Tanzania

Demographic and Health Survey 1991/1992

Bureau of Statistics
Planning Commission

DHS

Demographic and Health Surveys
Macro International Inc.

Tanzania Demographic and Health Survey 1991/1992

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This report summarises the findings of the 1991/1992 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. Core funds for the TDHS were provided by the U.S. Agency for International Development in Washington through the worldwide Demographic and Health Surveys programme. Additional funding was provided by USAID/Tanzania.

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 (Telephone 051-22722/5; Fax 051-36364). Additional information about the DHS programme may be obtained by writing to: DHS, Macro International Inc., 8850 Stanford Boulevard, Suite 4000, Columbia, MD 21045, USA (Telephone 410-290-2800; Fax 410-290-2999).

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ACRONYMS

ARI	Acute Respiratory Infections
BCG	Bacillus Calmette-Guerin (vaccine)
BMI	Body Mass Index
CBR	Crude Birth Rate
CCM	Chama Cha Mapinduzi (political party)
CDC	Centers for Disease Control
CDD	Control of Diarrhoeal Diseases
DHS	Demographic and Health Surveys
DPT	Diphtheria - Poliomyelitis - Tetanus (vaccine)
EA	Enumeration Area
EPI	Expanded Programme of Immunization
GDP	Gross Domestic Product
IEC	Information, Education, and Communication
ISSA	Integrated System for Survey Analysis
IUD	Intra-Uterine Device
MCH/FP	Maternal and Child Health/Family Planning
NACP	National AIDS Control Programme
NCHS	National Center for Health Statistics
NFPP	National Family Planning Programme
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PHC	Primary Health Care
SD	Standard Deviation
TBA	Traditional Birth Attendant
TDHS	Tanzania Demographic and Health Survey
TFR	Total Fertility Rate
UN	United Nations
UMATI	Family Planning Association of Tanzania
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organisation

PREFACE

The Tanzania Demographic and Health Survey (TDHS) involved all areas of the country and was a truly representative survey that aimed at collecting data on fertility, mortality, family planning, and health of the Tanzanians.

The survey is part of a worldwide undertaking that aims at assessing the changing demographic and health situation in many developing countries. This effort has, for some time, been coordinated and continues to be coordinated by the Demographic and Health Surveys programme of Macro International Inc., of Columbia, Maryland, USA. A decision to join the programme was made sometime in mid-1990; preparations began in July 1990, and the survey was executed between October 1991 and March 1992. The data processing arrangement, particularly the use of the ISSA (Integrated System for Survey Analysis) package, was done simultaneously with the fieldwork, and the tabulations were done a few months after the fieldwork was completed.

Tanzania has a long history of census taking which dates as far back as 1910 when the first count was taken. However, the first modern census was not taken until 1948 under the East African Commission; subsequent censuses were undertaken in 1957, 1967, 1978, and 1988. During the period between 1948 and 1988 only one demographic survey was carried out at a national level, in 1973 (the National Demographic Survey). Vital registration, which is a very important source of fertility and mortality information, is more or less nonexistent, though efforts are now being made to expand and improve the system to cover the whole country instead of just a small section of the urban population. Given this background, the Tanzania Demographic and Health Survey represents yet another milestone in an effort to collect high-quality data on the demographic situation, family planning, and health.

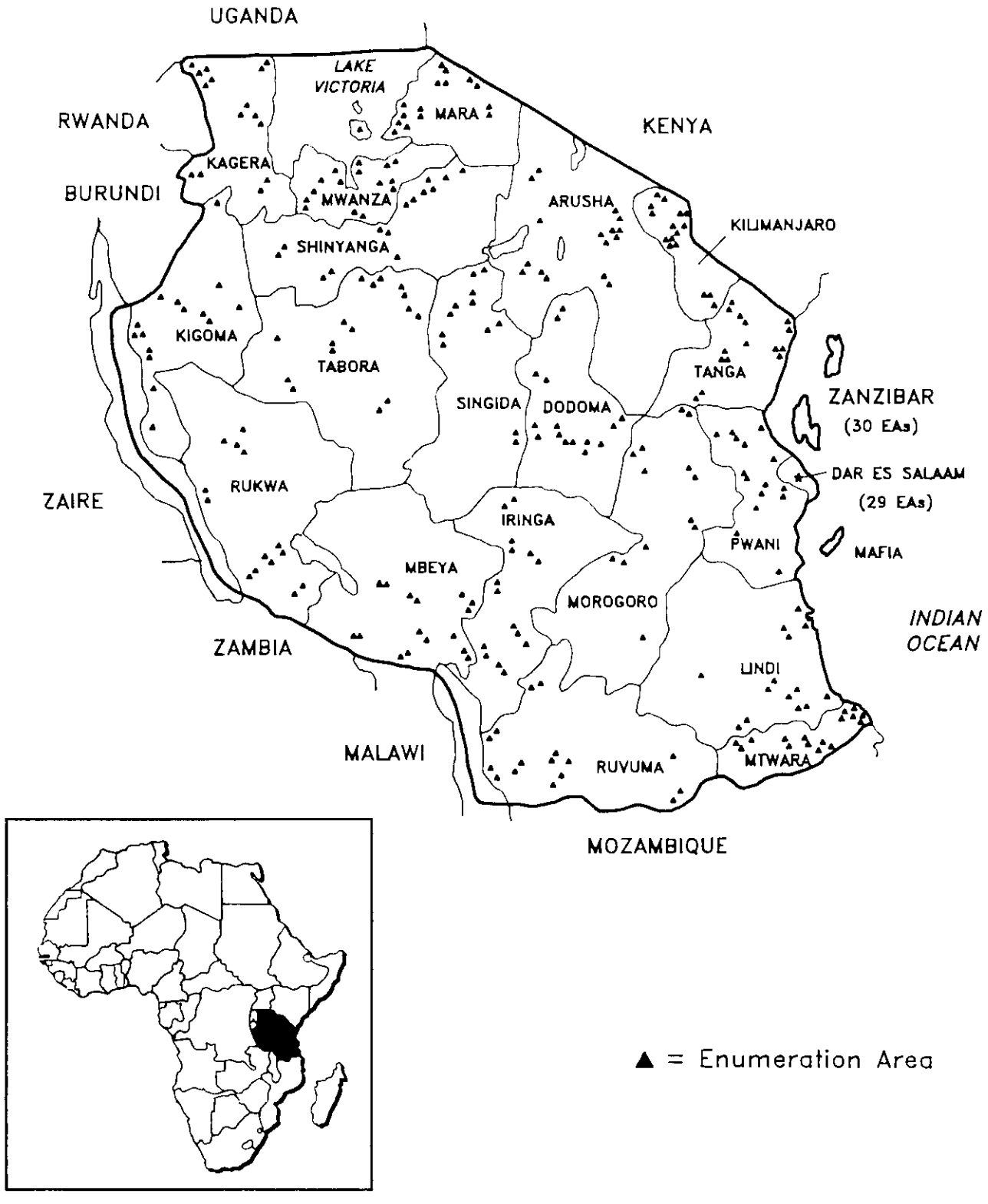
The successful completion of the TDHS and publication of this volume is due to the contributions of many people. First, I wish to thank the National Family Planning Project staff for their decision to assign the work to the Bureau of Statistics and provide the field interviewers. To the nurses who worked tirelessly throughout the survey period, I acknowledge with gratitude their valuable contributions to the survey. They endured many logistical and technical difficulties while in the field. Likewise, I would also like to extend my sincere appreciation to the Tanzania Food and Nutrition Centre for their valuable assistance in rendering free training services during the training of the interviewers. The great efforts that were made by the Census Office staff in supervising and running the survey are highly commended.

At this juncture, I wish to acknowledge here the immeasurable contributions of the following international agencies who participated in one way or another in the operation of the survey. The U.S. Agency for International Development facilitated the work by providing funds for the entire project. The Demographic and Health Surveys division of Macro International Inc. of Columbia, Maryland, initiated the idea of the survey and provided the needed technical as well as material and moral support during the entire period of the survey. Special acknowledgement is due to Ms. Anne Cross for her efforts in convincing the Government of Tanzania to conduct this survey, to Ms. Naomi Rutenberg who acted as the country coordinator, to Ties Boerma who worked tirelessly to put the survey in its present final form, and to all the staff who participated in some way in bringing this work to its successful conclusion. My sincere appreciation is also extended to the UN agencies, UNFPA and UNICEF, which played a very vital role in providing advice, particularly in determining the items to be included in the survey.

Last but not least, I wish to convey my sincere thanks to the Party and 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. The publication of this report is clear evidence of their contributions to the survey.

N.K. Mbalilaki
GOVERNMENT STATISTICIAN

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
PWANI
MAFIA
MBEYA
MOROGORO
INDIAN OCEAN
ZAMBIA
LINDI
MALAWI
RUVUMA
MTWARA
MOZAMBIQUE
▲ = Enumeration Area

CHAPTER 1

INTRODUCTION

1.1 History, Geography, and Economy

Geography

The United Republic of Tanzania is the largest country in East Africa, covering 940,000 square kilometers, 60,000 of which is inland water. Tanzania lies south of the Equator and shares borders with 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 large 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 is Tanzania's largest river and drains into the Indian Ocean south of Dar es Salaam. Of all the rivers in Tanzania, only the Rufiji and the Kagera are navigable by anything larger than a canoe.

One of Tanzania's most distinctive geological features is the Great Rift Valley, which was caused by 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; 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 in altitude, and much of the country is higher than 1000 metres above sea level. In the north, Mount Kilimanjaro rises to over 5000 metres with the highest peak, Kibo, reaching 5,895 metres. This is the highest point in Africa. 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 during November/December. The main rainy season along the coast and the areas around Mt. 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 between March and May.

Administratively, Tanzania mainland is divided into 20 regions, and Zanzibar into five. The regions are subdivided into districts.

History

Tanganyika became an independent nation from British rule on December 9th, 1961. One year later, on December 9th, 1962, it became a republic, severing all links with the British crown except for its membership in the Commonwealth. Zanzibar became independent on January 12th, 1964, after the overthrow of the rule of the Sultanate. On April 26th, 1964, Tanganyika and Zanzibar joined 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 3.8 percent in 1991 compared to 3.6 percent in 1990 and 3.3 percent in 1989. Economic growth in the last 5 years follows the implementation of structural adjustment policies over the last 7-8 years.

The economic growth rate attained in 1991 is higher than the annual population growth rate of 2.8 percent. However, as in the previous years, it is lower than the targeted growth rates of 4.5 and 5.0 percent as envisioned in the Second Economic Recovery Programme and the Second Five-Year Development Plan, respectively.

1.2 Population

The 1967 Tanzania census reported a total population of 12.3 million. According to the 1988 census the population had increased to 23.1 million (see 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 kilometer; by 1988 it had increased to 26 persons per square kilometer.

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. Life expectancy rose from 41 years in 1967 to 48 years in 1988. The intercensal growth rate between 1978 and 1988 was 2.8 percent, compared to 3.2 percent between 1967 and 1978.

Table 1.1 Demographic indicators, Tanzania, 1967, 1978, and 1988

Indicator	Census		
	1967	1978	1988
Population (millions)	12.3	17.5	23.1
Density (pop./sq.km)	14	20	26
Percent urban	6.39	13.78	18.33
Crude birth rate	47	49	46
Crude death rate	24.4	19.0	15.0
Total fertility rate	6.6	6.9	6.5
Infant mortality rate (per 1000)	155	137	115
Life expectancy at birth	41	44	48

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. At this rate of growth, it is estimated that by the year 2000 the population will be about 33 million. However, the national economy did not grow significantly in the last decade due to various constraints, and the resources available per head declined by between 7.5-10 percent during 1980-1985 and increased by 1.0 percent per annum between 1985 and 1991. As in other countries in sub-Saharan Africa, rapid population growth has been associated with poor economic performance. The consequences of rapid population growth are felt acutely and visibly in the public budgets for health, education, and related fields of human resource development. It is obvious that expansion of and improvements in the quality of these services is unlikely to happen without first controlling the rapid population growth.

It is against this background that Tanzania formulated the 1992 National Population Policy. The major objective of this policy is to reinforce national development by developing available resources in order to improve the quality of life of the people. The main emphasis is regulation of population growth and improvement of the health and welfare of women and children.

With specific reference to family planning, the goals of the policy are to lower the annual population growth rate through a reduction in the numbers of births and an increase in voluntary fertility regulation. 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 as well as women.

Family Planning

The Family Planning Association of Tanzania (UMATI) introduced family planning services to Tanzania in 1959. During the early years most services were concentrated in the urban areas. With the expansion of UMATI in the early seventies, services were extended to cover all regions in the country. The government became actively involved in service provision in 1974 following the launching of the integrated Maternal and Child Health (MCH) programme. Although family planning services were provided as part of the integrated programme, contraceptive use continued to be low in the country. In 1984, the government started a National Childspacing Programme with support from the United Nations Population Fund (UNFPA). Evaluation of the National Childspacing Programme in 1987 indicated only a slight increase in contraceptive prevalence and identified lack of trained service providers and poor logistic support as the major constraints to expansion of services.

The findings and recommendations from this evaluation were used to plan a five-year National Family Planning Programme (NFFP). The implementation of this programme began in 1989 with the broad objective of raising the contraceptive acceptance rate from about 7 to 25 percent by 1993. Other specific objectives of the programme are to:

- Improve the quality of family planning services through training of service providers, improvement of supervision, and upgrading of the logistic system,
- Improve accessibility of family planning services by increasing the proportion of health units providing family planning services,
- Improve general health of mothers and children, and
- Raise awareness and demand for family planning services.

1.4 Health Priorities and Programmes

The government of Tanzania emphasises equity in the distribution of health services and views access to services as a basic human right. In response to the worldwide efforts to attain the social goal of "Health for 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. As the primary objectives, the PHC strategy focuses on strengthening district management capacity, multisectoral collaboration, and community involvement. At the central, regional, and district level, PHC steering committees have been established.

About 60 percent of health services are provided by the government and the remainder are provided by nongovernmental organisations. Tanzania has an extensive network of health facilities. At the national level there are four major referral hospitals, one of which is the university teaching hospital. Most regions have a regional hospital and there are a total of 152 hospitals in 106 districts. At the divisional level there

are about 273 rural health centres and at the ward level there are about 3000 dispensaries. At the village level there are village health posts staffed by two village health workers. It is estimated that there are currently around 5550 village health workers in the country.

1.5 Objectives and Organisation of the Survey

The Tanzania Demographic and Health Survey (TDHS) is a national sample survey of women of reproductive ages (15-49) and men aged 15 to 60. The survey was designed to collect data on socio-economic characteristics, marriage patterns, birth history, breastfeeding, use of contraception, immunisation of children, accessibility to health and family planning services, treatment of children during times of illness, and the nutritional status of children and their mothers.

The TDHS is part of a worldwide programme that is being funded by the United States Agency for International Development (USAID). The primary objectives of the TDHS were to:

- Collect data for the evaluation of family planning and health programmes,
- Determine the contraceptive prevalence rate, which will help in the design of future national family planning programmes, and
- Assess the demographic situation of the country.

The TDHS involved various institutions and individuals. The Bureau of Statistics had the responsibility of running the project and the Ministry of Health provided technical advice and logistical support. Local UNFPA and UNICEF offices provided advisory and logistic support.

Financial support was provided by USAID and administered by Macro International. The funds were used to meet expenses related to salaries, allowances for survey personnel, data processing, anthropometric equipment, printing of questionnaires, maintenance of vehicles, fuel, and publication of reports. The Bureau of Statistics provided ten vehicles for the fieldwork and its supervision.

The entire work was under the supervision of the survey director who was closely assisted by survey statisticians and the field teams. The supervisors were recruited from both the Bureau of Statistics and the Planning Commission. The Ministry of Health provided male and female nurses who worked as field interviewers. The Census Office prepared the sample frame in conjunction with a sampling expert from Macro International. The questionnaire design and translation (into Kiswahili), the pretest, and the training for the main survey were carried out by the survey statisticians.

1.6 Fieldwork

The TDHS field staff consisted of eight teams, each composed of six female interviewers and one male interviewer, a field editor, a supervisor and a driver. Interviewers were recruited from the Ministry of Health and all of them were trained nurses. The fieldwork was conducted during the rainy season (between October 1991 and March 1992). The persons involved in the survey are listed in Appendix A, and a detailed account of the fieldwork is presented in Appendix B.

Table 1.2 shows the results of the household and individual interviews. Out of the 9282 households selected for interview, 8561 households could be located and 8327 were actually interviewed. The shortfall between selected and interviewed households was largely due to the fact that many dwellings were either vacant or destroyed or no competent respondents were present at the time of the interview. A total of 9647 eligible women (i.e., women age 15-49 who spent the night before the interview in a sampled household)

were identified for interview, and 9238 women were actually interviewed (96 percent response rate). The main reason for non-interview was absence from the home or incapacitation.

The TDHS male survey covered men aged between 15 and 60 years who were living in selected households (every fourth household of the female survey). The results of the survey show that 2392 eligible men were identified and 2114 men were interviewed (88 percent response rate). Men were generally not interviewed because they were either incapacitated or not at home during the time of the survey.

Table 1.2 Results of the household and individual interviews

Number of households, number of interviews, and response rates, Tanzania 1991/92

Result	Total
Household interviews	
Households sampled	9282
Households found	8561
Households interviewed	8327
Household response rate	97.3
Individual interviews	
Number of eligible women	9647
Number of eligible women interviewed	9238
Eligible women response rate	95.8
Number of eligible men	2392
Number of eligible men interviewed	2114
Eligible men response rate	88.3

CHAPTER 2

CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

Information on the background characteristics of the households interviewed in the survey and the individual survey respondents is essential for the interpretation of survey findings, and provides a rough measure of the representativeness of the survey. This chapter presents this information in three sections:

- Characteristics of the household population,
- Housing characteristics, and
- Background characteristics of survey respondents.

2.1 Characteristics of the Household Population

The TDHS collected information on all usual residents and visitors who spent the previous night in the household. A household was defined as a person or a group of persons living together and sharing a common source of food.

Age

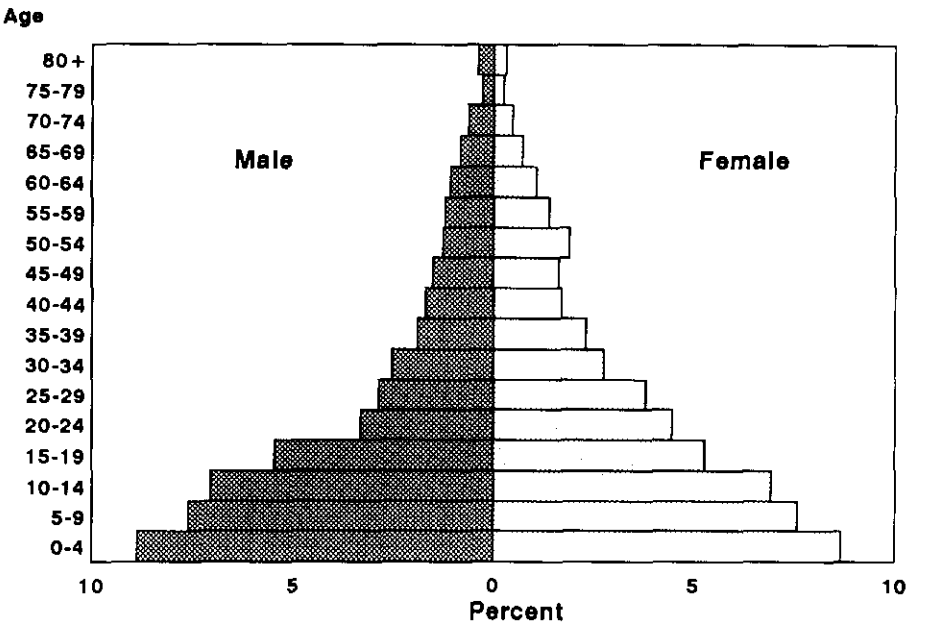
The age distribution of the household population in the TDHS is shown in Table 2.1 and Figure 2.1 by five-year age groups. This distribution conforms to the pattern typical of high-fertility populations, i.e., a much higher proportion of the population is in the younger age groups than in the older age groups.

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 1991/92

	Urban			Rural			Total		
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	17.0	14.6	15.8	18.6	17.6	18.1	18.2	16.9	17.6
5-9	13.4	14.0	13.7	16.2	15.0	15.6	15.6	14.8	15.2
10-14	13.8	12.0	12.9	14.8	13.9	14.3	14.5	13.5	14.0
15-19	12.6	13.0	12.8	10.8	9.6	10.2	11.2	10.3	10.8
20-24	8.1	10.8	9.4	6.5	8.2	7.4	6.8	8.7	7.8
25-29	7.0	9.0	8.0	5.6	7.0	6.3	5.9	7.4	6.7
30-34	5.7	6.5	6.1	5.0	5.1	5.1	5.2	5.4	5.3
35-39	4.1	4.5	4.3	3.9	4.5	4.2	3.9	4.5	4.2
40-44	4.2	2.9	3.6	3.3	3.4	3.3	3.5	3.3	3.4
45-49	4.1	3.1	3.6	2.8	3.2	3.0	3.1	3.2	3.1
50-54	3.1	3.4	3.3	2.5	3.7	3.1	2.6	3.7	3.2
55-59	2.3	1.7	2.0	2.5	2.9	2.7	2.5	2.7	2.6
60-64	2.3	1.9	2.1	2.2	2.1	2.2	2.2	2.1	2.1
65-69	0.9	1.0	1.0	1.9	1.6	1.7	1.7	1.4	1.6
70-74	0.5	0.7	0.6	1.5	0.9	1.2	1.3	0.9	1.1
75-79	0.3	0.4	0.4	0.7	0.6	0.6	0.6	0.5	0.6
80 +	0.3	0.4	0.4	1.0	0.6	0.8	0.8	0.6	0.7
Missing/Don't know	0.2	0.0	0.1	0.2	0.1	0.1	0.2	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4732	4717	9449	16439	17540	33978	21170	22257	43427

Figure 2.1
Population Pyramid of Tanzania



TDHS 1991/92

Table 2.2 shows that the population age structure found in the TDHS is very similar to that in the 1967, 1978, and 1988 population censuses. Dependency ratios are also shown. The age dependency ratio is the ratio of the number of persons age 0 to 14 and 65 and over divided by the number of persons age 15 to 64. It is an indicator of the dependency responsibility of adults in their productive years.

Table 2.2 Population by age from selected sources

Percent distribution of the population by age group, selected sources, Tanzania 1991/92

Age group	Census 1967	Census 1978	Census 1988	TDHS 1991/92
Less than 15	43.9	46.1	45.8	46.8
15-64	50.5	49.7	49.9	49.2
65+	5.6	4.0	4.2	3.9
Total	100.0	100.0	100.0	100.0
Median age	-	-	-	16.4
Dependency ratio	1.03	1.00	1.01	0.97

Source: Bureau of Statistics, 1967; 1978; 1988

The dependency ratios in Tanzania are typical of those found in other African countries. With approximately 47 percent of the population below age 15 and approximately 4 percent above 64, there is roughly one dependent person for each adult in the population. However, old age dependency is minimal compared to child dependency.

Household Composition

Table 2.3 presents the percent distribution of households by sex of head of household, size, and relationship structure and indicates whether the household includes fostered children, according to urban/rural residence. According to the TDHS data, the large majority of households in Tanzania are headed by males (81 percent), which is somewhat higher than the 1988 census figure (70 percent; Bureau of Statistics, 1992).

Table 2.3 Household composition

Percent distribution of households by sex of head of household, household size, relationship structure, and presence of foster children, according to urban-rural residence and region, Tanzania 1991/92

Characteristic	Mainland				Zanzibar	Total
	Total	Dar es Salaam	Other urban	Rural		
Household headship						
Male	75.5	82.9	81.5	83.0	77.6	81.4
Female	24.5	17.1	18.5	17.0	22.4	18.6
Number of usual members						
1	13.0	7.2	9.0	18.9	9.0	9.0
2	12.9	9.6	10.4	13.1	11.7	10.5
3	14.4	12.2	12.6	12.2	15.1	12.7
4	12.0	14.5	14.0	13.4	12.4	13.9
5	12.2	13.2	13.0	11.9	15.8	13.1
6	7.1	11.9	10.8	9.0	12.5	10.9
7	8.3	10.9	10.0	5.2	8.7	10.0
8	7.5	6.6	6.8	6.4	6.2	6.7
9+	12.7	13.9	13.4	9.8	8.7	13.2
Mean size	4.9	5.5	5.3	4.4	4.8	5.3
Relationship structure						
One adult	19.2	12.4	14.3	22.6	18.0	14.5
Two related adults:						
Of opposite sex	28.6	37.7	35.5	29.3	41.5	35.7
Of same sex	8.3	3.4	4.6	7.5	4.3	4.6
Three or more related adults	39.5	43.8	42.5	36.2	32.7	42.2
Other	4.0	2.6	3.0	4.4	3.5	3.0
Foster children[1]	23.3	23.2	22.8	16.7	31.5	23.1

Note: Table is based on de jure members, i.e., usual residents.
[1]Foster children are those under age 15 living in households with neither their mother nor their father present.

The average household size for the country is 5.3 persons per household. Rural households are generally larger than urban households (5.5 versus 4.4 for Dar es Salaam and 4.9 for other urban areas). The proportion of single-person households was relatively higher in Dar es Salaam and other urban areas than in the rural areas.

About 23 percent of households include one or more children under age 15 who have neither their natural mother nor father living with them (i.e., foster children). The highest proportion of households with foster children (32 percent) is found in Zanzibar and the lowest (17 percent) in rural areas.

Education

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 student enrolment and the number of new institutions. In 1970 a nationwide mass literacy program was launched and in 1975 a national policy of Universal Primary Education was adopted which gave every child the right to free primary education. 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 also incorporates two stages, it differs slightly from the mainland system. Primary education is entered at age 6-8 years and takes 8 years to complete. It is followed by two three-year cycles of secondary school.

In the TDHS, information on educational attainment was collected for every member of the household. Tables 2.4.1 and 2.4.2 show the percent distribution of the de facto male and female household population age 5 and over, respectively, by highest level of education attended according to age, residence, and region. It appears that 37 percent of males and 48 percent of females have never been to school (see also Figure 2.2). Fifty-eight percent of males and 49 percent of females have attended only primary school, and 4 percent of males and 2 percent of females have attended secondary school. A very small proportion of males and females (less than 1 percent) have received higher education. The levels of education by age show a pronounced increase in levels of education during the past decades. Progress in eradicating illiteracy in Tanzania would probably be even greater if nonformal education programmes (adult literacy programmes) were taken into account.

The proportion of both males and females with no education is highest in Zanzibar, followed by rural areas. However, Zanzibar also has the highest proportion of people with completed primary education. At the regional level, Kilimanjaro has the lowest proportion of people with no education and the highest percentage with primary education.

Table 2.4.1 Educational level of the female household population

Percent distribution of the de facto female household populations age five and over by highest level of education attended, according to selected background characteristics, Tanzania 1991/92

Background characteristic	No education	Primary incomplete	Completed primary	Some secondary/ Higher	Don't know/ Missing	Total	Number of persons	Median number of years
Age								
5-9	83.2	16.5	0.0	0.0	0.3	100.0	3300	0.0
10-14	22.3	77.5	0.2	0.0	0.0	100.0	3013	3.2
15-19	14.8	78.9	6.3	0.0	0.0	100.0	2297	7.2
20-24	16.4	75.9	7.6	0.0	0.1	100.0	1939	7.3
25-29	28.1	67.6	3.4	0.6	0.2	100.0	1653	7.1
30-34	43.7	51.3	4.0	0.7	0.3	100.0	1206	3.5
35-39	55.9	41.7	2.1	0.2	0.1	100.0	1012	0.0
40-44	60.4	38.0	1.3	0.2	0.0	100.0	727	0.0
45-49	73.1	26.2	0.2	0.0	0.6	100.0	701	0.0
50-54	82.7	15.9	0.2	0.0	1.2	100.0	818	0.0
55-59	85.7	13.5	0.1	0.0	0.7	100.0	591	0.0
60-64	91.2	8.5	0.0	0.0	0.3	100.0	458	0.0
65+	91.4	7.7	0.0	0.0	0.9	100.0	760	0.0
Missing/Don't know	73.8	0.0	0.0	0.0	26.2	100.0	12	0.0
Residence								
Mainland	47.9	49.7	2.0	0.1	0.3	100.0	17937	1.4
Dar es Salaam	32.2	60.8	6.5	0.2	0.3	100.0	965	5.4
Other urban	35.9	57.8	5.7	0.5	0.2	100.0	3022	4.2
Rural	51.6	47.1	0.9	0.1	0.3	100.0	13949	0.0
Zanzibar	53.9	33.0	13.1	0.0	0.0	100.0	550	0.0
Region								
Dodoma	49.6	49.2	1.1	0.0	0.1	100.0	1271	1.0
Arusha	43.4	48.1	6.0	1.0	1.5	100.0	1090	2.4
Kilimanjaro	26.0	68.2	5.5	0.2	0.0	100.0	1053	4.8
Tanga	41.2	57.2	1.2	0.0	0.4	100.0	987	2.6
Morogoro	50.5	48.2	1.2	0.1	0.0	100.0	942	0.0
Coast	56.9	41.4	1.2	0.2	0.3	100.0	376	0.0
Lindi	55.4	43.4	0.2	0.6	0.4	100.0	515	0.0
Mtwara	60.3	39.5	0.0	0.2	0.0	100.0	725	0.0
Ruvuma	36.3	62.6	0.7	0.2	0.2	100.0	688	3.5
Iringa	52.0	45.9	1.3	0.0	0.8	100.0	1067	0.0
Mbeya	45.8	53.5	0.5	0.0	0.2	100.0	914	1.9
Singida	48.0	49.3	2.5	0.0	0.2	100.0	715	1.5
Tabora	57.3	41.3	1.2	0.0	0.1	100.0	566	0.0
Rukwa	55.8	43.4	0.6	0.0	0.2	100.0	414	0.0
Kigoma	54.1	45.3	0.3	0.0	0.3	100.0	806	0.0
Shinyanga	59.5	39.1	1.3	0.0	0.1	100.0	1494	0.0
Kagera	49.1	47.3	3.3	0.0	0.2	100.0	1284	1.0
Mwanza	49.9	48.5	1.4	0.0	0.2	100.0	1238	1.0
Mara	46.8	52.6	0.4	0.0	0.2	100.0	829	1.7
Total	48.1	49.2	2.4	0.1	0.3	100.0	18487	1.4

Table 2.4.2 Educational level of the male household population

Percent distribution of the de facto male household populations age five and over by highest level of education attended, according to selected background characteristics, Tanzania 1991/92

Background characteristic	No education	Primary incomplete	Completed primary	Some secondary/ Higher	Don't know/ Missing	Total	Number of persons	Median number of years
Age								
5-9	87.0	12.8	0.0	0.0	0.2	100.0	3294	0.0
10-14	22.6	77.2	0.2	0.0	0.0	100.0	3077	2.8
15-19	11.1	83.1	5.7	0.0	0.1	100.0	2376	7.1
20-24	9.7	80.7	9.4	0.1	0.1	100.0	1449	7.4
25-29	9.8	83.0	6.8	0.3	0.1	100.0	1258	7.4
30-34	16.9	72.8	9.4	0.3	0.7	100.0	1094	7.3
35-39	27.7	62.6	8.0	1.4	0.3	100.0	827	5.7
40-44	29.3	63.8	6.2	0.5	0.2	100.0	746	4.6
45-49	35.8	57.2	5.4	1.1	0.5	100.0	660	4.2
50-54	41.3	50.9	7.0	0.7	0.2	100.0	556	3.9
55-59	50.7	43.0	4.7	0.1	1.6	100.0	525	0.0
60-64	60.0	37.1	1.5	0.2	1.2	100.0	472	0.0
65+	71.3	26.9	0.9	0.1	0.8	100.0	934	0.0
Missing/Don't know	45.7	34.9	1.6	0.0	17.7	100.0	44	0.9
Residence								
Mainland	37.0	58.8	3.6	0.2	0.3	100.0	16826	3.6
Dar es Salaam	21.8	65.4	11.9	0.6	0.2	100.0	1046	7.1
Other urban	29.9	62.6	7.0	0.4	0.2	100.0	2891	4.6
Rural	39.8	57.5	2.2	0.1	0.4	100.0	12889	3.0
Zanzibar	41.2	41.5	17.1	0.3	0.0	100.0	486	2.9
Region								
Dodoma	42.6	56.3	1.2	0.0	0.0	100.0	1200	2.4
Arusha	43.0	50.5	4.5	0.5	1.5	100.0	1060	2.9
Kilimanjaro	21.1	72.7	5.3	0.5	0.3	100.0	942	5.3
Tanga	30.5	66.3	3.1	0.0	0.0	100.0	872	4.1
Morogoro	35.8	61.1	3.1	0.0	0.0	100.0	872	3.5
Coast	45.2	52.0	2.1	0.1	0.6	100.0	343	2.1
Lindi	47.8	49.5	1.6	0.0	1.0	100.0	469	1.6
Mtwara	39.6	59.8	0.4	0.2	0.0	100.0	728	3.1
Ruvuma	29.0	68.1	2.1	0.7	0.2	100.0	575	4.5
Iringa	36.2	60.4	2.7	0.0	0.7	100.0	954	3.5
Mbeya	32.2	63.5	4.1	0.0	0.1	100.0	847	4.3
Singida	41.8	54.8	3.2	0.1	0.1	100.0	654	2.6
Tabora	41.6	56.0	2.4	0.0	0.1	100.0	560	2.7
Rukwa	42.1	55.2	2.4	0.1	0.2	100.0	438	2.4
Kigoma	44.0	54.1	1.6	0.3	0.0	100.0	690	2.4
Shinyanga	44.0	52.9	2.2	0.3	0.7	100.0	1442	2.4
Kagera	35.1	57.9	6.7	0.1	0.2	100.0	1211	3.7
Mwanza	39.4	56.8	3.4	0.2	0.3	100.0	1204	3.0
Mara	37.6	59.3	2.9	0.1	0.2	100.0	720	3.3
Total	37.1	58.4	4.0	0.2	0.3	100.0	17312	3.6

Figure 2.2
Level of Education for Men and Women

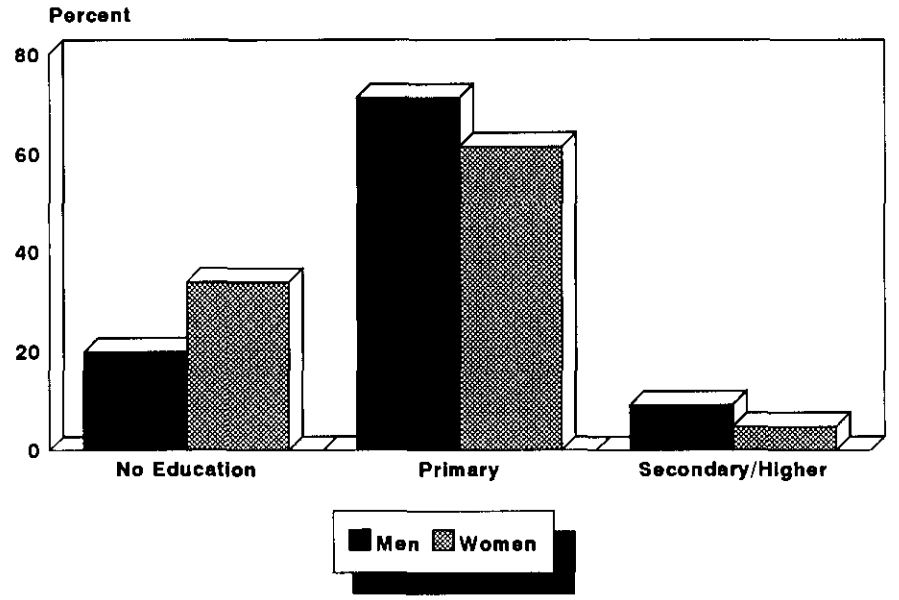


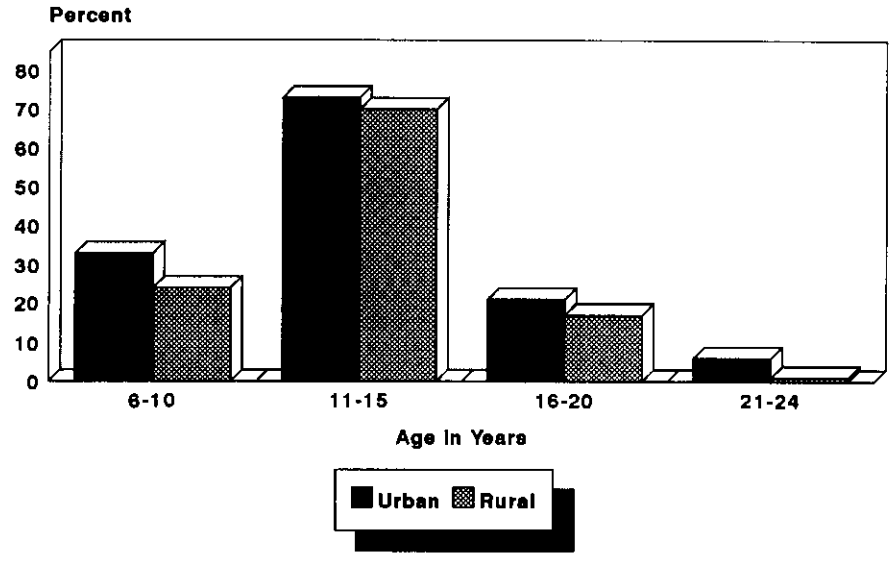
Table 2.5 and Figure 2.3 present the percentage of the de facto household population 6-24 years of age enrolled in schools by age, sex, and residence. Forty-seven percent of children aged 6-15 years are enroled. However, enrolment for children aged 11-15 is comparatively high (71 percent) suggesting that many children start primary education after age 6 or 7. In the age group 6-15 there is a slight difference in enrolment between rural and urban, with rural accounting for about 46 percent and urban about 52 percent. Enrolment after age 15 drops sharply, with only 18 percent of those 16-20 years old and 2 percent of those in their early 20s still in school.

Table 2.5 School enrolment

Percentage of the de facto household population age 6-24 years enrolled in school, by age group, sex, and urban/rural residence, Tanzania 1991/92

	Male			Female			Total		
Age group	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6-10	31.6	22.6	24.4	33.3	26.6	27.9	32.5	24.6	26.2
11-15	74.9	71.6	72.4	71.0	68.6	69.0	73.1	70.1	70.8
6-15	53.6	45.7	47.4	50.8	45.7	46.7	52.3	45.7	47.0
16-20	29.3	23.7	25.1	14.6	10.5	11.6	21.4	17.0	18.1
21-24	8.6	1.8	3.7	3.4	0.7	1.4	5.7	1.2	2.4

Figure 2.3
School Enrolment by Age and Place of Residence



TDHS 1991/92

2.2 Housing Characteristics

In order to assess the economic and environmental conditions in which the respondents live, women were asked to give specific information about their household environment. Table 2.6 presents the percent distribution of households by housing characteristics according to residence. The source of drinking water and its distance from the household, type of sanitation facilities, and type of flooring materials are important determinants of the health status of household members.

Overall, only 7 percent of households in Tanzania have electricity. Dar es Salaam has the highest proportion of households with electricity (28 percent). In the rural areas only 1 percent of households have electricity.

Sources of drinking water differ considerably by area of residence. The three primary sources of drinking water for the Mainland are public wells, public taps, and rivers or streams. In Dar es Salaam, 70 percent of the households have piped water in their homes and 20 percent obtain water from public taps. In other urban centres, 46 percent of households obtain water from a public tap and about 27 percent have piped water in their houses. Major sources of water in Zanzibar are public wells (34 percent) and public taps (32 percent). In rural areas, only 2 percent of the households have piped water in their houses. The majority get water from a public well (33 percent), rivers or streams (24 percent), public taps (16 percent), and springs (12 percent).

Table 2.6 Housing characteristics

Percent distribution of households with eligible women by housing characteristics, according to urban/rural residence and region, Tanzania 1991/92

Characteristic	Mainland				Zanzibar	Total
	Total	Dar es Salaam	Other urban	Rural		
Electricity						
Yes	6.6	28.2	20.4	1.3	12.7	6.8
No	92.5	71.4	78.3	97.8	86.9	92.3
Missing	0.9	0.4	1.3	0.9	0.4	0.9
Source of drinking water						
Piped into residence	10.9	69.9	26.9	1.8	22.3	11.3
Public tap	21.8	20.1	45.8	16.1	31.8	22.2
Well in residence	1.2	1.8	1.1	1.1	3.3	1.2
Public well	28.1	5.7	14.7	33.3	33.8	28.3
Spring	9.2	0.2	1.6	11.9	7.4	9.1
River, stream	18.5	0.0	4.4	23.6	1.0	17.9
Pond, lake	3.8	0.0	2.3	4.5	0.0	3.7
Dam	1.8	0.0	0.0	2.4	0.2	1.8
Rainwater	0.2	0.0	0.0	0.3	0.0	0.2
Tanker	0.1	1.3	0.0	0.0	0.0	0.1
Other	3.0	0.0	1.9	3.5	0.1	2.9
Missing	1.4	1.0	1.3	1.4	0.0	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Sanitation facility						
Own flush toilet	0.9	2.6	3.2	0.2	1.1	0.9
Shared flush toilet	0.4	0.8	1.5	0.1	0.2	0.4
Traditional pit latrine	84.2	92.1	88.8	82.4	41.3	82.8
Improved pit latrine	1.3	1.9	3.4	0.7	1.3	1.3
No facility, bush	12.3	1.8	2.2	15.7	56.2	13.7
Missing/Don't know	0.9	0.8	0.9	0.9	0.0	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Flooring						
Earth, sand	80.2	24.3	57.0	90.9	69.2	79.8
Wood planks	0.1	0.2	0.0	0.1	0.0	0.1
Parquet, polished wood	0.0	0.2	0.0	0.0	0.0	0.0
Ceramic tiles	0.2	0.9	0.8	0.0	0.0	0.2
Cement	18.2	74.0	41.1	7.6	30.8	18.6
Other	0.1	0.0	0.0	0.2	0.0	0.1
Missing/Don't know	1.1	0.5	1.2	1.2	0.0	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Persons per sleeping room						
1-2	54.0	60.1	61.4	51.6	66.1	54.4
3-4	32.3	30.2	29.3	33.3	25.9	32.1
5-6	8.4	6.2	6.5	9.1	6.3	8.4
7 +	3.1	2.5	0.9	3.7	1.2	3.0
Missing/Don't know	2.1	1.0	1.9	2.3	0.5	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean persons per room	2.8	2.5	2.5	2.9	2.5	2.8
Number of households	8057	537	1476	6044	269	8327

Modern sanitation facilities are not yet available to large proportions of the population. The use of traditional pit toilets is common in both urban and rural areas, accounting for about 83 percent of all households. An additional 14 percent of the households have no toilet facilities. This pattern is similar in most parts of the country except for Dar es Salaam and Zanzibar. In Dar es Salaam, 92 percent of the households use traditional pit toilets and 2 percent have no toilet facilities. In Zanzibar, 41 percent of the households use traditional pit toilets and 56 percent of the households have no toilets.

Eighty percent of the households have floors made of earth or sand and only 19 percent are made of cement. These percentages vary greatly. For example, in Dar es Salaam only 24 percent of the households have floors made of earth/sand and 74 percent use cement. Earth or sand flooring is used extensively in rural areas (91 percent), other urban centres (57 percent), and Zanzibar (69 percent). Other forms of floor materials, e.g., wood planks, parquet, and polished wood, are rarely used.

Information on the number of rooms that a household used for sleeping was collected with the intent of determining the extent of crowding. More than half of the households averaged one to two people per sleeping room and a third had three to four people sharing a sleeping room. There is very little diversity among the different geographical areas.

Household Durable Goods

Respondents were asked about ownership of particular household goods (e.g., radio and television to assess access to media, refrigerator to assess food storage) and modes of transportation (bicycle, motorcycle, car). The results presented in Table 2.7 indicate that 33 percent of households own a radio, with ownership being highest in Dar es Salaam (70 percent) and lowest in rural areas (25 percent). Less than 1 percent of households in Tanzania possess a television set. Since the Mainland does not have a television station, the percent of households with a television set is lower than in Zanzibar, where there is a television station. Refrigerators are not very common and are mainly found in urban areas.

Table 2.7 Household durable goods

Percentage of households with eligible women possessing various durable consumer goods, by urban/rural residence and region, Tanzania 1991/92

	Mainland					
Possession	Total	Dar es Salaam	Other urban	Rural	Zanzibar	Total
Radio	32.5	69.6	51.5	24.6	48.9	33.1
Television	0.4	2.0	0.9	0.1	4.7	0.5
Refrigerator	1.1	7.8	1.9	0.3	3.1	1.2
Bicycle	21.2	10.5	23.7	21.5	32.8	21.5
Motorcycle	0.7	1.2	1.2	0.6	1.6	0.8
Private car	1.3	3.7	2.3	0.9	1.5	1.3
Number of households	8057	537	1476	6044	269	8327

Bicycles are the most common means of transport owned by households. Twenty-two percent of rural households, 11 percent of households in Dar es Salaam, and 33 percent of households in Zanzibar own a bicycle. Only 1 percent of surveyed households owns an automobile, and most of them are located in Dar es Salaam and other urban areas.

2.3 Background Characteristics of Survey Respondents

General Characteristics

Table 2.8 shows the percent distribution of women by age, marital status, urban/rural residence, region, religion, and level of education. Eligible women 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 did not know their age or date of birth, and as a last resort, interviewers were instructed to record their best estimate of the respondent's age.

Data on marital status of the women at the time of the survey show that 25 percent had never married, 65 percent were in unions (47 percent in monogamous unions and 18 percent in polygamous unions), and 10 percent were divorced, separated, or widowed.

The vast majority of women live on the mainland (97 percent), with only 3 percent living on Zanzibar. One-quarter of women live in urban areas on the mainland, and almost three quarters in rural areas.

One-third of respondents had never attended school. Forty-two percent had completed primary school and only 5 percent of women had gone beyond the primary education level.

Table 2.8 Background characteristics of respondents

Percent distribution of women by selected background characteristics, Tanzania 1991/92

Background characteristic	Weighted percent	Number of women	
		Weighted	Un-weighted
Age			
15-19	23.6	2183	2229
20-24	20.4	1882	1849
25-29	17.3	1599	1573
30-34	12.6	1165	1121
35-39	10.8	1000	1010
40-44	7.7	715	757
45-49	7.5	695	699
Marital status			
Never married	24.5	2261	2188
Married, monogamous	47.4	4379	4381
Married, polygamous	18.0	1659	1710
Widowed/Divorced/Sep.	10.2	939	959
Education			
No education	33.9	3128	3259
Primary incomplete	19.8	1825	1887
Completed primary	41.6	3841	3653
Secondary/Higher	4.8	444	439
Residence			
Mainland	97.2	8978	8718
Dar es Salaam	6.3	585	505
Other urban	18.3	1686	1178
Rural	72.6	6707	7035
Zanzibar	2.8	260	520
Region[1]			
Dodoma	7.0	649	341
Arusha	6.2	573	367
Kilimanjaro	5.6	516	438
Tanga	5.1	471	383
Morogoro	5.5	512	486
Coast	1.7	159	377
Lindi	2.3	217	347
Mtwara	3.9	363	343
Ruvuma	3.5	320	455
Iringa	5.1	475	378
Mbeya	4.9	449	304
Singida	3.8	355	409
Tabora	2.9	271	414
Rukwa	2.4	217	496
Kigoma	4.1	375	496
Shinyanga	8.6	793	614
Kagera	6.6	608	384
Mwanza	7.2	666	590
Mara	4.4	403	591
Religion			
Muslim	30.7	2834	3202
Catholic	30.1	2777	2694
Protestant	25.0	2308	2049
None	13.8	1271	1242
Other religion	0.0	0	1
Missing	0.5	47	50
All women	100.0	9238	9238

[1]Excludes Dar es Salaam and Zanzibar.

The three major religions reported by women were Islam (31 percent), Catholicism (30 percent), and Protestantism (25 percent). Fourteen percent of all women either adhere to traditional religions or have no religion.

Differentials in Education

Table 2.9 shows the percent distribution of women by highest level of education attained according to age, residence, and region. Education is inversely related to age; older women are generally less educated than younger women. The survey results show that 74 percent of women age 45-49 have had no formal education in contrast to 15 percent of women age 15-19. The percentage of women with no education increases with age while the proportion of women with completed primary or secondary/higher education decreases with age, indicating recent improvements in educational attainments.

Urban women fare better than rural women in education. While 38 percent of rural women have never been to school, only 20 percent of women in other urban areas and 19 percent in Dar es Salaam have never been to school. Zanzibar has a much higher proportion of women with no education (41 percent) than Mainland (34 percent).

Generally, only a small proportion of women continue education beyond the primary level. The situation is worst in rural areas where only 2 percent of women have secondary or higher education. Due to the difference in the secondary education system between the Mainland and Zanzibar, 28 percent of women in Zanzibar have secondary education compared to 4 percent in Mainland.

A comparison among regions shows that only 9 percent of the women in Kilimanjaro have no education. On the other hand, about half of the women in Shinyanga have never been to school. The Arusha and Kilimanjaro regions have the highest proportion of women with secondary or higher education (13 and 12 percent, respectively). Mtwara, Kigoma, Mbeya, and Mara have the lowest levels of post-primary education (less than 1 percent have secondary or higher education).

Access to Media

Women were asked if they usually listen to a radio or watch television at least once a week. This information is important to programme planners seeking to reach women with family planning and health messages through the media. Table 2.10 shows that one quarter of women read newspapers and 46 percent listen to the radio. Only 3 percent watch television. Access to the media is somewhat higher among younger women (under 30 years): half of these women listen to the radio at least once a week and about 30 percent read newspapers. Educated women have more access to the media than those with less education and the proportion of women with access to media is higher in urban than in rural areas.

Table 2.9 Level of education

Percent distribution of women by highest level of education attended, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Level of education: No education	Primary incomplete	Completed primary	Secondary/ Higher	Total	Number of women
Age						
15-19	15.3	23.0	55.3	6.4	100.0	2183
20-24	16.2	12.2	63.4	8.1	100.0	1882
25-29	27.9	15.7	52.4	4.0	100.0	1599
30-34	44.9	20.6	30.0	4.5	100.0	1165
35-39	56.5	24.4	16.9	2.3	100.0	1000
40-44	61.6	28.6	8.2	1.6	100.0	715
45-49	74.2	22.0	3.7	0.1	100.0	695
Residence						
Mainland	33.7	20.0	42.3	4.1	100.0	8978
Dar es Salaam	18.7	15.2	56.7	9.5	100.0	585
Other urban	20.3	18.4	50.6	10.7	100.0	1686
Rural	38.3	20.8	38.9	2.0	100.0	6707
Zanzibar	41.0	12.9	18.1	28.0	100.0	260
Region						
Dodoma	35.6	16.5	45.8	2.2	100.0	649
Arusha	31.7	15.3	39.9	13.1	100.0	573
Kilimanjaro	8.5	19.2	60.9	11.5	100.0	516
Tanga	26.1	18.9	53.5	1.6	100.0	471
Morogoro	35.1	21.6	40.3	3.0	100.0	512
Coast	40.6	19.8	36.8	2.7	100.0	159
Lindi	33.9	26.2	38.5	1.4	100.0	217
Mtwara	45.3	21.5	33.0	0.2	100.0	363
Ruvuma	19.9	30.2	48.2	1.7	100.0	320
Iringa	42.3	11.6	43.3	2.9	100.0	475
Mbeya	32.7	16.6	49.8	0.9	100.0	449
Singida	29.0	24.4	40.8	5.8	100.0	355
Tabora	47.0	23.1	27.7	2.1	100.0	271
Rukwa	46.1	22.0	30.8	1.1	100.0	217
Kigoma	38.9	17.5	43.0	0.6	100.0	375
Shinyanga	51.7	17.3	28.8	2.1	100.0	793
Kagera	30.7	24.3	37.7	7.4	100.0	608
Mwanza	36.7	22.9	37.8	2.6	100.0	666
Mara	30.2	28.9	40.3	0.6	100.0	403
Total	33.9	19.8	41.6	4.8	100.0	9238

Table 2.10 Access to mass media

Percentage of women who usually read a newspaper once a week, watch television once a week, or listen to radio once a week, by selected background characteristics, Tanzania 1991/92

Background characteristic	Read newspaper weekly	Watch television weekly	Listen to radio weekly	Number of women
Age				
15-19	31.1	4.3	50.1	2183
20-24	34.2	4.5	53.3	1882
25-29	26.6	3.1	49.0	1599
30-34	21.1	3.1	46.4	1165
35-39	16.4	2.2	37.6	1000
40-44	12.4	2.7	35.1	715
45-49	8.5	1.6	32.4	695
Education				
No education	0.5	1.5	25.6	3128
Primary incomplete	22.3	1.7	41.4	1825
Completed primary	40.1	4.1	59.9	3841
Secondary/Higher	76.8	18.7	93.4	444
Residence				
Mainland	24.6	3.1	45.3	8978
Dar es Salaam	71.8	12.0	89.8	585
Other urban	47.3	7.2	71.2	1686
Rural	14.8	1.3	35.0	6707
Zanzibar	37.6	14.6	77.0	260
Region				
Dodoma	18.6	0.3	34.7	649
Arusha	37.5	5.1	63.8	573
Kilimanjaro	46.1	5.5	72.7	516
Tanga	25.1	1.7	39.4	471
Morogoro	26.1	3.7	42.3	512
Coast	38.6	7.5	65.5	159
Lindi	17.7	3.1	42.2	217
Mtwara	11.2	3.0	26.2	363
Ruvuma	17.3	2.0	43.8	320
Iringa	18.4	3.1	30.8	475
Mbeya	15.8	0.3	45.9	449
Singida	27.8	5.5	43.2	355
Tabora	8.9	0.7	28.7	271
Rukwa	13.9	1.2	31.7	217
Kigoma	15.6	0.8	41.6	375
Shinyanga	12.4	1.3	29.5	793
Kagera	13.7	2.3	35.5	608
Mwanza	19.0	2.4	44.6	666
Mara	21.8	0.8	47.6	403
Total	24.9	3.4	46.2	9238

CHAPTER 3

FERTILITY

The fertility measures presented in this chapter are based on the reported birth histories of women between 15 and 49 years old who were interviewed in the TDHS. Every woman was asked the number of sons and daughters who either were living with her, were living elsewhere, or had died. Also, she was asked for a history of her births, including the month and year each child was born; the name and sex; if deceased, the age at death; and if alive, the current age and whether the child was living with the mother. The information obtained from these questions was used to calculate measures of current and completed fertility, i.e., the number of children ever born.

3.1 Current Fertility

The current level of fertility is presented in this chapter because it has a direct relevance to population policies and programmes. Three-year age-specific fertility rates are presented in Table 3.1. The purpose of calculating three-year rates is to reduce errors that emanate from the size of the sample and to avoid problems caused by the displacement of births from five years preceding the survey to six. This latter practise is often done by the interviewer in order to reduce the amount of work that would have to be done. The sum of the age-specific fertility rates is called the total fertility rate (TFR), which can be defined as the number of children a woman would have by the end of her childbearing years if she were to pass through the years bearing children at the currently observed age-specific fertility rates. As shown in Table 3.1, the total fertility rate is 6.3.

Table 3.1 Current fertility

Age-specific and cumulative fertility rates and the crude birth rate for the three years preceding the survey, by urban-rural residence and region, Tanzania 1991/92

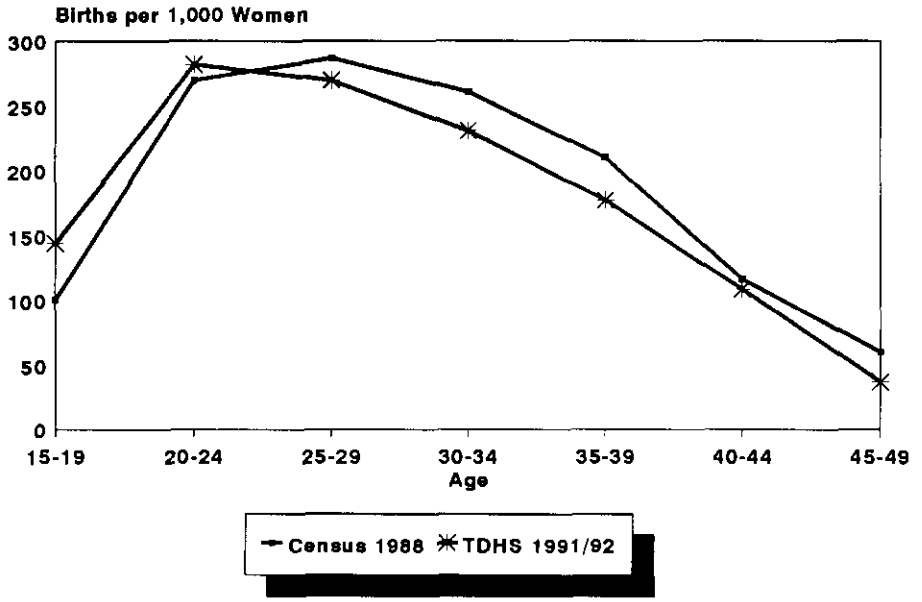
Age group	Urban	Rural	Total
15-19	131	149	144
20-24	236	297	282
25-29	229	284	270
30-34	198	242	231
35-39	139	187	177
40-44	75	117	108
45-49	19	42	37
TFR 15-49	5.14	6.59	6.25
TFR 15-44	5.04	6.38	6.06
GFR	179	222	212
CBR	42.1	43.0	42.8

TFR: Total fertility rate expressed per woman
GFR: General fertility rate (births divided by number of women 15-44), expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population
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.

The crude birth rate, also presented in Table 3.1, stands at 43 per thousand over the three years prior to the survey. This estimate is close to the 46 per 1,000 that was estimated from the 1988 Population Census.

The age-specific fertility rates derived from the TDHS can be compared with data from the 1988 census (Figure 3.1). Except for the two youngest age groups, fertility rates are lower in the TDHS than in the census. The fertility decline appears to be greatest among women aged 25-39.

Figure 3.1
Age-Specific Fertility Rates
1988 Census and 1991/92 TDHS



The total fertility rates by level of education and by place of residence can be summarized in Table 3.2 and Figure 3.2. Due to small sample sizes for some categories, the data should be viewed with caution. Dar es Salaam has considerably lower fertility than other urban and rural areas in Tanzania. In TDHS an attempt was made to compare fertility estimates by region. Due to the small numbers of women, the ability to make regional comparisons was seriously compromised. To avoid this problem, regions were grouped into six "zones," mainly based on geographic and ecologic characteristics. This strategy enhanced the power to make the necessary geographical comparisons by distributing relatively large numbers of women in each zone. 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 Highlands zone:	Arusha and Kilimanjaro
Lake zone:	Tabora, Kigoma, Shinyanga, Kagera, Mwanza, and Mara
Central zone:	Dodoma and Singida
Southern Highlands zone:	Iringa, Mbeya, and Rukwa
Southern zone:	Lindi, Mtwara, and Ruvuma

Total fertility rates are lowest in the Southern regions and Coastal zone (5.1 and 5.7 children per woman, respectively). Lake and Central regions have the highest levels of fertility (6.9 and 7.1 children per woman, respectively).

Women with secondary education have a total fertility rate of 4.2 children per woman, which is considerably less than all other women. Women who have only completed a primary education have a total fertility of 6.0; women with incomplete primary education and women with no formal education have total fertility rates of 6.4 and 6.5, respectively.

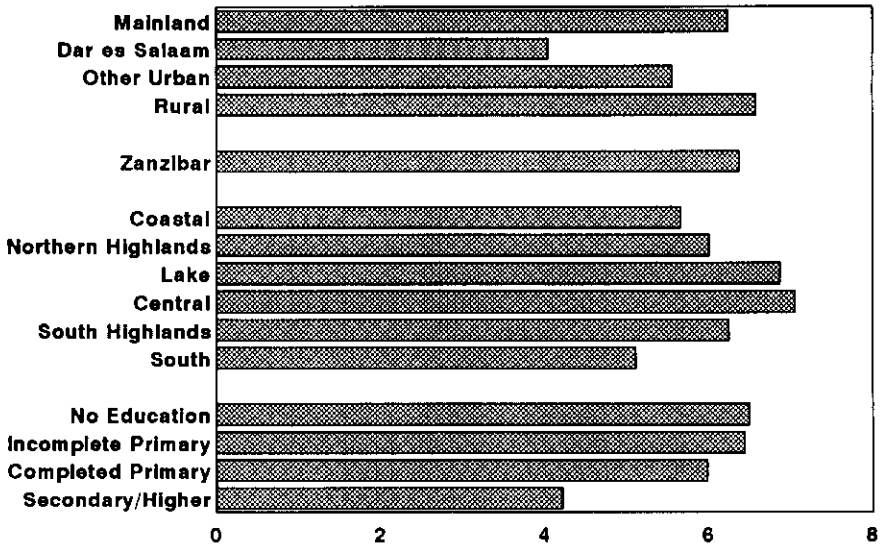
Table 3.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey and mean number of children ever born to women age 40-49, by selected background characteristics, Tanzania 1991/92

Background characteristic	Total fertility rate[1]	Mean number of children ever born to women age 40-49
Residence		
Mainland	6.2	6.9
Dar es Salaam	4.0	6.1
Other urban	5.6	6.4
Rural	6.6	7.1
Zanzibar	6.4	6.9
Zone		
Coastal	5.7	6.8
Northern Highlands	6.0	7.3
Lake	6.9	7.3
Central	7.1	6.2
Southern Highlands	6.3	7.1
South	5.1	6.4
Education		
No education	6.5	6.9
Primary incomplete	6.4	7.1
Completed primary	6.0	6.5
Secondary/Higher	4.2	4.8
Total	6.3	6.9

[1]Rate for women age 15-49 years

Figure 3.2
Total Fertility Rate
by Background Characteristics



TDHS 1991/92

Fertility trends can be analysed in two ways. One way is to compare TDHS data with previous censuses. As has been observed (see Table 1.1), the 1978 and 1988 censuses reveal that fertility declined over time, from 6.9 to 6.5 to 6.3 according to the TDHS.

A second way to analyse fertility trends is by using the TDHS data alone. Table 3.3 shows the age-specific fertility rates for four-year periods preceding the survey. Four-year periods were used instead of the usual five-year periods in order to avoid the effects of shifting births from five to six years preceding the survey. According to the table, there has been a gradual decline in fertility during the last 20 years, e.g., the cumulative fertility of women age 15-34 decreased from 5.7 to 4.6 during this period.

Table 3.3 Age-specific fertility rates

Age-specific fertility rates (per thousand women) for four-year periods preceding the survey, by mother's age at the time of birth, Tanzania 1991/92

	Number of years preceding the survey				
Mother's age	0-3	4-7	8-11	12-15	16-19
15-19	139	146	158	185	209
20-24	281	285	289	316	309
25-29	266	269	289	311	297
30-34	226	268	275	269	[320]
35-39	176	185	202	[257]	-
40-44	110	[115]	[176]	-	-
45-49	[40]	[34]	-	-	-

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

A similar pattern is observed in Table 3.4 which shows the fertility rates for ever-married women by duration since first marriage. For the same marriage duration, fertility has declined over time.

Table 3.4 Fertility by marital duration

Fertility rates for ever-married women by duration since first marriage in years, for four-year periods preceding the survey, Tanzania 1991/92

Marriage duration at birth	Number of years preceding the survey				
	0-3	4-7	8-11	12-15	16-19
0-4	332	339	344	361	354
5-9	284	307	325	328	321
10-14	258	272	284	317	299
15-19	211	232	254	248	[258]
20-24	150	192	193	[212]	-
25-29	89	107	[171]	-	-

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

3.2 Children Ever Born and Living

The distribution of all women by number of children ever born is presented in Table 3.5 for all women and currently married women. The mean number of children ever born increases with age; at the end of her reproductive period, the Tanzanian woman has given birth to about 7 children. About three percent of women 40 years and older are childless.

Currently married women at the end of their childbearing years have given birth to an average of seven children (7.2). Among currently married women aged 40-49 only two percent are childless.

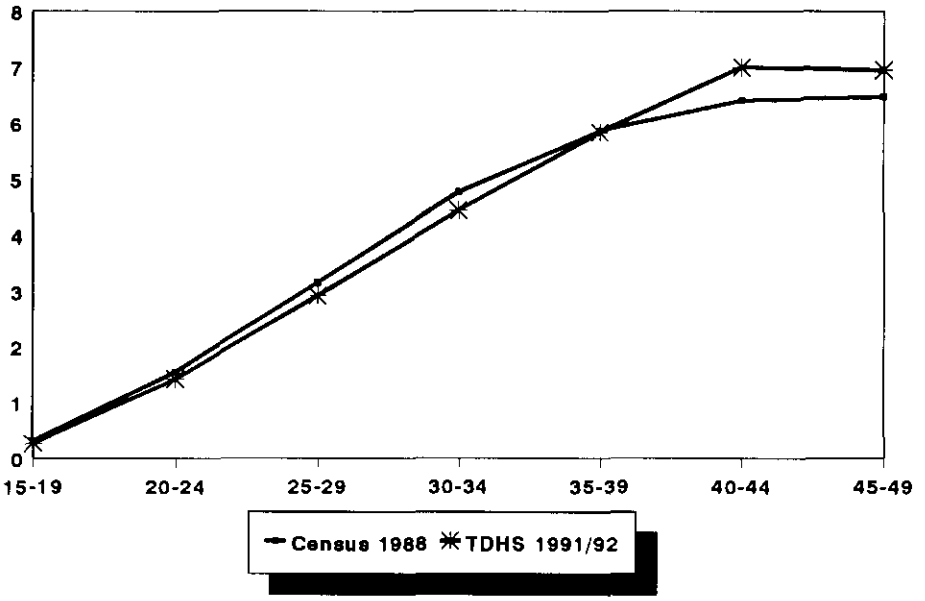
Data on children ever born from the TDHS and the 1988 Census can be compared in Figure 3.3. Up to about age 40 the two data sets exhibit remarkably similar results, which suggests good data quality in each.

Table 3.5 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 1991/92

Age group	Number of children ever born (CEB)											Total	Number of women	Mean no. of CEB	Mean no. of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
Age															
15-19	76.8	19.7	3.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2183	0.27	0.24
20-24	24.3	30.5	28.6	12.1	3.9	0.5	0.0	0.0	0.0	0.0	0.0	100.0	1882	1.42	1.24
15-29	6.4	12.7	21.3	24.7	18.7	11.2	3.6	1.0	0.4	0.1	0.0	100.0	1599	2.92	2.48
30-34	4.3	5.9	8.2	12.5	16.4	20.9	16.9	10.2	2.6	1.5	0.7	100.0	1165	4.43	3.75
35-39	1.9	4.1	3.2	8.4	8.7	15.5	17.8	14.6	13.2	7.5	5.1	100.0	1000	5.83	4.80
40-44	2.6	3.7	4.5	3.2	6.0	8.1	12.8	15.6	12.6	11.9	18.9	100.0	715	6.90	5.65
45-49	4.1	3.7	2.5	4.4	7.5	8.5	9.2	13.3	13.8	11.7	21.4	100.0	695	6.94	5.43
Total	25.5	14.8	12.2	9.8	8.1	7.6	6.4	5.2	3.8	2.8	3.7	100.0	9238	3.11	2.58
CURRENTLY MARRIED WOMEN															
Age															
15-19	42.1	48.4	9.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	558	0.68	0.60
20-24	10.9	31.3	35.8	16.2	5.2	0.7	0.1	0.0	0.0	0.0	0.0	100.0	1283	1.76	1.53
15-29	3.5	10.3	19.3	27.3	20.7	12.8	4.3	1.2	0.5	0.0	0.0	100.0	1274	3.16	2.70
30-34	1.4	4.8	8.1	12.8	17.1	21.2	17.6	11.2	3.0	1.8	0.9	100.0	935	4.67	3.96
35-39	1.4	4.1	2.7	7.4	7.8	15.4	19.0	15.5	13.6	7.8	5.5	100.0	841	5.98	4.92
40-44	2.3	3.1	3.8	2.0	6.0	8.0	13.0	16.2	13.5	12.2	19.8	100.0	603	7.09	5.82
45-49	2.3	4.5	1.7	4.2	6.1	7.4	10.1	13.3	14.6	12.6	23.2	100.0	545	7.24	5.67
Total	7.8	15.3	14.7	12.8	10.4	9.7	8.5	7.0	5.1	3.7	5.0	100.0	6038	4.02	3.34

Figure 3.3
Children Ever Born to Women 15-49
1988 Census and 1991/92 TDHS



3.3 Birth Intervals

The timing of births has implications for both fertility and mortality. A woman who has births spaced closely together most likely will complete her childbearing years with more children than one who spaces her births farther apart. Babies who are born within a short interval are subject to poor health and thus are more exposed to the risks of dying than those who are born after longer birth intervals. Table 3.6 shows the percent distribution of births in the five years before the survey by interval since previous birth by demographic and background characteristics. Half of all births occurred after an interval of 33 months, 18 percent of all births occurred less than 24 months after a previous birth, 63 percent occurred at an interval between 24 and 47 months, and 19 percent of the births occurred at an interval of four years or more. In general, there are only small differences in median birth interval length between subgroups. However, if the previous child is deceased, birth intervals are about 6 months shorter than if the previous child is surviving. Younger women also have shorter birth intervals than older women.

Table 3.6 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 1991/92

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	18.3	20.4	49.8	9.2	2.2	100.0	25.4	78
20-29	6.4	14.1	49.1	17.1	13.4	100.0	30.9	3046
30-39	5.1	10.5	40.0	20.6	23.8	100.0	35.0	2430
40 +	3.7	7.5	34.5	25.9	28.4	100.0	38.1	743
Birth order								
2-3	6.1	13.1	45.8	17.5	17.5	100.0	32.1	2604
4-6	4.7	11.2	44.8	18.8	20.5	100.0	33.6	2295
7 +	6.7	11.2	38.8	23.7	19.6	100.0	34.5	1398
Sex of prior birth								
Male	5.8	11.5	44.0	19.1	19.6	100.0	33.4	3178
Female	5.6	12.5	43.7	19.7	18.5	100.0	33.1	3119
Survival of prior birth								
Living	3.3	11.3	45.4	20.7	19.3	100.0	33.9	5339
Dead	19.2	16.2	35.4	11.7	17.5	100.0	28.3	958
Residence								
Mainland	5.6	11.9	43.9	19.5	19.1	100.0	33.3	6108
Dar es Salaam	5.3	6.5	44.7	22.4	21.1	100.0	34.7	270
Other urban	4.7	12.4	39.8	19.8	23.3	100.0	34.4	934
Rural	5.7	12.1	44.7	19.3	18.2	100.0	33.1	4904
Zanzibar	11.1	15.4	42.1	14.4	17.0	100.0	30.4	189
Zone								
Coastal	6.2	10.0	41.2	20.9	21.6	100.0	34.6	1238
Northern Highlands	6.5	16.5	34.8	15.8	26.4	100.0	33.5	714
Lake	6.8	14.4	48.5	16.2	14.1	100.0	30.7	2317
Central	4.0	9.5	48.4	23.3	14.8	100.0	33.2	723
Southern Highlands	3.8	9.5	40.4	23.3	23.0	100.0	36.1	805
South	3.9	7.1	41.3	22.9	24.8	100.0	36.3	501
Region								
Dodoma	4.0	7.3	49.9	25.3	13.5	100.0	33.3	500
Arusha	6.0	17.2	33.7	14.7	28.5	100.0	33.8	427
Kilimanjaro	7.3	15.5	36.4	17.5	23.4	100.0	32.9	287
Tanga	5.9	11.8	37.6	18.9	25.8	100.0	34.8	323
Morogoro	5.3	8.7	39.6	24.6	21.8	100.0	35.5	365
Coast	3.7	7.5	48.6	22.8	17.4	100.0	33.6	91
Lindi	5.1	6.8	34.8	27.0	26.2	100.0	37.8	140
Mtwara	3.3	4.4	37.3	20.5	34.6	100.0	38.3	152
Ruvuma	3.5	9.2	48.6	21.9	16.9	100.0	34.5	209
Iringa	2.6	7.0	37.9	27.8	24.7	100.0	37.7	352
Mbeya	4.3	11.7	39.5	20.9	23.6	100.0	35.4	283
Singida	4.1	14.5	45.0	18.9	17.6	100.0	32.8	223
Tabora	4.9	8.6	42.1	26.6	17.8	100.0	34.9	186
Rukwa	5.6	11.0	47.0	18.1	18.4	100.0	33.6	171
Kigoma	6.7	15.0	53.5	14.3	10.4	100.0	30.2	296
Shinyanga	7.3	13.8	49.0	15.5	14.4	100.0	30.5	633
Kagera	8.4	17.1	45.6	15.2	13.6	100.0	30.8	445
Mwanza	6.5	13.3	52.3	15.8	12.1	100.0	29.7	466
Mara	5.0	16.5	44.5	15.4	18.5	100.0	31.3	292
Education								
No education	5.4	11.5	40.8	21.4	20.9	100.0	34.5	2574
Primary incomplete	5.0	10.5	45.6	19.0	19.9	100.0	33.3	1288
Completed primary	5.9	13.7	47.0	17.4	16.0	100.0	32.0	2277
Secondary/Higher	14.1	8.2	34.7	17.6	25.4	100.0	34.1	158
Total	5.7	12.0	43.9	19.4	19.0	100.0	33.3	6297

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.

3.4 Age at First Birth

The age at which childbearing begins has important demographic consequences and also consequences for the mother and child. A rise in the age at first birth is usually a reflection of the increase of age at first marriage, though the opposite may not be true. In many countries, postponement of first births, reflecting an increase in age at marriage, has contributed greatly to overall fertility decline. Table 3.7 shows the percent distribution of women by age at first birth according to current age of the mother. While 10 percent of older women (45-49) had their first birth before age 15, only 4 percent of the younger women (20-24) had their first birth before reaching age 15. Among older women (45-49), 60 percent had their first birth before reaching age 20, whereas 57 percent of the young women had their first birth before age 20. The median age at first birth has increased by about one year across cohorts age 40-44 to 20-24.

Table 3.7 Age at first birth

Percent distribution of women 15-49 by age at first birth, according to current age, Tanzania 1991/92

Current age	Women with no births	Age at first birth						Total	Number of women	Median age at first birth
		<15	15-17	18-19	20-21	22-24	25+			
15-19	76.8	0.9	13.9	8.4	NA	NA	NA	100.0	2183	a
20-24	24.3	4.0	24.3	28.5	14.7	4.2	NA	100.0	1882	19.5
25-29	6.4	5.6	26.1	24.7	19.3	12.6	5.4	100.0	1599	19.5
30-34	4.3	9.2	35.6	20.8	14.6	10.4	5.1	100.0	1165	18.5
35-39	1.9	8.0	36.8	22.0	13.6	10.1	7.4	100.0	1000	18.4
40-44	2.6	9.7	34.4	21.2	13.6	11.0	7.5	100.0	715	18.5
45-49	4.1	9.7	31.3	19.1	14.5	10.5	10.9	100.0	695	18.8

NA = Not applicable

[a]Less than 50 percent of the women in the age group x to $x+4$ have had a birth by age x

Table 3.8 presents the median age at first birth by place of residence and education. There is no variation in age at first birth by place of residence, but there is a substantial increase in the age at first birth with increasing levels of education.

Table 3.8 Median age at first birth

Median age at first birth among women age 20-49 years, by current age and selected background characteristics, Tanzania 1991/92

Background characteristic	Current age						Ages 20-49	Ages 25-49
	20-24	25-29	30-34	35-39	40-44	45-49		
Residence								
Mainland	19.5	19.5	18.5	18.4	18.5	18.8	19.0	18.8
Dar es Salaam	a	20.1	18.8	(17.8)	(18.2)	(17.4)	19.4	18.7
Other urban	20.0	19.7	17.7	17.7	18.5	18.3	18.9	18.5
Rural	19.3	19.4	18.7	18.7	18.5	19.0	19.0	18.9
Zanzibar	19.7	19.5	18.3	(17.3)	(17.8)	(18.9)	18.8	18.4
Education								
No education	18.3	17.9	18.1	18.3	18.4	18.9	18.3	18.3
Primary incomplete	18.4	18.6	17.2	17.9	18.3	18.6	18.1	18.1
Completed primary	19.7	20.2	19.6	19.5	20.0	19.3	19.8	20.0
Secondary/Higher	a	23.9	23.1	*	*	*	a	23.4
Total	19.5	19.5	18.5	18.4	18.5	18.8	19.0	18.8

Note: The medians for cohort 15-19 could not be determined because half the women have not yet had a birth. Rates shown in parentheses are based on 25-49 women, whereas an asterisk means the rate is based on fewer than 25 women and has been suppressed.

[a]Medians were not calculated for these cohorts because less than 50 percent of women in the age group x to $x+4$ have had a birth by age x.

3.5 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 3.9 presents the percentage of teenagers aged 15-19 who are mothers or are pregnant with their first child by background characteristics. Overall, 29 percent of teenagers covered by this survey have already begun childbearing (i.e., they have given birth or had their first pregnancy at the time of the survey). Among those age 15, three percent have begun childbearing and among those age 19, almost 60 percent have had a birth or are pregnant.

Table 3.9 Teenage pregnancy and motherhood

Percentage of teenagers 15-19 who are mothers or pregnant with their first child, by selected background characteristics, Tanzania 1991/92

Background characteristic	Percentage who are: Mothers	Pregnant with first child	Percentage who have begun child-bearing	Number of teenagers
Age				
15	0.5	2.7	3.2	392
16	6.0	4.1	10.1	474
17	18.2	9.3	27.6	387
18	33.7	6.5	40.2	457
19	53.3	6.2	59.4	474
Residence				
Mainland	23.2	5.8	29.0	2114
Dar es Salaam	15.5	6.2	21.7	162
Other urban	25.7	4.8	30.5	421
Rural	23.3	6.1	29.4	1531
Zanzibar	23.9	2.2	26.1	69
Zone				
Coastal	24.1	5.2	29.4	480
Northern Highlands	11.8	2.0	13.8	228
Lake	22.4	5.6	28.0	813
Central	26.2	7.7	34.0	235
Southern Highlands	27.3	7.0	34.4	219
South	29.2	7.9	37.1	208
Education				
No education	29.1	6.4	35.5	333
Primary incomplete	16.4	4.0	20.4	503
Completed primary	26.8	6.7	33.5	1207
Secondary/Higher	3.1	1.5	4.6	139
Total	23.2	5.7	29.0	2183

Although most teenagers who have begun childbearing have given birth only once, a small proportion of them have given birth twice. Table 3.10 shows the percent distribution of teenagers 15-19 by number of children ever born according to single years of age. Twenty percent of teenagers have given birth to one child and 4 percent have had 2 or more children. The mean number of children ever born among teenagers is 0.3.

Table 3.10 Children born to teenagers

Percent distribution of teenagers 15-19 by number of children ever born (CEB), Tanzania 1991/92

Age	Number of children ever born 0	1	2+	Total	Mean number of CEB	Number of teenagers
15	99.5	0.5	0.0	100.0	0.00	392
16	94.0	5.8	0.2	100.0	0.06	474
17	81.8	16.0	2.2	100.0	0.20	387
18	66.3	28.1	5.7	100.0	0.40	457
19	46.7	44.4	8.9	100.0	0.62	474
Total	76.8	19.7	3.6	100.0	0.27	2183

CHAPTER 4

FERTILITY REGULATION

4.1 Knowledge of Contraception

Knowing about contraceptives is an important step needed before one can actually use contraceptives. Information on an individual's contraceptive knowledge was obtained at the interview by asking the respondent to name ways or methods by which a couple could delay or avoid pregnancy. If the respondent failed to mention a particular method spontaneously, the interviewer mentioned and described the method and asked if the respondent knew it. The following modern methods were described: pills, IUD, injections, barrier methods (diaphragm, foam, and jelly), condoms, and female and male sterilisation. Three traditional methods were also described—periodic abstinence (rhythm method), mucus method, and withdrawal. For each method recognised, the respondent was asked if she knew where it could be obtained. If she reported knowing about the rhythm method, she was asked if she knew where a person could obtain advice on how to use the method. The results are presented in Table 4.1.

Table 4.1 Knowledge of contraceptive methods and source for methods

Percentage of all women and currently married women who know specific contraceptive methods and who know a source (for information or services), by specific methods, Tanzania 1991/92

Contraceptive method	Know method		Know a source	
	All women	Currently married women	All women	Currently married women
Any method	74.4	80.2	65.5	71.4
Any modern method	72.2	77.6	65.1	71.1
Modern method				
Pill	68.9	74.6	59.5	65.6
IUD	31.3	35.0	29.1	32.7
Injection	39.6	44.0	36.5	40.7
Diaphragm/foam/jelly	19.5	22.2	17.9	20.4
Condom	51.3	55.0	44.8	48.3
Female sterilisation	49.5	54.6	46.0	50.8
Male sterilisation	10.1	11.3	9.3	10.5
Any traditional method	44.1	48.9	NA	NA
Periodic abstinence	23.3	24.7	19.1	20.7
Mucus method	9.3	9.8	NA	NA
Withdrawal	23.9	27.1	NA	NA
Other	21.2	24.6	NA	NA
Number of women	9238	6038	9238	6038

NA = Not applicable

Of all Tanzanian women aged 15-49 years who were interviewed in the survey, 74 percent knew at least one method of family planning. The level of knowledge was slightly higher (80 percent) among currently married women. A majority of all women interviewed (72 percent) knew at least one modern contraceptive method, while less than half (44 percent) reported knowing at least one traditional method. Currently married women were relatively more likely to know of modern contraceptive methods (78 percent) and traditional methods (49 percent). Since currently married women are regarded to be at highest risk of getting pregnant, the remaining sections of this chapter will focus on them. However, in interpreting the results it is recommended that readers take into consideration that out of 9238 women interviewed, 6038 (65 percent) were currently married. Hence, currently married women constitute two thirds of all women covered by this study.

The modern contraceptive methods most frequently reported by currently married women were pills (75 percent), condom (55 percent) and female sterilization (55 percent). Other methods commonly reported were injections (44 percent), IUD (35 percent), and barrier methods (22 percent). Male sterilization was the least known modern method of contraception. As for the traditional methods, 25 percent of married women knew periodic abstinence, while 27 percent knew withdrawal. Only 10 percent of currently married women knew the mucus method. Overall, the level of knowledge of both modern and traditional contraceptive methods was slightly lower among all women when compared to currently married women, suggesting that women not currently married were less likely to be aware of contraceptive methods.

Results of several other studies in Tanzania (Kapiga et al., 1993; Ministry of Health, 1992) showed widespread knowledge of modern contraceptive methods, with pills being the best known. The high level of knowledge of the pill may be due to its wide availability in most family planning service delivery points and for the fact that it is the most used method in Tanzania. Data presented in the subsequent sections of this chapter support this observation. The observed high level of knowledge of condoms has been reported in several other studies (NACP, 1992; Ministry of Health, 1992) and has been associated with the ongoing HIV/AIDS campaign in which condom use is promoted as a preventive measure.

Only 12 percent of currently married women who knew of pills were not aware of a place where they could obtain this method, and 7 percent of currently married women who knew female sterilization did not know where this procedure was done. As for other modern contraceptive methods, a majority of women were not aware of the place where these methods could be obtained. In general, about 92 percent of currently married women who know a modern method also are aware of where it can be obtained.

The association between age, education, and region where respondents were residing at the time of the survey, knowledge of family planning methods, and sources where such methods could be obtained was assessed in Table 4.2.

Knowledge of at least one method of contraception among currently married women is low in the extreme age groups (15-19 years and 45-49 years). The level of knowledge increases with age, reaches a peak at 30-34 years, and then decreases to reach the lowest level at 45-49 years. A similar pattern was observed for knowledge of modern contraceptives and a source where the methods could be obtained.

Overall, the level of knowledge of contraceptive methods and of a place where they could be obtained is lower on the Tanzania mainland than in Zanzibar. However, due to the small number of currently married women interviewed in Zanzibar (only 168), comparisons with mainland Tanzania should be regarded cautiously. Within mainland Tanzania, the level of knowledge is lower in rural areas than in urban areas.

Table 4.2 Knowledge of modern contraceptive methods and source for methods

Percentage of currently married women who know at least one modern contraceptive method and who know a source (for information or services), by selected background characteristics, Tanzania 1991/92

Background characteristic	Know any method	Know a modern method[1]	Know a source for modern method	Number of women
Age				
15-19	70.9	68.7	58.4	558
20-24	81.4	79.6	73.0	1283
25-29	84.5	82.6	76.0	1274
30-34	85.5	83.7	77.5	935
35-39	79.7	76.7	72.2	841
40-44	80.1	76.6	70.0	603
45-49	69.2	62.7	56.3	545
Residence				
Mainland	79.8	77.1	70.5	5870
Dar es Salaam	91.7	91.1	84.9	349
Other urban	94.2	93.8	89.1	966
Rural	75.8	72.5	65.4	4555
Zanzibar	95.9	95.9	92.5	168
Region				
Dodoma	94.9	93.1	86.5	445
Arusha	70.3	65.4	58.8	350
Kilimanjaro	94.5	94.5	93.4	258
Tanga	71.1	69.9	67.0	306
Morogoro	93.6	93.0	90.1	334
Coast	90.8	89.4	79.7	98
Lindi	94.4	93.8	81.3	155
Mtwara	81.9	78.9	66.3	249
Ruvuma	92.2	91.1	80.1	210
Iringa	70.3	68.6	63.7	338
Mbeya	75.9	70.9	70.6	333
Singida	86.6	84.8	82.5	190
Tabora	79.0	76.1	74.1	174
Rukwa	50.5	47.9	45.7	158
Kigoma	73.8	71.2	65.3	245
Shinyanga	60.9	53.3	40.6	578
Kagera	77.2	76.3	71.0	371
Mwanza	78.6	75.3	63.9	444
Mara	87.3	84.0	75.3	285
Education				
No education	68.7	64.2	56.2	2505
Primary incomplete	85.6	83.5	76.9	1166
Completed primary	89.2	88.3	83.0	2215
Secondary/Higher	98.9	98.9	98.9	152
Total	80.2	77.6	71.1	6038

[1]Includes pill, IUD, injection, vaginal methods (foaming tablets/diaphragm/foam/jelly), condom, female sterilisation, and male sterilisation.

Knowledge of contraceptive methods varies widely by region (Table 4.2). More than 90 percent of currently married women in Zanzibar, Ruvuma, Lindi, Dar es Salaam, Morogoro, Kilimanjaro, and Dodoma are aware of at least one modern contraceptive method. Knowledge of modern contraceptive methods is low in Rukwa (48 percent), Shinyanga (53 percent), Arusha (65 percent), Iringa (69 percent), and Tanga (70 percent).

