zone sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.139	0.060	709	638	4.616	0.432	0.019	0.259
No education	0.301	0.030	709	638	1.731	0.099	0.242	0.361
Secondary education or more	0.040	0.010	709	638	1.390	0.254	0.020	0.061
Never in union	0.201	0.017	709	638	1.114	0.084	0.167	0.234
Currently married	0.708	0.028	709	638	1.656	0.040	0.652	0.765
Married before 20	0.641	0.030	569	513	1.473	0.046	0.581	0.700
First sex relationship before 18	0.604	0.029	569	513	1.390	0.047	0.547	0.661
Children ever born (15-49)	3.407	0.102	709	638	0.905	0.030	3.202	3.612
Children ever born (40-49)	6.900	0.289	130	119	1.134	0.042	6.322	7.478
Children surviving	2.854	0.078	709	638	0.814	0.027	2.698	3.010
Knowing any method	0.876	0.020	499	452	1.351	0.023	0.836	0.916
Knowing any modern method	0.863	0.022	499	452	1.435	0.026	0.819	0.907
Ever use any method	0.347	0.034	499	452	1.606	0.099	0.278	0.415
Using any method	0.149	0.021	499	452	1.312	0.141	0.107	0.190
Using any modern method	0.132	0.017	499	452	1.110	0.127	0.099	0.166
Using pill	0.059	0.011	499	452	1.008	0.181	0.037	0.080
Using IUD	0.007	0.005	499	452	1.353	0.746	0.000	0.016
Using injectables	0.057	0.009	499	452	0.854	0.156	0.039	0.074
Using condom	0.002	0.002	499	452	0.892	1.002	0.000	0.005
Using female sterilisation	0.009	0.005	499	452	1.127	0.534	0.000	0.018
Using periodic abstinence	0.008	0.005	499	452	1.237	0.611	0.000	0.018
Using withdrawal	0.008	0.004	499	452	0.929	0.459	0.001	0.016
Using public sector source	0.900	0.043	87	77	1.335	0.048	0.814	0.987
Want no more children	0.305	0.021	499	452	1.041	0.070	0.262	0.348
Want to delay child at least 2 years	0.375	0.020	499	452	0.909	0.053	0.335	0.414
Ideal number of children	5.449	0.120	646	568	1.217	0.022	5.210	5.689
Mother received tetanus injection	0.897	0.022	636	570	1.387	0.024	0.854	0.940
Received medical care at delivery	0.425	0.040	636	570	1.743	0.093	0.346	0.504
Had diarrhoea in the past 2 weeks	0.164	0.018	560	496	1.153	0.113	0.127	0.201
Treated with ORS packets	0.712	0.039	94	81	0.813	0.055	0.633	0.790
Sought medical treatment	0.708	0.042	94	81	0.874	0.060	0.623	0.792
Having health card	0.765	0.044	110	98	1.081	0.058	0.677	0.853
Received BCG vaccination	0.933	0.028	110	98	1.170	0.030	0.877	0.989
Received DPT vaccination (3 doses)	0.814	0.043	110	98	1.138	0.052	0.729	0.899
Received polio vaccination (3 doses)	0.762	0.062	110	98	1.517	0.082	0.638	0.886
Received measles vaccination	0.803	0.048	110	98	1.251	0.060	0.707	0.898
Fully immunised	0.695	0.064	110	98	1.435	0.092	0.567	0.822
Weight-for-height (below -2 SD)	0.075	0.010	472	415	0.767	0.128	0.056	0.095
Height-for-age (below -2 SD)	0.434	0.031	472	415	1.271	0.071	0.373	0.496
Weight-for-age (below -2 SD)	0.314	0.024	472	415	1.117	0.077	0.265	0.362
Total fertility rate (3 years)	6.101	0.472	NA	1796	1.567	0.077	5.156	7.046
Neonatal mortality rate (10 years)	39.836	6.141	1263	1126	0.985	0.154	27.553	52.118
Infant mortality rate (10 years)	98.101	13.935	1266	1129	1.405	0.142	70.232	125.970
Child mortality rate (10 years)	60.555	10.744	1276	1138	1.260	0.177	39.066	82.044
Under-five mortality rate (10 years)	152.715	20.834	1279	1140	1.713	0.136	111.047	194.384
Postneonatal mortality rate (10 years)	58.265	13.316	1266	1129	1.703	0.229	31.633	84.897

NA = Not applicable.

Table B.8.2 Sampling errors - Central zone sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.123	0.042	224	176	1.905	0.340	0.040	0.207
No education	0.180	0.033	224	176	1.284	0.183	0.114	0.246
Secondary education or more	0.061	0.027	224	176	1.717	0.453	0.006	0.115
Never in union	0.379	0.028	224	176	0.851	0.073	0.324	0.434
Currently married	0.574	0.029	224	176	0.862	0.050	0.517	0.631
Knowing any method	0.957	0.020	127	101	1.108	0.021	0.917	0.997
Knowing any modern method	0.947	0.022	127	101	1.104	0.023	0.903	0.991
Ever use any method	0.495	0.029	127	101	0.659	0.059	0.437	0.554
Using any method	0.242	0.019	127	101	0.487	0.077	0.205	0.279
Using any modern method	0.194	0.020	127	101	0.557	0.101	0.154	0.233
Using pill	0.058	0.018	127	101	0.842	0.302	0.023	0.093
Using IUD	0.000	0.000	127	101	NA	NA	0.000	0.000
Using injectables	0.051	0.017	127	101	0.859	0.329	0.018	0.085
Using condom	0.074	0.026	127	101	1.124	0.353	0.022	0.127
Using female sterilisation	0.009	0.009	127	101	1.099	1.001	0.000	0.028
Using periodic abstinence	0.032	0.012	127	101	0.790	0.384	0.008	0.057
Using withdrawal	0.000	0.000	127	101	NA	NA	0.000	0.000
Want no more children	0.304	0.045	127	101	1.093	0.147	0.215	0.394
Want to delay child at least 2 years	0.288	0.043	127	101	1.066	0.149	0.202	0.374
Ideal number of children	5.920	0.284	200	159	0.984	0.048	5.352	6.489

NA = Not applicable.

Table B.9.1 Sampling errors - Southern Highlands zone sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.216	0.033	1056	1181	2.611	0.153	0.150	0.282
No education	0.302	0.020	1056	1181	1.397	0.065	0.262	0.341
Secondary education or more	0.042	0.017	1056	1181	2.700	0.396	0.009	0.076
Never in union	0.245	0.018	1056	1181	1.389	0.075	0.208	0.282
Currently married	0.666	0.021	1056	1181	1.459	0.032	0.624	0.708
Married before 20	0.640	0.023	837	933	1.357	0.035	0.595	0.685
First sex relationship before 18	0.591	0.020	837	933	1.183	0.034	0.550	0.631
Children ever born (15-49)	3.138	0.103	1056	1181	1.121	0.033	2.933	3.343
Children ever born (40-49)	6.802	0.187	186	217	0.983	0.027	6.429	7.176
Children surviving	2.523	0.098	1056	1181	1.322	0.039	2.327	2.719
Knowing any method	0.919	0.013	713	786	1.289	0.014	0.893	0.945
Knowing any modern method	0.912	0.013	713	786	1.248	0.015	0.886	0.939
Ever use any method	0.398	0.019	713	786	1.025	0.047	0.360	0.435
Using any method	0.178	0.018	713	786	1.260	0.102	0.142	0.214
Using any modern method	0.103	0.014	713	786	1.228	0.136	0.075	0.131
Using pill	0.052	0.008	713	786	1.009	0.161	0.036	0.069
Using IUD	0.000	0.000	713	786	NA	NA	0.000	0.000
Using injectables	0.031	0.006	713	786	0.872	0.182	0.020	0.042
Using condom	0.004	0.003	713	786	1.063	0.606	0.000	0.010
Using female sterilisation	0.015	0.007	713	786	1.512	0.456	0.001	0.029
Using periodic abstinence	0.011	0.005	713	786	1.287	0.461	0.001	0.021
Using withdrawal	0.057	0.010	713	786	1.200	0.183	0.036	0.078
Using public sector source	0.816	0.050	93	109	1.228	0.061	0.717	0.915
Want no more children	0.262	0.017	713	786	1.029	0.065	0.228	0.296
Want to delay child at least 2 years	0.388	0.022	713	786	1.232	0.058	0.343	0.433
Ideal number of children	5.343	0.101	961	1071	1.382	0.019	5.141	5.545
Mother received tetanus injection	0.915	0.013	890	959	1.351	0.015	0.888	0.942
Received medical care at delivery	0.464	0.037	890	959	1.860	0.079	0.391	0.538
Had diarrhoea in the past 2 weeks	0.171	0.015	780	847	1.098	0.090	0.140	0.202
Treated with ORS packets	0.495	0.048	139	145	1.049	0.096	0.400	0.591
Sought medical treatment	0.545	0.046	139	145	1.021	0.085	0.452	0.638
Having health card	0.772	0.032	168	181	0.965	0.042	0.707	0.837
Received BCG vaccination	0.977	0.015	168	181	1.239	0.015	0.947	1.000
Received DPT vaccination (3 doses)	0.910	0.022	168	181	0.992	0.025	0.865	0.955
Received polio vaccination (3 doses)	0.843	0.032	168	181	1.092	0.038	0.779	0.907
Received measles vaccination	0.855	0.028	168	181	1.022	0.033	0.798	0.912
Fully immunised	0.742	0.035	168	181	1.002	0.047	0.672	0.812
Weight-for-height (below -2 SD)	0.071	0.011	685	742	1.078	0.154	0.049	0.093
Height-for-age (below -2 SD)	0.542	0.029	685	742	1.439	0.053	0.485	0.599
Weight-for-age (below -2 SD)	0.331	0.028	685	742	1.421	0.084	0.275	0.387
Total fertility rate (3 years)	5.416	0.267	NA	3299	1.403	0.049	4.881	5.951
Neonatal mortality rate (10 years)	41.498	5.161	1741	1875	1.001	0.124	31.175	51.821
Infant mortality rate (10 years)	101.530	10.265	1745	1880	1.303	0.101	81.000	122.060
Child mortality rate (10 years)	71.665	8.793	1764	1900	1.076	0.123	54.080	89.251
Under-five mortality rate (10 years)	165.919	14.482	1768	1905	1.368	0.087	136.955	194.883
Postneonatal mortality rate (10 years)	60.032	7.834	1745	1880	1.249	0.131	44.364	75.701

NA = Not applicable.

Table B.9.2 Sampling errors - Southern Highlands zone sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.211	0.024	287	309	0.996	0.114	0.163	0.259
No education	0.124	0.020	287	309	1.034	0.162	0.084	0.164
Secondary education or more	0.094	0.025	287	309	1.424	0.261	0.045	0.144
Never in union	0.363	0.025	287	309	0.893	0.070	0.313	0.414
Currently married	0.602	0.028	287	309	0.957	0.046	0.547	0.658
Knowing any method	0.982	0.009	175	186	0.867	0.009	0.965	1.000
Knowing any modern method	0.977	0.007	175	186	0.635	0.007	0.963	0.992
Ever use any method	0.640	0.051	175	186	1.400	0.080	0.538	0.742
Using any method	0.398	0.054	175	186	1.466	0.137	0.289	0.507
Using any modern method	0.178	0.048	175	186	1.653	0.269	0.082	0.274
Using pill	0.042	0.016	175	186	1.029	0.374	0.010	0.073
Using IUD	0.000	0.000	175	186	NA	NA	0.000	0.000
Using injectables	0.049	0.020	175	186	1.221	0.406	0.009	0.089
Using condom	0.070	0.034	175	186	1.766	0.486	0.002	0.139
Using female sterilisation	0.017	0.013	175	186	1.331	0.774	0.000	0.043
Using periodic abstinence	0.111	0.027	175	186	1.142	0.245	0.057	0.166
Using withdrawal	0.094	0.029	175	186	1.291	0.303	0.037	0.152
Want no more children	0.197	0.035	175	186	1.146	0.175	0.128	0.267
Want to delay child at least 2 years	0.350	0.049	175	186	1.359	0.140	0.252	0.449
Ideal number of children	5.414	0.217	259	288	1.416	0.040	4.981	5.848

NA = Not applicable.

Table B.10.1 Sampling errors - Southern zone sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.203	0.024	1225	847	2.077	0.118	0.155	0.251
No education	0.249	0.019	1225	847	1.552	0.077	0.210	0.287
Secondary education or more	0.023	0.006	1225	847	1.312	0.243	0.012	0.034
Never in union	0.195	0.019	1225	847	1.648	0.096	0.158	0.232
Currently married	0.680	0.020	1225	847	1.517	0.030	0.640	0.721
Married before 20	0.722	0.021	975	675	1.488	0.030	0.679	0.765
First sex relationship before 18	0.743	0.019	975	675	1.349	0.025	0.705	0.781
Children ever born (15-49)	2.869	0.077	1225	847	0.985	0.027	2.716	3.023
Children ever born (40-49)	6.553	0.166	196	139	0.814	0.025	6.220	6.886
Children surviving	2.365	0.067	1225	847	1.030	0.028	2.230	2.499
Knowing any method	0.944	0.008	831	577	0.972	0.008	0.929	0.960
Knowing any modern method	0.935	0.008	831	577	0.908	0.008	0.920	0.951
Ever use any method	0.407	0.025	831	577	1.486	0.062	0.357	0.458
Using any method	0.183	0.018	831	577	1.347	0.099	0.147	0.219
Using any modern method	0.161	0.017	831	577	1.339	0.106	0.127	0.196
Using pill	0.082	0.011	831	577	1.126	0.131	0.060	0.103
Using IUD	0.001	0.001	831	577	0.918	0.998	0.000	0.003
Using injectables	0.049	0.008	831	577	1.068	0.164	0.033	0.065
Using condom	0.011	0.004	831	577	1.092	0.359	0.003	0.019
Using female sterilisation	0.019	0.005	831	577	1.129	0.282	0.008	0.030
Using periodic abstinence	0.009	0.003	831	577	0.977	0.356	0.003	0.015
Using withdrawal	0.004	0.002	831	577	0.966	0.552	0.000	0.008
Using public sector source	0.843	0.035	171	116	1.265	0.042	0.773	0.914
Want no more children	0.302	0.021	831	577	1.308	0.069	0.261	0.344
Want to delay child at least 2 years	0.282	0.022	831	577	1.404	0.078	0.238	0.326
Ideal number of children	5.123	0.082	1168	809	1.274	0.016	4.958	5.287
Mother received tetanus injection	0.929	0.007	893	614	0.741	0.008	0.914	0.943
Received medical care at delivery	0.628	0.030	893	614	1.635	0.048	0.567	0.688
Had diarrhoea in the past 2 weeks	0.100	0.012	784	539	1.149	0.123	0.075	0.124
Treated with ORS packets	0.604	0.059	78	54	1.057	0.097	0.486	0.721
Sought medical treatment	0.639	0.053	78	54	0.965	0.082	0.534	0.744
Having health card	0.818	0.040	152	104	1.222	0.048	0.739	0.897
Received BCG vaccination	0.994	0.006	152	104	0.972	0.006	0.981	1.000
Received DPT vaccination (3 doses)	0.915	0.027	152	104	1.134	0.030	0.860	0.970
Received polio vaccination (3 doses)	0.841	0.038	152	104	1.224	0.045	0.766	0.916
Received measles vaccination	0.861	0.035	152	104	1.223	0.040	0.791	0.930
Fully immunised	0.756	0.045	152	104	1.262	0.060	0.666	0.846
Weight-for-height (below -2 SD)	0.058	0.010	686	472	1.093	0.170	0.038	0.078
Height-for-age (below -2 SD)	0.562	0.023	686	472	1.200	0.041	0.516	0.608
Weight-for-age (below -2 SD)	0.340	0.023	686	472	1.199	0.068	0.294	0.387
Total fertility rate (3 years)	4.944	0.217	NA	2401	1.096	0.044	4.510	5.377
Neonatal mortality rate (10 years)	35.998	6.639	1754	1207	1.364	0.184	22.720	49.276
Infant mortality rate (10 years)	107.875	12.979	1757	1209	1.642	0.120	81.918	133.832
Child mortality rate (10 years)	63.164	6.132	1770	1218	0.943	0.097	50.900	75.428
Under-five mortality rate (10 years)	164.226	13.207	1773	1220	1.452	0.080	137.812	190.639
Postneonatal mortality rate (10 years)	71.877	9.914	1757	1209	1.489	0.138	52.049	91.705

NA = Not applicable.

Table B.10.2 Sampling errors - Southern zone sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.233	0.029	274	231	1.132	0.124	0.175	0.291
No education	0.105	0.024	274	231	1.272	0.225	0.058	0.152
Secondary education or more	0.031	0.014	274	231	1.345	0.455	0.003	0.059
Never in union	0.272	0.027	274	231	1.016	0.101	0.217	0.326
Currently married	0.645	0.026	274	231	0.892	0.040	0.594	0.697
Knowing any method	0.984	0.012	177	149	1.253	0.012	0.960	1.000
Knowing any modern method	0.984	0.012	177	149	1.253	0.012	0.960	1.000
Ever use any method	0.611	0.036	177	149	0.969	0.058	0.539	0.682
Using any method	0.310	0.033	177	149	0.952	0.107	0.244	0.377
Using any modern method	0.230	0.035	177	149	1.090	0.150	0.161	0.299
Using pill	0.160	0.029	177	149	1.046	0.181	0.102	0.218
Using IUD	0.000	0.000	177	149	NA	NA	0.000	0.000
Using injectables	0.038	0.012	177	149	0.836	0.318	0.014	0.062
Using condom	0.027	0.012	177	149	0.996	0.451	0.003	0.051
Using female sterilisation	0.005	0.005	177	149	0.966	0.991	0.000	0.016
Using periodic abstinence	0.048	0.015	177	149	0.961	0.324	0.017	0.079
Using withdrawal	0.017	0.010	177	149	0.978	0.559	0.000	0.036
Want no more children	0.197	0.026	177	149	0.851	0.129	0.146	0.248
Want to delay child at least 2 years	0.350	0.032	177	149	0.901	0.093	0.285	0.414
Ideal number of children	5.852	0.222	260	219	1.102	0.038	5.408	6.296

NA = Not applicable.

Table B.11.1 Sampling errors - Mainland sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.230	0.012	7479	7881	2.379	0.050	0.207	0.253
No education	0.285	0.008	7479	7881	1.508	0.028	0.269	0.300
Secondary education or more	0.046	0.005	7479	7881	2.075	0.109	0.036	0.056
Never in union	0.233	0.006	7479	7881	1.303	0.027	0.220	0.245
Currently married	0.666	0.007	7479	7881	1.346	0.011	0.651	0.680
Married before 20	0.650	0.008	5880	6197	1.354	0.013	0.634	0.667
First sex relationship before 18	0.623	0.009	5880	6197	1.402	0.014	0.606	0.641
Children ever born (15-49)	3.076	0.043	7479	7881	1.239	0.014	2.991	3.161
Children ever born (40-49)	6.951	0.094	1161	1232	1.097	0.013	6.764	7.139
Children surviving	2.572	0.037	7479	7881	1.292	0.015	2.497	2.647
Knowing any method	0.883	0.006	4961	5245	1.383	0.007	0.870	0.895
Knowing any modern method	0.875	0.006	4961	5245	1.382	0.007	0.862	0.888
Ever use any method	0.358	0.010	4961	5245	1.511	0.029	0.338	0.379
Using any method	0.186	0.007	4961	5245	1.333	0.040	0.171	0.201
Using any modern method	0.134	0.006	4961	5245	1.277	0.046	0.122	0.146
Using pill	0.055	0.004	4961	5245	1.110	0.065	0.048	0.062
Using IUD	0.006	0.001	4961	5245	1.101	0.202	0.004	0.008
Using injectables	0.045	0.003	4961	5245	1.030	0.067	0.039	0.051
Using condom	0.008	0.001	4961	5245	1.064	0.164	0.006	0.011
Using female sterilisation	0.019	0.003	4961	5245	1.305	0.134	0.014	0.024
Using periodic abstinence	0.021	0.002	4961	5245	1.147	0.112	0.016	0.025
Using withdrawal	0.027	0.002	4961	5245	1.067	0.091	0.022	0.032
Using public sector source	0.739	0.018	969	935	1.300	0.025	0.702	0.775
Want no more children	0.279	0.007	4961	5245	1.132	0.026	0.265	0.294
Want to delay child at least 2 years	0.371	0.008	4961	5245	1.200	0.022	0.354	0.387
Ideal number of children	5.416	0.044	6866	7253	1.563	0.008	5.327	5.504
Mother received tetanus injection	0.914	0.006	6181	6693	1.462	0.007	0.902	0.926
Received medical care at delivery	0.471	0.013	6181	6693	1.784	0.028	0.444	0.498
Had diarrhoea in the past 2 weeks	0.135	0.005	5521	5983	1.094	0.038	0.125	0.146
Treated with ORS packets	0.486	0.023	755	811	1.216	0.047	0.440	0.531
Sought medical treatment	0.565	0.022	755	811	1.155	0.038	0.522	0.608
Having health card	0.762	0.014	1179	1293	1.120	0.018	0.734	0.789
Received BCG vaccination	0.961	0.007	1179	1293	1.281	0.007	0.947	0.975
Received DPT vaccination (3 doses)	0.852	0.011	1179	1293	1.073	0.013	0.831	0.874
Received polio vaccination (3 doses)	0.794	0.013	1179	1293	1.083	0.016	0.769	0.819
Received measles vaccination	0.809	0.014	1179	1293	1.235	0.017	0.781	0.837
Fully immunised	0.703	0.016	1179	1293	1.196	0.022	0.672	0.735
Weight-for-height (below -2 SD)	0.071	0.004	4776	5180	1.007	0.053	0.064	0.079
Height-for-age (below -2 SD)	0.436	0.010	4776	5180	1.389	0.024	0.416	0.457
Weight-for-age (below -2 SD)	0.305	0.008	4776	5180	1.193	0.027	0.289	0.322
Total fertility rate (3 years)	5.813	0.137	NA	22082	1.582	0.024	5.539	6.087
Neonatal mortality rate (10 years)	36.390	2.360	11907	12817	1.271	0.065	31.670	41.111
Infant mortality rate (10 years)	94.746	4.343	11932	12841	1.462	0.046	86.060	103.433
Child mortality rate (10 years)	56.618	2.867	12005	12926	1.118	0.051	50.885	62.351
Under-five mortality rate (10 years)	146.000	5.329	12032	12952	1.448	0.037	135.342	156.658
Postneonatal mortality rate (10 years)	58.356	3.127	11930	12839	1.337	0.054	52.102	64.610

NA = Not applicable.

Table B.11.2 Sampling errors - Mainland sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.233	0.013	2148	2187	1.374	0.054	0.208	0.258
No education	0.135	0.009	2148	2187	1.242	0.068	0.117	0.153
Secondary education or more	0.091	0.008	2148	2187	1.295	0.088	0.075	0.107
Never in union	0.373	0.012	2148	2187	1.165	0.033	0.349	0.398
Currently married	0.573	0.012	2148	2187	1.147	0.021	0.548	0.597
Knowing any method	0.932	0.009	1212	1253	1.216	0.009	0.915	0.950
Knowing any modern method	0.927	0.009	1212	1253	1.189	0.010	0.909	0.945
Ever use any method	0.494	0.017	1212	1253	1.180	0.034	0.460	0.528
Using any method	0.296	0.016	1212	1253	1.220	0.054	0.264	0.328
Using any modern method	0.159	0.012	1212	1253	1.160	0.077	0.134	0.183
Using pill	0.065	0.007	1212	1253	1.036	0.113	0.051	0.080
Using IUD	0.004	0.002	1212	1253	0.858	0.368	0.001	0.008
Using injectables	0.030	0.005	1212	1253	1.015	0.167	0.020	0.039
Using condom	0.046	0.007	1212	1253	1.160	0.151	0.032	0.060
Using female sterilisation	0.013	0.004	1212	1253	1.164	0.296	0.005	0.020
Using periodic abstinence	0.092	0.011	1212	1253	1.359	0.122	0.070	0.115
Using withdrawal	0.037	0.007	1212	1253	1.246	0.182	0.024	0.051
Want no more children	0.198	0.013	1212	1253	1.139	0.066	0.172	0.224
Want to delay child at least 2 years	0.400	0.015	1212	1253	1.093	0.038	0.369	0.430
Ideal number of children	5.844	0.106	1974	2044	1.342	0.018	5.632	6.056

Table B.12.1 Sampling errors - Zanzibar sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.398	0.036	641	239	1.850	0.090	0.327	0.470
No education	0.309	0.021	641	239	1.155	0.068	0.267	0.351
Secondary education or more	0.332	0.019	641	239	1.041	0.058	0.293	0.371
Never in union	0.228	0.018	641	239	1.060	0.077	0.193	0.264
Currently married	0.694	0.016	641	239	0.894	0.023	0.661	0.727
Married before 20	0.754	0.027	511	191	1.399	0.035	0.700	0.807
First sex relationship before 18	0.594	0.025	511	191	1.147	0.042	0.544	0.644
Children ever born (15-49)	3.434	0.130	641	239	0.990	0.038	3.175	3.694
Children ever born (40-49)	7.645	0.263	90	33	0.798	0.034	7.118	8.172
Children surviving	2.973	0.106	641	239	0.936	0.036	2.761	3.184
Knowing any method	0.957	0.006	443	166	0.663	0.007	0.944	0.970
Knowing any modern method	0.954	0.006	443	166	0.608	0.006	0.942	0.967
Ever use any method	0.274	0.019	443	166	0.886	0.068	0.237	0.312
Using any method	0.131	0.012	443	166	0.752	0.092	0.107	0.155
Using any modern method	0.108	0.015	443	166	1.014	0.139	0.078	0.138
Using pill	0.055	0.011	443	166	1.028	0.203	0.033	0.077
Using IUD	0.003	0.003	443	166	1.056	0.989	0.000	0.008
Using injectables	0.031	0.010	443	166	1.232	0.330	0.010	0.051
Using condom	0.004	0.003	443	166	1.029	0.733	0.000	0.011
Using female sterilisation	0.015	0.005	443	166	0.940	0.360	0.004	0.026
Using periodic abstinence	0.011	0.005	443	166	1.049	0.463	0.001	0.022
Using withdrawal	0.006	0.004	443	166	0.972	0.580	0.000	0.014
Using public sector source	0.916	0.046	49	19	1.156	0.051	0.823	1.000
Want no more children	0.299	0.033	443	166	1.531	0.112	0.232	0.366
Want to delay child at least 2 years	0.418	0.021	443	166	0.877	0.049	0.376	0.459
Ideal number of children	6.946	0.200	608	227	1.481	0.029	6.546	7.347
Mother received tetanus injection	0.924	0.016	608	223	1.419	0.017	0.892	0.956
Received medical care at delivery	0.344	0.020	608	223	0.867	0.059	0.304	0.385
Had diarrhoea in the past 2 weeks	0.174	0.017	559	204	1.022	0.100	0.139	0.209
Treated with ORS packets	0.415	0.046	95	36	0.843	0.111	0.323	0.507
Sought medical treatment	0.522	0.056	95	36	1.038	0.107	0.410	0.634
Having health card	0.889	0.039	118	42	1.296	0.043	0.811	0.966
Received BCG vaccination	0.993	0.007	118	42	0.885	0.007	0.978	1.000
Received DPT vaccination (3 doses)	0.851	0.027	118	42	0.803	0.032	0.797	0.905
Received polio vaccination (3 doses)	0.851	0.024	118	42	0.725	0.029	0.802	0.900
Received measles vaccination	0.789	0.032	118	42	0.830	0.041	0.725	0.853
Fully immunised	0.754	0.032	118	42	0.797	0.043	0.689	0.819
Weight-for-height (below -2 SD)	0.110	0.012	450	163	0.714	0.107	0.086	0.133
Height-for-age (below -2 SD)	0.371	0.024	450	163	0.980	0.064	0.324	0.419
Weight-for-age (below -2 SD)	0.338	0.027	450	163	1.080	0.079	0.284	0.391
Total fertility rate (3 years)	5.930	0.415	NA	676	1.342	0.070	5.099	6.760
Neonatal mortality rate (10 years)	34.598	5.681	1157	423	0.880	0.164	23.235	45.960
Infant mortality rate (10 years)	75.304	7.829	1158	424	0.926	0.104	59.646	90.963
Child mortality rate (10 years)	34.773	4.839	1160	425	0.791	0.139	25.094	44.452
Under-five mortality rate (10 years)	107.459	8.097	1161	425	0.835	0.075	91.264	123.654
Postneonatal mortality rate (10 years)	40.706	6.706	1158	424	1.164	0.165	27.294	54.119

NA = Not applicable.