The level of education of currently married women is positively associated with knowledge of contraceptive methods and a source where they could be obtained. Knowledge of at least one modern contraceptive method was 64 percent among women with no education, 84 percent among women with incomplete primary education, 88 percent among women who had completed primary education, and 99 percent among women with secondary education or higher. However, only 3 percent of currently married women had secondary education or higher.

4.2 Ever Use of Contraception

All women interviewed in the survey who reported knowing a method of family planning were asked if they had ever used that method. The results are presented in Table 4.3. About 23 percent of all women have ever used a method of family planning, and 14 percent have ever used a modern contraceptive method.

Table 4.3 Ever use of contraception

Percentage of all women and of currently married women who have ever used any contraceptive method, by specific method and age, Tanzania 1991/92

		Modern methods								Traditional methods					
Age	Any method	Any modern method	Pill	IUD	Injection	Diaphragm, foam, jelly	Condom	Female sterilisation	Male sterilisation	Any trad. method	Periodic abstinence	Mucus method	Withdrawal	Other	Number of women
						ALL WOMEN									
15-19	6.7	2.9	1.3	0.0	0.0	0.1	1.8	0.0	0.0	5.0	3.3	0.3	1.7	0.5	2183
20-24	25.0	13.9	9.3	0.4	0.2	0.2	6.2	0.3	0.0	15.9	9.0	0.8	7.6	1.9	1882
25-29	28.2	17.2	14.9	0.9	0.8	0.1	3.7	0.4	0.1	16.6	7.1	1.9	9.9	2.2	1599
30-34	32.5	20.6	17.5	1.6	1.6	0.3	4.8	1.1	0.0	20.5	10.4	1.8	11.1	3.4	1165
35-39	30.4	22.9	18.7	3.6	1.4	0.7	3.7	4.6	0.1	14.7	6.2	2.0	7.3	3.7	1000
40-44	27.0	19.9	14.9	3.3	1.7	0.7	2.6	5.0	0.1	15.0	5.1	1.0	7.9	4.4	715
45-49	21.4	13.1	8.0	1.9	2.4	0.3	0.8	4.0	0.2	13.0	3.6	0.4	7.8	4.0	695
Total	22.7	14.1	10.8	1.2	0.9	0.3	3.6	1.5	0.0	13.6	6.5	1.1	7.0	2.4	9238
						CURRENTLY MARRIED WOMEN									
15-19	10.9	4.1	2.4	0.0	0.0	0.0	2.1	0.0	0.0	7.3	4.0	0.5	3.1	0.8	558
20-24	26.2	15.2	10.6	0.4	0.1	0.2	6.8	0.3	0.0	16.1	7.2	1.0	8.8	2.2	1283
25-29	26.6	15.4	13.2	0.9	0.4	0.2	2.4	0.3	0.1	16.4	5.7	1.9	10.5	2.3	1274
30-34	32.3	19.1	16.1	1.7	1.8	0.2	4.6	1.2	0.0	21.4	11.2	1.9	11.4	3.6	935
35-39	28.3	20.9	16.6	3.0	1.3	0.8	3.5	3.9	0.1	14.2	5.7	1.7	7.6	3.4	841
40-44	26.6	19.8	14.9	3.1	1.9	0.6	2.5	4.9	0.1	15.1	4.9	1.2	7.7	4.2	603
45-49	20.9	12.4	7.6	2.1	2.3	0.1	0.3	3.4	0.2	13.5	4.1	0.5	7.9	4.0	545
Total	25.7	15.8	12.3	1.5	1.0	0.3	3.6	1.6	0.1	15.6	6.5	1.4	8.7	2.8	6038

Among currently married women, 26 percent reported having used family planning methods, and 16 percent have ever used modern family planning methods. Ever use of traditional family planning methods was reported by 14 percent of all women and 16 percent of currently married women. The most commonly used methods of family planning by currently married women were pills (12 percent), withdrawal (9 percent), and periodic abstinence (7 percent). Generally, ever use of modern family planning methods increases with age up to 35-39 years, after which it decreases.

4.3 Current Use of Contraceptives

Table 4.4 presents the distribution of women by family planning method currently used according to age. Only 10 percent of currently married women in Tanzania were using family planning methods at the time of interview. This section focuses primarily on married women, since it is customary to analyse contraceptive use among currently married women.

Table 4.4 Current use of contraception by age

Percent distribution of all women and of currently married women by contraceptive method currently used, according to age, age, Tanzania 1991/92

			Modern methods							Traditional methods							
Age	Any method	Any modern method	Pill	IUD	Injection	Diaphragm, foam, jelly	Condom	Female sterilisation	Male sterilisation	Any trad. method	Periodic abstinence	Mucus method	With drawal	Other	Not currently using	Total	Number
ALL WOMEN																	
15-19	3.4	1.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0	2.4	1.7	0.0	0.5	0.2	3.4	100.0	2183
20-24	9.9	5.7	3.6	0.2	0.1	0.0	1.5	0.3	0.0	4.2	2.1	0.1	1.4	0.5	9.9	100.0	1882
25-29	10.7	5.7	4.6	0.3	0.1	0.0	0.3	0.4	0.0	5.0	2.1	0.2	2.0	0.7	10.7	100.0	1599
30-34	14.9	10.5	7.0	0.4	0.8	0.0	1.1	1.1	0.0	4.4	1.9	0.0	1.9	0.7	14.9	100.0	1165
35-39	14.2	11.1	3.7	1.0	0.5	0.0	1.2	4.6	0.0	3.1	1.0	0.2	1.4	0.5	14.2	100.0	1000
40-44	10.7	7.6	0.9	0.5	0.9	0.1	0.2	5.0	0.0	3.1	0.7	0.0	1.8	0.6	10.7	100.0	715
45-49	7.2	5.4	0.1	0.4	0.6	0.1	0.1	4.0	0.2	1.8	0.8	0.0	0.5	0.5	7.2	100.0	695
Total	9.5	5.9	3.0	0.3	0.3	0.0	0.7	1.5	0.0	3.6	1.6	0.1	1.3	0.5	9.5	100.0	9238
CURRENTLY MARRIED WOMEN																	
15-19	5.2	1.7	1.4	0.0	0.0	0.0	0.2	0.0	0.0	3.6	1.7	0.0	1.4	0.5	5.2	100.0	558
20-24	10.0	5.9	4.3	0.2	0.0	0.0	1.1	0.3	0.0	4.1	1.3	0.1	2.0	0.6	10.0	100.0	1283
25-29	9.9	5.2	4.1	0.4	0.2	0.0	0.3	0.3	0.0	4.8	1.4	0.3	2.5	0.6	9.9	100.0	1274
30-34	13.8	9.1	5.5	0.4	1.0	0.0	1.1	1.2	0.0	4.7	1.8	0.0	2.3	0.6	13.8	100.0	935
35-39	13.3	10.5	3.8	1.0	0.4	0.0	1.3	3.9	0.0	2.8	0.8	0.0	1.6	0.4	13.3	100.0	841
40-44	10.9	7.5	0.8	0.6	0.9	0.1	0.2	4.9	0.0	3.4	0.6	0.0	2.1	0.7	10.9	100.0	603
45-49	7.1	4.8	0.1	0.5	0.5	0.1	0.1	3.4	0.2	2.3	1.0	0.0	0.6	0.7	7.1	100.0	545
Total	10.4	6.6	3.4	0.4	0.4	0.0	0.7	1.6	0.0	3.9	1.3	0.1	1.9	0.6	10.4	100.0	6038

Use of modern methods was higher (7 percent) than that of traditional methods (4 percent). Pills were used by 3 percent of currently married women, which is about half of all women using modern methods. Other methods commonly used were withdrawal (2 percent), female sterilization (2 percent), and periodic abstinence (1 percent). Use of family planning methods was lowest among younger women (15-19 years) and highest among women between 30-39 years of age. The tendency to use family planning methods was higher among older women, probably due to the fact that they are more likely to have completed their

families and hence want to stop childbearing. Similar findings were also observed in Nigeria (Federal Office of Statistics, 1992).

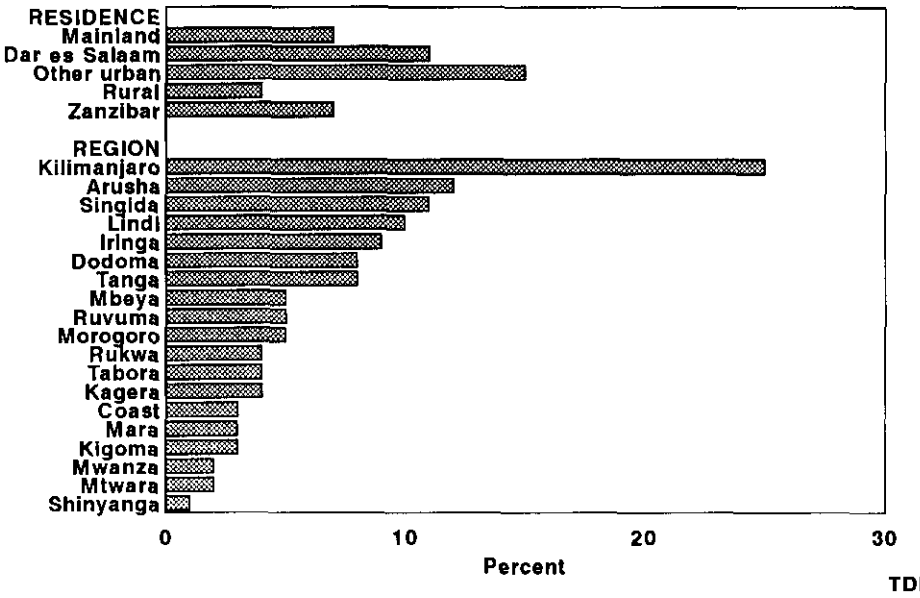
To determine the factors associated with current use of family planning methods, use of the methods was assessed by various background characteristics of women, such as urban/rural residence, region, education, and number of living children. The results are presented in Table 4.5 and Figure 4.1.

Table 4.5 Current use of contraception by background characteristics

Percent distribution of currently married women by contraceptive method currently used, according to selected background characteristics, Tanzania 1991/92

		Modern methods								Traditional methods					
Background characteristic	Any method	All modern	Pill	IUD	Injection	Vaginal methods	Condom	Female sterilisation	Male sterilisation.	Any trad. method	Periodic abstinence	Mucus	Withdrawal	Other	Number of women
Residence															
Mainland	10.5	6.6	3.4	0.4	0.4	0.0	0.7	1.6	0.0	4.0	1.3	0.1	2.0	0.6	5870
Dar es Salaam	15.7	10.9	5.7	0.5	0.6	0.0	1.9	2.2	0.0	4.8	0.6	0.0	3.5	0.6	349
Other urban	18.7	15.1	9.5	1.3	1.3	0.0	1.4	1.6	0.0	3.6	1.6	0.1	1.1	0.8	966
Rural	8.4	4.4	1.9	0.2	0.1	0.0	0.5	1.6	0.0	4.0	1.3	0.1	2.1	0.6	4555
Zanzibar	7.1	6.6	2.9	0.3	1.1	0.0	0.8	1.5	0.0	0.5	0.5	0.0	0.0	0.0	168
Region															
Dodoma	9.6	8.3	4.5	0.0	1.6	0.0	2.2	0.0	0.0	1.3	0.5	0.0	0.6	0.2	445
Arusha	17.3	12.3	7.6	0.8	0.4	0.0	1.1	2.5	0.0	5.0	0.8	0.6	3.3	0.2	350
Kilimanjaro	33.1	25.3	8.5	4.8	0.4	0.3	3.4	7.9	0.0	7.8	1.8	0.3	5.6	0.0	258
Tanga	15.8	7.5	4.9	0.0	0.7	0.0	0.3	1.6	0.0	8.3	1.8	0.0	6.5	0.0	306
Morogoro	10.6	4.5	3.3	0.0	0.0	0.0	1.0	0.2	0.0	6.1	2.0	0.0	2.4	1.8	334
Coast	13.6	3.3	1.8	0.0	0.0	0.4	1.1	0.0	0.0	10.3	0.8	0.0	6.7	2.8	98
Lindi	11.5	9.7	4.9	0.0	1.0	0.0	0.6	3.2	0.0	1.8	0.0	0.0	0.2	1.6	155
Mtwara	2.3	1.5	0.4	0.0	0.4	0.0	0.0	0.7	0.0	0.8	0.0	0.0	0.0	0.8	249
Ruvuma	7.8	5.1	1.3	0.0	0.0	0.0	0.3	3.5	0.0	2.7	0.0	0.4	1.3	1.1	210
Iringa	11.1	9.0	6.7	0.9	0.2	0.0	0.0	0.8	0.3	2.1	1.2	0.0	0.9	0.0	338
Mbeya	12.1	5.4	2.9	0.9	0.0	0.0	0.0	1.6	0.0	6.7	0.8	0.0	5.9	0.0	333
Singida	14.0	10.7	8.4	0.9	0.0	0.0	0.0	1.4	0.0	3.4	1.5	0.0	1.1	0.7	190
Tabora	9.0	4.1	1.0	0.2	0.0	0.0	0.0	2.9	0.0	5.0	1.6	0.4	1.5	1.4	174
Rukwa	5.6	4.4	2.3	0.0	0.0	0.0	0.5	1.7	0.0	1.2	0.9	0.0	0.1	0.1	158
Kigoma	4.9	2.8	1.3	0.0	0.1	0.0	0.9	0.5	0.0	2.1	0.3	0.0	0.5	1.3	245
Shinyanga	4.2	1.2	0.6	0.0	0.0	0.0	0.3	0.3	0.0	3.0	2.4	0.0	0.0	0.6	578
Kagera	8.4	3.9	0.5	0.0	0.3	0.0	0.0	3.2	0.0	4.4	2.8	0.0	1.3	0.3	371
Mwanza	4.0	2.3	1.5	0.0	0.0	0.0	0.0	0.9	0.0	1.6	0.8	0.0	0.3	0.6	444
Mara	7.9	3.0	0.8	0.2	1.1	0.0	0.0	0.9	0.0	4.9	2.9	0.3	1.1	0.6	285
Education															
No education	3.7	1.8	0.6	0.0	0.2	0.0	0.1	0.8	0.0	1.9	0.7	0.0	0.8	0.4	2505
Primary incomplete	12.9	8.2	2.3	0.6	1.0	0.0	0.7	3.6	0.0	4.7	0.7	0.2	2.9	0.9	1166
Completed primary	14.6	9.3	6.1	0.4	0.3	0.0	1.2	1.3	0.0	5.3	1.9	0.1	2.7	0.6	2215
Secondary/Higher	42.4	33.1	17.2	6.6	0.3	0.0	3.9	5.2	0.0	9.3	4.9	0.5	3.0	0.9	152
Number of children															
0	1.8	0.6	0.1	0.0	0.0	0.0	0.0	0.5	0.0	1.2	1.2	0.0	0.0	0.0	619
1	9.8	6.3	4.5	0.0	0.1	0.0	0.7	1.0	0.0	3.5	1.4	0.3	1.4	0.4	1058
2	11.6	6.0	4.2	0.4	0.0	0.0	1.2	0.3	0.0	5.6	1.6	0.1	2.9	1.0	1001
3	11.3	7.7	4.8	1.2	0.1	0.0	0.6	1.0	0.0	3.6	1.2	0.1	1.9	0.5	835
4+	12.0	8.0	2.9	0.5	0.8	0.1	0.7	2.9	0.0	4.0	1.1	0.0	2.2	0.7	2525
Total	10.4	6.6	3.4	0.4	0.4	0.0	0.7	1.6	0.0	3.9	1.3	0.1	1.9	0.6	6038

Figure 4.1
Current Use of Modern Contraceptives among Currently Married Women 15-49



The proportion of married women using any method of family planning was higher in the Tanzania mainland (11 percent) than in Zanzibar (7 percent). Within the Tanzania mainland, women in rural areas were less likely to use family planning methods than those in urban areas. However, the prevalence of contraceptive use was slightly lower in Dar es Salaam (16 percent) than in other urban areas (19 percent). In both urban and rural areas, the pill was the most used method.

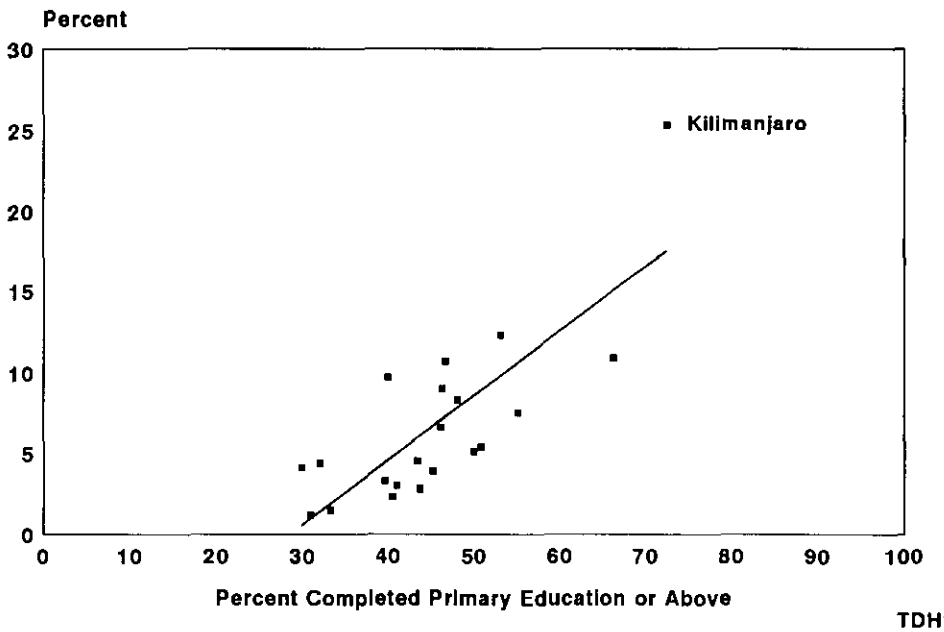
The prevalence of use of family planning methods varied widely by region. Regions with the highest proportion of married women using modern methods were Kilimanjaro (25 percent), Arusha (12 percent), Dar es Salaam (11 percent), and Singida (11 percent). Lowest prevalence of contraceptive use was found in Shinyanga (1 percent), Mtwara (2 percent), Mwanza (2 percent), and Kigoma (3 percent). Overall, pills were the most popular method in most of the regions. Use of traditional methods was relatively high in Coast (10 percent), Tanga (8 percent), Kilimanjaro (8 percent), and Mbeya (7 percent). In general, withdrawal was the most common traditional method used in all regions.

The probability of using family planning methods is associated with level of education. As documented in other countries, a monotonic increase in contraceptive use was found to be associated with increasing level of education. The proportion of married women using any family planning method increased from about 4 percent among women with no formal education to 42 percent among those with secondary education or higher. A similar pattern was observed for both modern and traditional methods. Female sterilisation is the most commonly used method among women with no education and those with incomplete primary education, whereas pills are the most used contraceptive method among women with completed primary education and above.

The association between level of education and use of contraception was further explored by relating the proportion of women who had completed primary school and above and current use of contraceptives by

region; the results are shown in Figure 4.2. These results indicate that there is a strong relationship between contraceptive use and level of education. The level of education explains 63 percent of the variation in use of modern contraceptives between regions. Kilimanjaro region is an outlier, especially because of its high use of modern contraceptives: the level of use is higher than expected on the basis of its level of education. Dar es Salaam, despite having a level of contraceptive use higher than most other regions, has a lower level than expected on the basis of its level of education.

Figure 4.2
Use of Modern Contraceptive Methods, Married Women 15-49



Use of any family planning method was found to increase from about 2 percent among women with no living child to 12 percent among those with at least four living children. Increasing prevalence of modern contraceptive use was also found to be associated with increasing number of living children. Use of specific modern and traditional methods varied little according to the number of living children, except for female sterilization and IUD, which were found to be used mainly by women with at least three living children.

In general, these findings indicate that women more likely to be using family planning methods are those on mainland Tanzania, particularly those in urban areas other than Dar es Salaam, those residing in the Kilimanjaro region, those who have completed secondary education, and those with at least two living children.

4.4 Number of Children at First Use of Contraception

Family planning methods may be used by couples for either limiting family size or spacing births. Family size limiters are likely to start using contraceptives only when they have already had as many children as they want, whereas couples wishing to space their births may start contracepting at a much earlier phase before having many births. In many cultures where acceptance of family planning is not widespread, most couples use contraceptives for limiting family size. As the concept of planning families gains acceptance,

however, couples may begin to use contraception for spacing births as well as for limiting family size. To explore the possible motivation for use of contraceptives, a question was posed on the number of living children ever-married women had when they first used contraception; the results are presented in Table 4.6.

Table 4.6 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, according to current age, Tanzania 1991/92

Current age	Never used contraception	Number of living children at time of first use of contraception						Total	Number of women
		0	1	2	3	4+	Missing		
15-19	88.5	6.0	4.7	0.2	0.0	0.0	0.6	100.0	618
20-24	73.6	2.5	17.8	3.7	0.7	0.4	1.3	100.0	1409
25-29	72.3	1.3	12.2	8.3	3.6	1.3	1.0	100.0	1457
30-34	66.9	0.7	10.2	7.1	6.1	7.8	1.3	100.0	1117
35-39	70.7	1.1	6.8	4.7	5.4	10.6	0.7	100.0	976
40-44	73.1	0.8	2.8	3.8	3.7	15.0	0.8	100.0	709
45-49	78.5	0.1	2.6	2.0	3.8	12.0	1.0	100.0	692
Total	73.6	1.7	9.7	4.9	3.4	5.8	1.0	100.0	6977

Overall, only 2 percent of women used contraceptives before they had children. About 37 percent of women who had ever used contraceptives (10 percent of all ever-married women) started using contraceptives when they had one child, suggesting that they were interested in spacing their births. On the other end, about 22 percent of ever users of contraceptives (6 percent of all ever-married women) used contraceptives for the first time when they had at least 4 living children, suggesting that they were interested in limiting family size.

When we take into consideration the age of respondents at interview a very interesting pattern can be observed. Among ever users of contraceptives, over half (52 percent) of women below 20 years of age started using contraceptives before they had any living child, while 67 percent of women between 20-24 years started using contraceptives when they had only one child. Among women age 40-49 who reported to have ever used contraceptives, 56 percent had at least 4 living children at the time they started using contraceptives. These results suggests that the major motivation for starting to use contraceptives was prevention of unwanted pregnancies for those below 20 years of age; spacing of births for those between 20-29 years; and limiting family size for those at 40 years and above. Thus, they reflect a possible increasing tendency of using family planning methods for prevention of unwanted pregnancies and child spacing rather than of family size limitation.

4.5 Knowledge of the Fertile Period

The time between two menstrual bleedings is commonly referred to as a menstrual cycle. Women's ability to conceive tends to vary within the menstrual cycle. Generally, women are said to be "fertile" for a brief period of time at mid-cycle, and relatively "infertile" for the rest of the cycle. Knowledge of this fact is obviously important for successful practice of coital-related methods and periodic abstinence or the rhythm

method. To assess this knowledge, women were asked to identify the time within the menstrual cycle when a woman is most likely to conceive. Table 4.7 presents the percent distribution of all women and those who have ever used periodic abstinence by reported knowledge of the fertile period.

Of all women interviewed, 42 percent reported that they did not know when a woman is most likely to conceive, and 20 percent said that a woman is most likely to conceive just after her period has ended. Only 13 percent gave the correct response -- that a woman was most likely to conceive in the middle of her menstrual cycle. Ever users of periodic abstinence were more likely to know the time in the cycle when a woman was expected to conceive. Of 598 women who had ever used periodic abstinence, 31 percent correctly identified the mid-cycle as the fertile period, and only 12 percent said they did not know. In general, knowledge of the fertile period was very low, since more than half of all women and those who have ever used periodic abstinence gave wrong answers or reporting that they did not know when a woman was most likely to conceive.

Table 4.7 Knowledge of fertile period

Percent distribution of all women and of women who have ever used periodic abstinence by knowledge of the fertile period during the ovulatory cycle, Tanzania 1991/92

Perceived fertile period	All women	Ever users of periodic abstinence
During menstrual period	0.6	0.6
Right after period has ended	19.5	27.8
In the middle of the cycle	13.0	31.1
Just before period begins	5.7	11.6
Other	0.1	0.3
No particular time	18.2	15.9
Don't know	42.1	12.1
Missing	0.9	0.6
Total	100.0	100.0
Number	9238	598

4.6 Sources for Family Planning Methods

All current users of modern contraceptive methods were asked to report the source from which they most recently obtained their methods. Interviewers were instructed to write the name of the source, which was later verified and coded by the supervisors and field editors.

The reported sources of contraceptive supplies are summarized in Table 4.8. Public (government) facilities were reported by the majority (73 percent) of modern contraceptive users as the source of their most recent contraceptive supplies. Eighteen percent reported obtaining contraceptives from private medical facilities, while only 4 percent obtained their supplies from other private outlets such as shops or friends and relatives. The most common sources of methods were dispensaries for public (government) sector and religious organisation health facilities and private shops for the private sector.

Several factors may influence a woman to select a certain facility as a source of contraceptive supplies. One of these factors may be the type of method chosen. Table 4.8 shows the most recent source of supply by the method used by current users of modern contraceptive methods. The majority of users of the pill, IUD, and condom and all users of injectables obtained their supplies from public (government) facilities. Among 134 women reporting to have been sterilized, half were performed in public (government) facilities, and one-third were done in a private medical facility. The sources of modern contraceptive methods are summarized in Figure 4.3.

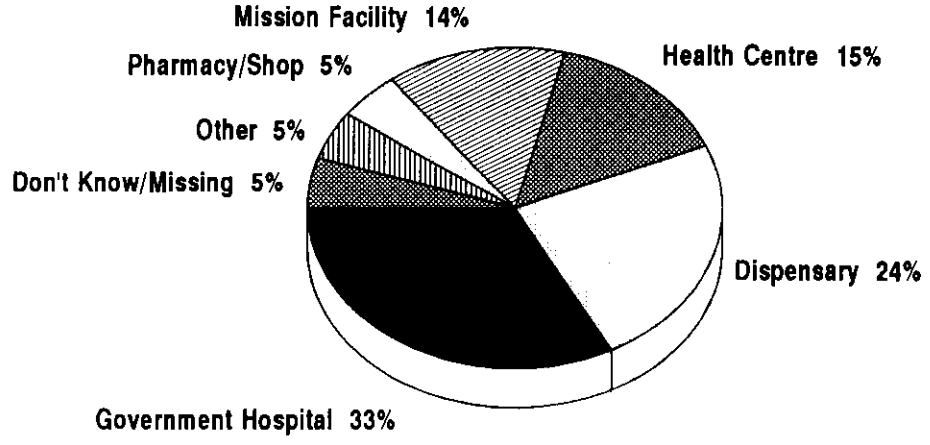
Table 4.8 Source of supply for modern contraceptive methods

Percent distribution of current users of modern contraceptive methods by most recent source of supply, according to specific methods, Tanzania 1991/92

Source of supply	Pill	IUD	Injec-tion	Condom	Female sterili-sation	Total
Public sector	86.3	(74.6)	(100.0)	54.3	49.4	72.9
Consultant hospital	0.7	(7.0)	(9.2)	2.2	12.3	4.5
Regional hospital	6.6	(21.5)	(10.3)	4.3	10.2	8.2
District hospital	18.8	(7.2)	(38.1)	12.0	25.6	19.9
Health centre	21.5	(30.3)	(16.3)	10.1	0.0	14.9
Dispensary	37.4	(8.6)	(21.5)	24.3	0.0	23.9
Parastatal health facility	1.4	(0.0)	(4.7)	0.0	1.4	1.3
Village health post/Worker	0.0	(0.0)	(0.0)	1.4	0.0	0.2
Medical private sector	9.2	(25.4)	(0.0)	18.0	36.3	17.8
Religious org. facility	6.1	(25.4)	(0.0)	6.4	33.4	14.0
Private doctor/Hospital/Clinic	0.9	(0.0)	(0.0)	4.0	2.8	1.7
Pharmacy/Medical store	2.0	(0.0)	(0.0)	7.5	0.0	2.0
UMATI CBD worker	0.1	(0.0)	(0.0)	0.0	0.0	0.1
Other private sector	2.4	(0.0)	(0.0)	23.1	0.0	4.1
Shop	0.3	(0.0)	(0.0)	21.3	0.0	2.8
Friends, relatives	2.1	(0.0)	(0.0)	1.9	0.0	1.3
Other	0.0	(0.0)	(0.0)	0.5	0.5	0.2
Don't know	0.0	(0.0)	(0.0)	4.1	0.0	0.5
Missing	2.1	(0.0)	(0.0)	0.0	13.8	4.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	279	31	29	69	134	545

UMATI = Family Planning Association of Tanzania

Figure 4.3
Distribution of Current Users by Source of Contraceptive Supply



TDHS 1991/92

Other factors that may influence a woman to select a certain source of supplies is the distance from home to the facility. To assess the distance involved, current users of modern contraceptive methods were asked how long it takes to travel from their home to the place where they obtain the method. Nonusers were asked if they knew a place where they could obtain a modern method and, if so, how long it would take to travel there. The results are shown in Table 4.9.

Table 4.9 Time to source of supply for modern contraceptive methods

Percent distribution of women who are currently using a modern contraceptive method, of women who are not using a modern method, and of women who know a method, by time to reach a source of supply, according to urban/rural residence, Tanzania 1991/92

Minutes to source	Women who are currently using a modern method			Women who are not using a modern method			Women who know a contraceptive method		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
0-14	16.7	10.4	13.4	10.2	3.8	5.3	12.3	5.4	7.4
15-29	22.5	6.9	14.4	11.4	3.1	5.0	14.4	4.5	7.3
30-59	22.1	14.1	18.0	22.7	8.7	12.0	25.8	12.4	16.3
60 or more	31.2	61.6	47.0	22.3	34.0	31.2	26.3	47.7	41.5
Does not know time	1.4	1.9	1.6	0.5	0.6	0.6	0.6	0.9	0.8
Does not know source	0.7	0.3	0.5	31.8	49.1	45.0	19.0	27.8	25.3
Not stated	5.4	4.8	5.1	1.1	0.7	0.8	1.7	1.2	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	262	282	545	2032	6661	8693	1991	4885	6876

Among women currently using modern contraceptive methods, 28 percent reported living less than 30 minutes from the source of contraceptives, while 18 percent took 30 minutes to one hour to reach the source of contraceptives. Almost half (47 percent) of current users reported taking one hour or more to reach the source. As expected, women in rural areas were more likely to live farther from their source of contraceptives than their urban counterparts.

Among women who are not currently using modern contraceptive methods, 45 percent did not know a source for contraceptive methods. This finding may be due to the fact that all women were asked this question, including those who do not know any method. However, even among those women who knew a family planning method, 25 percent said they did not know a place to get modern methods.[1] This suggests that lack of knowledge of a source of contraceptive supply is not necessarily due to not knowing about family planning methods. Among those who knew a source of contraceptives, the time to a source of contraceptives was similar in users and nonusers in urban and rural areas. For instance, the proportion more than 60 minutes away from the source is highest among rural women who use (62 percent), followed by women who know a method (48 percent) and non-users (34 percent). These findings partly suggest that travel time to the source of contraceptive supply may not be an important determinant of contraceptive use in urban and rural areas. However, the large proportion of non-users who do not know a source complicates the picture: these may be women who live far from a source. In that case, travel time is an important determinant of use.

4.7 Intention to use Family Planning Among Nonusers

Currently married women who were not using contraceptive methods at the time of survey were asked if they intended to use family planning methods in future. The results are presented in Table 4.10. Over half of women (56 percent) said they did not intend to use family planning methods in the future, whereas 17 percent were not sure. In general, women with no living children were more likely to report that they do not intend to use family planning methods.

Nineteen percent of nonusers said they were intending to use family planning methods within 12 months, 7 percent said they intended to use after 12 months, and about 2 percent indicated their intention to use contraceptives in the future, although they were not sure of the timing. Thus, the majority of women intending to use family planning methods in the future reported that they were planning to do so within the next 12 months.

[1] These results are not entirely consistent with the results presented in Table 4.1, where, based on a different question, it was shown that 89 percent of women who know a method know a source. No explanation for this difference can be given.

Table 4.10 Future use of contraception

Percent distribution of currently married women who are not using a contraceptive method by past experience with contraception and intention to use in the future, according to number of living children, Tanzania 1991/92

Past experience with contraception and future intentions	Number of living children[1]					Total
	0	1	2	3	4+	
Never used contraception						
Intends to use in next 12 months	2.3	10.6	11.5	13.0	14.0	11.9
Intends to use later	5.2	5.6	6.5	3.8	2.9	4.3
Unsure as to timing	0.9	0.8	1.2	1.2	1.0	1.0
Unsure as to intention	17.3	19.7	18.5	12.7	12.3	15.1
Does not intend to use	68.8	51.8	46.6	48.3	48.5	50.5
Missing	0.0	0.3	0.3	0.0	0.3	0.2
Previously used contraception						
Intends to use in next 12 months	0.6	3.5	8.2	10.1	8.3	7.1
Intends to use later	1.2	2.4	1.8	2.4	2.7	2.3
Unsure as to timing	0.0	0.0	0.3	2.1	0.6	0.6
Unsure as to intention	1.2	2.0	0.7	1.5	1.7	1.5
Does not intend to use	2.4	3.1	4.3	4.8	7.6	5.5
Missing	0.0	0.0	0.0	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
All currently married nonusers						
Intends to use in next 12 months	2.9	14.1	19.7	23.2	22.4	19.0
Intends to use later	6.4	8.0	8.3	6.2	5.6	6.6
Unsure as to timing	0.9	0.8	1.5	3.2	1.6	1.6
Unsure as to intention	18.4	21.7	19.2	14.1	13.9	16.5
Does not intend to use	71.3	54.9	51.0	53.1	56.2	55.9
Missing	0.0	0.3	0.3	0.2	0.4	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	461	927	897	796	2327	5409

[1]Includes current pregnancy

Women who said they do not intend to use family planning methods were asked to give their reasons for nonuse. Out of the 3025 respondents, 36 percent said they do not intend to use family planning methods in the future because they want children (see Table 4.11). Other reasons given were difficulty in conceiving (12 percent), infecundity (post-menopausal/had hysterectomy) (11 percent), lack of knowledge of methods (9 percent), and opposition to family planning (8 percent). Women below 30 years of age were more likely to report that they do not intend to use contraceptives because they want children, whereas those age 30 years or more were more likely to say that they were infecund or menopausal and therefore no longer at risk of getting pregnant.

Nonusers who indicated their willingness to use family planning methods in the future were asked to mention the method they preferred to use. A majority of these women (53 percent) said they preferred to use pills (see Table 4.12). Other preferred methods were injections (12 percent), female sterilization (9 percent), and IUD (5 percent). Women who intend to use in the next 12 months have similar method preference as women who intend to use after 12 months. However, women who were not sure of the timing of future use were more likely to prefer the withdrawal method.

Table 4.11 Reasons for not using contraception

Percent distribution of women who are not using a contraceptive method and who do not intend to use in the future by main reason for not using, according to age, Tanzania 1991/92

Reason for not using contraception	Age		Total
	<30	30+	
Wants children	52.2	23.9	36.4
Lack of knowledge	10.8	7.6	9.0
Partner opposed	4.1	2.4	3.1
Costs too much	0.0	0.1	0.1
Side effects	3.6	3.1	3.4
Health concerns	0.8	1.9	1.4
Hard to get methods	2.5	1.8	2.1
Religion	0.5	0.6	0.5
Opposed to family planning	7.7	7.6	7.7
Fatalistic	3.8	6.2	5.2
Other people opposed	0.1	0.2	0.1
Infrequent sex	1.3	2.1	1.8
Difficult to be pregnant	4.7	17.8	12.0
Menopausal, had hysterectomy	0.0	20.2	11.3
Inconvenient	1.1	1.3	1.2
Not married	0.4	0.4	0.4
Other	0.6	0.7	0.7
Don't know	5.5	2.0	3.5
Missing	0.1	0.1	0.1
Total	100.0	100.0	100.0
Number	1331	1694	3025

Table 4.12 Preferred method of contraception for future use

Percent distribution of currently married women who are not using a contraceptive method but who intend to use in the future by preferred method, according to whether they intend to use in the next 12 months or later, Tanzania 1991/92

Preferred method of contraception	Intend to use			Total[1]
	In next 12 months	After 12 months	Unsure as to timing	
Pill	53.1	54.3	54.5	53.4
IUD	5.6	3.3	0.0	4.7
Injection	13.7	10.2	3.6	12.2
Diaphragm/Foam/Jelly	1.0	2.1	0.0	1.2
Condom	1.5	1.2	0.0	1.4
Female sterilisation	8.9	7.0	9.6	8.5
Male sterilisation	0.2	0.4	0.0	0.3
Periodic abstinence	3.5	4.0	5.8	3.8
Mucus method	0.2	0.3	0.0	0.2
Withdrawal	1.6	2.0	12.5	2.4
Other	3.4	5.6	6.2	4.1
Missing	7.3	9.4	7.8	8.0
Total	100.0	100.0	100.0	100.0
Number	1026	359	88	1475

[1]Includes 3 missing cases

4.8 Approval of Family Planning

Radio and television are the major potential sources of information about family planning. To assess the effectiveness of such messages, all respondents were asked if they had heard a message about family planning on radio or television in the month preceding the survey. A large majority of respondents (76 percent) said they had not heard any message, whereas only 23 percent reported that they did (see Table 4.13). Women in Zanzibar were more likely to have heard family planning messages on radio and television than their counterparts on the mainland. It should be noted that although the question was asked for both radio and television for the mainland, radio is the only source of information, since no public television system is in place there. This may account for the differences observed between Zanzibar and the Tanzania mainland.

Table 4.13 Family planning messages on radio and television

Percent distribution of all women by whether they have heard a family planning message on radio or on television in the month preceding the survey, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Heard family planning message on radio or on television				Missing	Total	Number
	Neither	Radio only	Television only	Both			
Residence							
Mainland	77.5	21.5	0.3	0.3	0.4	100.0	8978
Dar es Salaam	43.8	53.1	0.9	2.2	0.0	100.0	585
Other urban	62.4	36.8	0.4	0.4	0.0	100.0	1686
Rural	84.2	14.9	0.3	0.2	0.5	100.0	6707
Zanzibar	33.0	55.4	0.4	11.0	0.2	100.0	260
Region							
Dodoma	84.7	14.5	0.5	0.0	0.3	100.0	649
Arusha	63.9	35.7	0.0	0.3	0.1	100.0	573
Kilimanjaro	73.0	26.5	0.4	0.2	0.0	100.0	516
Tanga	86.2	12.5	0.0	0.4	0.9	100.0	471
Morogoro	76.7	22.6	0.5	0.1	0.1	100.0	512
Coast	65.4	32.9	1.0	0.8	0.0	100.0	159
Lindi	86.3	13.7	0.0	0.0	0.0	100.0	217
Mtwara	93.3	6.7	0.0	0.0	0.0	100.0	363
Ruvuma	91.2	8.6	0.2	0.0	0.0	100.0	320
Iringa	77.9	19.6	0.0	0.3	2.3	100.0	475
Mbeya	79.9	19.4	0.0	0.2	0.4	100.0	449
Singida	80.3	19.2	0.5	0.0	0.0	100.0	355
Tabora	83.8	15.5	0.2	0.2	0.3	100.0	271
Rukwa	78.3	21.1	0.2	0.2	0.2	100.0	217
Kigoma	74.6	25.3	0.0	0.2	0.0	100.0	375
Shinyanga	88.5	10.8	0.0	0.0	0.7	100.0	793
Kagera	78.0	19.0	1.4	0.9	0.7	100.0	608
Mwanza	77.0	22.1	0.5	0.2	0.2	100.0	666
Mara	75.6	24.0	0.0	0.3	0.1	100.0	403
Education							
No education	86.7	12.2	0.2	0.2	0.6	100.0	3128
Primary incomplete	77.8	21.3	0.1	0.4	0.4	100.0	1825
Completed primary	70.3	28.5	0.4	0.6	0.2	100.0	3841
Secondary/Higher	46.4	46.6	1.7	5.0	0.2	100.0	444
Total	76.2	22.4	0.3	0.6	0.4	100.0	9238

On the Tanzania mainland, radio messages on family planning were more likely to have been heard by women in urban areas than those in rural areas and the proportion varied widely across regions. Over half of respondents in Zanzibar (67 percent) and Dar es Salaam (56 percent) have heard family planning messages

on radio compared to less than 12 percent of respondents in Mtwara, Ruvuma, and Shinyanga. More educated women were also more likely to have heard a family planning message on radio or television than their less educated counterparts.

Women were asked whether they thought it was acceptable or not acceptable for family planning information to be provided on radio or television. Overall, a majority of women interviewed (71 percent) reported that it was acceptable to use radio or television for family planning information (Table 4.14).

Table 4.14 Acceptability of the use of mass media for disseminating family planning messages

Percentage of women who believe that it is acceptable to have messages about family planning on radio or television, by selected background characteristics, Tanzania 1991/92

Background characteristic	Accept-able	Not accept-able	Missing	Total	Number
Age					
15-19	57.9	13.5	28.7	100.0	2183
20-24	79.4	10.2	10.4	100.0	1882
25-29	77.4	11.2	11.3	100.0	1599
30-34	79.7	11.2	9.1	100.0	1165
35-39	68.9	17.7	13.4	100.0	1000
40-44	67.7	16.7	15.7	100.0	715
45-49	60.4	15.4	24.2	100.0	695
Residence					
Mainland	70.5	12.7	16.8	100.0	8978
Dar es Salaam	79.4	15.9	4.7	100.0	585
Other urban	82.1	8.4	9.5	100.0	1686
Rural	66.8	13.4	19.7	100.0	6707
Zanzibar	71.2	24.3	4.6	100.0	260
Region					
Dodoma	73.7	13.8	12.5	100.0	649
Arusha	77.3	11.1	11.6	100.0	573
Kilimanjaro	84.6	4.6	10.8	100.0	516
Tanga	78.5	6.8	14.7	100.0	471
Morogoro	73.8	13.4	12.9	100.0	512
Coast	61.7	28.2	10.0	100.0	159
Lindi	74.2	14.1	11.7	100.0	217
Mtwara	56.4	13.8	29.8	100.0	363
Ruvuma	69.4	15.6	15.0	100.0	320
Iringa	55.8	15.4	28.8	100.0	475
Mbeya	62.7	7.9	29.4	100.0	449
Singida	69.7	10.8	19.5	100.0	355
Tabora	75.1	9.4	15.5	100.0	271
Rukwa	51.9	11.3	36.8	100.0	217
Kigoma	68.3	15.0	16.7	100.0	375
Shinyanga	66.6	10.2	23.3	100.0	793
Kagera	71.5	15.7	12.8	100.0	608
Mwanza	69.3	13.4	17.2	100.0	666
Mara	70.1	17.9	12.0	100.0	403
Education					
No education	57.0	19.3	23.6	100.0	3128
Some primary	70.8	11.6	17.6	100.0	1825
Completed primary	79.3	9.3	11.4	100.0	3841
Secondary/Higher	88.5	5.7	5.7	100.0	444
Total	70.5	13.0	16.5	100.0	9238

Acceptability of radio and television as a source of information was relatively low among women below 20 years and above 44 years, while the proportion of women reporting these channels to be unacceptable was relatively higher among women above 34 years of age. Women in Zanzibar were twice as likely as their counterparts in Tanzania mainland to say that radio and television were unacceptable media for family planning information. Within the Tanzania mainland, women in Dar es Salaam and rural areas were more likely to report that radio and television were unacceptable than women in other urban areas.

Acceptability of radio and television for dissemination of family planning messages varied across regions. Less than 10 percent of women in Kilimanjaro, Tanga, Mbeya, and Tabora reported that radio and television were unacceptable for dissemination of family planning messages, compared to more than twenty percent of women in Coast and Zanzibar. More educated women were much more likely to accept family planning messages on radio or television than less educated women.

To assess the acceptability of family planning among married women who know family planning methods, the TDHS included a question about the extent to which couples discuss the topic with each other. Table 4.15 indicates that 56 percent of respondents had not discussed family planning with their husbands during the previous year. Among those who have discussed family planning with their husbands, most had discussed the topic only once or twice. Women below 20 years of age and those above 39 years of age were more likely not to have discussed family planning with their husbands than their counterparts age 20-39 years.

Table 4.15 Discussion of family planning by couples

Percent distribution of currently married women who know a contraceptive method by the number of times family planning was discussed with husband in the year preceding the survey, according to current age, Tanzania 1991/92

Age	Number of times family planning discussed: Never	Once or twice	Three or more times	Don't know/ Missing	Total	Number of women
15-19	66.1	26.2	7.3	0.3	100.0	396
20-24	51.1	29.3	19.4	0.2	100.0	1040
25-29	52.9	28.2	18.6	0.3	100.0	1073
30-34	49.0	29.0	21.8	0.2	100.0	788
35-39	58.1	19.9	21.2	0.8	100.0	637
40-44	61.3	22.5	16.1	0.0	100.0	453
45-49	72.9	13.4	13.2	0.5	100.0	358
Total	56.0	25.6	18.1	0.3	100.0	4746

To obtain more direct information about the acceptability of family planning, respondents were asked if they approved or disapproved of couples using family planning methods. Although all women were asked this question, the data presented here are restricted to currently married women and exclude those women who had never heard of a contraceptive method. Currently married women were also asked if they thought that their husbands approved of the use of family planning. The results are shown in Table 4.16.

Table 4.16 Attitudes of couples toward family planning

Among currently married non-sterilised women who know a contraceptive method, the percentage who approve of family planning, by their perception of their husband's attitude and selected background characteristics, Tanzania 1991/92

Background characteristic	Respondent approves			Respondent disapproves					Number of women
	Both approve	Husband disapproves	Unsure of husband	Husband approves	Unsure of husband	Both disapprove	Missing	Total	
Age									
15-19	35.5	15.2	30.9	0.7	6.4	10.7	0.5	100.0	396
20-24	50.0	11.6	25.7	1.2	4.9	6.2	0.4	100.0	1040
25-29	45.1	19.0	21.2	1.7	6.1	6.8	0.1	100.0	1073
30-34	46.2	18.6	21.7	1.4	5.3	6.6	0.1	100.0	788
35-39	42.2	17.8	21.4	1.4	7.6	8.8	0.8	100.0	637
40-44	37.0	21.0	23.6	1.2	9.5	7.7	0.0	100.0	453
45-49	34.3	16.2	29.9	1.1	9.9	7.8	0.8	100.0	358
Residence									
Mainland	44.2	16.2	24.5	1.3	6.4	7.0	0.4	100.0	4587
Dar es Salaam	60.1	13.5	17.2	1.5	1.7	6.0	0.0	100.0	313
Other urban	59.1	18.6	14.3	0.9	2.9	4.1	0.1	100.0	895
Rural	38.8	15.9	27.8	1.4	7.8	7.8	0.4	100.0	3379
Zanzibar	26.1	32.8	11.1	1.7	9.7	18.4	0.3	100.0	159
Region									
Dodoma	43.5	19.6	23.9	0.0	9.1	3.8	0.2	100.0	422
Arusha	56.8	18.8	11.3	1.8	5.3	6.0	0.0	100.0	237
Kilimanjaro	73.5	12.1	13.0	0.0	0.4	1.0	0.0	100.0	223
Tanga	56.4	17.5	22.4	0.0	3.2	0.5	0.0	100.0	213
Morogoro	49.9	18.9	16.6	1.0	4.3	8.4	0.9	100.0	312
Coast	39.6	20.2	15.3	3.3	8.2	12.9	0.5	100.0	89
Lindi	34.7	17.4	21.0	3.5	6.2	16.4	0.8	100.0	141
Mtwara	21.8	9.0	38.8	3.7	12.4	13.3	1.0	100.0	202
Ruvuma	30.5	23.5	24.7	1.3	7.7	12.2	0.2	100.0	187
Iringa	43.3	20.4	14.2	4.4	4.8	11.8	1.1	100.0	233
Mbeya	43.5	16.1	31.2	1.1	4.1	4.0	0.0	100.0	247
Singida	46.3	17.4	29.9	0.5	2.8	3.2	0.0	100.0	162
Tabora	36.8	11.2	39.5	0.4	7.8	4.0	0.3	100.0	132
Rukwa	49.8	10.4	26.0	0.3	6.9	5.2	1.4	100.0	77
Kigoma	54.5	9.8	20.7	1.2	9.6	4.2	0.0	100.0	179
Shinyanga	23.4	10.9	46.5	2.0	10.5	6.6	0.0	100.0	350
Kagera	52.9	8.1	20.8	0.4	8.3	8.6	0.9	100.0	274
Mwanza	28.1	20.9	33.6	0.2	9.6	7.5	0.0	100.0	345
Mara	41.4	24.1	16.5	2.0	4.5	10.5	0.9	100.0	246
Education									
No education	27.4	18.3	29.7	1.6	11.3	11.2	0.4	100.0	1699
Primary incomplete	41.8	21.9	21.1	0.9	5.6	8.1	0.5	100.0	956
Completed primary	56.1	13.4	21.6	1.3	3.2	4.1	0.2	100.0	1948
Secondary/Higher	76.7	11.1	7.5	0.3	2.0	2.4	0.0	100.0	142
Total	43.6	16.8	24.0	1.3	6.6	7.4	0.3	100.0	4746

Overall, 84 percent of married women who know of a method approve of couples using family planning methods. Half of these women (44 percent) reported that their husbands also approved of family planning. However, about 17 percent of women said that they approve of family planning but their husbands do not. Seven percent of the respondents said that both they and their husbands disapproved of family planning. Only 1 percent of respondents reported that they disapproved of family planning, but their husbands approved. Women in Zanzibar were more likely than women in the mainland to disapprove of family planning methods, as were their spouses. Husbands of respondents approving family planning methods in Zanzibar were more likely to disapprove family planning than those in other parts of Tanzania. Approval of family planning methods by both respondents and husbands was found to increase with increasing women's education, while disapproval of family planning methods was found to decrease with increasing education. These findings underscore the importance of education in changing women's attitudes towards use of family planning methods.

CHAPTER 5

PROXIMATE DETERMINANTS OF FERTILITY

This chapter concerns the principal factors other than contraception that affect a woman's risk of becoming pregnant, namely nuptiality and sexual intercourse, postpartum amenorrhoea and abstinence from sexual relations, and secondary infertility.

Marriage is the primary indicator of exposure of women to the risk of pregnancy and therefore is important for the understanding of fertility. Populations in which age at marriage is low tend to experience early childbearing and subsequently high fertility. This situation necessitates an examination of trends in age at marriage.

This chapter also includes more direct measures of the beginning of exposure to pregnancy and the level of exposure: age at first sexual intercourse and the frequency of intercourse. Measures of other proximate determinants of fertility are the durations of postpartum amenorrhoea and postpartum abstinence and the level of secondary fertility.

5.1 Marital Status

The demographic significance of marriage patterns derives from the fact that formal or informal unions are primary indicators of exposure to the risk of pregnancy. Current marital status of eligible women at the time of the survey is shown in Table 5.1. Here, "marriage" refers to civil, religious, or traditional marriage, as well as "living together." Divorced (including separated) and widowed make up the remainder of the "ever married" category.

Table 5.1 Current marital status by age

Percent distribution of women by current marital status, according to age, Tanzania 1991/92

Age	Marital status					Total	Number of women
	Never married	Married	Living together	Widowed	Divorced		
15-19	71.8	21.2	4.3	0.2	2.6	100.0	2180
20-24	25.1	55.9	12.2	0.7	6.0	100.0	1880
25-29	8.9	58.0	21.6	1.8	9.7	100.0	1597
30-34	4.1	55.7	24.6	4.2	11.4	100.0	1165
35-39	2.4	55.7	28.4	5.0	8.5	100.0	1000
40-44	0.9	53.8	30.5	6.8	8.1	100.0	714
45-49	0.4	49.4	29.0	10.4	10.7	100.0	695
Total	24.5	47.4	18.0	2.9	7.3	100.0	9233

About 65 percent of the eligible women are currently married. This is virtually the same proportion as observed in the 1988 population census (66 percent currently married). As expected, most of the single (never married) women are in the young age groups, that is below 25 years.

5.2 Polygyny

According to Table 5.2, polygyny is fairly common in Tanzania: slightly more than one in four currently married women said their husbands had other wives (28 percent). Twenty-nine percent of rural currently married women have co-wives compared to 12 percent in Dar es Salaam. Polygynous unions exist in all the regions and among women of different education. Mara and Shinyanga regions have the highest percentages of married women in polygynous union, and Kilimanjaro and Dar es Salaam the smallest. More than one-third of women with no education are in polygynous unions compared to 14 percent of those with secondary or higher education.

Table 5.2 Polygyny

Percentage of currently married women in a polygynous union, by age and selected background characteristics, Tanzania 1991/92

Background characteristic	Age of woman							All ages
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Residence								
Mainland	16.6	18.0	27.2	30.7	33.8	36.1	37.2	27.5
Dar es Salaam	(0.0)	6.2	13.3	(11.2)	(23.3)	(23.2)	*	12.4
Other urban	6.5	15.6	21.9	28.9	31.0	37.6	35.8	24.1
Rural	20.4	19.6	29.4	32.7	35.1	36.7	38.0	29.4
Zanzibar	(19.9)	16.3	25.6	(25.8)	(31.9)	(36.6)	(27.8)	25.2
Region								
Dodoma	*	(15.5)	(15.4)	(13.0)	(16.5)	*	*	18.8
Arusha	*	19.4	27.8	(33.3)	(33.0)	(42.1)	*	31.1
Kilimanjaro	*	(2.1)	(10.6)	(10.9)	(17.0)	(29.4)	(6.1)	12.2
Tanga	*	13.6	(18.1)	(42.6)	(34.4)	(33.2)	(48.4)	28.5
Morogoro	(4.8)	12.5	21.3	(27.5)	31.9	(27.4)	(34.3)	22.5
Coast	(12.8)	12.0	23.6	32.1	31.0	*	(20.4)	22.3
Lindi	(6.6)	(15.0)	(8.7)	(33.8)	(49.1)	(65.1)	(49.6)	33.1
Mtwara	(14.5)	(15.0)	(15.6)	(21.2)	(42.2)	(42.4)	(38.5)	26.5
Ruvuma	(26.6)	14.5	34.6	(27.4)	(35.6)	(31.4)	(42.0)	29.8
Iringa	*	17.7	38.0	37.3	(53.8)	(36.4)	(34.3)	34.8
Mbeya	*	11.8	(26.5)	(45.1)	(31.1)	(45.7)	*	26.6
Singida	*	16.3	(29.8)	(36.0)	(42.4)	*	*	28.2
Tabora	(14.2)	(22.5)	32.1	(18.1)	(35.5)	(22.5)	(26.9)	25.2
Rukwa	(14.6)	15.2	33.8	21.9	(31.7)	(28.0)	*	23.3
Kigoma	(8.9)	11.6	25.0	34.0	(36.4)	(69.1)	(47.1)	30.2
Shinyanga	22.2	35.9	41.0	44.9	36.7	(36.8)	(51.9)	38.0
Kagera	(8.7)	19.2	19.0	(12.4)	(29.1)	(25.0)	(26.1)	19.7
Mwanza	12.1	22.0	33.5	42.8	(37.0)	(36.4)	(45.4)	31.2
Mara	42.2	29.8	52.4	52.9	56.9	(62.2)	*	48.9
Education								
No education	20.0	27.4	36.4	36.3	34.7	40.8	39.8	35.4
Some primary	18.3	22.3	25.7	27.2	33.4	31.7	29.9	27.5
Completed primary	14.8	14.4	23.3	24.3	31.0	24.4	24.1	19.4
Some secondary	*	(8.0)	(4.1)	(25.4)	*	*	*	14.2
Total	16.7	17.9	27.1	30.6	33.8	36.2	37.0	27.5

Note: Rates shown in parentheses are based on 25-49 women, whereas an asterisk means the rate is based on fewer than 25 women and has been suppressed.

Table 5.3 shows that 73 percent of currently married women have no other co-wives while 16 percent have one co-wife, and 11 percent have two or more co-wives. Mara, Kigoma, and Zanzibar 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 more common among less educated women.

Table 5.3 Number of co-wives

Percent distribution of currently married women by number of co-wives, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Number of co-wives			Missing	Total	Number of women
	0	1	2+			
Age						
15-19	83.3	11.0	5.5	0.2	100.0	558
20-24	82.1	10.6	6.3	1.0	100.0	1283
25-29	72.9	17.6	9.0	0.5	100.0	1274
30-34	69.4	18.0	11.7	0.9	100.0	935
35-39	66.2	17.2	15.9	0.6	100.0	841
40-44	63.8	19.7	16.2	0.3	100.0	603
45-49	63.0	19.9	16.5	0.5	100.0	545
Residence						
Mainland	72.5	16.2	10.8	0.6	100.0	5870
Dar es Salaam	87.6	7.5	4.9	0.0	100.0	349
Other urban	75.9	15.9	7.3	0.8	100.0	966
Rural	70.6	16.9	11.9	0.6	100.0	4555
Zanzibar	74.8	7.8	16.0	1.4	100.0	168
Region						
Dodoma	81.2	15.6	3.2	0.0	100.0	445
Arusha	68.9	16.2	14.0	0.9	100.0	350
Kilimanjaro	87.8	9.1	2.8	0.4	100.0	258
Tanga	71.5	15.5	12.2	0.8	100.0	306
Morogoro	77.5	15.4	7.0	0.1	100.0	334
Coast	77.7	13.2	9.2	0.0	100.0	98
Lindi	66.9	23.1	10.0	0.0	100.0	155
Mtwara	73.5	18.4	8.1	0.0	100.0	249
Ruvuma	70.2	18.2	11.6	0.0	100.0	210
Iringa	65.2	17.5	14.1	3.2	100.0	338
Mbeya	73.4	13.3	11.4	1.8	100.0	333
Singida	71.8	18.7	9.2	0.3	100.0	190
Tabora	74.8	15.5	8.7	0.9	100.0	174
Rukwa	76.7	12.2	10.5	0.6	100.0	158
Kigoma	69.8	13.2	16.3	0.6	100.0	245
Shinyanga	62.0	26.7	10.7	0.7	100.0	578
Kagera	80.3	6.9	12.1	0.6	100.0	371
Mwanza	68.8	18.4	12.8	0.0	100.0	444
Mara	51.1	22.2	26.5	0.3	100.0	285
Education						
No education	64.6	19.1	15.7	0.6	100.0	2505
Primary incomplete	72.5	16.7	10.3	0.5	100.0	1166
Completed primary	80.6	12.5	6.2	0.7	100.0	2215
Secondary/Higher	85.8	9.0	4.8	0.4	100.0	152
Total	72.5	16.0	10.9	0.6	100.0	6038

5.3 Age at First Marriage

According to the 1971 Marriage Act, the minimum legal age for a woman to get married is 18 years. The TDHS results show that the median age at first marriage is about 18 years (see Table 5.4). Age at marriage appears to be rising from about 17 years among women in their fourties, to 19 years among women in their twenties. Among women age 20-49, 15 percent were married by age 15, almost half by age 18 and two-thirds by age 20.

Table 5.4 Age at first marriage

Percentage of women who were first married by exact age 15, 18, 20, 22, and 25, and median age at first marriage, according to current age, Tanzania 1991/92

Current age	Percentage of women who were first married by exact age: 15	18	20	22	25	Percentage who had never married	Number of women	Median age at first marriage
15-19	3.7	NA	NA	NA	NA	71.7	2183	a
20-24	7.2	36.6	61.0	NA	NA	25.1	1882	19.0
25-29	10.9	39.7	59.1	74.0	85.9	8.9	1599	19.0
30-34	19.2	53.2	69.5	80.2	88.9	4.1	1165	17.7
35-39	19.0	55.0	74.3	83.7	91.3	2.4	1000	17.5
40-44	23.7	58.9	76.2	84.3	92.5	0.9	715	17.2
45-49	27.2	59.4	76.1	86.8	94.3	0.4	695	17.2
20-49	15.4	47.2	66.9	78.1	85.7	9.9	7055	18.3
25-49	18.3	51.0	69.0	80.4	89.7	4.3	5174	17.9

NA = Not applicable
[a]Omitted because less than 50 percent of the women in the age group x to $x+4$ were first married by age x

Table 5.5 shows that Zanzibar has a lower median age at first marriage (16 years) than that observed on the Mainland (18 years). Rural women are married slightly earlier than urban women. Differences by education are more pronounced. Women with secondary or higher education have the highest median age at first marriage (23 years), compared to women with completed primary education (20 years), and incomplete primary education and no education (17 years).

Table 5.5 Median age at first marriage

Median age at first marriage among women age 20-49 years, by current age and selected background characteristics, Tanzania 1991/92

Background characteristic	Current age						Women age 20-49	Women age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49		
Residence								
Mainland	19.1	19.0	17.7	17.6	17.2	17.2	18.3	18.0
Dar es Salaam	19.6	19.5	17.6	17.8	16.8	15.8	18.9	18.3
Other urban	a	20.2	17.4	18.0	17.5	18.2	19.0	18.4
Rural	18.7	18.7	17.8	17.5	17.1	17.1	18.1	17.8
Zanzibar	18.3	17.4	16.5	15.3	15.8	15.8	16.8	16.4
Education								
No education	17.0	16.7	16.6	16.9	16.5	16.7	16.7	16.7
Primary incomplete	17.8	18.1	16.5	17.1	17.4	17.9	17.5	17.4
Completed primary	19.4	20.1	19.5	19.6	19.9	18.3	19.6	19.9
Secondary/Higher	a	(23.0)	(23.5)	*	*	*	a	23.0
Total	19.0	19.0	17.7	17.5	17.2	17.2	18.3	17.9

Note: Medians are not shown for women 15-19 because less than 50 percent have married by age 15 in all subgroups shown in the table. Rates shown in parentheses are based on 25-49 women, whereas an asterisk means the rate is based on fewer than 25 women and has been suppressed.

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

5.4 Age at First Intercourse

Though age at first marriage is widely used as a proxy for exposure to sexual intercourse, this is not useful in Tanzania because many women engage in sexual activities before they are married. As Table 5.6 shows, the median age at first intercourse (16.8 years) is one and a half years lower than the median age at first marriage (18.3 years, Table 5.5). By age 15, 23 percent of women had had sexual intercourse and by age 18, the legal age at marriage, 65 percent of women had had sexual intercourse, whereas only half had married by this age. By age 20, 83 percent of women had had sexual intercourse but only 67 percent were married. Table 5.6 also shows that there is a moderate increase of the age at first sexual intercourse from 16.4 years among women 30-49 years to 17.3 years among women 20-24 years.

Table 5.6 Age at first sexual intercourse

Percentage of women who had first sexual intercourse by exact age 15, 18, 20, 22, and 25, and median age at first intercourse, according to current age, Tanzania 1991/92

Current age	Percentage of women who had first intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Number of women	Median age at first intercourse
15-19	11.2	NA	NA	NA	NA	48.7	2183	a
20-24	16.6	60.1	82.6	NA	NA	8.4	1882	17.3
25-29	19.3	59.8	79.5	89.4	94.7	1.5	1599	17.2
30-34	28.1	68.5	82.5	90.8	94.9	1.2	1165	16.4
35-39	25.5	70.0	86.3	93.2	96.6	0.4	1000	16.4
40-44	27.3	71.1	86.0	92.2	96.1	0.2	715	16.3
45-49	30.6	67.1	81.0	91.8	95.4	0.0	695	16.4
20-49	22.8	64.6	82.6	90.8	94.2	2.9	7055	16.8
25-49	25.1	66.3	82.6	91.1	95.4	0.8	5174	16.6

NA = Not applicable

[a]Omitted because less than 50 percent of the women in the age group *x* to *x+4* had had intercourse by age *x*

Overall, women become sexually active at almost the same age regardless of the geographical area, though with minor differences (Table 5.7). However, the relationship between education and sexual activity is quite strong. The median age at first sexual intercourse among women with secondary or higher education is 20 years, 18 years among women who have completed primary education, and about 16 years for women with incomplete primary education or no education.

5.5 Recent Sexual Activity

In a situation where contraception is not practiced, the probability of pregnancy is closely related to the frequency of sexual intercourse. Therefore, such information is very useful as a measure of exposure to pregnancy. Table 5.6 shows that all but 3 percent of women 20-49 in the TDHS had sexual intercourse. However, not all women who ever had sexual intercourse are currently sexually active.

Table 5.7 Median age at first intercourse

Median age at first sexual intercourse among women age 20-49 years, by current age and selected background characteristics, Tanzania 1991/92

Background characteristic	Current age						Women age 20-49	Women age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49		
Residence								
Mainland	17.3	17.2	16.4	16.4	16.3	16.4	16.8	16.6
Dar es Salaam	17.8	17.7	16.9	(16.7)	(16.4)	(15.8)	17.2	16.8
Other urban	17.8	17.9	16.2	16.3	16.5	16.7	17.0	16.7
Rural	17.0	17.0	16.5	16.4	16.2	16.4	16.7	16.6
Zanzibar	18.3	17.3	16.6	(15.3)	(15.8)	(16.0)	16.8	16.4
Education								
No education	16.1	15.6	15.7	15.9	15.9	16.2	15.9	15.8
Primary incomplete	16.3	16.3	15.8	16.3	16.4	17.0	16.3	16.3
Completed primary	17.6	18.1	17.6	18.1	18.4	17.8	17.8	18.0
Secondary/Higher	a	20.5	20.4	*	*	*	a	20.4
Total	17.3	17.2	16.4	16.4	16.3	16.4	16.8	16.6

Note: Medians were not shown for women 15-19 because less than 50 percent had had intercourse by age 15 in all subgroups shown in the table. Rates shown in parentheses are based on 25-49 women, whereas an asterisk means the rate is based on fewer than 25 women and has been suppressed.

Table 5.8 shows the percent distribution of women who have ever had sexual intercourse by sexual activity in the four weeks prior to the survey and duration of abstinence by whether or not postpartum. Women are considered to be sexually active if they had sexual intercourse at least once in the four weeks prior to the survey. Women who are not sexually active may be abstaining for various reasons, such as having given birth. Overall, 61 percent of women were sexually active during the 4 weeks period before the survey, 18 percent were postpartum abstaining, and 21 percent were abstaining for reasons other than having recently given birth.

The proportion of sexually active women varies very little by age of the woman. Women who have ever had sexual intercourse but have never been in union are also sexually active (43 percent), but less so than ever-married women. Twenty-two percent of single women who ever had sexual intercourse were postpartum abstaining and 35 percent were abstaining for other reasons. There appears to be no appreciable decline in the proportion of women sexually active according to duration since first marriage, except among those married for 25 years or more. Regional data show that sexual activity was highest in Mwanza, Zanzibar and Shinyanga (over 70 percent had intercourse in the last 4 weeks), and lowest in Iringa and Ruvuma (below 50 percent). The latter two regions had the highest proportion of women in the period of postpartum abstinence. The proportion sexually active decreases slightly with increasing levels of education. Women with secondary or higher education had markedly higher levels of abstinence for reasons other than giving birth. This may be due to the fact that the better educated women are more likely to be younger and single.

As expected, women who are using a family planning method are more likely to be sexually active than those who are not using any method. Among users of a family planning method, the proportion of women sexually active varies according to the method used: the highest level of sexual activity was found among users of the pill.

Table 5.8 Recent sexual activity

Percent distribution of women who have ever had sexual intercourse by sexual activity in the four weeks preceding the survey and the duration of abstinence by whether or not postpartum, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Sexually active in last 4 weeks	Not sexually active in last 4 weeks: Abstaining (postpartum) 0-1 years	Abstaining (postpartum) 2+ years	Abstaining (not postpartum) 0-1 years	Abstaining (not postpartum) 2+ years	Missing	Total	Number of women
Age of mother								
15-19	57.8	18.1	0.9	21.7	1.5	0.0	100.0	1121
20-24	59.9	19.9	1.8	17.1	1.2	0.1	100.0	1724
25-29	61.2	20.8	2.5	14.3	1.1	0.1	100.0	1576
30-34	63.8	16.4	2.2	15.8	1.8	0.1	100.0	1151
35-39	63.3	13.6	2.7	18.2	2.0	0.3	100.0	997
40-44	64.7	8.3	1.6	18.6	6.6	0.1	100.0	714
45-49	56.8	3.7	2.2	22.2	14.5	0.6	100.0	695
Duration of union								
0-4	64.6	20.5	0.7	13.8	0.4	0.0	100.0	1752
5-9	63.9	19.9	1.5	14.1	0.5	0.0	100.0	1409
10-14	65.0	18.4	1.3	14.4	0.9	0.0	100.0	986
15-19	62.5	13.7	2.6	18.7	2.3	0.1	100.0	975
20-24	65.4	12.5	2.1	16.2	3.0	0.8	100.0	809
25+	60.0	5.7	1.9	20.2	12.1	0.2	100.0	1047
Never in union	42.8	16.8	4.9	30.5	4.7	0.2	100.0	1000
Residence								
Mainland	60.7	16.3	2.0	17.7	3.1	0.1	100.0	7776
Dar es Salaam	69.3	12.2	1.2	13.4	3.9	0.0	100.0	500
Other urban	56.5	15.3	1.3	23.1	3.6	0.1	100.0	1451
Rural	61.0	16.9	2.3	16.8	2.9	0.2	100.0	5825
Zanzibar	73.3	6.6	0.2	16.8	2.5	0.7	100.0	202
Region								
Dodoma	56.4	20.7	1.4	17.6	3.9	0.0	100.0	606
Arusha	51.2	24.6	3.8	17.4	2.5	0.5	100.0	507
Kilimanjaro	58.0	11.3	2.9	22.7	5.1	0.0	100.0	371
Tanga	63.1	11.1	1.4	22.8	1.6	0.0	100.0	393
Morogoro	56.1	16.9	3.3	20.7	2.8	0.2	100.0	472
Coast	58.1	17.8	1.7	18.9	3.2	0.4	100.0	142
Lindi	51.0	25.1	2.7	18.5	2.8	0.0	100.0	205
Mtwara	59.4	21.7	2.4	14.8	1.7	0.0	100.0	335
Ruvuma	47.4	28.6	3.2	18.9	1.9	0.0	100.0	288
Iringa	40.7	31.7	7.0	15.8	4.4	0.4	100.0	429
Mbeya	62.3	15.8	1.2	16.6	4.0	0.0	100.0	388
Singida	52.4	18.2	2.2	22.5	4.1	0.6	100.0	291
Tabora	60.3	16.0	1.7	20.1	1.9	0.0	100.0	247
Rukwa	60.0	20.8	1.0	16.8	1.4	0.0	100.0	196
Kigoma	65.0	10.3	2.2	18.2	4.3	0.0	100.0	289
Shinyanga	71.9	10.3	0.0	16.6	1.2	0.0	100.0	685
Kagera	67.2	8.3	1.4	17.2	5.7	0.2	100.0	480
Mwanza	74.8	9.0	0.6	14.2	1.5	0.0	100.0	596
Mara	66.4	10.9	0.9	17.7	3.5	0.5	100.0	356
Education								
No education	62.7	14.0	1.7	17.0	4.3	0.2	100.0	2991
Primary incomplete	63.6	13.8	2.4	16.6	3.6	0.1	100.0	1499
Completed primary	58.7	19.5	2.1	17.8	1.7	0.1	100.0	3209
Secondary/Higher	55.1	10.5	1.0	30.6	2.8	0.0	100.0	278
Current contraceptive								
No method	59.5	17.4	2.1	17.6	3.2	0.1	100.0	7106
Pill	80.1	1.4	0.4	17.4	0.0	0.6	100.0	279
IUD	(76.3)	(0.0)	(0.0)	(23.7)	(0.0)	0.0	100.0	31
Sterilisation	59.3	7.5	1.2	20.7	11.2	0.0	100.0	134
Periodic abstinence	63.1	7.4	1.3	26.2	2.0	0.0	100.0	152
Other	77.7	7.6	1.0	13.7	0.0	0.0	100.0	275
Total	61.0	16.1	2.0	17.7	3.1	0.1	100.0	7978

Note: Rates shown in parentheses are based on 25-49 women.

5.6 Postpartum Amenorrhoea, Abstinence, and Insusceptibility

For women who are not using contraception, exposure to the risk of pregnancy in the period following birth is influenced by two factors, namely breastfeeding and sexual abstinence. Breastfeeding can prolong postpartum protection from conception by lengthening the duration of amenorrhoea (the period following a birth, but prior to return of menses) and by delaying the resumption of sexual relations.

Table 5.9 shows the percentage of births whose mothers are postpartum amenorrhoeic, abstaining, and postpartum insusceptible by the number of months since birth. Women who are insusceptible are defined as those who are either amenorrhoeic or abstaining following a birth and, thus, are not exposed to the risk of pregnancy. The data refer to whether or not the woman was amenorrhoeic or abstaining at the time of the survey.

Table 5.9 Postpartum amenorrhoea, abstinence, and insusceptibility

Percentage of births whose mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Tanzania 1991/92

Months since birth	Amenor-rhoeic	Abstaining	Insus-ceptible	Number of births
< 2	97.0	91.8	100.0	242
2-3	85.5	72.1	91.6	283
4-5	86.1	53.4	90.8	337
6-7	68.0	49.3	80.3	289
8-9	71.4	46.6	80.3	276
10-11	61.4	30.6	69.4	287
12-13	54.2	30.5	61.1	306
14-15	45.4	28.4	55.7	296
16-17	33.6	24.0	46.6	304
18-19	26.8	24.5	36.9	291
20-21	21.9	18.8	31.3	252
22-23	15.9	15.9	24.6	299
24-25	9.7	12.8	21.4	268
26-27	5.4	7.9	11.5	256
28-29	1.6	4.3	5.9	292
30-31	4.1	5.3	9.5	266
32-33	3.9	2.4	5.5	279
34-35	2.5	3.8	5.5	230
Total	39.4	29.3	46.9	5051
Median	13.3	6.5	15.6	-
Mean	14.2	10.7	16.8	-
Prevalence/Incidence mean	14.0	10.4	16.7	-

About 8-9 months after giving birth, 71 percent of women in Tanzania remain amenorrhoeic, 47 percent are abstaining from sexual relations, and only 20 percent are susceptible to pregnancy. At 18-19 months postpartum, 27 percent remain amenorrhoeic, 25 percent are still abstaining and 63 percent are susceptible to pregnancy. At 24 months, only 10 percent are amenorrhoeic and 13 percent are still abstaining

from sexual relations, while 79 percent are susceptible to pregnancy. The median duration of postpartum amenorrhoea is 13.3 months and of postpartum sexual abstinence 6.5 months, resulting in a postpartum insusceptible period of 15.6 months.

Table 5.10 shows the median durations of postpartum insusceptibility by background characteristics of the mothers. Older women have longer periods of insusceptibility mainly because they are amenorrhoeic for a longer period. Women in Dar-es-Salaam have very short periods of postpartum amenorrhoea (median 6 months), whereas women in Zanzibar practice postpartum abstinence only for a short period (3 months). Differences by education are small, except that women with more education have short durations of amenorrhoea.

Table 5.10 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 1991/92

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insuscep-tibility	Number of women
Age				
<30	12.3	6.2	14.5	3271
30+	15.4	7.1	17.3	1780
Residence				
Mainland	13.4	6.8	15.8	4906
Dar es Salaam	6.1	7.1	9.5	226
Other urban	10.9	9.8	13.2	843
Rural	14.2	6.1	16.1	3837
Zanzibar	11.1	3.2	11.6	146
Education				
No education	14.3	5.9	17.5	1693
Primary incomplete	15.1	4.7	16.2	932
Completed primary	12.2	7.4	14.5	2271
Secondary/Higher	6.6	7.2	11.0	156
Total	13.3	6.5	15.6	5051

Note: Medians are based on current status.

5.7 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. Three measures of decreasing exposure—menopause, terminal infertility, and long-term abstinence—are shown in Table 5.11. For this analysis women are considered to be menopausal if they are neither pregnant nor postpartum amenorrhoeic, but have not had a menstrual period in the six months preceding the survey. The proportion of women who are menopausal rises with age, particularly after age 40, and reaches 38 percent in the oldest age group (48-49).

Table 5.11 Termination of exposure to the risk of pregnancy

Indicators of menopause, terminal infertility and long-term abstinence among currently married women age 30-49, by age, Tanzania 1991/92

	Menopause[1]		Long-term abstinence[2]	
Age	Percent	Number	Percent	Number
30-34	2.0	548	0.9	935
35-39	5.8	529	0.9	841
40-41	9.2	224	1.3	308
42-43	15.6	179	2.6	224
44-45	24.4	199	5.1	235
46-47	28.7	171	4.2	191
48-49	38.1	173	4.2	189
Total	12.6	2024	1.8	2923

[1]Percentage of non-pregnant, non-amenorrhoeic currently married women whose last menstrual period occurred six or more months preceding the survey or who report that they are menopausal.
[2]Percentage of currently married women who did not have intercourse in the three years preceding the survey.

The second indicator of infecundity is obtained from a demonstrated lack of fertility. If a woman was married at least five years before the survey, has never used contraception, did not give birth in the five years before the survey, and is not currently pregnant, she is considered terminally infertile. By their mid-fourties, almost 60 percent appear to be terminally infertile and by their late fourties, three quarters are infertile.

The last indicator is long-term abstinence, which is the percentage of currently married women who did not have sexual intercourse in the three years preceding the survey. This percentage is quite low even among older women (about 4-5 percent).

CHAPTER 6

FERTILITY PREFERENCES

In the TDHS several questions were asked to all women in order to determine their fertility preferences: their desire to have a(nother) child; if so, how long they would prefer to wait before the next child; and if they could start afresh, how many children they would want. The responses obtained from these questions provided information that was used to classify women by their preferences according to age as well as other background characteristics.

6.1 Desire for More Children

In Tanzania, where contraceptive prevalence is still low and where cultural as well as husbands' influences on reproductive decisions are still strong, the desire for children is widespread. Table 6.1 and Figure 6.1 show the percent distribution of currently married women by their fertility preferences. One-quarter of currently married women indicated that they wanted another child soon, 42 percent wanted another child later, and 23 percent wanted no more children (including 2 percent who have been sterilised). The proportion of currently married women who want another child soon decreases rapidly with the increasing number of living children. For example, 35 percent of currently married women with one living child wanted another child soon compared to only 8 percent of women with 6 children or more. A similar pattern can be observed with the proportion of women who wanted another child later, at least among women with 2 or more children. However, the proportion of currently married women who wanted no more children increased with the increasing number of living children. More than half of women with at least six children did not want any more children.

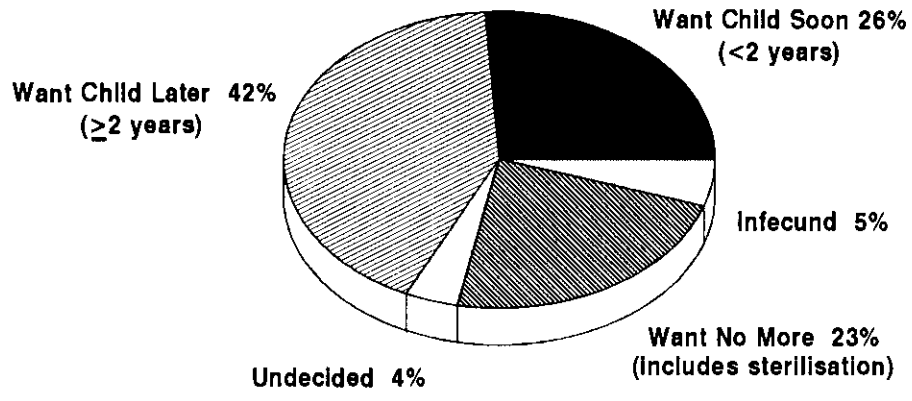
Table 6.1 Fertility preference by number of living children

Percent distribution of currently married women by desire for more children, according to number of living children, Tanzania 1991/92

Desire for children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Have another soon[2]	79.9	34.5	25.1	22.9	22.0	18.5	8.4	26.1
Have another later[3]	5.1	57.7	59.5	57.6	45.1	34.8	18.6	41.7
Have another, undecided when	3.3	1.8	0.9	1.0	1.2	1.2	0.7	1.3
Undecided	0.7	0.5	1.7	2.7	2.7	4.8	5.3	2.8
Wants no more	1.2	1.7	8.2	11.1	23.5	33.3	55.5	21.4
Sterilised	0.6	1.1	0.3	0.9	1.7	1.7	4.1	1.7
Declared infecund	8.6	2.5	3.8	3.4	3.6	5.3	7.3	4.8
Missing	0.7	0.1	0.4	0.5	0.3	0.4	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	472	1031	1014	890	738	598	1294	6038

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

Figure 6.1
Fertility Preferences among Currently Married Women 15-49



TDHS 1991/92

The percent distribution of currently married women by desire for children according to age is shown in Table 6.2. Older women are much more likely than younger women to want no more children. The desire to limit births increases rapidly with age. Only 2 percent of currently married women 15-19 years want no more children, but the proportion increases to 49 percent for women 40-44.

Table 6.2 Fertility preferences by age

Percent distribution of currently married women by desire for more children, according to age, Tanzania 1991/92

Desire for children	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Have another soon[1]	36.8	26.1	28.4	27.0	24.7	22.5	14.1	26.1
Have another later[2]	58.1	64.9	55.1	41.9	23.4	8.7	3.4	41.7
Have another, undecided when	2.0	1.3	1.2	1.2	1.1	1.1	1.5	1.3
Undecided	0.6	1.3	2.4	3.7	5.9	3.5	2.2	2.8
Wants no more	2.1	5.3	12.2	22.6	36.2	48.9	45.8	21.4
Sterilised	0.0	0.3	0.3	1.2	3.9	4.9	3.6	1.7
Declared infecund	0.3	0.6	0.3	2.4	4.1	10.3	28.8	4.8
Missing	0.2	0.3	0.3	0.2	0.7	0.1	0.6	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	558	1283	1274	935	841	603	545	6038

[1]Wants next birth within 2 years
[2]Wants to delay next birth for 2 or more years

The desire to have no more children varies by background characteristics of the women. Table 6.3 shows that there is only limited variation by urban/rural residence or between Zanzibar and Mainland Tanzania. However, there is considerable regional variation. In Kilimanjaro almost half of currently married women did not want another child (47 percent). Singida and Arusha follow with almost one-third of women wanting no more children. In eight regions, less than 20 percent of currently married women wanted no more children, including Shinyanga as the lowest with 14 percent. At the regional level, there was no clear relationship between percent wanting no more children and respondent's level of education.

Table 6.3 Desire to limit childbearing

Percentage of currently married women who want no more children, by number of living children and selected background characteristics, Tanzania 1991/92

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Mainland	1.6	2.8	8.5	12.0	25.5	34.9	59.8	23.1
Dar es Salaam	(0.0)	7.3	26.0	(20.3)	(47.6)	*	(72.0)	27.9
Other urban	3.4	1.7	18.5	11.8	37.4	41.2	73.2	27.3
Rural	1.6	2.7	5.3	11.4	21.3	33.0	56.9	21.9
Zanzibar	(5.8)	2.6	8.1	(12.3)	15.7	(34.8)	53.6	22.1
Education								
No education	1.0	3.3	6.1	12.9	22.3	30.9	52.6	26.6
Primary incomplete	4.7	5.2	3.4	13.5	27.7	44.6	71.6	33.6
Completed primary	1.3	2.1	10.0	10.1	26.4	33.0	67.6	13.6
Secondary/Higher	*	(0.9)	24.2	(20.9)	*	*	*	23.6
Total	1.7	2.8	8.5	12.0	25.2	34.9	59.6	23.1

Note: Women who have been sterilised are considered to want no more children. Rates shown in parentheses are based on 25-49 women, whereas an asterisk means the rate is based on fewer than 25 women and has been suppressed.
[1]Includes current pregnancy

6.2 Demand for Family Planning Services

Women who are currently married, and who indicate that they either want no more children or want to wait for two or more years before having another child, but are not using contraception, are considered to have an *unmet need for family planning*. Women with unmet need and those currently using contraception (met need) constitute the *total demand for family planning*. Table 6.4 shows the percentage of currently married women with unmet need and met need and the total demand for family planning services by background characteristics.

Forty-one percent of currently married women can be considered to constitute total demand for family planning, of which 24 percent is a demand for spacing purposes and 17 percent is a demand for limiting purposes. The demand for family planning services appears to be highest among currently married women living in urban areas (Dar-es-Salaam or other urban areas, about 50 percent), among women with secondary or higher education (62 percent, mostly more demand for spacing) and in selected regions. In Kilimanjaro, Arusha, and Morogoro, the total demand exceeds 50 percent.

Table 6.4 Need for family planning services

Percentage of currently married women with unmet need for family planning, met need for family planning, and the total demand for family planning services, by seleeted background characteristics, Tanzania 1991/92

Background characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			Total demand for family planning			Percentage of demand satis-fied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
Age											
15-19	17.5	3.0	20.5	5.2	0.0	5.2	22.8	3.0	25.8	20.3	558
20-24	24.8	3.1	27.8	9.1	0.9	10.0	33.9	3.9	37.8	26.3	1283
25-29	25.4	6.5	31.9	8.3	1.6	9.9	33.7	8.1	41.8	23.8	1274
30-34	21.9	10.4	32.2	7.9	6.0	13.8	29.7	16.3	46.0	30.0	935
35-39	11.3	20.8	32.1	3.2	10.1	13.3	14.5	30.9	45.4	29.3	841
40-44	5.9	27.8	33.7	0.8	10.1	10.9	6.7	37.9	44.6	24.5	603
45-49	2.5	27.6	30.1	0.1	7.0	7.1	2.6	34.6	37.2	19.0	545
Residence											
Mainland	17.7	12.1	29.8	6.0	4.5	10.5	23.7	16.6	40.4	26.1	5870
Dar es Salaam	19.9	13.8	33.7	7.3	8.5	15.7	27.2	22.3	49.5	31.8	349
Other urban	18.6	14.8	33.4	11.0	7.7	18.7	29.6	22.5	52.1	36.0	966
Rural	17.4	11.4	28.8	4.8	3.5	8.4	22.2	14.9	37.2	22.5	4555
Zanzibar	27.2	10.9	38.1	3.1	4.0	7.1	30.3	14.9	45.2	15.7	168
Region											
Dodoma	20.9	9.6	30.5	4.5	5.1	9.6	25.4	14.7	40.1	24.0	445
Arusha	21.7	13.3	35.0	11.9	5.5	17.3	33.6	18.8	52.3	33.1	350
Kilimanjaro	17.5	19.8	37.3	15.0	18.1	33.1	32.5	37.8	70.3	47.0	258
Tanga	21.4	12.0	33.4	10.3	5.5	15.8	31.7	17.6	49.2	32.1	306
Morogoro	24.6	15.4	40.1	6.7	3.9	10.6	31.3	19.3	50.6	20.9	334
Coast	17.8	9.9	27.7	9.3	4.3	13.6	27.1	14.2	41.3	33.0	98
Lindi	17.6	13.3	30.9	6.0	5.6	11.5	23.6	18.9	42.5	27.1	155
Mtwara	14.7	12.6	27.4	1.6	0.7	2.3	16.4	13.4	29.7	7.9	249
Ruvuma	20.7	10.8	31.6	2.3	5.6	7.8	23.0	16.4	39.4	19.8	210
Iringa	15.4	9.2	24.6	8.2	2.9	11.1	23.6	12.1	35.7	31.1	338
Mbeya	20.9	11.0	31.9	9.0	3.1	12.1	29.9	14.1	44.0	27.6	333
Singida	15.9	14.4	30.3	7.9	6.1	14.0	23.8	20.5	44.4	31.7	190
Tabora	12.4	17.1	29.5	4.0	5.0	9.0	16.4	22.1	38.5	23.4	174
Rukwa	20.9	11.0	31.9	3.3	2.3	5.6	24.2	13.3	37.5	14.9	158
Kigoma	15.2	9.1	24.3	3.8	1.1	4.9	19.0	10.2	29.2	16.7	245
Shinyanga	14.0	10.9	24.9	3.6	0.7	4.2	17.6	11.6	29.2	14.6	578
Kagera	12.3	10.8	23.1	2.9	5.5	8.4	15.2	16.3	31.5	26.5	371
Mwanza	16.0	11.2	27.1	1.8	2.2	4.0	17.7	13.4	31.1	12.8	444
Mara	15.5	11.0	26.5	4.3	3.6	7.9	19.8	14.6	34.4	22.9	285
Education											
No education	14.6	15.0	29.6	1.3	2.4	3.7	15.9	17.4	33.3	11.1	2505
Primary incomplete	14.5	17.9	32.4	5.1	7.8	12.9	19.6	25.7	45.2	28.5	1166
Completed primary	24.0	6.1	30.1	10.0	4.5	14.6	34.0	10.6	44.6	32.6	2215
Secondary/Higher	14.3	5.2	19.5	28.6	13.8	42.4	42.9	19.0	62.0	68.5	152
Total	18.0	12.1	30.1	5.9	4.5	10.4	23.9	16.6	40.5	25.7	6038

[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 and say they want to wait 2 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 and who want no more children.