Table B.12.2 Sampling errors - Zanzibar sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	0.383	0.059	108	69	1.247	0.153	0.266	0.500
No education	0.134	0.022	108	69	0.669	0.164	0.090	0.179
Secondary education or more	0.321	0.029	108	69	0.637	0.089	0.264	0.379
Never in union	0.440	0.053	108	69	1.114	0.121	0.334	0.547
Currently married	0.508	0.058	108	69	1.199	0.114	0.392	0.624
Knowing any method	0.985	0.015	56	35	0.894	0.015	0.956	1.000
Knowing any modern method	0.985	0.015	56	35	0.894	0.015	0.956	1.000
Ever use any method	0.254	0.047	56	35	0.797	0.184	0.161	0.348
Using any method	0.233	0.048	56	35	0.846	0.207	0.136	0.329
Using any modern method	0.138	0.049	56	35	1.063	0.358	0.039	0.237
Using pill	0.080	0.042	56	35	1.160	0.531	0.000	0.165
Using IUD	0.000	0.000	56	35	NA	NA	0.000	0.000
Using injectables	0.036	0.024	56	35	0.939	0.651	0.000	0.084
Using condom	0.022	0.023	56	35	1.155	1.046	0.000	0.067
Using female sterilisation	0.000	0.000	56	35	NA	NA	0.000	0.000
Using periodic abstinence	0.073	0.031	56	35	0.871	0.419	0.012	0.134
Using withdrawal	0.022	0.023	56	35	1.189	1.077	0.000	0.068
Want no more children	0.065	0.036	56	35	1.092	0.558	0.000	0.138
Want to delay child at least 2 years	0.870	0.039	56	35	0.868	0.045	0.791	0.949
Ideal number of children	7.530	0.460	73	47	0.974	0.061	6.609	8.450

NA = Not applicable.

Table B.13.1 Sampling errors - Mainland urban sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	1.000	0.000	1853	1811	NA	0.000	1.000	1.000
No education	0.135	0.013	1853	1811	1.614	0.095	0.109	0.161
Secondary education or more	0.131	0.016	1853	1811	2.082	0.125	0.098	0.163
Never in union	0.293	0.017	1853	1811	1.562	0.056	0.260	0.326
Currently married	0.592	0.017	1853	1811	1.510	0.029	0.558	0.627
Married before 20	0.567	0.017	1449	1418	1.274	0.029	0.534	0.600
First sex relationship before 18	0.553	0.020	1449	1418	1.508	0.036	0.514	0.592
Children ever born (15-49)	2.343	0.088	1853	1811	1.507	0.038	2.167	2.519
Children ever born (40-49)	6.074	0.212	208	207	1.053	0.035	5.651	6.497
Children surviving	2.019	0.079	1853	1811	1.556	0.039	1.861	2.176
Knowing any method	0.975	0.006	1106	1073	1.190	0.006	0.964	0.987
Knowing any modern method	0.974	0.006	1106	1073	1.216	0.006	0.963	0.986
Ever use any method	0.574	0.030	1106	1073	2.023	0.052	0.514	0.635
Using any method	0.335	0.023	1106	1073	1.652	0.070	0.289	0.382
Using any modern method	0.273	0.020	1106	1073	1.478	0.072	0.234	0.313
Using pill	0.104	0.011	1106	1073	1.169	0.103	0.083	0.126
Using IUD	0.015	0.004	1106	1073	1.050	0.259	0.007	0.022
Using injectables	0.098	0.010	1106	1073	1.118	0.102	0.078	0.118
Using condom	0.021	0.005	1106	1073	1.182	0.245	0.010	0.031
Using female sterilisation	0.033	0.008	1106	1073	1.466	0.238	0.017	0.049
Using periodic abstinence	0.042	0.009	1106	1073	1.436	0.206	0.025	0.060
Using withdrawal	0.016	0.004	1106	1073	1.161	0.277	0.007	0.024
Using public sector source	0.679	0.032	443	428	1.423	0.047	0.616	0.742
Want no more children	0.290	0.015	1106	1073	1.062	0.050	0.261	0.319
Want to delay child at least 2 years	0.333	0.018	1106	1073	1.243	0.053	0.298	0.369
Ideal number of children	4.403	0.079	1748	1707	1.802	0.018	4.244	4.561
Mother received tetanus injection	0.960	0.007	1175	1165	1.145	0.008	0.945	0.974
Received medical care at delivery	0.817	0.025	1175	1165	1.913	0.031	0.766	0.868
Had diarrhoea in the past 2 weeks	0.119	0.012	1070	1066	1.240	0.104	0.094	0.144
Treated with ORS packets	0.550	0.060	123	127	1.346	0.110	0.429	0.671
Sought medical treatment	0.700	0.046	123	127	1.128	0.066	0.608	0.793
Having health card	0.801	0.027	242	238	1.047	0.034	0.747	0.855
Received BCG vaccination	0.996	0.004	242	238	0.933	0.004	0.989	1.000
Received DPT vaccination (3 doses)	0.946	0.014	242	238	0.966	0.015	0.918	0.974
Received polio vaccination (3 doses)	0.837	0.027	242	238	1.146	0.033	0.782	0.891
Received measles vaccination	0.951	0.014	242	238	1.016	0.015	0.923	0.979
Fully immunised	0.806	0.027	242	238	1.056	0.033	0.752	0.859
Weight-for-height (below -2 SD)	0.076	0.011	896	898	1.247	0.142	0.055	0.098
Height-for-age (below -2 SD)	0.329	0.018	896	898	1.140	0.056	0.292	0.366
Weight-for-age (below -2 SD)	0.195	0.014	896	898	1.008	0.072	0.167	0.223
Total fertility rate (3 years)	4.094	0.235	NA	5134	1.357	0.057	3.625	4.564
Neonatal mortality rate (10 years)	33.541	5.405	2228	2192	1.237	0.161	22.731	44.350
Infant mortality rate (10 years)	83.119	7.655	2231	2194	1.199	0.092	67.809	98.430
Child mortality rate (10 years)	42.580	5.246	2244	2206	1.103	0.123	32.089	53.071
Under-five mortality rate (10 years)	122.160	9.063	2248	2210	1.195	0.074	104.034	140.286
Postneonatal mortality rate (10 years)	49.579	4.831	2230	2193	1.046	0.097	39.916	59.241

NA = Not applicable.

Table B.13.2 Sampling errors - Mainland urban sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	1.000	0.000	579	509	NA	0.000	1.000	1.000
No education	0.068	0.012	579	509	1.186	0.182	0.044	0.093
Secondary education or more	0.208	0.028	579	509	1.658	0.135	0.152	0.264
Never in union	0.425	0.022	579	509	1.091	0.053	0.380	0.470
Currently married	0.512	0.025	579	509	1.194	0.049	0.462	0.562
Knowing any method	0.969	0.012	290	260	1.199	0.013	0.944	0.993
Knowing any modern method	0.969	0.012	290	260	1.199	0.013	0.944	0.993
Ever use any method	0.641	0.037	290	260	1.329	0.058	0.566	0.716
Using any method	0.362	0.033	290	260	1.179	0.092	0.295	0.429
Using any modern method	0.267	0.031	290	260	1.193	0.116	0.205	0.329
Using pill	0.095	0.015	290	260	0.862	0.157	0.065	0.124
Using IUD	0.012	0.005	290	260	0.824	0.438	0.002	0.023
Using injectables	0.029	0.010	290	260	0.988	0.339	0.009	0.048
Using condom	0.110	0.023	290	260	1.243	0.208	0.064	0.156
Using female sterilisation	0.019	0.009	290	260	1.067	0.450	0.002	0.036
Using periodic abstinence	0.067	0.015	290	260	0.988	0.216	0.038	0.097
Using withdrawal	0.022	0.014	290	260	1.563	0.608	0.000	0.050
Want no more children	0.246	0.028	290	260	1.097	0.113	0.190	0.301
Want to delay child at least 2 years	0.335	0.030	290	260	1.073	0.089	0.275	0.395
Ideal number of children	4.766	0.156	534	477	1.425	0.033	4.454	5.078

NA = Not applicable.

Table B.14.1 Sampling errors - Mainland rural sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.000	0.000	5626	6070	NA	NA	0.000	0.000
No education	0.329	0.010	5626	6070	1.519	0.029	0.310	0.348
Secondary education or more	0.021	0.004	5626	6070	2.189	0.201	0.012	0.029
Never in union	0.214	0.007	5626	6070	1.250	0.032	0.201	0.228
Currently married	0.687	0.008	5626	6070	1.318	0.012	0.671	0.704
Married before 20	0.675	0.010	4431	4779	1.368	0.014	0.656	0.694
First sex relationship before 18	0.644	0.010	4431	4779	1.368	0.015	0.625	0.664
Children ever born (15-49)	3.295	0.049	5626	6070	1.214	0.015	3.196	3.394
Children ever born (40-49)	7.128	0.103	953	1026	1.102	0.014	6.922	7.335
Children surviving	2.737	0.044	5626	6070	1.277	0.016	2.650	2.825
Knowing any method	0.859	0.008	3855	4172	1.392	0.009	0.843	0.874
Knowing any modern method	0.849	0.008	3855	4172	1.387	0.009	0.834	0.865
Ever use any method	0.303	0.010	3855	4172	1.385	0.034	0.282	0.323
Using any method	0.148	0.007	3855	4172	1.273	0.049	0.133	0.162
Using any modern method	0.098	0.006	3855	4172	1.263	0.062	0.086	0.110
Using pill	0.043	0.004	3855	4172	1.086	0.083	0.035	0.050
Using IUD	0.004	0.001	3855	4172	1.153	0.304	0.001	0.006
Using injectables	0.031	0.003	3855	4172	1.021	0.091	0.026	0.037
Using condom	0.005	0.001	3855	4172	1.027	0.227	0.003	0.008
Using female sterilisation	0.015	0.002	3855	4172	1.256	0.164	0.010	0.020
Using periodic abstinence	0.015	0.002	3855	4172	0.951	0.124	0.011	0.019
Using withdrawal	0.030	0.003	3855	4172	1.043	0.096	0.024	0.035
Using public sector source	0.789	0.019	526	506	1.083	0.024	0.751	0.828
Want no more children	0.276	0.008	3855	4172	1.143	0.030	0.260	0.293
Want to delay child at least 2 years	0.380	0.009	3855	4172	1.178	0.024	0.362	0.399
Ideal number of children	5.727	0.051	5118	5545	1.525	0.009	5.625	5.830
Mother received tetanus injection	0.904	0.007	5006	5529	1.484	0.008	0.890	0.919
Received medical care at delivery	0.398	0.015	5006	5529	1.818	0.037	0.369	0.428
Had diarrhoea in the past 2 weeks	0.139	0.006	4451	4917	1.061	0.040	0.128	0.150
Treated with ORS packets	0.474	0.025	632	684	1.208	0.053	0.424	0.524
Sought medical treatment	0.540	0.024	632	684	1.165	0.045	0.492	0.588
Having health card	0.753	0.016	937	1055	1.127	0.021	0.721	0.784
Received BCG vaccination	0.953	0.009	937	1055	1.271	0.009	0.936	0.970
Received DPT vaccination (3 doses)	0.831	0.013	937	1055	1.069	0.015	0.806	0.857
Received polio vaccination (3 doses)	0.785	0.014	937	1055	1.061	0.018	0.756	0.813
Received measles vaccination	0.777	0.017	937	1055	1.248	0.022	0.744	0.811
Fully immunised	0.680	0.018	937	1055	1.202	0.027	0.644	0.717
Weight-for-height (below -2 SD)	0.070	0.004	3880	4282	0.951	0.056	0.062	0.078
Height-for-age (below -2 SD)	0.459	0.012	3880	4282	1.412	0.026	0.435	0.482
Weight-for-age (below -2 SD)	0.329	0.009	3880	4282	1.191	0.028	0.310	0.347
Total fertility rate (3 years)	6.330	0.146	NA	16948	1.549	0.023	6.037	6.623
Neonatal mortality rate (10 years)	36.979	2.624	9679	10625	1.275	0.071	31.731	42.227
Infant mortality rate (10 years)	97.149	4.984	9701	10647	1.489	0.051	87.182	107.116
Child mortality rate (10 years)	59.588	3.256	9761	10719	1.104	0.055	53.076	66.101
Under-five mortality rate (10 years)	150.948	6.089	9784	10742	1.464	0.040	138.769	163.127
Postneonatal mortality rate (10 years)	60.170	3.629	9700	10646	1.362	0.060	52.912	67.428

NA = Not applicable.

Table B.14.2 Sampling errors - Mainland rural sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	0.000	0.000	1569	1678	NA	NA	0.000	0.000
No education	0.155	0.011	1569	1678	1.240	0.073	0.132	0.178
Secondary education or more	0.056	0.006	1569	1678	1.087	0.113	0.043	0.068
Never in union	0.358	0.014	1569	1678	1.187	0.040	0.329	0.387
Currently married	0.591	0.014	1569	1678	1.136	0.024	0.563	0.620
Knowing any method	0.923	0.011	922	992	1.199	0.011	0.902	0.944
Knowing any modern method	0.916	0.011	922	992	1.170	0.012	0.894	0.937
Ever use any method	0.455	0.019	922	992	1.155	0.042	0.417	0.493
Using any method	0.279	0.018	922	992	1.231	0.065	0.243	0.315
Using any modern method	0.130	0.013	922	992	1.166	0.099	0.105	0.156
Using pill	0.058	0.008	922	992	1.095	0.146	0.041	0.074
Using IUD	0.002	0.002	922	992	0.930	0.616	0.000	0.006
Using injectables	0.030	0.006	922	992	1.016	0.191	0.018	0.041
Using condom	0.030	0.007	922	992	1.189	0.224	0.016	0.043
Using female sterilisation	0.011	0.004	922	992	1.201	0.377	0.003	0.019
Using periodic abstinence	0.099	0.014	922	992	1.399	0.139	0.071	0.126
Using withdrawal	0.041	0.008	922	992	1.185	0.188	0.026	0.057
Want no more children	0.186	0.015	922	992	1.146	0.079	0.156	0.215
Want to delay child at least 2 years	0.416	0.018	922	992	1.089	0.042	0.381	0.452
Ideal number of children	6.172	0.129	1440	1567	1.329	0.021	5.914	6.431

NA = Not applicable.

Table B.15.1 Sampling errors - Mainland Dar es Salaam city sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	1.000	0.000	666	563	NA	0.000	1.000	1.000
No education	0.144	0.024	666	563	1.793	0.169	0.095	0.193
Secondary education or more	0.177	0.028	666	563	1.919	0.160	0.120	0.234
Never in union	0.306	0.030	666	563	1.698	0.099	0.246	0.367
Currently married	0.604	0.029	666	563	1.541	0.048	0.545	0.662
Married before 20	0.568	0.026	516	436	1.173	0.045	0.517	0.619
First sex relationship before 18	0.498	0.033	516	436	1.517	0.067	0.431	0.565
Children ever born (15-49)	2.069	0.094	666	563	1.047	0.045	1.881	2.257
Children ever born (40-49)	5.476	0.292	63	53	0.907	0.053	4.893	6.059
Children surviving	1.761	0.072	666	563	0.938	0.041	1.617	1.905
Knowing any method	0.983	0.004	402	340	0.632	0.004	0.974	0.991
Knowing any modern method	0.983	0.004	402	340	0.632	0.004	0.974	0.991
Ever use any method	0.580	0.034	402	340	1.398	0.059	0.511	0.649
Using any method	0.378	0.036	402	340	1.483	0.095	0.306	0.450
Using any modern method	0.301	0.028	402	340	1.219	0.093	0.245	0.357
Using pill	0.102	0.018	402	340	1.187	0.176	0.066	0.138
Using IUD	0.025	0.007	402	340	0.903	0.282	0.011	0.039
Using injectables	0.095	0.014	402	340	0.946	0.146	0.067	0.122
Using condom	0.037	0.008	402	340	0.862	0.219	0.021	0.054
Using female sterilisation	0.037	0.012	402	340	1.317	0.334	0.012	0.062
Using male sterilisation	0.000	0.000	402	340	NA	NA	0.000	0.000
Using withdrawal	0.020	0.008	402	340	1.076	0.377	0.005	0.035
Using public sector source	0.591	0.036	159	134	0.914	0.060	0.520	0.663
Want no more children	0.279	0.020	402	340	0.888	0.071	0.239	0.318
Want to delay child at least 2 years	0.326	0.021	402	340	0.916	0.066	0.283	0.369
Ideal number of children	4.266	0.106	635	537	1.363	0.025	4.054	4.478
Mother received tetanus injection	0.972	0.009	387	327	0.959	0.009	0.954	0.989
Received medical care at delivery	0.876	0.023	387	327	1.268	0.027	0.829	0.922
Had diarrhoea in the past 2 weeks	0.093	0.010	354	299	0.636	0.108	0.073	0.113
Treated with ORS packets	0.606	0.052	33	28	0.630	0.086	0.502	0.710
Sought medical treatment	0.788	0.078	33	28	1.083	0.099	0.632	0.943
Having health card	0.769	0.061	91	77	1.386	0.080	0.646	0.892
Received BCG vaccination	0.989	0.011	91	77	1.008	0.011	0.967	1.000
Received DPT vaccination (3 doses)	0.923	0.035	91	77	1.234	0.037	0.854	0.992
Received polio vaccination (3 doses)	0.824	0.065	91	77	1.623	0.079	0.694	0.954
Received measles vaccination	0.934	0.027	91	77	1.031	0.029	0.880	0.988
Fully immunised	0.791	0.059	91	77	1.374	0.074	0.674	0.909
Weight-for-height (below -2 SD)	0.088	0.015	283	239	0.915	0.172	0.058	0.119
Height-for-age (below -2 SD)	0.311	0.029	283	239	1.015	0.093	0.253	0.369
Weight-for-age (below -2 SD)	0.230	0.031	283	239	1.179	0.136	0.167	0.292
Total fertility rate (3 years)	3.425	0.253	NA	1602	1.234	0.074	2.920	3.931
Neonatal mortality rate (10 years)	28.450	9.242	706	597	1.308	0.325	9.965	46.934
Infant mortality rate (10 years)	70.949	10.557	709	599	1.073	0.149	49.835	92.062
Child mortality rate (10 years)	42.029	9.613	711	601	1.155	0.229	22.803	61.254
Under-five mortality rate (10 years)	109.995	16.062	714	603	1.311	0.146	77.872	142.119
Postneonatal mortality rate (10 years)	42.499	6.791	709	599	1.032	0.160	28.918	56.081

NA = Not applicable.

Table B.15.2 Sampling errors - Mainland Dar es Salaam city sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	1.000	0.000	272	171	NA	0.000	1.000	1.000
No education	0.081	0.017	272	171	1.005	0.206	0.048	0.114
Secondary education or more	0.246	0.043	272	171	1.637	0.174	0.161	0.332
Never in union	0.471	0.031	272	171	1.024	0.066	0.409	0.533
Currently married	0.485	0.033	272	171	1.080	0.068	0.420	0.551
Knowing any method	0.985	0.011	132	83	1.001	0.011	0.963	1.000
Knowing any modern method	0.985	0.011	132	83	1.001	0.011	0.963	1.000
Ever use any method	0.659	0.050	132	83	1.218	0.077	0.558	0.760
Using any method	0.379	0.055	132	83	1.293	0.145	0.269	0.488
Using any modern method	0.295	0.047	132	83	1.180	0.159	0.201	0.389
Using pill	0.083	0.020	132	83	0.814	0.236	0.044	0.123
Using IUD	0.023	0.012	132	83	0.944	0.541	0.000	0.047
Using injectables	0.038	0.014	132	83	0.831	0.366	0.010	0.066
Using condom	0.121	0.037	132	83	1.288	0.303	0.048	0.195
Using female sterilisation	0.030	0.016	132	83	1.080	0.534	0.000	0.063
Using periodic abstinence	0.053	0.020	132	83	1.031	0.381	0.013	0.093
Using withdrawal	0.023	0.012	132	83	0.919	0.527	0.000	0.047
Want no more children	0.159	0.040	132	83	1.257	0.252	0.079	0.239
Want to delay child at least 2 years	0.386	0.047	132	83	1.101	0.121	0.293	0.480
Ideal number of children	4.406	0.191	251	158	1.135	0.043	4.025	4.788

NA = Not applicable.

Table B.16.1 Sampling errors - Mainland other urban sample: women, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	R+2SE
Urban residence	1.000	0.000	1187	1248	NA	0.000	1.000	1.000
No education	0.131	0.015	1187	1248	1.523	0.114	0.101	0.161
Secondary education or more	0.110	0.020	1187	1248	2.172	0.180	0.070	0.149
Never in union	0.287	0.020	1187	1248	1.484	0.068	0.248	0.326
Currently married	0.587	0.021	1187	1248	1.495	0.036	0.545	0.630
Married before 20	0.567	0.021	933	982	1.298	0.037	0.524	0.609
First sex relationship before 18	0.577	0.024	933	982	1.460	0.041	0.530	0.625
Children ever born (15-49)	2.466	0.117	1187	1248	1.561	0.048	2.231	2.701
Children ever born (40-49)	6.281	0.259	145	154	1.044	0.041	5.763	6.800
Children surviving	2.135	0.106	1187	1248	1.618	0.050	1.923	2.346
Knowing any method	0.972	0.008	704	733	1.246	0.008	0.957	0.988
Knowing any modern method	0.971	0.008	704	733	1.268	0.008	0.955	0.987
Ever use any method	0.572	0.041	704	733	2.194	0.072	0.490	0.654
Using any method	0.316	0.029	704	733	1.673	0.093	0.257	0.374
Using any modern method	0.261	0.026	704	733	1.547	0.098	0.209	0.312
Using pill	0.105	0.013	704	733	1.156	0.127	0.078	0.132
Using IUD	0.010	0.005	704	733	1.253	0.470	0.001	0.019
Using injectables	0.099	0.013	704	733	1.169	0.133	0.073	0.126
Using condom	0.013	0.006	704	733	1.513	0.501	0.000	0.026
Using female sterilisation	0.031	0.010	704	733	1.522	0.319	0.011	0.051
Using periodic abstinence	0.037	0.010	704	733	1.352	0.262	0.017	0.056
Using withdrawal	0.014	0.005	704	733	1.220	0.389	0.003	0.024
Using public sector source	0.719	0.043	284	294	1.593	0.059	0.634	0.804
Want no more children	0.295	0.019	704	733	1.101	0.064	0.258	0.333
Want to delay child at least 2 years	0.337	0.024	704	733	1.342	0.071	0.289	0.385
Ideal number of children	4.466	0.103	1113	1171	1.940	0.023	4.259	4.672
Mother received tetanus injection	0.955	0.009	788	838	1.125	0.010	0.936	0.974
Received medical care at delivery	0.794	0.033	788	838	1.939	0.042	0.727	0.860
Had diarrhoea in the past 2 weeks	0.129	0.017	716	767	1.325	0.130	0.096	0.163
Treated with ORS packets	0.534	0.075	90	99	1.391	0.140	0.385	0.683
Sought medical treatment	0.676	0.055	90	99	1.116	0.081	0.566	0.785
Having health card	0.816	0.027	151	161	0.846	0.032	0.763	0.869
Received BCG vaccination	1.000	0.000	151	161	NA	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.957	0.012	151	161	0.715	0.012	0.933	0.980
Received polio vaccination (3 doses)	0.842	0.026	151	161	0.870	0.030	0.791	0.894
Received measles vaccination	0.959	0.016	151	161	1.006	0.017	0.926	0.991
Fully immunised	0.812	0.028	151	161	0.886	0.034	0.756	0.868
Weight-for-height (below -2 SD)	0.072	0.014	613	659	1.343	0.191	0.044	0.099
Height-for-age (below -2 SD)	0.335	0.023	613	659	1.160	0.069	0.289	0.381
Weight-for-age (below -2 SD)	0.183	0.016	613	659	0.949	0.086	0.151	0.214
Total fertility rate (3 years)	4.358	0.297	NA	3532	1.336	0.068	3.765	4.952
Neonatal mortality rate (10 years)	35.455	6.677	1522	1595	1.217	0.188	22.100	48.809
Infant mortality rate (10 years)	87.752	9.829	1522	1595	1.219	0.112	68.093	107.410
Child mortality rate (10 years)	42.806	6.348	1533	1605	1.085	0.148	30.110	55.502
Under-five mortality rate (10 years)	126.801	11.136	1534	1607	1.170	0.088	104.530	149.073
Postneonatal mortality rate (10 years)	52.297	6.163	1521	1594	1.037	0.118	39.970	64.623

NA = Not applicable.

Table B.16.2 Sampling errors - Mainland other urban sample: men, Tanzania 1996

Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weighted (WN)	Design effect DEFT	Relative error SE/R	Confidence limits R-2SE	Confidence limits R+2SE
Urban residence	1.000	0.000	307	338	NA	0.000	1.000	1.000
No education	0.062	0.017	307	338	1.233	0.274	0.028	0.096
Secondary education or more	0.188	0.035	307	338	1.571	0.186	0.118	0.258
Never in union	0.402	0.031	307	338	1.092	0.076	0.340	0.463
Currently married	0.525	0.034	307	338	1.186	0.064	0.458	0.593
Knowing any method	0.961	0.017	158	177	1.117	0.018	0.927	0.996
Knowing any modern method	0.961	0.017	158	177	1.117	0.018	0.927	0.996
Ever use any method	0.633	0.050	158	177	1.289	0.078	0.534	0.732
Using any method	0.354	0.042	158	177	1.093	0.118	0.271	0.437
Using any modern method	0.254	0.040	158	177	1.156	0.158	0.173	0.334
Using pill	0.100	0.020	158	177	0.825	0.198	0.060	0.139
Using IUD	0.007	0.005	158	177	0.752	0.706	0.000	0.017
Using injectables	0.024	0.013	158	177	1.042	0.528	0.000	0.050
Using condom	0.105	0.029	158	177	1.187	0.277	0.047	0.163
Using female sterilisation	0.014	0.010	158	177	1.065	0.716	0.000	0.034
Using periodic abstinence	0.074	0.019	158	177	0.914	0.258	0.036	0.112
Using withdrawal	0.022	0.019	158	177	1.629	0.863	0.000	0.061
Want no more children	0.286	0.034	158	177	0.951	0.120	0.218	0.355
Want to delay child at least 2 years	0.311	0.036	158	177	0.985	0.117	0.238	0.384
Ideal number of children	4.944	0.207	283	319	1.424	0.042	4.529	5.358

NA = Not applicable.

APPENDIX C

DATA QUALITY

APPENDIX C

DATA QUALITY

This appendix provides an assessment of the quality of the 1996 TDHS data. For this purpose, misreporting of ages, respondents' recall problems and other problems encountered during data collection are investigated.

Table C.1 and Figure C.1 present the distribution of the *de facto* household population by single year of age and information on age is obtained from the Household Questionnaire. The table shows some preferences for ages ending in 0, 2, and 5, and, as expected, age heaping is more severe in the older ages. The typical pattern of heaping on age 12 is also prominent. Nevertheless, age reporting is particularly good. The Myer's blended index[1] is commonly used to measure overall digit preference in age reporting. The indices for the male and female population age 10-60 years are 9.3 and 7.8, respectively, suggesting that age heaping exists in the data. Another measure of the quality of the age data is the very small number of persons whose ages were recorded as not known or missing. However, there is some evidence that interviewers "displaced" women and men outside the eligible age range (15-49 for women and 15-59 for men), presumably to avoid the need to interview them. The number of women and men age 15 is substantially lower than the number age 14 or 13. At the other end of the range, the number of women age 50 exceeds the number age 49, implying that interviewers assigned an age of 50 to women whose ages might not have been known with certainty, in order to avoid interviewing them. Similar displacement of men for 59 years of age to age 60 is also prominent. These lower and upper boundary effects can be explained by looking at the age ratio[2]. The age ratio at 15 years for women and men are 66 and 87, respectively, whereas, age ratio at 49 years for women is 71 and age ratio at 59 years for men is 58. These results suggest a strong boundary effect in the 1996 TDHS.

Figure C.1
Distribution of De Facto Household Population by Single Year of Age and Sex

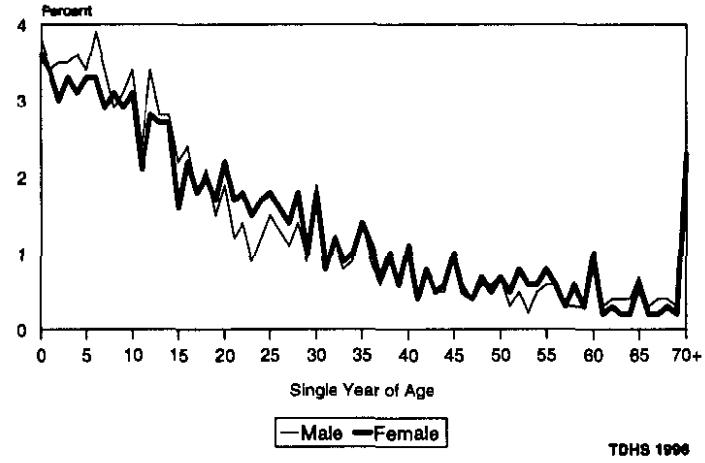


Table C.2 shows that during the household interview, 8,514 women age 15-49 were recorded, of which 8,142 women were successfully interviewed, yielding a response

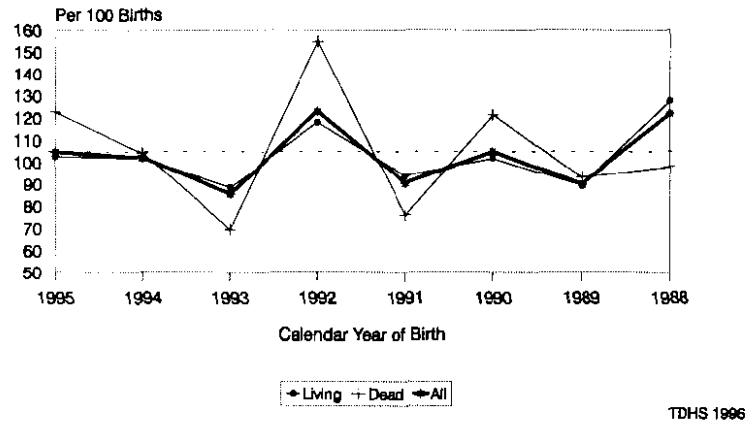
[1] The index can range from 0 if no age heaping is present to 90 if all ages were reported at a single digit.

[2] The age ratio is the number of respondents in the reference group divided by the average of the number of respondents in the two immediately adjacent age groups, multiplied by 100. Normally, one would expect roughly equal number of respondents at these three ages and therefore, the age ratio should be near 100.

rate of 96 percent. The five-year age distribution of women follows the expected pattern. Little difference can be seen between the age distribution of women recorded in the household schedule and those interviewed with the individual questionnaire, indicating that response rates vary little across the age of respondents (Table C.2).

Information on the completeness of reporting in connection with a set of important variables is provided in Table C.3. Among births in the 15 years preceding the survey, the percentage of cases with missing information on month and year of birth or age at death is extremely low (less than 1 percent). Data are 100 percent complete for mother's educational level. Data on height and weight are available for more than 90 percent of the children.

Figure C.2
Calendar Birth Ratios for Living, Dead, and All Children



Data quality is also measured by the completeness and accuracy of information on births. Table C.4 shows the distribution of births by calendar year to ascertain if any unusual patterns exist which may indicate that births have been omitted or that the ages of children have been displaced. The percentage of surviving children with known month and year of births in the 1996 TDHS is 92 and for dead children, the percentage is 82. Age displacement is common in many surveys that include both demographic and health information for children below a specific age. It is difficult to measure the extent of displacement precisely, but examination of the year of birth distributions of children helps to identify whether displacement is a significant problem.

The cutoff date for asking health question was January 1991. Children born in this year are the oldest children included in the health and breastfeeding section of the questionnaire. If births are being incorrectly transferred from this year to the previous year (1990), then a shortage of births should be evident in 1991 and an excess of births should appear in 1990. Observing the calendar ratios, there seems to be deficits of births in 1991 and a surplus in 1990 (Figure C.2). For all births, the ratio of births in 1991 to the average of two adjoining years is 0.91; for births in 1990, the ratio is 1.05 (Table C.5). The phenomenon is more serious among dead children (0.76 in 1991 and 1.21 in 1990). A similar pattern of age distribution was also observed in the 1991-92 TDHS. These numbers may represent a deliberate attempt by some interviewers to reduce their workloads, in particular to shorten the interview by skipping the health sections that contain extensive questions about children under five.

Underreporting of deaths is most severe for deaths which occur very early in infancy. A selective underreporting of early neonatal deaths would result in an abnormally low ratio of deaths under seven days to all neonatal deaths. Early infant deaths have not been severely underreported in the 1996 TDHS as suggested by the high ratio of deaths in the first six days to all neonatal deaths (Table C.5). This ratio also varies little over the 20 years before the survey (between 59 and 67) which further supports the evidence that early infant deaths have not been grossly underreported.

Heaping of the age at death on certain digits is another problem that is inherent in most retrospective surveys. Misreporting of age at death biases estimates of the age pattern of mortality if the net result of misreporting is transference of deaths between age segments for which rates are calculated; for example, an overestimate of child mortality relative to infant mortality may result if children who died during the first year of life are reported as having died at age one or older. To minimise the error in the reporting of age at death, the 1996 TDHS interviewers were instructed to record the age at death in days for deaths under one month, and in months for deaths under two years. They were specifically asked to probe for deaths reported at one year of age to ensure that they had actually occurred at 12 months. Nevertheless, there is evidence of some "heaping" on age 12 months in the reporting of age at death; however, this heaping is more significant for deaths that occurred five or more years before the survey but not in recent years (Table C.6). The index of heaping is 7.4 for deaths occurred 0-4 years before the survey and 10.0 for deaths occurred 15-19 years before the survey. From this standpoint, it is not necessarily to adjust for underreporting of deaths below age one.

The 1996 TDHS uses the direct method to collect data on maternal mortality. The procedure involved listing all the siblings of the respondent and then collecting information on: the survival status of each sibling; the ages of the surviving siblings; the ages and years since the death of deceased siblings. For each deceased sister, additional questions were asked to determine if a death is due to maternal causes. Maternal death is defined as any death that occurs during pregnancy, childbirth, or within two months following the birth or termination of a pregnancy. Table C.7 shows the number of siblings reported by the 1996 TDHS female respondents and level of completeness of the data on survivorship status, current age, age at death, and years since death of siblings. The sex ratio of reported siblings (the ratio of brothers to sisters) was a little low (1.01), possibly indicating slight underreporting of brothers. Respondents were highly knowledgeable about their siblings' survival status; in only less than 1 percent of the cases were respondents unable to report the survival status of their siblings, with negligible differences in reporting for sisters and brothers. Respondents could not tell the ages of their surviving siblings for less than 1 percent cases. As expected, information regarding deceased siblings is less complete than for living siblings. For about 3 percent of deceased siblings, both age at death and the year of death were not reported by the respondents.

Table C.8 provides the distribution of respondents and their siblings by year of birth which is a crude measure of data quality. If there is no bias, the year of birth of siblings should be roughly equivalent to the year of birth of respondents overall. The distribution of respondents and their siblings by year of birth is very similar-- in fact, the median year of birth is about the same, 1969 for respondents and 1970 for siblings. This indicates that there is no serious underreporting of siblings. The mean sibship size (number of siblings) is yet another crude measure of data quality (Table C.9). Since fertility in Tanzania has declined over time, one would expect mean sibship sizes to decline as well. The absence of a monotonic decline in the sibship size suggests there may be some omission in the reporting of older siblings. Table C.9 shows that there may be some omission in the reporting of siblings born before 1965. However, since adult mortality rates are reported here for 9 years preceding the survey this omission is unlikely to affect the calculation of mortality rates.

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Tanzania 1996

	Males		Females			Males		Females	
Age	Number	percent	Number	percent	Age	Number	percent	Number	percent
<1	707	3.8	706	3.6	36	172	0.9	215	1.1
1	632	3.4	672	3.4	37	103	0.6	142	0.7
2	642	3.5	601	3.0	38	160	0.9	198	1.0
3	641	3.5	653	3.3	39	111	0.6	116	0.6
4	665	3.6	624	3.1	40	210	1.1	214	1.1
5	620	3.4	650	3.3	41	96	0.5	76	0.4
6	713	3.9	655	3.3	42	146	0.8	167	0.8
7	628	3.4	572	2.9	43	94	0.5	107	0.5
8	544	2.9	610	3.1	44	95	0.5	125	0.6
9	578	3.1	571	2.9	45	181	1.0	190	1.0
10	630	3.4	619	3.1	46	107	0.6	107	0.5
11	439	2.4	409	2.1	47	78	0.4	78	0.4
12	627	3.4	557	2.8	48	115	0.6	141	0.7
13	524	2.8	538	2.7	49	108	0.6	98	0.5
14	509	2.8	527	2.7	50	134	0.7	137	0.7
15	414	2.2	318	1.6	51	55	0.3	90	0.5
16	442	2.4	436	2.2	52	86	0.5	166	0.8
17	336	1.8	351	1.8	53	41	0.2	127	0.6
18	385	2.1	400	2.0	54	90	0.5	122	0.6
19	276	1.5	336	1.7	55	106	0.6	164	0.8
20	351	1.9	440	2.2	56	103	0.6	115	0.6
21	230	1.2	340	1.7	57	50	0.3	68	0.3
22	251	1.4	364	1.8	58	59	0.3	116	0.6
23	175	0.9	291	1.5	59	60	0.3	65	0.3
24	216	1.2	345	1.7	60	147	0.8	195	1.0
25	275	1.5	365	1.8	61	58	0.3	43	0.2
26	238	1.3	319	1.6	62	82	0.4	68	0.3
27	202	1.1	278	1.4	63	70	0.4	44	0.2
28	255	1.4	350	1.8	64	71	0.4	38	0.2
29	174	0.9	196	1.0	65	135	0.7	121	0.6
30	344	1.9	358	1.8	66	59	0.3	40	0.2
31	155	0.8	159	0.8	67	67	0.4	43	0.2
32	222	1.2	244	1.2	68	68	0.4	60	0.3
33	139	0.8	177	0.9	69	47	0.3	37	0.2
34	158	0.9	202	1.0	70+	487	2.6	461	2.3
35	264	1.4	272	1.4	Don't know/ missing	17	0.1	11	0.1
					Total	18,464	100.0	19,807	100.0

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.

Table C.2 Age distribution of eligible and interviewed women

Percent distribution of the de facto household population of women age 10-54, and percentage of eligible women who were interviewed (weighted) by five-year groups, Tanzania 1996

Age	Household population of women		Interviewed women age 15-49		Percentage interviewed (weighted)
	Number	Percent	Number	Percent	
10-14	2,650	NA	NA	NA	NA
15-19	1,840	21.6	1,727	21.2	93.9
20-24	1,781	20.9	1,705	20.9	95.7
25-29	1,508	17.7	1,457	17.9	96.6
30-34	1,140	13.4	1,097	13.5	96.3
25-39	943	11.1	904	11.1	95.9
40-44	688	8.1	667	8.2	96.9
45-49	614	7.2	584	7.2	95.1
50-54	641	NA	NA	NA	NA
15-49	8,514	NA	8,142	NA	95.6

NA = Not applicable.

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions, Tanzania 1996

Subject	Reference group	Percentage missing information	Number of cases
Birth Date	Births in past 15 years		
Month only		6.73	17,902
Month and year		0.06	17,902
Age at death	Deaths to births in past 15 years	0.54	2,583
Age/date at first union[1]	Ever-married women	1.04	6,233
Respondent's education	All women	0.00	8,120
Anthropometry[2]	Living children 0-59 months		
Height missing		7.43	6,188
Weight missing		7.16	6,188
Height/weight missing		7.50	6,188
Diarrhoea last 2 weeks	Living children 0-59 months	3.81	6,188

[1] Both year and age missing
[2] Child not measured

Table C.4 Births by calendar year

Distribution of births by calendar years for living (L), dead (D), and all (T) children, according to reporting completeness, sex ratio at birth, and ratio of births by calendar year, Tanzania 1996

	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar ratio[3]			Male			Female		
Year	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T
96	1,194	122	1,316	98.5	87.4	97.4	104.0	143.3	107.1	NA	NA	NA	608	72	681	585	50	635
95	1,202	179	1,381	96.3	88.2	95.3	108.5	124.6	110.4	102.5	122.5	104.7	625	99	725	577	80	657
94	1,152	170	1,322	96.0	90.0	95.2	96.9	114.7	99.0	101.8	104.1	102.1	567	91	658	585	79	665
93	1,061	148	1,209	97.3	88.3	96.2	105.4	136.7	108.8	88.5	69.4	85.6	545	85	630	517	62	579
92	1,248	256	1,503	92.7	85.1	91.4	99.4	117.1	102.2	118.0	154.6	123.0	622	138	760	626	118	743
91	1,053	183	1,236	92.6	86.7	91.7	103.0	131.2	106.7	93.8	75.9	90.6	534	104	638	519	79	598
90	998	226	1,223	91.8	81.4	89.9	94.6	104.9	96.4	101.8	121.4	105.0	485	116	601	513	110	623
89	906	189	1,096	94.7	81.8	92.5	118.1	117.1	117.9	89.3	93.1	90.0	491	102	593	416	87	503
88	1,031	181	1,212	90.4	86.8	89.8	99.1	104.7	100.0	127.5	98.0	122	513	93	606	518	88	606
87	712	180	892	92.7	84.0	90.9	102.4	99.2	101.8	NA	NA	NA	360	90	450	352	90	442
92-96	5,857	876	6,732	96.1	87.5	95.0	102.7	124.7	105.3	NA	NA	NA	2,967	486	3,453	2,889	390	3,279
87-91	4,700	959	5,659	92.4	84.0	90.9	102.9	110.6	104.2	NA	NA	NA	2,384	504	2,887	2,316	455	2,772
82-86	3,529	792	4,321	90.6	80.2	88.7	97.0	106.5	98.6	NA	NA	NA	1,737	408	2,146	1,792	384	2,175
77-81	2,453	546	2,999	88.7	77.2	86.6	90.2	144.4	98.2	NA	NA	NA	1,163	323	1,486	1,290	223	1,513
< 77	2,073	685	2,759	85.8	75.4	83.2	105.4	106.2	105.6	NA	NA	NA	1,064	353	1,417	1,010	332	1,342
All	18,612	3,857	22,469	92.0	81.5	90.2	100.2	116.2	102.8	NA	NA	NA	9,315	2,073	11,388	9,297	1,784	11,081

NA = not applicable.

[1] Both year and month of birth given.

[2] $(B_m/B_f) * 100$, where B_m and B_f are numbers of male and female births, respectively.

[3] $[2 B_x/(B_{x-1} + B_{x+1})] * 100$, where B_x is the number of births in calendar year x.

Table C.5 Reporting of age at death in days

Distribution of reported deaths under 1 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, Tanzania 1996

Age at death (in days)	Number of years preceding survey				Total 0-19
	0-4	5-9	10-14	15-19	
< 1	47	63	58	27	195
1	35	40	33	24	132
2	20	18	20	22	80
3	17	21	15	13	67
4	7	13	4	5	29
5	7	6	12	2	28
6	6	4	3	4	16
7	26	42	30	20	118
8	1	5	5	1	11
9	2	2	3	0	7
10	1	4	1	0	6
11	1	0	2	0	3
12	2	1	0	1	4
13	1	0	0	0	2
14	22	24	19	16	81
15	5	1	1	2	10
16	1	0	0	0	1
17	2	2	0	0	3
18	1	2	0	2	4
19	2	1	0	0	3
20	2	2	1	0	4
21	4	3	7	0	15
22	3	0	0	0	3
28	5	1	5	2	13
30	15	11	8	4	38
Total 0-30	235	268	225	144	873
Percent early neonatal	58.9	62.0	64.1	67.1	62.5

[1] (0-6 days/0-3 days) * 100

Table C.6 Reporting of age at death in months

Distribution of reported deaths under 2 years of age by age at death in months and the percentage of infant deaths reported to occur at ages under one month, for five-year periods of birth preceding the survey, Tanzania 1996

Age at deaths (in months)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
< 1[a]	236	268	225	144	873
1	31	26	22	19	97
2	24	48	27	25	124
3	39	42	26	19	127
4	46	35	22	17	120
5	30	30	21	12	93
6	39	64	28	19	151
7	29	32	20	10	90
8	24	31	26	15	95
9	39	36	29	16	120
10	10	15	9	5	38
11	14	6	12	8	40
12	18	32	38	18	106
13	3	8	3	3	16
14	2	10	10	0	22
15	6	1	7	3	17
16	4	4	4	0	12
17	4	5	0	2	11
18	16	13	18	23	70
19	5	1	0	1	7
20	6	2	9	2	19
21	2	0	2	0	4
23	2	4	2	0	8
1 Year	36	45	40	22	144
Total 0-11	561	632	467	308	1,968
Percent neonatal[b]	42	42	48	46	44
Index of heaping[c]	7.4	7.9	9.2	10.0	8.6

[a] Includes death under 1 month reported in days.

[b] (Under 1 month/under 1 year) * 100

[c] Index of heaping = $\frac{4D12}{D10 + D11 + D13 + D14}$ (D = Deaths)

where D12 includes all deaths reported at 12 months and one year.

Table C.7 Completness of information on siblings

Number of siblings reported by survey respondents and completeness of reported data on age, age at death (AD) and years since death (YSD), Tanzania 1996

Sibling status and completeness of reporting	Sisters		Brothers		Total	
	Number	Percent	Number	Percent	Number	Percent
All siblings	23,775	100.0	23,952	100.0	47,727	100.0
Living	19,788	83.2	19,401	81.0	39,189	82.1
Dead	3,977	16.7	4,532	18.9	8,508	17.8
Status unknown	10	0	19	0.1	29	0.1
Living siblings	19,788	100.0	19,401	100.0	39,189	100.0
Age reported	19,699	99.6	19,301	99.5	39,000	99.5
Age missing	89	0.4	100	0.5	189	0.5
Dead siblings	3,977	100.0	4,532	100.0	8,508	100.0
AD and YSD reported	3,532	88.8	3,940	86.9	7,472	87.8
Missing only AD	23	0.6	39	0.9	62	0.7
Missing only YSD	322	8.1	412	9.1	734	8.6
Missing both AD and YSD	100	2.5	140	3.1	240	2.8

Table C.8 Data on Siblings: Indicators on Data Quality

Percent distribution of respondents and siblings by years of birth, Tanzania 1996

Year of birth	Respondents	Siblings
Before 1945	0.0	2.7
1945-49	3.9	3.4
1950-54	8.1	6.0
1955-59	9.4	9.3
1960-64	13.4	12.4
1965-69	16.0	14.6
1970-74	19.8	15.6
1975 or later	29.4	36.2
Total	100.0	100.0
Lower range	1946	1915
Upper range	1981	1996
Median	1969	1970
No. of cases	8,120	47,705

Table C.9 Sibship size and sex ratio of siblings

Mean sibship size and sex ratio of births, Tanzania 1996

Year of birth of respondents' siblings	Mean sibship size	Sex ratio at birth
1940s	6.2	93.5
1950-54	6.2	99.8
1955-59	6.7	101.3
1960-64	7.0	101.0
1965-69	7.2	103.2
1970-74	7.2	101.8
1975-79	6.8	99.4
Total	6.9	100.7

APPENDIX D

ADDITIONAL TABLES

Table D.1 Knowledge of contraceptive methods by background characteristics: married respondents

Percentage of currently married respondents who know at least one contraceptive method and at least one modern method, by selected background characteristics, Tanzania 1996

Background characteristic	Women			Men		
	Know any method	Know modern method	Number of women	Know any method	Know modern method	Number of men
Age						
15-19	80.0	79.7	401	*	*	6
20-24	90.7	90.2	1,131	92.0	92.0	91
25-29	92.6	92.0	1,184	94.7	94.7	196
30-34	91.1	90.7	947	96.6	95.0	232
35-39	88.5	87.5	740	95.2	95.2	230
40-45	85.3	84.1	561	98.2	98.2	194
45-49	78.2	75.9	447	89.7	89.7	137
50-54	NA	NA	NA	90.5	89.0	110
55-59	NA	NA	NA	78.4	76.4	90
Residence						
Mainland	88.3	87.5	5,245	93.2	92.7	1,253
Total urban	97.5	97.4	1,073	96.9	96.9	260
Dar es Salaam city	98.3	98.3	340	98.5	98.5	83
Other urban	97.2	97.1	733	96.1	96.1	177
Total rural	85.9	84.9	4,172	92.3	91.6	992
Zanzibar	95.7	95.4	166	98.5	98.5	35
Pemba	93.9	93.9	61	(96.8)	(96.8)	16
Unguja	96.7	96.3	105	(100.0)	(100.0)	19
Region						
Dodoma	90.0	89.1	258	93.3	93.3	51
Arusha	59.2	56.4	403	80.0	76.4	92
Kilimanjaro	95.5	95.5	221	83.3	83.3	55
Tanga	87.2	87.2	282	(81.4)	(81.4)	62
Morogoro	94.9	94.5	257	93.9	93.9	54
Coast	97.7	96.5	98	(100.0)	(100.0)	22
Dar es Salaam	98.1	98.1	399	98.7	98.7	94
Lindi	97.1	96.2	123	(100.0)	(100.0)	35
Mtwara	91.9	90.3	248	100.0	100.0	61
Ruvuma	95.8	95.8	205	95.5	95.5	54
Iringa	89.7	88.9	291	97.5	97.5	59
Mbeya	96.7	96.2	318	(100.0)	(100.0)	78
Singida	84.4	82.6	194	98.1	96.2	50
Tabora	91.3	91.3	157	*	*	32
Rukwa	86.9	86.1	177	96.3	94.4	49
Kigoma	93.0	92.6	233	(95.9)	(95.9)	67
Shinyanga	77.2	76.8	464	89.6	89.6	118
Kagera	92.2	90.2	337	(100.0)	(97.8)	90
Mwanza	87.4	87.4	395	(88.6)	(88.6)	99
Mara	89.8	89.8	183	(85.2)	(85.2)	32
Education						
No education	75.6	73.8	1,829	84.6	82.2	213
Primary incomplete	90.6	90.2	920	91.2	91.2	342
Primary complete	96.3	96.2	2,462	96.5	96.2	612
Secondary+	100.0	100.0	200	99.3	99.3	122
Total	88.5	87.7	5,411	93.4	92.8	1,288

Note: Figures in parentheses are based on 25 to 49 respondents. An asterisk indicates a figure is based on fewer than 25 respondents and has been suppressed.
NA = Not applicable.

Table D.2.1 Current use of contraception by background characteristics: currently married women

Percent distribution of currently married women by contraceptive method currently used, according to selected background characteristics, Tanzania 1996

Background characteristic	Modern method							Traditional/folk method				Not currently using	Total	Number of women
	Any method	Any modern method	Pill	IUD	Injectables	Condom	Female sterilisation	Any trad./ folk method	Calendar/ mucus	Withdrawal	Other methods			
Residence														
Mainland	18.6	13.4	5.5	0.6	4.5	0.8	1.9	5.2	2.1	2.7	0.4	81.4	100.0	5,245
Total urban	33.5	27.3	10.4	1.5	9.8	2.1	3.3	6.2	4.2	1.6	0.4	66.5	100.0	1,073
Dar es Salaam city	37.8	30.1	10.2	2.5	9.5	3.7	3.7	7.7	5.5	2.0	0.2	62.2	100.0	340
Other urban	31.6	26.1	10.5	1.0	9.9	1.3	3.1	5.5	3.7	1.4	0.5	68.4	100.0	733
Total rural	14.8	9.8	4.3	0.4	3.1	0.5	1.5	5.0	1.5	3.0	0.5	85.2	100.0	4,172
Zanzibar	13.1	10.8	5.5	0.3	3.1	0.4	1.5	2.3	1.1	0.6	0.5	86.9	100.0	166
Pemba	9.6	7.6	3.0	0.0	2.0	0.5	2.0	2.0	1.0	1.0	0.0	90.4	100.0	61
Unguja	15.1	12.7	6.9	0.4	3.7	0.4	1.2	2.4	1.2	0.4	0.8	84.9	100.0	105
Region														
Dodoma	12.7	10.9	5.2	0.9	4.4	0.0	0.4	1.7	0.9	0.9	0.0	87.3	100.0	258
Arusha	20.2	12.8	3.7	1.9	3.4	0.9	2.8	7.5	1.9	5.3	0.3	79.8	100.0	403
Kilimanjaro	50.7	32.7	11.2	3.1	7.2	2.7	8.5	17.9	6.7	10.3	0.9	49.3	100.0	221
Tanga	26.0	13.6	6.2	0.4	5.4	0.8	0.8	12.4	2.5	8.7	1.2	74.0	100.0	282
Morogoro	18.6	14.8	7.6	0.0	5.1	0.8	1.3	3.8	1.7	1.3	0.8	81.4	100.0	257
Coast	33.3	28.7	11.7	0.0	12.9	2.3	1.2	4.7	1.2	2.9	0.6	66.7	100.0	98
Dar es Salaam	35.4	28.0	9.7	2.3	9.1	3.2	3.2	7.4	5.5	1.7	0.2	64.6	100.0	399
Lindi	19.0	17.1	8.6	0.5	4.3	1.4	2.4	1.9	1.4	0.0	0.5	81.0	100.0	123
Mtwara	14.3	12.3	6.8	0.0	3.9	0.0	1.6	1.9	0.3	0.3	1.3	85.7	100.0	248
Ruvuma	22.7	20.1	9.6	0.0	6.4	2.2	1.9	2.6	1.3	0.6	0.6	77.3	100.0	205
Iringa	13.2	8.6	5.3	0.0	2.1	0.4	0.8	4.5	1.6	2.1	0.8	86.8	100.0	291
Mbeya	23.7	13.3	5.7	0.0	4.7	0.5	2.4	10.4	0.9	9.0	0.5	76.3	100.0	318
Singida	17.8	16.3	6.7	0.4	7.4	0.4	1.5	1.5	0.7	0.7	0.0	82.2	100.0	194
Tabora	18.8	13.0	6.5	0.0	4.3	0.7	1.4	5.8	5.8	0.0	0.0	81.2	100.0	157
Rukwa	14.7	7.7	4.2	0.0	1.9	0.4	1.2	6.9	0.4	5.8	0.8	85.3	100.0	177
Kigoma	17.2	13.1	4.5	0.4	5.3	0.0	2.5	4.1	3.3	0.4	0.0	82.8	100.0	233
Shinyanga	5.1	4.7	1.2	0.4	1.6	0.0	1.6	0.4	0.0	0.4	0.0	94.9	100.0	464
Kagera	12.2	6.8	2.9	0.0	1.5	1.0	1.5	5.4	3.4	1.5	0.5	87.8	100.0	337
Mwanza	6.1	5.1	1.9	0.0	2.8	0.0	0.5	0.9	0.9	0.0	0.0	93.9	100.0	395
Mara	8.6	6.6	2.0	0.0	4.6	0.0	0.0	2.0	1.0	0.5	0.5	91.4	100.0	183
Education														
No education	7.5	5.2	1.8	0.0	2.1	0.2	1.1	2.3	0.5	1.3	0.5	92.5	100.0	1,829
Primary incomplete	16.8	13.0	4.9	0.5	3.8	0.4	3.3	3.8	1.1	2.4	0.4	83.2	100.0	920
Primary complete	25.0	18.0	8.0	0.9	6.2	1.3	1.6	7.0	2.8	3.7	0.5	75.0	100.0	2,462
Secondary+	44.6	31.2	11.8	3.2	7.7	2.9	5.2	13.3	11.1	2.3	0.0	55.4	100.0	200
No. of living children														
0	1.2	0.5	0.2	0.0	0.0	0.2	0.2	0.7	0.7	0.0	0.0	98.8	100.0	562
1	16.4	11.7	6.9	0.6	2.4	1.5	0.3	4.7	1.9	2.8	0.1	83.6	100.0	941
2	20.2	14.0	7.1	0.7	4.6	0.9	0.6	6.2	3.0	2.7	0.4	79.8	100.0	879
3	21.9	15.4	7.7	1.0	4.6	1.3	0.9	6.5	2.3	3.5	0.7	78.1	100.0	812
4+	21.7	16.2	4.8	0.5	6.4	0.5	3.9	5.5	1.9	2.9	0.6	78.3	100.0	2,217
Total	18.4	13.3	5.5	0.6	4.5	0.8	1.9	5.1	2.0	2.6	0.4	81.6	100.0	5,411