[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.

The need for family planning is not fulfilled for the majority of the women. About one quarter of the total demand is satisfied: 30 percent of married women have an unmet need for family planning services. The lowest proportions of demand satisfied can be observed among women under 20 years and 45-49 years, among women in Zanzibar (16 percent of the demand satisfied), and among women with no education. The highest proportion of demand satisfied occurs among women with secondary or higher education (69 percent) and in Kilimanjaro region (47 percent). It appears that educated women are much more successful than other women in meeting their family planning needs.

6.3 Ideal and Actual Number of Children

In addition to the actual number of children that women have, the TDHS examined the ideal number of children that women desired. The question required the respondent to consider abstractly and independently of her family size and give the number of children she would like to have if she could start all over again. Table 6.5 shows the percent distribution of all women by ideal number of children and mean ideal number of children for all women and currently married women, according to the number of living children. About 14 percent of women gave a non-numeric response, such as "up to God" or "as many as possible."

Table 6.5 Ideal number of children

Percent distribution of all women by ideal number of children and mean ideal number of children for all women and for currently married women, according to number of living children, Tanzania 1991/92

Ideal number of children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	0.4	0.3	0.1	0.1	0.0	0.3	0.1	0.2
2	4.5	3.0	3.3	1.0	0.6	0.8	0.9	2.5
3	7.7	10.6	6.6	4.5	2.2	1.6	1.2	5.7
4	24.9	27.4	20.1	18.3	13.8	6.9	11.6	19.4
5	16.2	16.9	19.2	12.8	12.5	14.6	6.1	14.3
6+	31.8	34.1	40.5	50.2	57.4	58.8	59.7	44.3
Non-numeric response	14.6	7.8	10.2	13.1	13.4	17.1	20.3	13.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2345	1545	1275	1043	870	694	1466	9238
Mean ideal number	5.4	5.4	5.8	6.1	6.5	7.1	7.4	6.1
Number of women	2002	1425	1145	907	753	575	1168	7976
Mean for women in union	5.8	5.6	5.9	6.2	6.6	7.2	7.4	6.4
Number of women in union	403	935	901	775	639	496	1032	5181

Note: The means exclude women who gave non-numeric responses.
[1]Includes current pregnancy

The mean ideal family size among all women was 6.1 children and among currently married women 6.4 children. There is a correlation between the actual and ideal family size. The mean ideal number of children increases from 5.4 among childless women to 7.4 among women with 6 or more living children.

The reason for this is twofold. First, to the extent that women implement their preferences, those who want larger families will tend to achieve larger families. Secondly, women may adjust their ideal family size upwards as the actual number increases.

Forty-four percent of all women want at least six children, 59 percent at least five, and 78 percent at least four. Only 8 percent of respondents considered three children or fewer an ideal family size. This proportion is slightly higher among women with none or one child: 13 percent of women with no child or with one child wanted three children or less. Despite the pronatalist attitudes of most women, there is some evidence of unwanted fertility; 10 percent of women with 5 children and 20 percent of those with 6 or more children reported ideal numbers of children that were less than the actual number of children they have.

Table 6.6 presents the mean ideal number of children for all women by age and selected background characteristics. Women with secondary or higher education and women in Kilimanjaro region wanted fewer than five children (means of 4.2 and 4.3, respectively). Women with no education have the largest mean ideal number of children (7.3). Women in Zanzibar want more children on average (6.8) than women on mainland Tanzania (6.0).

Table 6.6 Mean ideal number of children by background characteristics

Mean ideal number of children for all women, by age and selected background characteristics, Tanzania 1991/92

Background characteristic	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Residence								
Mainland	5.5	5.4	5.8	6.4	7.0	7.2	7.5	6.0
Dar es Salaam	4.5	4.6	5.3	5.6	(6.1)	(7.2)	*	5.2
Other urban	4.8	4.6	5.2	5.9	6.7	6.1	7.2	5.4
Rural	5.8	5.7	5.9	6.6	7.1	7.5	7.6	6.3
Zanzibar	6.0	5.9	7.2	7.7	(6.9)	(7.6)	(9.4)	6.8
Region								
Dodoma	5.7	5.1	6.1	(6.7)	(8.3)	(7.1)	(7.3)	6.3
Arusha	4.9	4.8	5.2	(5.6)	(6.6)	(6.0)	(6.9)	5.4
Kilimanjaro	3.8	4.0	4.1	(4.8)	4.8	(5.6)	(4.4)	4.3
Tanga	4.8	4.8	5.6	6.3	(5.8)	(6.3)	(6.3)	5.5
Morogoro	5.4	5.8	5.8	6.4	8.1	(8.6)	(8.1)	6.5
Coast	5.2	5.6	(6.6)	(7.3)	(8.1)	(9.2)	(9.9)	6.8
Lindi	4.9	5.5	5.4	(5.7)	(7.0)	(7.2)	(7.8)	6.0
Mtwara	4.9	5.7	5.1	(6.6)	(6.7)	(7.0)	(7.6)	6.0
Ruvuma	4.8	4.9	5.9	6.3	6.7	(6.4)	(6.6)	5.7
Iringa	(5.0)	4.6	4.8	6.0	6.4	*	(8.2)	5.5
Mbeya	5.5	5.1	5.3	(6.2)	(7.4)	*	*	5.8
Singida	5.7	5.6	6.2	(6.6)	(6.6)	(7.7)	(8.9)	6.4
Tabora	6.5	6.4	5.6	6.2	(7.4)	7.4	(7.6)	6.6
Rukwa	5.8	5.6	6.5	6.6	6.7	(8.4)	(6.3)	6.3
Kigoma	6.2	6.4	7.0	7.0	8.3	(8.0)	(9.5)	6.9
Shinyanga	6.5	6.5	6.7	6.8	7.9	(7.9)	(9.0)	6.9
Kagera	5.9	6.0	5.9	6.5	6.9	(8.1)	(7.9)	6.3
Mwanza	6.4	6.1	6.8	7.1	(7.4)	(7.4)	(7.9)	6.7
Mara	5.7	5.9	6.0	7.0	7.3	7.1	(8.3)	6.4
Education								
No education	6.3	6.6	6.9	7.0	7.7	7.8	8.0	7.3
Primary incomplete	5.7	6.3	5.9	6.6	6.9	6.7	6.4	6.3
Completed primary	5.4	5.1	5.4	5.7	5.2	6.3	5.5	5.3
Secondary/Higher	4.3	4.2	3.8	4.7	*	*	*	4.2
Total	5.5	5.4	5.8	6.4	7.0	7.2	7.5	6.1

Note: Rates shown in parentheses are based on 25-49 women, whereas an asterisk means the rate is based on fewer than 25 women and has been suppressed.

6.4 Fertility Planning

In the TDHS, women were asked questions for each child born in the preceding five years and any pregnancy to determine whether the pregnancy was planned (wanted then), wanted but at a later time, or unwanted (wanted no more). The answers indicate the degree to which couples are successfully controlling fertility. However, it must be noted that these questions required the respondent to accurately recall her wishes at one or more points in the last five years and to report them honestly. Here, the danger of rationalization is present since an unwanted conception may become a cherished child. Therefore, the values presented here are likely to be underestimates of the proportion of couples successfully controlling their fertility.

Table 6.7 shows the percent distribution of births in the five years preceding the survey by planned fertility status, according to birth order and mother's age at birth. Three-quarters of births in the last five years were wanted at the time they were conceived, 15 percent were wanted later, and 8 percent were not wanted at all. These proportions vary according to birth order. Eleven percent of the fourth or higher order births were not wanted, 18 percent were wanted at a later time, and 70 percent were wanted at that time. The proportion of births that were not wanted at all generally increases with age of the mother. On the other hand, the older the women, the lower the proportion of births that were wanted at the time they were conceived. The proportion of births wanted later is low at the youngest age group, reaches a peak among age 25-29, and then decreases.

Table 6.7 Fertility planning status

Percent distribution of births in the five years preceding the survey by fertility planning status, according to birth order and mother's age, Tanzania 1991/92

Birth order and mother's age	Planning status of birth[1]				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
Birth order						
1	84.2	6.4	8.4	0.9	100.0	2005
2	78.4	17.1	4.1	0.5	100.0	1669
3	76.3	18.2	4.1	1.4	100.0	1284
4+	69.7	17.9	10.8	1.6	100.0	4106
Age at birth						
<19	80.4	9.9	8.9	0.9	100.0	1627
20-24	78.4	16.1	4.7	0.8	100.0	2656
25-29	73.2	20.1	5.5	1.3	100.0	2148
30-34	73.5	16.7	7.9	1.9	100.0	1299
35-39	71.6	12.2	14.4	1.7	100.0	874
40-44	65.2	8.5	24.9	1.4	100.0	381
45-49	60.0	7.8	26.8	5.4	100.0	79
Total	75.5	15.2	8.1	1.2	100.0	9065

[1]Includes current pregnancy.

The potential demographic impact of avoiding unwanted births can be estimated by calculating the wanted fertility rate. This calculation proceeds in the same way as the total fertility rate, but the unwanted births are excluded from the numerator. In this context unwanted births are defined as births that exceed the number considered ideal by the respondent. The rate that is obtained from these calculations represents the level of fertility that would have prevailed during the three years preceding the survey if all unwanted births were prevented. Comparison of actual rates with wanted rates indicates the potential demographic impact of the elimination of unwanted births.

Table 6.8 shows the wanted total fertility rate and the actual total fertility rate for the three years preceding the survey by selected background characteristics. Overall, the wanted total fertility rate is 11 percent lower than the actual total fertility rate. Thus, if the unwanted births were eliminated, the total fertility rate in Tanzania would be 5.6 children born per woman. The differences between actual and wanted fertility rates are fairly similar by urban/rural residence and level of education (less than 1 child). The one exception is among women in the northern highlands, where the wanted total fertility rate (4.6) is more than one child less than the actual total fertility rate (6.0). However, in general, even if women in Tanzania were to control their childbearing, fertility rates would remain high, either because women still prefer large families or they are not familiar with the idea of conscious reproductive choice. Hence, the demographic impact of family planning can be increased by promoting a desire for smaller families.

Table 6.8 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by selected background characteristics, Tanzania 1991/92

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Mainland	5.57	6.24
Dar es Salaam	3.72	4.04
Other urban	4.77	5.56
Rural	5.91	6.58
Zanzibar	5.73	6.38
Zone		
Coastal	5.06	5.66
Northern Highlands	4.63	6.01
Lake	6.18	6.88
Central	6.65	7.06
Southern Highlands	5.81	6.25
South	4.55	5.11
Education		
No education	5.93	6.50
Primary incomplete	5.47	6.44
Completed primary	5.32	5.99
Secondary/Higher	3.69	4.22
Total	5.57	6.25

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.

CHAPTER 7

INFANT AND CHILD MORTALITY

Including an estimation of infant and child mortality rates in the demographic assessment of Tanzania is important because mortality levels in children below the age of five may have profound impact on a number of demographic parameters. Childhood mortality data are also useful in assessing the impact of child survival programmes and identifying child populations that are at high risk.

Mortality estimates were calculated from information collected in the birth history section of the individual questionnaire. The section began with questions about the overall childbearing experience of respondents (i.e., the number of sons and daughters who live in the household, those who live elsewhere, and those who have died). These questions were followed by a retrospective birth history in which data were obtained on sex, date of birth, survivorship status, and current age or age at death of each of the respondents' live births.

The rates presented in this chapter are defined as follows:

- Neonatal mortality: the probability of dying within the first month of life
- Postneonatal mortality: the difference between infant and neonatal mortality
- Infant mortality: the probability of dying before the first birthday
- Child mortality: the probability of dying between the first and fifth birthday
- Under-five mortality: the probability of dying before the fifth birthday.

All rates are presented per 1,000 live births. The only exception is the child mortality probability (1-4 years), which is expressed per 1,000 children aged 1 year exactly.

7.1 Infant and Child Mortality

Neonatal, postneonatal, infant, child and under-five mortality rates are shown in Table 7.1 for three five-year periods in the 15 years preceding the survey. For the most recent five-year period (1987-91) under-

Table 7.1 Infant and child mortality

Infant and child mortality rates by five-year periods preceding the survey, Tanzania 1991/92

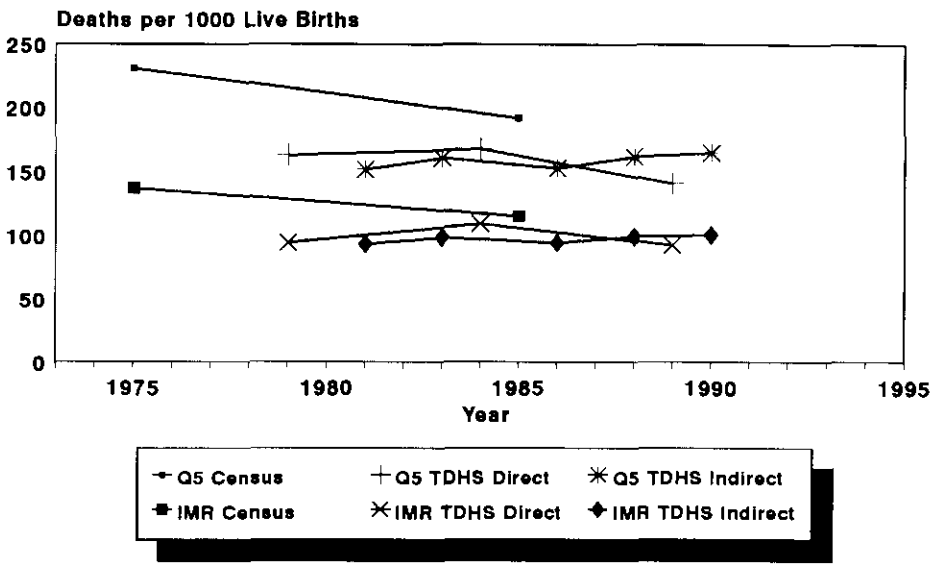
Years preceding survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality** ($_1q_0$)	Child mortality ($_4q_1$)	**Under-five mortality** ($_5q_0$)
0-4	37.9	53.7	91.6	54.6	141.2
5-9	42.4	66.2	108.6	66.9	168.2
10-14	41.2	52.4	93.7	76.0	162.6

five mortality was 141 per 1,000 live births and infant mortality 92 per 1,000 live births.[1] Among all deaths under five years, 27 percent occurred during the neonatal period, 38 percent during the postneonatal period, and 35 percent at ages 1-4 years.

During the fifteen years preceding the TDHS, under-five mortality fell from 163 deaths to 141 deaths per thousand live births. Virtually all of the decline was due to a decline in mortality at 1-4 years. Infant mortality remained at the same level during 1987-91 as it was during 1977-81. During the period 1982-86, infant mortality was estimated at 109 per 1,000 live births, which was an increase compared to the preceding five-year period (1977-81, 94 per 1,000 live births). The increase was entirely due to higher postneonatal mortality, since neonatal mortality did not change.

Under five and infant mortality estimates from TDHS can be compared in Figure 7.1 with estimates based on the 1978 and 1988 censuses. Since the census estimates are based on the indirect method of estimation, indirect mortality estimates are also presented for TDHS in addition to the direct estimates. Indirect estimates of infant and child mortality were produced using the Trussell variant of the Brass method. This method uses the reports on the number of children ever born and still alive by age of the respondent to estimate mortality levels and trends. In contrast to the direct approach, which is based on birth history data,

Figure 7.1
Trends in Mortality, Infants and Children Under Five, Direct and Indirect Estimates



Note: Census data from 1978 and 1988

TDHS 1991/92

[1] Using the jackknife model, sampling errors can be calculated for mortality estimates, which take into account the number of clusters of the TDHS. For infant mortality, the 95 percent confidence interval is 80.1-103.1 per 1,000 live births; the corresponding interval for under-five mortality is 128.1 - 154.3 per 1,000 live births.

no information is used on ages at death; model life tables are used to obtain indirect mortality estimates. The indirect estimates tend to be higher than the direct estimates of mortality, particularly the most recent estimate, which is based on the child mortality experience of women 20-24 years.[2] For the indirect estimates in both TDHS and the 1988 census, North model life tables were used.

There are marked discrepancies between census and TDHS estimates of under-five mortality, whereas infant mortality data are fairly consistent. The census estimates of under-five mortality are 231 and 192 per 1,000 live births for 1975 and 1985, respectively (Bureau of Statistics, undated). The census estimate for 1985 is about 30 points higher than the indirect and direct estimates from the TDHS, which are at a remarkably similar level. Part of the difference may be due to the fact that the 1985 census estimate was based on women 20-24, who may have excess mortality, as noted above. Analysis of the indirect mortality census data for women 20-44 may provide further insights.

Table 7.2 and Figures 7.2 and 7.3 present neonatal, postneonatal, infant, child and under-five mortality rates by selected background characteristics for the ten-year period (1982 - 1991) preceding the survey. There was no difference in mortality rates between rural and urban areas. As expected, all mortality rates decreased with increasing level of education. The largest education-related differentials are observed

Table 7.2 Infant and child mortality by background characteristics

Infant and child mortality rates for the ten-year period preceding the survey, by selected background characteristics, Tanzania 1991/92

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality** ($_1q_0$)	Child mortality ($_4q_1$)	**Under-five mortality** ($_5q_0$)
Residence[1]					
Urban	52.1	56.2	108.3	57.1	159.2
Rural	36.9	60.3	97.2	61.0	152.2
Zone					
Coastal	44.7	62.3	107.0	59.7	160.3
Northern Highlands	34.4	21.1	55.5	24.4	78.6
Lake	38.1	69.6	107.7	68.5	168.9
Central	51.2	76.6	127.9	71.9	190.6
Southern Highlands	31.8	48.1	79.9	54.7	130.2
South	41.5	57.6	99.1	71.0	163.1
Education					
No education	43.1	60.3	103.3	65.8	162.3
Primary incomplete	35.4	59.5	95.0	67.0	155.6
Completed primary	39.7	59.7	99.4	47.9	142.5
Secondary/Higher	29.0	42.8	71.8	31.3	100.8
Medical maternity care					
No antenatal/Delivery care	41.0	54.9	95.9	69.5	158.7
Either antenatal or delivery	33.6	55.1	88.7	54.4	138.2
Both antenatal & delivery	38.7	53.5	92.3	39.6	128.3
Total	40.0	59.5	99.4	60.2	153.6

[1]Number of observations for Dar es Salaam and Zanzibar is too small for mortality estimations.

[2] This is because women 20-24 are on average 22.5 years at the time of the survey, so an important part of their births occur when these women are very young. Infant and child mortality for births to such women is much higher, as also shown by the direct estimates of mortality by maternal age in Table 7.3.

Figure 7.2
Infant Mortality in the Ten Years Preceding the Survey by Selected Characteristics

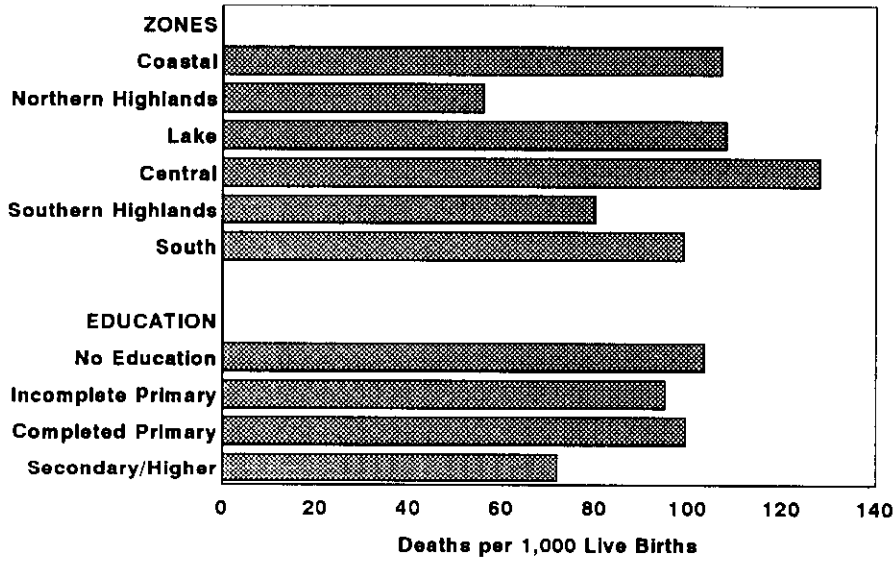


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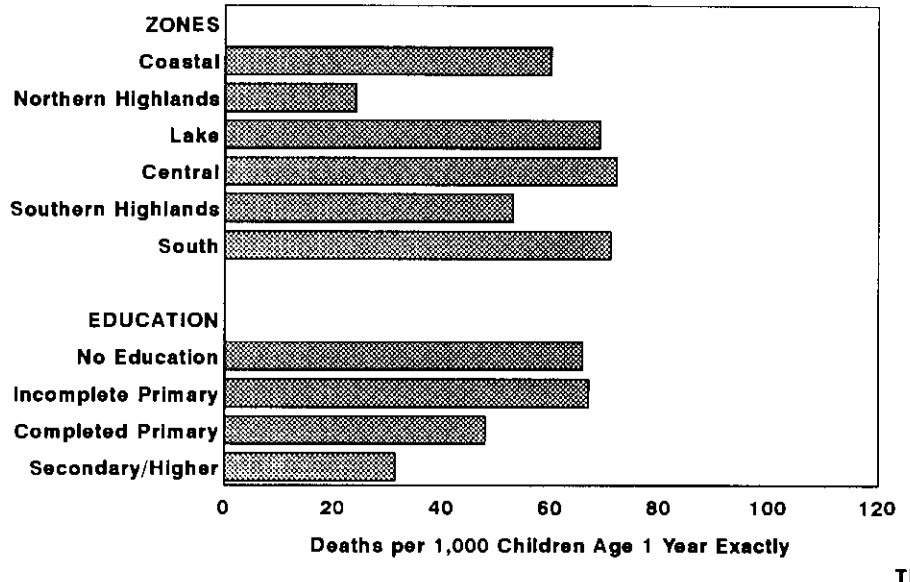
Figure 7.3
Child Mortality (1-4 years) in the Ten Years Preceding the Survey by Selected Characteristics



TDHS 1991/92

for mortality during ages 1-4 years. The benefits of higher levels of mother's education become most evident if the mother has at least some secondary education; the differences between no formal education and primary education are small. Nonformal adult education may have contributed to reducing the excess mortality risk of children of mothers without formal education compared to children of mothers with primary education.

Regional differences in childhood mortality were observed by collapsing the administrative regions into six ecological/geographical zones. This strategy allowed the necessary geographical comparisons to be made because it provided relatively large numbers of deaths 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 as shown below:

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

With the exception of neonatal mortality, mortality rates were lowest in the Northern Highlands; infant mortality was 56 per 1,000 live births, while under-five mortality was 79 per 1,000 live births. Mortality levels among children living in the Southern Highlands were also somewhat lower than average; infant mortality and under-five mortality were 80 and 130 per 1,000 live births, respectively. The Coastal, Lake, and Southern zones take an intermediate position, with infant mortality rates on the order of 100 per 1,000 and under-five mortality rates of about 160 per 1,000 live births. Finally, mortality rates were found to be highest in the Central zone (infant mortality 128 and under-five mortality 191 per 1,000 live births).

Quality of care received during the antenatal and delivery periods is known to be an important determinant of neonatal survival. Respondents were asked to report on services they received while pregnant or during delivery. Neonatal mortality among those who received neither antenatal nor delivery care was 50 per thousand live births; among those who received both services mortality during the first month of life was 39 per thousand live births for the five-year period prior to the survey (no maternity care data were collected for births more than 5 years before the survey). All other measures of mortality (especially childhood and under-five mortality) were relatively higher among women who receive no antenatal nor delivery care.

Table 7.3 presents mortality rates for the ten years preceding the survey by selected demographic characteristics. Male children have slightly higher mortality than female children in all three age periods. Children borne to mothers below 20 years of age had higher mortality than children borne to mothers at older ages. Paradoxically, children borne by older women (40-49 years) had the lowest mortality.

Parity was also associated with mortality. First-born and high-parity children had higher mortality than children of birth orders 2-6, but this association is largely restricted to the neonatal period. The relationship between birth intervals and mortality was also assessed. Shorter birth intervals were associated with much higher mortality both during and after infancy. All mortality measures among children born less than two years after the previous birth were more than 100 percent higher than those of children born at least four years after the previous birth. The difference in mortality was highest (elevated by about 200 percent) in the neonatal period and 1-4 years age group. High mortality associated with shorter birth interval during the neonatal period may be due to prenatal influences, such as maternal depletion, while the observed high mortality in higher age categories may be due to economic stress associated with large family size. In general, these data indicate the importance of child spacing for child survival.

Table 7.3 Infant and child mortality by demographic characteristics

Infant and child mortality rates for the ten-year period preceding the survey, by selected demographic characteristics, Tanzania 1991/92

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality** ($_1q_0$)	Child mortality ($_4q_1$)	**Under-five mortality** ($_5q_0$)
Sex of child					
Male	42.6	61.2	103.7	63.2	160.4
Female	37.4	57.7	95.1	57.1	146.8
Age of mother at birth					
<20	54.5	71.9	126.4	76.8	193.5
20-29	34.6	54.4	89.0	57.8	141.7
30-39	41.2	64.1	105.3	52.5	152.3
40-49	34.2	35.7	69.9	55.4	121.4
Birth order					
1	53.0	60.3	113.3	60.8	167.3
2-3	34.6	58.7	93.3	63.0	150.4
4-6	32.8	59.8	92.6	60.5	147.5
7+	45.9	59.2	105.1	53.3	152.8
Previous birth interval					
< 2 yrs	68.6	91.5	160.1	83.8	230.5
2-3 yrs	27.4	52.3	79.7	59.3	134.3
4 yrs +	25.3	39.8	65.1	29.4	92.6

7.2 High-Risk Fertility Behaviour

Generally, 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 parity. 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 over 34 years of age at the time of delivery. A "short birth interval" is defined by 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 living children (i.e., if the child is of birth order 4 or higher). Children can be further cross-classified by combinations of these characteristics. First births, although often at increased risk, are not included in this analysis because they are not considered an avoidable risk.

The first column in Table 7.4 shows the percentage of children born in the five years preceding the survey who fall into specific risk categories. Thirty-eight percent of children had a single risk characteristic, while 21 percent had more than one high-risk characteristic and were thus placed in the multiple risk category. Overall, over a half of children (59 percent) were at elevated risk as a result of the mother's fertility pattern.

Table 7.4 High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey who are at 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 1991/92

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[a]
	Percentage of births	Risk ratio	
Not in any high-risk category	41.5	1.00	24.5[b]
Single high-risk category			
Mother's age < 18	6.6	1.80	1.1
Mother's age > 34	0.2	*	2.7
Birth interval < 24	5.9	(1.31)	10.4
Birth order > 3	25.2	0.94	17.5
Subtotal	38.0	1.16	31.7
Multiple high-risk category			
Age <18 & birth interval <24[c]	0.2	*	0.4
Age >34 & birth interval<24	0.0	*	0.1
Age >34 & birth order>3	12.7	0.92	24.9
Age >34 & birth interval <24 & birth order >3	1.7	*	5.4
Birth interval <24 & birth order >3	5.9	(1.46)	12.9
Subtotal	20.5	1.15	43.8
In any high-risk category	58.5	1.16	75.5
Total	100.0	-	100.0
Number	8036	-	6038

Note: Risk ratio is the ratio of the proportion dead of births in a specific risk category to the proportion dead of births not in any high-risk category. Figures in parentheses are ratios based on fewer than 250-499 cases. An asterisk means the data are based on fewer than 250 cases and have been suppressed.

[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*.

Forty-six percent of all children were of birth order 4 or higher. Among births with a single risk characteristic, high birth order was the most common one (25 percent of all births). Common combinations of risk factors were maternal age 35 years and over with birth order 4 or higher, and birth interval less than 24 months and birth order 4 and over.

To obtain an idea of the magnitude of the mortality risk associated with fertility behaviour, risk ratios were calculated for each of the risk categories, as shown in the second column of Table 7.4. A risk ratio in this context is defined as the ratio of the proportion of children in the category who have died to the proportion who have died in the not in any risk category. Children were classified not to be in any risk category if they were born to mothers age 18-34, at an interval of 24 months or more after the previous birth, and with birth order 3 or less. Compared to children not in any risk category, the risk of mortality among children in at least one risk category was increased by 16 percent only. The increased risk of dying was similar in children in single and multiple risk categories. Among children with a single risk factor, the highest risk of dying was noted among those born to mothers younger than 18 years of age (elevated by 80 percent). Children born less than 24 months after the previous birth and of birth order 4 or higher had the highest risk of dying (risk increased by 46 percent) in the multiple risk category.

Based on this brief analysis of high-risk fertility behaviour, the question can be asked: How many women currently have the potential for having a high-risk birth? This may be answered by simulating the distribution of currently married women by the risk category into which a currently conceived birth would fall. In other words, a woman's current age, time elapsed since last birth, and parity are used to determine into which category her next birth would fall, if she were to conceive at the time of the survey. To determine what proportion of women in the simulation have the potential for a high-risk birth, it is assumed that all but sterilised women conceive. The results of this hypothetical situation are shown in column 3 of Table 7.4.

The simulation results indicate that without any form of fertility control among women who share a high-risk profile, the percentage of estimated high-risk births (in any category) will increase. This can be seen by comparing the proportion of women who currently have the potential for a high-risk birth (76 percent) with the proportion of births in the five years preceding the survey that were classified as high-risk (59 percent). This hypothetical increase in high-risk births is related to increases in the percentage of births in the multiple risk categories, from 21 to 44 percent. These findings clearly show the importance of family planning in prevention of mortality among children and suggests that impact on mortality can be achieved by targeting family planning services to significant women in risk categories.

CHAPTER 8

MATERNAL AND CHILD HEALTH

Findings in three areas of importance to maternal and child health—maternity care, vaccinations, and common childhood illnesses and their treatment—are presented in this chapter. This information can be used to assess progress in the implementation of child survival programmes and to identify the characteristics of nonusers of maternal and child health services. Data were obtained for all live births occurring in the five years preceding the survey.

8.1 Antenatal Care and Delivery Assistance

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 were instructed to record all persons a woman may have seen for care, but in the table, only the provider with the highest qualifications is considered (if more than one person was seen). The findings of this survey indicate very high utilization of antenatal care in Tanzania (for most pregnancies 96 percent). According to mothers' reports, more than 9 of 10 births received antenatal care from a medical professional (92 percent). Mostly, antenatal care was provided by a trained nurse/midwife (56 percent) or a MCH aide (30 percent). Doctors provided 7 percent of antenatal care and traditional birth attendants (TBAs) 4 percent. During the five-year period preceding the survey, mothers who received no antenatal care accounted for only 3 percent of births.

Differences in attendance of antenatal care were small by birth order of the child and age of the mother; attendance was high in all categories.

Births to women in Zanzibar were more likely to receive antenatal care than births on Tanzania mainland. More pronounced differences were observed in the sources of antenatal care for births in urban and rural areas. Women in urban areas were more likely to receive antenatal care from a doctor or trained nurse or midwife, while women in rural areas were more likely to receive antenatal care from MCH aides and TBAs. These differences may be due to the fact that some service providers such as doctors are mainly located in urban areas making them less accessible to rural women. Doctors were prominent particularly in Dar es Salaam where they accounted for 43 percent of antenatal care. At the other extreme is Zanzibar, where only 2 percent of births received antenatal care from a doctor.

There is some regional variation in utilization of antenatal care. Morogoro and Arusha had the largest number of births reportedly receiving no antenatal care (10 and 11 percent, respectively) whereas Iringa, Mbeya, Rukwa, and Shinyanga had relatively high utilisation of traditional birth attendants for antenatal care (all in the range of 11-12 percent of births). Apart from Dar es Salaam the proportion of women who reportedly received antenatal services from doctors was high in the Coast region (26 percent).

Births to women with no education were more likely not to receive any antenatal care than those to women with at least primary education (7 and 1 percent, respectively). Also there were significant differences in the sources of antenatal care for births according to mother's education. Women with secondary education or higher were more likely to receive antenatal care from a doctor or trained nurse midwife, whereas women with no education were more likely to receive care from a MCH aide or birth attendant.

Table 8.1 Antenatal care

Percent distribution of live births in the five years preceding the survey by source of antenatal care during pregnancy, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Antenatal care provider[1]							Number of births
	Doctor	Trained nurse/ Midwife	MCH aide	Trad. birth attendant	No one	Don't know/ Missing	Total	
Mother's age at birth								
< 20	6.2	54.5	30.9	4.6	3.0	0.8	100.0	1472
20-34	7.1	55.8	29.5	4.2	2.8	0.5	100.0	5385
35+	3.8	56.8	28.4	4.3	5.9	0.7	100.0	1174
Birth order								
1	8.4	56.1	28.7	3.8	2.4	0.7	100.0	1795
2-3	7.4	55.8	29.6	4.2	2.6	0.4	100.0	2580
4-5	5.1	54.4	31.8	4.4	3.6	0.6	100.0	1642
6+	4.6	56.3	28.7	4.8	4.6	0.9	100.0	2014
Residence								
Mainland	6.6	55.5	29.5	4.4	3.3	0.6	100.0	7793
Dar es Salaam	43.0	48.0	6.5	0.0	2.5	0.0	100.0	373
Other urban	10.6	68.4	19.1	1.2	0.5	0.3	100.0	1273
Rural	3.6	53.2	33.1	5.4	4.0	0.7	100.0	6148
Zanzibar	1.9	64.3	32.7	0.0	1.0	0.0	100.0	238
Region								
Dodoma	4.8	39.4	47.9	5.1	2.8	0.0	100.0	623
Arusha	10.0	55.7	19.5	2.2	11.2	1.3	100.0	534
Kilimanjaro	7.6	67.1	24.1	0.0	0.5	0.8	100.0	368
Tanga	2.3	46.2	51.1	0.0	0.2	0.2	100.0	406
Morogoro	10.7	54.9	19.9	4.2	10.1	0.3	100.0	471
Coast	25.5	62.0	3.6	0.4	7.4	1.1	100.0	116
Lindi	8.7	58.8	27.6	0.6	2.8	1.4	100.0	178
Mtwara	1.9	54.0	43.7	0.0	0.5	0.0	100.0	208
Ruvuma	2.0	63.1	34.8	0.0	0.0	0.2	100.0	271
Iringa	10.2	39.7	35.6	11.6	1.8	1.1	100.0	439
Mbeya	0.7	51.2	34.3	10.9	2.8	0.0	100.0	375
Singida	6.2	50.1	29.9	8.3	5.6	0.0	100.0	306
Tabora	1.3	68.0	29.4	0.6	0.5	0.1	100.0	231
Rukwa	3.0	40.1	41.3	10.7	3.1	1.8	100.0	223
Kigoma	2.7	52.9	39.2	3.7	0.4	1.1	100.0	358
Shinyanga	0.2	63.7	21.2	11.0	2.5	1.5	100.0	791
Kagera	0.8	66.3	29.8	0.7	2.4	0.0	100.0	554
Mwanza	2.3	64.3	26.3	3.5	2.7	1.0	100.0	605
Mara	6.5	63.8	21.5	3.8	3.8	0.6	100.0	363
Mother's education								
No education	3.2	53.0	30.2	6.2	6.5	0.9	100.0	2841
Some primary	5.8	57.0	30.5	3.8	2.0	0.9	100.0	1501
Completed primary	8.2	57.1	29.9	3.3	1.3	0.3	100.0	3448
Secondary/Higher	25.3	60.2	13.6	0.0	0.2	0.7	100.0	242
Total	6.5	55.7	29.6	4.3	3.3	0.6	100.0	8032

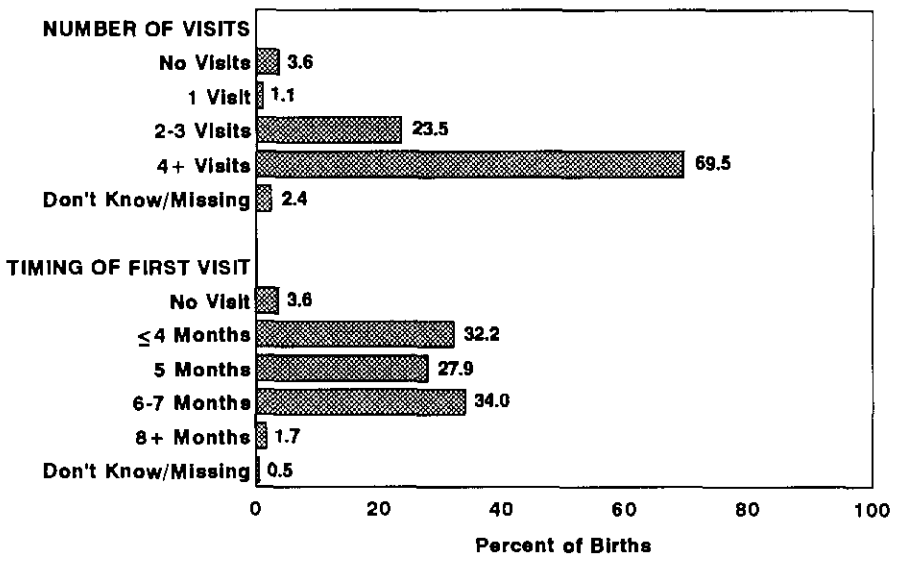
Note: Figures are for births in the period 1-59 months preceding the survey. The coding categories in the TDHS questionnaire are: doctor/medical assistant, rural medical aide, nurse/midwife, MCH aide, village health worker, trained traditional birth attendant, traditional birth attendant (TBA), and other.

[1]If the respondent mentioned more than one provider, only the most qualified provider is considered

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 care be started at 12 weeks (3 months) of gestation and visits be made on a monthly basis to the 28th week (7th month), fortnightly to the 36th week (8th month), and then weekly until the 40th week or delivery. If the first antenatal visit is made at the third month of pregnancy, this schedule translates to a total of about 12 visits during the pregnancy. To detect possible delivery complications at least one visit is required during the last weeks of pregnancy.

Figure 8.1 shows the distribution of number of antenatal visits made by pregnant mothers. In about 70 percent of all births, mothers made four or more antenatal care visits. The median number of antenatal visits per pregnancy was five. Clearly, most women make fewer than the recommended number of visits during pregnancy. This may be related to the stage of pregnancy at the first antenatal care visit. One third of births (32 percent) received antenatal care before five months of gestation and 28 percent went for the first visit at five months of pregnancy. The median duration of gestation at which the first antenatal care visit was made was 5.6 months.

Figure 8.1
Number of Antenatal Care Visits and Timing of First Visit



TDHS 1991/92

To obtain information about tetanus toxoid vaccination, women were asked to report if they received these injections against tetanus during pregnancy for all births in the five years preceding the survey; the results are presented in Table 8.2. These injections provide protection against neonatal tetanus, one of the principal causes of death among neonates in many developing countries. For full protection, a pregnant woman should receive two doses of the toxoid with at least one month between the doses. However, if a woman has been vaccinated during previous pregnancies, she may only require one booster dose during a current pregnancy, whereas five doses of tetanus toxoid are considered to provide lifetime protection.

Table 8.2 Tetanus toxoid vaccination

Percent distribution of births in the five years preceding the survey, by number of tetanus toxoid injections given to the mother during pregnancy and whether the respondent received an antenatal card, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Number of tetanus toxoid injections					Percentage given antenatal card	Number of births
	None	One dose	Two doses or more	Don't know/ Missing	Total		
Mother's age at birth							
< 20	7.6	14.8	77.2	0.4	100.0	95.4	1472
20-34	9.8	18.8	70.7	0.7	100.0	95.5	5385
35+	14.0	17.4	68.0	0.6	100.0	92.2	1174
Birth order							
1	6.6	13.4	79.4	0.6	100.0	95.5	1795
2-3	9.0	18.7	71.8	0.5	100.0	95.8	2580
4-5	11.6	21.2	66.3	0.8	100.0	95.0	1642
6+	13.0	18.0	68.3	0.7	100.0	93.4	2014
Residence							
Mainland	10.1	16.8	72.5	0.6	100.0	94.9	7793
Dar es Salaam	4.4	15.6	79.6	0.4	100.0	96.6	373
Other urban	7.0	15.7	76.6	0.7	100.0	98.6	1273
Rural	11.0	17.1	71.3	0.6	100.0	94.1	6148
Zanzibar	8.1	52.4	37.6	1.9	100.0	96.6	238
Region							
Dodoma	8.2	14.5	77.2	0.1	100.0	96.3	623
Arusha	24.8	14.4	60.8	0.1	100.0	84.3	534
Kilimanjaro	6.1	21.0	71.7	1.1	100.0	96.9	368
Tanga	10.0	15.7	73.5	0.8	100.0	98.5	406
Morogoro	14.2	10.5	75.3	0.0	100.0	89.4	471
Coast	10.5	20.1	68.2	1.2	100.0	89.8	116
Lindi	6.9	14.7	76.6	1.7	100.0	93.0	178
Mtwara	6.3	20.1	73.1	0.5	100.0	97.7	208
Ruvuma	8.5	18.3	72.7	0.5	100.0	99.1	271
Iringa	5.2	18.6	74.4	1.8	100.0	94.5	439
Mbeya	10.9	14.7	71.8	2.6	100.0	94.9	375
Singida	11.8	18.3	69.7	0.2	100.0	93.4	306
Tabora	5.2	16.2	77.9	0.7	100.0	99.1	231
Rukwa	14.4	12.6	72.7	0.4	100.0	89.0	223
Kigoma	10.4	20.8	68.5	0.3	100.0	98.4	358
Shinyanga	10.4	17.7	71.8	0.1	100.0	96.8	791
Kagera	10.1	21.0	68.2	0.7	100.0	96.6	554
Mwanza	8.0	17.2	74.6	0.2	100.0	97.0	605
Mara	6.8	16.2	76.1	0.9	100.0	95.0	363
Mother's education							
No education	14.7	18.8	65.8	0.7	100.0	91.5	2841
Primary incomplete	8.8	18.7	71.7	0.8	100.0	96.8	1501
Completed primary	7.0	16.5	76.0	0.5	100.0	97.0	3448
Secondary/Higher	5.3	21.8	72.4	0.5	100.0	95.9	242
All births	10.0	17.8	71.5	0.6	100.0	95.0	8032

Note: Figures are for births in the period 1-59 months preceding the survey.

For the majority of births (72 percent), the mothers received at least two doses of tetanus toxoid during pregnancy. However, 10 percent were not protected by any tetanus toxoid vaccination. Birth mothers 35 years or above and mothers of births of order 4 and above were less likely to receive tetanus vaccination.

The proportions of births where the mothers received no tetanus toxoid is similar in Tanzania mainland and Zanzibar. However, mothers in Zanzibar were much more likely to receive only one dose of tetanus toxoid, whereas their counterparts in Tanzania mainland were more likely to receive at least two doses. Tetanus vaccination status varied by mainland region. Ten regions had at least 10 percent of births with no tetanus toxoid injections during pregnancy at all. The highest proportions with no tetanus toxoid were observed in Arusha (25 percent of births), Rukwa (14 percent), and Morogoro (14 percent). However, in all regions more than 60 percent of all births in the five years preceding the survey received at least two doses of tetanus toxoid, but no region exceeded 80 percent coverage.

Vaccination status was found to be associated with education of mothers. The proportion of women who had live births and did not receive tetanus vaccination decreased steadily from 15 percent among women with no education to 5 percent among women with secondary education or above. This may be partly due to higher utilization of antenatal care among educated women (see Table 8.1).

For most births (95 percent) mothers had antenatal cards. In all categories of the background characteristics in Table 8.2, more than 90 percent had antenatal cards with the exception of four regions: Arusha, Rukwa, Morogoro, and Coast.

Table 8.3 presents the distribution of births in the five years preceding the survey by place of delivery. Slightly more than half of births took place in health facilities, whereas 46 percent took place at home.

The proportion of births delivered in health facilities decreased with increasing mother's age and birth order. Births in Zanzibar were considerably less likely to take place in health facilities than in mainland Tanzania. Within Tanzania mainland, births were much more likely to take place in health facilities in urban areas than in rural areas. Among the mainland regions home deliveries were most common in the Lake regions. More than three-quarters of births in Dar es Salaam, Ruvuma, and Kilimanjaro took place in health facilities. Births of educated women were more likely to take place in health facilities than those of uneducated women.

The largest differences can be observed by antenatal care attendance; among women not receiving antenatal care, 80 percent delivered at home; of women who made 1-3 antenatal visits during pregnancy, 55 percent delivered at home; and of women who made at least 4 visits, 40 percent delivered at home. In general, the proportion of all births taking place in health facilities (53 percent) was much lower than the proportion of births where the woman was reported to have received antenatal care during pregnancy (96 percent). These figures suggest that women seek antenatal care to get checked and if there are no complications they prefer to deliver at home.

In addition to the place of delivery, the TDHS collected data on the type of personnel assisting during delivery. This information is important because the nature of assistance, and hence the quality of care provided, depends on the competence of the service provider. Overall, 6 percent of all births were delivered without assistance; 27 percent of the births were delivered after being assisted by a relative or "other" (see Table 8.4). About 53 percent of all births were assisted by either doctors, trained nurse/midwife, or MCH aide. Traditional birth attendants assisted at 13 percent of all births. In Zanzibar, TBAs were the most common provider (64 percent of all births). In mainland Tanzania, TBAs were most common in Rukwa (32 percent of births), Iringa (30 percent), and Coast regions (23 percent). Traditional birth attendants were rarely mentioned as a source of assistance during delivery in Ruvuma, Mwanza, and Tabora (3 percent of births for each).

Table 8.3 Place of delivery

Percent distribution of births in the five years preceding the survey, by place of delivery, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Health facility	At home	Other	Don't know/ Missing	Total	Number of births
Mother's age at birth						
< 20	56.4	42.0	0.0	1.7	100.0	1472
20-34	52.6	45.4	0.0	2.0	100.0	5385
35+	47.8	50.5	0.1	1.6	100.0	1174
Birth order						
1	62.1	36.3	0.0	1.6	100.0	1795
2-3	52.5	45.3	0.1	2.1	100.0	2580
4-5	48.8	49.1	0.0	2.1	100.0	1642
6+	47.2	51.0	0.1	1.7	100.0	2014
Residence						
Mainland	53.2	44.8	0.0	1.9	100.0	7793
Dar es Salaam	85.5	14.1	0.0	0.3	100.0	373
Other urban	84.5	13.1	0.0	2.4	100.0	1273
Rural	44.7	53.3	0.1	2.0	100.0	6148
Zanzibar	32.6	67.4	0.0	0.0	100.0	238
Region						
Dodoma	59.3	40.2	0.0	0.6	100.0	623
Arusha	47.5	49.7	0.0	2.8	100.0	534
Kilimanjaro	75.7	21.4	0.0	2.9	100.0	368
Tanga	54.1	44.4	0.0	1.5	100.0	406
Morogoro	49.6	45.3	0.1	5.0	100.0	471
Coast	48.8	50.0	0.0	1.1	100.0	116
Lindi	65.9	30.1	0.4	3.5	100.0	178
Mtwara	46.3	51.0	0.0	2.7	100.0	208
Ruvuma	81.5	16.3	0.0	2.2	100.0	271
Iringa	51.8	43.9	0.0	4.3	100.0	439
Mbeya	52.8	45.5	0.0	1.7	100.0	375
Singida	54.3	44.9	0.0	0.8	100.0	306
Tabora	66.7	30.1	0.0	3.2	100.0	231
Rukwa	45.7	52.0	0.0	2.4	100.0	223
Kigoma	42.8	55.7	0.0	1.4	100.0	358
Shinyanga	47.5	51.7	0.2	0.7	100.0	791
Kagera	39.0	60.0	0.0	1.0	100.0	554
Mwanza	43.0	55.9	0.0	1.1	100.0	605
Mara	35.0	62.1	0.1	2.8	100.0	363
Mother's education						
No education	38.3	60.2	0.1	1.4	100.0	2841
Primary incomplete	52.3	45.5	0.0	2.2	100.0	1501
Completed primary	62.5	35.2	0.0	2.3	100.0	3448
Secondary/Higher	81.3	18.3	0.0	0.4	100.0	242
Antenatal care visits						
0	11.4	79.7	0.2	8.7	100.0	288
1-3	43.6	55.1	0.0	1.3	100.0	1974
4+	57.9	40.4	0.0	1.7	100.0	5579
Don't know/Missing	53.5	42.6	0.4	3.4	100.0	191
All births	52.6	45.5	0.0	1.9	100.0	8032

Note: Figures are for births in the period 1-59 months preceding the survey.

Table 8.4 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 1991/92

Background characteristic	Attendant assisting during delivery[1]								
	Doctor	Trained nurse/ Midwife	MCH Aide	Trad. birth attendant	Relative/ Other	No one	Don't know/ Missing	Total	Number of births
Mother's age at birth									
< 20	6.6	41.1	8.9	12.5	27.5	3.3	0.2	100.0	1472
20-34	6.1	37.7	9.4	13.2	27.1	6.0	0.5	100.0	5385
35+	5.5	34.2	8.6	15.7	25.1	10.3	0.5	100.0	1174
Birth order									
1	8.0	45.7	8.5	10.6	24.7	2.1	0.3	100.0	1795
2-3	6.7	37.9	8.7	14.2	28.0	4.1	0.3	100.0	2580
4-5	4.6	35.1	9.3	13.6	29.6	7.3	0.5	100.0	1642
6+	4.9	32.8	10.4	14.7	25.3	11.3	0.6	100.0	2014
Residence									
Mainland	6.3	38.0	9.4	11.9	27.7	6.3	0.4	100.0	7793
Dar es Salaam	31.3	54.0	1.3	6.5	6.8	0.2	0.0	100.0	373
Other urban	12.4	68.3	5.6	3.7	8.5	1.4	0.1	100.0	1273
Rural	3.5	30.7	10.7	13.9	32.9	7.7	0.5	100.0	6148
Zanzibar	0.6	31.9	2.7	63.6	1.3	0.0	0.0	100.0	238
Region									
Dodoma	5.7	32.6	21.2	12.1	27.9	0.4	0.0	100.0	623
Arusha	11.2	36.0	2.3	19.8	27.8	1.9	1.1	100.0	534
Kilimanjaro	10.9	57.8	10.2	6.6	13.5	0.2	0.8	100.0	368
Tanga	3.1	30.6	22.1	15.7	28.3	0.0	0.2	100.0	406
Morogoro	8.0	38.4	5.9	15.9	28.6	2.9	0.3	100.0	471
Coast	15.6	34.2	4.2	23.0	22.0	0.3	0.8	100.0	116
Lindi	6.7	49.3	10.2	3.5	27.5	1.3	1.4	100.0	178
Mtwara	4.9	33.3	9.4	5.8	40.4	6.2	0.0	100.0	208
Ruvuma	6.6	55.8	19.8	2.6	14.5	0.5	0.2	100.0	271
Iringa	4.7	32.6	13.7	30.3	14.6	2.3	1.7	100.0	439
Mbeya	6.0	42.1	6.1	12.6	24.0	8.5	0.7	100.0	375
Singida	2.7	39.5	11.5	6.8	33.7	5.7	0.0	100.0	306
Tabora	3.3	50.3	14.1	3.1	26.4	2.8	0.0	100.0	231
Rukwa	2.8	28.0	11.7	31.6	22.5	2.2	1.2	100.0	223
Kigoma	2.4	30.6	9.0	10.3	40.7	6.4	0.6	100.0	358
Shinyanga	2.0	35.0	7.9	5.2	37.4	12.1	0.3	100.0	791
Kagera	2.2	32.7	4.4	15.9	27.4	17.3	0.0	100.0	554
Mwanza	2.5	36.0	4.9	3.0	37.4	16.3	0.0	100.0	605
Mara	3.6	30.6	2.2	11.7	34.5	16.9	0.5	100.0	363
Mother's education									
No education	3.1	27.1	7.9	16.7	33.9	10.7	0.7	100.0	2841
Primary incomplete	4.7	38.5	9.7	12.1	27.8	6.7	0.5	100.0	1501
Completed primary	8.4	44.6	10.5	11.5	22.4	2.5	0.2	100.0	3448
Secondary/Higher	18.9	61.8	3.1	11.1	4.7	0.0	0.4	100.0	242
Antenatal care visits									
None	1.8	8.0	1.2	18.8	48.1	13.7	8.4	100.0	288
1-3 visits	3.1	33.4	7.6	13.6	34.1	8.0	0.2	100.0	1974
4 or more visits	7.5	41.0	9.9	13.0	23.5	5.0	0.1	100.0	5579
Don't know/Missing	3.3	34.9	18.3	14.5	20.1	8.8	0.2	100.0	191
Total	6.1	37.8	9.2	13.4	26.9	6.1	0.4	100.0	8032

Note: Figures are for births in the period 1-59 months preceding the survey.
[1]If the respondent mentioned more than one attendant, only the most qualified attendant is considered.

In several subgroups more than 10 percent of births were delivered without any type of assistance. These included births to women 35 years or above, four Lake regions, births to women with no formal education, and births that had received no antenatal care. Births of order of four or more were also more likely to be delivered without any assistance.

Only 2.5 percent of births or 4.8 percent of all deliveries in health facilities were delivered by caesarean section.

8.2 Vaccinations

To obtain information about vaccination coverage, the TDHS collected information on vaccination status of all children born in the preceding five years, although data presented here are restricted to children who were alive at the time of the survey. The immunization programme in Tanzania is implemented by the Ministry of Health through the Expanded Programme of Immunization (EPI) that began in 1975. By 1986, operation of the programme was established throughout the country (Ministry of Health, 1989). The EPI follows the World Health Organisation's (WHO) guidelines for vaccinating children. To be considered fully vaccinated, a child should receive the following vaccinations: BCG, measles, and three doses each of DPT and polio. BCG is given at birth for protection against tuberculosis; DPT is given for protection against diphtheria, pertussis, and tetanus. In Tanzania, the DPT and polio are given at one, two, and three months of age and measles at 9 months. Thus, according to the recommended schedule, children should have completed all vaccinations before their first birthday.

Information on vaccination status was obtained from vaccination cards shown to the interviewers during the survey and from mothers' reports. All MCH clinics in Tanzania provide "road to health" cards (MCH form No. 3), which included dates of vaccinations. If these 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 being given, the mother was asked to recall whether that particular vaccine had been given. If there was no card at all for the child, the mother was asked to recall whether the child had received BCG, polio (including the number of doses), or measles vaccinations. For children without a written record, DPT coverage was not asked about but was assumed to be the same as the mother's report for polio vaccine, since polio and DPT are usually given at the same time.

Table 8.5 shows the vaccination coverage among 1616 children aged 12-23 months according to the source of the information used to determine coverage. Overall, 96 percent of children aged 12-23 months were reported by their mother to have had MCH cards. However, interviewers managed to obtain the cards and extract vaccination information from only 78 percent of children. Mother's information was used to ascertain vaccination status for an additional 22 percent of children who had no cards. As part of the EPI evaluation, immunization coverage surveys were conducted by the Ministry of Health in collaboration with UNICEF and DANIDA in 1989 and 1991. Card retention among children covered by these surveys was 95 percent in 1989 and 90 percent in 1991.

The TDHS findings indicate overall BCG vaccination coverage against tuberculosis of 95 percent (see also Figure 8.2). This coverage was ascertained by vaccination card for 77 percent of the children and by mother's report for 18 percent of children without vaccination card. Almost all children (93 percent) received the BCG vaccine within the first year of age, as indicated by the coverage estimate by 12 months in Table 8.5.

Table 8.5 Vaccinations by source of information

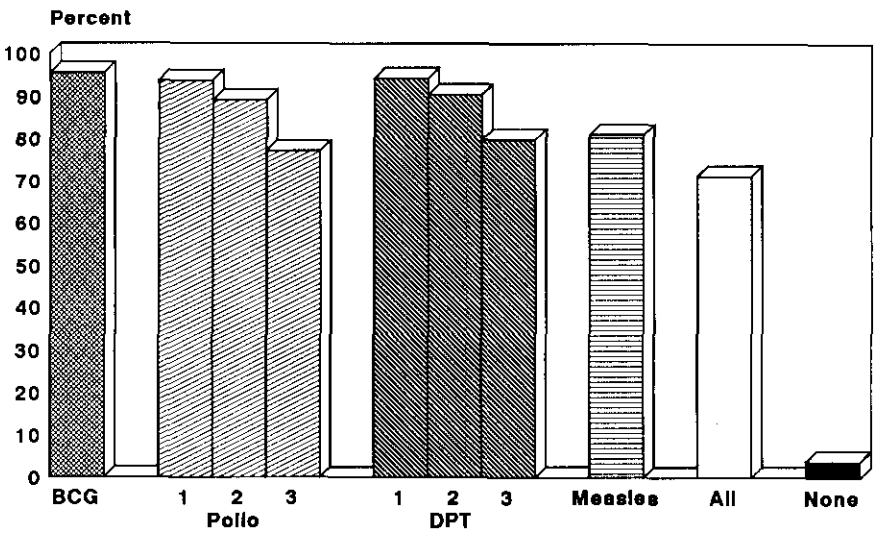
Percentage of children 12-23 months who had received specific vaccines at any time before the survey and the percentage vaccinated by 12 months of age, by whether the information was from a vaccination card or from the mother, Tanzania 1991/92

Source of information	Percentage of children who received:										Number of children
		DPT			Polio						
	BCG	1	2	3+	1	2	3+	Measles	All[1]	None	
Vaccinated at any time before the survey											
Vaccination card	77.3	76.7	74.4	69.2	76.1	73.0	66.4	66.1	61.3	0.3	1616
Mother's report	18.1	17.4	16.1	10.6	17.4	16.1	10.6	15.1	9.8	3.5	1616
Either source	95.4	94.1	90.4	79.8	93.6	89.1	77.1	81.2	71.1	3.8	1616
Vaccinated by 12 months of age	92.7	91.9	86.4	72.6	91.3	83.8	68.3	68.9	56.4	5.5	1616

Note: The DPT coverage rate for children without a written record is assumed to be the same as that for polio vaccine since mothers were specifically asked whether the child had received polio vaccine. 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]Children who are fully vaccinated (i.e., those who have received BCG, measles, and three doses of DPT and polio).

Figure 8.2
Vaccination Coverage Among Children Age 12-23 Months



Note: Based on health card information and mothers' reports.

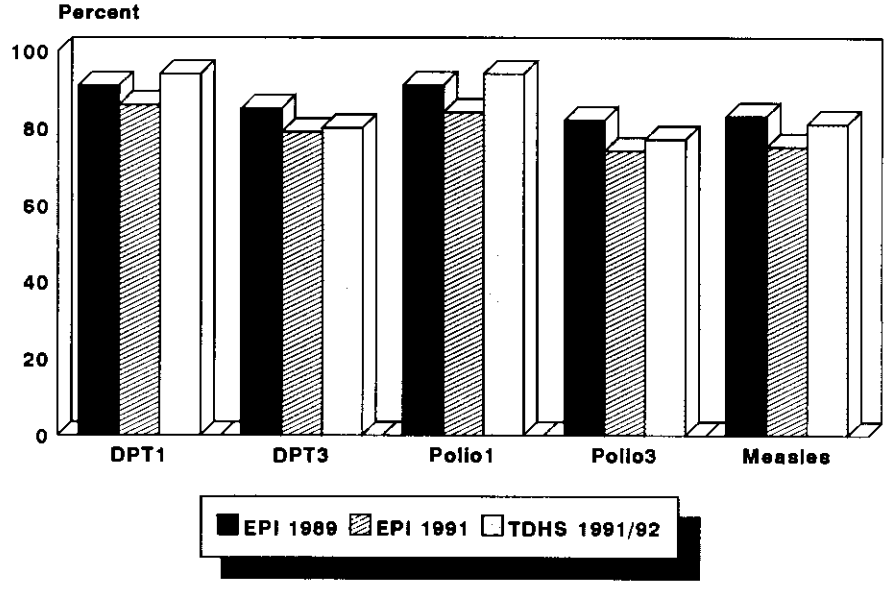
TDHS 1990

Coverage of the first dose of polio and the first dose of DPT were about the same as for BCG. Based on both vaccination card and mother's information, 94 percent of children had received the first dose of polio and DPT vaccine, and 91 percent of children received these vaccinations by 12 months of age. However, coverage of second and third doses of these vaccinations decreased; 77 percent for polio3 and 80 percent for DPT3. Drop-out rates between the first and third doses of DPT (and polio) were 18 and 15 percent, respectively.[1]

Eighty-one percent of children had received measles vaccination, and 69 percent had been vaccinated by 12 months of age. The TDHS found that 71 percent were fully vaccinated and slightly more than a half (56 percent) of children had received all recommended vaccinations during the first year of life. Only 4 percent of children 12-23 months did not receive any vaccination at all.

Compared to the EPI immunization coverage surveys in 1989 and 1991 (Ministry of Health, 1989, 1991), vaccination coverage was generally higher in the 1989 survey than in the 1991 and TDHS surveys (see Figure 8.3). The latter two surveys have comparable results, though a slight increase in coverage was observed. The proportion of fully vaccinated children was 71 percent, while in the EPI 1991 survey it was 62 percent. It is noted that TDHS data do not exclude measles vaccinations given before the recommended age of 9 months and DPT/polio vaccinations given at intervals of less than 4 weeks.

Figure 8.3
Vaccination Coverage Among Children 12-23 Months, EPI and DHS Surveys



TDHS 1991/92

In addition to data from multiple surveys, coverage trends can be assessed with TDHS data. Data on vaccination status of children 12-59 months allow for an evaluation of coverage by 12 months among different age groups. Table 8.6 shows the percentage of children by age group who had been vaccinated by 12 months. The coverage estimates, based on card and mother's recall, for each age group refer to a specific

[1] The dropout rate is calculated as (DPT3 - DPT1) / DPT1 * 100 %.

Table 8.6 Vaccinations in the first year of life

Percentage of children one to four years of age for whom a vaccination card was shown to the interviewer and the percentage vaccinated for BCG, DPT, polio, and measles during the first year of life, by current age of the child, Tanzania 1991/92

Vaccine	Current age of child in months				All children 12-59 months
	12-13	24-35	36-47	48-59	
Vaccination card shown to interviewer	78.1	69.1	61.2	48.0	65.0
Percent vaccinated at 0-11 months[a]					
BCG	92.7	89.1	87.0	85.0	88.7
DPT 1[b]	91.9	88.0	85.3	81.7	87.0
DPT 2	86.4	82.5	80.5	76.5	81.8
DPT 3	72.6	69.5	67.0	62.0	68.1
Polio 1	91.3	86.8	84.3	82.2	86.5
Polio 2	83.8	78.0	79.2	75.3	79.3
Polio 3	68.3	63.9	63.9	60.9	64.4
Measles	68.9	61.1	60.6	58.7	62.7
All vaccinations[c]	56.4	50.7	51.0	47.0	51.5
No vaccinations	5.5	9.9	12.7	14.7	10.4
Number of children	1616	1425	1281	1296	5618

[a]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.
[b]The DPT coverage rate for children without a written record is assumed to be the same as that for polio vaccine, since mothers were specifically asked whether the child had received polio vaccine.
[c]Children who have received BCG, measles, and three doses of DPT and polio vaccines.

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., 1991, since the mid-point data of the TDHS was December 1991), and data on children 24-35 months refer to 1990 etc. Hence, these results may be used to assess immunization coverage during the first year of life for the period 1988 to 1991. Several points emerge from Table 8.6. First, cards were less likely to be shown for older children, making those coverage estimates somewhat less accurate. All vaccines showed an increase of about 10 percent during 1988-91, with the exception of BCG and the third dose of polio. These findings indicate that the proportion of children vaccinated during the first year of life has been increasing over the last four years. Figure 8.4 displays the trend in vaccination coverage of measles and first and third doses of DPT, using the TDHS data. There is an increasing proportion of children receiving vaccinations during the first year of life. During the same time period, the proportion of children not receiving any vaccination decreased from 15 percent to 6 percent.

Figure 8.4
Percentage of Children Who Received DPT1, DPT3, and Measles Vaccine by 12 Months of Age, 1988-1992

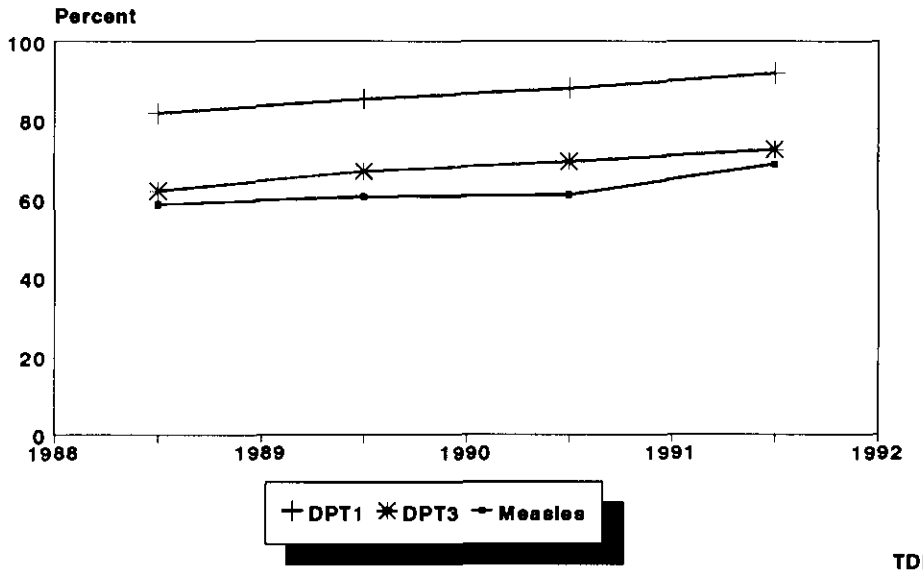


Table 8.7 shows the distribution of vaccination coverage among children 12-23 months old by background variables. Vaccination status does not differ appreciably by the sex or birth order of the child. Vaccination coverage was relatively higher in Zanzibar and urban areas than in mainland Tanzania and rural areas, respectively. Less than half of children aged 12-23 months were fully vaccinated in Shinyanga and Mara. Kilimanjaro region had the highest vaccination coverage. However, numbers of children are small in most regions. (Note: the unweighted number of observations is larger than the weighted number of observations in several subgroups in Table 8.7.) The coverage of all vaccinations was found to increase with increasing level of education of the mother.

Table 8.7 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, by selected background characteristics, Tanzania 1991/92

Background characteristic	Percentage of children who received:										Percentage with a card	Number of children
		DPT			Polio							
	BCG	1	2	3+	1	2	3+	Measles	All[1]	None		
Sex												
Male	95.5	94.7	90.4	78.8	94.3	88.6	75.2	81.3	69.1	3.7	79.4	810
Female	95.4	93.5	90.5	80.9	92.8	89.6	78.9	81.1	73.1	3.9	76.9	806
Birth order												
1	97.5	95.8	92.6	80.9	95.7	91.4	76.2	88.2	72.2	2.5	74.8	340
2-3	96.4	95.8	93.3	82.7	95.4	92.4	80.7	83.7	74.4	3.2	77.9	526
4-5	94.8	92.5	87.2	77.6	91.2	85.1	74.8	75.6	67.7	4.0	79.3	332
6+	93.0	91.9	87.6	77.2	91.3	86.3	75.0	76.7	68.7	5.5	80.4	418
Residence												
Mainland	95.3	93.9	90.2	79.4	93.4	88.8	76.6	81.0	70.7	3.9	77.7	1565
Dar es Salaam	(98.3)	(98.3)	(96.1)	(85.0)	(98.3)	(96.1)	(82.6)	(87.0)	(77.4)	(1.7)	(59.1)	55
Other urban	99.5	96.7	96.0	89.4	96.9	95.9	88.1	92.3	84.7	0.5	86.3	273
Rural	94.2	93.1	88.6	77.0	92.4	86.9	73.7	78.3	67.3	4.8	76.7	1237
Zanzibar	100.0	100.0	99.2	92.6	100.0	99.2	92.6	86.5	84.2	0.0	91.0	51
Region												
Dodoma	96.3	96.3	94.7	85.6	96.3	95.5	85.6	90.9	82.4	3.7	85.9	121
Arusha	93.4	82.6	80.9	77.0	81.9	80.1	67.4	70.9	59.3	6.6	73.8	124
Kilimanjaro	100.0	100.0	98.8	93.2	100.0	98.8	93.2	93.0	88.6	0.0	71.2	79
Tanga	92.9	94.8	86.3	76.7	91.0	85.0	75.3	78.6	67.5	3.8	72.4	78
Morogoro	92.0	92.0	89.6	84.1	92.0	87.9	81.2	84.4	77.2	8.0	79.4	104
Coast	96.8	94.8	87.9	76.2	94.8	87.9	73.0	77.3	67.2	3.2	78.7	21
Lindi	98.2	98.2	98.2	89.2	98.2	98.2	87.3	88.7	81.5	1.8	91.6	35
Mtwara	98.0	98.0	96.1	93.9	98.0	96.1	93.9	88.1	86.2	2.0	84.2	51
Ruvuma	98.2	97.5	97.5	90.5	95.7	93.3	89.0	90.7	85.8	1.8	87.7	54
Iringa	95.3	91.8	90.9	75.0	91.8	90.3	66.0	83.8	61.5	4.7	66.3	114
Mbeya	100.0	100.0	95.0	92.4	100.0	95.0	89.0	91.6	87.2	0.0	76.1	81
Singida	96.7	94.5	89.2	79.3	94.5	89.2	79.5	81.5	73.6	3.3	90.8	59
Tabora	100.0	98.3	97.2	86.6	93.9	92.8	83.8	79.8	75.1	0.0	91.4	43
Rukwa	98.7	95.9	93.3	80.7	94.7	87.1	76.2	76.8	68.7	1.3	81.3	42
Kigoma	98.0	97.2	95.9	91.3	97.1	91.7	83.1	90.4	78.6	2.0	90.6	65
Shinyanga	89.3	88.1	77.7	53.6	88.8	76.3	57.4	65.7	47.0	9.2	72.3	136
Kagera	96.7	97.0	95.9	84.1	95.2	92.8	80.2	81.8	74.7	2.2	77.3	123
Mwanza	91.0	92.3	85.3	71.2	92.3	82.9	68.1	72.9	61.5	5.1	77.5	119
Mara	92.0	90.9	79.9	56.1	90.0	80.3	54.3	63.3	48.1	5.0	74.4	62
Mother's education												
No education	90.9	88.3	82.9	70.9	87.8	81.1	67.1	70.5	60.0	7.9	74.2	539
Primary incomplete	94.7	93.8	92.3	80.8	93.3	90.9	79.5	81.7	73.2	4.1	79.5	292
Completed primary	98.7	98.1	94.6	85.7	97.5	93.6	82.9	88.0	77.9	1.0	80.9	736
Secondary/Higher	100.0	100.0	100.0	83.7	100.0	100.0	83.7	93.8	79.2	0.0	72.2	48
All children	95.4	94.1	90.4	79.8	93.6	89.1	77.1	81.2	71.1	3.8	78.1	1616

Note: The DPT coverage rate for children without a written record is assumed to be the same as that for polio vaccine since mothers were specifically asked whether the child had received polio vaccine. Figures in parentheses are based on 25 to 49 cases.

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

8.3 Acute Respiratory Infection

Acute respiratory infection (ARI) is one of the major causes of morbidity and mortality in children in Tanzania. Common symptoms associated with severe ARI include fever, cough, and difficult or rapid breathing. However, fever may be due to other infections, such as malaria. Typically, ARI involves the upper respiratory tract and may progress to involve the lower respiratory tract, leading to lung infection. The most common lower respiratory infection is pneumonia which is associated with high mortality risks. Early diagnosis and treatment with antibiotics can prevent a large proportion of pneumonia deaths.

To estimate the magnitude of ARI, mothers were asked if their children had experienced coughing, accompanied by difficult or rapid breathing, during the two weeks preceding the survey. The aim of these questions is to capture children with ARI and needing assessment by a health worker. In other words, children with these symptoms should be taken to a health facility. As Table 8.8 shows, 8 percent of children under five years of age had experienced cough and difficult or rapid breathing at some time in the two weeks preceding the survey. Of these children, 65 percent were seen at a health facility, where 22 percent reportedly

Table 8.8 Prevalence and treatment of acute respiratory infection

Percentage of children under five years who were ill with a cough accompanied by rapid breathing during the two weeks preceding the survey, and the percentage of ill children who were treated with specific remedies, by selected background characteristics, Tanzania 1991/92

		Among children with cough and rapid breathing								
			Percentage treated with:							
Background characteristic	Percentage of children with cough and rapid breathing	Percentage taken to a health facility or provider[1]	Antibiotic pill or syrup	Injection	Cough syrup	Home remedy	Other	None	Don't know/ Missing	Number of children
Age of child (months)										
<6	6.2	48.9	12.0	16.5	38.0	6.6	49.3	16.8	0.6	756
6-11	16.2	73.8	26.1	29.9	49.5	5.2	53.5	3.3	0.6	798
12-23	11.6	71.1	22.8	23.6	55.6	6.2	51.4	4.7	0.5	1616
24-35	6.1	65.4	15.2	23.2	51.8	6.7	42.5	13.0	0.0	1425
36-47	6.4	48.8	23.6	22.7	48.9	6.0	57.5	4.5	3.9	1281
48-59	4.6	61.7	23.5	31.9	36.9	2.9	33.5	13.9	4.4	1296
Sex of child										
Male	8.7	65.5	20.4	29.4	46.8	4.5	54.7	7.8	1.1	3571
Female	7.7	64.6	23.2	20.2	52.6	7.1	43.6	7.0	1.5	3600
Birth order										
1	8.1	68.5	13.4	19.4	57.0	8.3	43.5	8.2	3.1	1557
2-3	8.8	64.3	28.4	23.0	48.7	5.2	45.3	7.8	1.1	2332
4-5	8.6	56.2	24.3	26.4	35.8	4.6	58.4	8.9	0.0	1488
6+	7.2	71.9	16.6	32.5	57.3	5.2	53.2	4.8	1.2	1795
Residence										
Mainland	8.2	64.8	21.6	25.2	49.2	5.6	49.5	7.4	1.4	6949
Dar es Salaam	11.4	(62.6)	(52.0)	(37.4)	(69.2)	(0.0)	(62.7)	(2.8)	(0.0)	322
Other urban	11.4	77.9	13.4	30.2	55.8	2.3	50.7	3.1	3.1	1110
Rural	7.4	60.9	21.4	22.6	45.3	7.2	47.9	9.2	0.9	5517
Zanzibar	8.6	(73.7)	(26.7)	(19.2)	(60.2)	(7.9)	(49.5)	(7.8)	(0.0)	222
Education										
No education	6.8	60.7	16.1	26.0	46.0	8.4	47.6	11.6	2.2	2532
Primary incomplete	7.2	65.1	19.0	22.4	58.0	9.5	52.9	5.6	0.8	1324
Completed primary	9.9	66.5	25.3	25.0	48.7	3.3	48.8	5.8	1.0	3093
Secondary/Higher	7.3	*	*	*	*	*	*	*	*	223
Total	8.2	65.1	21.7	25.0	49.5	5.7	49.5	7.5	1.3	7171

Note: Figures are for children born in the period 1-59 months preceding the survey. Figures in parentheses are based on a small number of cases. An asterisk means the rate is based on fewer than 25 women and has been suppressed
[1]Includes health clinic, health centre, hospital, private doctor

received an antibiotic, 25 percent received injections, and 50 percent received cough syrup. It should be noted that it is usually difficult for mothers to distinguish antibiotic syrup from normal cough syrup. Also, some injections reported here may have been antibiotics. Thus, these categories are not mutually exclusive. Only 6 percent received home remedy (which includes drugs that were available at home).

The prevalence of ARI was higher from 6 to 23 months of age and in urban areas (including Dar es Salaam). Children in these categories were also more likely to be taken to a health facility (more than 70 percent of children taken).

8.4 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 had fever in the two weeks preceding the survey and what was done to treat it.

Table 8.9 shows that 31 percent of children under five years of age were reported to have had fever and over half of sick children (57 percent) were taken to a health facility for treatment. Among children with fever, 50 percent received antimalarials, 16 percent received antibiotics, and 16 percent were given injections.

Table 8.9 Prevalence and treatment of fever

Percentage of children under five years who were ill with a fever during the two weeks preceding the survey, and the percentage of ill children who were treated with specific remedies, by selected background characteristics, Tanzania 1991/92

		Among children with fever								
			Percentage treated with:							
Background characteristic	Percentage of children with fever	Percentage taken to a health facility or provider[1]	Anti-malarial	Anti-biotic	Injection	Home remedy	Other	None	Don't know/ Missing	Number of children
Age of child (months)										
<6	27.4	57.0	40.5	9.4	11.9	4.9	54.1	11.4	0.9	756
6-11	43.8	60.6	54.5	18.7	19.2	4.7	54.2	6.0	2.4	798
12-23	40.8	60.8	52.2	15.8	15.2	6.0	47.2	8.7	0.7	1616
24-35	30.3	56.3	49.7	15.6	18.1	4.4	47.2	10.6	0.7	1425
36-47	25.5	50.7	49.0	15.1	14.4	6.2	48.6	7.8	1.5	1281
48-59	19.4	53.4	48.2	16.8	16.1	6.4	43.4	10.9	1.7	1296
Sex of child										
Male	30.7	56.3	47.1	15.9	17.0	4.7	51.8	8.7	1.2	3571
Female	31.4	58.1	52.9	15.4	15.2	6.2	45.8	9.2	1.3	3600
Birth order										
1	28.4	63.0	53.0	14.4	14.7	5.6	51.2	7.0	2.7	1557
2-3	32.2	59.0	48.8	17.4	13.9	4.2	48.6	11.3	0.5	2332
4-5	31.1	53.7	44.3	16.7	18.0	6.6	48.1	8.1	1.5	1488
6+	31.8	53.2	54.1	13.4	18.5	6.1	47.4	8.2	0.8	1795
Residence										
Mainland	30.8	56.5	49.5	14.6	16.4	5.5	49.0	9.2	1.3	6949
Dar es Salaam	38.9	69.1	59.5	34.6	21.7	0.0	60.9	0.7	3.2	322
Other urban	35.4	62.7	48.9	10.1	23.1	1.1	60.7	3.2	1.0	1110
Rural	29.4	54.0	48.8	14.2	14.3	7.0	45.2	11.3	1.2	5517
Zanzibar	38.3	76.5	65.1	41.6	8.8	4.2	42.2	3.1	0.6	222
Education										
No education	30.1	50.5	49.7	14.3	14.5	8.6	42.9	12.1	0.7	2532
Primary incomplete	31.8	49.7	51.4	11.7	12.9	6.9	51.8	8.0	1.7	1324
Completed primary	31.6	63.7	49.3	17.5	18.0	2.8	52.0	7.3	1.5	3093
Secondary/Higher	29.7	88.2	57.0	29.2	25.1	0.0	47.3	3.8	1.0	223
Total	31.0	57.2	50.1	15.6	16.1	5.5	48.7	9.0	1.2	7171

Note: Figures are for children born in the period 1-59 months preceding the survey.
[1]Includes health clinic, health centre, hospital, private doctor

Fever was more prevalent in the 6 to 23 months age group than in any other age group. Children of more educated women were more likely to be taken to the health facility and given antimalarials, antibiotics, or injections than those of women with no education.

8.5 Diarrhoea

Diarrhoea is a major cause of morbidity and mortality among children in Tanzania. Thirteen percent of children under five years of age were reported to have diarrhoea during the two weeks before the survey, including 2 percent with bloody diarrhoea (see Table 8.10). Four percent were still having an episode of diarrhoea at the time of the survey (diarrhoea within the last 24 hours).

As for ARI and fever, children aged 6 to 23 months were more likely to have a diarrhoeal episode in the two weeks preceding the survey; prevalence is twice as high among these children as all other children. This peak in diarrhoea prevalence is partly due to the hazards associated with the weaning period. Children of women with secondary education and above had lower prevalence of diarrhoea than those of less educated women.

Dehydration is a major complication of diarrhoea and is the most important cause of mortality among children with acute diarrhoea. Oral rehydration therapy (ORT) is recommended for prevention or treatment of dehydration and includes a solution prepared from commercially produced packets of oral rehydration salts (ORS) or homemade fluids prepared from sugar, salt, and water. In Tanzania, the use of ORS and homemade fluids is being promoted by the Ministry of Health. Increasing the amount of any other type of fluids during a diarrhoea episode can also be considered ORT.

Table 8.10 Prevalence of diarrhoea

Percentage of children under five years who had diarrhoea and diarrhoea with blood in the two weeks preceding the survey, and the percentage of children who had diarrhoea in the preceding 24 hours, by selected background characteristics, Tanzania 1991/92

Background characteristic	Diarrhoea in the preceding 2 weeks[1]		All diarrhoea in the preceding 24 hours[2]	Number of children
	All diarrhoea	Diarrhoea with blood		
Child's age (months)				
< 6	11.5	0.7	4.0	756
6-11	26.1	3.5	9.3	798
12-23	21.1	2.5	6.9	1616
24-35	10.5	2.4	3.5	1425
36-47	7.4	2.0	2.4	1281
48-59	4.3	0.7	1.1	1296
Sex				
Male	12.9	2.1	4.3	3571
Female	13.2	1.9	4.3	3600
Birth order				
1	14.5	2.0	4.7	1557
2-3	12.6	1.9	4.2	2332
4-5	13.0	2.0	4.6	1488
6+	12.5	2.1	3.9	1795
Residence				
Mainland	13.1	2.0	4.2	6949
Dar es Salaam	12.0	3.0	2.3	322
Other urban	15.9	1.9	4.8	1110
Rural	12.6	2.0	4.1	5517
Zanzibar	12.7	0.4	9.5	222
Region				
Dodoma	17.0	0.1	3.2	532
Arusha	23.3	4.4	9.0	503
Kilimanjaro	10.8	0.9	2.8	348
Tanga	12.3	1.6	3.6	364
Morogoro	22.6	3.9	3.7	394
Coast	18.3	3.4	6.0	102
Lindi	17.8	3.0	6.7	157
Mtwara	10.4	1.8	3.3	186
Ruvuma	10.4	0.5	2.5	243
Iringa	13.5	2.4	3.4	401
Mbeya	12.2	3.8	4.7	347
Singida	20.8	2.2	5.6	282
Tabora	6.5	0.7	2.1	215
Rukwa	13.7	1.8	4.7	205
Kigoma	11.9	1.2	4.8	319
Shinyanga	8.4	1.8	4.5	709
Kagera	6.1	0.9	2.9	482
Mwanza	7.7	2.2	3.7	539
Mara	11.1	1.9	3.9	300
Mother's education				
No education	12.2	1.7	4.5	2532
Primary incomplete	11.3	2.6	3.8	1324
Completed primary	15.0	2.1	4.5	3093
Secondary/Higher	7.4	0.2	2.8	223
All children	13.1	2.0	4.3	7171

Note: Figures are for children born in the period 1-59 months preceding the survey.
[1]Includes diarrhoea in the past 24 hours

In TDHS, most mothers (93 percent) who gave birth in the previous five years knew about ORS (see Table 8.11). The level of knowledge did not change significantly with age of the mothers. Women with no education had slightly lower knowledge of ORS than educated women. Two-thirds of mothers reported to have ever used ORS. Younger women and those with no education were less likely to have ever used ORS.

Table 8.11 Knowledge and use of ORS packets

Percentage of mothers with births in the five years preceding the survey who know about and have ever used ORS packets, by selected background characteristics, Tanzania 1991/92

Background characteristic	Know about ORS packets	Have ever used ORS packets	Number of mothers
Age			
15-19	89.2	47.6	507
20-24	92.2	63.1	1380
25-29	96.1	70.5	1326
30-34	93.5	73.2	890
35+	91.5	72.3	1209
Residence			
Mainland	92.8	67.0	5166
Dar es Salaam	89.4	68.2	276
Other urban	95.9	71.3	914
Rural	92.3	65.9	3976
Zanzibar	98.8	76.2	146
Region			
Dodoma	98.0	64.5	410
Arusha	90.7	62.5	366
Kilimanjaro	95.2	71.1	249
Tanga	85.3	64.6	283
Morogoro	94.5	56.3	328
Coast	94.6	64.9	81
Lindi	97.9	64.3	133
Mtwara	97.6	74.6	160
Ruvuma	97.8	78.2	181
Iringa	95.7	71.5	313
Mbeya	95.5	72.9	258
Singida	97.2	70.5	205
Tabora	97.6	81.6	149
Rukwa	94.5	67.5	142
Kigoma	90.8	64.3	222
Shinyanga	85.6	61.6	487
Kagera	91.6	66.7	327
Mwanza	89.5	65.1	365
Mara	93.1	70.5	230
Education			
No education	88.6	63.0	1834
Primary incomplete	94.0	71.2	987
Completed primary	95.5	68.0	2322
Secondary/Higher	98.6	79.7	169
All mothers	93.0	67.2	5312

Note: Figures include mothers who have given ORS for diarrhoea during the preceding two weeks, although they were not asked about knowledge of ORS packets.