Table D 2.2 Current use of contraception by background characteristics: currently married men

Percent distribution of currently married men by contraceptive method currently used, according to selected background characteristics, Tanzania 1996

Background characteristic	Any method	Modern method						Traditional/folk method				Not currently using	Total	Number of women
		Any modern method	Pill	IUD	Injectables	Condom	Female sterilisation	Any trad./ folk method	Calendar mucus	Withdrawal	Other methods			
Residence														
Mainland	29.6	15.9	6.5	0.4	3.0	4.6	1.3	13.7	9.2	3.7	0.5	70.4	100.0	1,253
Total urban	36.2	26.7	9.5	1.2	2.9	11.0	1.9	9.5	6.7	2.2	0.2	63.8	100.0	260
Dar es Salaam city	37.9	29.5	8.3	2.3	3.8	12.1	3.0	8.3	5.3	2.3	0.8	62.1	100.0	83
Other urban	35.4	25.4	10.0	0.7	2.4	10.5	1.4	10.1	7.4	2.2	0.0	64.6	100.0	177
Total rural	27.9	13.0	5.8	0.2	3.0	3.0	1.1	14.9	9.9	4.1	0.6	72.1	100.0	992
Zanzibar	23.3	13.8	8.0	0.0	3.6	2.2	0.0	9.5	7.3	2.2	0.0	76.7	100.0	35
Pemba	(12.9)	(6.5)	(3.2)	(0.0)	(3.2)	(0.0)	(0.0)	(6.5)	(6.5)	(0.0)	(0.0)	(87.1)	(100.0)	16
Unguja	(32.0)	(20.0)	(12.0)	(0.0)	(4.0)	(4.0)	(0.0)	(12.0)	(8.0)	(4.0)	(0.0)	(68.0)	(100.0)	19
Region														
Dodoma	16.0	12.0	4.0	0.0	2.7	5.3	0.0	4.0	2.7	0.0	0.0	84.0	100.0	51
Arusha	32.7	16.4	5.5	0.0	1.8	5.5	3.6	16.4	7.3	9.1	0.0	67.3	100.0	92
Kilimanjaro	40.0	20.0	6.7	3.3	3.3	4.4	2.2	20.0	7.8	10.0	0.0	60.0	100.0	55
Tanga	(30.2)	(14.0)	(7.0)	(0.0)	(2.3)	(4.7)	(0.0)	(16.3)	(7.0)	(9.3)	(0.0)	(69.8)	100.0	62
Morogoro	24.4	19.5	8.5	1.2	2.4	6.1	0.0	4.9	1.2	2.4	1.2	75.6	100.0	54
Coast	(45.2)	(38.7)	(19.4)	(0.0)	(9.7)	(9.7)	(0.0(	(6.5)	0.0	(6.5)	(0.0)	(54.8)	100.0	22
Dar es Salaam	37.3	28.7	8.7	2.0	3.3	11.3	3.3	8.7	5.3	2.0	1.3	62.7	100.0	94
Lindi	(30.4)	(21.7)	(8.7)	(0.0)	(6.5)	(6.5)	(0.0)	(8.7)	(4.3)	(0.0)	(2.2)	(69.6)	100.0	35
Mtwara	21.9	20.3	17.2	0.0	1.6	1.6	0.0	1.6	0.0	1.6	0.0	78.1	100.0	61
Ruvuma	41.8	26.9	19.4	0.0	4.5	1.5	1.5	14.9	10.4	3.0	1.5	58.2	100.0	54
Iringa	20.0	10.0	3.7	0.0	1.2	1.2	3.7	10.0	2.5	6.2	0.0	80.0	100.0	59
Mbeya	39.0	24.4	2.4	0.0	7.3	14.6	0.0	(14.6)	4.9	(7.3	(2.4)	(61.0)	(100.0)	(78)
Singida	32.7	26.9	7.7	0.0	7.7	9.6	1.9	5.8	3.8	0.0	1.9	67.3	100.0	50
Tabora	*	*	*	*	*	*	*	*	*	*	*	*	100.0	32
Rukwa	64.8	16.7	7.4	0.0	5.6	1.9	1.9	48.1	31.5	16.7	0.0	35.2	100.0	49
Kigoma	46.9	14.3	8.2	0.0	4.1	2.0	0.0	(32.7)	32.7	(0.0)	(0.0)	(53.1)	(100.0)	(67)
Shinyanga	7.3	5.2	1.0	1.0	0.0	2.1	1.0	2.1	1.0	1.0	0.0	92.7	100.0	118
Kagera	42.2	11.1	6.7	0.0	0.0	2.2	2.2	(31.1)	31.1	(0.0)	(0.0)	(57.8)	(100.0)	(90)
Mwanza	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0	(0.0)	(0.0)	(100.0)	(100.0)	(99)
Mara	22.2	7.4	0.0	0.0	3.7	3.7	0.0	(14.8)	11.1	(3.7)	(0.0)	(77.8)	(100.0)	(32)
Education														
No education	16.3	4.7	1.4	0.0	0.7	1.9	0.8	11.6	9.0	2.6	0.0	83.7	100.0	213
Primary incomplete	17.6	8.3	3.3	0.2	1.7	2.0	1.2	9.3	6.6	1.8	0.4	82.4	100.0	342
Primary complete	37.3	20.9	9.7	0.4	4.6	5.6	0.5	16.4	10.6	4.7	0.8	62.7	100.0	612
Secondary+	46.3	30.8	9.1	2.0	2.7	11.2	5.8	15.4	9.7	5.8	0.0	53.7	100.0	122
No. of living children														
0	10.3	5.2	2.0	0.0	0.0	3.2	0.0	5.1	4.5	0.6	0.0	89.7	100.0	108
1	25.0	12.7	4.6	0.4	1.3	6.1	0.4	12.3	8.1	3.0	0.8	75.0	100.0	176
2	28.5	14.3	6.8	1.7	1.2	4.5	0.0	14.2	8.9	5.4	0.0	71.5	100.0	179
3	42.4	24.9	12.4	0.0	3.5	8.2	0.8	17.5	14.3	3.1	0.0	57.6	100.0	175
4+	30.6	16.4	6.2	0.3	4.3	3.4	2.1	14.2	8.9	4.1	0.7	69.4	100.0	650
Total	29.4	15.8	6.6	0.4	3.0	4.6	1.2	13.6	9.2	3.7	0.5	70.6	100.0	1,288

Note: Figures in parentheses are based on 25 to 49 women. An asterisk indicates a figure is based on fewer than 25 women and has been suppressed.

APPENDIX E

PERSONS INVOLVED IN THE 1996 TANZANIA DEMOGRAPHIC AND HEALTH SURVEY

APPENDIX E

PERSONS INVOLVED IN THE 1996 TANZANIA DEMOGRAPHIC AND HEALTH SURVEY

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APPENDIX F

QUESTIONNAIRES

UNITED REPUBLIC OF TANZANIA
BUREAU OF STATISTICS, PLANNING COMMISSION
TANZANIA DEMOGRAPHIC AND HEALTH SURVEY 2
HOUSEHOLD SCHEDULE

IDENTIFICATION

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER..... | | | |

HOUSEHOLD NUMBER..... | | | |

REGION _____ | | |

DISTRICT _____ | |

WARD _____ | | |

ENUMERATION AREA _____ | | |

LARGE CITY=1; SMALL CITY*=2; TOWN=3; COUNTRYSIDE=4.... |

HOUSEHOLD SELECTED FOR MALE SURVEY (YES=1, NO=2) |

*SMALL CITIES ARE: MWANZA, ARUSHA, MOROGORO, DODOMA, MOSHI, TANGA, IRINGA, MBEYA, & TABORA. ALL OTHER URBAN AREAS ARE TOWN.

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY
				MONTH
				YEAR 9 6
INTERVIEWER'S NAME	_____	_____	_____	ID NO.
RESULT*	_____	_____	_____	RESULT
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS
TIME	_____	_____		

* RESULT CODES:
1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL IN HOUSEHOLD

TOTAL ELIG WOMEN

TOTAL ELIG MEN

LINE NO.OF RESP. TO HOUSEHOLD

SUPERVISOR	FIELD EDITOR	OFF.EDIT.	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

HOUSEHOLD SCHEDULE

Now we would like some information about the people who usually live in your household or who are staying with you now.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD*	RESIDENCE		SEX	AGE	EDUCATION			PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 15 YEARS OLD***				ELIGIBILITY WOMEN	HUSBAND LINE NUMBER	ELIGIBILITY MEN
							IF AGED 5 YEARS OR OLDER									
	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.	What is the relationship of (NAME) to the head of the household?	Does (NAME) usually live here?	Did (NAME) sleep here last night?	Is (NAME) male or female?	How old is (NAME)?	Has (NAME) ever been to school?	IF ATTENDED: What is the highest formal school (NAME) completed?	IF ATTENDED: IF AGED LESS THAN 25 YEARS: Is (NAME) still in school?	Is (NAME)'s natural mother alive?	IF ALIVE: Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER	Is (NAME)'s natural father alive?	IF ALIVE: Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER	CIRCLE LINE NUMBER OF ALL WOMEN AGED 15-49	WRITE LINE NUMBER OF THE HUSBAND OF EACH ELIGIBLE WOMAN. WRITE 00 IF NOT MARRIED OR IF HUSBAND NOT IN HOUSEHOLD.	CIRCLE LINE NUMBER OF ALL MEN AGED 15-59 (IF HOUSEHOLD FALLS IN MALE SAMPLE)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
			YES NO	YES NO	M F	IN YEARS	YES NO		YES NO	YES NO DK		YES NO DK				
01			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		01		01
02			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		02		02
03			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		03		03
04			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		04		04
05			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		05		05
06			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		06		06
07			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		07		07
08			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		08		08

HOUSEHOLD SCHEDULE CONTINUED

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
			YES NO	YES NO	M F	IN YEARS	YES NO		YES NO	YES NO DK		YES NO DK				
09			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		11		11
10			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		12		12
11			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		13		13
12			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		14		14
13			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		15		15
14			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		16		16
15			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		17		17
16			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		18		18
17			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		19		19
18			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		20		20

TICK HERE IF CONTINUATION SHEET USED ☐

Just to make sure that I have a complete listing:

1) Are there any other persons such as small children or infants that we have not listed?
YES ☐ → ENTER EACH IN TABLE NO ☐

2) In addition, 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 ☐ → ENTER EACH IN TABLE NO ☐

3) Do you have any guests or temporary visitors staying here, or anyone else who slept here last night?
YES ☐ → ENTER EACH IN TABLE NO ☐

* CODES FOR Q.3, RELATIONSHIP TO HEAD OF HOUSEHOLD:

01= HEAD
02= WIFE OR HUSBAND
03= SON OR DAUGHTER
04= SON 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 CHILD
12= NOT RELATED
98=DK

** CODES FOR Q. 9, HIGHEST FORMAL SCHOOL:

00= LESS THAN 1 YEAR COMPLETED
01= STANDARD 1
02= STANDARD 2
03= STANDARD 3
04= STANDARD 4
05= STANDARD 5
06= STANDARD 6
07= STANDARD 7
08= STANDARD 8
09= FORM 1
10= FORM 2
11= FORM 3
12= FORM 4
13= FORM 5
14= FORM 6
15= UNIVERSITY
96= OTHER
98= DON'T KNOW

*** QUESTIONS 12 AND 14: RECORD '00'IF THE NATURAL (BIOLOGICAL) PARENT IS NOT A MEMBER OF THE HOUSEHOLD.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
18	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO HOUSE/YARD/PLOT.....11 PUBLIC /PRIVATE TAP.....12 WELL WATER WELL IN RESIDENCE/YARD/PLOT.....21 PUBLIC /PRVATE WELL.....22 SURFACE WATER SPRING.....31 RIVER/STREAM.....32 POND/LAKE.....33 DAM.....34 RAINWATER.....41 OTHER_____ 96 (SPECIFY)	→20 →20 →20
19	How long does it take to go there, get water, and come back?	MINUTES..... ☐☐☐ ON PREMISES.....996	
20	What kind of toilet facility does your household have? IF FLUSH TOILET, ASK IF IT IS SHARED WITH ANOTHER HOUSEHOLD.	FLUSH TOILET OWN FLUSH TOILET.....11 SHARED FLUSH TOILET.....12 PIT TOILET/LATRINE TRADITIONAL PIT TOILET.....21 VENTILATED IMPROVED PIT LATRINE.22 NO FACILITY/BUSH/FIELD.....31 OTHER_____ 96 (SPECIFY)	
21	Does your household have: Electricity? A radio? A television? A refrigerator?	YES NO ELECTRICITY.....1 2 RADIO.....1 2 TELEVISION.....1 2 REFRIGERATOR.....1 2	
22	How many rooms in your household are used for sleeping?	ROOMS..... ☐☐	
23	MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND.....11 RUDIMENTARY FLOOR WOOD PLANKS.....21 FINISHED FLOOR PARQUET OR POLISHED WOOD.....31 CERAMIC TILES.....32 CEMENT.....33 OTHER_____ 96 (SPECIFY)	
24	Does any member of your household own: A bicycle? A motorcycle? A car?	YES NO BICYCLE.....1 2 MOTORCYCLE.....1 2 CAR.....1 2	
25	Does your household always enough food to eat, or do you have sometimes or frequently have not enough food to eat?	ALWAYS ENOUGH.....1 SOMETIMES NOT ENOUGH.....2 FREQUENTLY NOT ENOUGH.....3 ALWAYS NOT ENOUGH.....4 DOES NOT KNOW.....8	

UNITED REPUBLIC OF TANZANIA
BUREAU OF STATISTICS, PLANNING COMMISSION
TANZANIA DEMOGRAPHIC AND HEALTH SURVEY 2

WOMAN'S QUESTIONNAIRE

IDENTIFICATION

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER.....

HOUSEHOLD NUMBER.....

REGION _____

DISTRICT _____

WARD _____

ENUMERATION AREA _____

LARGE CITY=1; SMALL CITY*=2; TOWN=3; COUNTRYSIDE=4....

NAME AND LINE NUMBER OF WOMAN _____

NAME AND LINE NUMBER OF HUSBAND _____

*SMALL CITIES ARE: MWANZA, ARUSHA, MOROGORO, DODOMA, MOSHI, TANGA, IRINGA, MBEYA, & TABORA. ALL OTHER URBAN AREAS ARE TOWN.

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR 9 6
INTERVIEWER'S NAME				ID NO.
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

* RESULT CODES:

1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 INCAPACITATED
7 OTHER _____ (SPECIFY)

TRANSLATOR USED (1=NOT AT ALL; 2=SOMETIME; 3=ALL THE TIME)....

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	MORNING/AM....1 HOURS..... [ ][ ] AFTERNOON/PM..2 MINUTES.... [ ][ ]	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in Dar es Salaam city, another urban area or in a rural area?	DAR ES SALAAM.....1 OTHER URBAN AREA.....2 RURAL AREA/VILLAGE.....3	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	YEARS..... [ ][ ] ALWAYS.....95 VISITOR.....96 → 105	
104	Just before you moved here, did you live in Dar es Salaam city, another urban area or in a rural area?	DAR ES SALAAM.....1 OTHER URBAN AREA.....2 RURAL AREA/VILLAGE.....3	
105	In what month and year were you born?	MONTH..... [ ][ ] DOES NOT KNOW MONTH.....98 YEAR..... [ ][ ] DOES NOT KNOW YEAR.....98	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS..... [ ][ ]	
107	Can you read and write kiswahili easily, with difficulty, or not at all?	EASILY.....1 WITH DIFFICULTY.....2 NOT AT ALL.....3 → 109	
108	How often do you read a newspaper?	EVERY DAY/ALMOST EVERY DAY.....1 AT LEAST ONCE A WEEK.....2 AT LEAST ONCE A MONTH.....3 ONCE A MONTH.....4 HARDLY EVER/ACTUALLY NEVER.....5 DOES NOT KNOW.....8	
109	Have you ever attended school?	YES.....1 NO.....2 → 114	
110	What is the highest formal school you completed?	LESS THAN 1 YEAR.....00 STANDARD 1.....01 STANDARD 2.....02 STANDARD 3.....03 STANDARD 4.....04 STANDARD 5.....05 STANDARD 6.....06 STANDARD 7.....07 STANDARD 8.....08 FORM 1.....09 FORM 2.....10 FORM 3.....11 FORM 4.....12 FORM 5.....13 FORM 6.....14 UNIVERSITY.....15 OTHER_____ 96 (SPECIFY)	

WOM 2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	CHECK 106: AGE 24 OR BELOW ☐ AGE 25 OR ABOVE ☐		→114
112	Are you currently attending school?	YES.....1 NO.....2	→114
113	What was the main reason you stopped attending school?	GOT PREGNANT.....01 GOT MARRIED.....02 HAD TO CARE FOR YOUNGER CHILDREN..03 FAMILY NEEDED HELP ON FARM OR IN BUSINESS.....04 *COULD NOT PAY SCHOOL FEES*.....05 NEEDED TO EARN MONEY.....06 GRADUATED/HAD ENOUGH SCHOOLING....07 BAD GRADES.....08 DID NOT LIKE SCHOOL.....09 SCHOOL NOT ACCESSIBLE/TOO FAR.....10 NO SPACE/OPPORTUNITY TO CONTINUE..11 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
114	How often do you listen to the radio?	EVERY DAY/ALMOST EVERY DAY.....1 AT LEAST ONCE A WEEK.....2 AT LEAST ONCE A MONTH.....3 ONCE A MONTH.....4 HARDLY EVER/ACTUALLY NEVER.....5 DOES NOT KNOW.....8	
115	Do you usually watch television at least once a week?	YES.....1 NO.....2	
116	What is your religion?	MOSLEM.....1 CATHOLIC.....2 PROTESTANT.....3 NONE.....4 OTHER_____6 (SPECIFY)	
117	To which tribe do you belong? IF NOT A TANZANIAN CITIZEN, WRITE NAME OF COUNTRY.	_____ ☐☐☐	
118	CHECK Q.4 IN THE HOUSEHOLD QUESTIONNAIRE: THE WOMAN INTERVIEWED IS NOT A USUAL RESIDENT ☐ THE WOMAN INTERVIEWED IS A USUAL RESIDENT ☐		→201
119	Now I would like to ask about the place in which you usually live. Do you usually live in Dar es Salaam city, another urban area or in a rural area? IF CITY: In which city do you live? _____ (NAME OF CITY)	DAR ES SALAAM, LARGE CITY.....1 SMALL CITY.....2 *TOWN*.....3 COUNTRYSIDE.....4	
120	In which region is that located? IF USUAL RESIDENCE IS OUTSIDE TANZANIA, WRITE COUNTRY.	REGION_____ ☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
121	Now I would like to ask about the household in which you usually live. What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO HOUSE/YARD/PLOT.....11 PUBLIC /PRIVATE TAP.....12 WELL WATER WELL IN RESIDENCE/YARD/PLOT.....21 PUBLIC /PRIVATE WELL.....22 SURFACE WATER SPRING.....31 RIVER/STREAM.....32 POND/LAKE.....33 DAM.....34 RAINWATER.....41 OTHER_____ 96 (SPECIFY)	→123 →123 →123
122	How long does it take to go there, get water, and come back?	MINUTES..... ☐☐☐ ON PREMISES.....996	
123	What kind of toilet facility does your household have? IF FLUSH TOILET, ASK IF IT IS SHARED WITH ANOTHER HOUSEHOLD.	FLUSH TOILET OWN FLUSH TOILET.....11 SHARED FLUSH TOILET.....12 PIT TOILET/LATRINE TRADITIONAL PIT TOILET.....21 VENTILATED IMPROVED PIT LATRINE.22 NO FACILITY/BUSH/FIELD.....31 OTHER_____ 96 (SPECIFY)	
124	Does your household have: Electricity? A radio? A television? A refrigerator?	YES NO ELECTRICITY.....1 2 RADIO.....1 2 TELEVISION.....1 2 REFRIGERATOR.....1 2	
125	Could you describe the main material of the floor of your home?	NATURAL FLOOR EARTH/SAND.....11 RUDIMENTARY FLOOR WOOD PLANKS.....21 FINISHED FLOOR PARQUET OR POLISHED WOOD.....31 CERAMIC TILES.....32 CEMENT.....33 OTHER_____ 96 (SPECIFY)	
126	Does any member of your household own: A bicycle? A motorcycle? A car?	YES NO BICYCLE.....1 2 MOTORCYCLE.....1 2 CAR.....1 2	
127	Does your household always enough food to eat, or do you have sometimes or frequently have not enough food to eat?	ALWAYS ENOUGH.....1 SOMETIMES NOT ENOUGH.....2 FREQUENTLY NOT ENOUGH.....3 ALWAYS NOT ENOUGH.....4 DOES NOT KNOW.....8	

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 a girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but survived only a few hours or days?	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 NEEDED		
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.

212 What name was given to your (first/next) baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday? OR: In what season was he/she born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	218 IF ALIVE Is (NAME) living with you?	219 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.	220 FROM YEAR OF BIRTH OF (NAME) SUBTRACT YEAR OF PREVIOUS BIRTH. IS THE DIFFERENCE 4 OR MORE?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
01	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3		
02	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
03	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
04	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
05	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
06	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
07	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2

212 What name was given to your next baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday? OR: In what season was he/she born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	218 IF ALIVE Is (NAME) living with you?	219 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.	220 FROM YEAR OF BIRTH OF (NAME) SUBTRACT YEAR OF PREVIOUS BIRTH. IS THE DIFFERENCE 4 OR MORE?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and NAME)?
08	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 → (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 → (NEXT BIRTH)	YES..1 NO...2
09	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 → (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 → (NEXT BIRTH)	YES..1 NO...2
10	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 → (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 → (NEXT BIRTH)	YES..1 NO...2
11	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 → (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 → (NEXT BIRTH)	YES..1 NO...2
12	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 → (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 → (NEXT BIRTH)	YES..1 NO...2

222 FROM YEAR OF INTERVIEW SUBTRACT YEAR OF LAST BIRTH.
IS THE DIFFERENCE 4 YEARS OR MORE?
YES.....1 → GO TO 223
NO.....2 → GO TO 224

223 Have you had any live births since the birth of (NAME OF LAST BIRTH)?
YES.....1
NO.....2

224 COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:

NUMBERS ARE SAME ☐ → CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED.
FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED.
FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED.
FOR AGE AT DEATH 12 MONTHS OR 1 YR.: PROBE TO DETERMINE EXACT NUMBER OF MONTHS. ☐

NUMBERS ARE DIFFERENT ☐ → (PROBE AND RECONCILE)

225 CHECK 215 AND ENTER THE NUMBER OF BIRTHS SINCE JANUARY 1991.
IF NONE, RECORD '0'. ☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
226	Are you pregnant now?	YES.....1 NO.....2 UNSURE.....8	→229
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS.	MONTHS..... ☐☐	
228	At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to have any more children at all?	THEN.....1 LATER.....2 NOT WANT MORE CHILDREN.....3	
229	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO.....1 ☐☐ WEEKS AGO.....2 ☐☐ MONTHS AGO.....3 ☐☐ YEARS AGO.....4 ☐☐ IN MENOPAUSE.....994 BEFORE LAST BIRTH.....995 NEVER MENSTRUATED.....996	
230	Between the first day of a woman's period and the first day of her next period, are there certain times when she has a greater chance of becoming pregnant than other times?	YES.....1 NO.....2 DON'T KNOW.....8	→301
231	During which times of the monthly cycle does a woman have the greatest chance of becoming pregnant?	DURING HER PERIOD.....1 RIGHT AFTER HER PERIOD HAS ENDED.....2 IN THE MIDDLE OF THE CYCLE.....3 JUST BEFORE HER PERIOD BEGINS.....4 OTHER_____6 (SPECIFY) DON'T KNOW.....8	

SECTION 3. CONTRACEPTION

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.
CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 302, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 301 OR 302, ASK 303.