Diarrhoea treatment practices of children who had diarrhoea in the two weeks preceding the survey is shown in Table 8.12 and Figure 8.5. About 60 percent of children with diarrhoea were taken to a health facility for treatment. Children under 6 months of age and those of uneducated mothers were less likely to be taken to the health facility for diarrhoea treatment. Over half of children (57 percent) were given a solution prepared from ORS packets, while 19 percent received homemade solution of sugar, salt, and water. The use of homemade solution was low probably because many mothers do not know how to prepare the solution or prefer to go to a health facility. Over a quarter (28 percent) of children with diarrhoea were not given either solution nor did they receive an increased amount of fluids. Use of ORS was more common among educated women, with less educated women more likely to use homemade solution. Overall, about a third (30 percent, including those increasing breastfeeding) of children received increased fluids during the recent episode of diarrhoea. Children of educated mothers were much more likely to have increased fluid intake during diarrhoea attack (68 percent).

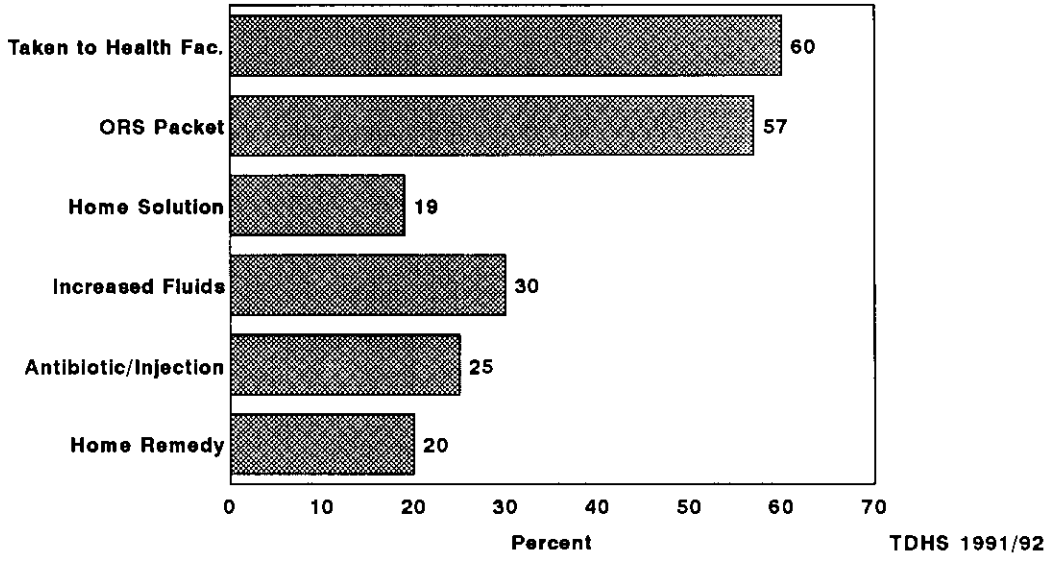
Table 8.12 Treatment of diarrhoea

Percentage of children under five years who had diarrhoea in the two weeks preceding the survey who were taken for treatment to a health facility or provider, the percentage who received oral rehydration therapy (ORT), the percentage who received increased fluids, the percentage who received neither ORT nor increased fluids, and the percentage receiving other treatments, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Percentage taken to a health facility or provider[1]	Oral rehydration therapy (ORT)		Percentage receiving increased fluids	Percentage receiving neither ORT nor increased fluids	Percentage receiving other treatments:					Number of children with diarrhoea
		ORS packets	RHF			Antibiotics	Injection	Home remedy/ Other	None	Missing	
Age of child (months)											
<6	44.5	47.3	20.2	33.4	33.9	14.5	0.8	20.4	16.7	0.0	87
6-11	64.7	65.0	18.2	34.1	22.3	30.5	7.7	18.5	11.1	0.5	208
12-23	63.2	57.5	20.4	27.7	28.5	14.0	5.0	20.1	12.1	0.0	341
24-35	59.9	54.3	18.2	29.6	31.4	24.3	1.6	27.2	14.0	0.5	149
36-47	51.1	54.7	18.8	25.1	26.3	15.8	3.1	13.3	9.3	1.9	95
48-59	54.4	56.7	13.6	39.5	32.7	29.9	4.9	16.6	15.6	1.0	55
Sex of child											
Male	56.8	55.8	20.8	30.4	29.0	20.8	1.9	17.9	13.6	0.8	460
Female	62.2	59.0	17.2	30.4	27.2	20.2	6.9	22.0	11.5	0.1	476
Birth order											
1	64.2	61.1	16.7	33.8	26.0	21.7	8.0	24.4	12.6	0.0	226
2-3	62.6	59.8	17.2	26.9	29.1	22.8	5.5	18.1	10.0	0.0	293
4-5	55.9	56.6	22.4	33.0	25.2	19.1	1.1	18.2	11.3	0.3	193
6+	53.8	51.1	20.7	29.4	31.4	17.4	2.5	19.5	16.9	1.6	224
Residence											
Mainland	59.2	57.5	19.1	30.3	27.8	20.3	4.6	20.3	12.3	0.4	908
Dar es Salaam	(62.1)	(30.9)	(42.7)	(34.8)	(34.0)	(21.8)	(5.5)	(21.1)	(11.8)	0.0	39
Other urban	71.9	60.5	19.7	42.2	24.0	29.5	16.3	18.7	8.6	0.4	176
Rural	55.9	58.2	17.6	27.0	28.4	17.9	1.6	20.6	13.3	0.5	693
Zanzibar	69.0	53.3	15.6	33.7	37.3	25.4	0.0	10.4	20.6	0.0	28
Education											
No education	53.8	54.8	14.4	20.9	34.0	17.7	1.8	22.2	15.4	1.1	308
Primary incomplete	60.7	51.7	24.4	38.0	22.8	15.5	4.6	16.7	11.9	0.0	149
Primary completed	62.1	60.1	20.7	32.9	26.3	22.6	4.8	20.2	10.9	0.2	462
Secondary/Higher	85.4	81.5	5.8	68.2	16.4	58.1	44.3	2.5	11.2	0.0	16
Total	59.5	57.4	19.0	30.4	28.1	20.5	4.5	20.0	12.5	0.4	936

Note: Figures are for children born in the period 1-59 months preceding the survey. Oral rehydration therapy (ORT) includes solution prepared from ORS packets, and recommended home fluid (sugar-salt-water solution). Increased fluids includes increased frequency of breastfeeding. Rates shown in parentheses are based on 25-49 women.
[1]Includes health post, health centre, hospital, and private doctor.

Figure 8.5
Percentage of Children Age 1-59 Months Who Received Treatment for Diarrhoea in the Two Weeks Preceding the Survey by Type of Treatment



Use of injections in the treatment of diarrhoea was very low (5 percent). Although ORS is generally accepted as a standard modern treatment of diarrhoea, one-fifth (21 percent) of children with diarrhoea were given antibiotic treatment. In some cases this may have been justified. For instance, 2 percent of children reportedly had diarrhoea with blood during the 2 weeks preceding the survey, which requires antibiotic treatment. However, the proportion receiving antibiotics is much larger, which indicates that there is a need for educating health workers about appropriate treatment of diarrhoea. Over half the children of educated mothers (58 percent) were given antibiotics. It is possible that educated mothers are more likely to request the health workers to provide antibiotics or to buy antibiotics from private drug stores. Many drug stores in Tanzania sell drugs, including antibiotics, without a medical prescription. Twenty percent of children were given home remedies other than the recommended home solution.

Continuing or increasing breastfeeding during diarrhoea is a recommended practice. About 79 percent of breastfed children who had diarrhoea were breastfed by their mothers at the usual frequency (Table 8.13). Only 8 percent of children had their breastfeeding frequency increased, and 9 percent had their frequency reduced.

Table 8.13 Feeding practices during diarrhoea

Feeding practices among children under five years who had diarrhoea in the two weeks preceding the survey, Tanzania 1991/92

Feeding practices	Percent
Breastfeeding frequency[1]	
Same as usual	79.3
Increased	7.5
Reduced	9.4
Stopped	0.4
Don't know/missing	3.4
No breastfeeding	27.4
Number of children	831
Amount of fluids given	
Same as usual	57.7
More	27.2
Less	13.3
Don't know/missing	1.9
Number of children with diarrhoea	936

Note: Figures are for children born in the period 1-59 months preceding the survey.
[1]Applies only to children who are still breastfed.

CHAPTER 9

MATERNAL AND CHILD NUTRITION

This chapter focuses on several aspects related to the nutritional status of mothers and children under five years. The TDHS data allow an assessment of infant feeding practices (including breastfeeding practices, introduction of supplementary weaning foods, and use of feeding bottles), birth weight of newborns, child anthropometric status (based on height and weight measurement of the respondent's children under the age of five years), and mother's anthropometric status.

9.1 Breastfeeding and Supplementation

Breastfeeding practices and introduction of supplementary foods are important determinants of the health and nutritional status of children, particularly those below the age of two years. Many studies have shown the beneficial effects of breastfeeding on nutritional status, morbidity, and mortality of young infants. Breastfeeding also has an indirect effect on postpartum fertility of the mother. More frequent breastfeeding for longer durations is associated with longer periods of postpartum amenorrhoea. Longer periods of postpartum amenorrhoea are related to longer birth intervals, and thus lower fertility levels.

Almost all children born in the five years before the survey (98 percent) were breastfed for some period of time (Table 9.1). The proportion of children ever breastfed was high across all regions and did not vary significantly by other background characteristics.

Early initiation of breastfeeding is beneficial for mother and child. From the mother's perspective early sucking stimulates the release of a hormone that helps the uterus to maintain a contracted state. From the child's perspective the first breast milk (colostrum) is important, since it is rich in antibodies. About 44 percent of children were put to the breast within one hour of birth and 82 percent within the first day. Women in Zanzibar were more likely to start breastfeeding within one hour of birth than their counterparts on Tanzania mainland. Women in Tanga, Coast, and Shinyanga were less likely to start breastfeeding within the initial hour after birth than in other regions.

Mothers were asked about the current (last 24 hours preceding the interview) breastfeeding status of all living children under five years. The results are presented in Table 9.2. Although exclusive breastfeeding is recommended for the first 4-6 months of life, only 43 percent of children 0-1 months received breast milk only. The proportion of children exclusively breastfed declined further at 2-3 and 4-5 months to 24 and 8 percent, respectively. Many young infants appeared to receive water only in addition to breast milk in Tanzania. This practice, often referred to as full breastfeeding (breastfeeding with or without plain water), is common in many parts of Africa, and has no biomedical benefits. However, it does pose an additional risk of transmitting infections and may also interfere with breastfeeding. More than one-third of children 0-1 months received breast milk with water, and 29 and 16 percent were in this feeding category at 2-3 and 4-5 months, respectively.

After 4-6 months of age, exclusive breastfeeding is not sufficient for the child and introduction of supplementary foods is required. Indeed, the majority of children in Tanzania received supplementary foods or liquids in addition to breast milk during the second half of infancy: 84 percent at 6-7 months and more than 90 percent at 8-9 and 10-11 months.

Table 9.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and the percentage of last-born children who started breastfeeding within one hour of birth and within one day of birth, by selected background characteristics, Tanzania 1991/92

Background characteristic	Among all children: Percentage ever breastfed	Among all children: Number of children	Among last-born children, percentage who started breastfeeding: Within 1 hour of birth	Among last-born children, percentage who started breastfeeding: Within 1 day of birth	Among last-born children, percentage who started breastfeeding: Number of children
Sex					
Male	97.5	4111	43.9	82.0	2727
Female	97.7	4007	43.8	81.9	2680
Residence					
Mainland	97.6	7878	43.4	81.5	5256
Dar es Salaam	95.6	381	39.9	80.9	281
Other urban	97.4	1277	46.1	83.6	934
Rural	97.7	6220	43.0	81.1	4041
Zanzibar	98.7	240	60.7	96.8	151
Region					
Dodoma	97.3	624	54.9	90.0	419
Arusha	98.2	543	46.5	91.6	376
Kilimanjaro	95.6	372	35.2	84.6	253
Tanga	97.7	410	22.3	68.3	289
Morogoro	96.9	475	65.6	89.7	337
Coast	96.5	117	25.5	79.7	83
Lindi	96.9	178	43.5	92.2	134
Mtwara	96.9	210	47.1	90.9	162
Ruvuma	97.7	273	48.2	93.3	186
Iringa	96.4	446	53.3	82.6	314
Mbeya	97.4	379	50.4	83.4	266
Singida	98.7	308	52.1	92.5	207
Tabora	98.9	232	48.4	86.3	151
Rukwa	96.7	223	49.0	83.9	144
Kigoma	95.0	360	53.4	84.8	225
Shinyanga	99.2	807	25.7	64.6	492
Kagera	98.8	564	47.7	81.9	331
Mwanza	98.7	608	30.0	67.3	373
Mara	98.4	368	31.0	67.9	234
Mother's education					
No education	97.6	2872	46.5	82.4	1872
Primary incomplete	98.0	1520	40.8	84.0	1000
Completed primary	97.4	3480	42.8	80.5	2360
Secondary/Higher	97.6	244	47.3	85.3	175
Assistance at delivery					
Medically trained person	98.0	4426	44.2	83.7	2996
Traditional birth attendant	97.5	977	49.9	85.9	625
Other or none	97.9	2680	41.3	78.0	1774
Missing	(28.5)	34	*	*	11
Place of delivery					
Health facility	98.0	4317	44.1	83.7	2915
At home	97.8	3700	43.8	80.1	2431
Other	*	3	*	*	2
Missing	73.3	97	31.5	72.8	59
All children	97.6	8117	43.8	82.0	5407

Note: Rates shown in parentheses are based on 25-49 women, whereas an asterisk means the rate is based on fewer than 25 women and has been suppressed. Table is based on all children born in the five years preceding the survey, whether living or dead at the time of the interview.

Table 9.2 Breastfeeding status

Percent distribution of living children by breastfeeding status, according to child's age in months, Tanzania 1991/92

Age in months	Percentage of living children who are: Not breast-feeding	Exclusively breast-fed	Breastfeeding and: Plain water only	Breastfeeding and: Supple-ments	Total	Number of living children
0-1	0.8	42.5	35.2	21.6	100.0	237
2-3	0.8	23.5	28.7	47.0	100.0	274
4-5	0.0	7.6	15.7	76.6	100.0	329
6-7	2.5	5.6	7.8	84.1	100.0	264
8-9	0.2	1.4	4.0	94.3	100.0	267
10-11	0.8	0.0	2.6	96.6	100.0	267
12-13	5.2	0.8	3.4	90.7	100.0	285
14-15	5.7	0.7	3.5	90.1	100.0	280
16-17	14.7	0.4	0.6	84.2	100.0	278
18-19	22.4	1.3	0.8	75.5	100.0	262
20-21	32.7	0.0	1.4	65.9	100.0	239
22-23	52.7	0.6	1.2	45.5	100.0	271
24-25	75.6	0.0	0.8	23.6	100.0	244
26-27	85.2	0.0	0.0	14.8	100.0	228
28-29	91.9	0.0	0.0	8.1	100.0	243
30-31	92.0	0.0	0.3	7.7	100.0	248
32-33	94.1	0.0	0.4	5.5	100.0	249
34-35	93.5	0.0	0.3	6.2	100.0	213

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

Continuing breastfeeding beyond the first birthday is common. About 95 percent of children 12-15 months were still breastfed as were 78 percent at 18-19 months. Although most women stopped breastfeeding during the second half of the second year of life, one-fourth of children 24-25 months continued being breastfed.

Mothers of breastfed children receiving supplementary feeding were asked to name the type of foods they had given their children during the last 24 hours and whether they had used a bottle and teat (nipple). In general, use of infant formula was relatively low (less than 10 percent of infants), although a substantial number of children were given other types of milk (Table 9.3). Infant formula is quite expensive in Tanzania and most people cannot afford it. Use of other milk was less common (5 percent) below age of two months, while between the ages of 2 and 24 months, over 20 percent of children were receiving types of milk other than breast milk. Solid or mushy food was introduced into the diet early. About 3 percent of breastfeeding children reportedly received solid or mushy foods before reaching two months of age. However, too few children 6-9 months of age receive solid foods and breast milk (60 percent), the age by which all children should receive complementary solid foods.

Table 9.3 Breastfeeding and supplementation by age

Percentage of breastfeeding children who are receiving specific types of food supplementation, and the percentage who are using a bottle with a nipple, by age in months, Tanzania 1991/92

	Percentage of breastfeeding children who are:					
	Receiving supplement				Using a bottle with a nipple	Number of children
Age in months	Infant formula	Other milk	Other liquid	Solid/ mushy		
0-1	0.0	5.0	15.4	2.7	0.7	236
2-3	4.5	21.6	26.5	8.7	6.6	272
4-5	7.3	31.1	43.4	30.2	4.2	329
6-7	10.2	28.5	56.3	45.8	7.7	258
8-9	17.7	35.8	55.6	72.9	5.2	266
10-11	6.9	33.3	61.3	80.2	4.9	265
12-13	10.3	26.8	52.5	89.5	3.9	270
14-15	13.5	36.2	62.1	89.6	5.4	264
16-17	14.0	33.2	58.6	91.2	3.3	237
18-19	11.7	37.0	62.9	91.5	4.5	203
20-21	4.4	31.2	63.1	91.6	10.2	161
22-23	14.3	28.2	57.3	94.1	3.6	128
24-25	20.0	23.9	59.1	88.7	2.2	60

Note: Breastfeeding status refers to preceding 24 hours. Percents by type of supplement among breastfeeding children may sum to more than 100 percent, as children may have received more than one type of supplement.

Although a substantial proportion of breastfed children across all age categories were given other milk, bottle feeding was not common. Only 4 percent of children 0-5 months and 6 percent of children 6-11 months received something in a bottle during the last 24 hours. These results suggest that the majority of children receiving other milk are not using a bottle and nipple.

Prolonged breastfeeding is common in Tanzania. Based on current status data, the median duration of breastfeeding was 21.6 months (Table 9.4). There was very little difference in median duration of breastfeeding between urban and rural areas. Compared to other regions, the median duration of breastfeeding was found to be lower in Tanga, Shinyanga, and Mbeya. However, the numbers of observations are small and these figures should be interpreted cautiously. Median duration of breastfeeding was found not to vary by mothers education, type of assistance at delivery, and sex of the child.

Children were categorized as fully breastfed if they were receiving only breast milk or if water was the only addition to their diet. The median duration of full breastfeeding nationwide was 2.3 months. The median duration of full breastfeeding was longer in rural areas than in urban areas and among women with no education than in educated women. Most educated women and those in urban areas tend to be employed and hence are more likely to introduce supplementary foods to their children early. The longest median duration of full breastfeeding was reported in Shinyanga (5 months), whereas in Dar es Salaam, Lindi, and Kigoma it was less than one month.

Table 9.4 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and full breastfeeding among children under 5 years of age, and the percentage of children under 6 months of age who were breastfed six or more times in the 24 hours preceding the interview, according to background characteristics, Tanzania 1991/92

Background characteristic	Median duration in months[1]			Number of children under 3 years of age	Children under 6 months	
	Any breast-feeding	Exclusive breast-feeding	Full breast-feeding[2]		Breastfed 6+ times in preceding 24 hours	Number of children
Region						
Mainland	21.6	0.6	2.3	4981	93.3	823
Dar es Salaam	20.1	0.4	0.6	229	96.4	44
Other urban	21.3	1.0	1.6	854	87.7	120
Rural	21.7	0.7	2.5	3898	94.1	660
Zanzibar	21.2	0.4	1.9	150	(90.7)	17
Residence						
Dodoma	24.5	0.9	2.4	424	(100.0)	82
Arusha	20.4	0.6	1.6	365	(86.1)	63
Kilimanjaro	22.6	0.5	1.0	220	(85.4)	32
Tanga	16.2	0.4	1.6	258	(86.0)	44
Morogoro	22.2	0.4	2.0	282	(100.0)	36
Coast	24.9	0.4	1.6	73	(97.2)	11
Lindi	23.4	0.5	0.7	106	(89.4)	20
Mtwara	23.4	0.4	3.3	124	(79.0)	19
Ruvuma	23.1	0.4	1.7	168	(85.0)	24
Iringa	22.0	0.6	3.1	277	(98.3)	45
Mbeya	17.5	1.7	2.0	238	*	33
Singida	21.2	0.6	2.5	202	(94.8)	34
Tabora	22.9	1.2	2.0	146	(100.0)	29
Rukwa	21.7	0.5	2.3	141	92.0	27
Kigoma	20.6	0.4	0.7	223	(93.2)	35
Shinyanga	17.2	2.3	5.0	511	98.8	84
Kagera	24.6	2.4	3.2	368	(98.5)	71
Mwanza	20.6	1.4	2.5	389	(86.1)	49
Mara	19.3	0.7	1.3	236	87.5	41
Education						
No education	21.8	0.7	3.0	1720	94.4	268
Primary incomplete	21.8	0.7	2.3	943	93.0	146
Completed primary	21.5	0.6	1.9	2306	93.9	397
Secondary/Higher	19.8	0.4	1.9	163	75.1	29
Assistance at delivery						
Medically trained	21.6	0.6	2.1	2747	93.0	466
Traditional midwife	21.6	0.6	1.9	620	94.1	106
Other or none	22.6	0.6	3.2	1433	94.3	224
Missing	20.8	2.0	3.4	332	88.4	44
Sex of child						
Male	21.7	0.7	2.4	2602	93.3	444
Female	21.6	0.6	2.2	2530	93.2	396
Total	21.6	0.6	2.3	5131	93.2	841
Mean	21.2	2.2	4.1	-	-	-
Prevalence/Incidence[3]	21.1	1.5	3.5	-	-	-

Note: Rates shown in parentheses are based on 25-49 women, whereas an asterisk means the rate is based on fewer than 25 women and has been suppressed.
[1]Medians and means are based on current status
[2]Either exclusive breastfeeding or breastfeeding and plain water only
[3]Prevalence-incidence mean

Ninety-three percent of children under six months of age were breastfed six or more times in the 24 hours preceding the interview.

An important determinant of child caloric intake is the number of meals given to a child per day. Table 9.5 presents the number of meals given to the child the day before the survey by age of the child. Most children reportedly had three meals (38 percent), while one-third had two meals and 15 percent had less than two meals the day prior to the interview. Only 6 percent of children had four meals or more. There is, however, marked variation by age, which presumably is related to breastfeeding. For instance, most children under 6 months of age did not receive a meal the previous day. Therefore, the focus in this table should be on older children. Almost half of children aged 2 years and over had three meals the previous day, and about one-third had two meals. Less than 5 percent of children aged 2 years and over had less than two meals.

Table 9.5 Feeding patterns for children under 5

Percent distribution of children under five years by number of meals in last 24 hours by age, Tanzania 1991/92

Age in months	Number of meals							Don't know	Missing	Number
	0	1	2	3	4	5	6			
< 6	45.4	12.7	13.7	5.9	1.0	0.3	0.2	3.3	17.5	756
6-11	15.6	20.4	32.3	22.9	5.4	1.2	0.0	1.0	1.1	798
12-23	2.0	11.7	39.3	37.6	5.7	1.3	0.2	2.0	0.2	1616
24-35	0.3	3.3	36.4	45.6	5.3	1.2	0.4	7.5	0.3	1425
36-47	0.2	3.7	31.1	49.6	5.4	1.3	0.0	8.8	0.8	1281
48-59	0.1	3.7	30.5	49.5	4.9	0.5	0.3	10.5	1.1	1296
Total	7.1	8.2	32.1	38.3	4.9	1.0	0.2	5.8	2.4	7171

9.2 Birth Weight

Data on birth weight are important for two reasons. First, national estimates of the incidence of low birth weight are internationally recognised indicators of the well-being of neonates and women of reproductive age. Second, the weight at birth is a leading determinant of the survival chances of a newborn. The main sources of birth weight data in developing countries are health facility statistics. However, these data are usually limited to babies born within health facilities, a group of babies that is markedly different from the overall population.

Recent studies have shown that surveys can provide useful information on birth weight (Moreno and Goldman, 1990). Therefore, TDHS included questions on birth weight for all children born in the five years preceding the survey. The mother was first asked to recall the size of the child at birth: very large, large, average, small, or very small. Then, she was asked whether the child had been weighed at birth, and, if so, what the weight was.

Table 9.6 shows that slightly more than half of births in the last five years had been weighed at birth (52 percent). Almost all mothers who reported their child had been weighed could actually recall the weight (50 percent). The proportion of children with numerical birth weight does differ considerably by residence and region. In urban areas (including Dar es Salaam) more than 80 percent knew the birth weight of their children, compared to 41 percent in rural mainland and 31 percent in Zanzibar. Kilimanjaro region also had

Table 9.6 Birth weight data

Among children born in the five years preceding the survey, the proportion weighed at birth and the percent distribution by type of birth weight data (recalled weight or size at birth), according to background characteristics, Tanzania 1991/92

Background characteristic	Weighed at birth		Don't know/ Missing	Total	Type of birth weight data			Total	Number
	Yes	No			Numeric weight	Size only	None		
Residence									
Mainland	52.6	46.9	0.5	100.0	50.2	49.4	0.4	100.0	7793
Dar es Salaam	86.9	12.6	0.5	100.0	86.9	12.6	0.6	100.0	373
Other urban	86.6	13.1	0.3	100.0	84.9	15.0	0.1	100.0	1273
Rural	43.5	56.0	0.5	100.0	40.8	58.7	0.5	100.0	6148
Zanzibar	31.7	68.2	0.2	100.0	30.7	69.3	0.0	100.0	238
Region									
Dodoma	57.7	42.3	0.0	100.0	56.6	43.4	0.0	100.0	623
Arusha	48.9	49.4	1.7	100.0	47.6	52.0	0.3	100.0	534
Kilimanjaro	83.5	15.7	0.8	100.0	81.2	18.8	0.0	100.0	368
Tanga	54.6	44.9	0.5	100.0	51.7	42.8	5.5	100.0	406
Morogoro	55.4	44.2	0.5	100.0	54.1	45.9	0.0	100.0	471
Coast	54.5	44.7	0.8	100.0	54.2	45.8	0.0	100.0	116
Lindi	58.8	38.9	2.3	100.0	54.2	45.8	0.0	100.0	178
Mtwara	46.6	53.4	0.0	100.0	39.7	60.3	0.0	100.0	208
Ruvuma	70.9	28.9	0.2	100.0	64.6	35.4	0.0	100.0	271
Iringa	60.6	38.2	1.1	100.0	58.7	41.3	0.0	100.0	439
Mbeya	51.2	48.8	0.0	100.0	47.8	52.2	0.0	100.0	375
Singida	53.7	46.0	0.3	100.0	51.0	49.0	0.0	100.0	306
Tabora	66.3	33.7	0.0	100.0	61.8	38.2	0.0	100.0	231
Rukwa	44.1	54.4	1.5	100.0	42.2	57.6	0.2	100.0	223
Kigoma	36.6	62.8	0.6	100.0	34.9	64.7	0.5	100.0	358
Shinyanga	39.5	60.3	0.1	100.0	35.4	64.6	0.0	100.0	791
Kagera	39.0	61.0	0.0	100.0	37.5	61.9	0.6	100.0	554
Mwanza	38.6	61.4	0.0	100.0	36.3	63.4	0.3	100.0	605
Mara	38.0	61.0	0.9	100.0	37.9	62.1	0.0	100.0	363
Education									
No education	36.5	62.9	0.6	100.0	32.8	66.7	0.5	100.0	2841
Primary incomplete	53.4	45.9	0.7	100.0	51.4	48.2	0.4	100.0	1501
Completed primary	61.8	37.9	0.3	100.0	60.3	39.3	0.4	100.0	3448
Secondary/Higher	83.7	15.8	0.5	100.0	83.3	16.7	0.0	100.0	242
Total	52.0	47.6	0.5	100.0	49.6	50.0	0.4	100.0	8032

more than 80 percent of births with known birth weights. At the lower end are Shinyanga and Kagera with 35 percent of births with known birth weight.

Table 9.7 presents a national estimate of the mean birth weight and the incidence of low birth weight for births in the five years preceding the survey. Low birth weight is defined as birth weight less than 2500 grams. Since there was considerable heaping of responses at 2500 grams, half of these births have been considered as below 2500 grams and half of these as at least 2500 grams. The mean birth weight for children with known birth weight was 3024 grams, and the incidence of low birth weight was 16.9 percent. As indicated above, these estimates may be biased, since women delivering in health facilities are a selective sample. Therefore, data on size at birth were used to obtain an estimate of mean birth weight and the incidence of low birth weight for the whole population.

Comparing the subjective sizes of children at birth shows that the distribution among children with no known/reported birth weight is skewed towards smaller sizes compared to children with known birth weights: there are more small children and fewer large children if the birth weight was not known. Among children with known birth weight there is a strong relationship between birth weight and reported size at birth. The mean birth weights for each size category are used to calculate the mean birth weight among children with no numerical birth weight. Thus, the estimated mean birth weight for all children in Tanzania is 3008 grams and the incidence of low birth weight is 18.0 percent. This indicates that low birth weight is a significant public health problem in Tanzania. Its relatively high incidence may be due to poor health and nutritional status of women, to malaria and other infectious diseases, and to poor nutrition during pregnancy.

Table 9.7 Mean birth weight and incidence of low birth weight

Mean birth weight (in grams) and incidence of low birth weight (<2500 grams) estimated from numerical birth-weight data and size at birth among children born in the five years preceding the survey, Tanzania 1991/92

Size at birth	Birth weight known: Yes	Birth weight known: No	Children with numerical birth weight: Mean birth weight	Children with numerical birth weight: Low birth weight (<2500 g)
Very large	1.8	1.3	3741	3.3
Large	10.2	6.7	3703	1.1
Average	78.6	80.8	3023	14.4
Small	7.0	7.1	2250	70.7
Very small	2.1	2.5	1791	88.3
Don't know/Missing	0.3	1.5	3065	14.0
Total	100.0	100.0	3024	16.9

	Percent of all births	Mean birth weight	Low birth weight (<2500 g)
Children with numerical weight	49.8	3024	16.9
Children with no numerical weight	50.2	2992	19.1
All children	100.0	3008	18.0

9.3 Child Nutritional Status

Nutritional status is a major determinant of children's susceptibility to diseases and is influenced by feeding practices as well as infections. Provision of inadequate or unbalanced diet and recurrent or chronic diseases are associated with poor nutritional status. To assess the nutritional status of children, height and weight were measured and used to construct the following indices: height-for-age, weight-for-height, and weight-for-age.

In TDHS, all children under five years whose mothers were present in the sample household the night before the interview were eligible to be included in the anthropometric data collection. However, not all eligible children are included in the results here: height or weight measurements are missing for about 8 percent of eligible children, and one or both of the measurements are grossly improbable in 5 percent of cases. The date of birth was either not known or was incomplete for 3 percent of the cases. Since two of the indices (height-for-age and weight-for-age) depend on the accuracy of the child's age, these indices are shown for 84 percent of the eligible children. Although the term "height" is used here, children younger than 24 months were measured lying on a measuring board (recumbent length), while standing height was measured for older children. For the measurement of weight a digital scale with accuracy of 100 grams was used.

As recommended by the WHO, the nutritional status of children in the survey was compared with an international reference population defined by the U.S. National Center for Health Statistics (NCHS) and accepted by the U.S. Centers for Disease Control (CDC). Use of this reference population is based on the finding that well-nourished young children of all population groups (for which data exist) follow very similar growth patterns (see Martorell and Habicht, 1986). The reference population serves as a point of comparison, facilitating the examination of differences in the anthropometric status of subgroups in a population and of changes in nutritional status over time. Although there are inherent variations in height and weight, these variations tend to approximate the normal distribution when the population is large.

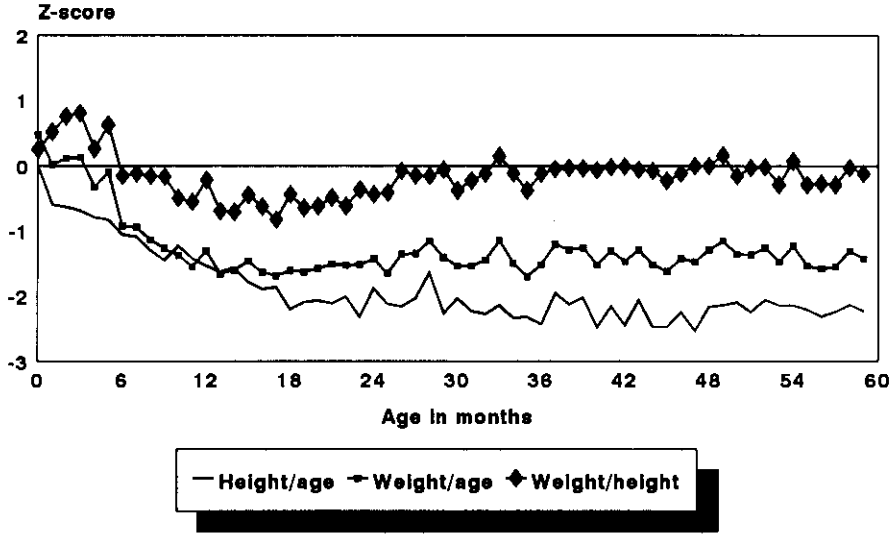
The height-for-age index is an indicator of linear growth retardation. Children whose height-for-age is below minus two standard deviation (-2SD) from the median of the reference population are considered short for their age (also referred to as "stunted"), and are chronically undernourished. Children who are below minus three standard deviations (-3SD) from the median of the reference population are considered severely stunted. Stunting reflects the outcome of a failure to receive adequate nutrition over a long period of time, and is also affected by recurrent and chronic illness. Height-for-age, therefore, represents a measure of the long-term effects of undernutrition in a population and does not vary appreciably according to the season of data collection.

The weight-for-height index measures body mass in relation to body length, and describes current nutritional status. Children who are below minus two standard deviations (-2SD) from the median of the reference population are considered thin (also referred to as "wasted"), and are acutely undernourished. 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, causing loss of weight and the onset of undernutrition. Wasting may also reflect acute food shortage. Children whose weight-for-height is below minus three standard deviations (-3SD) from the median of the reference population are considered to be severely wasted.

Weight-for-age is a composite index of height-for-age and weight-for-height that takes into account both acute and chronic undernutrition. It is a useful tool in clinical settings for continuous assessment of nutritional progress and growth. Children whose weight-for-age is below minus two standard deviations from the median of the reference population are classified as "underweight." In the reference population only 2.3 percent of children fall below minus two standard deviation (-2SD) for each of the three indices.

Considering weight-for-height, the nutritional status of Tanzanian children remains very close to the reference population (see Figure 9.1). However, regarding height-for-age and weight-for-age, their nutritional status falls below the standard population during the first 18 months of age and tends to stabilize thereafter. The deterioration is especially rapid during the first 6 months.

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



Note: Compared to the median of the NCHS/CDC/WHO reference population

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The distribution of nutritional status based on height-for-age, weight-for-height, and weight-for-age indices, by the child's age and selected demographic characteristics for 6,095 children is shown in Table 9.8, and by socioeconomic characteristics in Table 9.9 and Figure 9.2. Almost half of the children (47 percent) were found to be stunted, and 20 percent were severely stunted. These results indicate that chronic malnutrition is a major public health problem in Tanzania. Although stunting was less common among children below one year of age, it increased rapidly during the first year of life, so that during the second year of life half of the children were stunted. There were no appreciable differences in stunting by sex of the child, birth order, or length of preceding birth interval. Data by region show some interesting differences, although

Table 9.8 Nutritional status by demographic characteristics

Percentage of children under five years who are classified as undernourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by selected demographic characteristics, Tanzania 1991/92

Demographic characteristic	Height-for-age		Weight-for-height		Weight-for-age		Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below - 2 SD[1]	
Age (months)							
<6	1.0	12.0	0.6	2.1	0.4	5.4	705
6-11	7.2	25.6	0.6	6.8	7.5	28.9	735
12-23	19.4	49.5	1.4	9.8	10.9	36.7	1440
24-35	26.6	57.2	1.8	4.9	7.5	32.6	1223
36-47	29.1	59.5	1.0	3.4	6.5	30.2	1028
48-59	25.6	56.8	1.1	4.4	6.2	27.6	963
Sex							
Male	21.0	48.1	1.2	6.2	6.8	28.7	3030
Female	18.7	45.3	1.2	5.1	7.3	28.9	3065
Birth order							
1	17.5	43.8	1.4	6.3	6.0	25.8	1270
2-3	19.5	46.3	1.3	5.0	7.0	27.7	1992
4-5	21.7	46.6	0.9	6.2	7.4	32.9	1289
6+	20.7	49.6	1.1	5.5	7.9	29.2	1544
Birth interval (months)							
First birth	17.5	43.9	1.4	6.3	6.0	26.0	1276
<24	22.9	48.7	0.6	4.7	7.9	30.7	789
24-47	21.0	48.1	1.3	5.6	7.2	29.7	3118
48+	16.5	43.9	1.1	5.9	7.6	28.0	912
All children	19.8	46.7	1.2	5.6	7.1	28.8	6095

Note: Figures are for children born in the period 1-59 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 undernourished 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

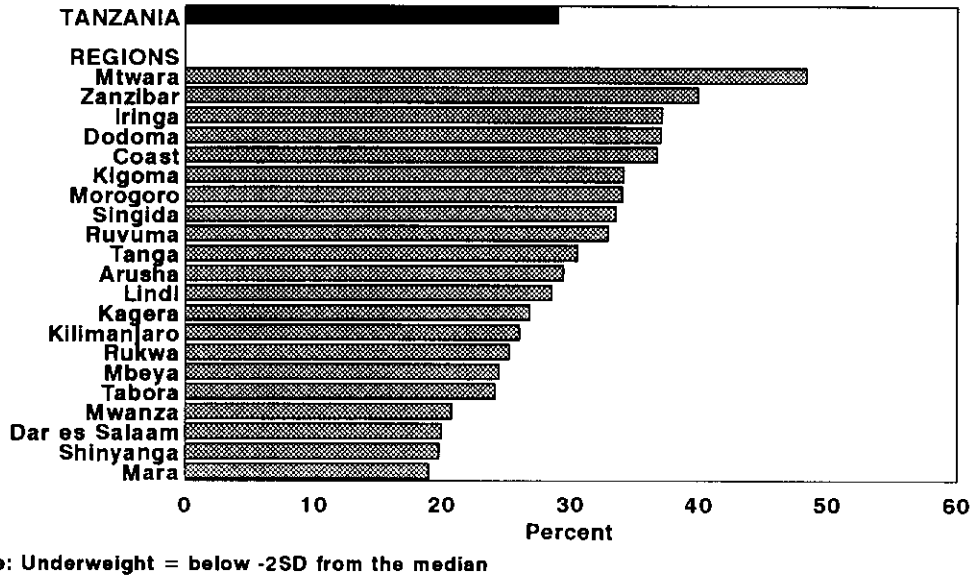
Table 9.9 Nutritional status by socioeconomic characteristics

Percentage of children under five years who are classified as undernourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by selected socioeconomic characteristics, Tanzania 1991/92

Socioeconomic characteristic	Height-for-age		Weight-for-height		Weight-for-age		Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	
Residence							
Mainland	19.7	46.6	1.2	5.5	7.0	28.5	5943
Dar es Salaam	11.3	28.5	1.3	6.8	4.0	19.9	277
Other urban	15.5	44.8	0.6	4.4	4.2	27.4	965
Rural	21.1	48.1	1.3	5.6	7.7	29.2	4701
Zanzibar	25.7	47.9	1.5	11.0	12.3	39.9	152
Region							
Dodoma	28.4	59.1	0.6	2.6	7.2	37.0	469
Arusha	14.8	38.7	0.9	5.9	5.2	29.4	381
Kilimanjaro	19.0	40.1	1.5	5.2	6.8	26.0	306
Tanga	16.6	44.0	3.6	14.7	5.7	30.5	291
Morogoro	23.2	61.1	0.6	5.4	8.3	34.0	361
Coast	28.2	54.8	0.3	6.0	10.5	36.7	91
Lindi	24.3	58.3	1.5	5.8	10.4	28.5	133
Mtwara	37.9	65.0	0.6	6.8	11.4	48.3	160
Ruvuma	27.9	56.8	1.2	4.5	9.0	32.9	217
Iringa	32.7	61.4	0.4	3.1	13.3	37.1	350
Mbeya	21.0	50.4	3.2	5.6	9.5	24.4	277
Singida	15.1	39.8	1.0	6.8	6.8	33.5	247
Tabora	16.9	44.8	0.8	4.8	5.3	24.1	192
Rukwa	19.2	48.3	1.4	4.1	4.0	25.2	159
Kigoma	21.4	52.3	0.7	5.5	7.3	34.1	291
Shinyanga	9.7	35.0	0.8	5.5	6.2	19.7	591
Kagera	19.5	44.3	1.9	5.0	6.0	26.8	431
Mwanza	15.6	39.4	0.5	4.5	5.2	20.7	456
Mara	12.7	37.0	1.3	4.5	2.6	18.9	263
Mother's education							
No education	22.5	50.3	0.7	6.1	8.6	32.1	2088
Primary incomplete	22.8	51.5	1.5	5.3	8.3	32.3	1177
Completed primary	17.1	42.9	1.5	5.5	5.7	25.4	2659
Secondary/Higher	10.3	27.6	0.4	4.0	2.7	17.7	170
All children	19.8	46.7	1.2	5.6	7.1	28.8	6095

Note: Figures are for children born in the period 1-59 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 undernourished 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

Figure 9.2
Percentage of Children under Five Years Who Are Underweight by Region



Note: Underweight = below -2SD from the median of the reference population

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the small number of observations in most regions should be taken into account. Stunting is less common in Dar es Salaam, where 28 percent of children under 5 years are below -2 SD. An additional six regions have less than 40 percent stunting, and three regions (Morogoro, Iringa, and Mtwara) have more than 60 percent stunting. Educational differences were pronounced. More than half of the children of mothers with no or incomplete primary education were stunted versus 28 percent of children of mothers with secondary education.

The weight-for-height index gives information about children's recent nutritional status. Severe wasting represents failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of recent illness or of seasonal variations in food supply. Almost 6 percent of children were wasted (i.e., below two standard deviations from the median of the reference population), and one percent was severely wasted (-3SD). Wasting was more common among children between 6-23 months. There was no association between wasting and birth order and length of birth interval. More than 10 percent wasting was observed in the Zanzibar and Tanga regions.

Weight-for-age provides an index for chronic and acute undernutrition, but does not distinguish between a child who is underweight because of stunting and one who is underweight because of wasting. Almost two-thirds of children (29 percent) were underweight, and 7 percent were below minus three standard deviations (-3SD) from the median of the reference population and therefore classified as severely underweight. The prevalence of underweight was lowest among children below 6 months of age and varied little by sex, birth order, or birth interval. Larger differences were evident by region. The lowest proportion of underweight children was found in Mara region (19 percent). In Zanzibar, the proportion underweight was twice as high as in Dar es Salaam (40 percent versus 20 percent), while the proportion with severe underweight was three times higher than in Dar es Salaam (12 percent versus 4 percent). Mtwara, Zanzibar, and Iringa had the highest prevalence of underweight. The high rate of undernutrition in Iringa was not expected because the region has been the site of the joint UNICEF/WHO Nutrition Support Programme for

over six years. Further analysis and larger numbers of measurements are required before coming to any conclusions regarding the anthropometric impact of the programme in Iringa.

9.4 Mother's Nutritional Status

Several indicators can be used to assess nutritional status of women (Krasovec and Andersen, 1991). During the TDHS, data on height and weight of women with living children under 5 years of age were collected. It is important to note that anthropometric data were not collected for women with no children under five years. This implies that several groups of women are underrepresented, for instance, women 15-19 and women 45-49 years. The same equipment was used for both child and adult anthropometry. The measuring board was equipped with an extension so that it could measure adults, and a digital bathroom scale with accuracy of 100 grams was used to weigh the women and children.

Table 9.10 shows the means and standard deviations for three anthropometric measures: height, weight, and body mass index (BMI). Arm circumference was not taken.

Height is a good indicator of socioeconomic status and is also useful to identify women at nutritional risk. In addition, maternal height is used to predict the risk of difficult delivery, since a short stature is correlated with a small pelvis. The risk of low birth weight also appears to be higher for children of short women. The optimal cut-off point to identify high-risk deliveries varies among populations, but is likely to be in the range 140-150 cm. The mean height of women was 155.9 cm. The TDHS shows that almost 4 percent of women were shorter than 145 cm, and 17 percent measured below 150 cm. The mean weight was 52.8 kg, excluding pregnant women.

Body mass indices are used to assess thinness or obesity. The most commonly used index is the BMI, which is defined as weight in kilograms divided by the square height in metres. A cut-off point of 18.5 has been recommended for defining chronic energy deficiency. Obesity has not been defined clearly. The mean BMI was 21.7 among women not pregnant at the time of the survey and having a living child under five years of age. Almost 10 percent of women had a BMI below 18.5, suggesting chronic energy deficiency.

Table 9.10 Anthropometric indicators of maternal nutritional status

Percent distribution and mean and standard deviation for women who had a birth in the five years preceding the survey by selected anthropometric indicators (height, weight, and body mass index (BMI)), Tanzania 1991/92

Indicator	Total	Distribution including missing
Height (cm)		
< 140	0.2	0.2
140-144	3.5	3.5
145-149	13.0	12.8
150-159	56.5	55.7
160-169	25.5	25.1
170-179	1.3	1.3
≥180	0.1	0.1
Missing	-	1.4
Mean	**155.9**	-
Standard deviation	6.4	-
Distribution	-	-
Number of women	5238	5312
Weight (kg)		
< 40	2.5	2.5
40-59	37.2	36.6
50-59	44.5	43.8
60-69	12.4	12.2
≥70	3.4	3.4
Missing	-	1.5
Mean	**52.8**	-
Standard deviation	8.3	-
Distribution	-	-
Number of women	4307	4372
BMI		
< 16.0	0.6	0.6
16.0-18.4	8.7	8.6
18.5-19.9	18.5	18.3
20.0-22.9	45.5	44.8
23.0-25.9	18.7	18.4
26.0-28.9	5.3	5.2
≥29.0	2.7	2.6
Missing	-	1.5
Mean	**21.7**	-
Standard deviation	3.0	-
Distribution	-	-
Number of women	4305	4372

Table 9.11 presents mean height, percent below 145 cm, mean BMI, and percent with BMI below 18.5 by background characteristics. Variation in height was limited by urban/rural, education, age, and parity. The largest differences were observed by region. Regions in northern Tanzania (Arusha and Kilimanjaro) and Mara, Mwanza, Kagera, and Shinyanga appeared to have taller women than in most other regions of Tanzania. However, differences in BMI were very small. For instance, the region with the lowest BMI was Mtwara with 20.9 and the highest was Dar es Salaam with 22.8. The only subgroup with a higher BMI than all other women were women with at least secondary education (24.0 versus 21-22).

Table 9.11 Differentials in maternal anthropometric indicators

Mean height and percentage of women shorter than 145 centimetres, mean body mass index (BMI), and the percentage of women whose BMI is less than 18.5, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Height			BMI		
	Mean	Percent <145 cm	Number	Mean	Percent <18.5	Number
Region						
Mainland	155.9	3.7	5093	21.7	9.6	4185
Dar es Salaam	154.3	4.6	272	22.8	5.8	230
Other urban	155.2	4.5	899	22.4	6.3	765
Rural	156.2	3.4	3921	21.5	10.7	3189
Zanzibar	154.8	6.3	145	21.3	11.5	120
Residence						
Dodoma	154.0	7.3	410	21.3	7.5	360
Arusha	157.8	0.2	362	21.7	16.4	314
Kilimanjaro	156.3	2.3	238	21.9	12.6	206
Tanga	154.4	3.9	266	21.2	12.5	221
Morogoro	152.4	10.9	327	21.7	9.2	265
Coast	152.0	11.6	80	21.8	12.6	68
Lindi	153.0	7.4	132	21.3	11.8	113
Mtwara	151.7	11.7	158	20.9	20.7	127
Ruvuma	153.1	8.7	180	21.6	7.6	153
Iringa	154.8	2.9	311	22.2	6.8	253
Mbeya	155.6	3.3	249	22.0	7.9	199
Singida	158.4	0.5	205	21.2	11.7	172
Tabora	156.2	1.9	148	21.6	9.7	121
Rukwa	156.7	2.4	137	21.8	7.3	112
Kigoma	155.7	2.2	221	21.5	11.6	176
Shinyanga	159.1	0.6	480	22.0	3.6	364
Kagera	157.3	0.7	327	21.8	10.6	265
Mwanza	158.3	0.9	364	22.1	6.9	293
Mara	159.4	0.9	224	21.1	10.4	172
Education						
No education	155.7	3.5	1816	21.4	12.1	1470
Primary incomplete	155.3	4.2	967	21.4	10.5	816
Completed primary	156.2	3.9	2292	21.9	7.8	1876
Secondary/Higher	156.7	1.5	163	24.0	4.0	143
Age of woman						
<20	155.4	7.3	495	21.5	9.3	407
20-34	156.0	3.6	3549	21.7	9.0	2859
≥35	155.6	2.7	1193	21.8	11.8	1039
Children ever born						
1	156.1	5.1	1100	21.5	10.0	886
2-3	155.8	4.8	1643	21.9	7.5	1312
4-5	155.8	2.7	1084	21.6	9.7	893
6+	155.8	2.3	1410	21.7	11.8	1215
Total	155.9	3.8	5238	21.7	9.7	4305

CHAPTER 10

RESULTS OF THE MALE SURVEY

10.1 Background Characteristics of the Male Survey Respondents

General Characteristics

In the TDHS, 2114 men were interviewed to obtain information about background and demographic characteristics, sexuality, family planning knowledge and practice, fertility preference and AIDS knowledge. Men were eligible for the individual interview if they were between age 15 and 60, and stayed in the household the night before the household interview was conducted. One in four households was selected for the male survey and the results are presented here. Results about AIDS knowledge are not presented here but are presented in Chapter 11.

Table 10.1 shows the percentage distribution of background characteristics of the respondents. Almost a quarter of men (24 percent) were age 15-19 years. This proportion was much higher than that of men age 20-24 years, a pattern typical of expanding population, although it also appears younger males were more likely to be found at home during the interviewers' visits. Thirty-nine percent of male respondents were unmarried and 56 percent were currently married (either in monogamous or polygamous union). One-fifth of the respondents had no formal education. Among those with formal education, a majority (71 percent) had primary education and only 9 percent had secondary or higher education. A majority of respondents were from the Tanzania mainland (98 percent) and over two-thirds (71 percent) were from rural areas. One-third were Moslems, 27 percent Catholics, and 25 percent Protestants.

Differentials in Education

Table 10.2 shows the distribution by education level of respondents according to age, rural/urban residence, and region. Compared to men in the younger age categories, older men were more likely to be uneducated. The proportion of men with no education was relatively higher in Zanzibar (where the number of men is small) and in rural areas than in mainland Tanzania and urban areas, respectively. However, Zanzibar also had the largest proportion of men with at least secondary education. The level of education was found to vary in the regions. Tanga, Ruvuma, and Dar es Salaam had the lowest proportion of uneducated men, and Mtwara, Shinyanga, and Dodoma had the highest proportion. In mainland Tanzania, Dar es Salaam had the largest proportion of men with secondary and higher education.

Access to mass media

All eligible men were asked if they usually listen to a radio, watch television, or read a newspaper at least once in a week (Table 10.3). This information can be used in identifying appropriate communication channels that can be used to reach most people. Overall, 77 percent reported listening to the radio daily, and 45 percent reported reading newspapers. As expected, only 5 percent reported watching television at least once a week. Since there is no television station on the Tanzanian mainland, most of the people who reported watching television see programmes from Zanzibar or neighbouring countries. Men less than 40 years and those with at least primary education were more likely to read newspapers and listen to the radio than other men. Men in rural areas were less likely to read newspapers than their counterparts in urban areas. In Dar es Salaam, a majority of men (93 percent) reported reading newspapers. Radio listening was found to be common in both rural and urban areas. In Zanzibar about a third of the respondents reported watching television at least once a week.

Table 10.1 Background characteristics of respondents

Percent distribution of men by selected background characteristics, Tanzania 1991/92

Background characteristic	Weighted percent	Number of women	
		Weighted	Un-weighted
Age			
15-19	23.6	499	518
20-24	14.6	308	309
25-29	12.4	262	268
30-34	12.1	256	240
35-39	9.5	201	194
40-44	7.5	159	170
45-49	7.3	155	158
50-54	6.0	127	112
55+	6.1	129	123
Marital status			
Never married	38.7	819	810
Married, monogamous	47.0	993	993
Married, polygamous	9.0	190	191
Widowed/Divorced/Sep.	5.3	112	120
Education			
No education	19.8	418	425
Primary incomplete	29.6	625	638
Completed primary	41.5	878	879
Secondary/Higher	9.1	192	172
Residence			
Mainland	97.6	2063	2010
Dar es Salaam	7.2	151	132
Other urban	19.0	402	263
Rural	71.4	1510	1615
Zanzibar	2.4	51	104
Region			
Dodoma	8.2	173	83
Arusha	5.9	124	93
Kilimanjaro	6.0	128	106
Tanga	4.3	90	74
Morogoro	5.7	120	107
Coast	1.6	34	87
Lindi	2.2	47	75
Mtwara	5.2	109	97
Ruvuma	3.3	70	101
Iringa	5.6	117	91
Mbeya	4.9	103	69
Singida	3.2	67	88
Tabora	3.4	73	106
Rukwa	2.4	51	112
Kigoma	3.7	79	108
Shinyanga	8.4	177	145
Kagera	5.7	121	79
Mwanza	6.7	143	128
Mara	4.0	85	129
Religion			
Muslim	33.3	703	748
Catholic	27.2	575	594
Protestant	24.5	517	456
None	15.0	318	315
Other religion	0.0	1	1
All men	100.0	2114	2114

Table 10.2 Level of education

Percent distribution of men by highest level of education attended, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Level of education				Total	Number of men
	None	Primary incomplete	Completed primary	Secondary/ Higher		
Age						
15-19	11.4	40.1	42.3	6.2	100.0	499
20-24	13.1	11.2	66.1	9.6	100.0	308
25-29	7.5	15.2	68.3	9.0	100.0	262
30-34	11.8	19.2	53.9	15.1	100.0	256
35-39	26.5	31.8	31.3	10.4	100.0	201
40-44	28.3	41.5	22.2	8.0	100.0	159
45-49	30.6	42.6	16.3	10.5	100.0	155
	36.4	38.4	13.9	11.2	100.0	127
Residence	52.1	40.9	3.7	3.2	100.0	129
Mainland						
Dar es Salaam	19.6	29.8	42.1	8.5	100.0	2063
Other urban	6.6	20.4	49.7	23.3	100.0	151
Rural	12.2	29.7	39.8	18.3	100.0	402
Zanzibar	22.9	30.8	42.0	4.4	100.0	1510
	27.2	21.5	18.6	32.7	100.0	51
Region						
Dodoma	29.1	22.6	39.0	9.3	100.0	173
Arusha	15.9	22.8	48.6	12.7	100.0	124
Kilimanjaro	7.9	23.8	56.4	11.9	100.0	128
Tanga	5.0	41.1	47.1	6.9	100.0	90
Morogoro	14.6	43.0	36.4	6.0	100.0	120
Coast	20.3	37.2	39.9	2.6	100.0	34
Lindi	21.9	40.1	30.4	7.6	100.0	47
Mtwara	31.6	39.6	26.2	2.6	100.0	109
Ruvuma	5.8	30.7	60.9	2.6	100.0	70
Iringa	22.4	32.6	40.5	4.5	100.0	117
Mbeya	19.4	23.1	51.4	6.1	100.0	103
Singida	18.6	31.8	42.9	6.8	100.0	67
Tabora	26.7	21.7	45.9	5.7	100.0	73
Rukwa	20.1	35.3	39.6	5.0	100.0	51
Kigoma	23.7	32.9	38.0	5.5	100.0	79
Shinyanga	30.8	28.4	36.1	4.7	100.0	177
Kagera	21.0	26.6	37.3	15.2	100.0	121
Mwanza	25.6	36.0	33.8	4.6	100.0	143
Mara	15.0	28.2	44.5	12.4	100.0	85
Total	19.8	29.6	41.5	9.1	100.0	2114

Table 10.3 Access to mass media

Percentage of men who usually read a newspaper once a week, watch television once a week, or listen to radio once a week, by selected background characteristics, Tanzania 1991/92

Background characteristic	Read newspaper weekly	Watch television weekly	Listen to radio weekly	Number of men
Age				
15-19	47.7	3.2	76.5	499
20-24	52.2	7.0	83.2	308
25-29	49.8	8.6	84.5	262
30-34	51.1	7.4	79.0	256
35-39	44.6	5.9	79.6	201
40-44	31.1	1.3	70.4	159
45-49	40.1	9.6	70.7	155
50-54	29.6	4.3	67.9	127
55+	32.0	1.3	66.6	129
Education				
No education	2.9	1.6	51.8	418
Primary incomplete	40.7	2.6	74.4	625
Completed primary	58.7	6.8	85.8	878
Secondary/Higher	83.9	16.9	98.4	192
Residence				
Mainland	44.7	4.8	76.6	2063
Dar es Salaam	93.2	6.7	99.8	151
Other urban	66.7	13.4	93.8	402
Rural	33.9	2.3	69.8	1510
Zanzibar	44.8	30.8	85.4	51
Region				
Dodoma	46.7	12.2	90.1	173
Arusha	45.2	0.5	78.3	124
Kilimanjaro	55.8	6.4	96.6	128
Tanga	27.7	0.0	86.5	90
Morogoro	66.8	8.1	87.9	120
Coast	72.2	4.1	89.7	34
Lindi	48.9	3.4	72.9	47
Mtwara	36.7	0.9	65.0	109
Ruvuma	50.6	0.0	71.7	70
Iringa	20.5	3.5	68.7	117
Mbeya	26.8	5.3	73.0	103
Singida	32.7	2.6	76.1	67
Tabora	31.7	0.8	57.3	73
Rukwa	23.1	4.1	73.0	51
Kigoma	31.9	0.0	67.1	79
Shinyanga	31.6	7.6	66.2	177
Kagera	22.2	0.0	40.6	121
Mwanza	51.3	7.2	75.3	143
Mara	63.4	8.7	84.1	85
Total	44.7	5.4	76.9	2114

10.2 Fertility Regulation

Knowledge of Contraception

One of the main objectives of the TDHS was to determine the level of knowledge of contraceptive methods and the sources where they can be obtained. Information on contraceptive knowledge was obtained by asking the respondent to name ways or methods that a couple could use to delay or avoid pregnancy. If the respondent failed to name a particular method spontaneously, the interviewer described the method and asked if he recognised it.

Table 10.4 shows that 78 percent of all men aged 15-60 know of at least one method of family planning. Moreover, about 72 percent of men know where one can obtain a method of family planning. Among currently married men, 86 percent know a method and 80 percent know a place where it can be obtained. Knowledge of modern contraceptive methods was equally high. The pill was the most commonly known modern contraceptive method. Interestingly, male sterilisation was known by only a small proportion of men. Periodic abstinence and withdrawal were the most known traditional contraceptive methods. In general, knowledge of traditional methods was relatively low. These findings indicate that the overall knowledge of contraception is high. However, knowledge of some specific methods such as IUD, injection, vaginal methods, and male sterilisation was low. It is obvious that more intensive information, education, and communication (IEC) is needed to inform people about these methods.

Table 10.4 Knowledge of contraceptive methods and source for methods

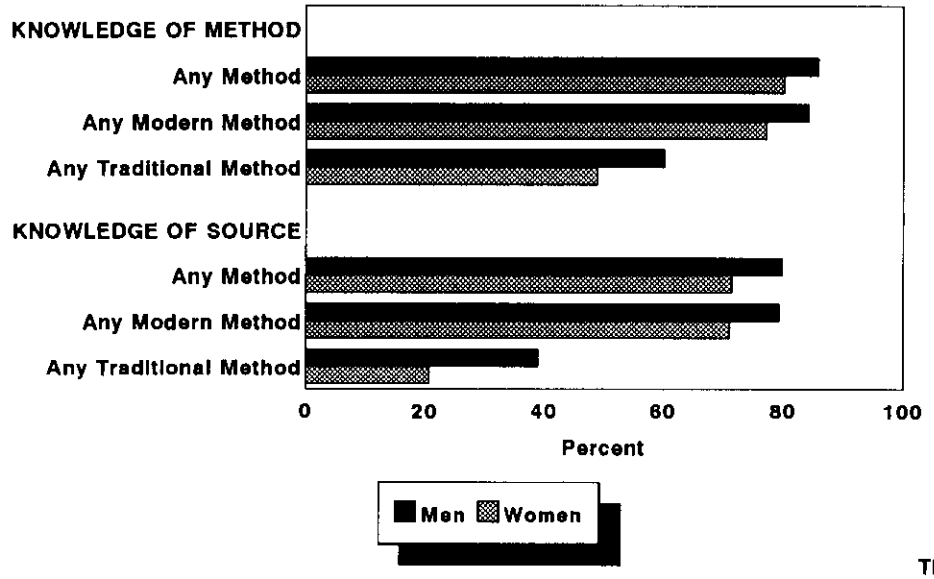
Percentage of all men and currently married men who know specific contraceptive methods and who know a source (for information or services), by specific methods, Tanzania 1991/92

Contraceptive method	Know method		Know a source	
	All men	Currently married men	All men	Currently married men
Any method	78.3	85.8	71.5	79.7
Any modern method	76.8	84.2	71.2	79.3
Modern method				
Pill	65.0	76.0	56.8	67.7
IUD	25.8	34.9	21.7	29.1
Injection	31.8	38.8	29.6	36.4
Diaphragm/foam/jelly	30.0	37.1	25.7	32.2
Condom	64.8	71.2	57.6	63.8
Female sterilisation	50.4	60.4	48.4	58.1
Male sterilisation	21.4	27.7	19.1	24.9
Any traditional method	50.7	60.1	NA	NA
Periodic abstinence	36.3	44.8	30.4	38.9
Mucus method	17.0	23.1	NA	NA
Withdrawal	39.3	46.3	NA	NA
Other	12.6	17.8	NA	NA
Number of men	2114	1184	2114	1184

NA = Not applicable

The level of knowledge of contraceptive methods and their source of supply among currently married males and females can be compared in Figure 10.1. In general, males have a relatively higher knowledge of contraceptive methods and places where they could be obtained. Men are more likely to know about condom, withdrawal, and periodic abstinence than women. However, women have relatively better knowledge of injections.

Figure 10.1
Contraceptive Knowledge Among Currently Married Men and Women



TDHS 1991/92

Among currently married men, knowledge of contraceptive methods is fairly high at all ages, especially among men 25-39 years (Table 10.5). Knowledge is high both in Zanzibar and mainland Tanzania and in both rural and urban areas. However, it is low among uneducated men and increases with increasing level of education. Contraceptive knowledge generally is high in most regions, although Shinyanga, Mwanza, and Coast have a relatively low level of knowledge.

Ever Use of Contraception

All eligible men (aged 15-60) interviewed in the TDHS who had heard of at least one method of family planning were asked if their wives and themselves had ever used contraceptives. Among unmarried men, the question of contraceptive use by their partners was not asked because most of these men are unlikely to know whether such use had ever occurred. Men were classified to have ever used contraceptives if they reported that they had ever used any method. This classification assumes that men were aware of the contraceptive practice of their wives. It is known that some women use contraceptives without the knowledge of their spouse. For example, in an ongoing study in Dar es Salaam, about one-third of women attending family planning clinics reported to have been using contraceptives without knowledge of their spouse (Kapiga et al. 1993). Hence, the results presented here may underestimate the true prevalence of contraceptive use. It should also be noted that the interpretation of this classification is difficult in polygamous marriages where some of the wives may be using contraceptives, and others may not be.

Table 10.5 Knowledge of modern contraceptive methods and source for methods

Percentage of currently married men who know at least one modern contraceptive method and who know a source (for information or services), by selected background characteristics, Tanzania 1991/92

Background characteristic	Know any method	Know a modern method[1]	Know a source for modern method	Number of men
Age				
15-19	*	*	*	9
20-24	82.1	80.5	74.8	100
25-29	89.7	89.0	86.4	169
30-34	89.9	89.2	85.0	205
35-39	91.5	89.6	84.8	176
40-44	85.2	83.9	77.3	144
45-49	83.2	81.6	76.7	137
50-54	80.5	79.0	70.7	111
55+	77.1	72.4	68.9	132
Residence				
Mainland	85.7	84.0	79.0	1154
Dar es Salaam	82.8	82.8	82.8	63
Other urban	98.9	98.9	95.4	234
Rural	82.3	80.1	74.3	857
Zanzibar	90.1	90.1	88.8	30
Region				
Dodoma	95.6	95.1	94.3	121
Arusha	85.8	75.4	72.0	54
Kilimanjaro	98.2	98.2	98.2	50
Tanga	98.2	98.2	96.4	58
Morogoro	98.2	96.4	94.2	69
Coast	(67.0)	(67.0)	(63.9)	17
Lindi	(90.1)	(90.1)	(87.1)	32
Mtwara	95.6	95.6	95.6	61
Ruvuma	100.0	100.0	98.5	44
Iringa	89.4	84.6	71.5	73
Mbeya	91.8	90.1	83.9	59
Singida	(83.0)	(82.2)	(79.4)	36
Tabora	(88.0)	(78.4)	(75.7)	38
Rukwa	(82.5)	81.3	77.0	32
Kigoma	93.3	90.7	85.7	50
Shinyanga	57.3	57.3	49.0	92
Kagera	76.3	76.3	76.3	78
Mwanza	64.2	64.2	44.1	82
Mara	83.8	80.2	63.8	44
Education				
No education	68.4	64.1	55.5	297
Primary incomplete	88.0	86.6	80.6	357
Completed primary	92.7	92.4	89.8	424
Secondary/Higher	99.4	99.4	98.7	106
Total	85.8	84.2	79.3	1184

Note: Rates shown in parentheses are based on 25-49 men, whereas an asterisk means the rate is based on fewer than 25 men and has been suppressed.

[1]Includes pill, IUD, injection, vaginal methods (foaming tablets/diaphragm/foam/jelly), condom, female sterilisation, and male sterilisation.

Table 10.6 indicates that 45 percent of currently married men had ever used family planning methods. Thirty-five percent of currently married men had ever used traditional methods, and 24 percent had ever used modern contraceptives. Periodic abstinence (23 percent) and withdrawal (19 percent) were the most commonly used traditional methods. Fourteen percent had ever used condoms. Ever use of contraceptive methods among all men is comparable to that of currently married men. Twenty percent had ever used a modern method, mostly a condom (15 percent). Traditional methods were less commonly reported by younger, unmarried men compared to married men. For instance, 27 percent of all men ever used traditional methods, compared to 35 percent of currently married men.

Table 10.6 Ever use of contraception

Percentage of all men and of currently married men who have ever used any contraceptive method, by specific method and age, Tanzania 1991/92

		Modern methods							Traditional methods					
Age	Any method	Any modern method	Pill	IUD	Injection	Diaphragm/ foam/ jelly	Condom	Female sterilisation	Any trad. method	Periodic abstinence	Mucus method	Withdrawal	Other	Number of men
ALL MEN														
15-19	14.0	9.7	0.4	0.0	0.4	0.5	8.7	0.0	8.9	2.6	0.8	6.9	0.0	499
20-24	37.5	27.1	2.7	0.0	0.3	0.6	25.6	1.5	25.5	11.6	3.6	16.7	1.7	308
25-29	45.8	23.2	6.9	0.0	0.0	0.2	21.2	0.3	32.8	16.7	6.8	19.8	1.8	262
30-34	46.8	22.7	11.7	0.6	1.3	0.0	19.0	0.0	42.8	32.7	16.5	23.9	1.8	256
35-39	51.2	29.2	14.6	4.2	0.7	1.3	20.3	1.1	41.1	24.7	4.7	22.2	5.3	201
40-44	43.3	22.2	11.7	3.1	1.6	1.4	12.2	5.1	34.0	20.4	4.5	17.7	2.3	159
45-49	40.8	26.5	14.4	0.8	0.0	0.0	11.3	5.2	25.1	16.5	3.9	15.6	1.8	155
50-54	39.8	20.3	10.0	0.0	1.8	0.0	2.8	7.4	29.6	10.7	7.2	19.2	4.5	127
55+	34.7	14.0	4.4	0.9	2.1	0.9	3.9	7.9	25.9	17.6	4.9	13.2	0.3	148
Total	36.0	20.4	7.0	0.8	0.7	0.5	14.8	2.1	27.0	15.3	5.4	16.0	1.8	2114
CURRENTLY MARRIED MEN														
15-19	*	*	*	*	*	*	*	*	*	*	*	*	*	9
20-24	37.4	24.6	3.8	0.0	0.0	0.0	23.0	0.0	33.0	21.7	11.0	15.9	5.2	100
25-29	44.9	20.9	6.6	0.0	0.0	0.3	18.8	0.0	33.9	19.3	8.2	19.7	2.8	169
30-34	50.1	22.5	11.9	0.8	1.4	0.0	18.7	0.0	45.7	35.0	19.7	27.1	1.9	205
35-39	53.6	29.3	15.5	3.4	0.8	0.3	20.2	1.3	44.0	26.3	5.3	23.1	5.2	176
40-44	42.7	22.4	12.4	3.4	1.7	1.5	11.5	4.8	33.3	22.4	4.9	15.3	2.5	144
45-49	43.4	29.4	16.2	0.9	0.0	0.0	12.3	5.9	26.1	18.6	4.3	15.3	2.0	137
50-54	44.7	23.3	11.4	0.0	2.0	0.0	3.2	8.5	33.0	12.2	8.2	21.1	5.1	111
55+	36.4	15.3	4.6	1.0	2.3	1.0	4.1	8.9	26.5	19.4	5.4	12.6	0.0	132
Total	45.0	23.5	10.7	1.3	1.0	0.4	14.4	3.2	35.4	22.9	8.8	19.3	3.0	1184

Note: An asterisk means the rate is based on fewer than 25 men and has been suppressed.

Current Use of Contraception

About 22 percent of currently married men were using family planning methods at the time of the survey (see Table 10.7). Use of traditional methods was reported by 11 percent of currently married men and use of modern methods by about 10 percent. The pill and condoms were reported to be used by 4 percent of currently married men and periodic abstinence by 8 percent. Use of modern contraceptives was low among younger men (below 20 years).

Table 10.7 Current use of contraception by age

Percent distribution of all men and of currently married men by contraceptive method currently used, according to age, Tanzania 1991/92

	Modern methods						Traditional methods						
Age	Any method	Any modern method	Pill	IUD	Condom	Female sterilisation	Any trad. method	Periodic abstinence	Mucus method	With drawal	Other	Total	Number
						ALL MEN							
15-19	4.6	3.7	0.3	0.0	3.3	0.0	0.9	0.9	0.0	0.0	0.0	4.6	499
20-24	9.9	7.3	0.3	0.0	7.0	0.0	2.6	2.1	0.0	0.5	0.0	9.9	308
25-29	17.5	8.3	2.3	0.0	5.9	0.0	9.2	6.4	0.4	1.5	0.9	17.5	262
30-34	20.4	11.9	5.5	0.6	5.8	0.0	8.5	7.0	0.0	0.8	0.6	20.4	256
35-39	30.0	14.0	3.8	0.0	9.0	1.1	16.0	11.8	0.4	2.7	1.1	30.0	201
40-44	21.3	11.1	5.2	0.5	3.3	2.1	10.2	6.7	0.0	2.5	0.9	21.3	159
45-49	20.7	12.5	5.4	0.0	2.7	4.4	8.3	5.5	0.0	2.8	0.0	20.7	155
50-54	21.0	9.0	2.5	0.0	0.0	6.5	12.0	3.0	0.0	6.4	2.6	21.0	127
55+	7.2	2.9	0.0	0.0	1.7	1.3	4.2	2.7	1.0	0.6	0.0	7.2	148
Total	14.9	8.2	2.4	0.1	4.7	1.1	6.7	4.6	0.2	1.4	0.5	14.9	2114
						CURRENTLY MARRIED MEN							
15-19	*	*	*	*	*	*	*	*	*	*	*	*	9
20-24	12.4	4.3	0.3	0.0	4.0	0.0	8.1	6.6	0.0	1.5	0.0	12.4	100
25-29	20.9	7.8	3.6	0.0	4.2	0.0	13.1	8.7	0.6	2.4	1.4	20.9	169
30-34	23.9	13.4	6.8	0.8	5.7	0.0	10.5	8.7	0.0	1.0	0.8	23.9	205
35-39	32.9	14.7	4.4	0.0	9.0	1.3	18.3	13.5	0.5	3.1	1.2	32.9	176
40-44	22.6	11.4	5.7	0.6	2.8	2.3	11.2	7.4	0.0	2.8	1.0	22.6	144
45-49	22.9	13.6	6.1	0.0	2.6	4.9	9.3	6.2	0.0	3.1	0.0	22.9	137
50-54	24.1	10.3	2.8	0.0	0.0	7.4	13.8	3.5	0.0	7.3	3.0	24.1	111
55+	7.0	3.0	0.0	0.0	1.6	1.4	4.0	3.0	1.1	0.0	0.0	7.0	132
Total	21.8	10.4	4.2	0.2	4.1	1.9	11.4	7.7	0.3	2.5	0.9	21.8	1184

Note: An asterisk means the rate is based on fewer than 25 men and has been suppressed.

Figure 10.2 shows current use of contraceptive methods among currently married males and females. Compared to women, men were twice as likely to report that they were currently using contraceptive methods. The reported current use of modern contraceptives was 3 percentage points higher among men. However, the largest differences were in the use of traditional methods; men were about 200 percent more likely to report that they were using traditional methods than women. The observed differences may be due to a number of reasons. Women were asked about their own contraceptive use, while men were asked about use of methods for both themselves and their wives. The high prevalence among men may indicate use of

contraceptives by men with women other than their wives. It is also possible that women did not mention some of the methods that were primarily used by their spouse. This may explain the difference in reported condom use. Regarding traditional methods, the main difference concerns abstinence, which is much more commonly reported by men. Different interpretations of this method may play a role as well.

Figure 10.2
Current Use of Contraceptives
Among Currently Married Men and Women

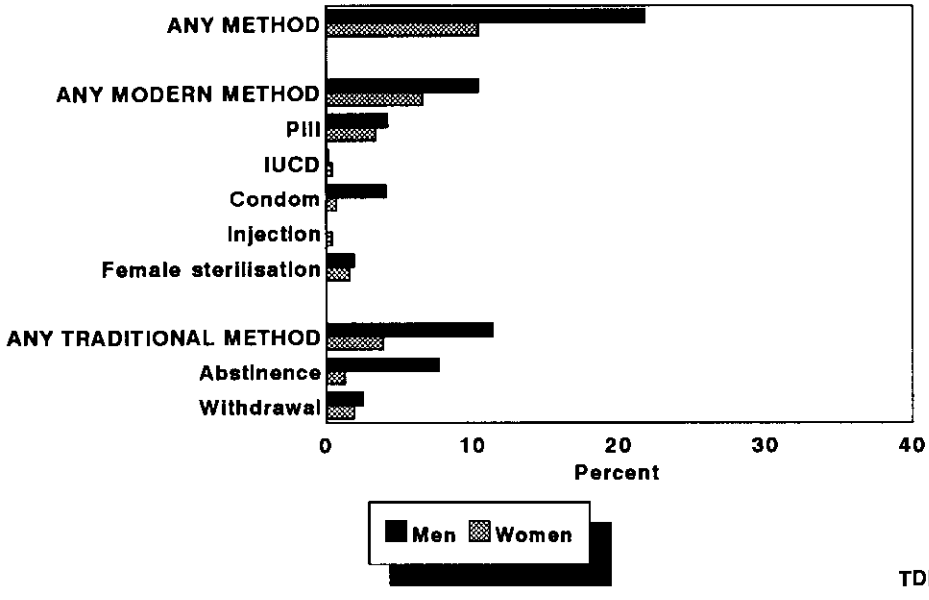


Table 10.8 shows the percent distribution of currently married men currently using contraceptives by rural/urban residence, region, educational status, and number of living children. Men in urban areas are more than twice as likely to use modern methods than their counterparts in rural areas. Conversely, use of traditional methods is more common in rural areas than in urban areas. There were significant differences in the prevalence of current contraceptive use among the regions. For example, use of modern methods ranges from 1 percent in Mwanza to 29 percent in Kilimanjaro. These differences need to be interpreted cautiously because of the small numbers of men covered.

Contraceptive use among men with formal education is much higher than among men with no education. Contraceptive use increases with increasing level of education from 7 percent among men with no education to 23 percent among men with primary education and to 52 percent among men with secondary or higher education. A similar pattern is observed for modern and traditional contraceptive methods. Furthermore, contraceptive use varies according to the number of living children. Only 1 percent of currently married men with no living child reported using family planning methods. Use of both modern and traditional methods increases with increasing number of living children up to about 3 above which it falls slightly.

Table 10.8 Current use of contraception by background characteristics

Percent distribution of currently married men by contraceptive method currently used, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Any method	Modern methods: Any modern method	Pill	IUD	Condom	Female sterilisation	Traditional methods: Any trad. meth.	Periodic abstinence	Mucus method	Withdrawal	Other	Total	Number of men
Residence													
Mainland	22.3	10.5	4.3	0.2	4.2	1.9	11.7	7.9	0.3	2.6	0.9	22.3	1153
Dar es Salaam	30.1	25.3	6.7	0.0	14.8	3.8	4.8	4.8	0.0	0.0	0.0	30.1	63
Other urban	25.9	16.4	7.8	0.0	8.4	0.3	9.4	4.5	0.6	3.3	1.0	25.9	234
Rural	20.7	7.8	3.1	0.3	2.2	2.2	12.9	9.1	0.2	2.5	1.0	20.7	857
Zanzibar	4.1	4.1	1.4	0.0	1.4	1.4	0.0	0.0	0.0	0.0	0.0	4.1	30
Region													
Dodoma	27.5	14.0	8.2	0.0	5.8	0.0	13.5	7.2	0.0	6.3	0.0	27.5	121
Arusha	39.2	12.3	1.7	0.0	6.8	3.8	26.9	14.2	0.0	9.9	2.8	39.2	54
Kilimanjaro	50.8	28.5	9.9	5.0	4.4	9.3	22.3	18.9	1.8	1.7	0.0	50.8	50
Tanga	60.7	21.5	5.7	0.0	14.1	1.8	39.2	30.2	0.0	3.9	5.1	60.7	58
Morogoro	23.7	10.0	3.9	0.0	6.1	0.0	13.7	6.6	1.5	2.5	3.0	23.7	69
Coast	(7.1)	(5.0)	(5.0)	(0.0)	(0.0)	(0.0)	(2.1)	(1.4)	(0.0)	(0.8	(0.0)	(7.1)	17
Lindi	(12.4)	(10.3)	(6.4)	(0.0)	(2.0)	(1.9)	(2.0)	(0.0)	(0.0)	(2.0)	(0.0)	(12.4)	32
Mtwara	2.7	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	61
Ruvuma	5.1	5.1	0.0	0.0	3.0	2.1	0.0	0.0	0.0	0.0	0.0	5.1	44
Iringa	18.2	11.7	10.4	0.0	1.3	0.0	6.5	1.6	0.0	4.9	0.0	18.2	73
Mbeya	20.0	8.1	0.0	0.0	6.1	2.0	11.9	6.1	2.4	3.4	0.0	20.0	59
Singida	(23.6)	(6.7)	(0.0)	(0.0)	(6.7)	(0.0)	(16.9)	(16.9)	(0.0)	(0.0)	(0.0)	(23.6)	36
Tabora	(18.9	(3.1)	(1.0)	(0.0)	(2.1)	(0.0)	(15.7)	(10.9)	(0.0)	(1.8)	(3.1)	(18.9)	38
Rukwa	(16.9)	(9.0)	(3.2)	(0.0)	(3.5)	(2.3)	(7.8)	(3.2)	(0.0)	(3.0)	(1.6)	(16.9)	32
Kigoma	21.3	4.5	2.9	0.0	1.7	0.0	16.8	14.2	0.0	0.0	2.6	21.3	50
Shinyanga	10.7	6.0	4.3	0.0	1.7	0.0	4.7	4.7	0.0	0.0	0.0	10.7	92
Kagera	25.3	10.7	0.0	0.0	0.0	10.7	14.6	9.7	0.0	3.9	1.0	25.3	78
Mwanza	3.5	1.4	1.4	0.0	0.0	0.0	2.1	2.1	0.0	0.0	0.0	3.5	82
Mara	17.8	7.0	7.0	0.0	0.0	0.0	10.9	8.1	0.0	1.4	1.3	17.8	44
Education													
No education	7.4	1.6	0.7	0.0	0.0	0.9	5.9	4.2	0.3	1.0	0.4	7.4	297
Primary incomplete	16.2	5.0	1.9	0.0	1.1	2.0	11.2	5.8	0.7	3.1	1.5	16.2	357
Completed primary	29.0	16.0	6.4	0.2	8.3	1.1	13.1	10.8	0.0	1.6	0.7	29.0	424
Secondary/Higher	52.0	30.8	12.8	1.5	8.7	7.8	21.2	11.9	0.0	8.1	1.2	52.0	106
Number of children													
0	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	96
1	21.5	8.4	4.1	0.0	4.3	0.0	13.1	7.5	0.8	2.9	1.9	21.5	169
2	18.0	4.5	1.3	0.0	3.2	0.0	13.6	11.2	0.7	1.3	0.3	18.0	160
3	32.6	16.3	9.2	1.0	6.1	0.0	16.3	14.0	0.0	1.6	0.7	32.6	158
4+	23.4	12.4	4.1	0.1	4.4	3.7	10.9	6.5	0.1	3.3	1.0	23.4	601
Total	21.8	10.4	4.2	0.2	4.1	1.9	11.4	7.7	0.3	2.5	0.9	21.8	1184

Note: Rates shown in parentheses are based on 25-49 men, whereas an asterisk means the rate is based on fewer than 25 men and has been suppressed.

Sources of Family Planning Methods

All current users of modern methods of family planning were asked to report the source from which they most recently obtained their supplies. Table 10.9 shows that 70 percent of modern contraceptive users obtained their last supplies from public (government) health facilities, of which half were dispensaries. Seventeen percent of users obtained contraceptives from private medical facilities, and only 9 percent obtained their last contraceptive supplies from either private shops or friends and relatives. As observed in Chapter 4, these findings indicate that public (government) health facilities are the main source of contraceptive supplies in Tanzania.

Table 10.9 Source of supply for modern contraceptive methods

Percent distribution of current users of modern contraceptive methods by most recent source of supply, according to specific methods, Tanzania 1991/92

Source of supply	Pill	Condom	All methods
Public sector	94.7	63.8	69.8
Consultant hospital	1.5	6.8	6.4
Regional hospital	10.8	6.5	7.7
District hospital	4.9	11.0	11.1
Health centre	26.3	4.8	10.3
Dispensary	51.2	27.2	30.1
Parastatal health facility	0.0	3.8	2.2
Village health post/Worker	0.0	3.8	2.1
Medical private sector	5.3	14.0	17.3
Religious org. facility	3.5	0.0	8.4
Private doctor/Hospital	0.0	3.6	2.5
Pharmacy/Medical store	0.0	7.5	4.3
UMATI CBD worker	1.9	2.8	2.1
Other private sector	0.0	15.8	9.3
Shop	0.0	8.6	4.9
Friends, relatives	0.0	7.2	4.4
Other	0.0	2.7	1.5
Missing	0.0	3.8	2.1
Total	100.0	100.0	100.0
Number	50	98	174

UMATI CBD = Family Planning Association of Tanzania community-based distribution

Men who are current users of contraceptive methods were asked how long it takes to travel from their home to the place where they obtain the method. Nonusers were asked if they knew a place where they could obtain a modern method and, if so, how long it would take to get there. The results are shown in Table 10.10.

Table 10.10 Time to source of supply for modern contraceptive methods

Percent distribution of men who are currently using a modern contraceptive method, of men who are not using a modern method, and of men who know a method, by time to reach a source of supply, according to urban-rural residence, Tanzania 1991/92

Minutes to source	Men who are currently using a modern method			Men who are not using a modern method			Men who know a contraceptive method		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
0-14	39.8	24.6	31.4	11.4	4.6	6.3	16.4	7.5	10.1
15-29	29.1	9.9	18.4	14.8	4.0	6.6	19.1	5.7	9.5
30-59	13.6	18.4	16.2	17.0	7.4	9.7	18.2	10.3	12.6
60+	11.3	40.9	27.7	12.6	29.8	25.5	14.4	39.0	31.8
Does not know time	0.0	0.0	0.0	1.8	0.3	0.6	1.8	0.3	0.7
Does not know source	0.0	0.0	0.0	24.3	38.2	34.8	15.4	21.4	19.6
Not stated	6.2	6.3	6.2	18.2	15.8	16.4	14.7	16.0	15.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	77	96	173	479	1460	1939	479	1175	1654

Among current users of contraceptive methods, 69 percent of men in urban areas and 35 percent of men in rural areas were within 30 minutes of the place from which they obtain their methods. Eleven percent of users in urban areas and 41 percent of men in rural areas need more than one hour to reach the source of contraceptive supplies.

Among men who are not currently using a modern method, 24 percent of men in urban areas and 38 percent of men in rural areas did not know any place where they could obtain contraceptives; 26 percent of urban men and 9 percent of those in rural areas reported that they were within 30 minutes from their source of contraceptive methods. Even among men who know of at least one family planning method, 20 percent said they did not know a place where they can get modern contraceptives, and only 20 percent were within 30 minutes of the source of modern methods.

As noted in Chapter 4, these findings indicate that contraceptive users in rural areas cover longer distances to reach their source of supplies. More service delivery points need to be established in rural areas to reduce the distances covered before reaching sources of supplies. The findings in this section suggest that apart from lack of knowledge of contraceptive methods, knowledge of the place where methods could be obtained is also lacking. This particularly pertains to men not currently using modern methods.

Intention to Use Family Planning Methods Among Nonusers

Currently married men who were not using a modern contraceptive method at the time of the survey were asked if they were planning to do something to prevent their partners from getting pregnant in the future. According to the results, which are shown in Table 10.11, more than half (56 percent) of men currently not using contraception do not intend to use contraceptive methods in the future. The proportion of men not intending to use contraceptives in the future increases with increasing number of living children. This suggests that men with a large number of living children are more likely to have a negative attitude towards family planning. Therefore, family planning education and counselling should be focused on this population.

Table 10.11 Future use of contraception

Percent distribution of currently married men who are not using a contraceptive method by past experience with contraception and intention to use in the future, according to number of living children, Tanzania 1991/92

Past experience with contraception and future intentions	Number of living children[1]					Total
	0	1	2	3	4+	
Never used contraception						
Intend to use in next 12 months	3.7	8.9	10.1	17.7	8.8	9.5
Intend to use later	10.1	5.5	3.8	4.2	2.7	4.2
Unsure as to timing	2.3	0.0	0.0	0.4	0.4	0.5
Unsure as to intention	24.5	12.1	13.5	15.0	8.8	12.2
Do not intend to use	36.8	41.1	35.0	44.1	48.1	43.7
Missing	0.0	0.0	0.8	1.0	0.2	0.3
Previously used contraception						
Intend to use in next 12 months	1.4	13.5	14.8	5.6	8.7	9.1
Intend to use later	9.9	10.0	11.3	2.4	2.4	5.5
Unsure as to timing	0.0	0.7	0.0	0.0	0.9	0.5
Unsure as to intention	1.8	0.3	1.7	0.4	1.2	1.1
Do not intend to use	7.0	5.4	9.1	7.1	16.8	11.9
Missing	2.4	2.7	0.0	2.1	1.1	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
All currently married nonusers						
Intend to use in next 12 months	5.0	22.3	24.9	23.3	17.5	18.6
Intend to use later	20.0	15.5	15.1	6.6	5.1	9.7
Unsure as to timing	2.3	0.7	0.0	0.4	1.2	1.0
Unsure as to intention	26.4	12.4	15.2	15.5	10.0	13.3
Do not intend to use	43.8	46.5	44.0	51.2	64.9	55.6
Missing	2.4	2.7	0.8	3.1	1.3	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	95	133	131	106	461	926

[1]Includes current pregnancy

Currently married men who indicated that they did not intend to use modern contraceptives were asked to state their reasons. Over half of men (52 percent) said that they did not intend to use modern contraception because they want children (see Table 10.12). Other reasons given were "their wives were menopausal or had a hysterectomy" (21 percent), "lack of knowledge" (9 percent), "opposed to family planning" (4 percent), and "infrequent sex" (4 percent). Men below 30 years were more likely not to use contraceptives because they want children. On the other hand, men above 30 years of age were more likely not to use contraceptive methods because their wives were menopausal or had a hysterectomy. Lack of knowledge and opposition to family planning were also more common among men age 30 years and over.

Table 10.12 Reasons for not using contraception

Percent distribution of men who are not using a contraceptive method and who do not intend to use in the future by main reason for not using, according to age, Tanzania 1991/92

Reason for not using contraception	Age <30	Age 30+	Total
Wants children	82.9	45.1	52.1
Lack of knowledge	3.7	10.1	8.9
Partner opposed	0.3	0.5	0.4
Side effects	1.8	1.0	1.2
Health concerns	0.0	0.1	0.1
Hard to get methods	0.0	0.3	0.3
Religion	0.7	2.4	2.0
Opposed to family planning	1.9	4.6	4.1
Fatalistic	1.8	1.5	1.6
Other people opposed	0.0	0.1	0.1
Infrequent sex	2.6	3.7	3.5
Difficult to be pregnant	0.0	0.1	0.0
Menopausal, had hysterectomy	0.3	25.8	21.1
Inconvenient	0.0	0.7	0.6
Not married	0.3	0.0	0.1
Other	0.0	2.4	1.9
Don't know	3.7	1.7	2.0
Total	100.0	100.0	100.0
Number	95	419	515

Table 10.13 Preferred method of contraception for future use

Percent distribution of currently married men who are not using a contraceptive method but who intend to use in the future by preferred method, according to whether they intend to use in the next 12 months or later, Tanzania 1991/92

Preferred method of contraception	Intend to use: In next 12 months	Intend to use: After 12 months	Total[1]
Pill	44.7	34.5	40.2
IUD	2.4	0.5	1.8
Injections	7.8	13.8	9.4
Condom	12.8	13.1	12.8
Female sterilisation	8.4	10.7	9.9
Male sterilisation	0.7	0.0	0.5
Periodic abstinence	16.3	22.8	18.5
Mucus method	0.6	0.0	0.4
Withdrawal	3.4	0.0	2.1
Other	0.0	1.2	0.4
Missing	2.9	3.5	3.9
Total	100.0	100.0	100.0
Number	172	90	274

[1]Includes 9 men who were unsure as to timing and 3 missing cases

Nonusers who said that they did intend to use family planning in the future were asked to state the method they would prefer to use. Table 10.13 shows that 40 percent of them preferred to use the pill, and 19 percent preferred periodic abstinence. Other methods preferred were condom (13 percent), female sterilization (10 percent), injections (9 percent), withdrawal (2 percent), and IUD (2 percent). Less than one percent preferred male sterilization or the mucus method. Men who intend to use in the next 12 months were more likely to say they wanted to use the pill.

Approval of Family Planning

All male respondents were asked if they had heard family planning messages on radio or television in the month preceding the survey (see Table 10.14). A majority of men (68 percent) said they did not hear any family planning message on the radio or television. Thirty-one percent reported that they had heard a message on family planning on the radio, and less than one percent said that they had heard family planning messages on television. Even in Zanzibar where there is a television system, less than 3 percent of men reported hearing family planning messages on television. This indicates that the television system is not used to promote use of family planning methods.

Table 10.14 Family planning messages on radio and television

Percent distribution of all men by whether they have heard a family planning message on radio or on television in the month preceding the survey, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Heard family planning message on radio or on television: Neither	Radio only	Television only	Both	Missing	Total	Number
Residence							
Mainland	67.5	31.5	0.5	0.5	0.1	100.0	2063
Dar es Salaam	65.6	34.4	0.0	0.0	0.0	100.0	151
Other urban	56.6	40.7	1.5	1.2	0.0	100.0	402
Rural	70.6	28.7	0.2	0.3	0.1	100.0	1510
Zanzibar	69.9	19.6	2.9	7.6	0.0	100.0	51
Region							
Dodoma	60.5	39.5	0.0	0.0	0.0	100.0	173
Arusha	65.9	34.1	0.0	0.0	0.0	100.0	124
Kilimanjaro	43.5	52.8	2.2	1.5	0.0	100.0	128
Tanga	40.4	59.6	0.0	0.0	0.0	100.0	90
Morogoro	56.6	40.1	0.0	3.2	0.0	100.0	120
Coast	67.5	31.2	0.0	1.3	0.0	100.0	34
Lindi	72.2	27.8	0.0	0.0	0.0	100.0	47
Mtwara	95.1	4.9	0.0	0.0	0.0	100.0	109
Ruvuma	59.5	40.5	0.0	0.0	0.0	100.0	70
Iringa	67.4	32.6	0.0	0.0	0.0	100.0	117
Mbeya	82.6	16.0	1.4	0.0	0.0	100.0	103
Singida	64.9	35.1	0.0	0.0	0.0	100.0	67
Tabora	80.4	19.6	0.0	0.0	0.0	100.0	73
Rukwa	70.9	26.3	0.0	1.8	1.1	100.0	51
Kigoma	78.6	20.7	0.0	0.0	0.7	100.0	79
Shinyanga	69.8	27.6	1.4	0.6	0.6	100.0	177
Kagera	92.5	7.5	0.0	0.0	0.0	100.0	121
Mwanza	74.8	22.6	2.0	0.6	0.0	100.0	143
Mara	43.9	55.3	0.0	0.8	0.0	100.0	85
Education							
No education	85.8	13.7	0.4	0.0	0.1	100.0	418
Primary incomplete	68.1	30.7	0.6	0.5	0.2	100.0	625
Completed primary	63.5	35.1	0.4	1.0	0.1	100.0	878
Secondary/Higher	45.0	53.0	1.1	0.9	0.0	100.0	192
Total	67.6	31.2	0.5	0.6	0.1	100.0	2114

Men in urban areas were more likely to hear family planning messages on the radio than those in rural areas. With the exception of Tanga, Kilimanjaro, and Mara, a majority of men in all regions had not heard family planning messages on the radio or television. Uneducated men are more likely not to hear family planning messages than educated men.

Table 10.15 presents results from a question on whether men believe it is acceptable to use radio or television to disseminate family planning messages. A majority of men (74 percent) think it is acceptable to do so. The acceptability of family planning messages is high across all ages, although the proportion of men stating that family planning messages on the radio or television are not acceptable increases among men above 39 years of age. The acceptability of family planning messages on the radio or television is relatively low in rural areas. A substantial proportion of men (more than 20 percent) in Zanzibar, Shinyanga, and Iringa said it was not acceptable to disseminate family planning messages on radio or television. Educated men are more likely to accept family planning messages on radio or television than uneducated men.

To obtain more direct information about the acceptability of family planning methods, currently married men who are not sterilized and who know about modern contraceptive methods were asked if they approve of the use of family planning methods (see Table 10.16). In a majority of couples (63 percent) both men and their wives approve of family planning, whereas in only 8 percent of couples both the man and wife disapproved of family planning methods. Approval of family planning varies tremendously with background characteristics. Men below 20 years of age were less likely to approve of family planning than other men. Educated men were more likely to approve family planning than uneducated men and also to know their wives' opinion of family planning.

Table 10.15 Acceptability of the use of mass media for disseminating family planning messages

Percentage of men who believe that it is acceptable to have messages about family planning on radio or television, by selected background characteristics, Tanzania 1991/92

Background characteristic	Acceptable	Not acceptable	Don't know/ Missing	Total	Number
Age					
15-19	61.0	9.1	29.9	100.0	499
20-24	79.8	8.7	11.5	100.0	308
25-29	84.6	8.3	7.0	100.0	262
30-34	78.2	11.9	9.8	100.0	256
35-39	82.4	9.8	7.9	100.0	201
40-44	75.1	17.6	7.4	100.0	159
45-49	71.0	19.6	9.4	100.0	155
50-54	68.4	19.4	12.2	100.0	127
55+	69.4	18.6	11.9	100.0	148
Residence					
Mainland	73.7	11.8	14.6	100.0	2063
Dar es Salaam	94.1	0.6	5.3	100.0	151
Other urban	83.6	8.1	8.3	100.0	402
Rural	69.0	13.9	17.2	100.0	1510
Zanzibar	71.0	23.2	5.9	100.0	51
Region					
Dodoma	77.4	16.5	6.1	100.0	173
Arusha	99.4	0.6	0.0	100.0	124
Kilimanjaro	98.7	1.3	0.0	100.0	128
Tanga	96.1	3.9	0.0	100.0	90
Morogoro	78.7	14.9	6.4	100.0	120
Coast	81.8	8.0	10.2	100.0	34
Lindi	76.9	13.9	9.2	100.0	47
Mtwara	59.9	10.6	29.4	100.0	109
Ruvuma	76.3	10.8	12.9	100.0	70
Iringa	72.2	21.4	6.4	100.0	117
Mbeya	78.4	11.9	9.7	100.0	103
Singida	78.3	13.5	8.2	100.0	67
Tabora	63.2	14.6	22.2	100.0	73
Rukwa	78.0	16.4	5.7	100.0	51
Kigoma	72.5	2.8	24.7	100.0	79
Shinyanga	41.1	22.8	36.0	100.0	177
Kagera	53.1	12.4	34.6	100.0	121
Mwanza	49.4	19.4	31.2	100.0	143
Mara	71.9	12.0	16.1	100.0	85
Education					
No education	50.9	22.3	26.8	100.0	418
Some primary	69.4	13.9	16.7	100.0	625
Completed primary	83.2	7.6	9.1	100.0	878
Secondary/Higher	92.7	3.9	3.4	100.0	192
Total	73.6	12.0	14.4	100.0	2114

Table 10.16 Attitudes of couples toward family planning

Among currently married non-sterilised men who know a contraceptive method, the percentage who approve of family planning, by their perception of their wife's attitude and selected background characteristics, Tanzania 1991/92

Background characteristic	Both approve	Respondent approves: Wife disapproves	Respondent approves: Unsure of wife	Respondent disapproves: Wife approves	Respondent disapproves: Unsure of wife	Both disapprove	Missing	Total	Number
Age									
15-19	*	*	*	*	*	*	*	100.0	8
20-24	68.4	3.3	4.2	9.7	5.3	5.5	3.5	100.0	82
25-29	66.0	4.5	9.1	4.9	1.4	5.5	8.6	100.0	152
30-34	67.4	1.5	7.5	4.3	4.8	6.5	8.0	100.0	184
35-39	71.1	5.5	6.8	2.6	2.8	8.7	2.5	100.0	159
40-44	65.8	1.3	7.7	5.3	11.2	5.0	3.7	100.0	120
45-49	53.5	3.4	15.4	2.6	12.8	9.8	2.4	100.0	107
50-54	53.0	10.3	9.6	4.0	1.9	14.3	6.8	100.0	81
55+	52.2	17.1	7.3	2.9	7.0	9.2	4.2	100.0	100
Residence									
Mainland	63.9	5.2	8.3	4.4	5.6	7.2	5.4	100.0	967
Dar es Salaam	(93.1)	(0.0)	(2.4)	(0.0)	(0.0)	(1.8)	(2.6)	(100.0)	50
Other urban	64.2	8.6	11.0	3.1	2.7	5.1	5.3	100.0	231
Rural	61.6	4.4	7.8	5.2	7.0	8.3	5.6	100.0	686
Zanzibar	(41.6)	(6.6)	(16.6)	(1.5)	(4.4)	(29.4)	(0.0)	(100.0)	27
Education									
No education	44.2	6.3	13.4	5.2	11.7	13.5	5.8	100.0	200
Primary incomplete	58.2	9.1	7.5	4.1	7.8	8.8	4.5	100.0	307
Completed primary	72.9	2.6	6.2	4.7	2.1	5.3	6.2	100.0	388
Secondary/Higher	79.9	1.4	11.0	1.8	0.0	3.2	2.8	100.0	97
Total	63.3	5.2	8.5	4.3	5.6	7.8	5.2	100.0	993

Note: Rates shown in parentheses are based on 25-49 men, whereas an asterisk means the rate is based on fewer than 25 men and has been suppressed.

10.3 Nuptiality and Sexual Intercourse

Factors other than contraception that affect a woman's risk of becoming pregnant are considered in this section. This includes nuptiality, as well as more direct measures of the beginning of exposure to pregnancy and the level of exposure, i.e., age at first sexual intercourse and the frequency of intercourse.

Marital Status

Table 10.17 shows the current marital status of the eligible men at the time of the survey. The term "married" refers to civil, religious, or traditional marriage, or just living together. Men who are widowed, divorced, or not living together (separated) are classified as "ever married" or "ever in union." Very few teenage men have married (about 2 percent). Among men 20-24 year, 37 percent are ever married and above

Table 10.17 Current marital status by age

Percent distribution of men by current marital status, according to age, Tanzania 1991/92

Age group	Marital status				Total	Number of men
	Never married	Married, monoga-mous	Married, polyga-mous	Widowed/ Divorced		
15-19	98.0	1.8	0.0	0.2	100.0	499
20-24	63.3	30.2	2.1	4.4	100.0	308
25-29	30.0	57.1	7.6	5.4	100.0	262
30-34	13.3	69.1	11.1	6.5	100.0	256
35-39	4.5	74.6	13.1	7.8	100.0	201
40-44	3.2	75.4	15.7	5.7	100.0	159
45-49	1.1	70.4	18.3	10.3	100.0	155
50-54	3.7	71.0	16.3	9.0	100.0	127
55+	1.1	65.5	23.8	9.6	100.0	148
Total	38.7	47.0	9.0	5.3	100.0	2114

age 24, 70 percent or more are ever married. About 56 percent of men are currently married (compared to 54 percent observed from the 1988 Population Census), of which 47 percent are in monogamous unions and 9 percent are in polygamous unions.

Polygyny

Table 10.18 shows the distribution of currently married men in a polygynous union (expressed as a percentage of all married men) by background characteristics. Overall, 16 percent of currently married men are in a polygynous marriage. The proportion of married men in a polygynous union increases with age of the respondents. Polygynous unions are more common in rural areas than in Dar es Salaam or other urban areas. Iringa, Singida, Mara, and Arusha have the highest proportion of married men in a polygynous union and Dar es Salaam, Morogoro, Mtwara, and Kilimanjaro have the lowest proportion. The proportions of educated and uneducated married men in polygynous unions are not significantly different.

The majority of polygynous marriages consisted of one man and two wives; 14 percent of all currently married men had two wives and only 2 percent had three or more wives (table not shown).

Table 10.18 Polygyny

Percentage of currently married men in a polygynous union, by age and selected background characteristics, Tanzania 1991/92

Background characteristic	Total	Number
Age		
15-19	*	9
20-24	11.7	100
25-29	13.8	169
30-34	14.9	205
35-39	17.2	176
40-44	20.6	144
45-49	18.7	137
50+	26.7	243
Residence		
Mainland	16.2	1153
Dar es Salaam	2.6	63
Other urban	13.1	234
Rural	18.0	857
Zanzibar	12.2	30
Region		
Dodoma	16.1	121
Arusha	25.3	54
Kilimanjaro	7.5	50
Tanga	16.7	58
Morogoro	5.3	69
Coast	(9.0)	17
Lindi	(21.4)	32
Mtwara	7.2	61
Ruvuma	16.3	44
Iringa	32.3	73
Mbeya	10.5	59
Singida	(32.2)	36
Tabora	(23.5)	38
Rukwa	(15.7)	32
Kigoma	18.5	50
Shinyanga	21.1	92
Kagera	12.9	78
Mwanza	9.6	82
Mara	29.3	44
Education		
No education	19.9	297
Primary incomplete	16.8	357
Primary completed	12.1	424
Secondary/Higher	18.7	106
Total	16.1	1184

Note: Figures in parentheses are based on 25-49 men, whereas an asterisk means the rate is based on fewer than 25 men and has been suppressed.

Age at First Marriage

Table 10.19 shows the percentage distribution of ever married men by specific exact ages at marriage according to their current age. The overall median age at first marriage among men age 25-49 years is 25 years. Less than 1 percent of ever married men age 20-49 years were married by 15 years of age. This increased to 4 percent by 18 years, 18 percent by 20 years, 34 percent by 22 years, and 49 percent by 25 years. Hence, 18 percent of respondents got married during adolescence.

Table 10.19 Age at first marriage

Percentage of men who were first married by exact age 15, 18, 20, 22, and 25, and median age at first marriage, according to current age, Tanzania 1991/92

Current age	Percentage of men who were first married by exact age: 15	18	20	22	25	Percentage who had never married	Number of men	Median age at first marriage
15-19	0.0	NA	NA	NA	NA	98.0	499	a
20-24	0.8	5.1	20.6	NA	NA	63.3	308	a
25-29	0.6	3.0	13.5	25.1	50.6	30.0	262	24.9
30-34	0.2	3.2	13.2	28.7	47.1	13.3	256	25.2
35-39	0.0	3.4	19.7	33.1	46.7	4.5	201	25.2
40-44	0.4	7.2	21.7	43.7	61.0	3.2	159	22.7
45-49	0.4	4.9	19.3	43.3	61.3	1.1	155	23.0
50-54	1.3	3.9	13.0	32.4	52.5	3.7	127	24.0
55+	0.6	5.2	26.7	44.3	48.1	1.1	148	25.1
20-49	0.5	4.3	18.1	33.8	48.9	20.4	1615	-
25-49	0.5	4.2	17.5	34.3	51.7	10.3	1307	24.6

NA = Not applicable
[a]Omitted because less than 50 percent of the men in the age group *x* to *x+4* were first married by age *x*

The median age at first marriage has not changed appreciably across age cohorts. This suggests that the age at first marriage in Tanzania has not changed significantly over time. However, these findings may be affected by recall problems among older men who are likely to have been married many years ago and hence, less likely to remember the exact age at the time of the first marriage. The comparison of the median age at first marriage for women and men shows that women tend to marry earlier than men. Among women and men aged 25-49 years, the median age at first marriage was 18 years for women (Table 5.14) and 25 years for men.

Table 10.20 shows the median age at first marriage by urban/rural residence and education. In general, the median age at first marriage does not vary much by residence. Men with no education marry earlier than men with at least some education.

Table 10.20 Median age at first marriage

Median age at first marriage among men age 25-49 years, by current age and selected background characteristics, Tanzania 1991/92

Background characteristic	Current age								Men age 20-49	Men age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+		
Residence										
Mainland	a	24.9	25.3	25.2	22.6	23.0	24.0	25.2	25.1	24.6
Dar es Salaam	a	a	26.7	26.4	21.3	25.3	22.8	18.2	a	a
Other urban	a	a	29.3	25.3	25.6	25.4	28.0	22.0	a	a
Rural	a	24.0	23.4	25.0	22.5	22.0	23.5	25.3	a	23.6
Zanzibar	a	a	24.2	20.7	27.8	20.8	25.0	20.5	a	23.7
Education										
No education	19.0	a	21.3	24.0	20.5	20.8	24.8	21.8	a	22.1
Primary incomplete	a	22.0	25.4	22.7	22.3	22.8	22.5	25.6	a	22.8
Completed primary	a	a	25.2	25.5	23.6	24.5	28.7	25.2	a	a
Secondary/Higher	a	a	29.4	26.9	25.7	25.4	28.7	25.4	a	a
Total	a	24.9	25.2	25.2	22.7	23.0	24.0	25.1	a	24.6

[a]Omitted because less than 50 percent of the men in the age group *x* to *x+4* were first married by age *x*

Age at First Sexual Intercourse

Although age at first marriage is commonly used as a proxy for exposure to intercourse, the two events do not necessarily coincide exactly. Sexual relations may begin prior to marriage. To obtain more objective information about this topic, TDHS asked men to report the age at which they first had sexual intercourse (see Table 10.21).

Table 10.21 Age at first sexual intercourse

Percentage of men who had first sexual intercourse by exact age 15, 18, 20, 22, and 25, and median age at first intercourse, according to current age, Tanzania 1991/92

Current age	Percentage of men who had first intercourse by exact age:					Percentage who never had intercourse	Number of men	Median age at first intercourse
	15	18	20	22	25			
15-19	29.6	NA	NA	NA	NA	39.7	499	a
20-24	26.5	68.1	86.8	NA	NA	6.2	308	16.2
25-29	19.4	60.1	79.8	86.1	93.0	2.2	262	16.8
30-34	17.2	56.5	78.4	85.0	92.7	0.4	256	17.5
35-39	11.6	47.3	76.8	90.2	93.0	0.8	201	18.1
40-44	21.2	58.7	77.7	86.8	90.4	0.0	159	16.9
45-49	13.9	48.4	75.9	84.6	87.0	0.9	155	18.1
50-54	20.3	53.9	74.7	86.4	91.3	1.7	127	17.5
55+	17.4	53.7	76.8	86.4	88.2	0.7	148	17.6
20-49	19.0	57.1	79.3	87.6	91.6	2.0	1615	17.2
25-49	17.2	54.5	77.5	86.5	91.2	1.0	1307	17.5

NA = Not applicable
[a]Omitted because less than 50 percent of the men in the age group *x* to *x+4* had had intercourse by age *x*

The results show that 19 percent of men aged 20-49 years have had intercourse by 15 years of age. The percentage of men reporting who had first intercourse increased to 57 percent by 18 years, 79 percent by 20 years, 88 percent by 22 years, and 92 percent by 25 years. The overall median age at first sexual intercourse (among men aged 25-49 years) was 18 years, which is about 7 years less than the median age at first marriage. Adolescent sexuality is not uncommon among men covered by TDHS. Over two-thirds (79 percent) of men aged 20-49 years of age were sexually active by 20 years of age.

Comparing cohorts suggests that there have been slight changes in the median age at first sexual intercourse during the past thirty years (Table 10.21). The median age at first intercourse was 18 years among men age 45 years and above and 16 years among men less than 25 years of age.

The age at initiation of sex seems to be similar in rural and urban areas (Table 10.22). However, the median age at first sexual intercourse is slightly higher among educated men. This suggests that educated men tend to delay sexual relations somewhat compared to less educated counterparts, although differences are small.

Table 10.22 Median age at first intercourse

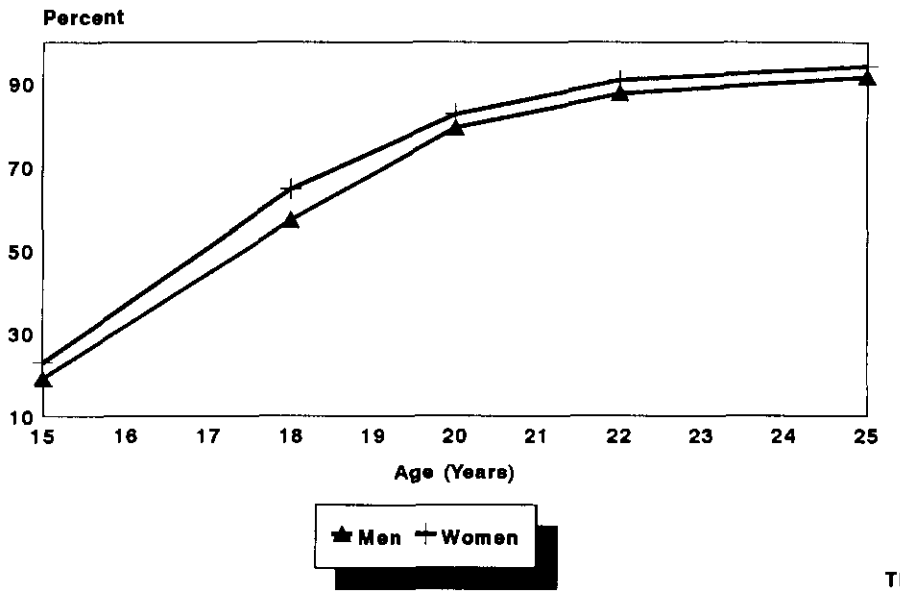
Median age at first sexual intercourse among men age 25-49 years, by current age and selected background characteristics, Tanzania 1991/92

Background characteristic	Current age								Men age 20-49	Men age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+		
Residence										
Mainland	16.2	16.8	17.5	18.1	16.8	18.1	17.4	17.6	17.1	17.4
Dar es Salaam	16.8	17.5	17.3	17.1	16.4	18.4	16.4	16.7	16.9	16.9
Other urban	15.5	16.7	17.8	18.5	18.5	18.1	17.5	15.9	17.2	17.7
Rural	16.2	16.7	17.3	17.9	16.8	18.0	18.0	18.2	17.1	17.4
Zanzibar	a	20.9	20.3	16.9	19.8	15.9	20.5	17.3	19.4	18.9
Education										
No education	14.8	15.6	15.9	19.0	15.6	17.3	17.8	17.5	16.8	17.1
Primary incomplete	16.7	16.7	18.2	17.1	18.3	18.2	18.0	17.0	17.7	17.9
Primary completed	16.3	16.8	17.2	18.2	16.8	16.9	18.4	17.4	16.9	17.2
Secondary/Higher	17.3	18.2	18.5	17.8	17.2	18.5	15.0	20.6	18.2	18.3
Total	16.2	16.8	17.5	18.1	16.9	18.1	17.5	17.6	17.2	17.5

[a]Omitted because less than 50 percent of the men in the age group *x* to *x+4* had had intercourse by age *x*

Women appear to start sexual activity slightly earlier than men, but the differences are small (see Figure 10.3). Eighty-three percent of women aged 20-49 years had sexual intercourse by 20 years of age (see Table 5.6) compared to 79 percent of men by the same age. The median age at first sexual intercourse was similar for both men and women.

Figure 10.3
Percentage of Men and of Women Who Have Ever Had Sexual Intercourse by Exact Age



Recent Sexual Activity

In the absence of contraception, the probability of pregnancy is related to the frequency of intercourse. Thus, information on sexual activity can be used to refine measures of exposure to pregnancy. Table 10.23 presents data on sexual activity by background characteristics among men who have ever had intercourse. Men were considered to be sexually active if they had intercourse at least once in the four weeks prior to the survey.

Among men who ever had sexual intercourse, 78 percent were sexually active in the month prior to the survey. Sexual activity appeared to vary little by age. Never married men were less likely to be sexually active in the month preceding the survey than ever married men. Sexual activity was relatively low in Dar es Salaam and among men with secondary education and above. As expected, men using contraceptive methods are more likely to be sexually active than those who do not. Data on the number of sexual partners are presented in Chapter 11.

Recent sexual activity was noted to be slightly higher among men than women. About 78 percent of men reported being sexually active in the last four weeks, compared to 61 percent of women (see Table 5.8) for the same period.

Table 10.23 Recent sexual activity

Percent of men who have ever had intercourse by sexual activity in the four weeks prior to the survey according to background characteristics, Tanzania 1991/92

Background characteristic	Active last 4 weeks	Number
Age		
15-19	76.3	301
20-24	77.3	289
25-29	72.9	256
30-34	78.4	255
35-39	78.2	199
40-44	86.5	159
45-49	79.4	153
50-54	68.8	125
55+	81.6	147
Duration of marriage		
<4	83.1	271
5-9	78.8	207
10-14	80.5	196
15-19	82.9	136
20-24	82.3	178
25+	79.6	289
Don't know/Not shown	71.0	19
Never in union	69.9	589
Residence		
Mainland	77.8	1847
Dar es Salaam	59.1	144
Other urban	80.3	366
Rural	79.1	1337
Zanzibar	63.5	36
Region		
Dodoma	86.0	150
Arusha	60.8	116
Kilimanjaro	68.2	114
Tanga	85.6	85
Morogoro	87.9	110
Coast	79.9	33
Lindi	81.9	44
Mtwara	93.5	106
Ruvuma	84.9	68
Iringa	57.9	99
Mbeya	55.4	89
Singida	79.4	58
Tabora	83.4	63
Rukwa	81.9	45
Kigoma	75.0	61
Shinyanga	90.0	161
Kagera	73.4	100
Mwanza	85.8	124
Mara	94.4	76
Education		
No education	80.0	381
Primary incomplete	81.2	527
Primary completed	79.4	798
Secondary/Higher	52.8	178
Contraceptive method		
No method	76.1	1569
Sterilisation	(66.6)	22
Periodic abstinence	80.3	96
Other	85.3	144
Total	77.5	1884

Note: Figures in parentheses are based on 25-49 men

10.4 Fertility Preferences

In the TDHS, currently married men were asked about their desire for children. They were also asked about the ideal number of children they wanted by gender, and how long they would like to wait before the birth of the next child.

Desire for More Children

In Tanzania where contraceptive prevalence rate is low and cultural influences are still strong, one would expect that many currently married men would have desired more children. As Tables 10.24 and 10.25 and Figure 10.4 show, 41 percent of currently married men indicated they wanted another child soon, 35 percent wanted another child later, and 3 percent were undecided when to have another child. Fifteen percent said that they wanted no more children and 2 percent were sterilized. The proportion who want no more children increases with age and the number of living children.

Table 10.24 Fertility preference by number of living children

Percent distribution of currently married men by desire for more children, according to number of living children, Tanzania 1991/92

Desire for children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Want another soon[2]	77.0	40.9	42.0	42.4	32.4	28.9	21.4	40.5
Want another later[3]	9.9	45.9	28.0	41.0	41.6	18.0	32.1	34.9
Want another, undecided when	12.1	1.8	3.3	2.8	0.0	4.1	1.5	3.0
Undecided	0.0	0.6	0.8	0.6	6.3	0.6	2.1	1.4
Want no more	0.0	6.5	22.5	8.1	13.8	31.3	31.8	14.5
Wife sterilised	0.0	1.7	1.1	0.2	3.0	1.2	7.2	1.9
Wife declared infecund	0.0	1.5	0.4	2.8	1.2	2.0	1.6	1.3
Other answer	0.0	0.8	1.1	2.1	1.7	2.5	0.6	1.2
Missing	1.0	0.3	0.9	0.0	0.0	11.3	1.6	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	96	338	242	178	127	77	125	1184

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

Table 10.25 Fertility preferences by age

Percent distribution of currently married men by desire for more children, according to age, Tanzania 1991/92

Desire for children	Current age								Total
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+	
Have another soon[1]	51.0	40.7	47.6	39.6	44.7	36.9	33.9	25.8	40.5
Have another later[2]	37.6	52.2	41.2	46.8	32.6	21.1	10.9	24.4	34.9
Another, undecided when	1.6	1.8	6.9	0.6	3.5	2.3	5.0	1.3	3.0
Undecided	0.0	0.0	0.5	0.6	0.0	7.8	2.3	0.9	1.4
Want no more	8.7	4.4	3.4	9.4	14.8	21.1	39.1	28.8	14.5
Wife sterilised	0.0	0.0	0.0	1.3	2.3	4.9	7.4	0.9	1.9
Wife declared infecund	0.0	0.0	0.0	0.0	0.5	3.9	1.5	5.8	1.3
Other answer	0.0	0.0	0.5	1.1	1.6	1.4	0.0	3.9	1.2
Missing	1.0	1.0	0.0	0.5	0.0	0.7	0.0	8.1	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	100	169	205	176	144	137	111	114	1184

Note: The 15-19 age group was omitted because less than 50 percent were married.
[1]Want next birth within 2 years
[2]Want to delay next birth for 2 or more years

Figure 10.4
Fertility Preferences among Currently Married Men 15-60

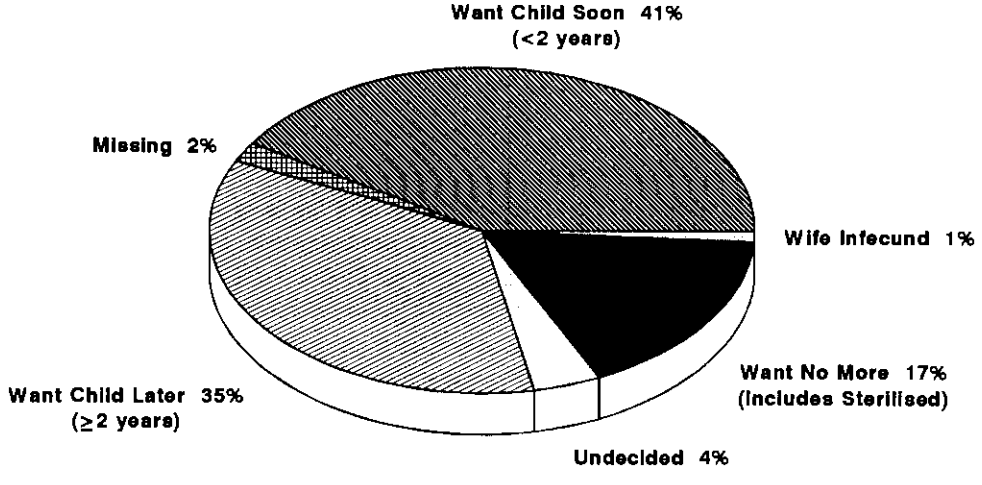


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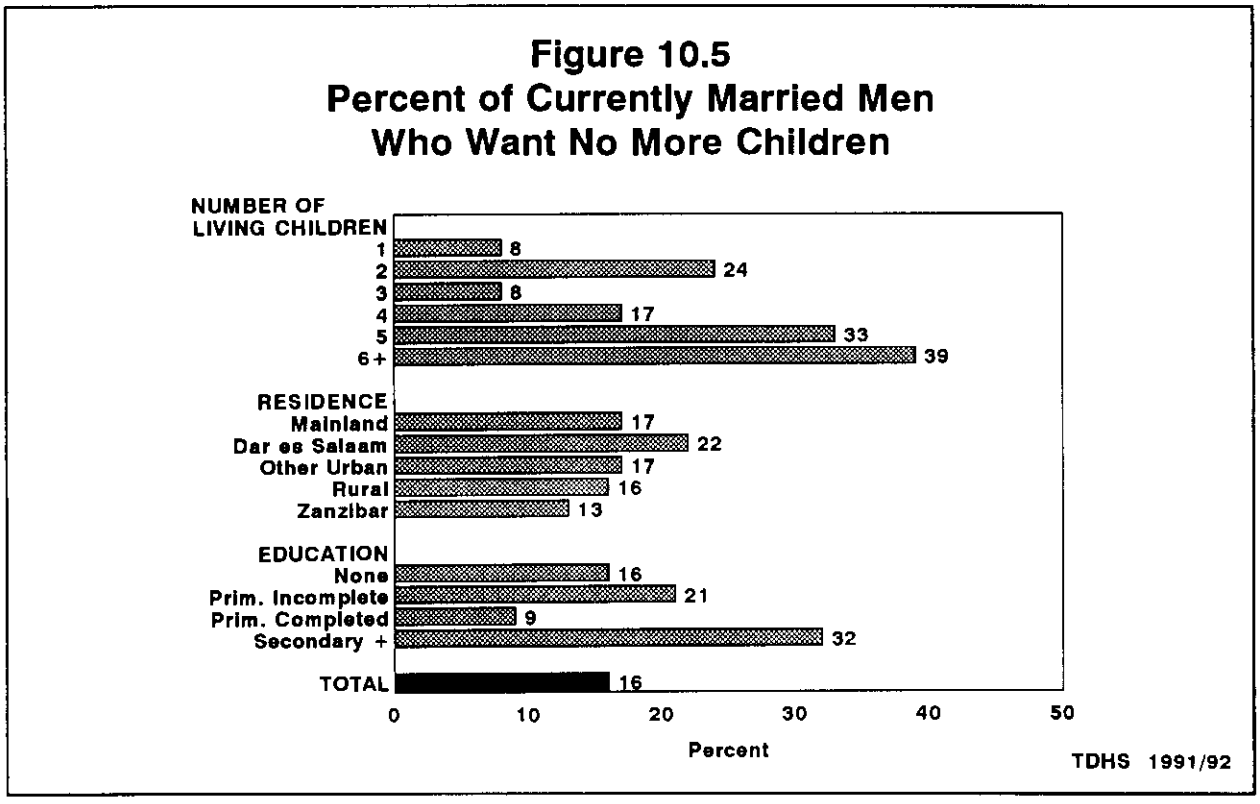
Figure 10.5 presents the percent of currently married men who want no more children by the number of living children, rural/urban residence, and educational attainment. The proportion of men who want no more children in rural areas is not significantly different from that in the urban areas. However, the proportion of men with secondary or higher education who want no more children is about twice that of men with primary or no education.



Ideal and Actual Number of Children

Though men do not bear children, they have a very strong influence and, in many cases, the final say, on the number of children they would like to have. Table 10.26 shows the percent distribution of all men by ideal number of children and mean ideal number of children for all men and currently married men, according to number of living children. About 11 percent of the men gave a non-numeric response. Twenty-eight percent of men with no child want four children and 30 percent of them want at least six children. Among men with one child, 19 percent wanted four children and 48 percent wanted six or more children. Among men with 6 or more living children, 14 percent of them would have wanted to have four children and 58 percent were satisfied with the number of children they have, that is six or more children. Overall, irrespective of the number of children still alive, 22 percent of all men wanted four children and 43 percent of them wanted six or more children.

As observed in Chapter 6, there is a correlation between the actual and ideal family size. The mean ideal number of children increases from 5.4 among childless men, to 6.7 among men with two living children, and to 8.9 among men with six or more children. Figure 10.6 shows the mean ideal number of children for all men by age and selected background characteristics. Overall, men with secondary or higher education had the smallest mean ideal number of children, and men with no education had the largest ideal family size (9 children). The mean ideal number of children varies among men of different ages. For example, the youngest men would like to have 5 children, men in the age 20-24 age group would like 6 children, men age 35-39 would like 7 children, and men age 45-49 years would like 9 children.

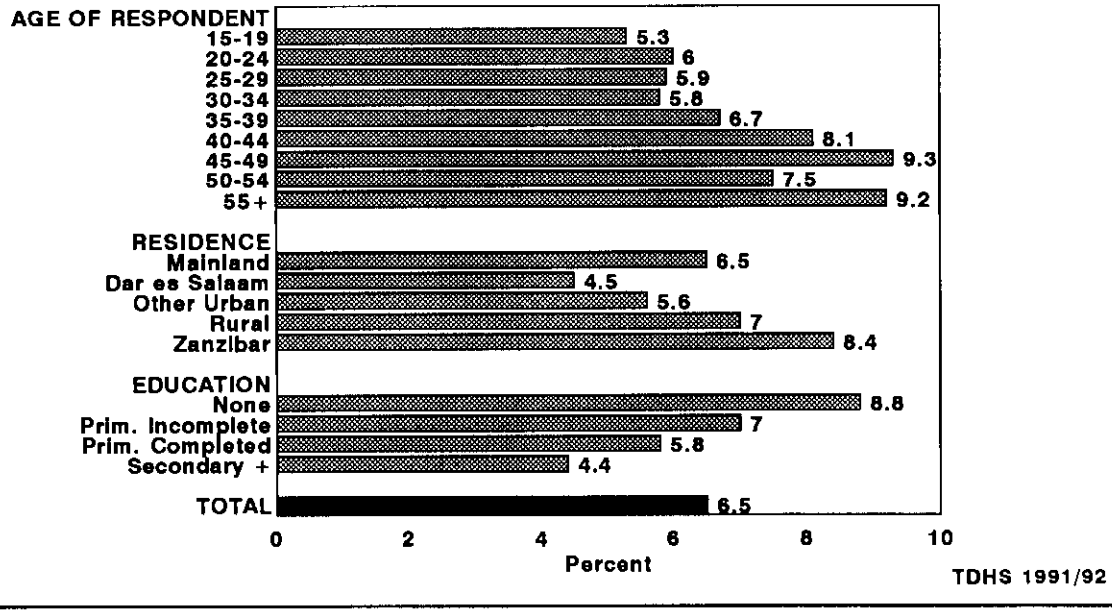
Table 10.26 Ideal number of children

Percent distribution of all men by ideal number of children and mean ideal number of children for all men and for currently married men, according to number of living children, Tanzania 1991/92

Ideal number of children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
1	0.4	0.1	0.0	0.0	0.0	3.1	0.0	0.3
2	3.4	2.0	2.4	0.6	1.3	1.9	2.6	2.5
3	9.9	4.9	3.8	1.5	0.4	3.4	8.8	6.5
4	28.2	19.2	20.2	18.1	9.3	12.8	13.6	21.9
5	18.8	14.9	15.2	18.0	7.1	3.1	4.8	15.3
6+	30.4	48.0	48.1	50.4	68.1	60.6	57.6	43.0
Non-numeric response	9.0	10.5	10.4	11.6	13.7	15.1	12.6	10.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	912	380	274	195	137	83	132	2114
Mean ideal number	5.4	7.0	6.7	7.5	8.4	8.3	8.9	6.5
Number of men	830	340	246	173	118	71	115	1893
Mean for men in union	5.6	7.2	6.7	7.6	8.5	8.4	8.8	7.4
Number of men in union	85	307	217	157	109	66	109	1049

Note: The means exclude men who gave non-numeric responses.
[1]Includes current pregnancy

Figure 10.6
Mean Ideal Number of Children among All Men



10.5 Couples

Background Characteristics

Table 10.27 presents the percent distribution of husbands by age, number of children, type of union, level of education, urban/rural residence, and region (each couple is counted once). Relatively few husbands (9 percent) are under 25 years of age and only 23 percent of them are under 30 years of age. One in five of the unions considered here are polygynous. It is noted that about 6 percent of couples had different opinions on their marital status; the husbands mostly reported polygynous status, and the wives reported that their husband had only one wife.

Table 10.28 shows that men tend to marry younger women. In 94 percent of the couples observed, husbands were older than wives. In about one-third of couples, husbands were 10 years or more older than their wives.

Knowledge and Use of Contraception

There is a general feeling that matters relating to family planning are focused too often on women despite the fact that husbands are equal partners in the reproductive process and have a greater responsibility for family decisions. Moreover, women often look at their husbands as a constraint on the use of contraception.

Table 10.29 shows the percentage distribution of contraceptive knowledge among married couples by specific method. In about 68 percent of the couples both husband and wife know a modern method of family planning, in 17 percent of the couples only men were aware of any modern method, and in 9 percent of the couples only the wives knew about a modern method of family planning. The proportion of couples in which both the husband and wife had no knowledge of modern contraception was small (7 percent). For most methods, if only one spouse knew the method, it was most likely to be the husband, except in the case of injections and "other" methods.

Table 10.27 Background characteristics of husbands

Percent distribution of husbands by selected background characteristics, Tanzania 1991/92

Background characteristic	Weighted percent	Number of men	
		Weighted	Un-weighted
Age			
15-19	0.7	6	10
20-24	8.2	78	87
25-29	14.5	139	143
30-34	19.1	182	164
35-39	16.7	159	148
40-44	13.4	128	132
45-49	11.3	108	115
50-54	9.4	90	72
55+	6.8	65	72
Number of children			
<2	35.3	337	330
3-4	26.0	248	220
5+	38.7	370	393
Type of union			
Monogamous	80.5	768	750
Polygamous	19.5	187	193
Education			
No education	24.0	229	229
Primary	68.5	654	649
Secondary/Higher	7.5	72	65
Residence			
Mainland	97.9	935	903
Dar es Salaam	4.8	46	40
Other urban	17.3	165	102
Rural	75.8	723	761
Zanzibar	2.1	20	40
Region			
Dodoma	8.8	84	40
Arusha	3.6	34	25
Kilimanjaro	3.7	36	31
Tanga	5.5	53	42
Morogoro	5.9	56	54
Coast	0.9	9	25
Lindi	1.6	15	21
Mtwara	4.8	46	40
Ruvuma	2.0	19	27
Iringa	6.9	66	51
Mbeya	5.7	54	35
Singida	3.2	30	40
Tabora	3.8	36	51
Rukwa	3.0	29	62
Kigoma	5.0	48	67
Shinyanga	8.4	80	63
Kagera	7.2	69	45
Mwanza	8.0	76	71
Mara	5.2	49	73
All men	100.0	955	943

Table 10.28 Age difference between spouses

Percent distribution of the age difference between spouses according to wife's age

Age	Husband's age - wife's age (in years)					Total	First wives	Second+ wives	Total	Number
	Negative	0-4	5-9	10-14	15+					
15-19	0.5	24.2	38.9	19.0	17.4	100.0	8.9	12.7	9.5	103
20-24	3.4	24.3	38.4	19.2	14.8	100.0	7.9	13.2	8.5	213
25-29	4.3	26.2	42.4	14.7	12.5	100.0	6.9	12.4	7.5	191
30-34	7.3	26.9	25.1	21.7	19.0	100.0	7.8	12.0	8.4	143
35-39	6.1	25.8	31.7	21.8	14.6	100.0	6.9	15.7	7.9	149
40-44	12.3	21.0	28.4	29.0	9.2	100.0	6.5	9.2	6.7	90
45-49	10.5	34.7	31.9	21.5	1.5	100.0	4.6	7.4	5.0	66
Total	5.6	25.7	34.8	20.1	13.8	100.0	7.3	12.3	7.9	955

Table 10.29 Knowledge of methods among married couples

Percent distribution of contraceptive knowledge among married couples by specific method, Tanzania 1991/92

Method	Both know method	Husband, not wife	Wife, not husband	Neither	Total
Any method	70.4	15.8	8.0	5.8	100.0
Any modern method	67.7	16.8	8.8	6.8	100.0
Pill	59.2	16.7	13.3	10.8	100.0
IUD	16.4	17.8	17.5	48.3	100.0
Injection	21.3	17.3	21.6	39.8	100.0
Diaphragm/Foam/Jelly	10.1	27.3	12.3	50.3	100.0
Condom	46.6	24.7	9.6	19.1	100.0
Female sterilisation	38.3	24.1	16.4	21.1	100.0
Male sterilisation	5.1	24.4	4.4	66.1	100.0
Any traditional method	34.5	25.8	13.7	26.0	100.0
Periodic abstinence	16.0	29.1	9.1	45.8	100.0
Mucus method	4.5	18.5	6.0	71.0	100.0
Withdrawal	19.4	26.9	8.4	45.3	100.0
Other	4.1	12.6	18.5	64.8	100.0

Approval of Family Planning

Husbands and wives were asked about their own approval of family planning. Husbands were also asked to state whether they thought their wives approved or disapproved family planning. Figure 10.7 shows the percentage distribution of couples by approval of family planning. Overall, in 59 percent of the couples both husband and wife approved of family planning, and in 9 percent of the couples both disapproved. In 19 percent of the couples, the wives approved but the husbands did not, and in 10 percent of the couples the husbands approved family planning but the wives did not.

Figure 10.7
Spouses Responses on Approval of Family Planning

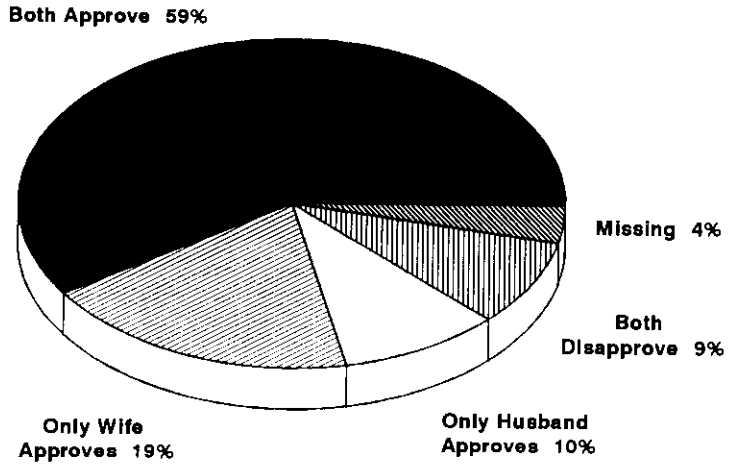


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Table 10.30 shows the perceptions of their wives' attitude towards family planning among husbands who approve of family planning according to background characteristics. Overall, 81 percent of husbands think that their wives approve of family planning as well, 6 percent believe their wives disapprove, and 13 percent don't know what their wives think.

On the other hand, as Table 10.31 shows, both husbands and wives often have wrong ideas about their spouses' opinion on family planning. Actually, husbands are more favourable towards family planning than their wives thought. In 63 percent of the cases, the wife thought that their husband disapproves of family planning, whereas the husband actually approves it; in 16 percent of cases the husband disapproved whereas the wife thought he approved. A significant proportion of wives does not know the husband's opinion; most of these were husbands who approved family planning (60 percent of cases in which the wife did not know). A similar picture emerges when validating the men's responses about the wives' opinions. For instance, in 65 percent of couples

Table 10.30 Attitudes of couples toward family planning

Among currently married non-sterilised men who know a contraceptive method, the percentage who approve of family planning, by their perception of their wife's attitude and selected background characteristics, Tanzania 1991/92

Background characteristic	Respondent approves: Both approve	Respondent approves: Wife disapproves	Respondent approves: Unsure of wife	Number
Age				
<30	82.2	5.3	12.5	152
30-39	83.0	4.4	12.6	254
40-49	81.1	4.2	14.7	154
50 +	72.3	15.5	12.3	99
Residence				
Mainland	81.2	6.1	12.7	648
Dar es Salaam	87.8	4.8	7.4	42
Other urban	82.3	5.1	12.6	130
Rural	80.3	6.4	13.3	476
Zanzibar	(57.7)	(14.6)	(27.7)	12
Education				
No education	60.8	13.7	25.6	116
Primary	83.3	5.3	11.5	478
Secondary/Higher	97.8	0.0	2.2	66
Total	80.8	6.2	13.0	660

Note: Rates shown in parentheses are based on 25-49 men.

in which the husband thought she disapproved, the wife approved of family planning. In general, this shows that there is considerable scope for improvement of communication between spouses.

Table 10.31 Spouse's perception of other spouse's approval of family planning

Percentage distribution of spouse's approval of family planning by other spouse's perception, Tanzania 1991/92

	Husband				
Perception	Approves	Disapproves	Unsure	Total	Number
Believe husband approves	81.2	16.0	2.9	100.0	389
Believe husband disapproves	62.9	34.5	2.7	100.0	206
Don't know	59.6	36.0	4.3	100.0	359
Total	69.1	27.5	3.4	100.0	955
	Wife				
Perception	Approves	Disapproves	Unsure	Total	Number
Believe wife approves	87.0	12.7	0.3	100.0	589
Believe wife disapproves	64.6	35.4	0.0	100.0	144
Don't know	73.6	26.4	0.0	100.0	222
Total	80.5	19.3	0.2	100.0	955

10.6 Desire for More Children

Husbands were asked about their desire for more children. Table 10.32 shows the percentage distribution of couples by desire for more children according to the number of living children each partner has. Overall, in 64 percent of the couples both want more children, in 6 percent of the couples both want no more children, in 4 percent of the couples the wife is infecund and the husband wants more children, in 15

Table 10.32 Desire for more children among couples by number of living children

Percentage distribution of couples by desire for more children, according to number of living children, Tanzania 1991/92

Number of living children	Both want more	Husband wants more, wife infecund	Husband wants more, wife does not	Wife wants more, husband does not	Both want no more	Other	Total	Number of couples
Husband								
0	79.5	14.1	2.4	0.0	0.0	4.0	100.0	72
1-3	82.4	2.3	10.4	1.5	0.2	3.1	100.0	400
4-6	53.3	2.2	19.4	6.2	9.2	9.6	100.0	288
7-9	36.9	3.5	26.8	6.4	15.5	11.0	100.0	121
10+	35.5	5.4	20.6	4.9	19.1	14.4	100.0	74
Wife								
0	84.0	9.6	2.2	2.4	0.0	1.8	100.0	111
1-3	80.5	2.9	8.3	2.6	1.3	4.5	100.0	470
4-6	45.4	1.7	25.5	5.9	9.8	11.7	100.0	269
7+	16.6	4.8	35.6	4.3	26.8	11.9	100.0	105
Total	64.0	3.6	15.4	3.7	6.3	7.0	100.0	955

percent of the couples the husband wants more children but the wife does not want any more children, and in 4 percent of the couples the wife wants more children but the husband did not. Thirty-seven percent of husbands who had 7 or more living children wanted more children in comparison to only 17 percent of women with 7 or more living children.

Table 10.33 shows the percentage distribution of couples by the husband's ideal number of children according to the wife's ideal number of children. Overall, 23 percent of the couples wanted the same number of children and in 32 percent of the couples, the husband wanted more children than the wife. In about 37 percent of the couples the wife wanted more children than the husband. This shows that there is little agreement between husbands and wives on the ideal number of children a couple would like to have.

Table 10.33 Ideal number of children according to spouses

Percent distribution of couples by ideal number of children, according to selected background characteristics, Tanzania 1991/92

Background characteristic	Ideal number same for husband and wife	Husband wants more than wife	Wife wants more than husband	Non-numeric response	Total	Number of couples
Age difference						
Negative	12.7	14.2	61.4	11.7	100.0	53
0-4	23.8	27.5	41.7	7.0	100.0	245
5-9	20.4	37.1	35.7	6.8	100.0	332
10-14	26.1	34.4	29.4	10.2	100.0	192
15+	24.9	29.3	33.4	12.4	100.0	131
Type of union						
Monogamous	24.3	31.1	37.8	6.8	100.0	726
Polygamous	18.6	36.8	33.4	11.2	100.0	161
Different[1]	14.1	26.2	38.1	21.6	100.0	67
Number of more children						
Same	25.6	29.9	37.2	7.3	100.0	497
Different	19.4	33.8	36.9	9.8	100.0	458
Education						
Both none	20.0	34.0	29.2	16.8	100.0	160
Wife some, husband none	12.0	34.1	34.7	19.3	100.0	67
Husband some, wife none	20.1	27.9	42.5	9.5	100.0	228
Both some	26.0	32.5	37.5	4.0	100.0	500
Total	22.6	31.8	37.1	8.5	100.0	955

[1]When asked to define type of union, each partner responded differently.

CHAPTER 11

AIDS KNOWLEDGE AND SEXUAL PRACTICES

The first cases of AIDS were reported in Tanzania in 1983 and, to date, the total is 34,605. This figure is believed to represent only 20 percent of the true number of AIDS cases that have occurred in the country. The National AIDS Control Programme (NACP) estimates that 800,000 healthy individuals are currently infected with HIV and projects that 2 million people will be infected by the year 2000 (NACP, 1992). It is obvious that HIV/AIDS is the major public health problem in Tanzania. In view of the importance of HIV/AIDS in Tanzania, this survey collected information to assess knowledge of HIV/AIDS transmission and prevention from 9,238 women and 2,114 men.

11.1 AIDS Awareness and Knowledge

Table 11.1 and Figure 11.1 show the distribution of AIDS awareness and knowledge of specific modes of AIDS transmission by background characteristics for females and males. It is encouraging to note that most respondents (93 percent of females and 98 percent of males) have heard about AIDS. AIDS awareness is high across all age groups, and in both urban and rural areas. Among both males and females, AIDS awareness is relatively low among respondents with no education (94 percent among men, 86 percent among women).

To obtain more information about AIDS knowledge, respondents were asked to mention how AIDS is transmitted. Knowledge of sexual transmission of AIDS is very high. About 83 percent of females and 90 percent of males mentioned sexual intercourse as a mode of AIDS transmission. Among both sexes, knowledge of other modes of transmission of AIDS, such as contaminated needles or blades, mother to child, and blood transfusion, is low. Overall, the proportion mentioning specific modes of transmission of AIDS increases with increasing level of education.

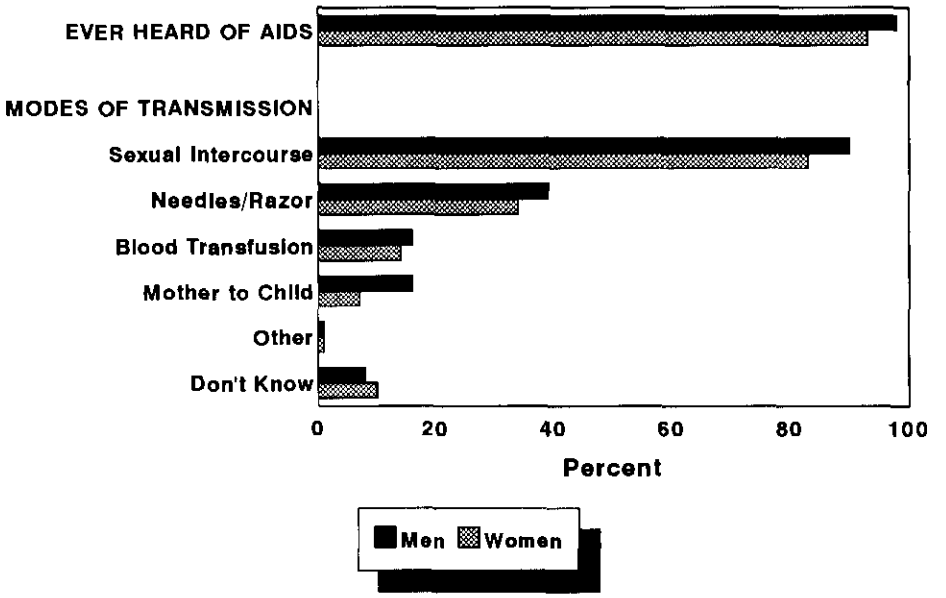
As observed in other studies (Kapiga et al., 1991; Gaisie et al., 1993) AIDS awareness is found to be very high in Tanzania. However, a majority of respondents know about sexual transmission of AIDS; knowledge of other modes of transmission is very low. The ongoing AIDS education campaign may need to focus more on these less known transmission modes.

Table 11.1 Knowledge of AIDS

Percentage of women and men who have ever heard of AIDS and percentage reporting various modes of transmission, by selected background characterisitcs, Tanzania 1991/92

Background characteristic	Ever heard of AIDS	Mode of AIDS transmission						Number of women
		Sexual inter-course	Needles, blades, skin punctures	Mother to child	Blood trans-fusion	Other	Don't know	
FEMALES								
Age								
15-19	93.6	77.9	32.4	6.5	11.3	1.3	14.4	2183
20-24	95.7	87.7	40.3	8.5	16.1	2.0	7.4	1882
25-29	94.7	87.5	38.9	8.9	15.7	1.0	6.9	1599
30-34	94.7	86.2	34.2	7.4	16.1	1.8	8.0	1165
35-39	91.2	81.0	30.5	8.2	13.1	1.1	9.3	1000
40-44	89.3	78.4	26.7	5.2	9.7	1.1	10.1	715
45-49	86.0	75.5	21.1	4.8	8.0	0.7	10.4	695
Residence								
Mainland	93.0	82.6	34.1	7.4	13.7	1.4	9.7	8978
Dar es Salaam	96.2	90.8	49.1	5.0	15.3	1.1	5.3	585
Other urban	99.0	93.4	51.3	10.6	22.3	2.3	5.2	1686
Rural	91.2	79.1	28.5	6.8	11.4	1.2	11.2	6707
Zanzibar	99.3	90.8	24.6	7.1	5.7	0.2	8.2	260
Education								
No education	86.1	71.0	15.7	2.9	7.0	1.1	14.5	3128
Primary incomplete	94.7	82.4	31.1	6.8	10.8	1.7	11.4	1825
Completed primary	97.5	90.8	45.7	10.5	17.4	1.5	6.0	3841
Secondary/Higher	99.5	98.3	70.2	14.9	35.7	0.9	0.6	444
Total	93.2	82.8	33.9	7.4	13.5	1.4	9.7	9238
MALES								
Age								
<20	96.1	81.0	28.0	12.0	11.1	0.7	14.8	498
20-24	99.4	95.8	45.8	16.7	21.9	1.7	3.3	307
25-29	99.2	93.6	50.0	19.7	18.3	0.4	5.2	262
30-34	99.1	95.2	48.5	18.8	17.0	1.8	3.9	256
35-39	97.5	94.6	37.8	20.2	18.6	0.6	2.9	201
40-44	97.8	94.6	35.9	16.0	16.7	0.0	3.2	159
45-49	97.0	85.5	38.2	10.9	14.3	2.0	10.1	155
50+	95.8	87.3	35.9	11.8	12.2	0.4	8.6	274
Age at marriage								
<30	97.8	88.3	38.5	15.3	16.0	0.9	9.2	1069
30-39	98.5	95.1	43.8	19.6	17.7	1.3	3.5	457
40-49	97.4	90.1	37.1	13.5	15.5	1.0	6.6	313
50 +	95.8	87.3	35.8	11.8	12.2	0.4	8.5	275
Residence								
Mainland	97.7	90.1	39.3	15.8	16.0	1.0	7.3	2063
Dar es Salaam	99.4	99.1	71.6	62.5	61.8	0.0	0.3	151
Other urban	99.8	95.8	47.9	15.2	15.5	0.0	4.0	402
Rural	97.0	87.7	33.7	11.3	11.6	1.3	8.9	1510
Zanzibar	96.8	83.0	32.0	1.7	7.5	0.8	13.8	51
Education								
No education	93.9	80.2	11.1	6.9	6.4	0.3	13.7	418
Primary incomplete	97.3	88.2	29.7	9.7	9.2	1.5	8.6	625
Completed primary	99.3	94.1	50.7	19.0	19.5	1.1	4.9	878
Secondary/Higher	99.6	97.4	77.5	37.2	41.0	0.0	2.2	192
Total	97.7	89.9	39.1	15.5	15.8	1.0	7.5	2114

Figure 11.1
AIDS Awareness and Knowledge of Modes of Transmission



11.2 AIDS Misconceptions

To assess potential misconceptions about methods of transmission of AIDS, respondents were asked whether they thought they can contract AIDS through hand shaking, hugging, kissing, sharing clothes or eating utensils, stepping on urine or stool, and mosquito bites. The results are presented in Table 11.2 for women and men who knew about AIDS. It is encouraging to note that the majority of respondents did not believe that any of these activities are risk factors for AIDS transmission.

Misconceptions were highly prevalent for both sexes: 33 percent of females and 36 percent of males thought urine and stools could transmit the infection, 32 percent of females and 42 percent of males thought mosquito bites could, and 28 percent of women and 33 percent of men thought kissing could. Respondents in rural areas and males are more likely to cite these activities as potential modes of AIDS transmission, whereas males living in Dar es Salaam appeared to have more correct knowledge than others.

Sixty-two percent of women and 68 percent of men knew a healthy person can have AIDS. A significant proportion of men and women did not know whether a healthy person can have AIDS (21 and 17 percent respectively), while an additional 17 percent of women and 13 percent of men thought a healthy person cannot have AIDS.

Table 11.2 AIDS transmission

Percentage of women and men who report possibility of transmitting AIDS by various means according to place of residence, Tanzania 1991/92

Method of transmission	Mainland				Zanzibar	Total
	Total	Dar es Salaam	Other urban	Rural		
	FEMALES					
Shaking hands	12.4	5.9	9.6	13.7	13.4	12.4
Hugging	20.1	12.1	16.1	22.0	14.9	20.0
Kissing	27.9	25.4	27.3	28.3	16.0	27.6
Wearing clothes	22.5	17.6	18.6	24.1	13.4	22.3
Sharing eating utensils	22.4	19.3	17.7	24.0	16.4	22.2
Step on urine/stool	33.4	31.2	32.5	33.8	28.5	33.2
Mosquito etc. bite	31.8	22.8	33.6	32.1	30.5	31.7
Can a healthy person have AIDS?						
Yes	61.6	78.6	71.9	57.2	58.2	61.5
No	16.5	10.7	14.2	17.7	35.4	17.1
Don't know	21.8	10.7	13.8	25.1	6.4	21.4
Can a mother transmit to child?						
Yes	59.0	77.5	71.3	53.9	56.0	58.9
No	14.5	9.8	12.9	15.4	31.8	15.0
Don't know	17.6	5.2	8.3	21.3	8.5	17.3
Missing	0.1	0.0	0.2	0.1	0.0	0.1
Total	8350	563	1669	6119	259	8609
	MALES					
Shaking hands	15.9	1.1	9.6	19.1	11.5	15.8
Hugging	24.7	2.5	18.6	28.7	15.7	24.5
Kissing	32.8	5.9	29.0	36.6	23.2	32.6
Wearing clothes	28.2	5.4	18.4	33.3	24.9	28.1
Sharing eating utensils	28.3	5.7	17.0	33.7	28.8	28.3
Step on urine/stool	36.4	6.6	25.9	42.4	37.0	36.4
Mosquito etc. bite	41.5	4.4	32.7	47.8	55.1	41.9
Can a healthy person have AIDS?						
Yes	67.4	91.4	70.6	64.0	80.0	67.7
No	15.0	7.6	18.0	15.0	4.5	14.8
Don't know	17.1	0.9	10.7	20.6	15.5	17.1
Missing	0.4	0.0	0.7	0.4	0.0	0.4
Can a mother transmit to child?						
Yes	77.0	98.6	73.1	75.9	77.3	77.0
No	7.3	1.4	14.2	6.0	4.9	7.2
Don't know	15.7	0.0	12.7	18.1	17.8	15.8
Total	2015	150	401	1464	50	2065

11.3 Sources of Information about AIDS

Respondents were asked to name the sources of information about AIDS during the month before the survey; the results are presented in Table 11.3 and Figure 11.2. Over half of females cited friends or relatives (62 percent) and radio (56 percent) as a source of information about AIDS, whereas the majority of males interviewed (81 percent) cited the radio. Respondents in Dar-es-Salaam are more likely to get AIDS information from radio and newspapers than respondents in other places. Overall, only 6 percent of females and 5 percent of males reported that they did not hear about AIDS during the month before the survey. These findings indicate that most people in Tanzania are exposed to AIDS information. However, the sources of

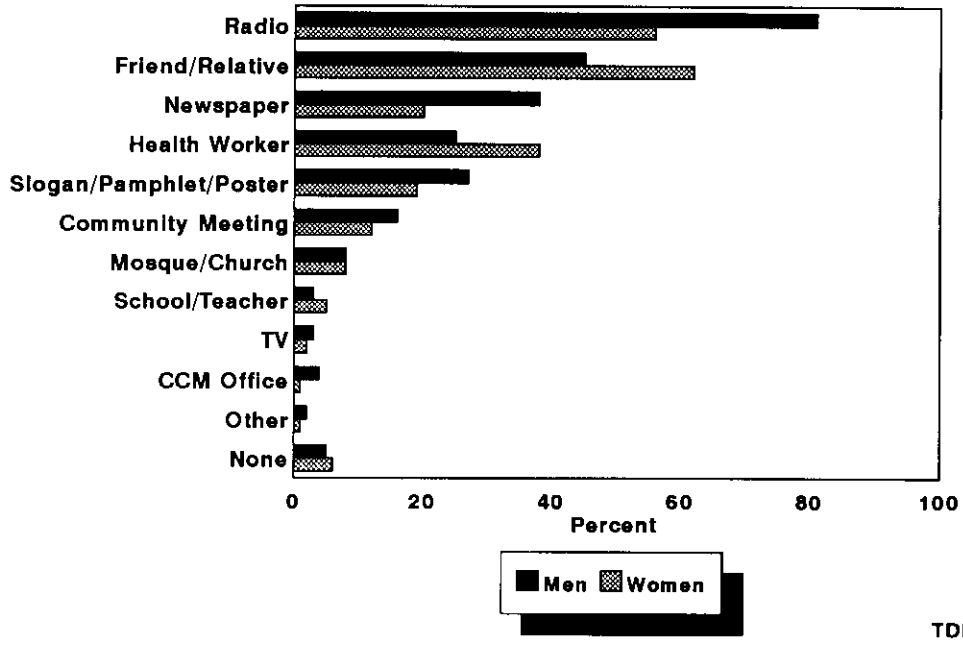
Table 11.3 Sources of AIDS information

Percentage of women who report hearing of AIDS from various sources in the month before the survey, by urban-rural residence, Tanzania 1991/92

Source of information	Mainland				Zanzibar	Total
	Total	Dar es Salaam	Other urban	Rural		
	FEMALES					
Radio	55.3	95.9	71.8	47.1	79.8	56.1
TV	1.7	6.7	3.3	0.9	10.1	2.0
Newspaper	19.6	57.5	31.7	12.9	17.1	19.6
Health worker	38.6	46.5	44.1	36.3	12.5	37.8
Mosque/Church	8.3	7.9	10.3	7.8	0.9	8.1
Friend/Relative	61.7	63.4	53.3	63.8	66.4	61.8
School/Teacher	4.9	3.5	6.7	4.6	3.7	4.9
Slogan/Pamphlet/Poster	19.1	35.2	23.4	16.5	7.6	18.8
Committee meeting	11.5	10.4	12.2	11.4	12.0	11.5
CCM office	1.2	0.1	1.8	1.2	2.1	1.3
Other	1.0	0.5	1.7	0.8	0.2	0.9
None	6.3	0.0	4.2	7.5	0.0	6.1
Total	8350	563	1669	6119	259	8609
	MALES					
Radio	81.0	100.0	91.6	76.1	80.2	80.9
TV	2.2	3.0	6.7	0.9	25.6	2.8
Newspaper	38.0	86.0	45.2	31.1	30.4	37.8
Health worker	25.2	5.0	34.2	24.8	13.3	24.9
Mosque/Church	8.4	0.4	11.9	8.2	0.0	8.2
Friend/Relative	44.7	8.8	39.6	49.8	59.3	45.1
School/Teacher	2.6	0.0	1.8	3.2	2.2	2.6
Slogan/Pamphlet/Poster	26.6	62.2	31.9	21.5	24.9	26.6
Committee meeting	16.7	1.6	20.3	17.3	0.0	16.3
CCM office	3.8	1.5	3.1	4.2	3.1	3.8
Other	1.8	0.0	4.1	1.4	0.0	1.8
None	5.3	0.0	1.6	6.8	0.0	5.2
Total	2015	150	401	1464	50	2065

information about AIDS tend to differ between men and women. Men are more likely than women to get information from radio, newspaper and slogan/pamphlet/poster; women were more likely than men to hear about AIDS from friends/relatives, and health workers. The differences in the source of information between men and women was also reported in another study conducted in Dar es Salaam and Bagamoyo (Kapiga, 1991). These findings indicate that radio and friends or relatives are the principal sources of AIDS information in Tanzania.

Figure 11.2
Sources of information about AIDS



11.4 Attitudes about AIDS

Table 11.4 shows the opinion of respondents about what they thought was the most important role of the government in the care of AIDS patients. Sixty-four percent of women and 59 percent of men said the government should provide medical treatment for AIDS complications, an additional 14 percent of women and 7 percent of men said the government should assist relatives to take care of AIDS patients, and 15 percent of women and 32 percent of men thought that the government should isolate or quarantine AIDS patients. Only 5 percent of women and less than 1 percent of men thought that the government should not be involved.

Respondents were then asked about the type of service they would prefer be given to their relative, if they had AIDS. A majority of respondents (60 percent of women and 53 percent of men) preferred AIDS patients to be cared for by their relatives or friends. Thirty-one percent of women and 40 percent of men wanted the government to provide care of AIDS patients.

Table 11.4 Government and personal action for AIDS patients

Percentage of women and men by perception of the most important action government could do for people with AIDS and by preferred caretaker for a relative with AIDS, according to place of residence, Tanzania 1991/92

Government action	Mainland				Zanzibar	Total
	Total	Dar es Salaam	Other urban	Rural		
FEMALES						
Assistance						
Provide medical training	64.2	45.2	64.0	66.0	70.8	64.4
Help relatives/Care	14.0	30.0	12.5	13.0	15.7	14.1
Isolation/Quarantine/Jail	15.4	12.0	16.8	15.3	11.8	15.3
Not be involved	4.6	11.2	3.4	4.3	1.5	4.5
Other	1.5	1.7	3.3	1.0	0.3	1.5
Missing	0.3	0.0	0.1	0.3	0.0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Preferred care						
Relatives/Friends	60.7	75.3	67.9	57.4	48.2	60.3
Government	30.0	23.2	23.2	32.5	48.2	30.5
Religious organisation/Mission	0.4	0.2	0.3	0.5	0.0	0.4
Nobody/Abandon	6.1	1.0	5.1	6.8	2.5	6.0
Other	2.7	0.4	3.4	2.7	1.1	2.6
Missing	0.1	0.0	0.0	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total	8350	563	1669	6119	259	8609
MALES						
Assistance						
Provide medical trainng	58.8	63.9	52.6	59.9	48.5	58.5
Help Relatives/Care	7.0	8.5	6.1	7.1	2.3	6.9
Isolation/Quarantine/Jail	31.4	27.6	34.5	30.9	49.1	31.8
Not be involved	0.5	0.0	0.0	0.7	0.0	0.5
Other	2.0	0.0	6.4	1.1	0.0	2.0
Missing	0.3	0.0	0.4	0.3	0.0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Preferred care						
Relatives/Friends	53.1	66.7	66.9	47.9	27.9	52.5
Government	39.1	32.2	27.3	43.1	71.4	39.9
Religious organisation/Mission	0.6	1.1	0.0	0.7	0.7	0.6
Nobody/Abandon	2.4	0.0	0.9	3.0	0.0	2.3
Other	4.8	0.0	4.9	5.3	0.0	4.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total	2015	150	401	1464	50	2065

11.5 Sexual Practices

Under the auspices of the NACP an intensive information, education and communication (IEC) campaign to raise general awareness of AIDS in Tanzania has been implemented. The findings of the TDHS and reports from the NACP indicate that general awareness about AIDS is high. However, there are limited data in Tanzania to show the impact of increased awareness on sexual behavior among both men and women. Information about recent sexual practise can be used by the NACP to assess the current programme impact and plan for future intervention strategies.

To obtain information about recent sexual activity, 7978 women and 1884 men who have had sexual relations were asked the frequency of sexual intercourse in the four weeks preceding the survey (see Table 11.5). Thirty-nine percent of women and 22 percent of men had no intercourse in the last four weeks, but most has intercourse 1-3 times. Men were relatively more sexually active than women. The median coital frequency is 2.7 for men and 2.1 for women. Among both men and women, the frequency of intercourse is higher among married and uneducated than among unmarried and educated. Frequency of intercourse varies moderately with age of the respondents and urban/rural residence.

To obtain more general information about frequency of sexual activity, respondents were asked to report how many times they usually have intercourse during one month (see Table 11.6). The median coital frequency for both men and women was 5. The usual frequency reported here was much higher than the frequency reported in the four weeks preceding the survey. This may occur because frequency in the last four weeks is affected by postpartum abstinence, illness, and temporary separation. Sexual activity among women reaches a peak at 25-29 years, while men reported the highest frequency of sexual intercourse at 40-44 and 45-49 years.

Respondents were further asked the number of different sex partners they have had in the four weeks preceding the survey (see Table 11.7). No distinction was made between formal partner (polygynous union), casual partner, extra-marital partner, or whether money was given for sex (commercial sex). Compared to women, men were more likely to have more than one sex partner (29 percent of men versus 6 percent of women). Among both men and women, the number of sex partners was higher among the unmarried and those below 25 years of age. However, the proportion of unmarried respondents is higher among subjects below 25 years of age. As expected, men in polygynous unions reported more than one partner (almost two-thirds of men had more than one partner). The reported number of sex partners does not vary significantly with education and urban/rural residence.

Information about condom use was obtained by asking respondents to report if they used a condom during the last four weeks (see Table 11.8). Only a small proportion (9 percent of men and 4 percent of women) responded positively. Men were more likely to report having used a condom than women. Among both men and women, condom use was relatively higher among the unmarried and those below 35 years of age. Condom use is lower among uneducated and residents of rural areas than among educated and urban residents.

Table 11.5 Frequency of intercourse in the four weeks preceding the survey

Percent distribution of women and men by frequency of intercourse in the last four weeks by selected background characteristics, Tanzania 1991/92

Background characteristic	Frequency of intercourse					Don't know/ Missing	Total percent	Number	Median
	0	1-3	4-7	8-13	14+				
FEMALES									
Marital status									
Unmarried	61.2	30.2	6.5	1.7	0.2	0.2	100.0	1939	0.8
Married - monogamous	30.9	30.6	21.6	12.6	4.1	0.1	100.0	4379	2.9
Married - polygamous	33.7	35.0	20.4	9.0	1.7	0.2	100.0	1659	2.4
Age									
15-19	42.0	34.3	14.1	6.5	2.8	0.2	100.0	1121	1.6
20-24	39.9	28.8	17.7	9.7	3.7	0.2	100.0	1724	2.2
25-29	38.6	29.6	18.6	9.8	3.3	0.2	100.0	1576	2.2
30-34	36.2	32.5	19.0	10.8	1.6	0.0	100.0	1151	2.3
35-39	36.7	30.1	18.6	12.3	2.3	0.0	100.0	997	2.5
40-44	35.3	35.8	18.9	8.2	1.9	0.0	100.0	714	2.3
45-49	42.8	33.3	16.9	5.2	1.4	0.4	100.0	695	1.7
Education									
No education	37.1	31.9	18.6	9.5	2.8	0.2	100.0	2991	2.4
Incomplete primary	36.4	34.1	19.6	8.2	1.7	0.0	100.0	1499	2.2
Complete primary	41.1	30.3	15.9	9.5	3.1	0.2	100.0	3209	1.9
Secondary/Higher	44.4	26.1	18.9	8.8	1.3	0.5	100.0	278	1.5
Residence									
Mainland	39.2	31.9	17.3	8.9	2.6	0.1	100.0	7776	2.1
Dar es Salaam	30.2	37.5	20.8	9.2	1.9	0.4	100.0	500	2.5
Other urban	43.5	30.9	16.3	7.6	1.7	0.0	100.0	1451	1.6
Rural	38.9	31.6	17.3	9.2	2.9	0.1	100.0	5825	2.1
Zanzibar	26.1	15.4	32.7	22.4	2.8	0.6	100.0	202	4.8
Total	38.8	31.4	17.7	9.2	2.7	0.2	100.0	7978	2.1
MALES									
Marital status									
Unmarried	31.8	50.8	14.2	2.2	0.6	0.4	100.0	700	1.9
Married - monogamous	18.0	39.9	22.5	13.0	6.7	0.0	100.0	992	3.4
Married - polygamous	10.6	31.8	32.7	14.6	10.3	0.0	100.0	191	4.6
Age									
15-19	23.7	61.1	12.0	2.4	0.8	0.0	100.0	301	2.1
20-24	22.7	49.8	17.8	6.9	2.8	0.0	100.0	289	2.5
25-29	27.1	42.1	19.1	7.3	4.4	0.0	100.0	256	2.5
30-34	21.6	32.8	27.8	11.0	6.7	0.0	100.0	255	3.6
35-39	21.8	32.1	25.4	13.7	7.1	0.0	100.0	199	3.6
40-44	13.5	38.6	31.1	10.6	6.3	0.0	100.0	159	3.8
45-49	20.6	35.9	20.4	14.8	8.3	0.0	100.0	153	3.0
50+	23.3	41.8	16.9	11.6	5.4	0.9	100.0	272	2.7
Education									
No education	19.3	38.4	25.0	13.8	2.8	0.7	100.0	381	3.3
Incomplete primary	18.8	46.1	21.0	8.6	5.6	0.0	100.0	527	2.8
Complete primary	20.6	46.3	20.2	7.7	5.1	0.0	100.0	798	2.7
Secondary/Higher	47.2	30.6	9.9	7.0	5.3	0.0	100.0	178	1.2
Residence									
Mainland	22.1	43.1	20.5	9.2	4.9	0.1	100.0	1847	2.8
Dar es Salaam	40.9	32.0	19.6	6.7	0.8	0.0	100.0	144	1.7
Other urban	19.7	40.3	18.2	12.6	9.2	0.0	100.0	366	3.0
Rural	20.7	45.1	21.2	8.6	4.1	0.2	100.0	1337	2.8
Zanzibar	36.5	43.8	16.7	2.9	0.0	0.0	100.0	36	2.0
Total	22.4	43.2	20.4	9.1	4.8	0.1	100.0	1884	2.7

Table 11.6 Usual frequency of intercourse

Percent distribution of women and men by usual frequency of intercourse by selected background characteristics, Tanzania 1991/92

Background characteristic	Frequency of intercourse					Don't know/ Missing	Total percent	Number	Median
	0	1-3	4-7	8-13	14+				
FEMALES									
Marital status									
Unmarried	13.5	49.5	24.7	9.7	2.1	0.4	100.0	1939	2.9
Married - monogamous	1.3	20.8	34.2	28.0	15.5	0.3	100.0	4379	6.5
Married - polygamous	1.6	25.0	38.0	25.7	9.3	0.3	100.0	1659	5.5
Age									
15-19	5.4	40.6	26.8	17.0	9.7	0.6	100.0	1121	4.3
20-24	3.9	27.1	31.2	23.2	14.3	0.4	100.0	1724	5.4
25-29	2.6	22.3	33.0	29.3	12.4	0.4	100.0	1576	6.2
30-34	3.2	26.7	31.9	27.6	10.3	0.2	100.0	1151	5.4
35-39	2.5	26.6	36.4	23.2	11.3	0.1	100.0	997	5.6
40-44	5.5	28.9	37.3	20.9	7.4	0.0	100.0	714	4.8
45-49	11.0	33.7	36.6	12.7	5.7	0.4	100.0	695	4.2
Education									
No education	3.8	25.8	35.5	23.6	10.9	0.4	100.0	2991	5.3
Primary incomplete	3.9	29.7	34.7	20.8	10.9	0.1	100.0	1499	4.9
Completed primary	4.6	30.5	29.0	23.9	11.6	0.4	100.0	3209	4.9
Secondary/Higher	8.5	31.8	35.0	19.5	4.9	0.2	100.0	278	4.5
Residence									
Mainland	4.4	29.2	32.0	23.0	11.1	0.3	100.0	7776	4.9
Dar es Salaam	2.4	42.1	32.6	17.7	4.9	0.3	100.0	500	4.4
Other urban	4.2	35.3	33.8	19.8	6.7	0.1	100.0	1451	4.6
Rural	4.6	26.6	31.6	24.2	12.7	0.4	100.0	5825	5.3
Zanzibar	2.1	7.3	58.1	25.9	6.0	0.6	100.0	202	6.4
Total	4.3	28.6	32.7	23.1	10.9	0.3	100.0	7978	5.0
MALES									
Marital status									
Unmarried	6.5	53.3	26.6	9.3	4.3	-	100.0	700	3.3
Married - monogamous	1.4	20.7	30.6	23.9	23.4	-	100.0	992	7.0
Married - polygamous	0.7	11.3	28.1	28.9	30.9	-	100.0	191	8.9
Age									
15-19	3.7	57.8	26.4	8.3	3.7	-	100.0	301	3.2
20-24	3.1	39.1	31.2	12.6	14.0	-	100.0	289	4.5
25-29	3.0	29.1	29.1	17.9	20.9	-	100.0	256	5.6
30-34	1.9	28.9	23.4	23.5	22.4	-	100.0	255	6.6
35-39	2.8	19.3	33.5	24.9	19.6	-	100.0	199	6.9
40-44	1.2	19.2	26.4	27.1	26.2	-	100.0	159	8.3
45-49	6.9	16.7	30.3	23.8	22.3	-	100.0	153	7.0
50+	3.9	26.0	31.3	22.5	16.3	-	100.0	272	5.0
Education									
No education	3.6	21.5	32.3	23.7	18.9	-	100.0	381	6.7
Primary incomplete	3.4	31.1	26.6	19.8	19.0	-	100.0	527	5.1
Completed primary	1.8	35.0	30.5	16.0	16.6	-	100.0	798	4.9
Secondary/Higher	8.0	42.1	20.9	19.7	9.3	-	100.0	178	4.0
Residence									
Mainland	3.2	31.5	28.9	19.1	17.3	-	100.0	1847	5.2
Dar es Salaam	0.0	38.1	39.5	16.6	5.9	-	100.0	144	4.4
Other urban	3.3	32.5	26.6	18.7	18.9	-	100.0	366	5.7
Rural	3.5	30.5	28.4	19.5	18.1	-	100.0	1337	5.4
Zanzibar	6.8	51.4	25.1	11.1	5.5	-	100.0	36	3.6
Total	3.2	31.9	28.9	19.0	17.1	-	100.0	1884	5.1

Table 11.7 Number of sexual partners in the four weeks preceding the survey

Percent distribution of women and men by number of sexual partners in the four weeks preceding the survey, by selected background characteristics, Tanzania 1991/92

Background characteristic	Number of partners			Missing	Total percent	Number
	1	2	3+			
			FEMALES			
Marital status						
Unmarried	79.6	13.8	5.2	1.4	100.0	747
Married - monogamous	97.0	2.1	0.4	0.5	100.0	3025
Married - polygamous	94.2	4.0	0.8	1.1	100.0	1097
Age						
15-19	89.6	6.7	2.7	1.1	100.0	648
20-24	93.4	4.1	1.6	0.8	100.0	1034
25-29	92.8	5.2	1.2	0.9	100.0	965
30-34	94.9	4.4	0.4	0.2	100.0	734
35-39	95.9	3.1	0.5	0.5	100.0	631
40-44	95.3	2.6	1.1	1.0	100.0	462
45-49	95.6	2.9	0.4	1.2	100.0	395
Education						
No education	94.0	4.4	0.8	0.8	100.0	1877
Primary incomplete	94.4	3.7	1.0	0.9	100.0	953
Completed primary	92.7	4.7	1.8	0.8	100.0	1885
Secondary/Higher	96.5	2.8	0.7	0.0	100.0	153
Residence						
Mainland	93.8	4.2	1.2	0.8	100.0	4721
Dar es Salaam	95.5	3.1	0.7	0.6	100.0	347
Other urban	91.8	4.8	2.7	0.8	100.0	820
Rural	94.2	4.1	0.9	0.8	100.0	3554
Zanzibar	88.6	9.0	2.0	0.4	100.0	148
Total	93.7	4.3	1.2	0.8	100.0	4869
			MALES			
Marital status						
Unmarried	55.8	25.6	17.8	0.9	100.0	477
Married - monogamous	84.6	8.0	5.4	2.0	100.0	814
Married - polygamous	35.6	55.2	8.6	0.7	100.0	171
Age						
15-19	54.4	26.5	19.0	0.0	100.0	229
20-24	61.3	21.9	15.9	0.8	100.0	223
25-29	75.7	15.6	7.5	1.2	100.0	187
30-34	74.5	15.3	6.6	3.6	100.0	200
35-39	68.5	15.6	13.1	2.9	100.0	156
40-44	73.1	21.3	4.8	0.7	100.0	137
45-49	81.1	15.6	3.3	0.0	100.0	122
50+	75.6	19.1	2.8	2.5	100.0	209
Education						
No education	70.0	21.0	7.6	1.3	100.0	307
Primary incomplete	71.6	19.2	8.7	0.5	100.0	428
Completed primary	66.5	18.8	12.4	2.4	100.0	633
Secondary/Higher	77.7	16.9	4.5	0.9	100.0	94
Residence						
Mainland	69.2	19.4	9.9	1.5	100.0	1439
Dar es Salaam	84.1	15.4	0.5	0.0	100.0	85
Other urban	74.4	15.5	9.7	0.5	100.0	294
Rural	66.6	20.8	10.7	1.9	100.0	1060
Zanzibar	84.3	10.8	4.9	0.0	100.0	23
Total	69.4	19.3	9.8	1.5	100.0	1462

Table 11.8 Condom use

Percent distribution of women and men by condom use, by selected background characteristics, Tanzania 1991/92

Background characteristic	Condom used		Missing	Total percent	Number
	Yes	No			
FEMALES					
Marital status					
Unmarried	7.9	90.2	1.9	100.0	747
Married - monogamous	2.8	96.1	1.0	100.0	3025
Married - polygamous	3.3	95.6	1.1	100.0	1097
Age					
15-19	3.8	95.0	1.2	100.0	648
20-24	7.1	91.8	1.0	100.0	1034
25-29	3.4	95.0	1.6	100.0	965
30-34	3.4	96.0	0.6	100.0	734
35-39	1.8	97.1	1.2	100.0	631
40-44	1.6	96.9	1.5	100.0	462
45-49	1.1	97.6	1.3	100.0	395
Education					
No education	1.4	97.3	1.3	100.0	1877
Primary incomplete	3.3	95.4	1.4	100.0	953
Completed primary	6.1	92.9	1.1	100.0	1885
Secondary/Higher	5.2	94.8	0.0	100.0	153
Residence					
Mainland	3.8	95.0	1.2	100.0	4721
Dar es Salaam	7.4	91.4	1.2	100.0	347
Other urban	7.6	91.8	0.6	100.0	820
Rural	2.5	96.1	1.3	100.0	3554
Zanzibar	1.0	98.6	0.4	100.0	148
Total	3.7	95.1	1.2	100.0	4869
MALES					
Marital status					
Unmarried	15.7	82.5	1.7	100.0	477
Married - monogamous	6.5	92.5	1.0	100.0	814
Married - polygamous	3.4	96.6	0.0	100.0	171
Age					
15-19	12.6	86.3	1.1	100.0	229
20-24	15.0	84.9	0.2	100.0	223
25-29	14.7	84.4	0.9	100.0	187
30-34	5.6	93.7	0.6	100.0	200
35-39	11.4	88.3	0.4	100.0	156
40-44	7.4	89.0	3.7	100.0	137
45-49	0.5	99.5	0.0	100.0	122
50+	2.1	95.4	2.4	100.0	209
Education					
No education	1.6	96.9	1.5	100.0	307
Primary incomplete	3.3	95.1	1.6	100.0	428
Completed primary	15.7	83.7	0.6	100.0	633
Secondary/Higher	16.2	82.2	1.6	100.0	94
Residence					
Mainland	9.3	89.5	1.1	100.0	1439
Dar es Salaam	12.1	80.9	7.0	100.0	85
Other urban	15.6	84.4	0.0	100.0	294
Rural	7.3	91.7	1.0	100.0	1060
Zanzibar	0.0	100.0	0.0	100.0	23
Total	9.2	89.7	1.1	100.0	1462

Men who knew about the condom (N=1369) were asked questions to elicit more information about their knowledge and their attitude about its use (see Table 11.9). Several statements were read to them and they were required to say whether they agreed or disagreed with each. More than three-quarters of men agreed with the statement "Condom is used only for casual sex." Most men are aware that condoms reduce the risk of STDs. It is interesting to note that 75 percent of men reported that the condom reduces sexual pleasure and 84 percent said women don't like condoms. Only 31 percent agreed that it is embarrassing to get condoms. One-fourth of the respondents thought that condom use can cause AIDS.