	301 Which ways or methods have you heard about?	301 SPONTANEOUS YES	302 Have you ever heard of (METHOD)? PROBED YES	302 NO	303 Have you ever used (METHOD)?
01	PILL Women can take a pill every day.	1	2	3	YES.....1 NO.....2
02	*IUD* Women can have a loop or coil placed inside them by a doctor or a nurse.	1	2	3	YES.....1 NO.....2
03	INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	1	2	3	YES.....1 NO.....2
04	IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for several years.	1	2	3	YES.....1 NO.....2
05	DIAPHRAGM,FOAM,JELLY Women can place a sponge, suppository, diaphragm, jelly, or cream inside themselves before intercourse.	1	2	3	YES.....1 NO.....2
06	CONDOM, RUBBER, RAINCOAT, DUREX A man can wear a rubber bag on his penis during sex to prevent pregnancy. The rubber bag is also used to prevent passing diseases such as AIDS and for cleanliness.	1	2	3	YES.....1 NO.....2
07	FEMALE STERILIZATION Women can have an operation to avoid having any more *children*.	1	2	3	Have you ever had an operation to avoid having *any more children*? YES.....1 NO.....2
08	MALE STERILIZATION Men can have an operation to avoid having any more children.	1	2	3	Have you ever had a partner who had an operation to avoid having children? YES.....1 NO.....2
09	CALENDAR/SAFE PERIOD Couples can have sexual intercourse only during the safe period of the monthly cycle that is the times during monthly cycle when women is least likely to get pregnant.	1	2	3	YES.....1 NO.....2
10	MUCUS METHOD A woman can observe daily the state of the mucus and avoid sexual *intercourse at the time when the mucus* is colorless and extremely elaastic.	1	2	3	YES.....1 NO.....2
11	WITHDRAWAL Men can be careful and pull out before climax.	1	2	3	YES.....1 NO.....2
12	*Have you heard of any other ways or* methods that women or men can use to avoid pregnancy?	1 (SPECIFY) (SPECIFY)		3	YES.....1 NO.....2 YES.....1 NO.....2

304 CHECK 303:
NOT A SINGLE "YES" (NEVER USED) → AT LEAST ONE "YES" (EVER USED) → SKIP TO 307

WOM 9

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
305	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES.....1 NO.....2	→330
306	What have you used or done? CORRECT 303 AND 304 (AND 302 IF NECESSARY).		
307	Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. How many living children did you have at that time, if any? IF NONE, RECORD '00'.	NUMBER OF CHILDREN..... ☐☐	
308	CHECK 303: WOMAN NOT STERILISED ☐ ▼ WOMAN STERILISED ☐		→311A
309	CHECK 226: NOT PREGNANT OR UNSURE ☐ ▼ PREGNANT ☐		→331
310	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES.....1 NO.....2	→330
311 311A	Which method are you using? CIRCLE '07' FOR FEMALE STERILISATION.	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 DIAPHRAGM/FOAM/JELLY.....05 CONDOM.....06 FEMALE STERILISATION.....07 MALE STERILISATION.....08 CALENDAR/SAFE PERIOD.....09 MUCUS METHOD.....10 WITHDRAWAL.....11 OTHER_____ 96 (SPECIFY)	→324 →319 →323 →324
312	May I see the package of pills you are now using? RECORD NAME OF BRAND IF PACKAGE IS SEEN.	PACKAGE SEEN.....1 BRAND NAME_____ ☐☐ PACKAGE NOT SEEN.....2	→314
313	Do you know the brand name of the pills you are now using? RECORD NAME OF BRAND.	BRAND NAME _____ ☐☐ DOES NOT KNOW.....98	
314	How much does one packet (cycle) of pills cost you?	COST..... ☐☐☐ FREE.....996 DOES NOT KNOW.....998	
315	When was the last time you took a pill?	DAYS AGO..... ☐☐ MORE THAN ONE MONTH AGO.....97	

WOM 10

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316	CHECK 315: MORE THAN 2 DAYS AGO ☐ ↓ TWO DAYS AGO OR LESS ☐		→318
317	Why aren't you taking the pill these days?	HUSBAND AWAY.....A *FORGOT*.....B HEALTH REASONS.....C COST TOO MUCH.....D NO NEED TO TAKE EVERY DAY.....E RAN OUT.....F CBD HAS NOT BROUGHT RESUPPLY.....G MENSTRUATING.....H OTHER_____X (SPECIFY)	
318	Just about everyone forgets to take a pill sometime. What do you do when you forget to take a pill for two days in a row?	START TAKING AGAIN AS USUAL.....1 TAKE EXTRA/MISSED PILLS.....2 USE ANOTHER METHOD.....3 TAKE EXTRA PILL AND USE ANOTHER METHOD.....4 NEVER FORGOT.....5 OTHER_____6 (SPECIFY)	→324
319	Where did the sterilisation take place? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL....11 DISTRICT HOSPITAL.....12 HEALTH CENTRE.....13 DISPENSARY/PARASTATAL FACILITY..14 VILLAGE HEALTH POST/WORKER.....15 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV.DOCTOR/CLINIC/HOSPITAL.....22 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
320	Do you regret that (you/your husband) had the operation not to have any (more) children?	YES.....1 NO.....2	→322
321	Why do you regret the operation?	RESPONDENT WANTS ANOTHER CHILD.....1 PARTNER WANTS ANOTHER CHILD.....2 SIDE EFFECTS.....3 CHILD DIED.....4 OTHER_____6 (SPECIFY)	
322	In what month and year was the sterilisation performed?	MONTH..... ☐☐ YEAR..... ☐☐	→325
323	You said that you have avoided having sexual intercourse on certain days of the month to avoid getting pregnant. How do you determine which days of your monthly cycle not to have sexual relations?	BASED ON CALENDAR.....1 BASED ON BODY TEMPERATURE.....2 BASED ON CERVICAL MUCUS (BILLINGS METHOD).....3 BASED ON BODY TEMPERATURE AND CERVICAL MUCUS.....4 NO SPECIFIC SYSTEM.....5 OTHER_____6 (SPECIFY)	
324	For how many months have you been using (METHOD) continuously? IF LESS THAN 1 MONTH, RECORD '00'.	MONTHS..... ☐☐ 8 YEARS OR LONGER.....96	

WOM 11

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
325	CHECK 311: CIRCLE METHOD CODE:	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 DIAPHRAGM/FOAM/JELLY.....05 CONDOM.....06 FEMALE STERILISATION.....07 MALE STERILISATION.....08 CALENDAR/SAFE PERIOD.....09 MUCUS METHOD.....10 WITHDRAWAL.....11 OTHER.....96	→328A →331
326	Where did you obtain (METHOD) the last time? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL....11 DISTRICT HOSPITAL.....12 HEALTH CENTRE.....13 DISPENSARY/PARASTATAL FACILITY..14 VILLAGE HEALTH POST/WORKER.....15 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV.DOCTOR/CLINIC/HOSPITAL.....22 PHARMACY/MEDICAL STORE.....23 CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP/KIOSK.....31 CHURCH.....32 FRIENDS/RELATIVES/NEIGHBORS.....33 HEALTH EDUCATOR/BAR GIRLS.....34 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
327	Who obtained/helped to have the contraceptive?	HERSELF.....1 HUSBAND.....2 OTHER_____6 (SPECIFY) DOES NOT KNOW.....8	
328	Do you know another place where you could have obtained (METHOD) the last time?	YES.....1 NO.....2	→333
328A	At the time of the sterilisation operation, did you know another place where you could have received the operation?		
329	People select the place where they get family planning services for various reasons. What was the main reason you went to (NAME OF PLACE IN Q.319 OR Q.326) instead of the other place you know about?	ACCESS-RELATED REASONS CLOSER TO HOME.....11 CLOSER TO MARKET/WORK.....12 AVAILABILITY OF TRANSPORT.....13 SERVICE-RELATED REASONS STAFF MORE COMPETENT/ FRIENDLY.....21 CLEANER FACILITY.....22 OFFERS MORE PRIVACY.....23 SHORTER WAITING TIME.....24 LONGER HRS. OF OPERATION.....25 USE OTHER SERVICES AT THE FACILITY.....26 LOWER COST/CHEAPER.....31 WANTED ANONYMITY.....41 OTHER_____ 96 (SPECIFY) DON'T KNOW.....98	→333

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
330	What is the main reason you are not using a method of contraception to avoid pregnancy?	NOT MARRIED.....11 *FERTILITY-RELATED REASONS* NOT HAVING SEX.....21 INFREQUENT SEX.....22 MENOPAUSAL/HYSTERECTOMY.....23 SUBFECUND/INFECUND.....24 *POSTPARTUM/BREASTFEEDING*.....25 WANTS MORE CHILDREN.....26 OPPOSITION TO USE RESPONDENT OPPOSED.....31 HUSBAND OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
331	Do you know of a place where you can obtain a method of family planning?	YES.....1 NO.....2	→333
332	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, *WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY* THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ *(NAME OF PLACE)*	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL....11 DISTRICT HOSPITAL.....12 HEALTH CENTRE.....13 *DISPENSARY/PARASTATAL FACILITY*..14 VILLAGE HEALTH POST/WORKER.....15 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV.DOCTOR/CLINIC/HOSPITAL.....22 *PHARMACY/MEDICAL STORE*.....23 CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 CHURCH.....32 FRIENDS/RELATIVES/NEIGHBORS.....33 OTHER_____ 96 (SPECIFY)	
333	Were you visited by a family planning program worker in the last 12 months?	YES.....1 NO.....2	
334	Have you visited a health facility in the last 12 months for any reason?	YES.....1 NO.....2	→335A
335	Did anyone at the health facility speak to you about family planning methods?	YES.....1 NO.....2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
335A	Have you seen or heard of the Green Star Logo (Symbol)?	YES.....1 NO.....2 DOESN'T KNOW.....8	→336
335B	What does the Green Star Logo mean to you?	FAMILY PLANNING RELATED.....1 NOT FAMILY PLANNING RELATED.....2 DOESN'T KNOW.....8	
335C	How did you learn about the Green Star? CIRCLE ALL MENTIONED.	BILLBOARDS.....A BUS.....B POSTERS.....C LEAFLETS.....D RADIO.....E CLINIC SIGN.....F SERVICE PROVIDER.....G OTHER_____X (SPECIFY)	
336	Some women think that breastfeeding can affect their chance of becoming pregnant. Do you think a woman's chance of becoming pregnant is <u>increased</u>, <u>decreased</u>, or <u>not affected</u> by breastfeeding?	INCREASED.....1 DECREASED.....2 NOT AFFECTED.....3 DEPENDS.....4 DOES NOT KNOW.....8	→401 →401 →401
337	CHECK 210: ONE OR MORE BIRTHS ☐ NO BIRTHS ☐		→401
338	Have you ever relied on breastfeeding as a method of avoiding pregnancy?	YES.....1 NO.....2	→401
339	CHECK 226 AND 308: NOT PREGNANT OR UNSURE AND NOT STERILISED ☐ EITHER PREGNANT OR STERILISED ☐		→401
340	Are you currently relying on breastfeeding to avoid getting pregnant?	YES.....1 NO.....2	

SECTION 4A. PREGNANCY AND BREASTFEEDING

401	CHECK 225 : ONE OR MORE LIVE BIRTHS SINCE JAN. 1991 ☐ (v) NO LIVE BIRTHS SINCE JAN. 1991 ☐ → (SKIP TO 465)			
402	ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1991 IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE ADDITIONAL FORMS). Now I would like to ask you some more questions about the health of children you had in the past five years. We will talk about one child at a time.			
403	LINE NUMBER FROM Q. 212	☐☐	☐☐	☐☐
		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
404	FROM Q. 212 AND Q. 216	NAME ____ ALIVE ☐ DEAD ☐	NAME ____ ALIVE ☐ DEAD ☐	NAME ____ ALIVE ☐ DEAD ☐
405	At the time you became pregnant with (NAME), did you want to become pregnant *then, did you* want to wait until later or did you want no more children at all?	THEN....................1 (SKIP TO 407) LATER....................2 NO MORE..................3 (SKIP TO 407)	THEN....................1 (SKIP TO 407) LATER....................2 NO MORE..................3 (SKIP TO 407)	THEN....................1 (SKIP TO 407) LATER....................2 NO MORE..................3 (SKIP TO 407)
406	How much longer would you like to have waited?	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	When you were pregnant with (NAME), did you see anyone for antenatal care for this pregnancy? IF YES: Whom did you see? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST......A RURAL MEDICAL AIDE.......B NURSE/MIDWIFE............C MCH AIDE.................D OTHER PERSON VILLAGE HEALTH WORKER....E TRAINED BIRTH ATTENDANT..F TRADITIONAL BIRTH ATTENDANT.............G OTHER ____ X (SPECIFY) NO ONE....................Y (SKIP TO 410)	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST......A RURAL MEDICAL AIDE.......B NURSE/MIDWIFE............C MCH AIDE.................D OTHER PERSON VILLAGE HEALTH WORKER....E TRAINED BIRTH ATTENDANT..F TRADITIONAL BIRTH ATTENDANT.............G OTHER ____ X (SPECIFY) NO ONE....................Y (SKIP TO 410)	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST......A RURAL MEDICAL AIDE.......B NURSE/MIDWIFE............C MCH AIDE.................D OTHER PERSON VILLAGE HEALTH WORKER....E TRAINED BIRTH ATTENDANT..F TRADITIONAL BIRTH ATTENDANT.............G OTHER ____ X (SPECIFY) NO ONE....................Y (SKIP TO 410)
408	How many months pregnant were you when you first received antenatal care?	MONTHS............. ☐☐ DON'T KNOW.............98	MONTHS............. ☐☐ DON'T KNOW.............98	MONTHS............. ☐☐ DON'T KNOW.............98
409	How many times did you receive antenatal care during this pregnancy?	NO. OF TIMES........ ☐☐ DON'T KNOW.............98	NO. OF TIMES........ ☐☐ DON'T KNOW.............98	NO. OF VISITS....... ☐☐ DON'T KNOW.............98

		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
410	When you were pregnant with (NAME) 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 412) DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 412) DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 412) DON'T KNOW.....8
411	During this pregnancy, how many times did you get this injection?	TIMES.....[ ] DON'T KNOW.....8	TIMES.....[ ] DON'T KNOW.....8	TIMES.....[ ] DON'T KNOW.....8
412	Where did you give birth to (NAME)?	HOME YOUR HOME.....11 OTHER HOME.....12 GOVERNMENT AND PARASTATAL HOSPITAL.....21 HEALTH CENTRE.....22 DISPENSARY.....23 PARASTATAL HOSP/CLINIC..24 OTHER PUBLIC ______26 (SPECIFY) PRIVATE SECTOR RELIGIOUS ORG HOSP/CLIN.31 PRIVATE HOSPITAL/CLINIC.32 OTHER PRIVATE MEDICAL ______36 (SPECIFY) OTHER______96 (SPECIFY)	HOME YOUR HOME.....11 OTHER HOME.....12 GOVERNMENT AND PARASTATAL HOSPITAL.....21 HEALTH CENTRE.....22 DISPENSARY.....23 PARASTATAL HOSP/CLINIC..24 OTHER PUBLIC ______26 (SPECIFY) PRIVATE SECTOR RELIGIOUS ORG HOSP/CLIN.31 PRIVATE HOSPITAL/CLINIC.32 OTHER PRIVATE MEDICAL ______36 (SPECIFY) OTHER______36 (SPECIFY)	HOME YOUR HOME.....11 OTHER HOME.....12 GOVERNMENT AND PARASTATAL HOSPITAL.....21 HEALTH CENTRE.....22 DISPENSARY.....23 PARASTATAL HOSP/CLINIC..24 OTHER PUBLIC ______26 (SPECIFY) PRIVATE SECTOR RELIGIOUS ORG HOSP/CLIN.31 PRIVATE HOSPITAL/CLINIC.32 OTHER PRIVATE MEDICAL ______36 (SPECIFY) OTHER______36 (SPECIFY)
412A	CHECK 412 (11 OR 12) DELIVERED AT HOME	DELIVERED AT HOME [ ] NOT DELIVERED AT HOME [ ] (SKIP TO 413)	DELIVERED AT HOME [ ] NOT DELIVERED AT HOME [ ] (SKIP TO 413)	DELIVERED AT HOME [ ] NOT DELIVERED AT HOME [ ] (SKIP TO 413)
412B	Why did you deliver (NAME) at home?	PREFERRED AT HOME.....1 TOO EXPENSIVE AT OUTSIDE..2 SERVICE NOT AVAILABLE.....3 DOES NOT KNOW WHERE TO GO.4 COULD NOT REACH CLINIC ON TIME.....5 OTHER REASON ______6 (SPECIFY)	PREFERRED AT HOME.....1 TOO EXPENSIVE AT OUTSIDE..2 SERVICE NOT AVAILABLE.....3 DOES NOT KNOW WHERE TO GO.4 COULD NOT REACH CLINIC ON TIME.....5 OTHER REASON ______6 (SPECIFY)	PREFERRED AT HOME.....1 TOO EXPENSIVE AT OUTSIDE..2 SERVICE NOT AVAILABLE.....3 DOES NOT KNOW WHERE TO GO.4 COULD NOT REACH CLINIC ON TIME.....5 OTHER REASON ______6 (SPECIFY)
413	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING.	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST.....A RURAL MEDICAL AIDE.....B NURSE/MIDWIFE.....C MCH AIDE.....D OTHER PERSON VILLAGE HEALTH WORKER....E TRAINED BIRTH ATTENDANT..F TRADITIONAL BIRTH ATTENDANT.....G NEIGHBORS/RELATIVES.....H OTHER______X (SPECIFY) NO ONE.....Y	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST.....A RURAL MEDICAL AIDE.....B NURSE/MIDWIFE.....C MCH AIDE.....D OTHER PERSON VILLAGE HEALTH WORKER....E TRAINED BIRTH ATTENDANT..F TRADITIONAL BIRTH ATTENDANT.....G NEIGHBORS/RELATIVES.....H OTHER______X (SPECIFY) NO ONE.....Y	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST.....A RURAL MEDICAL AIDE.....B NURSE/MIDWIFE.....C MCH AIDE.....D OTHER PERSON VILLAGE HEALTH WORKER....E TRAINED BIRTH ATTENDANT..F TRADITIONAL BIRTH ATTENDANT.....G NEIGHBORS/RELATIVES.....H OTHER______X (SPECIFY) NO ONE.....Y

		LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
414	Around the time of the birth of (NAME), did you have any of the following problems:	YES NO	YES NO	YES NO
	Long labor, that is, did your regular contractions last more than 12 hours?	LABOR MORE THAN 12 HOURS..1 2	LABOR MORE THAN 12 HOURS..1 2	LABOR MORE THAN 12 HOURS..1 2
	Excessive bleeding that was so much that you feared it was life threatening?	EXCESSIVE BLEEDING............1 2	EXCESSIVE BLEEDING............1 2	EXCESSIVE BLEEDING............1 2
	A high fever with bad smelling vaginal discharge?	FEVER/BAD SMELLING VAG. DISCHARGE......1 2	FEVER/BAD SMELLING VAG. DISCHARGE......1 2	FEVER/BAD SMELLING VAG. DISCHARGE......1 2
	Convulsions not caused by fever?	CONVULSIONS..........1 2	CONVULSIONS..........1 2	CONVULSIONS..........1 2
414A	CHECK 412 (11 OR 12) DELIVERED AT HOME	NOT DELIVERED AT HOME ☐ ↓ DELIVERED AT HOME ☐ ↓ (SKIP TO 416)	NOT DELIVERED AT HOME ☐ ↓ DELIVERED AT HOME ☐ ↓ (SKIP TO 416)	NOT DELIVERED AT HOME ☐ ↓ DELIVERED AT HOME ☐ ↓ (SKIP TO 416)
415	Was (NAME) delivered by caesarian section?	YES......................1 NO.......................2	YES......................1 NO.......................2	YES......................1 NO.......................2
416	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
417A	Was (NAME) weighed at birth?	YES......................1 NO.......................2 (SKIP TO 418A)←	YES......................1 NO.......................2 (SKIP TO 418A) ←	YES......................1 NO.......................2 (SKIP TO 418A)←
417B	How much did (NAME) weigh? RECORD WEIGHT FROM HEALTH CARD, IF AVAILABLE	GRAMS FROM CARD......1 ☐☐☐☐ GRAMS FROM RECALL....2 ☐☐☐☐ DON'T KNOW..........99998	GRAMS FROM CARD......1 ☐☐☐☐ GRAMS FROM RECALL....2 ☐☐☐☐ DON'T KNOW..........99998	GRAMS FROM CARD......1 ☐☐☐☐ GRAMS FROM RECALL....2 ☐☐☐☐ DON'T KNOW..........99998
418A	Did you see anyone for pospartum care within six weeks after delivery of (NAME)?	YES......................1 NO.......................2 (SKIP TO 419)←	YES......................1 NO.......................2 (SKIP TO 420)←	YES......................1 NO.......................2 (SKIP TO 420)←
418B	Who provided the postnatal care? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS CONSULTED.	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST......A RURAL MEDICAL AIDE.......B NURSE/MIDWIFE............C MCH AIDE.................D OTHER PERSON VILLAGE HEALTH WORKER....E TRAINED BIRTH ATTENDANT..F TRADITIONAL BIRTH ATTENDANT...............G NEIGHBORS/RELATIVES......H OTHER________X (SPECIFY)	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST......A RURAL MEDICAL AIDE.......B NURSE/MIDWIFE............C MCH AIDE.................D OTHER PERSON VILLAGE HEALTH WORKER....E TRAINED BIRTH ATTENDANT..F TRADITIONAL BIRTH ATTENDANT...............G NEIGHBORS/RELATIVES......H OTHER________X (SPECIFY)	HEALTH PROFESSIONAL DOCTOR/MEDICAL ASST......A RURAL MEDICAL AIDE.......B NURSE/MIDWIFE............C MCH AIDE.................D OTHER PERSON VILLAGE HEALTH WORKER....E TRAINED BIRTH ATTENDANT..F TRADITIONAL BIRTH ATTENDANT...............G NEIGHBORS/RELATIVES......H OTHER________X (SPECIFY)
419	Has your period returned since the birth of (NAME)?	YES ....1 (SKIP TO 421)← NO.......................2 (SKIP TO 422)←		

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		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
420	Did your period return between the birth of (NAME) and your next pregnancy?		YES....1 NO....2 (SKIP TO 424)	YES....1 NO....2 (SKIP TO 424)
421	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
422	CHECK 226: RESPONDENT PREGNANT?	NOT PREGNANT [ ] ↓ PREGNANT OR UNSURE [ ] (SKIP TO 424)		
423	Have you resumed sexual relations since the birth of (NAME)?	YES....1 NO....2 (SKIP TO 425)		
424	For how many months after the birth of (NAME) did you not have sexual relations?	MONTHS.... [ ][ ] DON'T KNOW....98	MONTHS.... [ ][ ] DON'T KNOW....98	MONTHS.... [ ][ ] DON'T KNOW....98
425	Did you ever breastfeed (NAME)?	YES....1 NO....1 (SKIP TO 431)	YES....1 NO....1 (SKIP TO 431)	YES....1 NO....1 (SKIP TO 431)
426	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00'. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY....000 HOURS....1 [ ][ ] DAYS....2 [ ][ ]	IMMEDIATELY....000 HOURS....1 [ ][ ] DAYS....2 [ ][ ]	IMMEDIATELY....000 HOURS....1 [ ][ ] DAYS....2 [ ][ ]
427	CHECK 404: CHILD ALIVE?	ALIVE [ ] ↓ DEAD [ ] (SKIP TO 429)	ALIVE [ ] ↓ DEAD [ ] (SKIP TO 429)	ALIVE [ ] ↓ DEAD [ ] (SKIP TO 429)
428	Are you still breastfeeding (NAME)?	YES....2 (SKIP TO 432) NO....2	YES....2 (SKIP TO 432) NO....2	
429	For how many months did you breastfeed (NAME)?	MONTHS.... [ ][ ] DON'T KNOW....98	MONTHS.... [ ][ ] DON'T KNOW....98	MONTHS.... [ ][ ] DON'T KNOW....98
430	Why did you stop breastfeeding (NAME)?	MOTHER ILL/WEAK....01 CHILD ILL/WEAK....02 CHILD DIED....03 NIPPLE/BREAST PROBLEM...04 NOT ENOUGH MILK....05 MOTHER WORKING....06 CHILD REFUSED....07 WEANING AGE/AGE TO STOP.08 BECAME PREGNANT....09 STARTED USING CONTRACEPTION....10 OTHER ______ 96 (SPECIFY)	MOTHER ILL/WEAK....01 CHILD ILL/WEAK....02 CHILD DIED....03 NIPPLE/BREAST PROBLEM...04 NOT ENOUGH MILK....05 MOTHER WORKING....06 CHILD REFUSED....07 WEANING AGE/AGE TO STOP.08 BECAME PREGNANT....09 STARTED USING CONTRACEPTION....10 OTHER ______ 96 (SPECIFY)	MOTHER ILL/WEAK....01 CHILD ILL/WEAK....02 CHILD DIED....03 NIPPLE/BREAST PROBLEM...04 NOT ENOUGH MILK....05 MOTHER WORKING....06 CHILD REFUSED....07 WEANING AGE/AGE TO STOP.08 BECAME PREGNANT....09 STARTED USING CONTRACEPTION....10 OTHER ______ 96 (SPECIFY)

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
431	CHECK 404: CHILD ALIVE?	ALIVE → (SKIP TO 434) DEAD → (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE *BIRTHS*, GO TO 440)	ALIVE → (SKIP TO 434) DEAD → (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE *BIRTHS*, GO TO 440)	ALIVE → (SKIP TO 434) DEAD → (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE *BIRTHS*, GO TO 440)
432	How many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF NIGHTIME FEEDINGS..... ☐☐	NUMBER OF NIGHTIME FEEDINGS..... ☐☐	
433	How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYLIGHT FEEDINGS..... ☐☐	NUMBER OF DAYLIGHT FEEDINGS..... ☐☐	
434	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
435	At any time yesterday or last night was (NAME) given any of the following?:	YES NO DK	YES NO DK	YES NO DK
	Plain water?	PLAIN WATER.....1 2 8	PLAIN WATER.....1 2 8	PLAIN WATER.....1 2 8
	Sugar water?	SUGAR WATER.....1 2 8	SUGAR WATER.....1 2 8	SUGAR WATER.....1 2 8
	Juice?	JUICE.....1 2 8	JUICE.....1 2 8	JUICE.....1 2 8
	Baby formula?	BABY FORMULA.....1 2 8	BABY FORMULA.....1 2 8	BABY FORMULA.....1 2 8
	Cow's milk?	FRESH MILK.....1 2 8	FRESH MILK.....1 2 8	FRESH MILK.....1 2 8
	Any other liquids?	OTHER LIQUIDS.....1 2 8	OTHER LIQUIDS.....1 2 8	OTHER LIQUIDS.....1 2 8
	Ugali, uji or other food from rice, wheat or maize?	FOOD MADE FROM RICE/WHEAT/MAIZE.1 2 8	FOOD MADE FROM RICE/WHEAT/MAIZE.1 2 8	FOOD MADE FROM RICE/WHEAT/MAIZE.1 2 8
	Any green vegetables?	GREEN VEGETABLES...1 2 8	GREEN VEGETABLES...1 2 8	GREEN VEGETABLES...1 2 8
	Any yellow food like yams, mangoes, paw paws or carots?	YELLOW FOOD - YAMS MANGOES.....1 2 8	YELLOW FOOD - YAMS MANGOES.....1 2 8	YELLOW FOOD - YAMS MANGOES.....1 2 8
	Egg, fish or poultry?	EGG/FISH/POULTRY...1 2 8	EGG/FISH/POULTRY...1 2 8	EGG/FISH/POULTRY...1 2 8
	Meat?	MEAT.....1 2 8	MEAT.....1 2 8	MEAT.....1 2 8
	Any other solid or semi-solid food?	OTHER SOLID/ SEMI-SOLID FOOD...1 2 8	OTHER SOLID/ SEMI-SOLID FOOD...1 2 8	OTHER SOLID/ SEMI-SOLID FOOD...1 2 8
436	CHECK 435 : FOOD OR LIQUID GIVEN YESTERDAY?	"YES" TO ONE OR MORE → ; "NO/DK" TO ALL → (SKIP TO 439)	"YES" TO ONE OR MORE → ; "NO/DK" TO ALL → (SKIP TO 439)	"YES" TO ONE OR MORE → ; "NO/DK" TO ALL → (SKIP TO 439)
437	(Aside from breastfeeding) how many times did (NAME) eat yesterday, including both meals and snacks? IF 7 OR MORE TIMES, RECORD '7'	NUMBER OF TIMES..... ☐ DON'T KNOW.....8	NUMBER OF TIMES..... ☐ DON'T KNOW.....8	NUMBER OF TIMES..... ☐ DON'T KNOW.....8
439		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 440.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 440.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 440.

440 ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1991 IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE ADDITIONAL QUESTIONNAIRES).