As has been reported by the NACP, these findings indicate that, despite a high level of knowledge of AIDS, the quality of this knowledge needs substantial improvement and a substantial number of respondents were engaged in high-risk sexual behavior. Low reported condom use in this population indicates a big gap between knowledge and practice. These findings indicate that knowledge is necessary but not enough in itself to cause changes in sexual behavior.

Table 11.9 Men's perceptions about condoms

Percentage of men who agree with certain statements about condoms, Tanzania 1991/92

Statement	Percent who agree
Condoms are used primarily with casual partners	78.2
Condoms reduce risk of STD	94.6
Most women don't like men to use condoms	83.5
Using condoms shows responsibility	83.1
Condoms are used primarily for family planning purposes	69.6
Condoms are embarrassing to obtain	30.6
A condom can be used more than once	55.6
Condoms make sex less enjoyable	74.7
Using a condom can give you AIDS	23.6

CHAPTER 12

LOCAL AVAILABILITY OF FAMILY PLANNING AND HEALTH SERVICES

Use of family planning and health services is determined by supply as well as demand. The TDHS included the Tanzania Service Availability Questionnaire (reproduced in Appendix E) to assess the availability, or supply, of family planning and health services. The questionnaire was applied at the community level, that is, one questionnaire was filled for each selected enumeration area. Information was gathered from two sources: groups of knowledgeable informants in the community (assembled by the interviewer) and informants visited in facilities. The information collected in the enumeration area (EA) and in the facilities is assigned to each respondent (individual questionnaire) to obtain population-based estimates. The number of independent data points, however, remains the same as the number of enumeration areas for which the information was collected: 319 for Mainland Tanzania and 30 for Zanzibar.[1] Due to the small number of actual data points, the service availability estimates are subject to larger sampling errors than are the estimates based on data from individual women in the main survey.

The results in this Chapter are presented for women, but it must be kept in mind that these were actually the results of 349 interviews at the cluster level. One interview was held per cluster and, therefore, all service availability data are the same for all women in the cluster. Intracluster variability is not taken into account.

12.1 Service Availability Questionnaire

The service availability questionnaire was designed to provide a picture of the service environment available to Tanzanian women. There are two types of mechanisms for providing services: outreach programmes and stationary facilities. The former deliver services directly to people in their communities, whereas the latter function as repositories of services, relying on people to come to them to obtain services.

Outreach services are provided by health workers, usually in the context of mobile clinics. The informants assembled for the cluster interview were asked whether their communities are served by such services, and if so, what was the nature of these services. For example, if a health worker visits the community, the informants were asked whether he or she provides family planning methods (and more specifically, the pill, condom, and foaming tablets), basic medications, ORS instruction, vitamins, and immunisations.

Many types of stationary facilities exist. Community informants were asked to identify the nearest facility of each of the following types: 1) a hospital (representing either the secondary or tertiary level); 2) a health centre (the most complex primary health care facility); 3) a health clinic (dispensary), maternity centre, or maternity home (facilities offering limited primary health care); 5) a family planning clinic; and 6) a pharmacy. Facilities said to be within six hours' walking distance from the community were eligible to be visited by interviewers. One facility of each type was visited if it met the eligibility requirement. A second facility of each type would be visited if the first one visited did not provide family planning methods.

When facilities were visited, detailed information regarding staff, equipment, services, fees, supplies, medications, vaccines, and contraceptives was collected. Attention was focussed on whether facilities had

[1] The TDHS included 357 clusters. No service availability data were available for eight clusters.

basic supplies, whether they experienced shortages of supplies or medicines, and whether equipment was in working order. Interviewers also verified the existence of equipment and supplies.

Health facilities were only visited if the distance from the community to the facility was less than 30 km. In total 191 hospitals, 204 health centres, and 329 dispensaries were visited.

12.2 Availability of Family Planning Services

Outreach Programmes

Twenty percent of women live in communities served by a health worker who provides family planning services (Table 12.1). Health workers are available to provide family planning services to 69 percent of the women in Zanzibar and to 18 percent of the women in mainland Tanzania.

Table 12.1 Distance to nearest family planning services according to residence

Percent distribution of women 15-49 by distance to nearest family planning services, according to residence, Tanzania 1991/92

Outreach services/ Distance to nearest FP services	Mainland	Dar es Salaam	Other urban	Rural	Zanzibar	Total
Outreach services						
Health worker	18.2	10.6	37.3	14.1	69.3	19.6
Kilometres						
<1	25.3	26.0	48.2	19.4	37.6	25.6
1-4	39.6	55.3	51.3	35.3	55.5	40.1
5-9	21.7	11.1	0.0	28.1	7.0	21.3
10-14	8.3	0.0	0.0	11.1	0.0	8.1
15-29	3.2	0.0	0.5	4.1	0.0	3.1
30+	1.4	0.0	0.0	1.9	0.0	1.4
Unknown distance	0.5	7.6	0.0	0.0	0.0	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	8978	585	1686	6707	260	9238
Campaign	4.7	0.0	4.7	5.1	53.7	6.0
Clusters	319	29	57	233	30	349

Stationary Facilities

About one-fourth of women live within 1 km of a facility that provides family planning (see Table 12.1) and two-thirds live within 5 km. Urban women generally are closer to a source of family planning than rural women. For example, in rural areas of mainland Tanzania, 55 percent of women live within 5 km of a facility that provides family planning, and 17 percent has to travel more than 10 km. In urban areas outside of Dar es Salaam, all but a tiny fraction of women live within 5 km of a family planning source.

Information Campaigns

Informants in the cluster interview were asked whether there had been an information campaign in the community within the past year that included family planning messages promoting specific methods or the general benefits of contraception. Whether or not there had been a family planning campaign in the preceding year varied: 54 percent of women in Zanzibar live in communities that had a campaign in the previous year versus only 5 percent of women in mainland Tanzania.

Availability of Family Planning by Type of Facility

Tables 12.2 and 12.3 show the distributions of women by distance and one-way travel time to the nearest facility providing family planning. (The medians are for those reporting a distance.) Overall, the median distance to any facility providing family planning services is 3 km. Health centres and dispensaries with family planning services are closer than hospitals: the median distance for women 15-49 is 15 km for health centres and 5 km for dispensaries compared to 21 km for hospitals. As expected, women living in Dar es Salaam, those living in other urban areas, and those in Zanzibar usually are closer to a source of family planning than women living in rural areas on the mainland.

Table 12.2 Distance to nearest facility providing family planning services according to type of facility and residence

Percent distribution of women 15-49 by distance to nearest facility providing family planning services/supplies, according to type of facility and residence, Tanzania 1991/92

	Type of facility					Residence				
Distance to nearest facility	Hospital	Health centre	Dispensary	Pharmacy	All types	Mainland	Dar es Salaam	Other urban	Rural	Zanzibar
Kilometres										
<1	2.4	6.1	15.8	6.0	25.6	25.3	26.0	48.2	19.4	37.6
1-4	17.4	8.4	35.2	8.2	40.1	39.6	55.3	51.3	35.3	55.5
5-9	10.8	12.4	23.5	5.9	21.3	21.7	11.1	0.0	28.1	7.0
10-14	7.1	11.0	8.7	4.8	8.1	8.3	0.0	0.0	11.1	0.0
15-29	18.2	20.2	6.8	9.2	3.1	3.2	0.0	0.5	4.1	0.0
30+	41.4	19.6	4.7	32.6	1.4	1.4	0.0	0.0	1.9	0.0
Unknown distance	2.8	4.0	3.5	11.8	0.5	0.5	7.6	0.0	0.0	0.0
None known	0.0	18.5	1.8	21.6	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	9238	9238	9238	9238	9238	8978	585	1686	6707	260
Median	21.0	15.3	4.6	25.5	3.0	3.1	1.9	1.2	4.4	1.4
Clusters	349	349	349	349	349	319	29	57	233	30

Over half of Tanzanian women live within one hour's travel time to a source of family planning; one in three lives within 30 minutes of a family planning outlet. The closest facilities are dispensaries: 42 percent of women live within one hour of a dispensary providing family planning, only 22 percent live within an hour of a hospital, and 17 percent are within one hour of a health centre.

Table 12.3 Time to nearest facility providing family planning services according to type of facility and residence

Percent distribution of women 15-49 by one-way travel time (in minutes) to nearest facility providing family planning services/supplies, according to facility and residence, Tanzania 1991/92

Time to nearest facility	Type of facility					Residence				
	Hospital	Health centre	Dispensary	Pharmacy	All types	Mainland	Dar es Salaam	Other urban	Rural	Zanzibar
Minutes										
<15	3.5	3.1	12.8	6.1	18.7	18.5	25.8	37.0	13.2	27.6
15-29	6.4	6.5	11.9	3.2	14.6	13.6	25.6	19.8	10.9	51.2
30-59	12.2	7.7	17.3	5.9	21.7	22.0	23.2	34.0	18.9	10.4
60-119	15.4	9.2	25.9	6.8	23.0	23.5	16.5	4.5	28.8	7.7
120+	19.0	30.3	22.0	12.8	18.8	19.3	0.0	3.9	24.9	0.0
Unknown time	3.1	5.2	3.9	12.4	1.8	1.8	8.8	0.9	1.3	3.1
Distance >30 km	40.4	19.6	4.4	31.2	1.4	1.4	0.0	0.0	1.9	0.0
None known	0.0	18.5	1.8	21.6	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	9238	9238	9238	9238	9238	8978	585	1686	6707	260
Median	60.7	-	60.2	60.8	40.8	45.1	20.8	20.6	60.3	15.6
Clusters	349	349	349	349	349	319	29	57	233	30

In rural areas, the distances to health centre and dispensary are very close to the national median distances, although travel times in rural areas were slightly longer than elsewhere.

Clearly, dispensaries are potentially the most important supplier of contraceptive methods. Their role could even be larger than shown in Chapter 4 (Table 4.8), where dispensaries were reported as the source of supply by 24 percent of current users of contraceptives. Of course dispensaries are not capable of providing a full range of methods; sterilisations and IUD insertions probably are beyond their range of capabilities.

12.3 Availability of Maternal and Child Health Services

Antenatal Care

Table 12.4 indicates that almost all women live in communities where informants were able to identify a facility that provides antenatal care (92 percent). Half of women in Tanzania live within 5 km of a facility that offers antenatal services, whereas 45 percent of women in rural mainland are within 5 km.

Table 12.4 Distance to nearest antenatal care services according to residence

Percent distribution of women 15-49 by distance to nearest antenatal care services, according to residence, Tanzania 1991/92

Distance to nearest antenatal services	Mainland	Dar es Salaam	Other urban	Rural	Zanzibar	Total
Kilometres						
<1	14.2	0.0	15.3	15.1	38.4	14.8
1-4	35.1	46.6	50.3	30.2	50.3	35.5
5-9	25.8	9.0	28.1	26.7	11.4	25.4
10-14	8.4	0.0	2.2	10.7	0.0	8.1
15-29	5.6	0.0	1.7	7.0	0.0	5.4
30+	0.9	0.0	0.0	1.3	0.0	0.9
Unknown distance	2.3	31.6	0.0	0.3	0.0	2.2
None known	7.8	12.7	2.4	8.8	0.0	7.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	8978	585	1686	6707	260	9238
Clusters	319	29	57	233	30	349

Tables 12.5 and 12.6 show that hospitals were often named as the source of antenatal care. Twenty-eight percent of women in Tanzania had a hospital with antenatal services within 5 km and 41 percent within 10 km. Dispensaries with antenatal services are found within 10 km for two-thirds of women.

Table 12.5 Distance to nearest facility providing antenatal care services according to type of facility

Percent distribution of all women 15-49 by distance to nearest facility providing antenatal care services by type of facility, Tanzania 1991/92

Distance to nearest facility	Hospital	Health centre	Dispensary	All types
Kilometres				
<1	5.3	6.3	14.1	14.8
1-4	22.7	19.3	30.3	35.5
5-9	13.3	14.0	20.5	25.4
10-14	3.7	4.4	7.7	8.1
15-29	1.1	3.3	5.4	5.4
30+	1.8	0.3	0.3	0.9
Unknown distance	1.1	2.4	0.2	2.2
None known	51.0	50.0	21.5	7.6
Total	100.0	100.0	100.0	100.0
Number	9238	9238	9238	9238
Median	4.3	4.7	4.4	4.5
Clusters	349	349	349	349

Delivery Care

According to Table 12.7, half of women live in communities where delivery care is available within 5 km, and three-quarters within 10 km. Hospitals, health centres, and dispensaries were mentioned as delivery care sources.

Distances and travel time to the nearest health facility by type of facility are shown in Tables 12.8 and 12.9, respectively. Among rural women, 18 percent had a hospital with delivery care within one hour travel time, 19 percent had a health centre within one hour, and 32 percent a dispensary. It is important to note that more than half of rural women live in communities where the informants could not mention a hospital with delivery care.

Table 12.6 Time to nearest facility providing antenatal care services according to type of facility

Percent distribution of all women 15-49 by one-way travel time (in minutes) to nearest facility providing antenatal care services by type of facility, Tanzania 1991/92

Time to nearest facility	Hospital	Health centre	Dispensary	All types
Minutes				
<15	5.2	3.8	11.1	11.7
15-29	6.9	5.9	9.5	11.0
30-59	11.3	11.0	16.1	19.5
60-119	17.0	14.5	23.3	28.0
120+	5.6	11.3	17.6	18.0
Unknown time	1.1	3.4	1.0	3.6
Distance >30 km	1.8	0.0	0.0	0.6
None known	51.0	50.0	21.5	7.6
Total	100.0	100.0	100.0	100.0
Number	9238	9238	9238	9238
Median	46.0	60.3	60.2	60.2
Clusters	349	349	349	349

Table 12.7 Distance to nearest delivery care services according to residence

Percent distribution of women 15-49 by distance (in km) to nearest delivery care services, according to residence, Tanzania 1991/92

Distance to nearest delivery care services	Mainland	Dar es Salaam	Other urban	Rural	Zanzibar	Total
Kilometres						
Under 1	14.3	0.0	10.7	16.5	38.4	15.0
1-4	33.8	32.6	52.4	29.2	50.3	34.3
5-9	24.2	0.0	29.9	24.9	11.4	23.8
10-14	8.0	1.9	1.5	10.2	0.0	7.8
15-29	5.3	0.0	1.7	6.7	0.0	5.2
30+	0.9	0.0	0.0	1.3	0.0	0.9
Unknown distance	1.2	12.5	0.8	0.3	0.0	1.2
None known	12.2	53.0	3.0	10.9	0.0	11.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	8978	585	1686	6707	260	9238
Clusters	319	29	57	233	30	349

Table 12.8 Distance to nearest facility providing delivery care services according to type of facility

Percent distribution of all women 15-49 by distance (in km) to nearest facility providing delivery care service by type of facility, Tanzania 1991/92

Distance to nearest facility	Hospital	Health centre	Dispensary	All types
Kilometres				
<1	7.2	5.9	12.7	15.0
1-4	22.2	18.4	24.0	34.3
5-9	12.4	12.3	18.5	23.8
10-14	3.4	4.4	7.7	7.8
15-29	1.5	3.7	4.8	5.2
30+	1.8	0.3	0.3	0.9
Unknown distance	1.1	1.0	0.2	1.2
None known	50.3	54.0	31.8	11.8
Total	100.0	100.0	100.0	100.0
Number	9238	9238	9238	9238
Median	4.1	4.7	4.6	4.4
Clusters	349	349	349	349

Table 12.9 Time to nearest facility providing delivery assistance according to type of facility

Percent distribution of women 15-49 by one-way travel time (in minutes) to nearest facility providing delivery assistance by type of facility, Tanzania 1991/92

Time to nearest facility	Hospital	Health centre	Dispensary	All types
Minutes				
<15	5.6	2.7	8.4	10.2
15-29	7.5	6.1	9.2	11.6
30-59	11.8	9.9	13.9	19.0
60-119	16.5	14.6	19.1	27.5
120+	5.3	11.4	16.7	17.3
Unknown time	1.1	1.3	1.0	2.0
Distance > 30 km	1.8	0.0	0.0	0.6
None known	50.3	54.0	31.8	11.8
Total	100.0	100.0	100.0	100.0
Number	9238	9238	9238	9238
Median	45.4	60.5	60.2	60.1
Clusters	349	349	349	349

Immunisation

Data on the distance and travel time to immunisation services are presented in Tables 12.10 to 12.11, respectively. More than 90 percent of women live in communities where a source of immunisation was known. Mostly the source was within either 5 km (49 percent) or 10 km (74 percent). Forty-two percent had to travel less than one hour to reach a health facility with immunisation services.

Table 12.10 Distance to nearest immunisation services according to residence

Percent distribution of women 15-49 by distance to nearest immunisation services, according to residence, Tanzania 1991/92

Distance to nearest immunisation services	Mainland	Dar es Salaam	Other urban	Rural	Zanzibar	Total
Kilometres						
<1	14.0	0.0	13.0	15.4	38.4	14.6
1-4	34.3	46.6	48.6	29.6	50.3	34.7
5-9	25.1	0.0	29.3	26.3	11.4	24.8
10-14	7.9	0.0	1.5	10.2	0.0	7.7
15-29	6.0	0.0	2.3	7.4	0.0	5.8
30+	1.4	0.0	0.0	1.8	0.0	1.3
Unknown distance	2.3	31.6	0.0	0.3	0.0	2.2
None known	9.0	21.7	5.3	8.9	0.0	8.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	8978	585	1686	6707	260	9238
Clusters	319	29	57	233	30	349

Table 12.11 Time to nearest immunisation services

Percent distribution of all women 15-49 by one-way travel time (in minutes) to nearest facility providing immunisation services, Tanzania 1991/92

Time to nearest immunisation services	All types of facilities
Minutes	
<15	11.7
15-29	11.1
30-59	18.7
60-119	28.7
120+	17.0
Unknown time	3.0
Distance > 30 km	1.0
None known	8.8
Total	100.0
Number	9238
Median	60.2
Clusters	349

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APPENDIX A

PERSONS INVOLVED IN THE TANZANIA DEMOGRAPHIC AND HEALTH SURVEY 1991/1992

APPENDIX A

PERSONS INVOLVED IN THE TANZANIA DEMOGRAPHIC AND HEALTH SURVEY 1991/1992

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APPENDIX B

SURVEY DESIGN

APPENDIX B

SURVEY DESIGN

B.1 Sample Design

The principal objective of the Tanzania Demographic and Health Survey (TDHS) was to collect data on fertility, family planning, and health of the people. This survey involved randomly selected women aged 15-49 and men aged 15-60 in selected households.

Before the sampling frame was developed, two possibilities for the TDHS sample design were considered:

- The 1988 Population census list of Enumeration Areas (EAs)
- The National Master Sample for Tanzania created in 1986 (NMS).

The NMS was intended mainly for agricultural purposes and, at that time, only for rural areas. The NMS was based on the 1978 Census information while the urban frame was still being worked upon. Therefore, it was decided that the TDHS sample design would use the 1988 Census information as the basic sampling frame. Since the TDHS sample was to be clustered, it was necessary to have sampling units of manageable and fairly uniform size and with very well defined boundaries. The 1988 Census frame provided the list of enumeration area units (EAs) that had well defined boundaries and manageable uniform size. Therefore, EAs were used as primary sampling units (PSUs).

The target of the TDHS sample was about 7850 women age 15-49 with completed interviews. This sample should allow for separate analyses in urban and rural areas, and for estimation of contraceptive use in each of the 20 regions located on the mainland and in Zanzibar. Estimates for large domains (by combination of a group of regions) were also taken into consideration.

The TDHS used a three-stage sample. The frame was stratified by urban and rural areas. The primary sampling units in the TDHS survey were the wards/branches. The design involved the target of 350 completed interviews for each of 19 regions on the mainland and 500 in each of Dar es Salaam and Zanzibar.

In the first stage, the wards/branches were systematically selected with probability proportional to size (according to 1988 census information). In a second sampling stage, two EAs per selected rural ward/branch and one EA per selected urban ward/branch were chosen with probability proportional to size (also according to 1988 census information). In total, 357 EAs were selected for the TDHS, 95 in the urban area and 262 in the rural. A new listing of households was made shortly before the TDHS fieldwork by special teams including a total of 14 field workers. These teams visited the selected EAs all over the country to list the names of the heads of the households and obtain the population composition of each household (total number of persons in the household). In urban areas, the address of the dwelling was also recorded in order to make it easy to identify the household during the main survey. A fixed number of 30 households in each rural EA and 20 in each urban EA were selected.

About 9560 households were needed to achieve the required sample size, assuming 80 percent overall household completion rate.

The first-stage sampling was implemented with the following process

$$P_1 = (a_h \; M_{hi}) / \; M_h$$

where

P_1 is the first-stage selection probability
a_h is the number of wards/branches selected in a particular region
M_{hi} is the measure of size of the i-th selected ward/branch
M_h is the measure of size for the region under consideration.

The second stage was the selection of EAs according to the following sampling probability

$$P_2 = (a_{hi} \; M_{hij}) / \; M_{hi}$$

where

P_2 is the second-stage selection probability
a_{hi} is the number of EAs selected in the i-th selected ward/branch
M_{hij} is the measure of size of the j-th selected EA
M_{hi} is the measure of size for the ward/branch under consideration.

The final third stage was implemented according to the following relationship

$$P_3 = b / L_{hij}$$

where

b is either 20 (urban) or 30 (rural)
L_{hij} is the number of households listed in the j-th selected EA.

The overall sampling fraction was calculated as the product of the three probabilities of selection; the raw sample weights are just the inverse of this value. The raw sample weights were adjusted by differentials in the household response rate and the individual interview response rate. The final individual weights were calculated by normalizing them for each area so that the total number of weighted cases equals the total number of unweighted cases.

A male survey was also designed as a subsample of the selected households; one of every four was selected and every male between 15 and 60 years old was interviewed.

A total of 9238 women aged 15-49 years were successfully interviewed in the 1991 TDHS. The household response rate was about 97.2 on the mainland and 98.9 in Zanzibar. The individual response was 88.9 on the mainland and 79.4 in Zanzibar.

B.2 Fieldwork and Data Processing

The Questionnaires

The household, female, and male questionnaires were designed by following the Model Questionnaire "B" which is for low contraceptive prevalence countries. Some adaptations were made to suit the Tanzania situation, but the core questions were not changed. The original questionnaire was prepared in English and later translated into Kiswahili, the language that is widely spoken in the country. There are parts in the

country where people are not very conversant with Kiswahili and would find it difficult to respond in Kiswahili but would understand when they are asked anything. The translated document was given to another translator to translate it back into English and comparisons were made to determine the differences. The final English versions of the questionnaires are given in Appendix E.

Pretest

A pretest to assess the viability of the survey instruments, particularly the questionnaires and the field organization, was carried out in Iringa Rural District, Iringa Region. It covered 16 enumeration areas with a total of 320 households. The pretest, which took a month to complete, was carried out in November/December, 1990, and covered both rural and urban EAs.

The pretest training took two weeks and consisted of classroom training and field practice in neighbourhood areas. In all, 14 newly recruited interviewers and the Census staff were involved. The Census staff who were to be transformed into the TDHS team handled the training for both the fieldwork management and the questionnaire. During the later fieldwork, they supervised the field exercise.

During the fieldwork, the administrative structure of the CCM Party, which involved the Party Branch Offices and the ten-cell leadership, were utilised in an effort to secure the maximum confidence and cooperation of the people in the areas where the team was working. At the end of the fieldwork, the interviewers and the supervisory team returned to the head office in Dar es Salaam for debriefing and discussion of their field experiences, particularly those related to the questionnaires and the logistic problems that were encountered. All these experiences were used to improve upon the final version of the questionnaires and the overall logistic arrangements.

Recruitment of Field Staff

One of the most difficult activities that must be done before the interviews begin is recruiting of the right type of personnel, i.e., those who would undertake such a difficult task. Given the nature of the work, the questions to be asked, and the type of respondents involved, interviewers who are selected have to be able to endure the difficult conditions in the field. Since most of the work relates to health and family planning issues, it was believed that persons who are working in the health sector would be the best people to do the job. In general, they are mature, responsible, and familiar with many of the questionnaire topics.

The Ministry of Health was consulted to secure the services of the female and male trained nurses. Two female nurses were required from each of the mainland regions and one male nurse in each of the selected regions (since only one male interviewer was needed for each team). For Zanzibar, six female nurses were requested from the Zanzibar Ministry of Health and the Office of the Government Statistician in Zanzibar was requested to provide supervisory and other staff to work on the survey in Zanzibar.

In all, 62 female interviewers and 16 male interviewers were recruited, and 7 Census and Planning Commission people were selected as supervisors, including some who took part in the pretest. After the four intensive weeks of training, 48 female and 8 male interviewers were selected for the fieldwork. Assessment tests and in-class mock interviews were used in selecting the best candidates.

Training of Field Staff

The training of the field staff was carried out in two classrooms at one location. The training took place at the National Bank of Commerce, Bankers' Training Institute, Iringa Municipality, Iringa Region. Two teams of two persons from the Census Office, with support of staff from DHS/Macro International and the Tanzania Food and Nutrition Centre, conducted the training. Trial interviews were done in the neighbourhood of the municipality.

The four weeks of training were devoted to classroom lectures, classroom mock interviews among the trainees, and interviews with invited volunteers from outside the classrooms with everyone listening. At the end of such interviews, trainees were invited to relate their observations as to how the entire interview was conducted and describe any mistakes that were made by the interviewer under the prevailing conditions. Later, the interviewers were taken out of the classroom to the field where each was assigned a household to interview. When all the interviewers were back in the classroom, each was asked to recount some of the experiences he encountered in the administration of the questionnaire, the behaviour of the respondent, and how he handled the situation.

During training, a series of assessment tests were given to the interviewers and supervisors. These tests were graded and the results were used in selecting interviewers. Those candidates who had a better grasp of the questionnaire and were able to detect errors in completed questionnaires were chosen to be field editors.

Two guests were invited to talk to the trainees on family planning and maternal and child health. A staff person from the Tanzania Family Planning Association (UMATI) talked about family planning methods and sources where they can be obtained. Another person who came from the Maternal and Child Health Department in the Regional Hospital of Iringa discussed maternal and child health care and immunization.

Anthropometry was taught for a week and was conducted by a DHS consultant on anthropometry who was assisted by a specialist from the Tanzania Food and Nutrition Centre. Arrangements were made with the neighbouring villages for practice measuring of children below age 5 years and their mothers. All trainees received the anthropometric training.

Supervisors and editors received additional training on their specific duties in the field. The main purpose was to ensure that all the teams would be following a uniform set of procedures.

The forty-eight female interviewers, 8 male interviewers, and 8 editors were selected from the larger pool of trainees at the end of the training course. Eight teams were made up and each team was allocated between two and three regions. Each field team was composed of six female interviewers, one male interviewer, one editor, a supervisor, and a driver (each team had one vehicle).

The main fieldwork began immediately after the training. Teams were dispatched to their respective regions with instructions to introduce themselves to the regional, district, ward, and village leaders *before* beginning the interviews. When a team got into the cluster (enumeration area), it had to identify itself to the local leaders before interviews would begin. This was necessitated by the fact that, in order to get the required maximum cooperation, the leaders had to be aware of the project and so inform the people about it. This is the usual practice in Tanzania whenever there is anything that involves the participation of the people, be it in urban or rural areas.

The fieldwork for the main survey was conducted in the period between October 1991 and March 1992. Thirty households were selected for interview in each cluster (EA). Women and men for the individual interview were identified during the household interview. Team supervisors located the housing units and assigned the selected households to the interviewers. Completed household and individual questionnaires were handed over to the field editors who checked to ensure that all relevant questions were recorded correctly, that the skip pattern instructions were followed properly, and that responses were internally consistent. The editing work was done before the team left the EA so that the interviewer could go back to the respondent to resolve any errors.

The supervisors were required to ensure that all the selected households and eligible women and men in an EA were interviewed, and that assignment sheets for the interviewers and supervisors were duly filled. The questionnaires and other control forms were submitted to the Head Office in Dar es Salaam for data entry.

Data Entry

The data processing staff for the survey work consisted of four clerks and one supervisor who were staff of the Bureau of Statistics. They were given initial data processing training by the DHS staff. Four microcomputers were installed in the Census Office and were used exclusively to process the TDHS data.

Before the questionnaires were passed for data entry, they had to undergo office editing to check for internal consistency of responses recorded in the questionnaire and to see that the skip instructions had been followed, that there were no omissions, and that all entries were legible. Data entry began in November 1991 after the Census Office received questionnaires from the Dar es Salaam/Coast team and was completed during the last week of May 1992. When all the data had been entered, a final edit was done. This was completed in July 1992 and the preliminary report was published in September 1992.

Table B.1 Results of the household and individual interviews by residence and zone

Results of the household and individual interviews by residence and zone, Tanzania 1991/92

Result	Residence					Zone						
	Main-land	Dar es Salaam	Other urban	Rural	Zanzi-bar	Coastal	Northern High-lands	Lake	Central	Southern High-lands	South	Total
Selected households												
Sampled	8686	583	1162	6941	596	2462	876	2570	816	1242	1316	9282
Found	8013	520	1057	6436	548	2266	800	2406	744	1139	1206	8561
Interviewed	7785	478	1005	6302	542	2199	733	2367	731	1126	1171	8327
Household response rate	97.2	91.9	95.1	97.9	98.9	97.0	91.6	98.4	98.3	98.9	97.1	97.3
Eligible women	9112	541	1227	7344	535	2375	848	3213	773	1233	1205	9647
Women interviewed	8718	505	1178	7035	520	2271	805	3089	750	1178	1145	9238
Eligible women response rate	95.7	93.3	96.0	95.8	97.2	95.6	94.9	96.1	97.0	95.5	95.0	95.8
Eligible men	2261	151	301	1809	131	574	224	779	192	328	295	2392
Men interviewed	2010	132	263	1615	104	504	199	695	171	272	273	2114
Eligible men response rate	88.9	87.4	87.4	89.3	79.4	87.8	88.8	89.2	89.1	82.9	92.5	88.4

Table B.2 Sample implementation for women according to residence and zone

Percent distribution of households and eligible women in the DHS sample by results of the interview and household, eligible women and overall response rates, according to residence and zone, Tanzania 1991/92

	Residence					Zone						
Result	Main-land	Dar es Salaam	Other urban	Rural	Zanzi-bar	Coastal	Northern High-lands	Lake	Central	Southern High-lands	South	Total
Selected households												
Completed (C)	89.6	82.0	86.5	90.8	90.9	89.3	83.7	92.1	89.6	90.7	89.0	89.7
Household present but no competent respondent at home (HP)	1.7	4.6	2.3	1.3	0.3	1.8	7.4	0.8	1.1	0.2	0.4	1.6
Refused (R)	0.1	0.9	0.2	0.1	0.0	0.2	0.2	0.1	0.1	0.2	0.0	0.1
Dwelling not found (DNF)	0.8	1.7	2.0	0.5	0.7	0.7	0.0	0.6	0.4	0.6	2.3	0.8
Household absent (HA)	1.6	3.4	2.8	1.3	1.5	1.8	4.6	0.6	1.2	1.6	1.6	1.6
Dwelling vacant (DV)	4.8	6.2	5.6	4.5	5.7	5.2	3.9	4.2	5.1	6.1	4.8	4.8
Dwelling destroyed (DD)	1.1	0.3	0.4	1.3	0.8	0.6	0.2	1.5	2.1	0.2	2.0	1.1
Other (O)	0.2	0.9	0.3	0.1	0.0	0.3	0.0	0.1	0.4	0.3	0.0	0.2
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
Number	8686	583	1162	6941	596	2462	876	2570	816	1242	1316	9282
Household response rate (HRR)[1]	97.2	91.9	95.1	97.9	98.9	97.0	91.6	98.4	98.3	98.9	97.1	97.3
Eligible women												
Completed (EWC)	95.7	93.3	96.0	95.8	97.2	95.6	94.9	96.1	97.0	95.5	95.0	95.8
Not at home (EWNH)	3.2	4.4	2.9	3.1	2.1	3.0	4.2	3.0	1.8	3.6	3.2	3.1
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Refused (EWR)	0.2	1.1	0.2	0.1	0.0	0.3	0.0	0.2	0.0	0.0	0.2	0.2
Partly completed (EWPC)	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1
Incapacitated (EWI)	0.9	1.1	0.8	0.9	0.7	1.0	0.8	0.6	0.9	0.8	1.5	0.9
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
Number	9112	541	1227	7344	535	2375	848	3213	773	1233	1205	9647
Eligible woman response rate (EWRR)[2]	95.7	93.3	96.0	95.8	97.2	95.6	94.9	96.1	97.0	95.5	95.0	95.8
Overall response rate (ORR)[3]	93.0	85.8	91.3	93.8	96.1	92.8	87.0	94.6	95.3	94.4	92.3	93.1

Note: The household response rate (HRR) is calculated for completed households as a proportion of completed, no competent respondent, postponed, refused, and household absent. The eligible woman response rate (EWRR) is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed 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:

$$\frac{C}{C + HP + P + R + HA + O}$$

[2]Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{EWC}{EWC + EWNH + EWP + EWR + EWPC + EWO + EWI}$$

[3]The overall response rate (ORR) is calculated as:

$$ORR = HRR * EWRR$$

Table B.3 Sample implementation for women according to region

Percent distribution of households and eligible women in the DHS sample by results of the interview and household, eligible women and overall response rates, according to region, Tanzania 1991/92

	Selected households											Eligible women									
Region	Completed (C)	Household present but no competent respondent at home (HP)	Refused (R)	Dwelling not found (DNF)	House-hold absent (HA)	House-hold vacant (DV)	Dwelling destroyed (DD)	Other (O)	Total percent	Number	House-hold response rate (HRR)	Completed (EWC)	Not at home (EWNC)	Postponed (EWP)	Refused (EWR)	Partly completed (EWPC)	Incapacitated (EWI)	Total percent	Number	Eligible woman response rate (EWRR)	Overall response rate (ORR)
Dodoma	91.2	1.9	0.3	0.3	0.5	4.5	1.1	0.3	100.0	375	97.4	97.7	1.7	0.0	0.0	0.0	0.6	100.0	349	97.7	95.2
Arusha	80.3	7.1	0.2	0.0	7.8	4.4	0.2	0.0	100.0	436	91.6	93.9	5.1	0.0	0.0	0.0	1.0	100.0	391	93.9	86.0
Kilimanjaro	87.0	7.7	0.2	0.0	1.4	3.4	0.2	0.0	100.0	440	91.6	95.8	3.5	0.0	0.0	0.0	0.7	100.0	457	95.8	87.8
Tanga	89.9	0.5	0.0	0.7	0.7	6.9	1.1	0.2	100.0	437	98.7	96.2	2.8	0.0	0.0	0.0	1.0	100.0	398	96.2	95.0
Morogoro	94.5	0.2	0.0	0.0	1.2	3.6	0.2	0.2	100.0	422	99.7	97.4	1.4	0.0	0.0	0.2	1.0	100.0	499	97.4	97.2
Coast	91.3	2.8	0.0	0.2	1.7	3.1	0.7	0.2	100.0	424	96.8	93.8	4.5	0.0	0.2	0.5	1.0	100.0	402	93.8	90.7
Dar es Salaam	82.0	4.6	0.9	1.7	3.4	6.2	0.3	0.9	100.0	583	91.9	93.3	4.4	0.0	1.1	0.0	1.1	100.0	541	93.3	85.8
Lindi	85.7	0.7	0.0	2.7	3.4	6.3	1.1	0.0	100.0	442	96.2	96.1	2.8	0.0	0.0	0.0	1.1	100.0	361	96.1	92.5
Mtwara	92.0	0.2	0.0	1.4	0.0	3.7	2.8	0.0	100.0	436	98.3	96.1	2.5	0.0	0.0	0.0	1.4	100.0	357	96.1	94.4
Ruvuma	89.3	0.2	0.0	2.7	1.4	4.3	2.1	0.0	100.0	438	96.8	93.4	4.1	0.0	0.6	0.0	1.8	100.0	487	93.4	90.4
Iringa	93.4	0.2	0.5	0.2	1.6	4.1	0.0	0.0	100.0	441	99.0	96.2	2.8	0.0	0.0	0.0	1.0	100.0	393	96.2	95.3
Mbeya	90.9	0.0	0.3	1.1	1.7	5.8	0.0	0.3	100.0	361	98.5	94.1	5.0	0.0	0.0	0.0	0.9	100.0	323	94.1	92.7
Singida	88.2	0.5	0.0	0.5	1.8	5.7	2.9	0.5	100.0	441	99.0	96.5	1.9	0.2	0.0	0.2	1.2	100.0	424	96.5	95.5
Tabora	89.7	1.4	0.0	2.3	0.7	5.0	0.9	0.0	100.0	439	96.1	96.5	2.6	0.0	0.0	0.0	0.9	100.0	429	96.5	92.7
Rukwa	87.7	0.2	0.0	0.7	1.6	8.4	0.7	0.7	100.0	440	99.0	95.9	3.5	0.0	0.0	0.0	0.6	100.0	517	95.9	95.0
Kgoma	92.0	1.6	0.0	0.5	1.1	2.7	1.8	0.2	100.0	439	97.8	97.3	2.4	0.0	0.2	0.0	0.2	100.0	510	97.3	95.1
Shinyanga	92.7	0.2	0.0	0.5	0.5	5.5	0.5	0.2	100.0	440	99.3	95.2	3.7	0.0	0.2	0.0	0.9	100.0	645	95.2	94.5
Kagera	90.3	1.6	0.5	0.5	0.5	5.5	1.0	0.0	100.0	382	97.2	94.8	3.7	0.0	1.0	0.0	0.5	100.0	405	94.8	92.1
Mwanza	90.8	0.2	0.0	0.0	0.7	4.6	3.4	0.2	100.0	436	99.7	97.4	2.1	0.0	0.0	0.0	0.5	100.0	606	97.4	97.1
Mara	96.8	0.0	0.0	0.0	0.2	1.8	1.2	0.0	100.0	434	100.0	95.6	3.6	0.2	0.0	0.2	0.5	100.0	618	95.6	95.6
Zanzibar	90.9	0.3	0.0	0.7	1.5	5.7	0.8	0.0	100.0	596	98.9	97.2	2.1	0.0	0.0	0.0	0.7	100.0	535	97.2	96.1
Total	89.7	1.6	0.1	0.8	1.6	4.8	1.1	0.2	100.0	9282	97.3	95.8	3.1	0.0	0.2	0.1	0.9	100.0	9647	95.8	93.1

Table B.4 Sample implementation for men according to residence and zone

Percent distribution of households and eligible men in the DHS sample by results of the interview and household, eligible men and overall response rates, according to residence and zone, Tanzania 1991/92

	Residence					Zone						
Result	Main-land	Dar es Salaam	Other urban	Rural	Zanzi-bar	Coastal	Northern high-lands	Lake	Central	Southern high-lands	South	Total
Selected households												
Completed (C)	91.3	80.3	88.4	92.7	89.0	89.3	88.2	91.7	93.8	93.3	91.8	91.1
Household present but no competent respondent at home (HP)	1.3	5.6	1.4	0.9	0.6	2.0	5.5	0.6	0.0	0.0	0.0	1.2
Refused (R)	0.1	2.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1
Dwelling not found (DNF)	0.6	0.7	1.8	0.4	1.3	0.5	0.0	0.5	0.5	0.3	1.9	0.6
Household absent (HA)	1.9	3.5	4.2	1.4	1.9	2.1	5.5	0.8	0.5	2.2	1.9	1.9
Dwelling vacant (DV)	3.5	6.3	3.9	3.2	7.1	5.0	0.9	4.2	2.6	4.1	2.5	3.7
Dwelling destroyed (DD)	1.3	0.7	0.0	1.5	0.0	0.5	0.0	2.2	2.1	0.0	1.9	1.2
Other (O)	0.1	0.7	0.4	0.0	0.0	0.2	0.0	0.0	0.5	0.0	0.0	0.1
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
Number	2137	142	284	1711	154	605	220	639	193	315	319	2291
Household response rate (HRR)[1]	97.9	90.5	96.5	98.7	97.9	96.8	94.2	98.8	99.5	99.7	98.0	97.9
Eligible men												
Completed (EMC)	88.9	87.4	87.4	89.3	79.4	87.8	88.8	89.2	89.1	82.9	92.5	88.4
Not at home (EMNH)	8.4	8.6	8.0	8.5	9.9	7.1	9.8	9.8	9.4	10.7	3.7	8.5
Postponed (EMP)	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Refused (EMR)	0.3	2.6	0.3	0.1	0.0	0.9	0.0	0.0	0.5	0.0	0.0	0.3
Partly completed (EMPC)	0.1	0.0	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
Incapacitated (EMI)	2.3	1.3	4.3	2.0	10.7	3.7	1.3	1.0	1.0	6.4	3.7	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
Number	2261	151	301	1809	131	574	224	779	192	328	295	2392
Eligible man response rate (EMRR)[2]	88.9	87.4	87.4	89.3	79.4	87.8	88.8	89.2	89.1	82.9	92.5	88.4
Overall response rate (ORR)[3]	87.0	79.1	84.4	88.1	77.7	85.0	83.7	88.2	88.6	82.6	90.7	86.5

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, postponed, refused, and household absent. The eligible man response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed 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:

$$\frac{C}{C + HP + P + R + HA + O}$$

[2]Using the number of eligible men falling into specific response categories, the eligible man response rate (EMRR) is calculated as:

$$\frac{EMC}{EMC + EMNH + EMP + EMR + EMPC + EMO + EMI}$$

[3]The overall response rate (ORR) is calculated as:

$$ORR = HRR * EMRR$$

Table B.5 Sample implementation for men according to region

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 region, Tanzania 1991/92

	Selected households											Eligible men								
Region	Completed (C)	Household present but no competent respondent at home (HP)	Refused (R)	Dwelling not found (DNF)	Household absent (HA)	Household vacant (DV)	Dwelling destroyed (DD)	Other (O)	Total percent	Number	Household response rate (HRR)	Completed (EMC)	Not at home (EMNC)	Postponed (EMP)	Refused (EMR)	Partly completed (EMPC)	Incapacitated (EMI)	Total percent	Number	Eligible man response rate (EMRR)	Overall response rate (ORR)
Dodoma	95.5	0.0	0.0	0.0	0.0	3.4	1.1	0.0	100.0	89	100.0	89.2	7.5	0.0	1.1	0.0	2.2	100.0	93	89.2	89.2
Arusha	84.3	6.5	0.0	0.0	8.3	0.9	0.0	0.0	100.0	108	92.9	86.1	13.0	0.0	0.0	0.0	0.9	100.0	108	86.1	80.0
Kilimanjaro	92.0	4.5	0.0	0.0	2.7	0.9	0.0	0.0	100.0	112	95.4	91.4	6.9	0.0	0.0	0.0	1.7	100.0	116	91.4	87.1
Tanga	94.1	0.0	0.0	0.0	1.0	3.9	1.0	0.0	100.0	102	100.0	85.1	11.5	0.0	0.0	0.0	3.4	100.0	87	85.1	85.1
Morogoro	94.2	0.0	0.0	0.0	1.9	3.8	0.0	0.0	100.0	104	100.0	97.3	0.9	0.9	0.9	0.0	0.0	100.0	110	97.3	97.3
Coast	92.2	2.9	0.0	0.0	1.9	1.9	1.0	0.0	100.0	103	96.9	91.6	4.2	0.0	0.0	2.1	2.1	100.0	95	91.6	88.8
Dar es Salaam	80.3	5.6	2.1	0.7	3.5	6.3	0.7	0.7	100.0	142	90.5	87.4	8.6	0.0	2.6	0.0	1.3	100.0	151	87.4	79.1
Lindi	89.4	0.0	0.0	1.0	3.8	4.8	1.0	0.0	100.0	104	98.9	89.3	6.0	0.0	0.0	0.0	4.8	100.0	84	89.3	88.3
Mtwara	95.4	0.0	0.0	0.9	0.0	0.9	2.8	0.0	100.0	108	99.0	94.2	1.9	0.0	0.0	0.0	3.9	100.0	103	94.2	93.3
Ruvuma	90.7	0.0	0.0	3.7	1.9	1.9	1.9	0.0	100.0	107	96.0	93.5	3.7	0.0	0.0	0.0	2.8	100.0	108	93.5	89.8
Iringa	94.5	0.0	0.0	0.0	1.8	3.7	0.0	0.0	100.0	109	100.0	90.1	5.9	0.0	0.0	0.0	4.0	100.0	101	90.1	90.1
Mbeya	94.5	0.0	0.0	0.0	1.1	4.4	0.0	0.0	100.0	91	100.0	86.2	7.5	0.0	0.0	0.0	6.3	100.0	80	86.2	86.2
Singida	92.3	0.0	0.0	1.0	1.0	1.9	2.9	1.0	100.0	104	99.0	88.9	11.1	0.0	0.0	0.0	0.0	100.0	99	88.9	88.0
Tabora	92.5	0.9	0.0	2.8	1.9	1.9	0.0	0.0	100.0	106	96.1	90.6	9.4	0.0	0.0	0.0	0.0	100.0	117	90.6	87.0
Rukwa	91.3	0.0	0.0	0.9	3.5	4.3	0.0	0.0	100.0	115	99.1	76.2	15.6	0.0	0.0	0.0	8.2	100.0	147	76.2	75.5
Kgoma	92.5	2.8	0.0	0.0	0.9	0.9	2.8	0.0	100.0	106	97.0	90.0	9.2	0.0	0.0	0.0	0.8	100.0	120	90.0	87.3
Shinyanga	92.5	0.0	0.0	0.0	0.9	5.7	0.9	0.0	100.0	106	100.0	87.3	12.0	0.0	0.0	0.0	0.6	100.0	166	87.3	87.3
Kagera	88.2	0.0	0.0	0.0	0.0	8.6	3.2	0.0	100.0	93	100.0	81.4	17.5	0.0	0.0	0.0	1.0	100.0	97	81.4	81.4
Mwanza	89.3	0.0	0.0	0.0	0.0	5.4	5.4	0.0	100.0	112	100.0	93.4	5.1	0.0	0.0	0.0	1.5	100.0	137	93.4	93.4
Mara	94.8	0.0	0.0	0.0	0.9	3.4	0.9	0.0	100.0	116	100.0	90.8	7.0	0.0	0.0	0.0	2.1	100.0	142	90.8	90.8
Zanzibar	89.0	0.6	0.0	1.3	1.9	7.1	0.0	0.0	100.0	154	97.9	79.4	9.9	0.0	0.0	0.0	10.7	100.0	131	79.4	77.7
Total	91.1	1.2	0.1	0.6	1.9	3.7	1.2	0.1	100.0	2291	97.9	88.4	8.5	0.0	0.3	0.1	2.8	100.0	2392	88.4	86.5

APPENDIX C

ESTIMATES OF SAMPLING ERRORS

APPENDIX C

ESTIMATES OF SAMPLING ERRORS

The results from sample surveys are affected by two types of errors, nonsampling error and sampling error. Nonsampling error is due to mistakes made in carrying out field activities, such as failure to locate and interview the correct household, errors in the way the questions are asked, misunderstanding on the part of either the interviewer or the respondent, and data entry errors. Although efforts were made to minimize this type of error during the design and implementation of the TDHS, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be measured statistically. The sample of women 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 one would have yielded results that differed somewhat from the actual sample selected. The sampling error is a measure of the variability between all possible samples; although it is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of *standard error* of 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 one can be reasonably assured that, apart from nonsampling errors, the true value of the variable for the whole population falls. For example, for any given statistic calculated from a sample survey, the value of that same statistic as measured in 95 percent of all possible samples with the same design (and expected size) will fall within a range of plus or minus two times the standard error of that statistic.

If the sample of women had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the TDHS sample design depended on stratification, stages, and clusters. Consequently, it was necessary to utilize more complex formulas. The computer package CLUSTERS, developed by the International Statistical Institute for the World Fertility Survey, was used to assist in computing the sampling errors with the proper statistical methodology.

The CLUSTERS program 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 EAs 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 (women) in EA i in the h^{th} stratum

f is the overall sampling fraction, which is so small that CLUSTERS ignores it.

In addition to the standard errors, CLUSTERS 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. CLUSTERS also computes the relative error and confidence limits for the estimates.

Sampling errors are presented in Tables C.2-C.15 for variables considered to be of major interest. Results are presented for the urban and rural areas separated and study domains. For each variable, the type of statistic (mean or proportion) and the base population are given in Table C.1. For each variable, Tables C.2-C.18 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted cases (WN), the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE).

The confidence limits have the following interpretation. For the mean number of children ever born (EVBORN), the overall average from the sample is 3.105 and its standard error is 0.038. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $3.105 \pm (2 \times 0.038)$, which means that there is a high probability (95 percent) that the *true* average number of children ever born is between 3.03 and 3.18.

The relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. The magnitude of the error increases as estimates for subpopulations such as geographical areas are considered. For the variable *children ever born*, for instance, the relative standard error (as a percentage of the estimated mean) for the whole country is 1.2 percent and is between 1.2 and 5.3 percent for the different study domains.

Table C.1 List of selected variables for sampling errors, Tanzania 1991/92

Variable	Type	Description	Base population
URBRUR	Proportion	Urban resident	All women
SECOND	Proportion	Secondary or more	All women
CURMAR	Proportion	Currently in union	All women
AGEM20	Proportion	Union before 20	Ever in union
SEX18	Proportion	Sex before 18	Ever in union
PREGNT	Proportion	Pregnant	Women in union
EVBORN	Mean	Children ever born	All women
EVB40	Mean	Children ever born	Women 40-49
SURVIV	Mean	Children surviving	All women
KMETHO	Proportion	Knowing any method	Women in union
KMDMET	Proportion	Knowing any modern method	Women in union
KSRCE	Proportion	Knowing method source	Women in union
EVUSE	Proportion	Ever use any method	Women in union
CUSE	Proportion	Using any method	Women in union
CUMODE	Proportion	Using any modern method	Women in union
CUPILL	Proportion	Using pill	Women in union
CUIUD	Proportion	Using IUD	Women in union
CUSTER	Proportion	Using female sterilisation	Women in union
CUCOND	Proportion	Using condom	Women in union
CUPABS	Proportion	Currently using abstinence	Women in union
PSOURC	Proportion	Public source user	User modern method
NOMORE	Proportion	Desiring no more children	Women in union
DELAY	Proportion	Delay child at least 2 years	Women in union
IDEAL	Mean	Ideal number of children	All women
TETANU	Proportion	Received tetanus	Births last 5 years
MEDELI	Proportion	Medical attention at birth	Births last 5 years
DIARR1	Proportion	Diarrhoea last 2 weeks	Children < 5 years
DIARR2	Proportion	Diarrhoea last 24 hours	Children < 5 years
ORSTRE	Proportion	Received ORS treatment	Diarrhea last 2 weeks
MEDTRE	Proportion	Received medical treatment	Diarrhea last 2 weeks
HCARD	Proportion	Had health card	Children 12-23 months
BCG	Proportion	Received BCG	Children 12-23 months
DPT3	Proportion	Received DPT (3 doses)	Children 12-23 months
POL3	Proportion	Received polio (3 doses)	Children 12-23 months
MEASLE	Proportion	Received measles	Children 12-23 months
FULLIM	Proportion	Fully immunised	Children 12-23 months
WGTAGE	Proportion	Weight for age < 2 standard	Children < 3 years
HGTLNG	Proportion	Height for age < 2 standard	Children < 3 years
WGTLNG	Proportion	Weight for age < 2 standard	Children < 3 years

Table C.2 Sampling errors, entire sample, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
URBRUR	.248	.031	9238	9238	6.863	.124	.187	.310
SECOND	.048	.007	9238	9238	3.005	.139	.035	.061
CURMAR	.654	.009	9238	9238	1.815	.014	.636	.672
AGEM20	.669	.010	7009	7055	1.778	.015	.649	.689
SEX18	.646	.010	7006	7053	1.715	.015	.627	.666
PREGNT	.135	.004	6091	6038	1.010	.033	.126	.143
EVBORN	3.105	.038	9238	9238	1.193	.012	3.030	3.180
EVB40	6.920	.103	1456	1410	1.256	.015	6.715	7.125
SURVIV	2.575	.031	9238	9238	1.156	.012	2.514	2.637
KMETHO	.802	.011	6091	6038	2.166	.014	.780	.825
KMDMET	.776	.012	6091	6038	2.227	.015	.753	.800
KSRCE	.711	.013	6091	6038	2.283	.019	.684	.737
EVUSE	.257	.012	6091	6038	2.102	.046	.233	.280
CUSE	.104	.006	6091	6038	1.546	.058	.092	.116
CUMODE	.066	.006	6091	6038	1.741	.084	.055	.077
CUPILL	.034	.004	6091	6038	1.792	.123	.025	.042
CUIUD	.004	.000	6091	6038	.000	.000	.004	.004
CUSTER	.016	.002	6091	6038	1.129	.112	.013	.020
CUCOND	.007	.001	6091	6038	1.255	.192	.004	.010
CUPABS	.013	.002	6091	6038	1.583	.173	.009	.018
PSOURC	.729	.023	477	545	1.108	.031	.684	.775
NOMORE	.214	.007	6091	6038	1.394	.034	.200	.229
DELAY	.416	.008	6091	6038	1.256	.019	.400	.432
IDEAL	6.051	.062	7957	7976	2.110	.010	5.927	6.175
TETANU	.900	.006	8062	8035	1.542	.007	.888	.911
MEDELI	.531	.021	8062	8035	3.073	.039	.490	.573
DIARR1	.131	.006	7209	7173	1.481	.046	.119	.142
DIARR2	.043	.003	7209	7173	1.332	.074	.037	.050
ORSTRE	.574	.022	934	936	1.306	.038	.530	.617
MEDTRE	.595	.026	934	936	1.560	.043	.544	.647
HCARD	.781	.015	1617	1616	1.453	.019	.751	.812
BCG	.954	.009	1617	1616	1.618	.009	.937	.972
DPT3	.798	.015	1617	1616	1.505	.019	.768	.829
POL3	.771	.016	1617	1616	1.544	.021	.738	.803
MEASLE	.812	.014	1617	1616	1.410	.017	.784	.840
FULLIM	.711	.017	1617	1616	1.525	.025	.676	.746
WGTAGE	.288	.009	6111	6095	1.471	.031	.270	.306
HGTLNG	.467	.011	6111	6095	1.579	.023	.445	.488
WGTLNG	.056	.004	6111	6095	1.301	.069	.049	.064

Table C.3 Sampling errors, urban, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
URBRUR	1.000	.000	1838	2294	.000	.000	1.000	1.000
SECOND	.120	.021	1838	2294	2.809	.178	.077	.162
CURMAR	.572	.023	1838	2294	2.003	.040	.526	.618
AGEM20	.592	.019	1345	1699	1.435	.032	.553	.630
SEX18	.605	.020	1345	1699	1.508	.033	.565	.645
PREGNT	.125	.012	1055	1312	1.149	.094	.101	.148
EVBORN	2.580	.100	1838	2294	1.538	.039	2.379	2.781
EVB40	6.322	.283	240	292	1.298	.045	5.756	6.888
SURVIV	2.160	.071	1838	2294	1.294	.033	2.017	2.302
KMETHO	.935	.015	1055	1312	1.979	.016	.906	.965
KMDMET	.930	.016	1055	1312	2.015	.017	.899	.962
KSRCE	.880	.020	1055	1312	1.973	.022	.840	.919
EVUSE	.440	.027	1055	1312	1.758	.061	.386	.494
CUSE	.178	.018	1055	1312	1.564	.104	.141	.215
CUMODE	.140	.019	1055	1312	1.784	.136	.101	.178
CUPILL	.084	.016	1055	1312	1.862	.190	.052	.115
CUIUD	.011	.004	1055	1312	1.223	.361	.003	.019
CUSTER	.017	.004	1055	1312	1.098	.256	.008	.026
CUCOND	.016	.004	1055	1312	1.137	.275	.007	.025
CUPABS	.015	.004	1055	1312	1.112	.277	.007	.023
PSOURC	.777	.027	199	262	.928	.035	.722	.832
NOMORE	.257	.018	1055	1312	1.370	.072	.220	.294
DELAY	.403	.014	1055	1312	.912	.034	.375	.431
IDEAL	5.342	.179	1708	2122	3.119	.034	4.984	5.700
TETANU	.934	.016	1264	1646	2.068	.017	.903	.965
MEDELI	.859	.013	1264	1646	1.271	.016	.832	.886
DIARR1	.148	.018	1124	1437	1.680	.118	.113	.184
DIARR2	.043	.009	1124	1437	1.518	.210	.025	.061
ORSTRE	.561	.048	156	213	1.240	.086	.464	.657
MEDTRE	.701	.064	156	213	1.801	.092	.572	.829
HCARD	.824	.029	247	334	1.212	.035	.766	.882
BCG	.993	.005	247	334	.961	.005	.984	1.003
DPT3	.889	.024	247	334	1.246	.027	.841	.937
POL3	.875	.036	247	334	1.786	.041	.802	.947
MEASLE	.916	.026	247	334	1.557	.029	.863	.969
FULLIM	.838	.038	247	334	1.676	.045	.762	.913
WGTAGE	.262	.030	963	1239	1.965	.113	.202	.321
HGTLNG	.416	.045	963	1239	2.769	.108	.326	.505
WGTLNG	.051	.012	963	1239	1.718	.241	.026	.075

Table C.4 Sampling errors, rural, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
URBRUR	.000	.000	7400	6944	.000	.000	.000	.000
SECOND	.024	.005	7400	6944	2.651	.195	.015	.034
CURMAR	.681	.009	7400	6944	1.605	.013	.663	.698
AGEM20	.693	.010	5664	5356	1.669	.015	.673	.714
SEX18	.660	.012	5661	5354	1.891	.018	.636	.683
PREGNT	.137	.005	5036	4726	.931	.033	.128	.146
EVBORN	3.279	.039	7400	6944	1.086	.012	3.201	3.357
EVB40	7.076	.103	1216	1119	1.188	.015	6.870	7.282
SURVIV	2.713	.032	7400	6944	1.075	.012	2.648	2.777
KMETHO	.766	.011	5036	4726	1.884	.015	.743	.788
KMDMET	.734	.012	5036	4726	1.889	.016	.710	.757
KSRCE	.664	.013	5036	4726	1.936	.019	.638	.690
EVUSE	.206	.010	5036	4726	1.746	.048	.186	.226
CUSE	.084	.005	5036	4726	1.353	.063	.073	.094
CUMODE	.045	.003	5036	4726	1.106	.072	.039	.051
CUPILL	.020	.002	5036	4726	1.270	.126	.015	.025
CUIUD	.003	.000	5036	4726	.000	.000	.003	.003
CUSTER	.016	.002	5036	4726	1.146	.126	.012	.020
CUCOND	.004	.001	5036	4726	.000	.236	.002	.007
CUPABS	.013	.003	5036	4726	1.755	.215	.007	.019
PSOURC	.685	.032	278	282	1.137	.046	.622	.749
NOMORE	.203	.007	5036	4726	1.147	.032	.190	.216
DELAY	.420	.009	5036	4726	1.335	.022	.401	.438
IDEAL	6.308	.061	6249	5854	1.797	.010	6.187	6.429
TETANU	.891	.006	6798	6390	1.462	.007	.878	.903
MEDELI	.447	.017	6798	6390	2.405	.039	.412	.482
DIARR1	.126	.006	6085	5736	1.317	.045	.115	.137
DIARR2	.043	.003	6085	5736	1.271	.077	.037	.050
ORSTRE	.578	.024	778	723	1.308	.042	.529	.626
MEDTRE	.564	.028	778	723	1.488	.049	.509	.619
HCARD	.770	.017	1370	1282	1.445	.021	.737	.803
BCG	.944	.010	1370	1282	1.625	.011	.923	.965
DPT3	.775	.018	1370	1282	1.555	.023	.739	.811
POL3	.743	.018	1370	1282	1.494	.024	.707	.779
MEASLE	.785	.014	1370	1282	1.266	.018	.756	.813
FULLIM	.678	.019	1370	1282	1.458	.028	.641	.715
WGTAGE	.295	.009	5148	4856	1.430	.032	.276	.313
HGTLNG	.480	.010	5148	4856	1.361	.021	.460	.500
WGTLNG	.058	.004	5148	4856	1.094	.061	.051	.065

Table C.5 Sampling errors, Mainland, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
URBRUR	.246	.032	8718	8978	6.899	.129	.182	.309
SECOND	.041	.007	8718	8978	3.238	.167	.028	.055
CURMAR	.654	.009	8718	8978	1.811	.014	.635	.672
AGEM20	.665	.010	6624	6864	1.757	.015	.645	.686
SEX18	.647	.010	6621	6861	1.712	.016	.627	.667
PREGNT	.134	.004	5757	5870	1.001	.033	.125	.143
EVBORN	3.104	.038	8718	8978	1.189	.012	3.027	3.180
EVB40	6.921	.105	1378	1371	1.259	.015	6.711	7.131
SURVIV	2.571	.031	8718	8978	1.153	.012	2.508	2.633
KMETHO	.798	.011	5757	5870	2.153	.014	.775	.821
KMDMET	.771	.012	5757	5870	2.216	.016	.747	.796
KSRCE	.705	.014	5757	5870	2.278	.019	.677	.732
EVUSE	.261	.012	5757	5870	2.077	.046	.237	.285
CUSE	.105	.006	5757	5870	1.534	.059	.093	.118
CUMODE	.066	.006	5757	5870	1.735	.086	.054	.077
CUPILL	.034	.004	5757	5870	1.784	.126	.025	.042
CUIUD	.004	.001	5757	5870	.000	.231	.002	.006
CUSTER	.016	.002	5757	5870	1.122	.115	.013	.020
CUCOND	.007	.001	5757	5870	1.256	.198	.004	.010
CUPABS	.014	.002	5757	5870	1.568	.175	.009	.019
PSOURC	.723	.023	445	530	1.103	.032	.676	.769
NOMORE	.215	.008	5757	5870	1.386	.035	.200	.230
DELAY	.414	.008	5757	5870	1.252	.020	.398	.430
IDEAL	6.028	.063	7481	7739	2.116	.010	5.902	6.155
TETANU	.899	.006	7609	7797	1.538	.007	.887	.911
MEDELI	.537	.021	7609	7797	3.064	.039	.494	.579
DIARR1	.131	.006	6788	6950	1.478	.047	.118	.143
DIARR2	.042	.003	6788	6950	1.357	.080	.035	.048
ORSTRE	.575	.022	877	907	1.300	.039	.530	.620
MEDTRE	.592	.027	877	908	1.550	.045	.539	.645
HCARD	.777	.016	1522	1565	1.448	.020	.746	.809
BCG	.953	.009	1522	1565	1.597	.009	.935	.971
DPT3	.794	.016	1522	1565	1.492	.020	.763	.826
POL3	.766	.017	1522	1565	1.532	.022	.732	.799
MEASLE	.810	.014	1522	1565	1.407	.018	.781	.839
FULLIM	.707	.018	1522	1565	1.521	.025	.671	.743
WGTAGE	.285	.009	5816	5943	1.471	.032	.267	.303
HGTLNG	.466	.011	5816	5943	1.571	.023	.445	.488
WGTLNG	.055	.004	5816	5943	1.288	.071	.047	.063

Table C.6 Sampling errors, Dar es Salaam, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
URBRUR	.889	.027	505	585	1.931	.030	.835	.943
SECOND	.095	.021	505	585	1.580	.218	.053	.136
CURMAR	.597	.016	505	585	.741	.027	.564	.629
AGEM20	.613	.027	374	423	1.066	.044	.559	.667
SEX18	.588	.032	374	423	1.237	.054	.525	.651
PREGNT	.105	.014	301	349	.808	.136	.077	.134
EVBORN	2.354	.111	505	585	.923	.047	2.132	2.576
EVB40	6.083	.470	56	66	1.089	.077	5.144	7.022
SURVIV	1.957	.113	505	585	1.130	.058	1.730	2.184
KMETHO	.917	.033	301	349	2.076	.036	.851	.983
KMDMET	.911	.033	301	349	2.011	.036	.845	.977
KSRCE	.849	.036	301	349	1.739	.042	.777	.921
EVUSE	.495	.033	301	349	1.127	.066	.430	.560
CUSE	.157	.023	301	349	1.072	.143	.112	.202
CUMODE	.109	.023	301	349	1.294	.213	.063	.156
CUPILL	.057	.015	301	349	1.116	.261	.027	.087
CUIUD	.005	.003	301	349	.790	.628	-.001	.012
CUSTER	.022	.007	301	349	.851	.331	.007	.036
CUCOND	.019	.006	301	349	.815	.335	.006	.032
CUPABS	.006	.004	301	349	.865	.621	-.002	.014
PSOURC	.697	.056	51	52	.861	.080	.585	.809
NOMORE	.257	.029	301	349	1.143	.112	.199	.315
DELAY	.353	.029	301	349	1.055	.082	.295	.411
IDEAL	5.182	.178	491	572	1.532	.034	4.826	5.538
TETANU	.956	.012	314	373	1.052	.013	.931	.980
MEDELI	.865	.040	314	373	1.905	.046	.786	.944
DIARR1	.120	.016	272	322	.809	.133	.088	.152
DIARR2	.023	.008	272	322	.896	.354	.007	.039
ORSTRE	.309	.099	32	39	1.118	.321	.110	.508
MEDTRE	.621	.096	32	39	1.106	.154	.429	.812
HCARD	.591	.059	47	55	.828	.100	.473	.708
BCG	.983	.016	47	55	.836	.016	.952	1.015
DPT3	.850	.038	47	55	.724	.045	.774	.926
POL3	.826	.038	47	55	.686	.046	.750	.902
MEASLE	.870	.050	47	55	1.023	.058	.769	.970
FULLIM	.774	.054	47	55	.884	.070	.666	.883
WGTAGE	.199	.024	228	277	.934	.122	.151	.248
HGTLNG	.285	.035	228	277	1.227	.123	.215	.355
WGTLNG	.068	.021	228	277	1.272	.304	.027	.110

Table C.7 Sampling errors, Other urban (Mainland), Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
URBRUR	1.000	.000	1178	1686	.000	.000	1.000	1.000
SECOND	.107	.028	1178	1686	3.064	.257	.052	.163
CURMAR	.573	.031	1178	1686	2.155	.054	.511	.635
AGEM20	.582	.024	866	1265	1.416	.041	.534	.629
SEX18	.617	.024	866	1265	1.424	.038	.570	.664
PREGNT	.135	.016	689	966	1.254	.121	.102	.168
EVBORN	2.689	.120	1178	1686	1.452	.045	2.449	2.928
EVB40	6.421	.353	160	220	1.316	.055	5.715	7.128
SURVIV	2.246	.079	1178	1686	1.135	.035	2.087	2.405
KMETHO	.942	.016	689	966	1.781	.017	.911	.974
KMDMET	.938	.017	689	966	1.858	.018	.903	.972
KSRCE	.891	.023	689	966	1.903	.025	.846	.936
EVUSE	.433	.035	689	966	1.836	.080	.364	.503
CUSE	.187	.024	689	966	1.610	.128	.140	.235
CUMODE	.151	.024	689	966	1.765	.160	.103	.199
CUPILL	.095	.021	689	966	1.863	.219	.053	.137
CUIUD	.013	.005	689	966	1.238	.415	.002	.023
CUSTER	.016	.005	689	966	1.079	.323	.006	.026
CUCOND	.014	.006	689	966	1.304	.422	.002	.025
CUPABS	.017	.006	689	966	1.135	.327	.006	.028
PSOURC	.793	.030	136	208	.865	.038	.732	.853
NOMORE	.257	.024	689	966	1.419	.092	.210	.305
DELAY	.420	.017	689	966	.887	.040	.387	.454
IDEAL	5.408	.233	1068	1527	3.377	.043	4.941	5.875
TETANU	.930	.019	872	1273	2.035	.021	.891	.969
MEDELI	.863	.014	872	1273	1.073	.016	.836	.891
DIARR1	.159	.022	776	1110	1.645	.136	.116	.202
DIARR2	.048	.011	776	1110	1.471	.233	.026	.071
ORSTRE	.605	.058	117	176	1.293	.096	.489	.722
MEDTRE	.719	.077	117	176	1.871	.107	.565	.874
HCARD	.863	.027	176	273	1.062	.032	.809	.918
BCG	.995	.005	176	273	.954	.005	.986	1.005
DPT3	.894	.029	176	273	1.280	.032	.837	.951
POL3	.881	.044	176	273	1.881	.050	.793	.969
MEASLE	.923	.030	176	273	1.565	.033	.862	.983
FULLIM	.847	.046	176	273	1.750	.054	.756	.939
WGTAGE	.274	.035	685	965	1.883	.127	.204	.344
HGTLNG	.448	.050	685	965	2.510	.112	.348	.548
WGTLNG	.044	.014	685	965	1.675	.307	.017	.071

Table C.8 Sampling errors, Rural (Mainland), Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
URBRUR	.000	.000	7035	6707	.000	.000	.000	.000
SECOND	.020	.005	7035	6707	2.890	.241	.010	.030
CURMAR	.679	.009	7035	6707	1.610	.013	.661	.697
AGEM20	.690	.011	5384	5176	1.671	.015	.669	.711
SEX18	.659	.012	5381	5173	1.904	.019	.635	.684
PREGNT	.137	.005	4767	4555	.924	.034	.127	.146
EVBORN	3.273	.040	7035	6707	1.086	.012	3.194	3.353
EVB40	7.073	.105	1162	1086	1.196	.015	6.862	7.284
SURVIV	2.706	.033	7035	6707	1.077	.012	2.639	2.772
KMETHO	.758	.012	4767	4555	1.866	.015	.735	.781
KMDMET	.725	.012	4767	4555	1.871	.017	.701	.749
KSRCE	.654	.013	4767	4555	1.922	.020	.627	.680
EVUSE	.207	.010	4767	4555	1.752	.050	.186	.227
CUSE	.084	.005	4767	4555	1.359	.065	.073	.095
CUMODE	.044	.003	4767	4555	1.114	.075	.037	.051
CUPILL	.019	.003	4767	4555	1.295	.135	.014	.024
CUIUD	.002	.000	4767	4555	.000	.000	.002	.002
CUSTER	.016	.002	4767	4555	1.155	.131	.012	.020
CUCOND	.005	.001	4767	4555	.000	.241	.002	.007
CUPABS	.014	.003	4767	4555	1.739	.215	.008	.019
PSOURC	.673	.033	258	269	1.134	.049	.607	.740
NOMORE	.202	.007	4767	4555	1.122	.032	.189	.215
DELAY	.417	.010	4767	4555	1.337	.023	.398	.436
IDEAL	6.282	.062	5922	5640	1.813	.010	6.158	6.405
TETANU	.889	.007	6423	6152	1.467	.007	.876	.902
MEDELI	.449	.018	6423	6152	2.427	.040	.413	.485
DIARR1	.126	.006	5740	5518	1.327	.047	.114	.137
DIARR2	.041	.003	5740	5518	1.312	.084	.034	.048
ORSTRE	.582	.025	728	693	1.310	.043	.533	.632
MEDTRE	.559	.028	728	693	1.490	.051	.502	.615
HCARD	.767	.017	1299	1237	1.446	.022	.732	.801
BCG	.942	.011	1299	1237	1.613	.011	.920	.964
DPT3	.770	.018	1299	1237	1.551	.024	.733	.807
POL3	.737	.019	1299	1237	1.490	.025	.700	.774
MEASLE	.783	.015	1299	1237	1.266	.019	.753	.812
FULLIM	.673	.019	1299	1237	1.457	.029	.634	.711
WGTAGE	.292	.010	4903	4701	1.429	.033	.273	.311
HGTLNG	.481	.010	4903	4701	1.368	.021	.460	.501
WGTLNG	.056	.004	4903	4701	1.076	.063	.049	.064

Table C.9 Sampling errors, Zanzibar, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
URBRUR	.340	.034	520	261	1.633	.100	.272	.408
SECOND	.280	.031	520	261	1.564	.110	.219	.342
CURMAR	.646	.022	520	261	1.066	.035	.601	.691
AGEM20	.792	.017	385	192	.797	.021	.759	.825
SEX18	.624	.022	385	192	.890	.035	.580	.668
PREGNT	.140	.022	334	168	1.158	.158	.096	.183
EVBORN	3.166	.128	520	261	.900	.041	2.909	3.423
EVB40	6.891	.395	78	39	.898	.057	6.101	7.680
SURVIV	2.744	.102	520	261	.820	.037	2.539	2.949
KMETHO	.959	.013	334	168	1.198	.014	.932	.985
KMDMET	.959	.013	334	168	1.198	.014	.932	.985
KSRCE	.925	.015	334	168	1.060	.017	.895	.956
EVUSE	.111	.022	334	168	1.261	.195	.068	.155
CUSE	.071	.017	334	168	1.189	.235	.038	.105
CUMODE	.066	.016	334	168	1.189	.245	.034	.098
CUPILL	.029	.010	334	168	1.126	.357	.008	.050
CUIUD	.003	.003	334	168	.974	1.020	-.003	.008
CUSTER	.015	.006	334	168	.963	.435	.002	.027
CUCOND	.008	.003	334	168	.596	.358	.002	.014
CUPABS	.005	.004	334	168	.943	.715	-.002	.013
PSOURC	.972	.030	32	15	.000	.030	.913	1.031
NOMORE	.207	.026	334	168	1.193	.128	.154	.260
DELAY	.494	.027	334	168	.974	.054	.441	.548
IDEAL	6.799	.275	476	236	1.666	.040	6.249	7.349
TETANU	.919	.015	453	238	.937	.016	.889	.948
MEDELI	.351	.039	453	238	1.374	.111	.273	.429
DIARR1	.127	.016	421	222	.949	.122	.096	.158
DIARR2	.095	.012	421	222	.868	.130	.070	.119
ORSTRE	.533	.078	57	28	1.135	.147	.376	.690
MEDTRE	.690	.086	57	28	1.366	.124	.519	.862
HCARD	.910	.026	95	51	.916	.029	.857	.962
BCG	1.000	.000	95	51	.000	.000	1.000	1.000
DPT3	.926	.023	95	51	.891	.025	.879	.972
POL3	.926	.023	95	51	.891	.025	.879	.972
MEASLE	.865	.023	95	51	.682	.027	.818	.911
FULLIM	.842	.030	95	51	.830	.036	.782	.903
WGTAGE	.399	.044	295	152	1.375	.111	.310	.487
HGTLNG	.479	.033	295	152	1.097	.069	.413	.546
WGTLNG	.110	.021	295	152	1.222	.194	.067	.152

Table C.10 Sampling errors, Coast, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
URBRUR	.428	.025	2271	1988	2.406	.058	.378	.478
SECOND	.078	.010	2271	1988	1.857	.134	.057	.099
CURMAR	.632	.012	2271	1988	1.163	.019	.609	.656
AGEM20	.665	.014	1716	1507	1.225	.021	.637	.693
SEX18	.625	.016	1715	1507	1.348	.025	.594	.657
PREGNT	.132	.010	1425	1256	1.141	.077	.112	.153
EVBORN	3.033	.066	2271	1988	1.033	.022	2.902	3.165
EVB40	6.843	.174	355	307	1.038	.025	6.494	7.192
SURVIV	2.488	.060	2271	1988	1.137	.024	2.367	2.609
KMETHO	.877	.014	1425	1256	1.551	.015	.850	.904
KMDMET	.869	.014	1425	1256	1.540	.016	.842	.897
KSRCE	.825	.014	1425	1256	1.413	.017	.797	.854
EVUSE	.352	.017	1425	1256	1.371	.049	.317	.386
CUSE	.131	.012	1425	1256	1.399	.096	.106	.156
CUMODE	.072	.011	1425	1256	1.550	.148	.051	.093
CUPILL	.042	.008	1425	1256	1.539	.195	.026	.058
CUIUD	.002	.000	1425	1256	.000	.000	.002	.002
CUSTER	.012	.002	1425	1256	.832	.197	.007	.017
CUCOND	.011	.003	1425	1256	.952	.243	.005	.016
CUPABS	.013	.004	1425	1256	1.196	.280	.006	.020
PSOURC	.785	.037	153	134	1.104	.047	.711	.859
NOMORE	.230	.013	1425	1256	1.197	.058	.203	.256
DELAY	.415	.017	1425	1256	1.337	.042	.380	.449
IDEAL	5.928	.105	2111	1855	1.714	.018	5.717	6.138
TETANU	.903	.011	1818	1604	1.351	.012	.881	.925
MEDELI	.587	.029	1818	1604	2.057	.049	.529	.645
DIARR1	.156	.009	1612	1405	1.021	.060	.137	.175
DIARR2	.044	.005	1612	1405	.931	.108	.035	.054
ORSTRE	.584	.046	260	219	1.439	.079	.492	.677
MEDTRE	.644	.050	260	219	1.594	.077	.545	.743
HCARD	.759	.031	358	309	1.310	.040	.698	.820
BCG	.950	.022	358	309	1.733	.023	.907	.993
DPT3	.832	.023	358	309	1.133	.028	.786	.879
POL3	.813	.027	358	309	1.264	.033	.759	.867
MEASLE	.833	.023	358	309	1.129	.028	.786	.879
FULLIM	.753	.032	358	309	1.361	.043	.688	.817
WGTAGE	.308	.018	1317	1171	1.354	.058	.272	.343
HGTLNG	.470	.022	1317	1171	1.543	.047	.425	.514
WGTLNG	.088	.010	1317	1171	1.239	.110	.069	.108

Table C.11 Sampling errors, Northern Highlands, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
URBRUR	.275	.099	805	1090	6.297	.360	.077	.474
SECOND	.123	.035	805	1090	3.017	.284	.053	.193
CURMAR	.558	.045	805	1090	2.571	.081	.468	.648
AGEM20	.490	.023	637	861	1.164	.047	.444	.536
SEX18	.440	.027	637	861	1.371	.061	.386	.494
PREGNT	.113	.013	472	608	.876	.113	.088	.139
EVBORN	2.908	.154	805	1090	1.471	.053	2.599	3.217
EVB40	7.289	.309	125	151	1.250	.042	6.671	7.907
SURVIV	2.651	.140	805	1090	1.454	.053	2.372	2.931
KMETHO	.806	.028	472	608	1.538	.035	.749	.862
KMDMET	.777	.035	472	608	1.829	.045	.707	.847
KSRCE	.735	.034	472	608	1.689	.047	.666	.803
EVUSE	.507	.028	472	608	1.202	.055	.452	.563
CUSE	.240	.022	472	608	1.115	.091	.196	.284
CUMODE	.178	.020	472	608	1.136	.112	.138	.218
CUPILL	.080	.021	472	608	1.672	.262	.038	.122
CUIUD	.025	.007	472	608	.978	.284	.011	.039
CUSTER	.048	.009	472	608	.899	.185	.030	.066
CUCOND	.021	.007	472	608	1.123	.357	.006	.035
CUPABS	.017	.006	472	608	1.001	.348	.005	.029
PSOURC	.616	.039	102	144	.803	.063	.538	.694
NOMORE	.321	.028	472	608	1.318	.088	.265	.378
DELAY	.398	.035	472	608	1.561	.088	.328	.469
IDEAL	4.839	.176	760	1026	2.471	.036	4.487	5.192
TETANU	.828	.025	672	902	1.471	.030	.779	.878
MEDELI	.615	.051	672	902	2.186	.082	.514	.716
DIARR1	.182	.024	628	852	1.511	.132	.134	.230
DIARR2	.064	.013	628	852	1.333	.207	.038	.091
ORSTRE	.557	.058	92	155	1.169	.103	.442	.672
MEDTRE	.418	.063	92	155	1.300	.150	.292	.543
HCARD	.728	.054	144	203	1.477	.074	.620	.836
BCG	.960	.033	144	203	2.020	.034	.895	1.025
DPT3	.833	.049	144	203	1.534	.059	.735	.931
POL3	.775	.065	144	203	1.841	.084	.645	.905
MEASLE	.795	.038	144	203	1.103	.048	.719	.871
FULLIM	.707	.059	144	203	1.547	.083	.589	.825
WGTAGE	.279	.018	516	687	.849	.065	.243	.315
HGTLNG	.393	.024	516	687	1.096	.062	.344	.442
WGTLNG	.056	.010	516	687	.991	.187	.035	.077

Table C.12 Sampling errors, Lake, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
URBRUR	.142	.030	3089	3116	4.802	.213	.081	.202
SECOND	.029	.010	3089	3116	3.257	.340	.009	.048
CURMAR	.673	.011	3089	3116	1.250	.016	.652	.694
AGEM20	.730	.019	2275	2304	2.076	.026	.692	.769
SEX18	.722	.023	2274	2302	2.493	.032	.675	.769
PREGNT	.154	.007	2098	2096	.874	.045	.141	.168
EVBORN	3.153	.062	3089	3116	1.095	.020	3.030	3.276
EVB40	7.305	.188	439	428	1.245	.026	6.930	7.681
SURVIV	2.602	.047	3089	3116	.991	.018	2.509	2.695
KMETHO	.741	.020	2098	2096	2.065	.027	.702	.781
KMDMET	.702	.020	2098	2096	2.043	.029	.661	.743
KSRCE	.613	.023	2098	2096	2.137	.037	.567	.658
EVUSE	.158	.016	2098	2096	2.038	.103	.126	.191
CUSE	.059	.008	2098	2096	1.641	.143	.042	.076
CUMODE	.026	.004	2098	2096	1.271	.170	.017	.035
CUPILL	.009	.002	2098	2096	1.076	.245	.005	.014
CUIUD	.000	.000	2098	2096	.000	.000	.000	.000
CUSTER	.013	.003	2098	2096	1.356	.262	.006	.019
CUCOND	.002	.000	2098	2096	.000	.000	.002	.002
CUPABS	.020	.006	2098	2096	1.863	.287	.008	.031
PSOURC	.740	.068	78	77	1.369	.093	.603	.876
NOMORE	.181	.010	2098	2096	1.134	.053	.162	.200
DELAY	.411	.012	2098	2096	1.153	.030	.386	.436
IDEAL	6.665	.104	2534	2547	2.004	.016	6.458	6.873
TETANU	.909	.009	2912	2905	1.544	.010	.891	.928
MEDELI	.439	.031	2912	2905	2.733	.070	.377	.500
DIARR1	.084	.007	2567	2564	1.205	.079	.071	.097
DIARR2	.038	.005	2567	2564	1.330	.134	.028	.048
ORSTRE	.482	.039	226	216	1.127	.081	.404	.560
MEDTRE	.546	.038	226	216	1.113	.070	.469	.623
HCARD	.785	.027	546	548	1.548	.035	.730	.839
BCG	.935	.016	546	548	1.462	.017	.904	.967
DPT3	.716	.030	546	548	1.540	.042	.655	.776
POL3	.696	.030	546	548	1.478	.042	.637	.755
MEASLE	.746	.025	546	548	1.340	.034	.695	.797
FULLIM	.624	.031	546	548	1.464	.049	.563	.686
WGTAGE	.235	.013	2237	2224	1.429	.057	.208	.261
HGTLNG	.410	.013	2237	2224	1.141	.031	.385	.436
WGTLNG	.050	.005	2237	2224	1.123	.103	.040	.061

Table C.13 Sampling errors, Central, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
URBRUR	.347	.207	750	1004	11.923	.597	-.068	.762
SECOND	.035	.011	750	1004	1.659	.320	.013	.057
CURMAR	.632	.024	750	1004	1.381	.038	.584	.681
AGEM20	.613	.022	566	769	1.063	.036	.570	.657
SEX18	.705	.023	566	769	1.191	.032	.659	.751
PREGNT	.101	.013	465	635	.963	.134	.074	.128
EVBORN	3.157	.082	750	1004	.749	.026	2.993	3.320
EVB40	6.161	.310	146	182	1.112	.050	5.541	6.781
SURVIV	2.530	.070	750	1004	.777	.028	2.391	2.670
KMETHO	.924	.032	465	635	2.574	.034	.860	.987
KMDMET	.906	.037	465	635	2.771	.041	.831	.981
KSRCE	.853	.047	465	635	2.861	.055	.759	.947
EVUSE	.280	.069	465	635	3.332	.248	.141	.419
CUSE	.110	.026	465	635	1.785	.236	.058	.161
CUMODE	.090	.027	465	635	2.033	.300	.036	.144
CUPILL	.056	.015	465	635	1.417	.269	.026	.087
CUIUD	.003	.003	465	635	1.147	1.022	-.003	.008
CUSTER	.004	.003	465	635	1.077	.772	-.002	.011
CUCOND	.016	.007	465	635	1.166	.428	.002	.029
CUPABS	.008	.004	465	635	1.042	.544	-.001	.016
PSOURC	.792	.052	36	82	.762	.066	.687	.897
NOMORE	.243	.035	465	635	1.782	.146	.172	.313
DELAY	.478	.029	465	635	1.267	.061	.419	.537
IDEAL	6.347	.149	686	931	1.499	.023	6.049	6.644
TETANU	.906	.020	696	929	1.596	.022	.866	.946
MEDELI	.577	.113	696	929	5.023	.196	.351	.802
DIARR1	.183	.021	623	814	1.360	.114	.141	.225
DIARR2	.040	.007	623	814	.946	.185	.025	.055
ORSTRE	.582	.065	117	149	1.332	.111	.453	.711
MEDTRE	.647	.067	117	149	1.438	.103	.513	.781
HCARD	.875	.016	144	180	.576	.019	.842	.908
BCG	.964	.021	144	180	1.339	.022	.922	1.007
DPT3	.835	.038	144	180	1.196	.046	.759	.912
POL3	.836	.039	144	180	1.229	.047	.757	.914
MEASLE	.878	.055	144	180	1.945	.062	.769	.988
FULLIM	.795	.049	144	180	1.415	.062	.696	.894
WGTAGE	.358	.030	548	716	1.352	.083	.299	.417
HGTLNG	.524	.047	548	716	2.143	.090	.430	.619
WGTLNG	.040	.014	548	716	1.623	.340	.013	.067

Table C.14 Sampling errors, Southern Highlands, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
URBRUR	.161	.042	1178	1141	3.912	.261	.077	.244
SECOND	.018	.011	1178	1141	2.753	.597	-.003	.039
CURMAR	.726	.021	1178	1141	1.645	.029	.683	.769
AGEM20	.671	.031	938	922	1.998	.046	.609	.732
SEX18	.590	.029	937	922	1.835	.050	.531	.649
PREGNT	.138	.006	857	829	.512	.044	.125	.150
EVBORN	3.223	.127	1178	1141	1.570	.040	2.968	3.478
EVB40	7.116	.228	166	155	1.160	.032	6.660	7.572
SURVIV	2.675	.103	1178	1141	1.539	.039	2.469	2.881
KMETHO	.687	.027	857	829	1.727	.040	.633	.742
KMDMET	.656	.024	857	829	1.475	.037	.608	.704
KSRCE	.630	.027	857	829	1.621	.042	.577	.684
EVUSE	.213	.028	857	829	2.020	.133	.157	.270
CUSE	.105	.019	857	829	1.769	.177	.068	.142
CUMODE	.067	.018	857	829	2.151	.274	.030	.104
CUPILL	.044	.015	857	829	2.198	.352	.013	.074
CUIUD	.007	.004	857	829	1.509	.600	-.001	.016
CUSTER	.013	.004	857	829	1.151	.343	.004	.022
CUCOND	.001	.000	857	829	.000	.000	.001	.001
CUPABS	.010	.004	857	829	1.320	.454	.001	.019
PSOURC	.819	.069	56	70	1.320	.084	.682	.956
NOMORE	.177	.011	857	829	.819	.060	.155	.198
DELAY	.429	.019	857	829	1.095	.043	.392	.466
IDEAL	5.764	.117	826	807	1.543	.020	5.530	5.999
TETANU	.906	.011	1098	1039	1.023	.012	.885	.927
MEDELI	.503	.028	1098	1039	1.586	.056	.446	.559
DIARR1	.131	.015	1010	953	1.348	.112	.101	.160
DIARR2	.042	.009	1010	953	1.399	.211	.024	.059
ORSTRE	.695	.046	139	124	1.107	.066	.603	.787
MEDTRE	.728	.045	139	124	1.141	.062	.637	.819
HCARD	.723	.043	247	237	1.468	.059	.638	.808
BCG	.975	.016	247	237	1.637	.017	.943	1.008
DPT3	.820	.039	247	237	1.596	.048	.741	.898
POL3	.756	.037	247	237	1.335	.049	.683	.830
MEASLE	.852	.023	247	237	1.015	.027	.806	.898
FULLIM	.716	.038	247	237	1.302	.053	.640	.791
WGTAGE	.302	.022	825	787	1.280	.072	.258	.346
HGTLNG	.549	.025	825	787	1.368	.046	.499	.599
WGTLNG	.042	.011	825	787	1.556	.261	.020	.064

Table C.15 Sampling errors, South, Tanzania 1991/92

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
URBRUR	.190	.034	1145	899	2.891	.177	.123	.257
SECOND	.010	.004	1145	899	1.334	.385	.002	.018
CURMAR	.683	.019	1145	899	1.350	.027	.646	.720
AGEM20	.755	.019	877	692	1.292	.025	.717	.792
SEX18	.707	.018	877	692	1.169	.025	.671	.743
PREGNT	.124	.014	774	614	1.191	.114	.096	.152
EVBORN	3.132	.088	1145	899	.996	.028	2.956	3.309
EVB40	6.444	.199	225	187	.928	.031	6.045	6.843
SURVIV	2.507	.067	1145	899	.931	.027	2.373	2.641
KMETHO	.886	.011	774	614	.979	.013	.864	.908
KMDMET	.868	.010	774	614	.828	.012	.848	.889
KSRCE	.748	.018	774	614	1.162	.024	.712	.784
EVUSE	.186	.017	774	614	1.229	.092	.152	.221
CUSE	.065	.009	774	614	1.056	.144	.047	.084
CUMODE	.048	.007	774	614	.939	.150	.034	.062
CUPILL	.018	.004	774	614	.922	.243	.009	.027
CUIUD	.000	.000	774	614	.000	.000	.000	.000
CUSTER	.023	.006	774	614	1.108	.260	.011	.035
CUCOND	.003	.002	774	614	1.025	.726	-.001	.006
CUPABS	.001	.001	774	614	.970	1.007	-.001	.004
PSOURC	.647	.077	52	39	1.144	.118	.494	.800
NOMORE	.215	.019	774	614	1.298	.089	.176	.253
DELAY	.374	.024	774	614	1.399	.065	.325	.422
IDEAL	5.883	.141	1040	811	1.659	.024	5.600	6.165
TETANU	.927	.010	866	657	1.007	.011	.906	.947
MEDELI	.669	.026	866	657	1.391	.039	.617	.721
DIARR1	.124	.013	769	586	1.062	.105	.098	.150
DIARR2	.039	.008	769	586	1.179	.213	.022	.056
ORSTRE	.628	.047	100	73	.916	.075	.534	.723
MEDTRE	.641	.052	100	73	1.013	.081	.537	.745
HCARD	.874	.026	178	140	1.049	.030	.822	.927
BCG	.981	.010	178	140	1.020	.011	.961	1.002
DPT3	.914	.038	178	140	1.800	.041	.838	.990
POL3	.904	.039	178	140	1.775	.043	.825	.982
MEASLE	.893	.031	178	140	1.329	.035	.831	.955
FULLIM	.848	.042	178	140	1.566	.050	.764	.933
WGTAGE	.366	.025	668	509	1.307	.069	.315	.417
HGTLNG	.597	.023	668	509	1.197	.039	.550	.644
WGTLNG	.056	.007	668	509	.742	.119	.042	.069

APPENDIX D

DATA QUALITY TABLES

APPENDIX D

DATA QUALITY TABLES

Table D.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Tanzania 1991/92

	Males		Females			Males		Females	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	857	4.0	842	3.8	36	154	0.7	204	0.9
1	831	3.9	764	3.4	37	141	0.7	168	0.8
2	744	3.5	688	3.1	38	158	0.7	228	1.0
3	676	3.2	745	3.3	39	112	0.5	145	0.7
4	750	3.5	731	3.3	40	299	1.4	227	1.0
5	686	3.2	634	2.8	41	95	0.4	144	0.6
6	728	3.4	703	3.2	42	163	0.8	143	0.6
7	668	3.2	660	3.0	43	116	0.5	127	0.6
8	617	2.9	711	3.2	44	72	0.3	86	0.4
9	595	2.8	591	2.7	45	199	0.9	218	1.0
10	641	3.0	646	2.9	46	114	0.5	131	0.6
11	553	2.6	524	2.4	47	89	0.4	101	0.5
12	615	2.9	621	2.8	48	126	0.6	147	0.7
13	652	3.1	666	3.0	49	133	0.6	103	0.5
14	616	2.9	556	2.5	50	198	0.9	176	0.8
15	552	2.6	425	1.9	51	88	0.4	146	0.7
16	557	2.6	488	2.2	52	112	0.5	193	0.9
17	460	2.2	411	1.8	53	66	0.3	158	0.7
18	482	2.3	473	2.1	54	92	0.4	145	0.7
19	324	1.5	500	2.2	55	150	0.7	190	0.9
20	421	2.0	512	2.3	56	93	0.4	139	0.6
21	288	1.4	338	1.5	57	93	0.4	96	0.4
22	269	1.3	388	1.7	58	113	0.5	104	0.5
23	255	1.2	381	1.7	59	75	0.4	62	0.3
24	215	1.0	320	1.4	60	162	0.8	222	1.0
25	314	1.5	393	1.8	61	53	0.3	30	0.1
26	266	1.3	304	1.4	62	109	0.5	100	0.4
27	227	1.1	328	1.5	63	75	0.4	61	0.3
28	256	1.2	324	1.5	64	74	0.3	45	0.2
29	194	0.9	304	1.4	65	124	0.6	136	0.6
30	411	1.9	407	1.8	66	37	0.2	44	0.2
31	148	0.7	198	0.9	67	57	0.3	42	0.2
32	244	1.2	252	1.1	68	66	0.3	58	0.3
33	149	0.7	157	0.7	69	69	0.3	40	0.2
34	142	0.7	191	0.9	70+	580	2.7	439	2.0
35	261	1.2	267	1.2	Don't know/ Missing	44	0.2	12	0.1
					Total	21170	100.0	22257	100.0

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.