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
441	LINE NUMBER FROM Q. 212	LINE.....	LINE.....	LINE.....
442	FROM Q. 212 AND Q. 216	NAME _____ ALIVE ☐ DEAD ☐ (GO TO 442 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 465.)	NAME _____ ALIVE ☐ DEAD ☐ (GO TO 442 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 465.)	NAME _____ ALIVE ☐ DEAD ☐ (GO TO 442 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 465.)
443	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it, please?	YES, SEEN.....1 (SKIP TO 445) YES, NOT SEEN.....2 (SKIP TO 447) NO CARD.....3	YES, SEEN.....1 (SKIP TO 445) YES, NOT SEEN.....2 (SKIP TO 447) NO CARD.....3	YES, SEEN.....1 (SKIP TO 445) YES, NOT SEEN.....2 (SKIP TO 447) NO CARD.....3
444	Did you ever have a vaccination card for (NAME)?	YES.....1 (SKIP TO 447) NO.....2	YES.....1 (SKIP TO 447) NO.....2	YES.....1 (SKIP TO 447) NO.....2
445	(1) COPY VACCINATION DATES FOR EACH VACCINE FROM THE CARD. (2) WRITE '44' IN 'DAY' COLUMN, IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE RECORDED.	DAY MO YR	DAY MO YR	DAY MO YR
	BCG	BCG	BCG	BCG
	Polio 0 (at birth)	P0	P0	P0
	Polio 1	P1	P1	P1
	Polio 2	P2	P2	P2
	Polio 3	P3	P3	P3
	DPT1	D1	D1	D1
	DPT2	D2	D2	D2
	DPT3	D3	D3	D3
	MEASLES	MEA	MEA	MEA
446	Has (NAME) received any vaccinations that are not recorded on this card? RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-3, DPT 1-3, AND/OR MEASLES VACCINATIONS.	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 445) NO.....2 DON'T KNOW.....8 (SKIP TO 449)	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 445) NO.....2 DON'T KNOW.....8 (SKIP TO 449)	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 445) NO.....2 DON'T KNOW.....8 (SKIP TO 449)
447	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases?	YES.....1 NO.....2 (SKIP TO 449) DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 449) DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 449) DON'T KNOW.....8

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		LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
448	Please tell me if (NAME) (has) received any of the following vaccinations:			
448A	A BCG vaccination against tuberculosis, that is, an injection in the right shoulder that left 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
448B	Polio vaccine, that is, drops in the mouth?	YES....1 NO....2 DON'T KNOW....8 (SKIP TO 448E)<	YES....1 NO....2 DON'T KNOW....8 (SKIP TO 448E)<	YES....1 NO....2 DON'T KNOW....8 (SKIP TO 448E)<
448C	How many times?	NUMBER OF TIMES....[ ]	NUMBER OF TIMES....[ ]	NUMBER OF TIMES....[ ]
448D	When was the first polio vaccine given, just after birth or later?	JUST AFTER BIRTH....1 LATER....2	JUST AFTER BIRTH....1 LATER....2	JUST AFTER BIRTH....1 LATER....2
448E	DPT vaccination, that is, an injection usually given at the same time as polio drops?	YES....1 NO....2 DON'T KNOW....8 (SKIP TO 448G)<	YES....1 NO....2 DON'T KNOW....8 (SKIP TO 448G)<	YES....1 NO....2 DON'T KNOW....8 (SKIP TO 448G)<
448F	How many times?	NUMBER OF TIMES....[ ]	NUMBER OF TIMES....[ ]	NUMBER OF TIMES....[ ]
448G	An injection against 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
449	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
450	Has (NAME) been ill with a cough at any time in the last 2 weeks?	YES....1 NO....2 (SKIP TO 454)< DON'T KNOW....8	YES....1 NO....2 (SKIP TO 454)< DON'T KNOW....8	YES....1 NO....2 (SKIP TO 454)< DON'T KNOW....8
451	When (NAME) had the illness with a cough, did he/she breathe faster than usual with short, fast breaths?	YES....1 NO....2 DON'T KNOW....8	YES....1 NO....2 DON'T KNOW....8	YES....1 NO....2 DON'T KNOW....8
452	Did you seek advice or treatment for the cough?	YES....1 NO....2 (SKIP TO 454)<	YES....1 NO....2 (SKIP TO 454)<	YES....1 NO....2 (SKIP TO 454)<
453	Where did you seek advice or treatment? Anyone else? RECORD ALL MENTIONED.	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER....E OTHER PUBLIC ________ F (SPECIFY) MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.G PRIVATE DOCTOR/HOSP/CLIN.H PHARMACY/MEDICAL STORE...I OTHER PRIVATE MEDICAL ________ J (SPECIFY) OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...K NEIGHBORS/RELATIVES......L OTHER________X (SPECIFY)	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER....E OTHER PUBLIC ________ F (SPECIFY) MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.G PRIVATE DOCTOR/HOSP/CLIN.H PHARMACY/MEDICAL STORE...I OTHER PRIVATE MEDICAL ________ J (SPECIFY) OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...K NEIGHBORS/RELATIVES......L OTHER________X (SPECIFY)	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER....E OTHER PUBLIC ________ F (SPECIFY) MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.G PRIVATE DOCTOR/HOSP/CLIN.H PHARMACY/MEDICAL STORE...I OTHER PRIVATE MEDICAL ________ J (SPECIFY) OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...K NEIGHBORS/RELATIVES......L OTHER________X (SPECIFY)

		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
454	Has (NAME) had diarrhea (three or more watery stools) in the last two weeks?	YES....1 NO....2 (SKIP TO 464) DON'T KNOW....8	YES....1 NO....2 (SKIP TO 464) DON'T KNOW....8	YES....1 NO....2 (SKIP TO 464) DON'T KNOW....8
455	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
456	On the worst day of the diarrhea, how many bowel movements did (NAME) have?	NUMBER OF BOWEL MOVEMENTS.... [ ][ ] DON'T KNOW....8	NUMBER OF BOWEL MOVEMENTS.... [ ][ ] DON'T KNOW....8	NUMBER OF BOWEL MOVEMENTS.... [ ][ ] DON'T KNOW....8
457	Was he/she given the same amount to drink as before the diarrhea, or more, or less?	SAME....1 MORE....2 LESS....3 DON'T KNOW....8	SAME....1 MORE....2 LESS....3 DON'T KNOW....8	SAME....1 MORE....2 LESS....3 DON'T KNOW....8
458	Was he/she given the same amount of food as before the diarrhea, or more, or less?	SAME....1 MORE....2 LESS....3 DON'T KNOW....8	SAME....1 MORE....2 LESS....3 DON'T KNOW....8	SAME....1 MORE....2 LESS....3 DON'T KNOW....8
460	Was anything (else) given to treat the diarrhea ?	YES....1 NO....2 (SKIP TO 462) DON'T KNOW....8	YES....1 NO....2 (SKIP TO 462) DON'T KNOW....8	YES....1 NO....2 (SKIP TO 462) DON'T KNOW....8
461	What was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS MENTIONED.	FLUID FROM ORS PACKET....A HOMEMADE SUGAR SALT SOLN.B ANTIBIOTIC PILL OR SYRUP....C OTHER PILL OR SYRUP......D INJECTION....E DRIP....F HOME REMEDIES/ HERBAL MEDICINES........G OTHER______X (SPECIFY)	FLUID FROM ORS PACKET....A HOMEMADE SUGAR SALT SOLN.B ANTIBIOTIC PILL OR SYRUP....C OTHER PILL OR SYRUP......D INJECTION....E DRIP....F HOME REMEDIES/ HERBAL MEDICINES........G OTHER______X (SPECIFY)	FLUID FROM ORS PACKET....A HOMEMADE SUGAR SALT SOLN.B ANTIBIOTIC PILL OR SYRUP....C OTHER PILL OR SYRUP......D INJECTION....E DRIP....F HOME REMEDIES/ HERBAL MEDICINES........G OTHER______X (SPECIFY)
462	Did you seek advice or treatment for the diarrhea?	YES....1 NO....2 (SKIP TO 464)	YES....1 NO....2 (SKIP TO 464)	YES....1 NO....2 (SKIP TO 464)
463	From whom or where did you seek advice or treatment? Anyone else? RECORD ALL MENTIONED.	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER....E OTHER PUBLIC MEDICAL ______F (SPECIFY) MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.G PRIVATE DOCTOR/HOSP/CLIN.H PHARMACY/MEDICAL STORE...I OTHER PRIVATE MEDICAL ______J (SPECIFY) OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...K NEIGHBORS/RELATIVES......L OTHER______X (SPECIFY)	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER....E OTHER PUBLIC MEDICAL ______F (SPECIFY) MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.G PRIVATE DOCTOR/HOSP/CLIN.H PHARMACY/MEDICAL STORE...I OTHER PRIVATE MEDICAL ______J (SPECIFY) OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...K NEIGHBORS/RELATIVES......L OTHER______X (SPECIFY)	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER....E OTHER PUBLIC MEDICAL ______F (SPECIFY) MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.G PRIVATE DOCTOR/HOSP/CLIN.H PHARMACY/MEDICAL STORE...I OTHER PRIVATE MEDICAL ______J (SPECIFY) OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...K NEIGHBORS/RELATIVES......L OTHER______X (SPECIFY)
464		GO BACK TO 442 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 465.	GO BACK TO 442 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 465.	GO BACK TO 442 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 465.

WOM 22

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
465	When a child has diarrhea, should he/she be given less to drink than usual, about the same amount, or more than usual?	LESS TO DRINK.....1 ABOUT SAME AMOUNT TO DRINK.....2 MORE TO DRINK.....3 *DON'T KNOW*.....8	
466	When a child has diarrhea, should he/she be given less to eat than usual, about the same amount, or more than usual?	LESS TO EAT.....1 ABOUT SAME AMOUNT TO EAT.....2 MORE TO EAT.....3 DON'T KNOW.....8	
467	When a child is sick with diarrhea, what signs of illness would tell you that he or she should be taken to a health facility or health worker? *RECORD ALL MENTIONED.*	REPEATED WATERY STOOLS.....A ANY WATERY STOOLS.....B REPEATED VOMITING.....C ANY VOMITING.....D *BLOOD IN STOOLS*.....E FEVER.....F MARKED THIRST.....G NOT EATING/NOT DRINKING WELL.....H GETTING SICKER/VERY SICK.....I NOT GETTING BETTER.....J OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
468	When a child is sick with a cough, what signs of illness would tell you that he or she should be *taken to a health facility or health worker?* RECORD ALL MENTIONED.	FAST BREATHING.....A DIFFICULT BREATHING.....B *NOISY BREATHING*.....C FEVER.....D UNABLE TO DRINK.....E NOT EATING/NOT DRINKING WELL.....F GETTING SICKER/VERY SICK.....G NOT GETTING BETTER.....H OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
469	CHECK 461, ALL COLUMNS: *NO CHILD* RECEIVED ORS ☐ — *QUESTION* NOT ASKED ☐ — *ANY CHILD* RECEIVED ORS ☐		→471
470	Have you ever heard of a special product called ORS you can get for the treatment of diarrhea?	YES.....1 NO.....2	
471	Have you fallen sick during the last 4 weeks?	YES.....1 NO.....2	→480
472	What is the type of most recent illness?	FEVER.....01 MALARIA.....02 CHEST PROBLEM.....03 JOINT BODY ACHE.....04 STOMACH PROBLEMS.....05 INJURIES.....06 EYES PROBLEM.....07 EARS PROBLEM.....08 TEETH PROBLEM.....09 GYNAECOLOGICAL PROBLEM.....10 ANTENATAL.....11 COUGH.....12 OTHER_____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
473	Where did you go for the last treatment?	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL....11 DISTRICT HOSPITAL.....12 HEALTH CENTRE.....13 DISPENSARY/PARASTATAL FACILITY..14 VILLAGE HEALTH POST/WORKER.....15 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV.DOCTOR/CLINIC/HOSPITAL.....22 PHARMACY/MEDICAL STORE.....23 CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 CHURCH.....32 FRIENDS/RELATIVES/NEIGHBORS.....33 OTHER_____ 96 (SPECIFY)	
474A	How long did it take to get there? (in minutes)	MINUTES.....	
474B	How many kilometers did you travel?	KILOMETERS.....	
475	Is there another health facility nearer your home than the one you went for treatment?	YES.....1 NO.....2 DOES NOT KNOW.....8	→477
476	What is the main reason you didn't go to the closer facility? CIRCLE ONE ONLY	WAS REFERRED HERE.....01 YOU HAVE TO PAY THERE.....02 NO DRUGS THERE.....03 NO DOCTOR THERE.....04 STAFF POOR THERE.....05 EMPLOYER DOES NOT PAY THERE.....06 OTHER FACILITY WOULD HAVE SENT HERE.....07 OTHER FACILITY WOULD NOT HAVE SEEN.....08 INCONVENIENT HOURS OF OPERATION...09 SERVICES I NEEDED NOT AVAILABLE...10 WAITING TIME TOO LONG.....11 OTHER_____96 (SPECIFY) DOES NOT KNOW.....98	
477	How do you rate the service you received from the facility where you went?	POOR.....1 FAIR.....2 GOOD.....3 EXCELLENT.....4 DOES NOT KNOW.....8	
478	How much did treatment cost you?	NO COST/EMPLOYER PAID.....00000	→480
	i. Transport cost	TRANSPORT COST.....	
	ii. Clinic fee	CLINIC FEE.....	
	iii. Cost of drugs	COST OF DRUGS.....	
	iv. Other expenses	OTHER EXPENSES.....	
479	Do you think the cost was too high, fair or too low?	HIGH.....1 FAIR.....2 LOW.....3 DOES NOT KNOW.....8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
480	Do you think that patients should be charged for each visit to raise funds for more drugs and other supplies for the facility?	YES.....1 NO.....2 DOES NOT KNOW.....8	
481	Do you ever go to a facility where you have to pay?	YES.....1 NO.....2	→483
482	Why not?	TOO EXPENSIVE.....1 TOO FAR.....2 OTHER_____6 (SPECIFY) DOES NOT KNOW.....8	→501
483	How often do you visit a health facility where you have to pay?	RARELY.....1 MOST OF THE TIME.....2 ALL OF THE TIME.....3 OTHER_____6 (SPECIFY) DOES NOT KNOW.....8	
484	For what service did you go there last time? CHOOSE ONE ONLY	CONSULTATION FOR ILLNESS.....01 MATERNITY SERVICES.....02 LABORATORY/X-RAY.....03 DRUGS.....04 FAMILY PLANNING.....05 ANTE-NATAL CARE.....06 IMMUNIZAION.....07 OTHER_____96 (SPECIFY) DOES NOT KNOW.....98	

SECTION 5. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	PRESENCE OF OTHERS AT THIS POINT.	YES NO CHILDREN UNDER 10.....1 2 HUSBAND/PARTNER.....1 2 OTHER MALES.....1 2 OTHER FEMALES.....1 2	
502	Are you currently married or living with a man?	YES, CURRENTLY MARRIED.....1 YES, LIVING WITH A MAN.....2 NO, NOT IN UNION.....3	→505
503	Have you ever been married or lived with a man?	YES.....1 NO.....2	→512
504	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED.....1 DIVORCED.....2 SEPARATED.....3	→509
505	Is your husband/partner living with you now or is he staying elsewhere?	LIVES WITH HER.....1 STAYING ELSEWHERE.....2	
506	Does your husband/partner have any other wives besides yourself?	YES.....1 NO.....2 DOESN'T KNOW.....8	→509
507	How many other wives does he have?	NUMBER..... DOES NOT KNOW.....98	→509
508	Are you the first, second,.....wife?	RANK.....	
509	Have you been married or lived with a man only once or more than once?	ONCE.....1 MORE THAN ONCE.....2	
510	In what month and year did you start living with your (first) husband/partner?	MONTH..... DOES NOT KNOW MONTH.....98 YEAR..... DOES NOT KNOW YEAR.....98	→512
511	How old were you when you started living with him?	AGE.....	
512	CHECK 502: MARRIED OR LIVING WITH A MAN ☐ NOT MARRIED AND NOT LIVING WITH A MAN ☐		→515
513	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family planning issues. When was the last time you had sexual intercourse with your husband?	DAYS AGO.....1 WEEKS AGO.....2 MONTHS AGO.....3 YEARS AGO.....4 BEFORE LAST BIRTH.....996	
514	For that sexual intercourse, was a condom used?	YES.....1 NO.....2	
515	Do you now have a regular partner (apart from your husband)? I mean someone with whom you have been having sex for about a year or more?	YES.....1 NO.....2	→517
516	How many such regular partners do you have (aside from your husband)?	NUMBER.....	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
516A	When was the last time you had sexual intercourse with the regular partner (other than your husband)?	DAYS AGO.....1 [ ][ ] WEEKS AGO.....2 [ ][ ] MONTHS AGO.....3 [ ][ ] YEARS AGO.....4 [ ][ ] BEFORE LAST BIRTH.....996	
516B	For that sexual intercourse, was a condom used?	YES.....1 NO.....2	
517	Have you had sexual intercourse with anyone (else) in the last 12 months? (I mean, with someone other than your husband or regular partner that you mentioned earlier?)	YES.....1 NO.....2	→524
518	With how many different people have you had sexual intercourse in the last 12 months (apart from your husband or regular partners)?	NUMBER..... [ ][ ]	
519	When was the last time you had sexual intercourse (apart from your husband/regular partner)?	DAYS AGO.....1 [ ][ ] WEEKS AGO.....2 [ ][ ] MONTHS AGO.....3 [ ][ ] YEARS AGO.....4 [ ][ ] BEFORE LAST BIRTH.....996	
520	For that last sexual intercourse, did you receive money, gifts or favours in return for sex?	YES.....1 NO.....2	
521	Was this person someone you had met before or someone you met for the first time?	MET BEFORE.....1 MET FOR FIRST TIME.....2	
522	Was a condom used for that last sexual intercourse?	YES.....1 NO.....2	→524
523	What was the main reason that you did not use a condom that time?	_____ _____	
524	CHECK 514, 516B OR 522: CONDOMS USED WITH HUSBAND OR PARTNER(S) ☐ DID NOT USE CONDOM WITH ANY ONE ☐		→524B
524A	Last time you used condom, where was that condom obtained? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL....11 DISTRICT HOSPITAL.....12 HEALTH CENTRE.....13 DISPENSARY/PARASTATAL FACILITY..14 VILLAGE HEALTH POST/WORKER.....15 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV.DOCTOR/CLINIC/HOSPITAL.....22 PHARMACY/MEDICAL STORE.....23 CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 CHURCH.....32 FRIENDS/RELATIVES/NEIGHBORS.....33 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
524B	Have you heard of a condom called 'Salama'?	YES.....1 NO.....2	
525	Now think back to the past. How old were you when you had sexual intercourse for the first time?	AGE..... [ ][ ] NEVER HAD SEX.....95 FIRST TIME WHEN MARRIED.....96	→601
526	In the last four weeks, how many times have you had sexual intercourse?	NUMBER OF TIMES..... [ ][ ] DOES NOT KNOW.....98	

SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK 311: NEITHER STERILISED ☐ — HE OR SHE STERILISED ☐		→612
602	CHECK 226: NOT PREGNANT OR UNSURE ☐ — PREGNANT ☐ NOT PREGNANT OR UNSURE: 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? PREGNANT: Now I have some questions about the future. After the child you are expecting, 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 SAYS SHE CAN'T GET PREGNANT.....3 UNDECIDED/DOES NOT KNOW.....8	→606 →604
603	CHECK 226: NOT PREGNANT OR UNSURE ☐ — PREGNANT ☐ NOT PREGNANT OR UNSURE: How long would you like to wait from now before the birth of (a/another) child? PREGNANT: How long would you like to wait after the birth of the child you are expecting before the birth of another child?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ SOON/NOW.....993 SAYS SHE CAN'T GET PREGNANT.....994 AFTER MARRIAGE.....995 OTHER _____ (SPECIFY) 996 DOES NOT KNOW.....998	→606
604	CHECK 226: NOT PREGNANT OR UNSURE ☐ — PREGNANT ☐		→607
605	If you became pregnant in the next few weeks, would you be happy, unhappy, or would it not matter very much?	HAPPY.....1 UNHAPPY.....2 WOULD NOT MATTER.....3	
606	CHECK 310: USING A METHOD? NOT ASKED ☐ — NOT CURRENTLY USING ☐ — CURRENTLY USING ☐		→612
607	Do you think you will use a method to delay or avoid pregnancy within the next 12 months?	YES.....1 NO.....2 DOES NOT KNOW.....8	→609
608	Do you think you will use a method at any time in the future?	YES.....1 NO.....2 DOES NOT KNOW.....8	→610
609	Which method would you prefer to use?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANT.....04 DIAPHRAGM/FOAM/JELLY.....05 CONDOM.....06 FEMALE STERILISATION.....07 MALE STERILISATION.....08 CALENDAR/SAFE PERIOD.....09 MUCUS METHOD.....10 WITHDRAWAL.....11 OTHER _____ (SPECIFY) 96 UNSURE.....98	→612

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
610	What is the main reason you think you will never use a method?	NOT MARRIED.....11 FERTILITY-RELATED REASONS INFREQUENT/NO SEX.....22 MENOPAUSAL/HYSTERECTOMY.....23 SUBFECUND/INFECUND.....24 WANTS MORE CHILDREN.....26 OPPOSITION TO USE RESPONDENT OPPOSED.....31 HUSBAND OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 NO OTHER REASON.....95 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	→612
611	Would you ever use a method if you were married?	YES.....1 NO.....2 DOES NOT KNOW.....8	
612	CHECK 216: HAS 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? NO LIVING CHILDREN ☐ → 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.	NUMBER..... ☐☐ OTHER_____ 96 (SPECIFY)	→614
613	How many of these children would you like to be boys and how many would you like to be girls?	BOYS NUMBER..... ☐☐ OTHER_____96 (SPECIFY) GIRLS NUMBER..... ☐☐ OTHER_____96 (SPECIFY) EITHER NUMBER..... ☐☐ OTHER_____96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
614	In general, do you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE.....1 DISAPPROVE.....2 NO OPINION.....8	→617
615	Have you ever recommended family planning to a friend, relative, or anyone else?	YES.....1 NO.....2	
616	If you wanted to get information on family planning, who would you like to talk to most: Family planning worker from your community? Health clinic staff? Traditional Birth Attendant (TBA)? Your husband or partner? Friend? Relative? Religious leader? Somebody else?	CBD WORKER.....01 CLINIC STAFF.....02 TBA.....03 HUSBAND/PARTNER.....04 FRIEND.....05 RELATIVE.....06 RELIGIOUS LEADERS.....07 OTHER _____96 (SPECIFY)	
617	Is it acceptable or not acceptable to you for information on family planning to be provided: On the radio? On the television?	ACCEPTABLE / NOT ACCEPTABLE / DK RADIO.....1 2 8 TELEVISION.....1 2 8	
618	In the last six months have you heard about family planning: On the radio? On the television? In a newspaper or magazine? From a poster? From billboards? At community events/logo launches From live drama? From a doctor or nurse? From a community health worker?	YES NO RADIO.....1 2 TELEVISION.....1 2 NEWSPAPER OR MAGAZINE.....1 2 POSTER.....1 2 BILLBOARDS.....1 2 COMMUNITY EVENT/LOGO LAUNCHES..1 2 LIVE DRAMA.....1 2 DOCTOR OR NURSE.....1 2 COMMUNITY HEALTH WORKER.....1 2	
619	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 6 months, have you listened to (NAME OF SERIES)? Zinduka Twende na Wakati Ukweli Kuhusu Maisha Other	YES SPONTANEOUS / YES PROBED / NO ZINDUKA.....1 2 3 TWENDE NA WAKATI.....1 2 3 UKWELI KUHUSU MAISHA.....1 2 3 OTHER.....1 2 3	
619A	CHECK 619: LISTENED TO ZINDUKA ☐ ↓ HAS NOT LISTENED TO ZINDUKA ☐		→619E
619B	How often do you listen to Zinduka?	TWICE A WEEK.....1 ONCE A WEEK.....2 ONCE OR TWICE A MONTH.....3 RARELY.....4 DOES NOT KNOW.....8	
619C	As a result listening to Zinduka, did you do anything or take any any action related to family planning?	YES.....1 NO.....2 DOES NOT KNOW.....8	→619E
619D	What did you do as a result of listening to Zinduka? RECORD ALL MENTIONED.	TALKED TO PARTNER.....A TALKED TO HEALTH WORKER.....B TALKED TO SOMEONE ELSE.....C VISITED A CLINIC FOR FAMILY PLANN..D BEGAN USING A MODERN METHOD.....E CONTINUED USING A MODERN METHOD....F OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
619E	CHECK 619: *LISTENED TO* TWENDE NA WAKATI ☐ ▼ *HAS NOT LISTENED TO* TWENDE NA WAKATI ☐		→620
619F	How often do you listen to Twende na Wakati?	TWICE A WEEK.....1 ONCE A WEEK.....2 ONCE OR TWICE A MONTH.....3 RARELY.....4 DOES NOT KNOW.....8	
620	In the last six months have you discussed family planning with your friends or relatives?	YES.....1 NO.....2	→622
621	With whom? Anyone else? RECORD ALL MENTIONED.	HUSBAND/PARTNER.....A MOTHER.....B FATHER.....C SISTER(S).....D BROTHER(S).....E DAUGHTER.....F SONS.....G MOTHER-IN-LAW.....H FRIENDS.....I OTHER_____ X (SPECIFY)	
622	CHECK 502 YES, CURRENTLY MARRIED ☐ ▼ YES, LIVING WITH A MAN ☐ ▼ NO, NOT IN A UNION ☐		→701
623	Spouses/partners do not always agree on everything. Now I want to ask you about your husband's/partner's views on family planning. Do you think that your husband/partner approves or *disapproves of couples using a method to avoid* pregnancy?	APPROVES.....1 DISAPPROVES.....2 DOES NOT KNOW.....8	
624	How often have you talked to your husband/partner *about family planning in the past year?*	NEVER.....1 ONCE OR TWICE.....2 MORE OFTEN.....3	
625	Have you and your husband/partner ever discussed the number of children you would like to have?	YES.....1 NO.....2	
626	Who mainly decides how many children should you have?	HERSELF.....1 HUSBAND.....2 BOTH.....3 OTHER_____ 6 (SPECIFY) DOES NOT KNOW.....8	
627	Do you think your husband/partner wants 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 DOES NOT KNOW.....8	

SECTION 7. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 502 AND 503 CURRENTLY MARRIED/ LIVING WITH A MAN ☐ FORMERLY MARRIED/ LIVED WITH A MAN ☐ NEVER MARRIED AND NEVER IN UNION ☐		→703 →708
702	How old was your husband/partner on his last birthday?	AGE..... ☐☐	
703	Did your (last) husband/partner ever attend school?	YES.....1 NO.....2	→705
704	What is the highest formal school he completed?	LESS THAN 1 YEAR.....00 STANDARD 1.....01 STANDARD 2.....02 STANDARD 3.....03 STANDARD 4.....04 STANDARD 5.....05 STANDARD 6.....06 STANDARD 7.....07 STANDARD 8.....08 FORM 1.....09 FORM 2.....10 FORM 3.....11 FORM 4.....12 FORM 5.....13 FORM 6.....14 UNIVERSITY.....15 OTHER_____ (SPECIFY) 96	
705	What is (was) your (last) husband/partner's occupation? That is, what kind of work does (did) he mainly do?	_____ ☐☐ _____ _____	
706	CHECK 705: WORKS (WORKED) IN AGRICULTURE ☐ DOES (DID) NOT WORK IN AGRICULTURE ☐		→708
707	(Does/did) your husband/partner work mainly on his own land or on family rent land, or borrow for share crop, government allocation, shifting cultivation land?	OWN LAND.....1 FAMILY RENT.....2 BORROW SHARE CROP.....3 GOVERNMENT ALLOCATION.....4 SHIFTING CULTIVATION.....5	
708	Aside from your own housework, are you currently working?	YES.....1 NO.....2	→710
709	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. Are you currently doing any of these things or any other work?	YES.....1 NO.....2	→801
710	Do you work for money for yourself, for someone else, or both?	HERSELF.....1 SOMEONE ELSE.....2 BOTH.....3	→720

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
711	How many employees are working for you?	NUMBER OF EMPLOYEES..... ☐☐ NONE.....97	
712	Do you work in agriculture, livestock, or poultry production?	YES.....1 NO.....2	
713	Do you collect and sell wild products like honey, nuts, firewood, etc ?	YES.....1 NO.....2	
714	Do you process food products for sale like pombe?	YES.....1 NO.....2	
715	Do you engage in a craft or skilled work such as tailoring, making bricks, pottery, etc for money?	YES.....1 NO.....2	
716	Do you do *any* other work for yourself such as own a shop or driving a taxi? IF YES, specify _____ (SPECIFY)	YES.....1 NO.....2	
717	CHECK 712 WORKS IN AGRICULTURE ☐ ▼ DOES NOT WORK IN AGRICULTURE ☐ → 719		
718	Do you work mainly on your own land or on family rent land, or borrow for share crop, government allocation, shifting cultivation land?	OWN LAND.....1 FAMILY RENT.....2 BORROW SHARE CROP.....3 GOVERNMENT ALLOCATION.....4 SHIFTING CULTIVATION.....5	
719	CHECK 710 WORKS FOR SOMEONE ELSE OR BOTH ☐ ▼ WORKS FOR HERSELF ☐ → 723		
720	You told me that you (also) work for someone else. Do you work for the government, for a private business, or a semi-government (parastatal) organization, or for family/friend?	GOVERNMENT.....1 PRIVATE.....2 SEMI-GOVERNMENT.....3 FAMILY/FRIEND.....4 DO NOT KNOW.....8	
721	Do you work in agriculture, I mean on a farm?	YES.....1 NO.....2	
722	Do you yourself receive money from the following: Money from friends/relatives? Pension? Rent? *Savings/Loans?*	YES NO FRIENDS/RELATIVES.....1 2 PENSION.....1 2 RENT.....1 2 SAVINGS/LOANS.....1 2	
723	CHECK 502: YES, CURRENTLY MARRIED OR LIVING WITH A MAN ☐ ▼ Who mainly decides how the money you earn will be used: you, your husband/partner, you and your husband/partner jointly, or someone else? NO, NOT IN UNION ☐ ▼ Who mainly decides how the money you earn will be used: you, someone else, or you and someone else jointly?	RESPONDENT DECIDES.....1 HUSBAND/PARTNER DECIDES.....2 JOINTLY WITH HUSBAND/PARTNER.....3 SOMEONE ELSE DECIDES.....4 JOINTLY WITH SOMEONE ELSE.....5	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 302 (06): HAS HEARD OF CONDOMS ☐ ▼ NEVER HEARD OF CONDOMS ☐		→809
802	CHECK 303 (06), 514, 516B, AND 522 HAS NEVER USED CONDOMS (ALL ARE 'NO') ☐ ▼ HAS USED CONDOMS (AT LEAST ONE 'YES') ☐		→804
803	Have you ever seen a condom?	YES.....1 NO.....2	
804	Do you know where you can get condoms?	YES.....1 NO.....2	→806
805	Where can you get condoms? CIRCLE ALL MENTIONED. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL.....A DISTRICT HOSPITAL.....B HEALTH CENTRE.....C DISPENSARY/PARASTATAL FACILITY...D VILLAGE HEALTH POST/WORKER.....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....F PRIV.DOCTOR/CLINIC/HOSPITAL.....G PHARMACY/MEDICAL STORE.....H CBD WORKER.....I OTHER PRIVATE SECTOR SHOP.....J CHURCH.....K FRIENDS/RELATIVES/NEIGHBORS.....L OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
806	How many times can a condom be used?	ONCE.....1 MORE THAN ONCE.....2 UNTIL IT BREAKS.....3 OTHER_____6 (SPECIFY) DOES NOT KNOW.....8	
808	In general, do you think that most women like men to use condoms, they don't like men to use condoms, or it does not matter?	LIKE MEN TO USE CONDOMS.....1 DON'T LIKE MEN TO USE CONDOMS.....2 DOES NOT MATTER.....3 OTHER_____6 (SPECIFY) DOES NOT KNOW.....8	
809	Have you heard about diseases that can be transmitted through sex?	YES.....1 NO.....2	→822
810	Which diseases do you know? (RECORD ALL DISEASES SHE MENTIONED)	SYPHILIS.....A GONORRHOEA.....B AIDS.....C GENITAL WARTS/CONDYLOMATA.....D OTHER_____X (SPECIFY) DON'T KNOW.....Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
811	CHECK 525: HAS HAD SEX ☐ ▼ HAS NEVER HAD SEX ☐		→822
812	During the last 12 months, did you have any of these diseases (MENTIONED IN Q.810)?	YES.....1 NO.....2 DON'T KNOW.....8	→822
813	*Which of the diseases did you have?* CIRCLE ALL MENTIONED.	SYPHILIS.....A GONORRHOEA.....B AIDS.....C GENITAL WARTS / CONDYLOMATA.....D OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
817	When you had this (DISEASE FROM Q.813) did you seek advice or treatment?	ADVICE /TREATMENT.....1 SELF TREATMENT.....2 *DID NOT DO ANYTHING*.....3	→819
818	Where did you seek advice or treatment? Any other place or person? RECORD ALL MENTIONED	GOVERNMENT AND PARASTATAL CONSULTANT HOSPITAL.....A REGIONAL HOSPITAL.....B DISTRICT HOSPITAL.....C HEALTH CENTRE.....D DISPENSARY.....E PARASTATAL HEALTH FACILITY.....F VILLAGE HEALTH POST/WORKER.....G MEDICAL PRIVATE SECTOR *RELIGIOUS ORG. FACILITY*.....H PRIV.DOCTOR/CLINIC/HOSPITAL.....I PHARMACY/MEDICAL STORE.....J UMATI CBD WORKER.....K OTHER PRIVATE SECTOR SHOP.....L CHURCH.....M *FRIENDS/RELATIVES/NEIGHBOURS*.....N OTHER_____ X (SPECIFY)	
818A	CHECK 502 AND 503 CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ▼ FORMERLY IN A UNION ☐ ▼ NEVER IN A UNION ☐		→822
819	*Did you tell your husband/partner that you had* (DISEASE(S) FROM 813)?	YES.....1 NO.....2	
820	When you had this (DISEASE(S) FROM 813) did you do something so as not to infect your partner?	YES.....1 NO.....2 PARTNER ALREADY INFECTED.....3	→822
821	What did you do? CIRCLE ALL MENTIONED.	NO SEXUAL INTERCOURSE.....A *USED CONDOMS*.....B TOOK MEDICINES.....C TOLD HIM TO GO FOR MEDICAL HELP...D OTHER_____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
822	CHECK 810: DID NOT MENTION AIDS OR QUESTION NOT ASKED ☐ MENTIONED 'AIDS' ☐		→824
823	Have you ever heard of an illness called AIDS?	YES.....1 NO.....2	→901
824	From which sources of information have you learned about AIDS? Any other sources? RECORD ALL MENTIONED.	RADIO.....A TV.....B NEWSPAPERS/MAGAZINES.....C PAMPLETS/POSTERS.....D HEALTH WORKERS.....E MOSQUES/CHURCHES.....F SCHOOLS/TEACHERS.....G COMMUNITY MEETINGS.....H FRIENDS/RELATIVES.....I WORK PLACE.....J OTHER_____X (SPECIFY)	
825	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	→827
826	What can a person do to avoid getting AIDS or the virus that causes AIDS? Any other ways? CIRCLE ALL MENTIONED	DO NOT HAVE SEX AT ALL.....A USE CONDOMS DURING SEX.....B DON'T HAVE SEX WITH PROSTITUTES...C DO NOT HAVE SEX WITH HOMOSEXUALS.....D DO NOT HAVE MANY SEX PARTNERS.....E HAVE ONLY ONE SEX PARTNER.....F AVOID BLOOD TRANSFUSIONS.....G AVOID INJECTIONS.....H DON'T HAVE CHILDREN.....I AVOID KISSING.....J AVOID MOSQUITO BITES.....K SEEK PROTECTION FROM TRADITIONAL HEALER.....L DO NOT DRINK TOO MUCH ALCOHOL.....M OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
827	Do you think a person can protect themselves from getting AIDS by:	YES NO DK	
	having a good diet?	GOOD DIET.....1 2 8	
	staying with one faithful partner?	STAY WITH ONE PARTNER.....1 2 8	
	avoid stepping on the urine or stool of a person with AIDS?	AVOID URINE OR STOOL.....1 2 8	
	using condoms?	USE CONDOMS.....1 2 8	
	avoiding touching a person who has AIDS?	DON'T TOUCH PERSON 1 2 8	
	not sharing eating utensils with a person with AIDS?	DON'T SHARE UTENSILS.....1 2 8	
	avoiding being bitten by mosquitos or other insects?	AVOID INSECT BITES.....1 2 8	
	making sure any injection they have is done with a clean needle?	INJECTION WITH CLEAN NEEDL 1 2 8	
828	Is it possible for a healthy-looking person to have the AIDS virus?	YES.....1 NO.....2 DOES NOT KNOW.....8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
829	Can AIDS be cured?	YES.....1 NO.....2 DOES NOT KNOW.....8	
830	Can AIDS be transmitted from mother to child?	YES.....1 NO.....2 DOES NOT KNOW.....8	→831
830A	How do you think that it can be transmitted? CIRCLE ALL MENTIONED	DURING PREGNANCY.....A DURING DELIVERY.....B THROUGH BREASTFEEDING.....C OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
831	*Does any member of your household have AIDS or* has any member of your household died of AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	→832
831A	Do you personally know someone who has AIDS or has died of AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	
832	Do you think your chances of getting AIDS are small, moderate, great, or no risk at all?	SMALL.....1 MODERATE.....2 GREAT.....3 NO RISK AT ALL.....4 DOES NOT KNOW.....8 HAS AIDS 9	→834 →834A →901
833	Why do you think that you have (NO RISK/ *A SMALL CHANCE) of getting AIDS?* Any other reasons? CIRCLE ALL MENTIONED	NO SEXUAL INTERCOURSE.....A *NO SEX WITH PROSTITUTES.....B* SLEEP ONLY WITH SPOUSE/PARTNER....C USE CONDOMS.....D NO INJECTIONS.....E NO BLOOD TRANSFUSIONS.....F OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	→834A
834	Why do you think that you have a (MODERATE/GREAT) chance of getting AIDS? Any other reasons? *CIRCLE ALL MENTIONED*	MULTIPLE PARTNERS.....A SEX WITH PROSTITUTES..... .....B SPOUSE HAS MULTIPLE PARTNERS.....C DO NOT USE CONDOMS.....D HAD INJECTIONS.....E HAD BLOOD TRANSFUSION.....F *OTHER*_____X (SPECIFY) *DOES NOT KNOW*.....Z	
834A	CHECK 811: HAS HAD SEX HAS NEVER HAD SEX		→838
835	Since you heard of AIDS, have you changed your sexual behaviour to prevent getting AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	→837

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
836	What did you do? Anything else? CIRCLE ALL MENTIONED	ONE PARTNER.....A STOPPED HAVING MANY SEX PARTNERS.....B STOPPED SEX WITH PROSTITUTES.....C STARTED USING CONDOMS.....D USED CONDOMS MORE OFTEN.....E →838 ABSTINENCE (STOPPED HAVING SEX WITH ANYONE).....F OTHER_____X (SPECIFY)	
837	Have you ever used a condom during sex to avoid getting or transmitting diseases, such as AIDS?	YES.....1 NO.....2	
838	Have you ever been tested to see if you have the AIDS virus?	YES.....1 →841A NO.....2 DOES NOT KNOW/NOT SURE.....8	
839	Would you like to be tested for the AIDS virus?	YES.....1 NO.....2 DOES NOT KNOW/NOT SURE.....8	
840	Do you know a place where you could go to get an AIDS test?	YES.....1 NO.....2 DOES NOT KNOW/NOT SURE.....8 →842	
841 841A	Where could you go? Where did you go?	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL.....A DISTRICT HOSPITAL.....B HEALTH CENTRE.....C DISPENSARY/PARASTATAL FACILITY...D VILLAGE HEALTH POST/WORKER.....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....F PRIV.DOCTOR/CLINIC/HOSPITAL.....G PHARMACY/MEDICAL STORE.....H CBD WORKER.....I OTHER PRIVATE SECTOR SHOP.....J CHURCH.....K FRIENDS/RELATIVES/NEIGHBOURS.....L OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
842	What do you suggest is the most important thing the government should do for people who have AIDS?	PROVIDE MEDICAL TREATMENT.....1 HELP RELATIVES PROVIDE CARE.....2 ISOLATE/QUARANTINE/JAIL PEOPLE.....3 NOT BE INVOLVED.....4 OTHER_____6 (SPECIFY)	
843	If a member of your family is suffering from AIDS would you be willing to care for him or her at home?	YES.....1 NO.....2 DEPENDS.....3 OTHER_____6 (SPECIFY) NOT SURE/DO NOT KNOW.....8	

SECTION 9. MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	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..... ☐☐	
902	CHECK 901: TWO OR MORE BIRTHS ☐	ONLY ONE BIRTH (RESPONDENT ONLY) ☐	→ 1001
903	How many of these births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS..... ☐☐	

904 What was the name given to your oldest (next oldest) brother or sister?	[1]	[2]	[3]	[4]	[5]	[6]
905 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
906 Is (NAME) still alive?	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [2]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [3]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [4]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [5]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [6]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [7]
907 How old is (NAME)?	GO TO [2]	GO TO [3]	GO TO [4]	GO TO [5]	GO TO [6]	GO TO [7]
908 In what year did (NAME) die?	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98
909 How many years ago did (NAME) die?						
910 How old was (NAME) when she/he 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]
911 Was (NAME) pregnant when she died?	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2
912 Did (NAME) die during childbirth?	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2
913 Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915
914 Was her death due to complications of 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
915 How many children did (NAME) give birth to during her lifetime?	GO TO [2]	GO TO [3]	GO TO [4]	GO TO [5]	GO TO [6]	GO TO [7]

IF NO MORE BROTHERS OR SISTERS, GO TO 1001

	[7]	[8]	[9]	[10]	[11]	[12]
904 What was the name given to your oldest (next oldest) brother or sister?	----------	----------	----------	----------	----------	----------
905 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
906 Is (NAME) still alive?	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [8]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [9]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [10]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [11]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [12]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [13]
907 How old is (NAME)?	GO TO [8]	GO TO [9]	GO TO [10]	GO TO [11]	GO TO [12]	GO TO [13]
908 In what year did (NAME) die?	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98
909 How many years ago did (NAME) die?						
910 How old was (NAME) when she/he 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]
911 Was (NAME) pregnant when she died?	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2
912 Did (NAME) die during childbirth?	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2
913 Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915
914 Was her death due to complications of 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
915 How many children did (NAME) give birth to during her lifetime?	GO TO [8]	GO TO [9]	GO TO [10]	GO TO [11]	GO TO [12]	GO TO [13]

IF NO MORE BROTHERS OR SISTERS, GO TO 1001

SECTION: 10 FEMALE CIRCUMCISION MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Are women circumcised in this area?	YES.....1 NO.....2 DOES NOT KNOW.....8	
1002	Have you ever been circumcised?	YES.....1 NO.....2	→1006
1003	What type of circumcision did you have? Did you have clitoridectomy, excision, or infibulation?	CLITORIDECTOMY.....1 EXCISION.....2 INFIBULATION.....3 OTHER_____6 (SPECIFY)	
1004	How old were you when you were circumcised?	AGE IN COMPLETED YEARS..... ☐☐ DOES NOT KNOW.....98	
1005	Who performed the circumcision?	DOCTOR.....1 TRAINED NURSE/MIDWIFE.....2 TRADITIONAL MIDWIFE.....3 CIRCUMCISION PRACTITIONER.....4 OTHER _____6 (SPECIFY) DOES NOT KNOW.....8	
1006	CHECK 214 AND 216:	HAS AT LEAST ONE LIVING DAUGHTER ☐ HAS NO LIVING DAUGHTER ☐	→1011
1007	Has (NAME OF ELDEST DAUGHTER) been circumcised?	YES.....1 NO.....2	→1011
1008	How old was she when she was circumcised?	AGE IN COMPLETED YEARS..... ☐☐ DOES NOT KNOW.....98	
1009	Who performed the circumcision?	DOCTOR.....1 TRAINED NURSE/MIDWIFE.....2 TRADITIONAL MIDWIFE.....3 CIRCUMCISION PRACTITIONER.....4 OTHER _____6 (SPECIFY) DOES NOT KNOW.....8	
1010	Did anyone object to your eldest daughter being circumcised? Anyone else? RECORD ALL PERSONS MENTIONED.	RESPONDENT.....A RESPONDENT'S HUSBAND.....B RESPONDENT'S MOTHER.....C RESPONDENT'S MOTHER-IN-LAW.....D OTHER RELATIVE OF RESPONDENT....E OTHER RELATIVE OF HUSBAND.....F OTHER_____X (SPECIFY)	
1011	RECORD THE TIME.	MORNING/AM.....1 HOUR..... ☐☐ AFTERNOON/PM...2 MINUTES... ☐☐	

WOM 42

SECTION 11. HEIGHT AND WEIGHT

1101	CHECK 215:	
	ONE OR MORE BIRTHS SINCE JAN. 1991	NO BIRTHS SINCE JAN. 1991 → END

INTERVIEWER: IN 1102 (COLUMNS 2-4) RECORD THE LINE NUMBER FOR EACH CHILD BORN SINCE JANUARY 1991 AND STILL ALIVE. IN 1103 AND 1104 RECORD THE NAME AND BIRTH DATE FOR THE RESPONDENT AND FOR ALL LIVING CHILDREN BORN SINCE JANUARY 1991. IN 1106 AND 1108 RECORD HEIGHT AND WEIGHT OF THE RESPONDENT AND THE LIVING CHILDREN. (NOTE: ALL RESPONDENTS WITH ONE OR MORE BIRTHS SINCE JANUARY 1991 SHOULD BE WEIGHED AND MEASURED EVEN *IF ALL OF THE CHILDREN HAVE DIED*. IF THERE ARE MORE THAN 3 LIVING CHILDREN BORN SINCE JANUARY 1991, USE ADDITIONAL FORMS).

	[1] RESPONDENT	[2] YOUNGEST LIVING CHILD	[3] NEXT-TO-YOUNGEST LIVING CHILD	[4] SECOND-TO-YOUNGEST LIVING CHILD
1102 LINE NO. FROM Q212				
1103 NAME FROM Q.212 FOR CHILDREN	(NAME)	(NAME)	(NAME)	(NAME)
1104 DATE OF BIRTH FROM Q.105 FOR RESPONDENT FROM Q.215 FOR CHILDREN, AND ASK FOR DAY OF BIRTH	MONTH.... YEAR.....	DAY..... MONTH.... YEAR.....	DAY..... MONTH.... YEAR.....	DAY..... MONTH.... YEAR.....
1105 BCG SCAR ON TOP OF RIGHT SHOULDER		SCAR SEEN.....1 NO SCAR.....2	SCAR SEEN.....1 NO SCAR.....2	SCAR SEEN.....1 NO SCAR.....2
1106 HEIGHT (*in centimeters*)	.	.	.	.
1107 WAS HEIGHT/LENGTH OF CHILD MEASURED WHILE CHILD WAS LYING DOWN OR STANDING UPRIGHT?		LYING.....1 STANDING.....2	LYING.....1 STANDING.....2	LYING.....1 STANDING.....2
1108 WEIGHT (in kilograms)	.	0 .	0 .	0 .
1109 DATE WEIGHED AND MEASURED	DAY..... MONTH.... YEAR.....	DAY..... MONTH.... YEAR.....	DAY..... MONTH.... YEAR.....	DAY..... MONTH.... YEAR.....
1110 RESULT	MEASURED.....1 NOT PRESENT....3 REFUSED.....4 OTHER.....6 (SPECIFY)	*CHILD MEASURED.1* CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED..4 MOTHER REFUSED.5 OTHER.....6 (SPECIFY)	*CHILD MEASURED.1* CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED..4 MOTHER REFUSED.5 OTHER.....6 (SPECIFY)	*CHILD MEASURED.1* CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED..4 MOTHER REFUSED.5 OTHER.....6 (SPECIFY)

1111 NAME OF MEASURER: _____ NAME OF ASSISTANT: _____

WOM 43

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: _____

WOM 44

UNITED REPUBLIC OF TANZANIA
BUREAU OF STATISTICS, PLANNING COMMISSION
TANZANIA DEMOGRAPHIC AND HEALTH SURVEY 2
MAN'S QUESTIONNAIRE

IDENTIFICATION

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER..... | | |

HOUSEHOLD NUMBER..... | | |

REGION _____ | |

DISTRICT _____ | |

WARD _____ | | |

ENUMERATION AREA _____ | | |

LARGE CITY=1; SMALL CITY*=2; TOWN=3; COUNTRYSIDE=4.... |

NAME AND LINE NUMBER OF MAN _____ | |

NAME AND LINE NUMBER OF FIRST WIFE _____ | |

NAME AND LINE NUMBER OF SECOND WIFE _____ | |

NAME AND LINE NUMBER OF THIRD WIFE _____ | |

NAME AND LINE NUMBER OF FOURTH WIFE _____ | |

*SMALL CITIES ARE: MWANZA, ARUSHA, MOROGORO, DODOMA, MOSHI, TANGA, IRINGA, MBEYA, & TABORA. ALL OTHER URBAN AREAS ARE TOWN.

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY
				MONTH
				YEAR 9 6
INTERVIEWER'S NAME	_____	_____	_____	ID NO.
RESULT*	_____	_____	_____	RESULT
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS
TIME	_____	_____		

* RESULT CODES:
1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 INCAPACITATED
7 OTHER _____ (SPECIFY)

TRANSLATOR USED (1=NOT AT ALL; 2=SOMETIME; 3=ALL THE TIME).... |

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	MORNING/AM....1 HOURS..... [ ][ ] AFTERNOON/PM..2 MINUTES.... [ ][ ]	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in Dar es Salaam city, another urban area or in a rural area?	DAR ES SALAAM.....1 OTHER URBAN AREA.....2 RURAL AREA/VILLAGE.....3	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	YEARS..... [ ][ ] ALWAYS.....95 VISITOR.....96 → 105	
104	Just before you moved here, did you live in Dar es Salaam city, another urban area or in a rural area?	DAR ES SALAAM.....1 OTHER URBAN AREA.....2 RURAL AREA/VILLAGE.....3	
105	In what month and year were you born?	MONTH..... [ ][ ] DOES NOT KNOW MONTH.....98 YEAR..... [ ][ ] DOES NOT KNOW YEAR.....98	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS..... [ ][ ]	
107	Can you read and write kiswahili easily, with difficulty, or not at all?	EASILY.....1 WITH DIFFICULTY.....2 NOT AT ALL.....3 → 109	
108	How often do you read a newspaper?	EVERY DAY/ALMOST EVERY DAY.....1 AT LEAST ONCE A WEEK.....2 AT LEAST ONCE A MONTH.....3 ONCE A MONTH.....4 HARDLY EVER/ACTUALLY NEVER.....5 DOES NOT KNOW.....8	
109	Have you ever attended school?	YES.....1 NO.....2 → 113	
110	What is the highest formal school you completed?	LESS THAN 1 YEAR.....00 STANDARD 1.....01 STANDARD 2.....02 STANDARD 3.....03 STANDARD 4.....04 STANDARD 5.....05 STANDARD 6.....06 STANDARD 7.....07 STANDARD 8.....08 FORM 1.....09 FORM 2.....10 FORM 3.....11 FORM 4.....12 FORM 5.....13 FORM 6.....14 UNIVERSITY.....15 OTHER _____ 96 (SPECIFY)	

MAN 2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	CHECK 106: AGE 24 OR BELOW ☐ ▼ AGE 25 OR ABOVE ☐ →		113
112	Are you currently attending school?	YES.....1 NO.....2	
113	How often do you listen to the radio?	EVERY DAY/ALMOST EVERY DAY.....1 AT LEAST ONCE A WEEK.....2 AT LEAST ONCE A MONTH.....3 ONCE A MONTH.....4 HARDLY EVER/ACTUALLY NEVER.....5 DOES NOT KNOW.....8	
114	Do you usually watch television at least once a week?	YES.....1 NO.....2	
115	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
116	CHECK 115: WORKS (WORKED) IN AGRICULTURE ☐ ▼ DOES (DID) NOT WORK IN AGRICULTURE ☐ →		118
117	Do you work mainly on your own land or on family rent land, or borrow for share crop, government allocation, or shifting cultivation land?	OWN LAND.....1 FAMILY RENT.....2 BORROW SHARE CROP.....3 GOVERNMENT ALLOCATION.....4 SHIFTING CULTIVATION.....5	
118	What is your religion?	MOSLEM.....1 CATHOLIC.....2 PROTESTANT.....3 NONE.....4 OTHER_____6 (SPECIFY)	
119	To which tribe do you belong? IF NOT A TANZANIAN CITIZEN, WRITE NAME OF COUNTRY.	_____ ☐☐☐	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the children you have had during your life. I mean your own children, not ones you may have adopted or care for as a father but whose real father is someone else. Do you have children?	YES.....1 NO.....2	→206
202	Do you have any sons or daughters who are 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 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 had a son or daughter who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but survived only a few hours or days?	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 ___ children during your life. Is that correct? YES ☐ NO ☐ → PROBE AND CORRECT 201-208 AS NEEDED		

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.*
CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 302, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 301 OR 302, ASK 303.

301 Which ways or methods have you heard about?	SPONTANEOUS YES	302 Have you ever heard of (METHOD)? PROBED YES	NO	303 Have you ever used (METHOD)?
01 PILL Women can take a pill every day.	1	2	3	YES.....1 NO.....2
02 IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	1	2	3	YES.....1 NO.....2
03 INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	1	2	3	YES.....1 NO.....2
04 IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for several years.	1	2	3	YES.....1 NO.....2
05 DIAPHRAGM,FOAM,JELLY Women can place a sponge, suppository, diaphragm, jelly, or cream inside themselves before intercourse.	1	2	3	YES.....1 NO.....2
06 CONDOM, RUBBER, RAINCOAT, DUREX A man can wear a rubber bag on his penis during sex to prevent pregnancy. The rubber bag is also used to prevent passing diseases such as AIDS and for cleanliness.	1	2	3	YES.....1 NO.....2
07 FEMALE STERILIZATION Women can have an operation to avoid having any more children.	1	2	3	Have you ever had a partner who had an operation to avoid having children? YES.....1 NO.....2
08 MALE STERILIZATION Men can have an operation to avoid having any more children.	1	2	3	Have you ever had an operation to avoid having any more children? YES.....1 NO.....2
09 CALENDAR/SAFE PERIOD Couples can have sexual intercourse only during the safe period of the monthly cycle that is the times during monthly cycle when women is least likely to get pregnant.	1	2	3	YES.....1 NO.....2
10 MUCUS METHOD A woman can observe daily the state of the mucus and avoid sexual intercourse at the time when the mucus is colorless and extremely elastic.	1	2	3	YES.....1 NO.....2
11 WITHDRAWAL Men can be careful and pull out before climax.	1	2	3	YES.....1 NO.....2
12 Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	1 (SPECIFY) (SPECIFY)		3	YES.....1 NO.....2 YES.....1 NO.....2

304 CHECK 303:
NOT A SINGLE "YES" (NEVER USED) ▼
AT LEAST ONE "YES" (EVER USED) → SKIP TO 307

MAN 5

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
305	Have you ever done anything or tried in any way to delay or avoid having a child?	YES.....1 NO.....2	→312
306	What have you used or done? CORRECT 303 AND 304 (AND 302 IF NECESSARY).		
307	Are you currently doing something or using any method to delay or avoid having a child?	YES.....1 NO.....2	→312
308	Which method are you using? RECORD FIRST, SECOND AND THIRD PARTNER IN SEPARATE COLUMNS.	1ST WIFE / 2ND WIFE / 3RD WIFE PILL.....01 / 01 / 01 IUD.....02 / 02 / 02 INJECTIONS.....03 / 03 / 03 IMPLANTS.....04 / 04 / 04 DIAPHRAGM/FOAM/JELLY...05 / 05 / 05 CONDOM.....06 / 06 / 06 FEMALE STERILIZATION...07 / 07 / 07 MALE STERILIZATION.....08 / 08 / 08 CALENDAR/SAFE METHOD...09 / 09 / 09 MUCUS METHOD.....10 / 10 / 10 WITHDRAWAL.....11 / 11 / 11 NO (OTHER) METHOD.....95 / 95 / 95 OTHER_____96 (SPECIFY) OTHER_____96 (SPECIFY) OTHER_____96 (SPECIFY)	
309	CHECK 308 (All COLUMNS): CONDOMS MARKED IN ANY COLUMN ☐ ▼ / CONDOMS NOT MARKED IN ANY COLUMN ☐		→315
310	Where did you obtain condoms the last time? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL....11 DISTRICT HOSPITAL.....12 HEALTH CENTRE.....13 DISPENSARY/PARASTATAL FACILITY..14 VILLAGE HEALTH POST/WORKER.....15 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV.DOCTOR/CLINIC/HOSPITAL.....22 PHARMACY/MEDICAL STORE.....23 CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 CHURCH.....32 FRIENDS/RELATIVES/NEIGHBORS.....33 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
311	What is the brand name of the condom you last used? RECORD NAME OF BRAND.	BRAND NAME _____ ☐☐ DOES NOT KNOW.....98	→315