Table D.2 Age distribution of eligible and interviewed women

Five-year age distribution of the de facto household population of women aged 10-54, five-year age distribution of interviewed women aged 15-49, and percentage of eligible women who were interviewed (weighted), Tanzania 1991/92

Age	Household population of women		Interviewed women		Percent interviewed (weighted)
	Number	Percent	Number	Percent	
10-14	3013	NA	NA	NA	NA
15-19	2297	24.1	2183	23.6	95.0
20-24	1939	20.3	1882	20.4	97.0
25-29	1653	17.3	1599	17.3	96.7
30-34	1206	12.6	1165	12.6	96.6
25-39	1012	10.6	1000	10.8	98.8
40-44	727	7.6	715	7.7	98.4
45-49	701	7.4	695	7.5	99.1
50-54	818	NA	NA	NA	NA
15-49	9536	NA	9238	NA	96.9

Note: The de facto population includes all residents and nonresidents who slept in the household the night before interview.
NA = Not applicable

Table D.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Tanzania 1991/92

Subject	Reference group	Percentage missing information	Number of cases
Birth date	Births in last 15 years		
Month only		16.7	20502
Month and year		0.5	20502
Age at death	Deaths to births in last 15 years	0.2	2983
Age/date at first union[1]	Ever-married women	10.9	6977
Respondent's education	All women	0.0	9238
Child's size at birth	Births in last 59 months	1.0	4248
Anthropometry[2]	Living children age 0-59 months		
Height missing		7.2	7257
Weight missing		7.1	7257
Height and weight missing		7.5	7257
Diarrhoea in last 2 weeks	Living children age 0-59 months	4.4	7257

[1]Both year and age missing
[2]Child not measured

Table D.4 Births by calendar year since birth

Distribution of births by calendar years since birth 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 1991/92

	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
90	1602	164	1766	97.6	86.2	96.5	95.2	128.4	97.9	-	-	-	781	92	874	821	72	893
89	1424	198	1622	96.1	84.2	94.7	104.5	144.0	108.6	98.0	108.8	99.2	727	117	844	696	81	778
88	1304	200	1504	93.1	85.7	92.1	91.7	145.3	97.4	96.6	95.5	96.4	624	119	742	680	82	762
87	1276	221	1498	91.1	77.4	89.1	106.6	159.4	113.0	101.8	119.5	104.1	659	136	794	618	85	703
86	1205	170	1375	91.6	71.4	89.1	100.3	90.1	99.0	95.1	62.3	89.3	603	80	684	602	89	691
85	1257	324	1580	80.2	69.3	77.9	93.4	78.6	90.1	107.0	154.8	114.2	607	142	749	650	181	831
84	1144	248	1393	77.8	68.2	76.1	103.0	96.2	101.8	95.9	87.4	94.3	581	122	703	564	127	690
83	1131	245	1375	80.2	63.2	77.2	90.3	129.7	96.2	104.8	113.9	106.3	536	138	674	594	106	701
82	1013	181	1194	78.4	63.4	76.1	116.3	126.5	117.8	96.7	82.0	94.1	545	101	646	468	80	548
81	966	196	1162	77.1	58.8	74.0	88.0	110.9	91.5	NA	NA	NA	452	103	555	514	93	607
86-90	6811	953	7764	94.2	81.0	92.5	99.3	133.0	102.9	NA	NA	NA	3394	544	3938	3417	409	3826
81-85	5511	1194	6705	78.8	65.2	76.4	97.5	103.3	98.5	NA	NA	NA	2721	607	3328	2790	587	3377
76-80	4336	916	5253	72.6	54.4	69.4	109.7	106.0	109.0	NA	NA	NA	2268	471	2740	2068	445	2513
71-75	2949	769	3718	68.3	51.2	64.8	104.8	101.5	104.1	NA	NA	NA	1509	387	1896	1440	381	1821
<71	2484	962	3445	60.2	47.6	56.7	101.0	113.1	104.2	NA	NA	NA	1248	510	1758	1236	451	1687
All	22091	4794	26885	78.8	60.5	75.6	101.7	110.8	103.3	NA	NA	NA	11140	2520	13660	10951	2274	13225

NA = Not applicable

[1]Both year and month of birth given

[2]$(B_m/B_f)*100$, where B_m and B_f are the numbers of male and female births, respectively

[3]$[2B_x/(B_{x-1}+B_{x+1})]*100$, where B_x is the number of births in calendar year x

Table D.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 1991/92

Age at death (in days)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1	49	54	31	25	160
1	69	58	54	27	208
2	26	36	24	21	108
3	32	21	18	9	80
4	14	7	6	3	31
5	7	12	1	4	24
6	5	3	9	1	18
7	42	39	30	26	138
8	0	8	5	2	16
9	0	5	8	2	15
10	0	8	1	5	14
11	1	1	0	0	2
12	1	2	0	1	4
13	1	0	0	1	2
14	30	15	15	10	69
15	1	4	3	1	8
16	0	0	2	0	2
18	0	1	3	0	4
19	0	1	1	2	3
20	3	1	1	1	6
21	10	7	5	2	24
23	0	1	0	1	2
24	1	0	0	1	1
25	0	0	1	1	2
26	1	0	0	0	1
27	0	0	1	0	1
28	5	7	4	2	18
29	1	1	1	0	4
30	9	23	5	4	41
31+	4	5	4	1	14
Missing	0	0	0	2	2
% early neonatal[1]	65.6	60.4	62.5	59.3	62.3
Total 0-30	309	317	229	154	1009

[1](0-6 days/0-30 days) * 100

Table D.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 1991/92

Age at death (in months)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1[a]	309	317	229	155	1011
1	43	47	29	19	139
2	41	43	39	32	156
3	43	65	48	34	191
4	39	28	20	11	98
5	24	41	17	20	101
6	40	59	26	47	171
7	40	38	36	15	130
8	28	29	22	20	98
9	48	44	22	18	131
10	12	16	12	7	47
11	19	16	16	10	61
12	22	37	25	46	130
13	12	21	10	5	48
14	11	6	10	7	34
15	10	10	14	6	41
16	3	3	6	7	19
17	2	4	3	7	17
18	14	35	40	30	120
19	3	1	0	0	5
20	3	2	3	1	9
21	2	1	1	2	6
22	1	4	0	0	5
23	2	1	3	1	7
24+	6	20	10	6	42
1 year	14	21	35	23	92
Total 0-11	687	742	516	389	2333
Percent neonatal[b]	45.1	42.7	44.4	40.0	43.3

[a]Includes deaths under 1 month reported in days
[b](Under 1 month/under 1 year) * 100

APPENDIX E

QUESTIONNAIRES

UNITED REPUBLIC OF TANZANIA

BUREAU OF STATISTICS, PLANNING COMMISSION
TANZANIA DEMOGRAPHIC AND HEALTH SURVEY

HOUSEHOLD SCHEDULE

IDENTIFICATION

NAME OF HOUSEHOLD HEAD _____

TDHS CLUSTER ID.....

HOUSEHOLD NO.....

REGION _____

DISTRICT _____

WARD _____

ENUMERATION AREA _____

URBAN/RURAL (urban=1, rural=2).....

LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE.....
(large city=1, small city=2, town=3, countryside=4)

HOUSEHOLD SELECTED FOR MALE SURVEY (1=YES, 2=NO)

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR
INTERVIEWER'S NAME				ID NO.
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:
1 COMPLETED
2 HOUSEHOLD PRESENT BUT NO COMPETENT RESP. AT HOME
3 HOUSEHOLD ABSENT
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 ELIGIBLE WOMEN

TOTAL ELIGIBLE MEN

	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	KEYED BY
NAME				
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.

NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	EDUCATION			PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 15 YEARS OLD				ELIGIBILITY	
							IF AGED 5 YEARS OR OLDER							WOMEN	MEN
	Please give me the names of the persons who usually live in your household or are staying with you now, starting with the head of the household	What is the relationship of (NAME) to the head of the household?*	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) sleep here last night?	How old is (NAME)?	Has (NAME) ever been to school?	What is the highest formal school (NAME) completed?**	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 WOMEN ELIGIBLE FOR INDIVIDUAL INTERVIEW	CIRCLE LINE NUMBER OF MEN ELIGIBLE FOR INDIVIDUAL INTERVIEW
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
			M F	YES NO	YES NO	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
09			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		09	09
10			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		10	10

HOUSEHOLD SCHEDULE CONTINUED

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
			M F	YES NO	YES NO	IN YEARS	YES NO		YES NO	YES NO DK		YES NO DK			
11			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		11	11
12			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		12	12
13			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		13	13
14			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		14	14
15			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		15	15
16			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		16	16
17			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		17	17
18			1 2	1 2	1 2		1 2		1 2	1 2 8		1 2 8		18	18

TICK HERE IF CONTINUATION SHEET USED ☐

WOMEN MEN

TOTAL NUMBER OF ELIGIBLE: ☐☐ ☐☐

LINE NUMBER OF RESPONDENT TO HOUSEHOLD SCHEDULE: ☐☐

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, 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	05= GRANDCHILD	09= OTHER RELATIVE
02= WIFE OR HUSBAND	06= PARENT	10= ADOPTED/FOSTER CHILD
03= SON OR DAUGHTER	07= PARENT-IN-LAW	11= NOT RELATED
04= SON OR DAUGHTER-IN-LAW	08= BROTHER OR SISTER	98= DK

** CODES FOR Q.9 HIGHEST FORMAL SCHOOL:

00= LESS THAN 1 YEAR COMPLETED			
01= STANDARD1	05= STANDARD5	09= FORM1	13= FORM5
02= STANDARD2	06= STANDARD6	10= FORM2	14= FORM6
03= STANDARD3	07= STANDARD7	11= FORM3	15= UNIVERSITY
04= STANDARD4	08= STANDARD8	12= FORM4	98= DONT 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 TO
17	What is the source of water your household uses for handwashing and dishwashing?	PIPED INTO HOUSE/YARD/PLOT.....11 PUBLIC TAP.....12 WELL IN RESIDENCE/YARD/PLOT....21 PUBLIC WELL.....22 SPRING.....31 RIVER/STREAM.....32 POND/LAKE.....33 DAM.....34 RAIN WATER.....41 TANKER TRUCK.....51 OTHER_____71 (SPECIFY)	→18 →18 →18
18	How long does it take to go there, get water, and come back?	MINUTES..... ☐☐☐ ON PREMISES.....996	
19	Does your household get drinking water from this same source?	YES.....1 NO.....2	→21
20	What is the source of drinking water for members of your household?	PIPED INTO HOUSE/YARD/PLOT.....11 PUBLIC TAP.....12 WELL IN RESIDENCE/YARD/PLOT....21 PUBLIC WELL.....22 SPRING.....31 RIVER/STREAM.....32 POND/LAKE.....33 DAM.....34 RAIN WATER.....41 TANKER TRUCK.....51 OTHER_____71 (SPECIFY)	→21 →21 →21
21	How long does it take to go there, get water, and come back?	MINUTES..... ☐☐☐ ON PREMISES.....996	
22	What kind of toilet facility does your household have?	OWN FLUSH TOILET.....11 SHARED FLUSH TOILET.....12 TRADITIONAL PIT TOILET.....21 VENTILATED PIT LATRINE.....22 NO FACILITY/BUSH/FIELD.....31	
23	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	
24	How many rooms in your household are used for sleeping?	ROOMS..... ☐☐	
25	MAIN MATERIAL OF THE FLOOR.	EARTH/SAND.....11 WOOD PLANKS.....21 PARQUET OR POLISHED WOOD.....31 CERAMIC TILES.....32 CEMENT.....33 OTHER_____41 (SPECIFY)	
26	Does any member of your household own: A bicycle? A motorcycle? A car?	YES NO BICYCLE.....1 2 MOTORCYCLE.....1 2 CAR.....1 2	

UNITED REPUBLIC OF TANZANIA

BUREAU OF STATISTICS, PLANNING COMMISSION
TANZANIA DEMOGRAPHIC AND HEALTH SURVEY

INDIVIDUAL QUESTIONNAIRE
FEMALE

IDENTIFICATION

NAME OF HOUSEHOLD HEAD _____

TDHS CLUSTER ID..... | | | |

HOUSEHOLD NO..... | | | |

REGION _____ | | |

DISTRICT _____ | |

WARD _____ | | | |

ENUMERATION AREA _____ | | | |

URBAN/RURAL (urban=1, rural=2)..... | |

LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE..... | |
(large city=1, small city=2, town=3, countryside=4)

NAME AND LINE NUMBER OF FEMALE RESPONDENT _____ | |

NAME AND LINE NUMBER OF HUSBAND _____ | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY | | MONTH | | YEAR | |
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 OTHER _____
(SPECIFY)

	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	KEYED BY
NAME				| |
DATE				

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
101	RECORD THE TIME.	HOUR..... ☐☐ MINUTES..... ☐☐	
102	First I would like to ask some questions about your background. For most of the time until you were 12 years old, did you live in Dar es Salaam city, another urban area, or in the rural area?	CITY (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 the rural area?	CITY (DAR ES SALAAM).....1 OTHER URBAN AREA.....2 RURAL AREA/VILLAGE.....3	
105	In what month and year were you born?	MONTH..... ☐☐ DK MONTH.....98 YEAR..... ☐☐ DK 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	Do you usually read a newspaper or magazine at least once a week?	YES.....1 NO.....2	
109	Have you ever attended school?	YES.....1 NO.....2 →111	
110	What is the highest formal school you completed?	LESS THAN 1 YEAR.....00 STANDARD1.....01 STANDARD2.....02 STANDARD3.....03 STANDARD4.....04 STANDARD5.....05 STANDARD6.....06 STANDARD7.....07 STANDARD8.....08 FORM1.....09 FORM2.....10 FORM3.....11 FORM4.....12 FORM5.....13 FORM6.....14 UNIVERSITY.....15 OTHER_____16 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
111	Do you usually listen to a radio at least once a week?	YES.....1 NO.....2	
112	Do you usually watch television at least once a week?	YES.....1 NO.....2	
113	What is your religion?	MOSLEM.....1 CATHOLIC.....2 PROTESTANT.....3 NONE.....4 OTHER_____5 (SPECIFY)	
114	To which tribe do you belong? IF NOT A TANZANIAN CITIZEN, RECORD COUNTRY OF CITIZENSHIP.	_____ ☐☐☐	
115	CHECK Q.5 IN THE HOUSEHOLD SCHEDULE: THE RESPONDENT IS NOT A USUAL RESIDENT OF THE HH ☐ → ▽ THE RESPONDENT IS A USUAL RESIDENT OF THE HH ☐	→201	
116	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 the rural area? IF OTHER URBAN AREA: In which town do you live?*	CITY (DAR ES SALAAM).....1 LARGE URBAN AREA.....2 SMALL URBAN AREA.....3 RURAL AREA/VILLAGE.....4	
117	In which region is that located? IF USUAL RESIDENCE IS OUTSIDE OF TANZANIA, RECORD COUNTRY OF RESIDENCE.	REGION_____ ☐☐	
118	Now I would like to ask you about the household in which you usually live? What is the source of water your household uses for handwashing and dishwashing?	PIPED INTO HOUSE/YARD/PLOT.....11→120 PUBLIC TAP.....12 WELL IN RESIDENCE/YARD/PLOT....21→120 PUBLIC WELL.....22 SPRING.....31 RIVER/STREAM.....32 POND/LAKE.....33 DAM.....34 RAIN WATER.....41→120 TANKER TRUCK.....51 OTHER_____71 (SPECIFY)	
119	How long does it take to go there, get water, and come back?	MINUTES..... ☐☐☐ ON PREMISES.....996	
120	Does your household get drinking water from this same source?	YES.....1→123 NO.....2	

* Q.116 LARGE URBAN AREAS ARE MWANZA, ARUSHA, MOROGORO, DODOMA, MOSHI, TANGA, IRINGA, MBEYA, TABORA AND ZANZIBAR. SMALL URBAN AREAS ARE ALL OTHER TOWNS.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
121	What is the source of drinking water for members of your household?	PIPED INTO HOUSE/YARD/PLOT.....11 PUBLIC TAP.....12 WELL IN RESIDENCE/YARD/PLOT....21 PUBLIC WELL.....22 SPRING.....31 RIVER/STREAM.....32 POND/LAKE.....33 DAM.....34 RAIN WATER.....41 TANKER TRUCK.....51 OTHER_____71 (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?	OWN FLUSH TOILET.....11 SHARED FLUSH TOILET.....12 TRADITIONAL PIT TOILET.....21 VENTILATED PIT LATRINE.....22 NO FACILITY/BUSH/FIELD.....31	
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	How many rooms in your household are used for sleeping?	ROOMS.....|__|__|	
126	Could you describe the main material of the floor of your home?	EARTH/SAND.....11 WOOD PLANKS.....21 PARQUET OR POLISHED WOOD.....31 CERAMIC TILES.....32 CEMENT.....33 OTHER_____41 (SPECIFY)	
127	Does any member of your household own: A bicycle? A motorcycle? A car?	YES NO BICYCLE.....1 2 MOTORCYCLE.....1 2 CAR.....1 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
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 (other) baby who cried or showed any sign of life but only survived a few hours or days?	YES.....1 NO.....2	→208
207	In all, 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 RECORD TOTAL. IF NONE RECORD '00'.	TOTAL.....	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL ___ live births during your life. Is that correct? YES ☐ ↓ NO ☐ → PROBE AND CORRECT 201-208 AS NECESSARY		
210	CHECK 208: ONE OR MORE BIRTHS ☐ ↓ NO BIRTHS ☐		→223

211 Now I would like to talk to you about all of 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?	213 RECORD SINGLE OR MULTIPLE BIRTH STATUS	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 LESS THAN 15 YRS. OF AGE: With whom does he/she live? IF 15+: GO TO NEXT BIRTH	220 IF DEAD: How old was he/she 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.
01 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
02 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
03 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
04 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
05 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
06 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
07 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3

212 What name was given to your (first,next) baby?	213 RECORD SINGLE OR MULTIPLE BIRTH STATUS	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 LESS THAN 15 YRS. OF AGE: With whom does he/she live? IF 15+: GO TO NEXT BIRTH	220 IF DEAD: How old was he/she 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.
08 (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
09 (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
10 (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
11 (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
12 (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 OTHER RELATIVE...2 SOMEONE ELSE.3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3

221 COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:

NUMBERS ARE SAME ☐ ↓

NUMBERS ARE DIFFERENT ☐ → (PROBE AND RECONCILE)

CHECK: FOR EACH LIVE 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: PROBE TO DETERMINE EXACT NUMBER OF MONTHS ☐

222 CHECK 215 AND ENTER THE NUMBER OF BIRTHS SINCE JANUARY 1986
IF NONE, ENTER 0. ☐

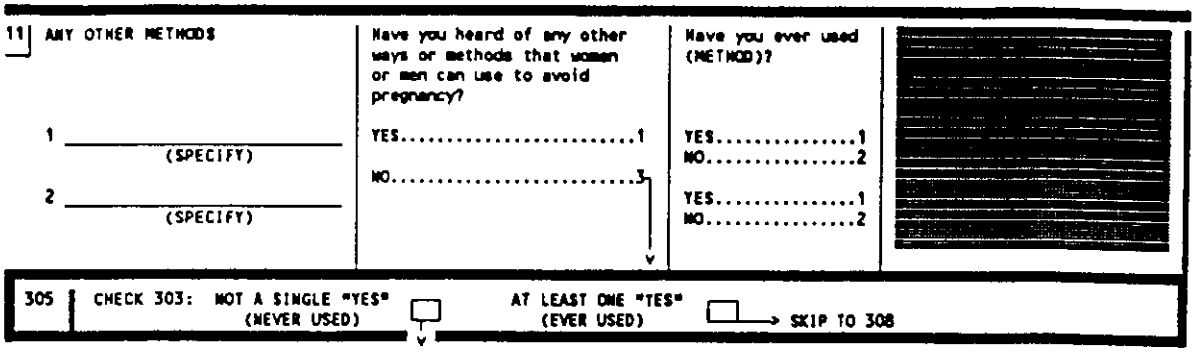
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
223	Are you pregnant now?	YES.....1 NO.....2 UNSURE.....8	→226
224	How many months pregnant are you?	MONTHS..... ☐☐	
225	At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to become pregnant at all?	THEN.....1 LATER.....2 NOT AT ALL.....3	
226	How long ago did your last menstrual period start?	DAYS AGO.....1 ☐☐ WEEKS AGO.....2 ☐☐ MONTHS AGO.....3 ☐☐ YEARS AGO.....4 ☐☐ IN MENOPAUSE.....994 BEFORE LAST BIRTH.....995 NEVER MENSTRUATED.....996	
227	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 DK.....8	→301
228	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 _____ 5 (SPECIFY) DK.....8	

SECTION 3: CONTRACEPTION

301 Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Which ways or methods have you heard about?

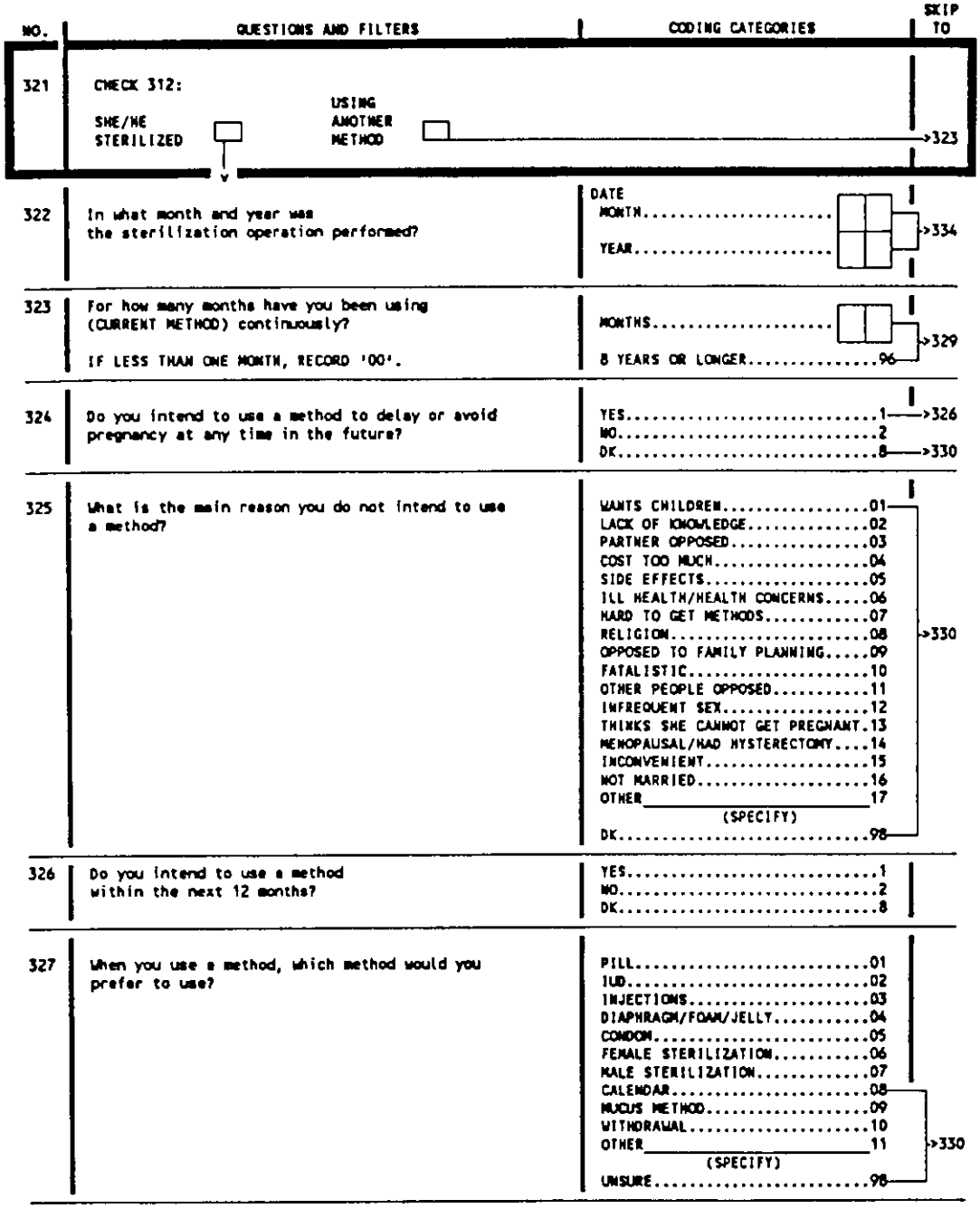
CIRCLE CODE 1 IN 302 FOR EACH METHOD MENTIONED SPONTANEOUSLY.
THEN PROCEED DOWN THE COLUMN, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY.
CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED.
THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 302, ASK 303-304 BEFORE PROCEEDING TO THE NEXT METHOD.

		302 Have you ever heard of (METHOD)? READ DESCRIPTION OF EACH METHOD.	303 Have you ever used (METHOD)?	304 Do you know where a person could go to get (METHOD)?
01	PILL Women can take a pill every day.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
02	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	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.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
04	DIAPHRAGM,FOAM,JELLY Women can place a sponge, suppository, diaphragm, jelly or cream inside them before intercourse.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
05	CONDOM Men can use a rubber sheath during sexual intercourse to avoid pregnancy. The rubber sheath is also used to prevent transmission of diseases such as AIDS and for cleanliness.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
06	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	Have you ever had an operation to avoid having any more children? YES.....1 NO.....2	YES.....1 NO.....2
07	MALE STERILIZATION Men can have an operation to avoid having any more children.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
08	CALENDAR Couples can have sexual intercourse only during the safe period of the monthly cycle, that is the times during the monthly cycle when the woman is least likely to become pregnant.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	Do you know where a person can obtain advice on how to use the calendar method? YES.....1 NO.....2
09	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.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	Do you know where a person can obtain advice on how to observe changes in the mucus? YES.....1 NO.....2
10	WITHDRAWAL Men can be careful and pull out before climax.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
306	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES..... NO.....	→324
307	What have you used or done? CORRECT 303-305 (AND 302 IF NECESSARY).		
308	When you first did something or used a method to avoid getting pregnant, how many living children did you have at that time? IF NONE RECORD '00'.	NUMBER OF CHILDREN.....	
309	CHECK 223: NOT PREGNANT OR UNSURE PREGNANT		→324
310	CHECK 303: WOMAN NOT STERILIZED WOMAN STERILIZED		→312A
311	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES.....1 NO.....2	→324
312 312A	Which method are you using? CIRCLE '06' FOR FEMALE STERILIZATION.	PILL.....01 IUD.....02 INJECTIONS.....03 DIAPHRAGM/FOAM/JELLY.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 CALENDAR.....08 MUCUS METHOD.....09 WITHDRAWAL.....10 OTHER _____ (SPECIFY) 11	→318 →323

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
313	At the time you first started using the pill, did you consult a doctor or a nurse ?	YES.....1 NO.....2 DK.....8	
314	At the time you last got pills, did you consult a doctor or a nurse?	YES.....1 NO.....2	
315	May I see the pack of pills you are using now? (RECORD NAME OF BRAND.)	PACK SEEN.....1 BRAND NAME_____ ☐☐ PACK NOT SEEN.....2	→317
316	What is the brand name of the pills you are now using? (RECORD NAME OF BRAND.)	BRAND NAME_____ ☐☐ DK.....98	
317	How much does one pack of pills cost you?	COST..... ☐☐☐ FREE.....996 DK.....998	
318	CHECK 312: SHE/HE STERILIZED ☐ → V Where did the sterilization take place? USING ANOTHER METHOD ☐ → V Where did you obtain (METHOD) the last time? _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL CONSULTANT HOSPITAL.....11 REGIONAL HOSPITAL.....12 DISTRICT HOSPITAL.....13 HEALTH CENTRE.....14 DISPENSARY.....15 PARASTATAL HEALTH FACILITY....16 VILLAGE HEALTH POST/WORKER....17 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV. DOCTOR/CLINIC/HOSPITAL..22 PHARMACY/MEDICAL STORE.....23 UMATI CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 NEIGHBORS/RELATIVES.....32 OTHER_____ 41 (SPECIFY) DK.....98	→321 →321 →321
319	How long does it take to travel from your home to this place? IF LESS THAN TWO HOURS, RECORD TRAVEL TIME IN MINUTES. OTHERWISE, RECORD TRAVEL TIME IN HOURS.	MINUTES.....1 ☐☐☐ HOURS.....2 0☐☐ DK.....9998	
320	Is it easy or difficult to get there?	EASY.....1 DIFFICULT.....2	


NO.
QUESTIONS AND FILTERS
CODING CATEGORIES
SKIP TO
321
CHECK 312:
SHE/HE STERILIZED
USING ANOTHER METHOD
>323
322
In what month and year was the sterilization operation performed?
DATE
MONTH.....
YEAR.....
>334
323
For how many months have you been using (CURRENT METHOD) continuously?
IF LESS THAN ONE MONTH, RECORD '00'.
MONTHS.....
8 YEARS OR LONGER.....96
>329
324
Do you intend to use a method to delay or avoid pregnancy at any time in the future?
YES.....1
NO.....2
DK.....8
>326
>330
325
What is the main reason you do not intend to use a method?
WANTS CHILDREN.....01
LACK OF KNOWLEDGE.....02
PARTNER OPPOSED.....03
COST TOO MUCH.....04
SIDE EFFECTS.....05
ILL HEALTH/HEALTH CONCERNS.....06
HARD TO GET METHODS.....07
RELIGION.....08
OPPOSED TO FAMILY PLANNING.....09
FATALISTIC.....10
OTHER PEOPLE OPPOSED.....11
INFREQUENT SEX.....12
THINKS SHE CANNOT GET PREGNANT.13
MENOPAUSAL/HAD HYSTERECTOMY....14
INCONVENIENT.....15
NOT MARRIED.....16
OTHER _____ 17
(SPECIFY)
DK.....98
>330
326
Do you intend to use a method within the next 12 months?
YES.....1
NO.....2
DK.....8
327
When you use a method, which method would you prefer to use?
PILL.....01
IUD.....02
INJECTIONS.....03
DIAPHRAGM/FOAM/JELLY.....04
CONDOM.....05
FEMALE STERILIZATION.....06
MALE STERILIZATION.....07
CALENDAR.....08
MUCUS METHOD.....09
WITHDRAWAL.....10
OTHER _____ 11
(SPECIFY)
UNSURE.....98
>330

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
328	Where can you get (METHOD MENTIONED IN 327)? _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL CONSULTANT HOSPITAL.....11 REGIONAL HOSPITAL.....12 DISTRICT HOSPITAL.....13 HEALTH CENTRE.....14 DISPENSARY.....15 PARASTATAL HEALTH FACILITY....16 VILLAGE HEALTH POST/WORKER....17 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV. DOCTOR/CLINIC/HOSPITAL..22 PHARMACY/MEDICAL STORE.....23 UMATI CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 NEIGHBORS/RELATIVES.....32 OTHER_____ 41 (SPECIFY) DON'T KNOW.....98	>332 >334 >332 >334 >332 >334 >330
329	CHECK 312: USING CALENDER, MUCUS METHOD WITHDRAWAL OR OTHER TRADITIONAL METHOD ☐ USING A MODERN METHOD ☐		>334
330	Do you know of a place where you can obtain a method of family planning?	YES.....1 NO.....2	>334
331	Where is that? _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL CONSULTANT HOSPITAL.....11 REGIONAL HOSPITAL.....12 REGIONAL HOSPITAL.....12 DISTRICT HOSPITAL.....13 HEALTH CENTRE.....14 DISPENSARY.....15 PARASTATAL HEALTH FACILITY....16 VILLAGE HEALTH POST/WORKER....17 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV. DOCTOR/CLINIC/HOSPITAL..22 PHARMACY/MEDICAL STORE.....23 UMATI CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 NEIGHBORS/RELATIVES.....32 OTHER_____ 41 (SPECIFY)	>334 >334 >334
332	How long does it take to travel from your home to this place? IF LESS THAN TWO HOURS, RECORD TRAVEL TIME IN MINUTES. OTHERWISE, RECORD TRAVEL TIME IN HOURS.	MINUTES.....1 ☐☐ HOURS.....2 0☐ DK.....9998	
333	Is it easy or difficult to get there?	EASY.....1 DIFFICULT.....2	
334	In the last month, have you heard or seen a message about family planning on the radio? on television? from MCH aide? from neighbors/relatives? on posters?	YES NO RADIO.....1 2 TELEVISION.....1 2 MCH AIDE.....1 2 NEIGHBORS/RELATIVES.....1 2 POSTER.....1 2	
335	Is it acceptable or not acceptable to you for family planning information to be provided on the radio or television?	ACCEPTABLE.....1 NOT ACCEPTABLE.....2 DK.....8	

SECTION 4A. PREGNANCY AND BREASTFEEDING

401	CHECK 222 : ONE OR MORE LIVE BIRTHS SINCE JAN. 1986 ☐	NO LIVE BIRTHS SINCE JAN. 1986 ☐ → (SKIP TO 501)		
402	ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1986 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.			
	LINE NUMBER FROM Q. 212	☐☐	☐☐	☐☐
	FROM Q. 212 AND Q. 216	LAST BIRTH NAME ______ ALIVE ☐ DEAD ☐	NEXT-TO-LAST BIRTH NAME ______ ALIVE ☐ DEAD ☐	SECOND-FROM-LAST BIRTH NAME ______ ALIVE ☐ DEAD ☐
403	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 405) LATER....2 NO MORE....3 (SKIP TO 405)	THEN....1 (SKIP TO 405) LATER....2 NO MORE....3 (SKIP TO 405)	THEN....1 (SKIP TO 405) LATER....2 NO MORE....3 (SKIP TO 405)
404	How much longer would you like to have waited?	MONTHS....1 ☐☐ YEARS....2 ☐☐ DK....998	MONTHS....1 ☐☐ YEARS....2 ☐☐ DK....998	MONTHS....1 ☐☐ YEARS....2 ☐☐ DK....998
405	When you were pregnant with (NAME), did you see anyone for antenatal care for this pregnancy?	YES....1 NO....2 (SKIP TO 411)	YES....1 NO....2 (SKIP TO 411)	YES....1 NO....2 (SKIP TO 411)
406	Whom did you see for antenatal care? Anyone else? RECORD ALL PERSONS MENTIONED.	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 ______ H (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 OTHER ______ H (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 OTHER ______ H (SPECIFY)
407	Where did you go for this antenatal care? RECORD ALL PLACES VISITED.	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C HEALTH POST....D PARASTATAL HOSP/CLINIC...E PRIVATE SECTOR REIGIOUS ORG. HOSP/CLIN..F PRIVATE HOSPITAL/CLINIC..G HOME....H	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C HEALTH POST....D PARASTATAL HOSP/CLINIC...E PRIVATE SECTOR REIGIOUS ORG. HOSP/CLIN..F PRIVATE HOSPITAL/CLINIC..G HOME....H	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C HEALTH POST....D PARASTATAL HOSP/CLINIC...E PRIVATE SECTOR REIGIOUS ORG. HOSP/CLIN..F PRIVATE HOSPITAL/CLINIC..G HOME....H
408	Were you given an antenatal card for this pregnancy?	YES....1 NO....2	YES....1 NO....2	YES....1 NO....2
409	How many months pregnant were you when you first saw someone for an antenatal check on this pregnancy?	MONTHS.... ☐☐ DK....98	MONTHS.... ☐☐ DK....98	MONTHS.... ☐☐ DK....98
410	How many antenatal visits did you have during that pregnancy?	NO. OF VISITS.... ☐☐ DK....98	NO. OF VISITS.... ☐☐ DK....98	NO. OF VISITS.... ☐☐ DK....98

		LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
411	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 413)< DK.....................8	YES....................1 NO.....................2 (SKIP TO 413)< DK.....................8	YES....................1 NO.....................2 (SKIP TO 413)< DK.....................8
412	How many times did you get this injection?	TIMES................[ ] DK.....................8	TIMES................[ ] DK.....................8	TIMES................[ ] DK.....................8
413	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 PRIVATE SECTOR RELIGIOUS ORG HOSP/CLIN.31 PRIVATE HOSPITAL/CLINIC.32 OTHER ________ 41 (SPECIFY)	HOME YOUR HOME..............11 OTHER HOME.............12 GOVERNMENT AND PARASTATAL HOSPITAL...............21 HEALTH CENTRE..........22 DISPENSARY.............23 PARASTATAL HOSP/CLINIC..24 PRIVATE SECTOR RELIGIOUS ORG HOSP/CLIN.31 PRIVATE HOSPITAL/CLINIC.32 OTHER ________ 41 (SPECIFY)	HOME YOUR HOME..............11 OTHER HOME.............12 GOVERNMENT AND PARASTATAL HOSPITAL...............21 HEALTH CENTRE..........22 DISPENSARY.............23 PARASTATAL HOSP/CLINIC..24 PRIVATE SECTOR RELIGIOUS ORG HOSP/CLIN.31 PRIVATE HOSPITAL/CLINIC.32 OTHER ________ 41 (SPECIFY)
414	Who assisted with the delivery of (NAME)? Anyone else? 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 ________ I (SPECIFY) NO ONE...................J	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 ________ I (SPECIFY) NO ONE...................J	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 ________ I (SPECIFY) NO ONE...................J
415	Was (NAME) born on time or prematurely?	ON TIME.................1 PREMATURELY.............2 DK......................8	ON TIME.................1 PREMATURELY.............2 DK......................8	ON TIME.................1 PREMATURELY.............2 DK......................8
416	Was (NAME) delivered by caesarian section?	YES.....................1 NO......................2	YES.....................1 NO......................2	YES.....................1 NO......................2
417	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 DK......................8	VERY LARGE..............1 LARGER THAN AVERAGE......2 AVERAGE.................3 SMALLER THAN AVERAGE.....4 VERY SMALL..............5 DK......................8	VERY LARGE..............1 LARGER THAN AVERAGE......2 AVERAGE.................3 SMALLER THAN AVERAGE.....4 VERY SMALL..............5 DK......................8
418	Was (NAME) weighed at birth?	YES.....................1 NO......................2 (SKIP TO 420)<	YES.....................1 NO......................2 (SKIP TO 421)<	YES.....................1 NO......................2 (SKIP TO 421)<
419	How much did (NAME) weigh? RECORD FROM MCH CARD IF AVAILABLE.	KILOGRAMS.....[ ].[ ][ ] DK....................998	KILOGRAMS.....[ ].[ ][ ] DK....................998	KILOGRAMS.....[ ].[ ][ ] DK....................998

		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
420	Has your period returned since the birth of (NAME)?	YES ......1 (SKIP TO 422) NO......2 (SKIP TO 423)		
421	Did your period return between the birth of (NAME) and your next pregnancy?		YES......1 NO......2 (SKIP TO 425)	YES......1 NO......2 (SKIP TO 425)
422	For how many months after the birth of (NAME) did you not have a period?	MONTHS......[ ][ ] DK......98	MONTHS......[ ][ ] DK......98	MONTHS......[ ][ ] DK......98
423	CHECK 223: WOMAN PREGNANT?	NOT PREGNANT [ ] (GO TO 424) PREGNANT OR UNSURE [ ] (SKIP TO 425)		
424	Have you resumed sexual relations since the birth of (NAME)?	YES......1 NO......2 (SKIP TO 426)		
425	For how many months after the birth of (NAME) did you not have sexual relations?	MONTHS......[ ][ ] DK......98	MONTHS......[ ][ ] DK......98	MONTHS......[ ][ ] DK......98
426	Did you ever breastfeed (NAME)?	YES......1 (SKIP TO 428) NO......2	YES......1 (SKIP TO 435) NO......2	YES......1 (SKIP TO 435) NO......2
427	Why did you not breastfeed (NAME)?	MOTHER ILL/WEAK......1 CHILD ILL/WEAK......2 CHILD DIED......3 NIPPLE/BREAST PROBLEM....4 INSUFFICIENT MILK......5 MOTHER WORKING......6 CHILD REFUSED......7 OTHER ______ 8 (SPECIFY) (SKIP TO 437)	MOTHER ILL/WEAK......1 CHILD ILL/WEAK......2 CHILD DIED......3 NIPPLE/BREAST PROBLEM....4 INSUFFICIENT MILK......5 MOTHER WORKING......6 CHILD REFUSED......7 OTHER ______ 8 (SPECIFY) (SKIP TO 437)	MOTHER ILL/WEAK......1 CHILD ILL/WEAK......2 CHILD DIED......3 NIPPLE/BREAST PROBLEM....4 INSUFFICIENT MILK......5 MOTHER WORKING......6 CHILD REFUSED......7 OTHER ______ 8 (SPECIFY) (SKIP TO 437)
428	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[ ][ ]		

		LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
429	CHECK 216: CHILD ALIVE?	ALIVE ☐ DEAD ☐ (SKIP TO 435)		
430	Are you still breastfeeding (NAME)?	YES....................1 NO.....................2 (SKIP TO 435)		
431	How many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF NIGHTTIME FEEDINGS [__][__]		
432	How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYLIGHT FEEDINGS [__][__]		
433	At any time yesterday or last night was (NAME) given any of the following?: Plain water? Sugar water? Juice? Baby formula? Cow's milk? Tinned or powdered milk? Other liquids? Any solid or mushy food?	YES NO PLAIN WATER..........1 2 SUGAR WATER..........1 2 JUICE................1 2 BABY FORMULA.........1 2 FRESH MILK...........1 2 TINNED/POWDERED MILK.1 2 OTHER LIQUIDS........1 2 SOLID/MUSHY FOOD.....1 2		
434	CHECK 433 : FOOD OR LIQUID GIVEN YESTERDAY?	YES TO ONE OR MORE ☐ (SKIP TO 439) NO TO ALL ☐ (SKIP TO 438)		
435	For how many months did you breastfeed (NAME)?	MONTHS.............[__][__] UNTIL DIED.............96 (SKIP TO 438)	MONTHS.............[__][__] UNTIL DIED.............96 (SKIP TO 438)	MONTHS.............[__][__] UNTIL DIED.............96 (SKIP TO 438)
436	Why did you stop breastfeeding (NAME)?	MOTHER ILL/WEAK.........01 CHILD ILL/WEAK..........02 CHILD DIED..............03 NIPPLE/BREAST PROBLEM...04 INSUFFICIENT MILK.......05 MOTHER WORKING..........06 CHILD REFUSED...........07 WEANING AGE.............08 BECAME PREGNANT.........09 STARTED USING CONTRACEPTION..........10 OTHER __________11 (SPECIFY)	MOTHER ILL/WEAK.........01 CHILD ILL/WEAK..........02 CHILD DIED..............03 NIPPLE/BREAST PROBLEM...04 INSUFFICIENT MILK.......05 MOTHER WORKING..........06 CHILD REFUSED...........07 WEANING AGE.............08 BECAME PREGNANT.........09 STARTED USING CONTRACEPTION..........10 OTHER __________11 (SPECIFY)	MOTHER ILL/WEAK.........01 CHILD ILL/WEAK..........02 CHILD DIED..............03 NIPPLE/BREAST PROBLEM...04 INSUFFICIENT MILK.......05 MOTHER WORKING..........06 CHILD REFUSED...........07 WEANING AGE.............08 BECAME PREGNANT.........09 STARTED USING CONTRACEPTION..........10 OTHER __________11 (SPECIFY)

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
437	CHECK 216: CHILD ALIVE?	ALIVE ☐ → (SKIP TO 439) DEAD ☐	ALIVE ☐ → (SKIP TO 439) DEAD ☐	ALIVE ☐ → (SKIP TO 439) DEAD ☐
438	Was (NAME) ever given any water, or something else to drink or eat (other than breastmilk)?	YES.....1 NO.....2 (SKIP TO 444)	YES.....1 NO.....2 (SKIP TO 444)	YES.....1 NO.....2 (SKIP TO 444)
439	How many months old was (NAME) when you started giving the following on a regular basis?:			
	Formula or milk other than breastmilk?	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96
	Plain water?	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96
	Other liquids?	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96
	Any solid or mushy food?	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96
	IF LESS THAN ONE MONTH, RECORD '00'.			
440	CHECK 216: CHILD ALIVE?	ALIVE ☐ DEAD ☐ → (SKIP TO 444)	ALIVE ☐ DEAD ☐ → (SKIP TO 444)	ALIVE ☐ DEAD ☐ → (SKIP TO 444)
441	How many meals did (NAME) eat yesterday?	NUMBER OF MEALS..... ☐ DK.....8	NUMBER OF MEALS..... ☐ DK.....8	NUMBER OF MEALS..... ☐ DK.....8
442	Did (NAME) eat any other food such as ground nuts, sweet bananas, buns or other things or drink any soda yesterday?	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
443	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES.....1 NO.....2 DK.....8		
444	GO BACK TO 403 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, SKIP TO 445.			

445 ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1986 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).

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
	LINE NUMBER FROM Q. 212			
	FROM Q. 212 AND Q. 216	NAME _____ ALIVE ↓ DEAD ↓	NAME _____ ALIVE ↓ DEAD ↓	NAME _____ ALIVE ↓ DEAD ↓
446	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it, please?	YES, SEEN.....1 (SKIP TO 448) ← YES, NOT SEEN.....2 (SKIP TO 450) ← NO CARD.....3	YES, SEEN.....1 (SKIP TO 448) ← YES, NOT SEEN.....2 (SKIP TO 450) ← NO CARD.....3	YES, SEEN.....1 (SKIP TO 448) ← YES, NOT SEEN.....2 (SKIP TO 450) ← NO CARD.....3
447	Did you ever have a vaccination card for (NAME)?	YES.....1 (SKIP TO 450) ← NO.....2	YES.....1 (SKIP TO 450) ← NO.....2	YES.....1 (SKIP TO 450) ← NO.....2
448	(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
	DPT 1	D1	D1	D1
	DPT 2	D2	D2	D2
	DPT 3	D3	D3	D3
	POLIO 1	P1	P1	P1
	POLIO 2	P2	P2	P2
	POLIO 3	P3	P3	P3
	MEASLES	MEA	MEA	MEA
449	Has (NAME) received any vaccinations that are not recorded on this card? RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, DPT, POLIO AND/OR MEASLES VACCINATIONS.	YES.....1 PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 448 ← NO.....2 DK.....8 (SKIP TO 452) ←	YES.....1 PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 448 ← NO.....2 DK.....8 (SKIP TO 452) ←	YES.....1 PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 448 ← NO.....2 DK.....8 (SKIP TO 452) ←
450	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases?	YES.....1 NO.....2 (SKIP TO 452) ← DK.....8	YES.....1 NO.....2 (SKIP TO 452) ← DK.....8	YES.....1 NO.....2 (SKIP TO 452) ← DK.....8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
451	Please tell me if (NAME) (has) received any of the following vaccinations:			
	A BCG vaccination against tuberculosis, that is, an injection in the right shoulder that left a scar?	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
	Polio vaccine, that is, drops in the mouth?	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
	IF YES: How many times?	NUMBER OF TIMES..... ☐	NUMBER OF TIMES..... ☐	NUMBER OF TIMES..... ☐
	An injection against measles?	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
452	Was (NAME) ever ill with measles?	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2
453	CHECK 216: CHILD ALIVE?	ALIVE ☐ DEAD ☐ (SKIP TO 455)	ALIVE ☐ DEAD ☐ (SKIP TO 455)	ALIVE ☐ DEAD ☐ (SKIP TO 455)
454	GO BACK TO 446 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, SKIP TO 485.			

		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
455	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
456	Has (NAME) been ill with a cough at any time in the last 2 weeks?	YES.....1 NO.....2 (SKIP TO 460)< DK.....8	YES.....1 NO.....2 (SKIP TO 460)< DK.....8	YES.....1 NO.....2 (SKIP TO 460)< DK.....8
457	Has (NAME) been ill with a cough at any time in the last 24 hours?	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
458	How long (has the cough lasted/did the cough last)? IF LESS THAN 1 DAY, RECORD '00'	DAYS.....[ ][ ]	DAYS.....[ ][ ]	DAYS.....[ ][ ]
459	When (NAME) had the illness with a cough, did he/she breathe faster than usual with short, rapid breaths?	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
460	CHECK 455 AND 456: FEVER OR COUGH?	"YES" IN EITHER 455 OR 456 [ ] OTHER [ ] ->(SKIP TO 465)	"YES" IN EITHER 455 OR 456 [ ] OTHER [ ] ->(SKIP TO 465)	"YES" IN EITHER 455 OR 456 [ ] OTHER [ ] ->(SKIP TO 465)
461	Was anything given to treat the fever/cough?	YES.....1 NO.....2 (SKIP TO 463)< DK.....8	YES.....1 NO.....2 (SKIP TO 463)< DK.....8	YES.....1 NO.....2 (SKIP TO 463)< DK.....8
462	What was given to treat the fever/cough? Anything else? RECORD ALL TREATMENTS MENTIONED.	INJECTION.....A ANTIBIOTIC (PILL OR SYRUP).....B ANTIMALARIAL (PILL OR SYRUP).....C COUGH SYRUP.....D OTHER PILL OR SYRUP.....E UNKNOWN PILL OR SYRUP.....F HOME REMEDY/ HERBAL MEDICINE.....G OTHER______H (SPECIFY)	INJECTION.....A ANTIBIOTIC (PILL OR SYRUP).....B ANTIMALARIAL (PILL OR SYRUP).....C COUGH SYRUP.....D OTHER PILL OR SYRUP.....E UNKNOWN PILL OR SYRUP.....F HOME REMEDY/ HERBAL MEDICINE.....G OTHER______H (SPECIFY)	INJECTION.....A ANTIBIOTIC (PILL OR SYRUP).....B ANTIMALARIAL (PILL OR SYRUP).....C COUGH SYRUP.....D OTHER PILL OR SYRUP.....E UNKNOWN PILL OR SYRUP.....F HOME REMEDY/ HERBAL MEDICINE.....G OTHER______H (SPECIFY)
463	Did you seek advice or treatment for the fever/cough?	YES.....1 NO.....2 (SKIP TO 465)<	YES.....1 NO.....2 (SKIP TO 465)<	YES.....1 NO.....2 (SKIP TO 465)<
464	From whom or where did you seek advice or treatment? Anyone else? CIRCLE ALL PERSONS SEEN AND PLACES VISITED.	GOVERNMENT AND PARASTATAL HOSPITAL.....A HEALTH CENTRE.....B DISPENSARY.....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER.....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.F PRIVATE DOCTOR/HOSP/CLIN.G PHARMACY/MEDICAL STORE...H OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...I NEIGHBORS/RELATIVES.....J OTHER______K (SPECIFY)	GOVERNMENT AND PARASTATAL HOSPITAL.....A HEALTH CENTRE.....B DISPENSARY.....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER.....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.F PRIVATE DOCTOR/HOSP/CLIN.G PHARMACY/MEDICAL STORE...H OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...I NEIGHBORS/RELATIVES.....J OTHER______K (SPECIFY)	GOVERNMENT AND PARASTATAL HOSPITAL.....A HEALTH CENTRE.....B DISPENSARY.....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER.....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.F PRIVATE DOCTOR/HOSP/CLIN.G PHARMACY/MEDICAL STORE...H OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...I NEIGHBORS/RELATIVES.....J OTHER______K (SPECIFY)

		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
465	Has (NAME) had diarrhea (three or more watery stools) in the last two weeks?	YES....1 (SKIP TO 467)< NO....2 DK....8	YES....1 (SKIP TO 467)< NO....2 DK....8	YES....1 (SKIP TO 467)< NO....2 DK....8
466	GO BACK TO 446 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, SKIP TO 485.			
467	Has (NAME) had diarrhea (three or more watery stools) in the last 24 hours?	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8
468	How long has the diarrhea lasted/did the diarrhea last? IF LESS THAN 1 DAY, RECORD '00'	DAYS....[ ][ ]	DAYS....[ ][ ]	DAYS....[ ][ ]
469	Was there any blood in the stools?	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8 (SKIP TO 473)	YES....1 NO....2 DK....8 (SKIP TO 473)
470	CHECK 425: LAST CHILD STILL BREASTFED?	YES [ ] NO [ ] (SKIP TO 473)		
471	During (NAME)'s diarrhea, did you change the frequency of breastfeeding?	YES....1 NO....2 (SKIP TO 473)<		
472	Did you increase the number of feeds or reduce them, or did you stop completely?	INCREASED....1 REDUCED....2 STOPPED COMPLETELY....3		
473	(Aside from breastmilk) Was he/she given the same amount to drink as before the diarrhea, or more, or less?	SAME....1 MORE....2 LESS....3 DK....8	SAME....1 MORE....2 LESS....3 DK....8	SAME....1 MORE....2 LESS....3 DK....8
474	Was anything given to treat the diarrhea ?	YES....1 NO....2 (SKIP TO 476)< DK....8	YES....1 NO....2 (SKIP TO 476)< DK....8	YES....1 NO....2 (SKIP TO 476)< DK....8
475	What was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS MENTIONED.	FLUID FROM ORS PACKET....A RECOMMENDED HOME FLUID*..B ANTIBIOTIC PILL OR SYRUP....C OTHER PILL OR SYRUP....D INJECTION....E DRIP....F HOME REMEDIES/ HERBAL MEDICINES....G OTHER______H (SPECIFY)	FLUID FROM ORS PACKET....A RECOMMENDED HOME FLUID*..B ANTIBIOTIC PILL OR SYRUP....C OTHER PILL OR SYRUP....D INJECTION....E DRIP....F HOME REMEDIES/ HERBAL MEDICINES....G OTHER______H (SPECIFY)	FLUID FROM ORS PACKET....A RECOMMENDED HOME FLUID*..B ANTIBIOTIC PILL OR SYRUP....C OTHER PILL OR SYRUP....D INJECTION....E DRIP....F HOME REMEDIES/ HERBAL MEDICINES....G OTHER______H (SPECIFY)

* RECOMMENDED HOME FLUID MADE FROM SUGAR, SALT AND WATER AND/OR CEREAL OR THIN PORRIDGE.

		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
476	Did you seek advice or treatment for the diarrhea?	YES....1 NO....2 (SKIP TO 478)	YES....1 NO....2 (SKIP TO 478)	YES....1 NO....2 (SKIP TO 478)
477	From whom or where did you seek advice or treatment? Anyone else? CIRCLE ALL PERSONS SEEN AND PLACES VISITED.	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.F PRIVATE DOCTOR/HOSP/CLIN.G PHARMACY/MEDICAL STORE...H OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...I NEIGHBORS/RELATIVES....J OTHER ______ K (SPECIFY)	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.F PRIVATE DOCTOR/HOSP/CLIN.G PHARMACY/MEDICAL STORE...H OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...I NEIGHBORS/RELATIVES....J OTHER ______ K (SPECIFY)	GOVERNMENT AND PARASTATAL HOSPITAL....A HEALTH CENTRE....B DISPENSARY....C PARASTATAL HOSP/CLINIC...D VILLAGE HEALTH POST/ WORKER....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLIN.F PRIVATE DOCTOR/HOSP/CLIN.G PHARMACY/MEDICAL STORE...H OTHER PRIVATE SECTOR TRADITIONAL PRACTIONER...I NEIGHBORS/RELATIVES....J OTHER ______ K (SPECIFY)
478	CHECK 475: FLUID FROM ORS PACKET MENTIONED?	NO, ORS FLUID NOT MENTIONED ☐ YES, ORS FLUID MENTIONED ☐ →(SKIP TO 480)	NO, ORS FLUID NOT MENTIONED ☐ YES, ORS FLUID MENTIONED ☐ →(SKIP TO 480)	NO, ORS FLUID NOT MENTIONED ☐ YES, ORS FLUID MENTIONED ☐ →(SKIP TO 480)
479	Was (NAME) given fluid from ORS packet when he/she had the diarrhea?	YES....1 NO....2 (SKIP TO 481) DK....8	YES....1 NO....2 (SKIP TO 481) DK....8	YES....1 NO....2 (SKIP TO 481) DK....8
480	For how many days was (NAME) given fluid from the ORS packet? IF LESS THAN 1 DAY, RECORD '00'	DAYS....☐☐ DK....98	DAYS....☐☐ DK....98	DAYS....☐☐ DK....98
481	CHECK 475: RECOMMENDED HOME FLUID* MENTIONED?	NO, HOME FLUID NOT MENTIONED ☐ YES, HOME FLUID MENTIONED ☐ →(SKIP TO 483)	NO, HOME FLUID NOT MENTIONED ☐ YES, HOME FLUID MENTIONED ☐ →(SKIP TO 483)	NO, HOME FLUID NOT MENTIONED ☐ YES, HOME FLUID MENTIONED ☐ →(SKIP TO 483)
482	Was (NAME) given a recommended home fluid made from sugar, salt and water and/or cereal or thin porridge when he/she had the diarrhea?	YES....1 NO....2 (SKIP TO 484) DK....8	YES....1 NO....2 (SKIP TO 484) DK....8	YES....1 NO....2 (SKIP TO 484) DK....8
483	For how many days was (NAME) given the fluid made from sugar, salt, and water and/or cereal or thin porridge? IF LESS THAN 1 DAY, RECORD '00'	DAYS....☐☐ DK....98	DAYS....☐☐ DK....98	DAYS....☐☐ DK....98
484	GO BACK TO 446 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, GO TO 485			

* RECOMMENDED HOME FLUID MADE FROM SUGAR, SALT AND WATER AND/OR CEREAL OR THIN PORRIDGE.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
485	CHECK 475 and 479: ORS FLUID FROM PACKET GIVEN TO ANY CHILD → 489 ORS FLUID FROM PACKET NOT GIVEN TO ANY CHILD OR 475 AND 479 NOT ASKED		
486	Have you ever heard of a special product called (LOCAL NAME) you can get for the treatment of diarrhea?	YES.....1 → 488 NO.....2	
487	Have you ever seen a packet like this before? (SHOW PACKET)	YES.....1 NO.....2 → 492	
488	Have you ever prepared a solution with one of these packets to treat diarrhea in yourself or someone else? (SHOW PACKET)	YES.....1 NO.....2 → 491	
489	The last time you prepared the fluid from the ORS packet, did you prepare the whole packet at once or only part of the packet?	WHOLE PACKET AT ONCE.....1 PART OF PACKET.....2 → 491	
490	How much water did you use to prepare (LOCAL NAME OF ORS PACKET) the last time you made it?	1\2 LITER.....1 1 LITER.....2 1 1\2 LITERS.....3 2 LITERS.....4 FOLLOWED PACKAGE INSTRUCTIONS...5 OTHER _____ 6 (SPECIFY) DK.....8	
491	Where can you get the (LOCAL NAME) packet? PROBE: Anywhere else? CIRCLE ALL PLACES MENTIONED.	GOVERNMENT AND PARASTATAL HOSPITAL.....A HEALTH CENTRE.....B DISPENSARY.....C PARASTATAL HOSP/CLINIC.....D VILLAGE HEALTH POST/WORKER.....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLINIC.....F PRIVATE DOCTOR/HOSP/CLINIC.....G PHARMACY/MEDICAL STORE.....H OTHER PRIVATE SECTOR SHOP.....I TRADITIONAL PRACTIONER.....J NEIGHBORS/RELATIVES.....K OTHER _____ L (SPECIFY)	
492	CHECK 475 and 482: RECOMMENDED HOME MADE FLUID GIVEN TO ANY CHILD RECOMMENDED HOME FLUID NOT GIVEN TO ANY CHILD OR 475 AND 482 NOT ASKED → 501		
493	Where did you learn to prepare the recommended home fluid made from sugar, salt, and water and/or cereal or porridge given to (NAME) when he/she had diarrhea?	GOVERNMENT AND PARASTATAL HOSPITAL.....A HEALTH CENTRE.....B DISPENSARY.....C PARASTATAL HOSP/CLINIC.....D VILLAGE HEALTH POST/WORKER.....E MEDICAL PRIVATE SECTOR RELIGIOUS ORG. HOSP/CLINIC.....F PRIVATE DOCTOR/HOSP/CLINIC.....G PHARMACY/MEDICAL STORE.....H OTHER PRIVATE SECTOR SHOP.....I TRADITIONAL PRACTIONER.....J NEIGHBORS/RELATIVES.....K OTHER _____ L (SPECIFY)	

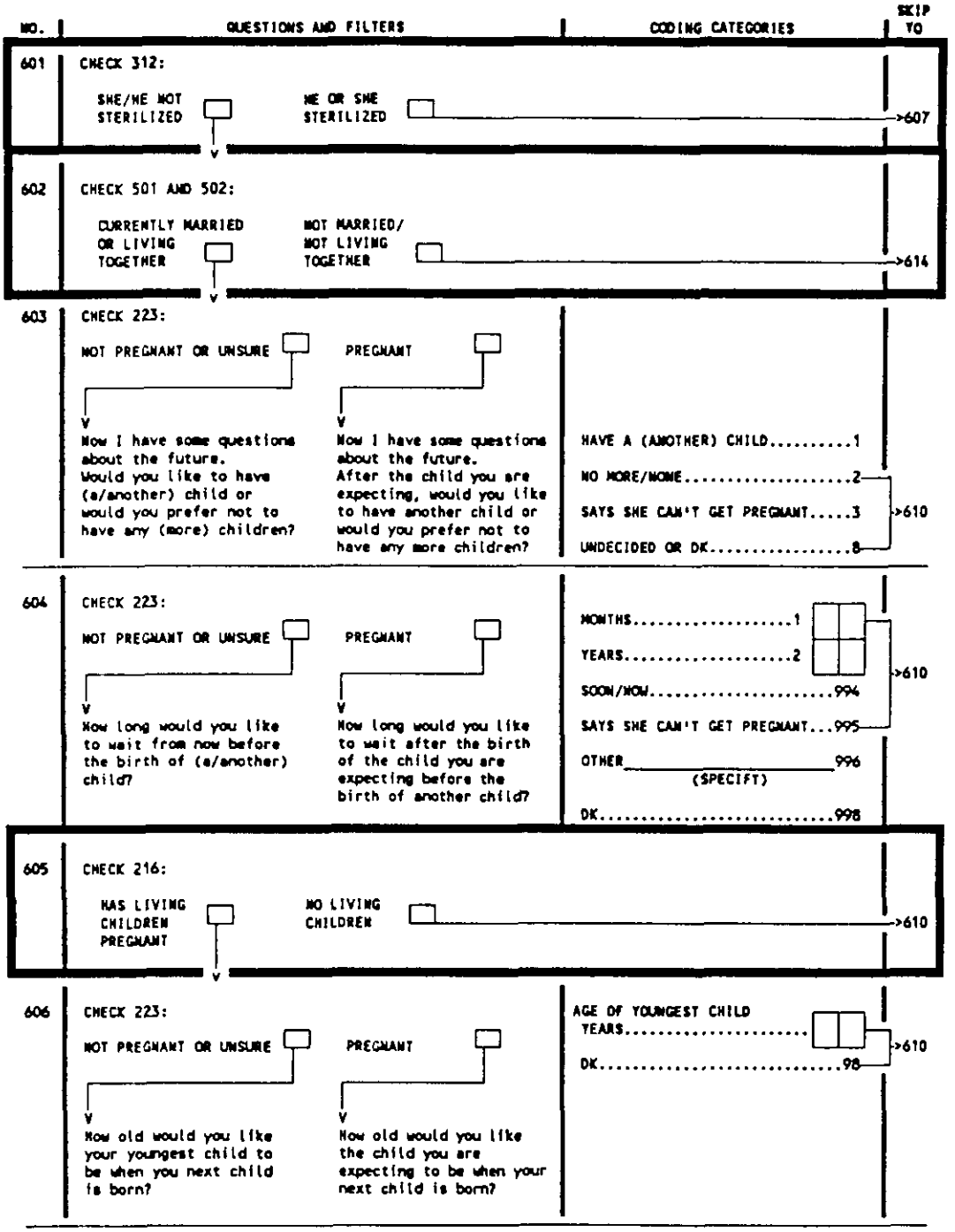
SECTION 5. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
501	Have you ever been married or lived with a man?	YES.....1 NO.....2	→512
502	Are you now married or living with a man, or are you now widowed, or divorced or no longer living together?	MARRIED.....1 LIVING TOGETHER.....2 WIDOWED.....3 DIVORCED/NO LONGER LIVING TOGETHER.....4	→507
503	Does your husband/partner usually sleep in this house or does he usually sleep somewhere else?	USUALLY SLEEPS IN HER HOUSE.....1 USUALLY SLEEPS ELSEWHERE.....2	
504	Does your husband/partner have any other wives besides yourself?	YES.....1 NO.....2	→507
505	How many other wives does he have?	NUMBER..... DK.....98	→507
506	Are you the first, second,...wife?	RANK.....	
507	Have you been married or lived with a man only once, or more than once?	ONCE.....1 MORE THAN ONCE.....2	
508	In what month and year did you start living with your (first) husband or partner?	MONTH..... DK MONTH.....98 YEAR..... DK YEAR.....98	
509	How old were you when you started living with your (first) husband or partner?	AGE..... DK AGE.....98	
510	CHECK 508 AND 509: YEAR AND AGE GIVEN? YES ☐ NO ☐		→513
511	CHECK CONSISTENCY OF 508 AND 509: YEAR OF BIRTH (105) ☐☐ PLUS + AGE AT MARRIAGE (509) ☐☐ = CALCULATED YEAR OF MARRIAGE ☐☐ IF NECESSARY, CALCULATE YEAR OF BIRTH: CURRENT YEAR 9 1 MINUS - CURRENT AGE (106) ☐☐ = CALCULATED YEAR OF BIRTH ☐☐ IS THE CALCULATED YEAR OF MARRIAGE WITHIN ONE YEAR OF THE REPORTED YEAR OF MARRIAGE (508)? YES ☐ → SKIP TO 513 NO ☐ → PROBE AND CORRECT 508 AND 509.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
512	IF NEVER MARRIED OR LIVED WITH A MAN: Have you ever had sexual intercourse?	YES.....1 NO.....2	→520
513	Now we need some details about your sexual activity in order to get a better understanding of family planning and fertility. How many times did you have sexual intercourse in the last four weeks?	TIMES..... ☐☐	
514	How many times in a month do you usually have sexual intercourse?	TIMES..... ☐☐	
515	CHECK 513: HAD SEXUAL INTERCOURSE ONE OR MORE TIMES IN LAST FOUR WEEKS ☐ Y ZERO TIMES ☐		→518
516	With how many different men did you have sex in the last four weeks?	NUMBER OF MEN..... ☐☐	
517	Did you use a condom with any of these men?	YES.....1 NO.....2	
518	When was the last time you had sexual intercourse?	DAYS AGO.....1 ☐☐ WEEKS AGO.....2 ☐☐ MONTHS AGO.....3 ☐☐ YEARS AGO.....4 ☐☐ BEFORE LAST BIRTH.....996	
519	How old were you when you first had sexual intercourse?	AGE..... ☐☐ FIRST TIME WHEN MARRIED.....96	
520	PRESENCE OF OTHERS AT THIS POINT.	YES NO CHILDREN UNDER 10.....1 2 HUSBAND.....1 2 OTHER MALES.....1 2 OTHER FEMALES.....1 2	
521	Now I have a few questions about a very important topic. Have you heard of an illness called AIDS?	YES.....1 NO.....2	→601
522	From which sources of information or persons have you heard about AIDS in the last month? RECORD ALL MENTIONED.	RADIO.....A TV.....B NEWSPAPERS.....C HEALTH WORKERS.....D MOSQUES/CHURCHES.....E FRIENDS/RELATIVES.....F SCHOOLS/QURAN TEACHERS.....G SLOGANS/PAMPHLETS/POSTERS.....H COMMUNITY MEETINGS.....I CCN OFFICE.....J OTHER_____ (SPECIFY) K NONE.....L	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
523	How is AIDS transmitted? RECORD ALL MENTIONED.	SEXUAL INTERCOURSE.....A NEEDLES/BLADES/SKIN PUNCTURES...B MOTHER TO CHILD.....C TRANSFUSION OF INFECTED BLOOD...D OTHER_____E (SPECIFY) DON'T KNOW.....F	
524	Do you think that you can get AIDS from shaking hands with someone who has AIDS? hugging someone who has AIDS? kissing someone who has AIDS? wearing the clothes of someone who has AIDS? sharing eating utensils with someone who has AIDS? stepping on the urine or stool of someone who has AIDS? mosquito, flea or bedbug bites?	YES NO HANDSHAKING.....1 2 HUGGING.....1 2 KISSING.....1 2 SHARING CLOTHES.....1 2 SHARING EATING UTENSILS....1 2 STEPPING ON URINE/STOOL....1 2 MOSQUITO/FLEA/BEDBUG BITES.1 2	
525	Is it possible for a healthy looking person to have AIDS?	YES.....1 NO.....2 DK.....8	
526	Is it possible for a woman who has the AIDS virus to give birth to a child with the AIDS virus?	YES.....1 NO.....2 DK.....8	
527	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.....3 NOT BE INVOLVED.....4 OTHER_____5 (SPECIFY)	
528	If your relative is suffering with AIDS, who would you prefer to care for him/her?	RELATIVES/FRIENDS.....1 GOVERNMENT.....2 RELIGIOUS ORG./MISSION.....3 NOBODY/ABANDON.....4 OTHER_____5 (SPECIFY)	

SECTION 6. FERTILITY PREFERENCES



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
607	Given your present circumstances, if you had to do it over again, do you think you would make the same decision to have an operation not to have any more children?	YES.....1 NO.....2	
608	Do you regret that you (your husband) had the operation not to have any (more) children?	YES.....1 NO.....2	→614
609	Why do you regret it?	RESPONDENT WANTS ANOTHER CHILD..1 PARTNER WANTS ANOTHER CHILD.....2 SIDE EFFECTS.....3 OTHER REASON_____4 (SPECIFY)	→614
610	Do you think that your husband/partner approves or disapproves of couples using a method to avoid pregnancy?	APPROVES.....1 DISAPPROVES.....2 DK.....8	
611	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	
612	Have you and your husband/partner ever discussed the number of children you would like to have?	YES.....1 NO.....2	
613	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 DON'T KNOW.....8	
614	How long should a couple wait before starting sexual intercourse after the birth of a baby?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ OTHER_____996 (SPECIFY) DON'T KNOW.....998	
615	Should a mother wait until she has completely stopped breastfeeding before starting to have sexual relations again, or doesn't it matter?	WAIT.....1 DOESN'T MATTER.....2 DON'T KNOW.....8	
616	Do you think that it is easy or difficult for a woman who is breastfeeding to get pregnant?	EASY.....1 DIFFICULT.....2	
617	In general, do you approve or disapprove of couples using a method to avoid pregnancy?	APPROVE.....1 DISAPPROVE.....2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
618	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? RECORD SINGLE NUMBER OR OTHER ANSWER.	NUMBER..... ☐☐ OTHER ANSWER _____ (SPECIFY) 96	→620
619	Among the children you want to have, how many would you prefer to be boys and how many to be girls?	NUMBER OF SONS..... ☐☐ NUMBER OF DAUGHTERS..... ☐☐ NO SEX PREFERENCE..... 95 OTHER ANSWER _____ (SPECIFY) 96	
620	What do you think is the best number of months or years between the birth of one child and the birth of the next child?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ OTHER _____ (SPECIFY) 996 DON'T KNOW.....998	

SECTION 7. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
701	CHECK 501: YES, MARRIED OR LIVED WITH A MAN ☐ → ASK QUESTIONS ABOUT CURRENT OR MOST RECENT HUSBAND/PARTNER. NO, NEVER MARRIED OR LIVED WITH A MAN ☐		→708
702	Can (could) you husband/partner read and write Kiswahili easily, with difficulty, or not at all?	EASILY.....1 WITH DIFFICULTY.....2 NOT AT ALL.....3	
703	Did your (last) husband/partner ever attend school?	YES.....1 NO.....2	→705
704	What was the highest formal school he completed?	LESS THAN 1 YEAR.....00 STANDARD1.....01 STANDARD2.....02 STANDARD3.....03 STANDARD4.....04 STANDARD5.....05 STANDARD6.....06 STANDARD7.....07 STANDARD8.....08 FORM1.....09 FORM2.....10 FORM3.....11 FORM4.....12 FORM5.....13 FORM6.....14 UNIVERSITY.....15 OTHER _____ (SPECIFY) 16	
705	What kind of work does (did) your (last) husband/partner 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 family land, or does (did) he rent land, or does (did) he work on someone else's land?	HIS/FAMILY LAND.....1 RENTED LAND.....2 SOMEONE ELSE'S LAND.....3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
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	→717
710	What is your occupation, that is, what kind of work do you do?	_____ ☐☐ _____ _____	
711	In your current work, do you work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER.....1 FOR SOMEONE ELSE.....2 SELF-EMPLOYED.....3	
712	Do you earn cash for this work? PROBE: Do you make money for working?	YES.....1 NO.....2	
713	Do you do this work at home or away from home?	HOME.....1 AWAY.....2	
714	CHECK 215/216/218: HAS CHILD BORN SINCE JAN. 1986 AND LIVING WITH RESPONDENT?	YES ☐ ↓ NO ☐	→717
715	While you are working, do you usually have (NAME OF YOUNGEST CHILD AT HOME) with you, sometimes have him/her with you, or never have him/her with you?	USUALLY.....1 SOMETIMES.....2 NEVER.....3	→717
716	Who usually takes care of (NAME OF YOUNGEST CHILD AT HOME) while you are working?	HUSBAND/PARTNER.....01 OLDER CHILD(REN).....02 OTHER RELATIVES.....03 NEIGHBORS.....04 FRIENDS.....05 SERVANTS/HIRED HELP.....06 CHILD IS IN SCHOOL.....07 INSTITUTIONAL CHILDCARE.....08 OTHER_____09 (SPECIFY)	
717	RECORD THE TIME	HOURS..... ☐☐ MINUTES..... ☐☐	

SECTION 8. HEIGHT AND WEIGHT

801 CHECK 222:

ONE OR BIRTHS SINCE JAN. 1986 ☐ ↓

NO BIRTHS SINCE JAN. 1986 ☐ → 901

INTERVIEWER: IN 802 (COLUMNS 2-4) RECORD THE LINE NUMBER FOR EACH CHILD BORN SINCE JANUARY 1986 AND STILL ALIVE. IN 803 AND 804 RECORD THE NAME AND BIRTH DATE FOR THE RESPONDENT AND FOR ALL LIVING CHILDREN BORN SINCE JANUARY 1986. IN 806 AND 808 RECORD HEIGHT AND WEIGHT OF THE RESPONDENT AND THE LIVING CHILDREN. (NOTE: ALL RESPONDENTS WITH ONE OR MORE BIRTHS SINCE JANUARY 1986 SHOULD BE WEIGHED AND MEASURED EVEN IF ALL OF THE CHILDREN HAVE DIED. IF THERE ARE MORE THAN 3 LIVING CHILDREN BORN SINCE JANUARY 1986, USE ADDITIONAL FORMS).