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
312	What is the main reason you are not using a method of contraception to avoid pregnancy?	NOT MARRIED.....11 FERTILITY-RELATED REASONS *NOT HAVING SEX*.....21 INFREQUENT SEX.....22 WIFE MENOPAUSAL/HYSTERECTOMY....23 WIFE SUBFECUND/INFECUND.....24 POSTPARTUM/BREASTFEEDING.....25 WANTS (MORE) CHILDREN.....26 WIFE PREGNANT.....27 OPPOSITION TO USE *RESPONDENT OPPOSED*.....31 WIFE/PARTNER OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 *METHOD-RELATED REASONS* HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 *UP TO THE WOMAN TO USE*.....61 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
313	Do you know of a place where you can obtain a method of family planning?	YES.....1 NO.....2	→315
314	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL....11 DISTRICT HOSPITAL.....12 HEALTH CENTRE.....13 DISPENSARY/PARASTATAL FACILITY..14 VILLAGE HEALTH POST/WORKER.....15 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV.DOCTOR/CLINIC/HOSPITAL.....22 PHARMACY/MEDICAL STORE.....23 CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 CHURCH.....32 FRIENDS/RELATIVES/NEIGHBORS.....33 OTHER_____ 96 (SPECIFY)	
315	Have you seen or heard of the Green Star Logo (Symbol)?	YES.....1 NO.....2 DOESN'T KNOW.....8	→401
316	What does the Green Star Logo mean to you?	FAMILY PLANNING RELATED.....1 NOT FAMILY PLANNING RELATED.....2 DOESN'T KNOW.....8	
317	*How did you learn about the Green Star?* CIRCLE ALL MENTIONED.	*BILLBOARDS*.....A BUS.....B POSTERS.....C LEAFLETS.....D RADIO.....E CLINIC SIGN.....F SERVICE PROVIDER.....G OTHER_____X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	PRESENCE OF OTHERS AT THIS POINT.	YES NO CHILDREN UNDER 10.....1 2 HUSBAND/PARTNER.....1 2 OTHER MALES.....1 2 OTHER FEMALES.....1 2	
402	Are you currently married or living with a woman?	YES, CURRENTLY MARRIED.....1 YES, LIVING WITH A WOMAN.....2 NO, NOT IN UNION.....3	→407
403	Have you ever been married or lived with a woman?	YES.....1 NO.....2	→412
404	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED.....1 DIVORCED.....2 SEPARATED.....3	→410
407	How many wives do you have?	NUMBER..... DOES NOT KNOW.....98	
410	In what month and year did you start living with your (first) wife/partner?	MONTH..... DOES NOT KNOW MONTH.....98 YEAR..... DOES NOT KNOW YEAR.....98	→412
411	How old were you when you started living with her?	AGE.....	
412	CHECK 402: MARRIED OR LIVING WITH A WOMAN ☐ NOT MARRIED AND NOT LIVING WITH A WOMAN ☐		→415
413	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family planning issues. When was the last time you had sexual intercourse with your wife?	DAYS AGO.....1 WEEKS AGO.....2 MONTHS AGO.....3 YEARS AGO.....4 BEFORE LAST BIRTH.....996	
414	For that sexual intercourse, did you use a condom?	YES.....1 NO.....2	
415	Do you now have a regular partner (apart from your wife)? I mean someone with whom you have been having sex for about a year or more?	YES.....1 NO.....2	→417
416	How many such regular partners do you have (aside from your wife)?	NUMBER.....	
416A	When was the last time you had sexual intercourse with the regular partner (other than your wife)?	DAYS AGO.....1 WEEKS AGO.....2 MONTHS AGO.....3 YEARS AGO.....4 BEFORE LAST BIRTH.....996	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
416B	Did you use a condom for that sexual intercourse?	YES.....1 NO.....2	
417	Have you had sexual intercourse with anyone (else) in the last 12 months? (I mean, with someone other than your wife or regular partner that you mentioned earlier?)	YES.....1 NO.....2	→424
418	With how many different women have you had sexual intercourse in the last 12 months (apart from your wife or regular partners)?	NUMBER OF WOMEN.....	
419	When was the last time you had sexual intercourse (apart from your wife/regular partner)?	DAYS AGO.....1 WEEKS AGO.....2 MONTHS AGO.....3 YEARS AGO.....4 BEFORE LAST BIRTH.....996	
420	For that last sexual intercourse, did you give money, gifts or favours in return for sex?	YES.....1 NO.....2	
421	Was this person someone you had met before or someone you met for the first time?	MET BEFORE.....1 MET FOR FIRST TIME.....2	
422	Did you use a condom for that last sexual intercourse?	YES.....1 NO.....2	→424
423	What was the main reason that you did not use a condom that time?	_____ _____	
424	CHECK 414, 416B OR 422: CONDOMS USED WITH WIFE OR PARTNER(S) ☐ ▼ DID NOT USE CONDOM WITH ANY ONE ☐		→424B
424A	Last time you used condom, where was that condom obtained? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL....11 DISTRICT HOSPITAL.....12 HEALTH CENTRE.....13 DISPENSARY/PARASTATAL FACILITY..14 VILLAGE HEALTH POST/WORKER.....15 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV.DOCTOR/CLINIC/HOSPITAL.....22 PHARMACY/MEDICAL STORE.....23 CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 CHURCH.....32 FRIENDS/RELATIVES/NEIGHBORS.....33 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
424B	Have you heard of a condom called 'Salama'?	YES.....1 NO.....2	
425	Now think back to the past. How old were you when you had sexual intercourse for the first time?	AGE..... NEVER HAD SEX.....95 FIRST TIME WHEN MARRIED.....96	→501
426	In the last four weeks, how many times have you had sexual intercourse?	NUMBER OF TIMES..... DOES NOT KNOW.....98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 402, 415, AND 425 CURRENTLY IN UNION OR HAVING A REGULAR PARTNER ☐ ↓ NOT CURRENTLY IN UNION NOR HAVING A REGULAR PARTNER OR NEVER HAD SEX ☐		→504A
502	Spouses/partners do not always agree on everything. Now I want to ask you about your wife's/partner's views on family planning. Do you think that your wife/partner approves or disapproves of couples using a method to avoid pregnancy?	WIFE 1 / WIFE 2 / WIFE 3 / WIFE 4 APPROVES.....1 — 1 / 1 / 1 / 1 DISAPPROVES....2 — 2 / 2 / 2 / 2 DOES NOT KNOW..8 — 8 / 8 / 8 / 8	
503	Do you think your wife/partner wants the same number of children that you want, or does she want more or fewer than you want?	WIFE 1 / WIFE 2 / WIFE 3 / WIFE 4 SAME NUMBER.....1 — 1 / 1 / 1 / 1 MORE CHILDREN....2 — 2 / 2 / 2 / 2 FEWER CHILDREN...3 — 3 / 3 / 3 / 3 DOES NOT KNOW....8 — 8 / 8 / 8 / 8	
503A	How often have you talked to your wife/partner about family planning in the past year?	WIFE 1 / WIFE 2 / WIFE 3 / WIFE 4 NEVER.....1 — 1 / 1 / 1 / 1 ONCE OR TWICE....2 — 2 / 2 / 2 / 2 MORE OFTEN.....3 — 3 / 3 / 3 / 3 DOES NOT KNOW....8 — 8 / 8 / 8 / 8	
503B	Have you and your wife/partner ever discussed the number of children you would like to have?	WIFE 1 / WIFE 2 / WIFE 3 / WIFE 4 YES.....1 — 1 / 1 / 1 / 1 NO.....2 — 2 / 2 / 2 / 2 DOES NOT KNOW....8 — 8 / 8 / 8 / 8	
503C	Who mainly decides how many children should you have?	WIFE 1 / WIFE 2 / WIFE 3 / WIFE 4 HIMSELF.....1 — 1 / 1 / 1 / 1 WIFE/PARTNER.....2 — 2 / 2 / 2 / 2 BOTH.....3 — 3 / 3 / 3 / 3 OTHER.....6 — 6 / 6 / 6 / 6 DOES NOT KNOW....8 — 8 / 8 / 8 / 8	
504A	CHECK 308 NEITHER STERILISED ☐ ↓ HE OR SHE STERILISED ☐		→506
504B	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 HIS WIFE CAN'T GET PREGNANT.....3 HE CAN'T HAVE CHILDREN ANYMORE.....4 UNDECIDED OR DOES NOT KNOW.....8	→506
505	How long would you like to wait before the birth of (a/another) child?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ SOON/NOW.....993 SHE OR HE CAN'T HAVE CHILDREN....994 AFTER MARRIAGE.....995 OTHER_____ 996 (SPECIFY) DOES NOT KNOW.....998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
506	CHECK 307: USING A METHOD? NOT ASKED ☐ NOT CURRENTLY USING ☐ CURRENTLY USING ☐		→512
507	Do you intend to use a method to delay or avoid pregnancy within the next 12 months?	YES.....1 NO.....2 DOES NOT KNOW.....8	→509
508	Do you intend to use a method at any time in the future?	YES.....1 NO.....2 DOES NOT KNOW.....8	→510
509	Which method would you prefer to use?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 DIAPHRAGM/FOAM/JELLY.....05 CONDOM.....06 FEMALE STERILISATION.....07 MALE STERILISATION.....08 CALENDAR/SAFE PERIOD.....09 MUCUS METHOD.....10 WITHDRAWAL.....11 OTHER_____ 96 (SPECIFY) UNSURE.....98	→512
510	What is the main reason you think you will never use a method?	NOT MARRIED.....11 FERTILITY-RELATED REASONS INFREQUENT/NO SEX.....22 MENOPAUSAL/HYSTERECTOMY.....23 SUBFECUND/INFECUND.....24 WANTS MORE CHILDREN.....26 OPPOSITION TO USE RESPONDENT OPPOSED.....31 HUSBAND OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 NO OTHER REASON.....95 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	→512
511	Would you ever use a method if you were married?	YES.....1 NO.....2 DOES NOT KNOW.....8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
512	CHECK 203 AND 205: HAS 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? NO LIVING CHILDREN ☐ — 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.	NUMBER..... ☐☐ OTHER _____ (SPECIFY) 96	→514
513	How many of these children would you like to be boys and how many would you like to be girls?	BOYS NUMBER..... ☐☐ OTHER _____ (SPECIFY) 96 GIRLS NUMBER..... ☐☐ OTHER _____ (SPECIFY) 96 EITHER NUMBER..... ☐☐ OTHER _____ (SPECIFY) 96	
514	In general, do you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE.....1 DISAPPROVE.....2 NO OPINION.....8	→517
515	Have you ever recommended family planning to a friend, relative, or anyone else?	YES.....1 NO.....2	
516	If you wanted to get information on family planning, who would you like to talk to most: Family planning worker from your community? Traditional Birth Attendant (TBA)? Your wife or partner? Friend? Relative? Religious leader? Somebody else?	CBD WORKER.....01 TBA.....02 WIFE/PARTNER.....03 FRIEND.....04 RELATIVE.....05 RELIGIOUS LEADERS.....06 OTHER _____ (SPECIFY) 96	
517	Is it acceptable or not acceptable to you for information on family planning to be provided: On the radio? On the television?	ACCEPTABLE / NOT ACCEPTABLE / DK RADIO.....1 2 8 TELEVISION.....1 2 8	
518	In the last six months have you heard about family planning: On the radio? On the television? In a newspaper or magazine? From a poster? From billboards? At community events/logo launches From live drama? From a doctor or nurse? From a community health worker?	YES / NO RADIO.....1 2 TELEVISION.....1 2 NEWSPAPER OR MAGAZINE.....1 2 POSTER.....1 2 BILLBOARDS.....1 2 COMMUNITY EVENT/LOGO LAUNCHES..1 2 LIVE DRAMA.....1 2 DOCTOR OR NURSE.....1 2 COMMUNITY HEALTH WORKER.....1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
519	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 6 months, have you listened to (NAME OF SERIES)? Zinduka Twende na Wakati Ukweli Kuhusu Maisha Other	YES SPONTANEOUS / YES PROBED / NO ZINDUKA.....1 2 3 TWENDE NA WAKATI.....1 2 3 UKWELI KUHUSU MAISHA.....1 2 3 OTHER.....1 2 3	
519A	CHECK 519: LISTENED TO ZINDUKA ☐ / HAS NOT LISTENED TO ZINDUKA ☐		→519E
519B	How often do you listen to Zinduka?	TWICE A WEEK.....1 ONCE A WEEK.....2 ONCE OR TWICE A MONTH.....3 RARELY.....4 DOES NOT KNOW.....8	
519C	As a result of listening to Zinduka, did you do anything or take any any action related to family planning?	YES.....1 NO.....2 DOES NOT KNOW.....8	→519E
519D	What did you do as a result of listening to Zinduka? Anything else? RECORD ALL MENTIONED.	TALKED TO PARTNER.....A TALKED TO HEALTH WORKER.....B TALKED TO SOMEONE ELSE.....C VISITED A CLINIC FOR FAMILY PLANN..D BEGAN USING A MODERN METHOD.....E CONTINUED USING A MODERN METHOD....F OTHER_____ X (SPECIFY) DOES NOT KNOW.....Z	
519E	CHECK 519: LISTENED TO TWENDE NA WAKATI ☐ / HAS NOT LISTENED TO TWENDE NA WAKATI ☐		→520
519F	How often do you listen to Twende na Wakati?	TWICE A WEEK.....1 ONCE A WEEK.....2 ONCE OR TWICE A MONTH.....3 RARELY.....4 DOES NOT KNOW.....8	
520	In the last six months have you discussed family planning with your friends or relatives?	YES.....1 NO.....2	→601
521	With whom? Anyone else? RECORD ALL MENTIONED.	WIFE/PARTNER.....A MOTHER.....B FATHER.....C SISTER(S).....D BROTHER(S).....E DAUGHTER.....F SONS.....G MOTHER-IN-LAW.....H FRIENDS.....I OTHER_____ X (SPECIFY)	

SECTION 6. AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK 302 (06): HAS HEARD OF CONDOMS ☐ NEVER HEARD OF CONDOMS ☐		→609
602	CHECK 303 (06), 414, 416B AND 422 HAS NEVER USED CONDOMS (ALL ARE 'NO') ☐ HAS USED CONDOMS (AT LEAST ONE 'YES') ☐		→604
603	Have you ever seen a condom?	YES.....1 NO.....2	
604	Do you know where you can get condoms?	YES.....1 NO.....2	→606
605	Where can you get condoms? Any other places? CIRCLE ALL MENTIONED. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL.....A DISTRICT HOSPITAL.....B HEALTH CENTRE.....C DISPENSARY/PARASTATAL FACILITY...D VILLAGE HEALTH POST/WORKER.....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....F PRIV.DOCTOR/CLINIC/HOSPITAL.....G PHARMACY/MEDICAL STORE.....H CBD WORKER.....I OTHER PRIVATE SECTOR SHOP.....J CHURCH.....K FRIENDS/RELATIVES/NEIGHBORS.....L OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
606	How many times can a condom be used?	ONCE.....1 MORE THAN ONCE.....2 UNTIL IT BREAKS.....3 OTHER_____6 (SPECIFY) DOES NOT KNOW.....8	
607	Do you think that using condoms can give you AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	
608	In general, do you think that most women like men to use condoms, they don't like men to use condoms, or it does not matter?	LIKE MEN TO USE CONDOMS.....1 DON'T LIKE MEN TO USE CONDOMS.....2 DOES NOT MATTER.....3 OTHER_____6 (SPECIFY) DOES NOT KNOW.....8	
609	Have you heard about diseases that can be transmitted through sex?	YES.....1 NO.....2	→611
610	Which diseases do you know? Any other diseases?	SYPHILIS.....A GONORRHOEA.....B AIDS.....C GENITAL WARTS/CONDYLOMATA.....D OTHER_____X (SPECIFY) DON'T KNOW.....Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
611	CHECK 425: HAS HAD SEX ☐ ▼ HAS NEVER HAD SEX ☐		→613A
612	During the last 12 months, did you have any of these diseases?	YES.....1 NO.....2 DON'T KNOW.....8	→622
613	Which of these diseases? CIRCLE ALL MENTIONED.	SYPHILIS.....A GONORRHOEA.....B AIDS.....C GENITAL WARTS / CONDYLOMATA.....D OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
613A	During the last twelve months, did you have a discharge from your penis?	YES.....1 NO.....2 DOES NOT KNOW.....8	
613B	During the last twelve months, did you have a sore or ulcer on your penis?	YES.....1 NO.....2 DOES NOT KNOW.....8	
613C	CHECK 612, 613A, AND 613B HAD ONE OR MORE DISEASES ☐ ▼ NONE OF THE DISEASES ☐		→622
617	When you had this (DISEASE FROM Q.613) did you seek advice or treatment?	ADVICE /TREATMENT.....1 SELF TREATMENT.....2 DID NOT DO ANYTHING.....3	→619
618	Where did you seek advice or treatment? Any other place or person? RECORD ALL MENTIONED	GOVERNMENT AND PARASTATAL CONSULTANT HOSPITAL.....A REGIONAL HOSPITAL.....B DISTRICT HOSPITAL.....C HEALTH CENTRE.....D DISPENSARY.....E PARASTATAL HEALTH FACILITY.....F VILLAGE HEALTH POST/WORKER.....G MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....H PRIV.DOCTOR/CLINIC/HOSPITAL.....I PHARMACY/MEDICAL STORE.....J UMATI CBD WORKER.....K OTHER PRIVATE SECTOR SHOP.....L CHURCH.....M FRIENDS/RELATIVES/NEIGHBOURS.....N OTHER_____ X (SPECIFY)	
619	Did you tell your wife/partner that you had this (disease/discharge/sore)?	YES.....1 NO.....2	
620	When you had this disease, did you do something so as not to infect your partner?	YES.....1 NO.....2 PARTNER ALREADY INFECTED.....3	→622
621	What did you do? CIRCLE ALL MENTIONED.	NO SEXUAL INTERCOURSE.....A USED CONDOMS.....B TOOK MEDICINES.....C TOLD HIM TO GO FOR MEDICAL HELP...D OTHER_____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
622	CHECK 610: DID NOT MENTION AIDS OR QUESTION NOT ASKED ☐ MENTIONED 'AIDS' ☐ →624		
623	Have you ever heard of an illness called AIDS?	YES.....1 NO.....2 →701	
624	From which sources of information have you learned about AIDS? Any other sources? RECORD ALL MENTIONED.	RADIO.....A TV.....B NEWSPAPERS/MAGAZINES.....C PAMPLETS/POSTERS.....D HEALTH WORKERS.....E MOSQUES/CHURCHES.....F SCHOOLS/TEACHERS.....G COMMUNITY MEETINGS.....H FRIENDS/RELATIVES.....I WORK PLACE.....J OTHER_____X (SPECIFY)	
625	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8 →627	
626	What can a person do to avoid getting AIDS or the virus that causes AIDS? Any other ways? CIRCLE ALL MENTIONED	DO NOT HAVE SEX AT ALL.....A USE CONDOMS DURING SEX.....B DON'T HAVE SEX WITH PROSTITUTES...C DO NOT HAVE SEX WITH HOMOSEXUALS.....D DO NOT HAVE MANY SEX PARTNERS.....E HAVE ONLY ONE SEX PARTNER.....F AVOID BLOOD TRANSFUSIONS.....G AVOID INJECTIONS.....H MOTHERS DON'T HAVE CHILDREN.....I AVOID KISSING.....J AVOID MOSQUITO BITES.....K SEEK PROTECTION FROM TRADITIONAL HEALER.....L DO NOT DRINK TOO MUCH ALCOHOL.....M OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
627	Do you think a person can protect themselves from getting AIDS by:	YES NO	
	having a good diet?	GOOD DIET.....1 2	
	staying with one faithful partner?	STAY WITH ONE PARTNER.....1 2	
	avoid stepping on the urine or stool of a person with AIDS?	AVOID URINE OR STOOL.....1 2	
	using condoms?	USE CONDOMS.....1 2	
	avoiding touching a person who has AIDS?	DON'T TOUCH PERSON WITH AIDS...1 2	
	not sharing eating utensils with a person with AIDS?	DON'T SHARE UTENSILS.....1 2	
	avoiding being bitten by mosquitoes or insects?	AVOID INSECT BITES.....1 2	
	making sure any injection they have is done with a clean needle?	INJECTION WITH CLEAN NEEDLE....1 2	
628	Is it possible for a healthy-looking person to have the AIDS virus?	YES.....1 NO.....2 DOES NOT KNOW.....8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
629	Can AIDS be cured?	YES.....1 NO.....2 DOES NOT KNOW.....8	
630	Can AIDS be transmitted from mother to child?	YES.....1 NO.....2 DOES NOT KNOW.....8	2 → 631
630A	How do you think that it can be transmitted? CIRCLE ALL MENTIONED	DURING PREGNANCY.....A DURING DELIVERY.....B THROUGH BREASTFEEDING.....C OTHER_____ (SPECIFY) X DOES NOT KNOW.....Z	
631	Does any member of your household have AIDS or has any member of your household died of AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	1 → 632
631A	Do you personally know someone who has AIDS or has died of AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	
632	Do you think your chances of getting AIDS are small, moderate, great, or no risk at all?	SMALL.....1 MODERATE.....2 GREAT.....3 NO RISK AT ALL.....4 DOES NOT KNOW.....8 HAS AIDS.....9	2, 3 → 634 8 → 634A 9 → 701
633	Why do you think that you have (NO RISK/ A SMALL CHANCE) of getting AIDS? Any other reasons? CIRCLE ALL MENTIONED	NO SEXUAL INTERCOURSE.....A NO SEX WITH PROSTITUTES.....B SLEEP ONLY WITH SPOUSE/PARTNER....C USE CONDOMS.....D NO INJECTIONS.....E NO BLOOD TRANSFUSIONS.....F OTHER_____ (SPECIFY) X DOES NOT KNOW.....Z	A–F, X, Z → 634A
634	Why do you think that you have a (MODERATE/GREAT) chance of getting AIDS? Any other reasons? CIRCLE ALL MENTIONED	MULTIPLE PARTNERS.....A SEX WITH PROSTITUTES.....B SPOUSE HAS MULTIPLE PARTNERS.....C DO NOT USE CONDOMS.....D HAD INJECTIONS.....E HAD BLOOD TRANSFUSION.....F OTHER_____ (SPECIFY) X DOES NOT KNOW.....Z	
634A	CHECK 425: HAS HAD SEX ▼ HAS NEVER HAD SEX → 638		
635	Since you heard of AIDS, have you changed your sexual behaviour to prevent getting AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	2 → 637

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
636	What did you do? Anything else? CIRCLE ALL MENTIONED	ONE PARTNER.....A STOPPED HAVING MANY SEX PARTNERS.....B STOPPED SEX WITH PROSTITUTES.....C STARTED USING CONDOMS.....D USED CONDOMS MORE OFTEN.....E ABSTINENCE (STOPPED HAVING SEX WITH ANYONE).....F OTHER_____X (SPECIFY)	→638
637	Some people use a condom during sexual intercourse to avoid getting AIDS or other sexually transmitted diseases. Have you ever used a condom during sex to avoid getting or transmitting diseases, such as AIDS?	YES.....1 NO.....2	
638	Have you ever been tested to see if you have the AIDS virus?	YES.....1 NO.....2 DOES NOT KNOW/NOT SURE.....8	→641A
639	Would you like to be tested for the AIDS virus?	YES.....1 NO.....2 DOES NOT KNOW/NOT SURE.....8	
640	Do you know a place where you could go to get an AIDS test?	YES.....1 NO.....2 DOES NOT KNOW/NOT SURE.....8	→642
641 641A	Where could you go? Where did you go?	GOVERNMENT AND PARASTATAL REGIONAL/CONSULTANT HOSPITAL.....A DISTRICT HOSPITAL.....B HEALTH CENTRE.....C DISPENSARY/PARASTATAL FACILITY...D VILLAGE HEALTH POST/WORKER.....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....F PRIV.DOCTOR/CLINIC/HOSPITAL.....G PHARMACY/MEDICAL STORE.....H CBD WORKER.....I OTHER PRIVATE SECTOR SHOP.....J CHURCH.....K FRIENDS/RELATIVES/NEIGHBOURS.....L OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
642	What do you suggest is the most important thing the government should do for people who have AIDS?	PROVIDE MEDICAL TREATMENT.....1 HELP RELATIVES PROVIDE CARE.....2 ISOLATE/QUARANTINE/JAIL PEOPLE.....3 NOT BE INVOLVED.....4 OTHER_____6 (SPECIFY)	
643	If a member of your family is suffering from AIDS would you be willing to care for him or her at home?	YES.....1 NO.....2 DEPENDS.....3 OTHER_____6 (SPECIFY) NOT SURE/DO NOT KNOW.....8	

SECTION 7. MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	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..... ☐☐	
702	CHECK 701: TWO OR MORE BIRTHS ☐	ONLY ONE BIRTH (RESPONDENT ONLY) ☐	→ 716
703	How many of these births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS..... ☐☐	

704 What was the name given to your oldest (next oldest) brother or sister?	[1]	[2]	[3]	[4]	[5]	[6]
705 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
706 Is (NAME) still alive?	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [2]	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [3]	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [4]	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [5]	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [6]	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [7]
707 How old is (NAME)?	GO TO [2]	GO TO [3]	GO TO [4]	GO TO [5]	GO TO [6]	GO TO [7]
708 In what year did (NAME) die?	19 GO TO 710 DK.....98	19 GO TO 710 DK.....98	19 GO TO 710 DK.....98	19 GO TO 710 DK.....98	19 GO TO 710 DK.....98	19 GO TO 710 DK.....98
709 How many years ago did (NAME) die?						
710 How old was (NAME) when she/he 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]
711 Was (NAME) pregnant when she died?	YES.....1 GO TO 714 NO.....2	YES.....1 GO TO 714 NO.....2	YES.....1 GO TO 714 NO.....2	YES.....1 GO TO 714 NO.....2	YES.....1 GO TO 714 NO.....2	YES.....1 GO TO 714 NO.....2
712 Did (NAME) die during childbirth?	YES.....1 GO TO 715 NO.....2	YES.....1 GO TO 715 NO.....2	YES.....1 GO TO 715 NO.....2	YES.....1 GO TO 715 NO.....2	YES.....1 GO TO 715 NO.....2	YES.....1 GO TO 715 NO.....2
713 Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES.....1 NO.....2 GO TO 715	YES.....1 NO.....2 GO TO 715	YES.....1 NO.....2 GO TO 715	YES.....1 NO.....2 GO TO 715	YES.....1 NO.....2 GO TO 715	YES.....1 NO.....2 GO TO 715
714 Was her death due to complications of 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
715 How many children did (NAME) give birth to during her lifetime?	GO TO [2]	GO TO [3]	GO TO [4]	GO TO [5]	GO TO [6]	GO TO [7]

IF NO MORE BROTHERS OR SISTERS, STOP

	[7]	[8]	[9]	[10]	[11]	[12]
704 What was the name given to your oldest (next oldest) brother or sister?	----------	----------	----------	----------	----------	----------
705 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
706 Is (NAME) still alive?	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [8]	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [9]	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [10]	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [11]	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [12]	YES.....1 NO.....2 GO TO 708 DK.....8 GO TO [13]
707 How old is (NAME)?	GO TO [8]	GO TO [9]	GO TO [10]	GO TO [11]	GO TO [12]	GO TO [13]
708 In what year did (NAME) die?	19 GO TO 710 DK.....98	19 GO TO 710 DK.....98	19 GO TO 710 DK.....98	19 GO TO 710 DK.....98	19 GO TO 710 DK.....98	19 GO TO 710 DK.....98
709 How many years ago did (NAME) die?						
710 How old was (NAME) when she/he 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]
711 Was (NAME) pregnant when she died?	YES.....1 GO TO 714 NO.....2	YES.....1 GO TO 714 NO.....2	YES.....1 GO TO 714 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 714 NO.....2	YES.....1 GO TO 714 NO.....2
712 Did (NAME) die during childbirth?	YES.....1 GO TO 715 NO.....2	YES.....1 GO TO 715 NO.....2	YES.....1 GO TO 715 NO.....2	YES.....1 GO TO 715 NO.....2	YES.....1 GO TO 715 NO.....2	YES.....1 GO TO 715 NO.....2
713 Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES.....1 NO.....2 GO TO 715	YES.....1 NO.....2 GO TO 715	YES.....1 NO.....2 GO TO 715	YES.....1 NO.....2 GO TO 715	YES.....1 NO.....2 GO TO 715	YES.....1 NO.....2 GO TO 715
714 Was her death due to complications of 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
715 How many children did (NAME) give birth to during her lifetime?	GO TO [8]	GO TO [9]	GO TO [10]	GO TO [11]	GO TO [12]	GO TO [13]

IF NO MORE BROTHERS OR SISTERS, GO TO 716

716	RECORD THE TIME.	MORNING/AM.....1 AFTERNOON/PM...2	HOUR..... MINUTES...

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: _____

MAN 22