	[1] RESPONDENT	[2] YOUNGEST LIVING CHILD	[3] NEXT-TO-YOUNGEST LIVING CHILD	[4] SECOND-TO-YOUNGEST LIVING CHILD
802 LINE NO. FROM Q212		☐☐	☐☐	☐☐
803 NAME FROM Q.212 FOR CHILDREN	(NAME) _____	(NAME) _____	(NAME) _____	(NAME) _____
804 DATE OF BIRTH FROM Q215 FOR RESPONDENT FROM Q.215 FOR CHILDREN, AND ASK FOR DAY OF BIRTH	MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐
805 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
806 HEIGHT (in centimeters)	☐☐☐.☐	☐☐☐.☐	☐☐☐.☐	☐☐☐.☐
807 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
808 WEIGHT (in kilograms)	☐☐☐.☐	0☐☐.☐	0☐☐.☐	0☐☐.☐
809 DATE WEIGHED AND MEASURED	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐
810 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 PRESENY.....3 CHILD REFUSED..4 MOTHER REFUSED.5 OTHER.....6 (SPECIFY)

811 NAME OF MEASURER: _____ ☐☐ NAME OF ASSISTANT: _____ ☐☐

SECTION 9. LANGUAGE INFORMATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
901	IN WHAT LANGUAGE DID YOU CONDUCT THE INTREVIEW?	KISWAHILI.....01 OTHER_____ ☐☐	
902	FOR HOW MUCH OF THE INTERVIEW DID YOU DEPEND ON A THIRD PERSON TO INTERPRET FOR YOU?	NONE OF THE INTERVIEW.....1 SOME OF THE INTERVIEW.....2 MOST OF THE INTERVIEW.....3 ALL OF THE INTERVIEW.. .....4 OTHER_____5 (SPECIFY)	→END
903	IF AN INTERPRETER WAS USED, INDICATE THE SEX AND APPROXIMATE AGE OF INTERPRETER.	ADULT FEMALE.....1 TEENAGE FEMALE.....2 ADULT MALE.....3 TEENAGE MALE.....4 OTHER_____5 (SPECIFY)	

INTERVIEWER'S OBSERVATIONS

(To be filled in after completing interview)

Comments About Respondent: _____

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Comments on Specific Questions: _____

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Any Other Comments: _____

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SUPERVISOR'S OBSERVATIONS

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Name of Supervisor: _____ Date: _____

EDITOR'S OBSERVATIONS

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Name of Field Editor: _____ Date: _____

UNITED REPUBLIC OF TANZANIA

BUREAU OF STATISTICS, PLANNING COMMISSION
TANZANIA DEMOGRAPHIC AND HEALTH SURVEY

INDIVIDUAL QUESTIONNAIRE
MALE

IDENTIFICATION

NAME OF HOUSEHOLD HEAD _____

TDHS CLUSTER ID..... | | | |

HOUSEHOLD NO..... | | | |

REGION _____ | | |

DISTRICT _____ | |

WARD _____ | | |

ENUMERATION AREA _____ | | |

URBAN/RURAL (urban=1, rural=2)..... |

LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE.....
(large city=1, small city=2, town=3, countryside=4) |

NAME AND LINE NUMBER OF MALE RESPONDENT _____ | |

NAME AND LINE NUMBER OF WIFE _____ | |

NAME AND LINE NUMBER OF WIFE _____ | |

NAME AND LINE NUMBER OF WIFE _____ | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY | | MONTH | | YEAR | |
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 OTHER _____ (SPECIFY)

	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	KEYED BY
NAME				| |
DATE				

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M101	RECORD THE TIME.	HOUR..... MINUTES.....	
M102	First I would like to ask some questions about your background. For most of the time until you were 12 years old, did you live in Dar es Salaam city, another urban area, or in the rural area?	CITY (DAR ES SALAAM).....1 OTHER URBAN AREA.....2 RURAL AREA/VILLAGE.....3	
M103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	YEARS..... ALWAYS.....95 VISITOR.....96	→M105
M104	Just before you moved here, did you live in Dar es Salaam city, another urban area, or in the rural area?	CITY (DAR ES SALAAM).....1 OTHER URBAN AREA.....2 RURAL AREA/VILLAGE.....3	
M105	In what month and year were you born?	MONTH..... DK MONTH.....98 YEAR..... DK YEAR.....98	
M106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS.....	
M107	Can you read and write kiswahili easily, with difficulty, or not at all?	EASILY.....1 WITH DIFFICULTY.....2 NOT AT ALL.....3	→M109
M108	Do you usually read a newspaper or magazine at least once a week?	YES.....1 NO.....2	
M109	Have you ever attended school?	YES.....1 NO.....2	→M111
M110	What is the highest formal school 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_____16 (SPECIFY)	
M111	Do you usually listen to a radio at least once a week?	YES.....1 NO.....2	
M112	Do you usually watch television at least once a week?	YES.....1 NO.....2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M113	What kind of work do you mainly do?	_____ ☐☐ _____ _____	
M114	CHECK M113: WORKS IN AGRICULTURE ☐ → v DOES NOT WORK IN AGRICULTURE ☐		→M116
M115	Do you work mainly on your own land or family land, or do you rent land, or do you work on someone else's land?	OWN/FAMILY LAND.....1 RENT LAND.....2 SOMEONE ELSE'S LAND.....3	
M116	What is your religion?	MUSLIM.....1 CATHOLIC.....2 PROTESTANT.....3 NONE.....4 OTHER_____5 (SPECIFY)	
M117	To which tribe do you belong?	_____ ☐☐☐	
M118	CHECK Q.5 IN THE HOUSEHOLD SCHEDULE: THE RESPONDENT IS NOT A USUAL RESIDENT OF THE HH ☐ → v THE RESPONDENT IS A USUAL RESIDENT OF THE HH ☐		→M201
M119	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 the rural area? IF OTHER URBAN AREA: In which town do you live?*	CITY (DAR ES SALAAM).....1 LARGE URBAN AREA.....2 SMALL URBAN AREA.....3 RURAL AREA/VILLAGE.....4	
M120	In which region is that located? IF USUAL RESIDENCE IS OUTSIDE OF TANZANIA, RECORD COUNTRY OF RESIDENCE.	REGION_____ ☐☐	
M121	Does the household in which you usually live have:	YES NO	
	Electricity?	ELECTRICITY.....1 2	
	A radio?	RADIO.....1 2	
	A television?	TELEVISION.....1 2	
	A refrigerator?	REFRIGERATOR.....1 2	
M122	Could you describe the main material of the floor of your home?	EARTH/SAND.....11 WOOD PLANKS.....21 PARQUET OR POLISHED WOOD.....31 CERAMIC TILES.....32 CEMENT.....33 OTHER_____41 (SPECIFY)	
M123	Does any member of your household own:	YES NO	
	A bicycle?	BICYCLE.....1 2	
	A motorcycle?	MOTORCYCLE.....1 2	
	A car?	CAR.....1 2	

* Q. M119 LARGE URBAN AREAS ARE MWANZA, ARUSHA, MOROGORO, DODOMA, MOSHI, TANGA, IRINGA, MBEYA, TABORA AND ZANZIBAR. SMALL URBAN AREAS ARE ALL OTHER TOWNS.

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M201	Do you have any sons or daughters who are now living with you?	YES.....1 NO.....2	→M203
M202	How many sons live with you? And how many daughters live with you? IF NONE ENTER '00'.	SONS AT HOME..... DAUGHTERS AT HOME.....	
M203	Do you have any sons or daughters who do not live with you?	YES.....1 NO.....2	→M205
M204	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 ENTER '00'.	SONS ELSEWHERE..... DAUGHTERS ELSEWHERE.....	
M205	Have you ever had a son or daughter who was born alive but later died?	YES.....1 NO.....2	→M207
M206	In all, how many boys have died? And how many girls have died? IF NONE ENTER '00'.	BOYS DEAD..... GIRLS DEAD.....	
M207	SUM ANSWERS TO M202, M204, AND M206, AND ENTER TOTAL. IF NONE ENTER '00'.	TOTAL.....	
M208	CHECK M207: Just to make sure that I have this right: you have TOTAL ____ children born alive during your life. Is that correct? YES ☐ NO ☐ → PROBE AND CORRECT M201-M207 AS NECESSARY		
M209	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 DK.....3	→M301
M210	During which time 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_____ (SPECIFY) 5 DK.....8	

M301 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. Which ways or methods have you heard about?

CIRCLE CODE 1 IN M302 FOR EACH METHOD MENTIONED SPONTANEOUSLY.
THEN PROCEED DOWN THE COLUMN, 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 M302, ASK M303 AND M304 BEFORE PROCEEDING TO THE NEXT METHOD.

	M302 Have you ever heard of (METHOD)? READ DESCRIPTION OF EACH METHOD.	M303 Have you (or your wife/partner) ever used (METHOD)? (METHOD)?	M304 Do you know where a person could go to get (METHOD)?
01 PILL Women can take a pill every day.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
02 IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	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.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
04 DIAPHRAGM,FOAM,JELLY Women can place a sponge, suppository, diaphragm, jelly or cream inside them before intercourse.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
05 CONDOM Men can use a rubber sheath during sexual intercourse. The rubber sheath is used to avoid pregnancy, to prevent transmission of diseases such as AIDS, or for cleanliness.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
06 FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
07 MALE STERILIZATION Men can have an operation to avoid having any more children.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	Have you ever had an operation to avoid having any more children? YES.....1 NO.....2	YES.....1 NO.....2
08 CALENDAR Couples can have sexual intercourse only during the safe period of the monthly cycle, that is the times during the monthly cycle when the woman is least likely to become pregnant.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	Do you know where a person can obtain advice on how to use the calendar method? YES.....1 NO.....2
09 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.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	Do you know where a person can obtain advice on how to observe changes in the mucus? YES.....1 NO.....2
10 WITHDRAWAL Men can be careful and pull out before climax.	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	

11 ANY OTHER METHODS	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	Have you ever used (METHOD)?	
1 _____ (SPECIFY)	YES.....1	YES.....1	
2 _____ (SPECIFY)	NO.....3 →	NO.....2	
		YES.....1	
		NO.....2	

M305 CHECK M303: NOT A SINGLE "YES" (NEVER USED) ☐ → SKIP TO M308 | AT LEAST ONE "YES" (EVER USED) ☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M306	Have you (or your wife/partner) ever used anything or tried in any way to delay or avoid having a child?	YES..... ☐ NO..... ☐	→M321
M307	What have you used or done? CORRECT M303-M305 (AND M302 IF NECESSARY).		
M308	CHECK M303: MAN NOT STERILIZED ☐	MAN STERILIZED ☐	→M310A
M309	Are you (or your wife/partner) currently doing something or using any method to delay or avoid having a child?	YES.....1 NO.....2	→M315
M310 M310A	Which method are you using? CIRCLE '07' FOR MALE STERILIZATION.	PILL.....01 IUD.....02 INJECTIONS.....03 DIAPHRAGM/FOAM/JELLY.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 CALENDAR.....08 MUCUS METHOD.....09 WITHDRAWAL.....10 OTHER _____ 11 (SPECIFY)	→M315
M311	CHECK M310 SHE/HE STERILIZED ☐ → Where did the sterilization take place? USING ANOTHER METHOD ☐ → Where did you (or your wife/partner) obtain (METHOD) last time?	GOVERNMENT AND PARASTATAL CONSULTANT HOSPITAL.....11 REGIONAL HOSPITAL.....12 DISTRICT HOSPITAL.....13 HEALTH CENTRE.....14 DISPENSARY.....15 PARASTATAL HEALTH FACILITY....16 VILLAGE HEALTH POST/WORKER....17 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV. DOCTOR/CLINIC/HOSPITAL..22 PHARMACY/MEDICAL STORE.....23 UMATI CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 NEIGHBORS/RELATIVES.....32 OTHER _____ 41 (SPECIFY) DK.....98	→M314 →M314 →M314
M312	How long does it take to travel from your home to this place? IF LESS THAN TWO HOURS, RECORD TRAVEL TIME IN MINUTES. OTHERWISE, RECORD TRAVEL TIME IN HOURS.	MINUTES.....1 ☐☐ HOURS.....2 0☐ DK.....9998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M313	Is it easy or difficult to get there?	EASY.....1 DIFFICULT.....2	
M314	CHECK M309/M310: NOT CURRENTLY USING CONDOM ☐ ↓ USING CONDOM ☐		→M316
M315	Have you used a condom in the last four weeks?	YES.....1 NO.....2	→M320
M316	What is the brand name of the condom you last used?	BRAND _____ ☐☐ DK.....98	
M317	How much did the condom you last used cost?	COST..... ☐☐ PARTNER OBTAINED.....95 FREE.....96 DK.....98	
M318	Do you use more condoms now than a year ago, about the same number, or fewer?	MORE.....1 SAME NUMBER.....2 FEWER.....3	→M320
M319	What is the main reason you use more condoms now than a year ago?	FEAR OF GETTING AIDS.....1 FEAR OF GETTING OTHER STD.....2 FAMILY PLANNING.....3 LESS EXPENSIVE NOW.....4 MORE AVAILABLE NOW.....5 OTHER _____ 6 (SPECIFY) DK.....8	
M320	CHECK M309: NOT CURRENTLY USING A METHOD ☐ ↓ USING A METHOD ☐		→M331
M321	Do you intend to use a method to delay or avoid having a child at any time in the future?	YES.....1 NO.....2 DK.....3	→M323 →M327
M322	What is the main reason you do not intend to use a method?	WANTS CHILDREN.....01 LACK OF KNOWLEDGE.....02 PARTNER OPPOSED.....03 COST TOO MUCH.....04 SIDE EFFECTS.....05 HEALTH CONCERNS.....06 HARD TO GET METHODS.....07 RELIGION.....08 OPPOSED TO FAMILY PLANNING.....09 FATALISTIC.....10 OTHER PEOPLE OPPOSED.....11 INFREQUENT SEX.....12 WIFE/PARTNER INFECUND.....13 INCONVENIENT.....15 NOT MARRIED/NO PARTNER.....16 OTHER _____ 17 (SPECIFY) DK.....98	→M327
M323	Do you intend to use a method within the next 12 months?	YES.....1 NO.....2 DK.....8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M324	When you use a method, which method would you prefer to use?	PILL.....01 IUD.....02 INJECTIONS.....03 DIAPHRAGM/FOAM/JELLY.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 CALENDAR.....08 MUCUS METHOD.....09 WITHDRAWAL.....10 OTHER_____ 11 (SPECIFY) UNSURE.....98	→M327
M325	Where can you get (METHOD MENTIONED IN M324)? _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL CONSULTANT HOSPITAL.....11 REGIONAL HOSPITAL.....12 DISTRICT HOSPITAL.....13 HEALTH CENTRE.....14 DISPENSARY.....15 PARASTATAL HEALTH FACILITY....16 VILLAGE HEALTH POST/WORKER....17 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV. DOCTOR/CLINIC/HOSPITAL..22 PHARMACY/MEDICAL STORE.....23 UMATI CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 NEIGHBORS/RELATIVES.....32 OTHER_____ 41 (SPECIFY) DON'T KNOW.....98	→M329 →M331 →M329 →M331 →M329 →M331 →M331 →M327
M326	CHECK M310: USING CALENDER, MUCUS METHOD WITHDRAWAL OR OTHER TRADITIONAL METHOD USING A MODERN METHOD		→M331
M327	Do you know of a place where you can obtain a method of family planning?	YES.....1 NO.....2	→M331
M328	Where is that? _____ (NAME OF PLACE)	GOVERNMENT AND PARASTATAL CONSULTANT HOSPITAL.....11 REGIONAL HOSPITAL.....12 REGIONAL HOSPITAL.....12 DISTRICT HOSPITAL.....13 HEALTH CENTRE.....14 DISPENSARY.....15 PARASTATAL HEALTH FACILITY....16 VILLAGE HEALTH POST/WORKER....17 MEDICAL PRIVATE SECTOR RELIGIOUS ORG. FACILITY.....21 PRIV. DOCTOR/CLINIC/HOSPITAL..22 PHARMACY/MEDICAL STORE.....23 UMATI CBD WORKER.....24 OTHER PRIVATE SECTOR SHOP.....31 NEIGHBORS/RELATIVES.....32 OTHER_____ 41 (SPECIFY)	→M331 →M331 →M331
M329	How long does it take to travel from your home to this place? IF LESS THAN ONE HOUR, RECORD TRAVEL TIME IN MINUTES. OTHERWISE, RECORD TRAVEL TIME IN HOURS.	MINUTES.....1 ☐☐☐ HOURS.....2 0☐☐ DK.....9998	
M330	Is it easy or difficult to get there?	EASY.....1 DIFFICULT.....2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M331	In the last month, have you heard or seen a message about family planning: on the radio? on television? from a Rural Medical aide? from a MCH aide? from neighbors/relatives? on posters?	YES NO RADIO.....1 2 TELEVISION.....1 2 RURAL MEDICAL AIDE.....1 2 MCH AIDE.....1 2 NEIGHBORS/RELATIVES.....1 2 POSTERS.....1 2	
M332	Is it acceptable or not acceptable to you for family planning information to be provided on the radio or television?	ACCEPTABLE.....1 NOT ACCEPTABLE.....2 DK.....8	
M333	CHECK M302: KNOWS CONDOM ☐ → v DOES NOT KNOW CONDOM ☐		→M401
M334	Do you agree or disagree with the following statements: READ AND OBTAIN A RESPONSE FOR EACH STATEMENT.	AGREE DISAGREE	
	Condoms are used primarily with casual partners.	1 2	
	Condoms reduce risk of sexually transmittad diseases.	1 2	
	Most women don't like men to use condoms.	1 2	
	Using condoms shows responsibility.	1 2	
	Condoms are used primarily for family planning purposes.	1 2	
	Condoms are embarassing to obtain.	1 2	
	A condom can be used more than once.	1 2	
	Condoms make sex less enjoyable.	1 2	
	Using a condom can give you AIDS.	1 2	

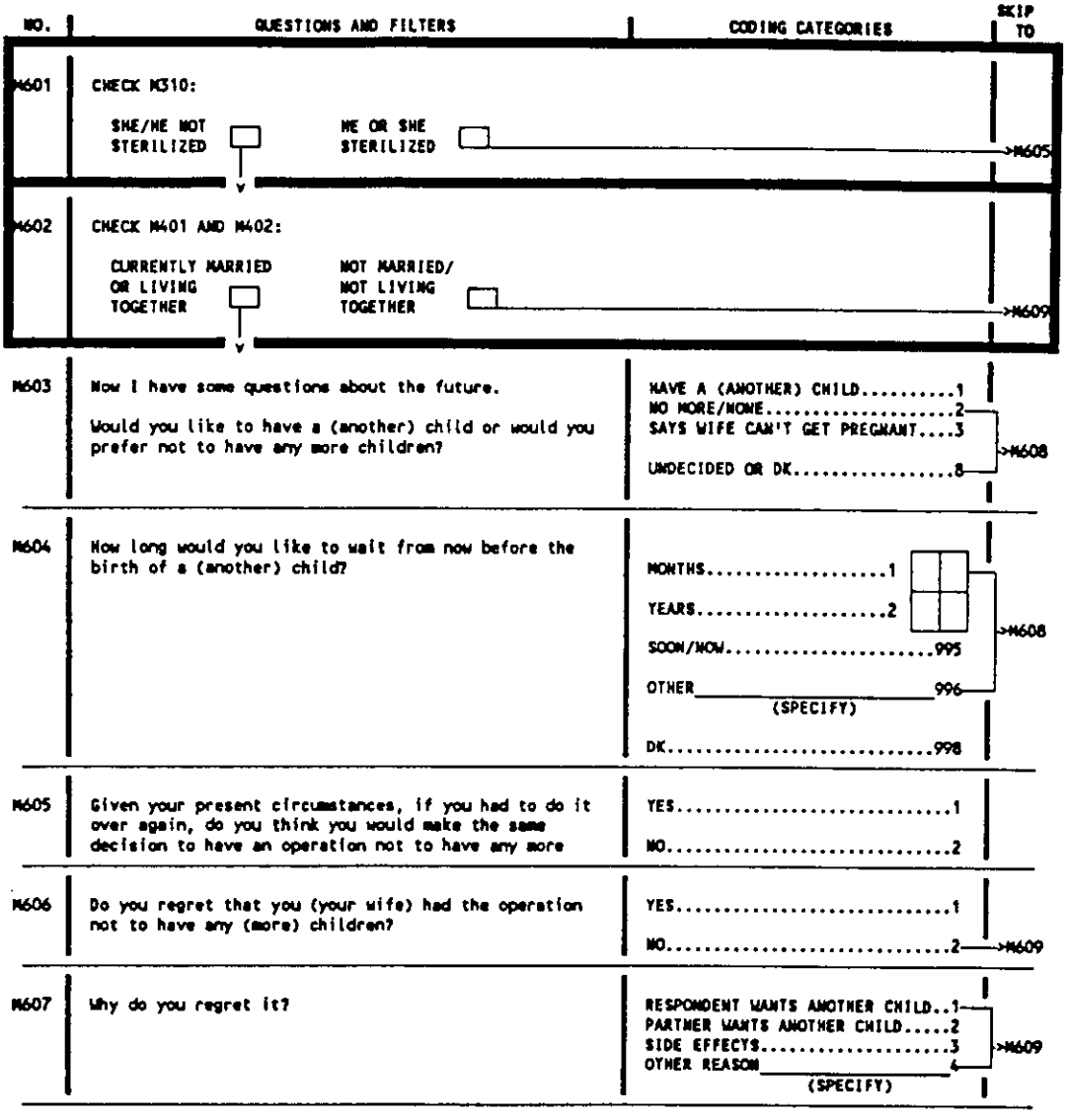
SECTION 4. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M401	Have you ever been married or lived with a woman?	YES.....1 NO.....2	→M405
M402	Are you now married or living with a partner, or are you now widowed, or divorced or no longer living together?	MARRIED.....1 LIVING TOGETHER.....2 WIDOWED.....3 DIVORCED/NO LONGER LIVING TOGETHER.....4	→M404
M403	How many wives do you have?	NUMBER.....	
M404	How old were you when you started living with your (first) wife or partner?	AGE.....	→M406
M405	IF NEVER MARRIED OR LIVED WITH A WOMAN: Have you ever had sexual intercourse?	YES.....1 NO.....2	→M413
M406	Now we need some details about your sexual activity in order to get a better understanding of family planning and health. How many times did you have sexual intercourse in the last four weeks?	TIMES.....	
M407	How many times in a month do you usually have sexual intercourse?	TIMES.....	
M408	CHECK M406: HAD SEXUAL INTERCOURSE ONE OR MORE TIMES IN LAST FOUR WEEKS ☐ ↓ ZERO TIMES ☐		→M411
M409	With how many different women did you have sex in the last four weeks?	NUMBER OF WOMEN.....	
M410	Did you use a condom with any of these women?	YES.....1 NO.....2	
M411	When was the last time you had sexual intercourse?	DAYS AGO.....1 WEEKS AGO.....2 MONTHS AGO.....3 YEARS AGO.....4	
M412	How old were you when you first had sexual intercourse?	AGE..... FIRST TIME WHEN MARRIED.....96	
M413	PRESENCE OF OTHERS AT THIS POINT.	YES NO CHILDREN UNDER 10.....1 2 WIFE.....1 2 OTHER FEMALES.....1 2 OTHER MALES.....1 2	

SECTION 5. AIDS KNOWLEDGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M501	Now I have a few questions about a very important topic. Have you heard of an illness called AIDS?	YES.....1 NO.....2	→M601
M502	From which sources of information or persons have you heard about AIDS in the last month? RECORD ALL MENTIONED.	RADIO.....A TV.....B NEWSPAPERS.....C HEALTH WORKERS.....D MOSQUES/CHURCHES.....E FRIENDS/RELATIVES.....F SCHOOLS/QURAN TEACHERS.....G SLOGANS/PAMPHLETS/POSTERS.....H COMMUNITY MEETINGS.....I CDH OFFICE.....J OTHER_____K (SPECIFY) NONE.....L	
M503	How is AIDS transmitted? RECORD ALL MENTIONED.	SEXUAL INTERCOURSE.....A NEEDLES/BLADES/SKIN PUNCTURES...B MOTHER TO CHILD.....C TRANSFUSION OF INFECTED BLOOD...D OTHER_____E (SPECIFY) DON'T KNOW.....F	
M504	Do you think that you can get AIDS from shaking hands with someone who has AIDS? hugging someone who has AIDS? kissing someone who has AIDS? wearing the clothes of someone who has AIDS? sharing eating utensils with someone who has AIDS? stepping on the urine or stool of someone who has AIDS? mosquito, flea or bedbug bites?	YES NO HANDSHAKING.....1 2 HUGGING.....1 2 KISSING.....1 2 SHARING CLOTHES.....1 2 SHARING EATING UTENSILS....1 2 STEPPING ON URINE/STOOL....1 2 MOSQUITO/FLEA/BEDBUG BITES.1 2	
M505	Is it possible for a healthy looking person to have AIDS?	YES.....1 NO.....2 DK.....8	
M506	Is it possible for a woman who has the AIDS virus to give birth to a child with the AIDS virus?	YES.....1 NO.....2 DK.....8	
M507	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.....3 NOT BE INVOLVED.....4 OTHER_____5 (SPECIFY)	
M508	If your relative is suffering with AIDS, who would you prefer to care for him/her?	RELATIVES/FRIENDS.....1 GOVERNMENT.....2 RELIGIOUS ORG./MISSION.....3 NOBODY/ABANDON.....4 OTHER_____5 (SPECIFY)	

SECTION 6. FERTILITY PREFERENCES



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M608	Do you think that your wife(wives)/partner(s) approves or disapproves of couples using a method to avoid pregnancy?	APPROVES.....1 DISAPPROVES.....2 DK.....8	
M609	How long should a couple wait before starting sexual intercourse after the birth of a baby?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ OTHER _____ 996 (SPECIFY)	
M610	Should a mother wait until she has completely stopped breastfeeding before starting to have sexual relations again, or doesn't it matter?	WAIT.....1 DOESN'T MATTER.....2	
M611	In general, do you approve or disapprove of couples using a method to avoid pregnancy?	APPROVE.....1 DISAPPROVE.....2	
M612	CHECK M202 AND M204: 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? RECORD SINGLE NUMBER OR OTHER ANSWER.	NUMBER..... ☐☐ OTHER ANSWER _____ 96 → M614 (SPECIFY)	
M613	How many of those children would be sons? And how many would be daughters?	NUMBER OF SONS..... ☐☐ NUMBER OF DAUGHTERS..... ☐☐ NO SEX PREFERENCE.....95 OTHER ANSWER _____ 96 (SPECIFY)	
M614	What do you think is the best number of months or years between the birth of one child and the birth of the next child?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ OTHER _____ 996 (SPECIFY) DON'T KNOW.....998	
M615	RECORD THE TIME	HOURS..... ☐☐ MINUTES..... ☐☐	

SECTION 7. LANGUAGE INFORMATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
M701	IN WHAT LANGUAGE DID YOU CONDUCT THE INTERVIEW?	KISWAHILI.....01 OTHER_____ ☐☐	
M702	FOR HOW MUCH OF THE INTERVIEW DID YOU DEPEND ON A THIRD PERSON TO INTERPRET FOR YOU?	NONE OF THE INTERVIEW.....1 SOME OF THE INTERVIEW.....2 MOST OF THE INTERVIEW.....3 ALL OF THE INTERVIEW.. .....4 OTHER_____5 (SPECIFY)	→END
M703	IF AN INTERPRETER WAS USED, INDICATE THE SEX AND APPROXIMATE AGE OF INTERPRETER.	ADULT FEMALE.....1 TEENAGE FEMALE.....2 ADULT MALE.....3 TEENAGE MALE.....4 OTHER_____5 (SPECIFY)	

INTERVIEWER'S OBSERVATIONS
(To be filled in after completing interview)

Comments About Respondent: _____

_____

_____

Comments on Specific Questions: _____

_____

_____

Any Other Comments: _____

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_____

SUPERVISOR'S OBSERVATIONS

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Name of Supervisor: _____ Date: _____

EDITOR'S OBSERVATIONS

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_____

Name of Field Editor: _____ Date: _____

TANZANIA DEMOGRAPHIC AND HEALTH SURVEYS
SERVICE AVAILABILITY QUESTIONNAIRE

TANZANIA
BUREAU OF STATISTICS, PLANNING COMMISSION

IDENTIFICATION	
PLACE NAME _____	
DHS CLUSTER NUMBER.....	
REGION.....	
DISTRICT.....	
WARD.....	
ENUMERATION AREA.....	
URBAN/RURAL (urban=1, rural=2).....	
LOCALITY TYPE (major town=1, large town=2, small town=3, village=4)	

INTERVIEWER NAME: _____ CODE

CLUSTER VISIT START DATE: _____ DAY MONTH

CLUSTER VISIT END DATE: _____ DAY MONTH

SECTION 1A. COMMUNITY CHARACTERISTICS

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
	QUESTIONS 101 TO 102 ARE TO BE ANSWERED BY THE INTERVIEWER UPON ARRIVAL AT THE CLUSTER.		
101	TYPE OF LOCALITY (in which cluster is found/nearest to cluster)	MAJOR TOWN.....1 LARGE TOWN.....2 SMALL TOWN.....3 VILLAGE.....4	→ 111 → 111 → 109
102	DENSITY OF VILLAGE	COMPACT.....1 SCATTERED.....2	
	THE REMAINING QUESTIONS IN SECTIONS ONE AND TWO ARE TO BE ANSWERED BY KNOWLEDGEABLE INFORMANTS FROM THE CLUSTER.		
103	What is the name of the nearest urban center?	_____ ☐☐	
104	How far is it in kilometers to the nearest urban center?	KM. TO NEAREST URBAN CENTER..... ☐☐☐	
105	What are the most commonly used types of transportation to go to the nearest urban center? (CIRCLE ALL APPLICABLE)	CAR/BUS.....A ANIMAL.....B WALKING.....C CYCLING.....D OTHER_____...E	
106	Does this village/community keep records of births and deaths?	YES.....1 NO.....2	
107	What is the type of the main access road to this community/village?	ALL WEATHER ROAD.....1 SEASONAL ROAD.....2 PATH.....3 OTHER (RIVER/RAILWAY).....4	
108	What is the MAJOR economic activity of community/village inhabitants? (CIRCLE ONE)	AGRICULTURAL.....1 FISHING.....2 TRADING/MARKETING.....3 MANUFACTURING.....4 MINING.....5 LIVESTOCK.....6 HUNTING.....7 OTHER_____...8	
109	What is the MAIN source of drinking water in this community/village?	PIPED TO HOUSES.....1 PUBLIC TAP.....2 WELL.....3 LAKE, RIVER, SPRING.....4 RAINWATER TANK.....5 OTHER_____...6	→ 111
110	How far is it in meters to the main source of drinking water?	METERS TO WATER SOURCE..... ☐☐☐☐	
111	Is there electricity in this community/village?	YES.....1 NO.....2	
112	What is the main method of waste disposal in this community/village?	PIT INSIDE/OUTSIDE COMPOUND.....1 RUBBISH BIN.....2 THROWN INSIDE/OUTSIDE COMPOUND..3 OTHER_____.4	
113	Is there telephone service or a radio call for this community/village?	YES.....1 NO.....2	
114	What type of toilet facilities are used by most households in this community/village?	FLUSH.....1 PIT AND OTHER.....2 NO FACILITIES/BUS-/FIELD.....3	

COMMENTS:

SECTION 1B. AVAILABILITY OF PUBLIC SERVICES NEAREST TO OR IN THE COMMUNITY/VILLAGE:

INTERVIEWER: Now I would like to ask you about the distances to the nearest of various types of schools and services, how you usually go there and how long it takes to get there from here.

SERVICE	115 How far is it to the nearest [SERVICE] in km? [a]	116 What is the most common transport to [SERVICE]? [b]	117 How long does it take to get to [SERVICE]? HOURS	MINUTES
A. EDUCATION				
1 Primary School				
2 Day Secondary School	IF '00'			
3 Post Primary Technical Centre	IF '00'			
B. GENERAL SERVICES	IF '00'			
1 Post Office/Mail Service				
2 Weekly Market	IF '00'			
3 Shop (Duka)	IF '00'			
4 Place With Bus Service Available	IF '00'			
5 Place Where Most Village/ Community Residents Sell Cash Crops	IF '00'			
	IF '00' 118			

CODES: [a] 96 = 96+
00 = Less than 1/located in village
98 = No known facility

[b] Car/Bus 1
Animal 2
Walking 3
Cycling 4
Other 5

118	Are there adult literacy classes (Kisomo Chenye Manufaa) in this community/village?	YES.....1 NO.....2	

COMMENTS:

SECTION 1C. HEALTH AND FAMILY PLANNING PROGRAMS IN THE COMMUNITY

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
119	Is there a traditional birth attendant available to women here who regularly assists during delivery?	YES.....1 NO.....2	→ 120
119a	Has the traditional birth attendant had any special training from the MOH or other organisation?	YES.....1 NO.....2	
120	Is this community visited by a maternal and child health (MCH) aide?	YES.....1 NO.....2	
121	Is there a traditional healer available in this community/ village?	YES.....1 NO.....2	
122	Does a family planning field worker from UMATI visit this community/village? (DVC or DUC or RUC)	YES.....1 NO.....2	→ 123
122a	How often does the family planning field worker come to this community/village and give motivational talks?	NO. OF TIMES [ ][ ] PER MONTH..1 YEAR...2	
122b	Does the family planning worker distribute any contraceptives during the visit?	YES.....1 NO.....2	
123	Does this community/village have one or more village health workers?	YES.....1 NO.....2	→ 124
123a	Have any of the village health workers been trained?	YES.....1 NO.....2	
123b	Are any of the village health workers paid by the village/ community as a group?	YES.....1 NO.....2	→ 123d
123c	Has the village health worker been paid in the last 3 months?	YES.....1 NO.....2	
123d	Does a village health worker provide: Chloroquine syrup?	CHLOROQUINE: YES.....1 NO.....2	
	Family Planning Motivation?	FAMILY PLANNING MOTIVATION: YES.....1 NO.....2	
	Condoms?	CONDOMS: YES.....1 NO.....2	
	ORS Instruction?	ORS INSTRUCTION: YES.....1 NO.....2	
	ORS Packets?	ORS PACKETS: YES.....1 NO.....2	
	Antenatal Care?	ANTENATAL CARE: YES.....1 NO.....2	
	Growth Monitoring?	GROWTH MONITORING: YES.....1 NO.....2	
	Environmental Sanitation Talks?	SANITATION TALKS: YES.....1 NO.....2	

COMMENTS:

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
124	Is this community/village visited by one or more outreach programs from a dispensary, health centre or hospital?	YES.....1 NO.....2	→ 125
124a	Does an outreach program provide: Growth Monitoring?	GROWTH MONITORING: YES.....1 NO.....2	
	Immunisation?	IMMUNISATION: YES.....1 NO.....2	
	Antenatal Care?	ANTENATAL CARE: YES.....1 NO.....2	
	Condoms?	CONDOMS: YES.....1 NO.....2	
	Family Planning Motivation?	FAMILY PLANNING MOTIVATION: YES.....1 NO.....2	
	Contraceptive Pills?	PILLS: YES.....1 NO.....2	
125	Is there an active village health committee (VHC)/primary health committee in this community/village?	YES.....1 NO.....2	
126	Have you had a Village Health Day in the last 3 months?	YES.....1 NO.....2	→ 127
126a	Was it organised by the village/community?	YES.....1 NO.....2	
127	Have you had any AIDS campaigns in this community/village?	YES.....1 NO.....2	→ 128
127a	How many AIDS campaigns have you had in the last year?	NUMBER OF AIDS CAMPAIGNS IN LAST YEAR.. ☐☐	
127b	Have you had an AIDS campaign in the last three months?	YES.....1 NO.....2	
128	Other then for AIDS, have you ever had any health or family planning campaigns in this community/village?	YES.....1 NO.....2	→ Section 2
128a	How many health and family planning campaigns have you had in the last year?	NUMBER OF HEALTH CAMPAIGNS IN LAST YEAR.. ☐☐	
128b	Have you had a health or family planning campaign in the last three months?	YES.....1 NO.....2	→ Section 2
128c	What was the health campaign about? (CIRCLE ALL APPLICABLE)	BENEFITS OF PROLONGED LACTATION.A EPI.....B ORS.....C MALARIA.....D NUTRITION (FOOD IS LIFE).....E SANITATION..... .....F FP RADIO PROGRAM.....G BENEFITS OF CHILD SPACING.....H SPECIFIC METHOD(S) PROMOTION....I OTHER (SPECIFY)_____.J	

SECTION 2. FACILITY IDENTIFICATION SECTION

INTERVIEWER: I am planning to visit facilities providing maternal and child health services including family planning throughout Tanzania and together we can identify those in this area that I am interested in. I plan to visit private doctors (which include those in private clinics), private pharmacies or medical stores, dispensaries, health centers and hospitals.

What is the name of the NEAREST (YA KARIBU ZIADI KULIKO ZOK) doctor to this community with a private practice or in a private clinic? (A DOCTOR WITH A PRIVATE PRACTICE IS A DOCTOR WHO SEES WOMEN AND CHILDREN WHERE THE PATIENT MUST PAY FOR THE VISIT. OFTEN IN TANZANIA, THIS DOCTOR WILL WORK IN A GOVERNMENT FACILITY DURING WORKING HOURS AND SEE PATIENTS PRIVATELY AFTER HOURS.)

_____

What is the name of the NEAREST private pharmacy or medical store to this community? (A PRIVATE PHARMACY IS A STORE OR SHOP WHERE MEDICINE IS SOLD AND WHERE THERE MAY BE A TRAINED PHARMACIST WHO CAN FILL PRESCRIPTIONS.)

_____

What is the name of the NEAREST dispensary (zahanati) providing health services for women and children to this community? (DISPENSARIES ARE WARD LEVEL FACILITIES STAFFED BY A RURAL MEDICAL AIDE. THESE FACILITIES PROVIDE BOTH BASIC CURATIVE AND PREVENTIVE CARE AND GENERALLY HAVE FEW OR NO BEDS. PATIENTS ARE GENERALLY NOT ADMITTED IN DISPENSARIES.)

_____

What is the name of the NEAREST health centre (kituo cha afya) providing health services for women and children to this community? (HEALTH CENTRES ARE AT THE DIVISION LEVEL, ARE RUN BY MEDICAL ASSISTANTS AND HAVE AN ADDITIONAL SEVEN OR EIGHT HEALTH WORKERS. THEY TEND TO PROVIDE THE SAME TYPES OF BASIC PREVENTIVE AND CURATIVE CARE AS DISPENSARIES BUT HAVE MORE BEDS AND PATIENTS ARE ADMITTED.)

_____

What is the name of the NEAREST hospital providing health services for women and children to this community? (HOSPITALS ARE AT THE ZONAL, REGIONAL AND DISTRICT LEVEL AND ARE RUN BY MEDICAL OFFICERS. THEY PROVIDE CURATIVE AND PREVENTIVE HEALTH SERVICES AND ARE THE FINAL REFERRAL CENTER. THEY PROVIDE THE MOST COMPREHENSIVE CARE AND ARE STAFFED BY DOCTORS. HOSPITALS CAN BE CALLED CONSULTANT, REGIONAL OR DISTRICT HOSPITALS.)

_____

INTERVIEWER: Now I am going to ask some additional questions about the facilities that you just mentioned.

A. PRIVATE DOCTOR

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
A201	NAME OF PRIVATE DOCTOR (COPY FROM SECTION 2 COVER PAGE).	PRIVATE DOCTOR'S NAME_____ NOT APPLICABLE.....98 → B201	
A202	Where is the private doctor's practice located?	LOCALITY_____	
A203	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐ IF MORE THAN 30 KM → A206	☐☐
A204	What is the most common type of transport to the doctor's practice?	CAR/BUS.....1 ANIMAL.....2 WALKING.....3 CYCLING.....4 OTHER_____5	☐
A205	How long does it take to get from here to (PRIVATE DOCTOR'S NAME) using most common type of transport?	HOURS..... ☐ MINUTES..... ☐☐	☐ ☐☐
A206	Does this private doctor provide family planning services?	YES.....1 → A212 NO.....2 DON'T KNOW.....8	
A207	Who is the nearest doctor with a private practice who provides family planning services to this community?	PRIVATE DOCTOR'S NAME_____ NOT APPLICABLE.....98 → A212	
A208	Where is his/her practice located?	LOCALITY_____	
A209	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐ IF MORE THAN 30 KM → A212	☐☐
A210	What is the most common type of transport to the doctor's practice?	CAR/BUS.....1 ANIMAL.....2 WALKING.....3 CYCLING.....4 OTHER_____5	☐
A211	How long does it take to get from here to (PRIVATE DOCTOR'S NAME) using most common type of transport?	HOURS..... ☐ MINUTES..... ☐☐	☐ ☐☐
A212	How many private doctor practices in total are there within 30 kilometers?	NONE.....0 ONE.....1 TWO.....2 THREE OR FOUR.....3 FIVE OR MORE.....4	

BOXES IN THE 'SKIP TO' COLUMN ARE TO BE USED IN THE INSTANCE OF MISIDENTIFICATION.

B. PHARMACY

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
B201	NAME OF PHARMACY (COPY FROM SECTION 2 COVER PAGE).	PHARMACY NAME_____ NOT APPLICABLE.....98	→ C201
B202	Where is (PHARMACY NAME) located?	LOCALITY_____	
B203	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐ IF MORE THAN 30 KM	☐☐ → B206
B204	What is the most common type of transport to the pharmacy?	CAR/BUS.....1 ANIMAL.....2 WALKING.....3 CYCLING.....4 OTHER_____5	☐
B205	How long does it take to get from here to (PHARMACY NAME) using most common type of transport?	HOURS..... ☐ MINUTES..... ☐☐	☐ ☐☐
B206	Does this pharmacy sell family planning supplies?	YES.....1 NO.....2 DON'T KNOW.....8	→ B212
B207	What is the name of the nearest pharmacy which sells family planning supplies to this community?	PHARMACY NAME_____ NOT APPLICABLE.....98	→ B212
B208	Where is it located?	LOCALITY_____	
B209	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐ IF MORE THAN 30 KM	☐☐ → B212
B210	What is the most common type of transport to the pharmacy?	CAR/BUS.....1 ANIMAL.....2 WALKING.....3 CYCLING.....4 OTHER_____5	☐
B211	How long does it take to get from here to (PHARMACY NAME) using most common type of transport?	HOURS..... ☐ MINUTES..... ☐☐	☐ ☐☐
B212	How many private pharmacies in total are there within 30 kilometers?	NONE.....0 ONE.....1 TWO.....2 THREE OR FOUR.....3 FIVE OR MORE.....4	

BOXES IN THE 'SKIP TO' COLUMN ARE TO BE USED IN THE INSTANCE OF MISIDENTIFICATION.

COMMENTS:

C. DISPENSARY

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
C201	NAME OF DISPENSARY (COPY FROM SECTION 2 COVER PAGE).	DISPENSARY NAME _____ NOT APPLICABLE.....98 →	D201
C202	Where is (DISPENSARY NAME) located?	LOCALITY _____	
C203	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐ IF MORE THAN 30 KM →	☐☐ C206
C204	What is the most common type of transport to the dispensary?	CAR/BUS.....1 ANIMAL.....2 WALKING.....3 CYCLING.....4 OTHER _____5	☐
C205	How long does it take to get from here to (DISPENSARY NAME) using most common type of transport?	HOURS..... ☐ MINUTES..... ☐☐	☐ ☐☐
C206	Does this dispensary provide family planning services?	YES.....1 → NO.....2 DON'T KNOW.....8	C212
C207	What is the name of the nearest dispensary providing family planning services to this community?	DISPENSARY NAME _____ NOT APPLICABLE.....98 →	C212
C208	Where is it located?	LOCALITY _____	
C209	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐ IF MORE THAN 30 KM →	☐☐ C212
C210	What is the most common type of transport to the dispensary?	CAR/BUS.....1 ANIMAL.....2 WALKING.....3 CYCLING.....4 OTHER _____5	☐
C211	How long does it take to get from here to (DISPENSARY NAME) using most common type of transport?	HOURS..... ☐ MINUTES..... ☐☐	☐ ☐☐
C212	How many dispensaries in total are there within 30 kilometers?	NONE.....0 ONE.....1 TWO.....2 THREE OR FOUR.....3 FIVE OR MORE.....4	

BOXES IN THE 'SKIP TO' COLUMN ARE TO BE USED IN THE INSTANCE OF MISIDENTIFICATION.

COMMENTS:

D. HEALTH CENTRE

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
D201	NAME OF HEALTH CENTRE (COPY FROM SECTION 2 COVER PAGE).	HEALTH CENTRE NAME _____ NOT APPLICABLE.....98	→E201
D202	Where is (HEALTH CENTRE NAME) located?	LOCALITY _____	
D203	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐ IF MORE THAN 30 KM	☐☐ → D206
D204	What is the most common type of transport to the health centre?	CAR/BUS.....1 ANIMAL.....2 WALKING.....3 CYCLING.....4 OTHER _____ 5	☐
D205	How long does it take to get from here to (HEALTH CENTRE NAME) using most common type of transport?	HOURS..... ☐ MINUTES..... ☐☐	☐ ☐☐
D206	Does this health centre provide family planning services?	YES.....1 NO.....2 DON'T KNOW.....8	→ D212
D207	What is the name of the nearest health centre providing family planning services to this community?	HEALTH CENTRE NAME _____ NOT APPLICABLE.....98	→ D212
D208	Where is it located?	LOCALITY _____	
D209	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐ IF MORE THAN 30 KM	☐☐ → D212
D210	What is the most common type of transport to the health centre?	CAR/BUS.....1 ANIMAL.....2 WALKING.....3 CYCLING.....4 OTHER _____ 5	☐
D211	How long does it take to get from here to (HEALTH CENTRE NAME) using most common type of transport?	HOURS..... ☐ MINUTES..... ☐☐	☐ ☐☐
D212	How many health centres in total are there within 30 kilometers?	NONE.....0 ONE.....1 TWO.....2 THREE OR FOUR.....3 FIVE OR MORE.....4	

BOXES IN THE 'SKIP TO' COLUMN ARE TO BE USED IN THE INSTANCE OF MISIDENTIFICATION.

COMMENTS:

E. HOSPITALS

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
E201	NAME OF HOSPITAL (COPY FROM SECTION 2 COVER PAGE).	HOSPITAL NAME_____ NOT APPLICABLE.....98 →	213
E202	Where is (HOSPITAL NAME) located?	LOCALITY_____	
E203	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐ IF MORE THAN 30 KM →	☐☐ E206
E204	What is the most common type of transport to the hospital?	CAR/BUS.....1 ANIMAL.....2 WALKING.....3 CYCLING.....4 OTHER_____5	☐
E205	How long does it take to get from here to (HOSPITAL NAME) using most common type of transport?	HOURS..... ☐ MINUTES..... ☐☐	☐ ☐☐
E206	Does (HOSPITAL NAME) provide family planning services?	YES.....1 → NO.....2 DON'T KNOW.....8	E212
E207	What is the name of the nearest hospital providing family planning services to this community?	HOSPITAL NAME_____ NOT APPLICABLE.....98 →	E212
E208	Where is it located?	LOCALITY_____	
E209	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐ IF MORE THAN 30 KM →	☐☐ E212
E210	What is the most common type of transport to the hospital?	CAR/BUS.....1 ANIMAL.....2 WALKING.....3 CYCLING.....4 OTHER_____5	☐
E211	How long does it take to get from here to (HOSPITAL NAME) using most common type of transport?	HOURS..... ☐ MINUTES..... ☐☐	☐ ☐☐
E212	How many hospitals in total are there within 30 kilometers?	NONE.....0 ONE.....1 TWO.....2 THREE OR FOUR.....3 FIVE OR MORE.....4	

BOXES IN THE 'SKIP TO' COLUMN ARE TO BE USED IN THE INSTANCE OF MISIDENTIFICATION.

COMMENTS:

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
213	What is the name of the nearest facility or provider to this community where birth control pills can be obtained?	NEAREST PILL PROVIDER NAME _____	
214	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐	
215	What is the name of the nearest facility or provider to this community where condoms can be obtained?	NEAREST CONDOM PROVIDER NAME _____	
216	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐	
217	What is the name of the nearest facility or provider to this community where injectables (Depo Provera) can be obtained?	NEAREST INJECTABLE PROVIDER NAME _____	
218	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐	
219	What is the name of the nearest facility or provider to this community where foaming tablets, foam or jelly can be obtained?	NEAREST FOAMING TABLET PROVIDER NAME _____	
220	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐	
221	What is the name of the nearest facility or provider to this community where IUCDs (loops) can be inserted?	NEAREST IUCD PROVIDER NAME _____	
222	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐	
223	What is the name of the nearest facility or provider to this community where contraceptive sterilisation can be obtained?	NEAREST STERILISATION PROVIDER NAME _____	
224	How far is it (in kms) from here? (WRITE IN '00' IF LESS THAN 1 KILOMETER. IF 1 TO 95 KILOMETERS, WRITE IN NUMBER AS GIVEN IN CLUSTER. IF 96 KILOMETERS OR MORE, WRITE IN '96'.)	KILOMETERS..... ☐☐	

225. CLUSTER INFORMANTS

	NAME	POSITION/TITLE/OCCUPATION
1.		
2.		
3.		
4.		
5.		

226. TOTAL NUMBER OF INFORMANTS IN THE CLUSTER..... ☐☐

END OF CLUSTER INTERVIEW.

LOG OF FACILITIES TO BE VISITED

DIRECTIONS: LIST BELOW ALL FACILITIES THAT WERE CITED AS BEING WITHIN 30 KILOMETERS OF THE CLUSTER. GET THIS INFORMATION FROM QUESTIONS A-E203 AND A-E209.

FACILITY TYPE & NAME:	DISTANCE FROM CLUSTER	LOCATION:	DATE VISITED:
	☐☐		
	☐☐		
	☐☐		
	☐☐		
	☐☐		
	☐☐		

SECTION 3. Name:_____ **HOSPITAL VISIT** Date: _____

IF THE HOSPITAL IS 30 KILOMETERS OR LESS AWAY, IT IS TO BE VISITED. COMPLETE QUESTIONS 300 AND 302 UPON ARRIVAL AT THE FACILITY BASED ON YOUR OWN OBSERVATIONS. THEN FIND A KNOWLEDGEABLE SOURCE AT THE FACILITY TO ANSWER THE REMAINING QUESTIONS.

COMPLETE VISIT

IF THIS FACILITY HAS ALREADY BEEN VISITED FOR A DIFFERENT CLUSTER, RECORD DHS CLUSTER NUMBER HERE: ☐☐☐
IF THE FACILITY HAS ALREADY BEEN VISITED, A SECOND VISIT IS NOT NEEDED.

300	IF THIS IS THE FIRST FACILITY VISITED AFTER THE CLUSTER VISIT RECORD DISTANCE FROM CLUSTER FROM THE ODOMETER.	DISTANCE FROM CLUSTER.... ☐☐ NOT FIRST FACILITY VISITED.....95	
301	DO YOU THINK THAT THE ESTIMATE OF DISTANCE TO THE FACILITY GIVEN IN THE CLUSTER IS REASONABLE?	REASONABLE.....1 OVERESTIMATED.....2 UNDERESTIMATED.....3	
302	DO YOU THINK THAT THE ESTIMATE OF THE TIME TO THE FACILITY GIVEN IN THE CLUSTER IS REASONABLE?	REASONABLE.....1 OVERESTIMATED.....2 UNDERESTIMATED.....3	

QUESTIONS TO BE ASKED OF STAFF PERSON AT FACILITY:

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
303	In what year did this hospital open?	YEAR OPENED.....19☐☐	
304	Under what authority is this hospital operated?	GOVERNMENT.....1 PRIVATE.....2 VOLUNTARY AGENCY.....3 OTHER_____.4	
305	What is the status of this hospital?	CONSULTANT.....1 REGIONAL.....2 DISTRICT/DESIGNATED DIST. HOS.....3 NONE.....4	
306	How many beds does this hospital have?	NUMBER OF BEDS.....☐☐☐	
307	On average, how many outpatients are seen daily at this facility? (Outpatients are people seen for preventive care and sick people who go home the same day)	NUMBER OF DAILY OUTPATIENTS.....☐☐☐☐	
308	How many regular staff of the following types does the hospital have?	NUMBER OF:	
	Doctors	DOCTORS.....☐☐	
	Medical assistants	MEDICAL ASSISTANTS.....☐☐	
	Rural medical aides	RURAL MEDICAL AIDES.....☐☐	
	Public health nurses	NURSES.....☐☐	
	Trained midwives	MIDWIVES.....☐☐	
	MCH aides	MCH AIDES.....☐☐	
	Auxillary staff (health officers, health attendants, other nurses)	AUXILLARY STAFF.....☐☐	

COMMENTS:

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
309	Does this facility normally use disposable needles when giving injections for MCH immunisations?	YES.....1 NO.....2	→312
310	Is this facility out now or has it run out of its supply of MCH disposable needles at any time in the last 6 months?	YES.....1 NO.....2	
311	Does this facility ever reuse disposable needles?	YES.....1 NO.....2	
312	Does this facility normally use disposable gloves?	YES.....1 NO.....2	→314
313	Is this facility out now or has it run out of disposable gloves at any time in the last 6 months?	YES.....1 NO.....2	
314	What is the method MOST frequently used for the sterilisation of medical instruments (not linens)? (CIRCLE ONE)	ELECTRIC STERILISER.....1 AUTOCLAVE.....2 STEAM PRESSURE STERILISER.....3 BOIL OVER KEROSENE STOVE.....4 BOIL OVER CHARCOAL/WOOD STOVE.....5 NONE.....6 OTHER_____7	→316
315	Has the facility NOT been able to sterilise medical instruments for any reason (e.g. equipment broken, no electricity, no fuel) at any time in the last six months?	YES.....1 NO.....2	
316	Does the facility have the following items in working order/ in stock:	YES NO	
	Running water?	RUNNING WATER.....1 2	
	Electricity?	ELECTRICITY.....1 2	
	Refrigerator?	REFRIGERATOR.....1 2	
	Kerosene?	KEROSENE.....1 2	
	Telephone or radio transmitter?	TELEPHONE.....1 2	
	Vehicle?	VEHICLE.....1 2	
	Motorbike?	MOTORBIKE.....1 2	
	Operating theatre in working order?	OPERATING THEATRE.....1 2	
	Delivery bed?	DELIVERY BED.....1 2	
	Delivery kit?	DELIVERY KIT.....1 2	
	Waiting area for women in labor?	WAITING AREA.....1 2	
	Blood bank?	BLOOD BANK.....1 2	
	Examination couch?	EXAM COUCH.....1 2	
	Examination light for gynecological examination?	LIGHT-GYN EXAMS.....1 2	
	IUCD (loop insertion) kit?	IUCD KIT.....1 2	
	Minilap kit for tubal ligation?	MINILAP KIT.....1 2	
	Weighing scales for children?	WEIGHING SCALE-CHILD.....1 2	
	Adult weighing scale?	ADULT SCALE.....1 2	
	Growth cards?	GROWTH CARDS.....1 2	
	Linens?	LINENS.....1 2	
	Gauze?	COTTON WOOL.....1 2	
	Cotton wool?	GAUZE.....1 2	
	Antiseptics?	ANTISEPTICS.....1 2	
	Blood pressure machine?	BLOOD PRESSURE MACHINE....1 2	
	Hemoglobinometer for diagnosis of anemia?	HEMOGLOBINOMETER.....1 2	
	Microscope?	MICROSCOPE.....1 2	
	AIDS test (Elisa test)?	AIDS TEST.....1 2	
317	Do you have an outreach program?	YES.....1 NO.....2	→320
318	How many villages/communities do you regularly visit?	NUMBER OF SITES..... ☐☐	

COMMENTS:

SERVICES AVAILABLE AT THE FACILITY:
Now I would like to ask you about maternal and child health services available at this hospital. ASK Q.320 FOR THE FIRST SERVICE. IF THIS SERVICE IS AVAILABLE, CONTINUE ACROSS THE TABLE, IF NOT, ASK ABOUT THE NEXT SERVICE.

SERVICE	320 Is (SERVICE) available?	321 How many days per week is (SERVICE) available?	322 In what year was (SERVICE) first offered here?
1 Antenatal care	YES.....1 NO.....2	☐	19☐☐
2 Delivery care	YES.....1 NO.....2	→	19☐☐
3 Postnatal care	YES.....1 NO.....2	☐	19☐☐
4 Child immunisation sessions	YES.....1 NO.....2	☐	19☐☐
5 Child growth monitoring sessions	YES.....1 NO.....2	☐	19☐☐
6 Rehydration unit	YES.....1 NO.....2 → 323	☐	19☐☐

MEDICATION AVAILABILITY AT THE FACILITY:
Now I would like to ask you about medications and other supplies available at this facility. When I have finished, I will need to see the medications you have in stock. ASK Q.323 FOR EACH MEDICATION. IF THE MEDICATION IS AVAILABLE, ASK Q.324, IF NOT ASK Q.325. IF THE MEDICATION HAS AT SOME TIME BEEN AVAILABLE, ASK Q.326. IF Q.323 IS YES, RECORD WHETHER YOU SEE THE MEDICATION.

MEDICATION	323 Is (MEDICATION) available now?	324 At any time in the last 6 months did you run out of (MEDICATION)?	325 Have you ever had (MEDICATION)?	326 Why do you not have (MEDICATION) now? [a]	327 MEDICATION SEEN/NOT SEEN STATUS
1 Chloroquine syrup	YES.....1 NO.....2 → 325	YES.....1 NO.....2 → 323	YES.....1 NO.....2 → 323	☐	SEEN.....1 NOT SEEN....2
2 Quinine	YES.....1 NO.....2 → 325	YES.....1 NO.....2 → 323	YES.....1 NO.....2 → 323	☐	SEEN.....1 NOT SEEN....2
3 Penicillin	YES.....1 NO.....2 → 325	YES.....1 NO.....2 → 323	YES.....1 NO.....2 → 323	☐	SEEN.....1 NOT SEEN....2
4 Iron tablets	YES.....1 NO.....2 → 325	YES.....1 NO.....2 → 323	YES.....1 NO.....2 → 323	☐	SEEN.....1 NOT SEEN....2
5 Folic acid	YES.....1 NO.....2 → 325	YES.....1 NO.....2 → 323	YES.....1 NO.....2 → 323	☐	SEEN.....1 NOT SEEN....2
6 ORS packets	YES.....1 NO.....2 → 325	YES.....1 NO.....2 → 323	YES.....1 NO.....2 → 323	☐	SEEN.....1 NOT SEEN....2
7 Condoms	YES.....1 NO.....2 → 325	YES.....1 NO.....2 → 327	YES.....1 NO.....2 → 327	☐	SEEN.....1 NOT SEEN....2

CODES: [a] Insufficient funds = 1 Not designated to carry = 3 Other =
Unable to get resupply = 2 Out of current month's supply = 4

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
328	Do you have enough space in this facility for MCH services?	YES.....1 NO.....2	
329	Are immunisations available for children now?	YES.....1 NO.....2	→332
330	At any time in the last 6 months have you run out of vaccines?	YES.....1 NO.....2	
331	I need to see your supply of vaccines now.	VACCINES SEEN IN REFRIGERATOR.....1 VACCINES SEEN NOT IN REFRIGERATOR.2 VACCINES NOT SEEN.....3	
332	Does this facility provide family planning services?	YES.....1 NO.....2	→ 338
333	What is your position or title here?	_____	→ 354

IF THE FAMILY PLANNING INFORMATION IS OBTAINED FROM A SECOND FACILITY, BEGIN QUESTIONNAIRE WITH Q.334.

334	In what year did this hospital open?	YEAR OPENED.....19[ ][ ]	
335	Under what authority is this hospital operated?	GOVERNMENT.....1 PRIVATE.....2 VOLUNTARY AGENCY.....3 OTHER_____.4	
336	What is the status of this hospital?	CONSULTANT.....1 REGIONAL.....2 DISTRICT/DESIGNATED DIST. HOS.....3 NONE.....4	
337	Does the facility have the following items in working order: Running water? Electricity? Operating theatre in working order? Examination couch? Examination light for gynecological examination? Blood pressure machine? IUCD (loop insertion) kit? Minilap kit for tubal ligation?	YES NO RUNNING WATER.....1 2 ELECTRICITY.....1 2 OPERATING THEATRE.....1 2 EXAM COUCH.....1 2 LIGHT-GYN EXAMS.....1 2 BLOOD PRESSURE MACHINE....1 2 IUCD KIT.....1 2 MINILAP KIT.....1 2	
338	Does the hospital have the following types of staff who are trained in family planning provision? Doctors? Medical Assistants? Rural Medical Aides? Nurses? MCH Aides?	YES NO DOCTORS.....1 2 MEDICAL ASSISTANTS.....1 2 RURAL MEDICAL AIDES.....1 2 NURSES.....1 2 MCH AIDES.....1 2	→ 340
339	Are any family planning doctors trained in sterilisation procedures (tubal ligation or vasectomy)?	YES.....1 NO.....2	
340	Are the following types of staff, if available, trained in IUCD (loop) insertion? Doctors? Medical Assistants? Rural Medical Aides? Nurses? MCH Aides?	YES NO NA DOCTORS.....1 2 7 MEDICAL ASSISTANTS.....1 2 7 RURAL MEDICAL AIDES.....1 2 7 NURSES.....1 2 7 MCH AIDES.....1 2 7	
341	During an average month, how many women come to get family planning for the first time?	NEW PATIENTS.....[ ][ ][ ]	

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
342	During an average month, how many women come because they need more family planning (resupply)?	RESUPPLY PATIENTS..... ☐☐☐	
343	Do you fill out an MCH 3 form (Taarifa ya mahudhurio ya akina mama na watoto kwa mwezi au mwaka) regularly?	YES.....1 NO.....2	→ 345
344	What do you do this form?	SEND TO MOH.....1 SEND TO DISTRICT OFFICER.....2 SEND TO ZONAL OFFICE.....3 KEEP IN FILE.....4 NOTHING/DON'T KNOW.....8	

CONTRACEPTIVE METHOD AVAILABILITY:
Now I would like to ask you about which family planning methods are available at this hospital. I must also see the methods when we are finished. ASK ABOUT THE FIRST METHOD. IF THIS METHOD IS AVAILABLE FROM THE HOSPITAL, MOVE ACROSS THE TABLE. IF THE METHOD IS NOT AVAILABLE NOW, ASK Q.350 AND THEN BEGIN AGAIN WITH THE NEXT METHOD.

METHOD	345 Is (METHOD) available now?	346 How many days per week is (METHOD) available?	347 In what year did you first offer (METHOD)?	348 Is your stock of (METHOD) in date or out of date?	349 METHOD SEEN/NOT SEEN STATUS	350 How many weeks ago did you run out of (METHOD)? [a]
01 ☐ Pill	YES.....1 NO.....2 350 ↵	☐	19☐☐	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	☐☐ WKS.
02 ☐ IUCD (loop)	YES.....1 NO.....2 350 ↵	☐	19☐☐	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	☐☐ WKS.
03 ☐ Injection	YES.....1 NO.....2 350 ↵	☐	19☐☐	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	☐☐ WKS.
04 ☐ Foaming tablets/ foam/jelly	YES.....1 NO.....2 350 ↵	☐	19☐☐	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	☐☐ WKS.
05 ☐ Contraceptive sterilisation (tubal ligation/vasectomy)	YES.....1 NO.....2 350↵	☐	19☐☐			
06 ☐ Other Specify_____	YES.....1 NO.....2 350↵	☐	19☐☐			

CODES: [a] 97 = Never stocked method

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
351	Do you have your contraceptives delivered or must you go get them?	DELIVERED.....1 PICK THEM UP.....2	→ 353
352	How far (in kilometers) must you go to get them?	KM. TO PICK UP CONTRACEPTIVES..... ☐☐	
353	What is your position or title here?	_____	

QUESTIONS 354 AND 355 ARE TO BE ANSWERED BY THE INTERVIEWER AFTER THE FACILITY VISIT IS COMPLETE.

354	DID THE INFORMANT SEEM KNOWLEDGEABLE?	YES.....1 NO.....2	
355	ADDITIONAL COMMENTS:		

SECTION 4. Name:_____ **HEALTH CENTRE VISIT** Date: _____

IF THE HEALTH CENTRE IS 30 KILOMETERS OR LESS AWAY, IT IS TO BE VISITED. COMPLETE QUESTIONS 400 AND 402 UPON ARRIVAL AT THE FACILITY BASED ON YOUR OWN OBSERVATIONS. THEN FIND A KNOWLEDGEABLE SOURCE AT THE FACILITY TO ANSWER THE REMAINING QUESTIONS.

COMPLETE VISIT

IF THIS FACILITY HAS ALREADY BEEN VISITED FOR A DIFFERENT CLUSTER, RECORD DHS CLUSTER NUMBER HERE: ☐☐☐
IF THE FACILITY HAS ALREADY BEEN VISITED, A SECOND VISIT IS NOT NEEDED.

400	IF THIS IS THE FIRST FACILITY VISITED AFTER THE CLUSTER VISIT RECORD DISTANCE FROM CLUSTER FROM THE ODOMETER.	DISTANCE FROM CLUSTER.... ☐☐ NOT FIRST FACILITY VISITED.....95	
401	DO YOU THINK THAT THE ESTIMATE OF DISTANCE TO THE FACILITY GIVEN IN THE CLUSTER IS REASONABLE?	REASONABLE.....1 OVERESTIMATED.....2 UNDERESTIMATED.....3	
402	DO YOU THINK THAT THE ESTIMATE OF THE TIME TO THE FACILITY GIVEN IN THE CLUSTER IS REASONABLE?	REASONABLE.....1 OVERESTIMATED.....2 UNDERESTIMATED.....3	

QUESTIONS TO BE ASKED OF STAFF PERSON AT FACILITY:

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
403	In what year did this health centre open?	YEAR OPENED.....19☐☐	
404	Under what authority is this health centre operated?	GOVERNMENT.....1 PRIVATE.....2 VOLUNTARY AGENCY.....3 OTHER_____.4	
406	How many beds does this health centre have?	NUMBER OF BEDS.....☐☐☐	
407	On average, how many outpatients are seen daily at this facility? (Outpatients are people seen for preventive care and sick people who go home the same day)	NUMBER OF DAILY OUTPATIENTS.....☐☐☐☐	
408	How many regular staff of the following types does the health centre have?	NUMBER OF:	
	Medical assistants	MEDICAL ASSISTANTS.....☐☐	
	Rural medical aides	RURAL MEDICAL AIDES.....☐☐	
	Public health nurses	NURSES.....☐☐	
	Trained midwives	MIDWIVES.....☐☐	
	MCH aides	MCH AIDES.....☐☐	
	Auxillary staff (health officers, health attendants, other nurses)	AUXILLARY STAFF.....☐☐	

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COMMENTS:

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
409	Does this facility normally use disposable needles when giving injections for MCH immunisations?	YES.....1 NO.....2	→412
410	Is this facility out now or has it run out of its supply of disposable needles at any time in the last 6 months?	YES.....1 NO.....2	
411	Does this facility ever reuse disposable needles?	YES.....1 NO.....2	
412	Does this facility normally use disposable gloves?	YES.....1 NO.....2	→414
413	Is this facility out now or has it run out of its supply of disposable gloves at any time in the last 6 months?	YES.....1 NO.....2	
414	What is the method MOST frequently used for the sterilisation of medical instruments (not linens)? (CIRCLE ONE)	ELECTRIC STERILISER.....1 AUTOCLAVE.....2 STEAM PRESSURE STERILISER.....3 BOIL OVER KEROSENE STOVE.....4 BOIL OVER CHARCOAL/WOOD STOVE.....5 NONE.....6 OTHER_____7	→416
415	Has the facility NOT been able to sterilise medical instruments for any reason (e.g. equipment broken, no electricity, no fuel) at any time in the last six months?	YES.....1 NO.....2	
416	Does the facility have the following items in working order/ in stock:	YES NO	
	Running water?	RUNNING WATER.....1 2	
	Electricity?	ELECTRICITY.....1 2	
	Refrigerator?	REFRIGERATOR.....1 2	
	Kerosene?	KEROSENE.....1 2	
	Telephone or radio transmitter?	TELEPHONE.....1 2	
	Vehicle?	VEHICLE.....1 2	
	Motorbike?	MOTORBIKE.....1 2	
	Bicycle?	BICYCLE.....1 2	
	Delivery bed?	DELIVERY BED.....1 2	
	Delivery kit?	DELIVERY KIT.....1 2	
	Waiting area for women in labor?	WAITING AREA.....1 2	
	Blood bank?	BLOOD BANK.....1 2	
	Examination couch?	EXAM COUCH.....1 2	
	Examination light for gynecological examination?	LIGHT-GYN EXAMS.....1 2	
	IUCD (loop insertion) kit?	IUCD KIT.....1 2	
	Weighing scales for children?	WEIGHING SCALE-CHILD.....1 2	
	Adult weighing scale?	ADULT SCALE.....1 2	
	Growth cards?	GROWTH CARDS.....1 2	
	Linens?	LINENS.....1 2	
	Gauze?	COTTON WOOL.....1 2	
	Cotton wool?	GAUZE.....1 2	
	Antiseptics?	ANTISEPTICS.....1 2	
	Blood pressure machine?	BLOOD PRESSURE MACHINE....1 2	
	Talquist method for diagnosis of anemia?	TALQUIST METHOD.....1 2	
	Microscope?	MICROSCOPE.....1 2	
	AIDS test (Elisa test)?	AIDS TEST.....1 2	
417	Do you have an outreach program?	YES.....1 NO.....2	→419
418	How many villages/communities do you regularly visit?	NUMBER OF SITES..... ☐☐	
419	Do you receive an EDP kit every month?	YES.....1 NO.....2	

COMMENTS:

SERVICES AVAILABLE AT THE FACILITY:
Now I would like to ask you about maternal and child health services available at this health centre. ASK Q.420 FOR THE FIRST SERVICE. IF THIS SERVICE IS AVAILABLE, CONTINUE ACROSS THE TABLE, IF NOT, ASK ABOUT THE NEXT SERVICE.

SERVICE	420 Is (SERVICE) available?	421 How many days per week is (SERVICE) available?	422 In what year was (SERVICE) first offered here?
1 Antenatal care	YES.....1 NO.....2	☐	19☐☐
2 Delivery care	YES.....1 NO.....2	→	19☐☐
3 Postnatal care	YES.....1 NO.....2	☐	19☐☐
4 Child immunisation sessions	YES.....1 NO.....2	☐	19☐☐
5 Child growth monitoring sessions	YES.....1 NO.....2 → 423	☐	19☐☐

MEDICATION AVAILABILITY AT THE FACILITY:
Now I would like to ask you about medications and other supplies available at this facility. When I have finished, I will need to see the medications you have in stock. ASK Q.423 FOR EACH MEDICATION. IF THE MEDICATION IS AVAILABLE, ASK Q.424, IF NOT A Q.425. IF THE MEDICATION HAS AT SOME TIME BEEN AVAILABLE, ASK Q.426. IF Q.423 IS YES, RECORD WHETHER YOU SEE THE MEDICATION.

MEDICATION	423 Is (MEDICATION) available now?	424 At any time in the last 6 months did you run out of (MEDICATION)?	425 Have you ever had (MEDICATION)?	426 Why do you not have (MEDICATION) now? [a]	427 MEDICATION SEEN/NOT SEEN STATUS
1 Chloroquine syrup	YES.....1 NO.....2 → 425	YES.....1 NO.....2 → 423	YES.....1 NO.....2 → 423	☐	SEEN.....1 NOT SEEN....2
2 Quinine	YES.....1 NO.....2 → 425	YES.....1 NO.....2 → 423	YES.....1 NO.....2 → 423	☐	SEEN.....1 NOT SEEN....2
3 Penicillin	YES.....1 NO.....2 → 425	YES.....1 NO.....2 → 423	YES.....1 NO.....2 → 423	☐	SEEN.....1 NOT SEEN....2
4 Iron tablets	YES.....1 NO.....2 → 425	YES.....1 NO.....2 → 423	YES.....1 NO.....2 → 423	☐	SEEN.....1 NOT SEEN....2
5 Folic acid	YES.....1 NO.....2 → 425	YES.....1 NO.....2 → 423	YES.....1 NO.....2 → 423	☐	SEEN.....1 NOT SEEN....2
6 ORS packets	YES.....1 NO.....2 → 425	YES.....1 NO.....2 → 423	YES.....1 NO.....2 → 423	☐	SEEN.....1 NOT SEEN....2
7 Condoms	YES.....1 NO.....2 → 425	YES.....1 NO.....2 → 427	YES.....1 NO.....2 → 427	☐	SEEN.....1 NOT SEEN....2

CODES: [a] Insufficient funds = 1 Not designated to carry = 3 Other = 5
Unable to get resupply = 2 Out of current month's supply = 4

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
428	Do you have enough space in this facility for MCH services?	YES.....1 NO.....2	
429	Are immunisations available for children now?	YES.....1 NO.....2	→432
430	At any time in the last 6 months have you run out of vaccines?	YES.....1 NO.....2	
431	I need to see your supply of vaccines now.	VACCINES SEEN IN REFRIGERATOR.....1 VACCINES SEEN NOT IN REFRIGERATOR.2 VACCINES NOT SEEN.....3	
432	Does this facility provide family planning services?	YES.....1 NO.....2	→ 438
433	What is your position or title here?	_____	→ 454

IF THE FAMILY PLANNING INFORMATION IS OBTAINED FROM A SECOND FACILITY, BEGIN QUESTIONNAIRE WITH Q.434.

434	In what year did this health centre open?	YEAR OPENED.....19 ☐☐	
435	Under what authority is this health centre operated?	GOVERNMENT.....1 PRIVATE.....2 VOLUNTARY AGENCY.....3 OTHER_____.4	
437	Does the facility have the following items in working order:	YES NO RUNNING WATER.....1 2 ELECTRICITY.....1 2 EXAM COUCH.....1 2 LIGHT-GYN EXAMS.....1 2 BLOOD PRESSURE MACHINE....1 2 IUCD KIT.....1 2	
	Running water? Electricity? Examination couch? Examination light for gynecological examination? Blood pressure machine? IUCD (loop insertion) kit?		
438	Does the health centre have the following types of staff who are trained in family planning provision?	YES NO MEDICAL ASSISTANTS.....1 2 RURAL MEDICAL AIDES.....1 2 NURSES.....1 2 MCH AIDES.....1 2	
	Medical Assistants? Rural Medical Aides? Nurses? MCH Aides?		
440	Are the following types of staff, if available, trained in IUCD (loop) insertion?	YES NO NA MEDICAL ASSISTANTS.....1 2 7 RURAL MEDICAL AIDES.....1 2 7 NURSES.....1 2 7 MCH AIDES.....1 2 7	
	Medical Assistants? Rural Medical Aides? Nurses? MCH Aides?		
441	During an average month, how many women come to get family planning for the first time?	NEW PATIENTS..... ☐☐☐	
442	During an average month, how many women come because they need more family planning (resupply)?	RESUPPLY PATIENTS..... ☐☐☐	

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
443	Do you fill out an MCH 3 form (Taarifa ya mahudhurio ya akina mama na watoto kwa muezi au mwaka) regularly?	YES.....1 NO.....2	→ 445
444	What do you do this form?	SEND TO MOH.....1 SEND TO DISTRICT OFFICER.....2 SEND TO ZONAL OFFICE.....3 KEEP IN FILE.....4 NOTHING/DON'T KNOW.....8	

CONTRACEPTIVE METHOD AVAILABILITY:
Now I would like to ask you about which family planning methods are available at this health centre. I must also see the methods when we are finished. ASK ABOUT THE FIRST METHOD. IF THIS METHOD IS AVAILABLE FROM THE HEALTH CENTRE, MOVE ACROSS THE TABLE. IF THE METHOD IS NOT AVAILABLE NOW, ASK Q.450 AND THEN BEGIN AGAIN WITH THE NEXT METHOD.

METHOD	445 Is (METHOD) available now?	446 How many days per week is (METHOD) available?	447 In what year did you first offer (METHOD)?	448 Is your stock of (METHOD) in date or out of date?	449 METHOD SEEN/NOT SEEN STATUS	450 How many weeks ago did you run out of (METHOD)? [a]
01 Pill	YES.....1 NO.....2 450 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	WKS.
02 IUCD (loop)	YES.....1 NO.....2 450 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	WKS.
03 Injection	YES.....1 NO.....2 450 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	WKS.
04 Foaming tablets/ foam/jelly	YES.....1 NO.....2 450 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	WKS.
06 Other Specify	YES.....1 NO.....2 450 ↵		19			

CODES: [a] 97 = Never stocked method

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
451	Do you have your contraceptives delivered or must you go get them?	DELIVERED.....1 PICK THEM UP.....2	→ 453
452	How far (in kilometers) must you go to get them?	KM. TO PICK UP CONTRACEPTIVES.....	
453	What is your position or title here?	_____	

QUESTIONS 454 AND 455 ARE TO BE ANSWERED BY THE INTERVIEWER AFTER THE FACILITY VISIT IS COMPLETE.

454	DID THE INFORMANT SEEM KNOWLEDGEABLE?	YES.....1 NO.....2	
455	ADDITIONAL COMMENTS:		

SECTION 5. Name:_____ **DISPENSARY VISIT** Date: _____

IF THE DISPENSARY IS 30 KILOMETERS OR LESS AWAY, IT IS TO BE VISITED. COMPLETE QUESTIONS 500 AND 502 UPON ARRIVAL AT THE FACILITY BASED ON YOUR OWN OBSERVATIONS. THEN FIND A KNOWLEDGEABLE SOURCE AT THE FACILITY TO ANSWER THE REMAINING QUESTIONS.

COMPLETE VISIT

IF THIS FACILITY HAS ALREADY BEEN VISITED FOR A DIFFERENT CLUSTER, RECORD DHS CLUSTER NUMBER HERE: ☐☐☐
IF THE FACILITY HAS ALREADY BEEN VISITED, A SECOND VISIT IS NOT NEEDED.

500	IF THIS IS THE FIRST FACILITY VISITED AFTER THE CLUSTER VISIT RECORD DISTANCE FROM CLUSTER FROM THE ODOMETER.	DISTANCE FROM CLUSTER.... ☐☐ NOT FIRST FACILITY VISITED.....95	
501	DO YOU THINK THAT THE ESTIMATE OF DISTANCE TO THE FACILITY GIVEN IN THE CLUSTER IS REASONABLE?	REASONABLE.....1 OVERESTIMATED.....2 UNDERESTIMATED.....3	
502	DO YOU THINK THAT THE ESTIMATE OF THE TIME TO THE FACILITY GIVEN IN THE CLUSTER IS REASONABLE?	REASONABLE.....1 OVERESTIMATED.....2 UNDERESTIMATED.....3	

QUESTIONS TO BE ASKED OF STAFF PERSON AT FACILITY:

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
503	In what year did this dispensary open?	YEAR OPENED.....19☐☐	
504	Under what authority is this dispensary operated?	GOVERNMENT.....1 PRIVATE.....2 VOLUNTARY AGENCY.....3 OTHER_____.4	
506	How many beds does this dispensary have?	NUMBER OF BEDS..... ☐☐☐	
507	On average, how many outpatients are seen daily at this facility? (Outpatients are people seen for preventive care and sick people who go home the same day)	NUMBER OF DAILY OUTPATIENTS..... ☐☐☐☐	
508	How many regular staff of the following types does the dispensary have?	NUMBER OF:	
	Rural medical aides	RURAL MEDICAL AIDES..... ☐☐	
	Public health nurses	NURSES..... ☐☐	
	Trained midwives	MIDWIVES..... ☐☐	
	MCH aides	MCH AIDES..... ☐☐	
	Auxillary staff (health officers, health attendants, other nurses)	AUXILLARY STAFF..... ☐☐	

5-1

COMMENTS:

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
509	Does this facility normally use disposable needles when giving injections?	YES.....1 NO.....2	→512
510	Is this facility out now or has it run out of its supply of disposable needles at any time in the last 6 months?	YES.....1 NO.....2	
511	Does this facility ever reuse disposable needles?	YES.....1 NO.....2	
512	Does this facility normally use disposable gloves?	YES.....1 NO.....2	→514
513	Is this facility out now or has it run out of its supply of disposable gloves at any time in the last 6 months?	YES.....1 NO.....2	
514	What is the method MOST frequently used for the sterilisation of medical instruments (not linens)? (CIRCLE ONE)	ELECTRIC STERILISER.....1 AUTOCLAVE.....2 STEAM PRESSURE STERILISER.....3 BOIL OVER KEROSENE STOVE.....4 BOIL OVER CHARCOAL/WOOD STOVE.....5 NONE.....6 OTHER_____7	→516
515	Has the facility NOT been able to sterilise medical instruments for any reason (e.g. equipment broken, no electricity, no fuel) at any time in the last six months?	YES.....1 NO.....2	
516	Does the facility have the following items in working order/ in stock:	YES NO	
	Running water?	RUNNING WATER.....1 2	
	Electricity?	ELECTRICITY.....1 2	
	Refrigerator?	REFRIGERATOR.....1 2	
	Kerosene?	KEROSENE.....1 2	
	Bicycle?	BICYCLE.....1 2	
	Delivery bed?	DELIVERY BED.....1 2	
	Delivery kit?	DELIVERY KIT.....1 2	
	Waiting are for women in labor?	WAITING AREA.....1 2	
	Examination couch?	EXAM COUCH.....1 2	
	Examination light for gynecological examination?	LIGHT-GYN EXAMS.....1 2	
	IUCD (loop insertion) kit?	IUCD KIT.....1 2	
	Weighing scales for children?	WEIGHING SCALE-CHILD.....1 2	
	Adult weighing scale?	ADULT SCALE.....1 2	
	Growth cards?	GROWTH CARDS.....1 2	
	Linens?	LINENS.....1 2	
	Gauze?	COTTON WOOL.....1 2	
	Cotton wool?	GAUZE.....1 2	
	Antiseptics?	ANTISEPTICS.....1 2	
	Blood pressure machine?	BLOOD PRESSURE MACHINE....1 2	
	Talquist method for diagnosis of anemia?	TALQUIST METHOD.....1 2	
517	Do you have an outreach program?	YES.....1 NO.....2	→519
518	How many villages/communities do you regularly visit?	NUMBER OF SITES..... ☐☐	
519	Do you receive an EDP kit every month?	YES.....1 NO.....2	
519a	Where do you refer difficult cases (patients the dispensary is unable to treat)?	HEALTH CENTRE.....1 HOSPITAL.....2 DON'T REFER PATIENTS.....3 OTHER_____4	

COMMENTS:

SERVICES AVAILABLE AT THE FACILITY:
Now I would like to ask you about maternal and child health services available at this dispensary. ASK Q.520 FOR THE FIRST SERVICE. IF THIS SERVICE IS AVAILABLE, CONTINUE ACROSS THE TABLE, IF NOT, ASK ABOUT THE NEXT SERVICE.

	SERVICE	520 Is (SERVICE) available?	521 How many days per week is (SERVICE) available?	522 In what year was (SERVICE) first offered here?
1	Antenatal care	YES.....1 NO.....2	☐	19☐☐
2	Delivery care	YES.....1 NO.....2	→	19☐☐
3	Postnatal care	YES.....1 NO.....2	☐	19☐☐
4	Child immunisation sessions	YES.....1 NO.....2	☐	19☐☐
5	Child growth monitoring sessions	YES.....1 NO.....2 523↵	☐	19☐☐

MEDICATION AVAILABILITY AT THE FACILITY:
Now I would like to ask you about medications available at this facility. When I have finished, I will need to see the medications you have in stock. ASK Q.523 FOR EACH MEDICATION. IF THE MEDICATION IS AVAILABLE, ASK Q.524, IF NOT ASK Q.525. IF THE MEDICATION HAS AT SOME TIME BEEN AVAILABLE, ASK Q.526. IF Q.523 IS YES, RECORD WHETHER THE MEDICATION IS SEEN OR NOT.

	MEDICATION	523 Is (MEDICATION) available now?	524 At any time in the last 6 months did you run out of (MEDICATION)?	525 Have you ever had (MEDICATION)?	526 Why do you not have (MEDICATION) now? [a]	527 MEDICATION SEEN/NOT SEEN STATUS
1	Chloroquine syrup	YES.....1 NO.....2 525↵	YES.....1 NO.....2 523↵	YES.....1 NO.....2 523↵	☐	SEEN.....1 NOT SEEN....2
3	Penicillin	YES.....1 NO.....2 525↵	YES.....1 NO.....2 523↵	YES.....1 NO.....2 523↵	☐	SEEN.....1 NOT SEEN....2
4	Iron tablets	YES.....1 NO.....2 525↵	YES.....1 NO.....2 523↵	YES.....1 NO.....2 523↵	☐	SEEN.....1 NOT SEEN....2
5	Folic acid	YES.....1 NO.....2 525↵	YES.....1 NO.....2 523↵	YES.....1 NO.....2 523↵	☐	SEEN.....1 NOT SEEN....2
6	ORS packets	YES.....1 NO.....2 525↵	YES.....1 NO.....2 523↵	YES.....1 NO.....2 523↵	☐	SEEN.....1 NOT SEEN....2
7	Condoms	YES.....1 NO.....2 525↵	YES.....1 NO.....2 527↵	YES.....1 NO.....2 527↵	☐	SEEN.....1 NOT SEEN....2

CODES: [a] Insufficient funds = 1 Not designated to carry = 3 Other = 5
Unable to get resupply = 2 Out of current month's supply = 4

5-3

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
528	Do you have enough space in this facility for MCH services?	YES.....1 NO.....2	
529	Are immunisations available for children now?	YES.....1 NO.....2 → 532	
530	At any time in the last 6 months have you run out of vaccines?	YES.....1 NO.....2	
531	I need to see your supply of vaccines now.	VACCINES SEEN IN REFRIGERATOR.....1 VACCINES SEEN NOT IN REFRIGERATOR.2 VACCINES NOT SEEN.....3	
532	Does this facility provide family planning services?	YES.....1 → 538 NO.....2	
533	What is your position or title here?	_____ → 554	

IF THE FAMILY PLANNING INFORMATION IS OBTAINED FROM A SECOND FACILITY, BEGIN QUESTIONNAIRE WITH Q.534.

534	In what year did this dispensary open?	YEAR OPENED.....19☐☐	
535	Under what authority is this dispensary operated?	GOVERNMENT.....1 PRIVATE.....2 VOLUNTARY AGENCY.....3 OTHER_____.4	
537	Does the facility have the following items in working order:	YES NO	
	Running water?	RUNNING WATER.....1 2	
	Electricity?	ELECTRICITY.....1 2	
	Examination couch?	EXAM COUCH.....1 2	
	Examination light for gynecological examination?	LIGHT-GYN EXAMS.....1 2	
	Blood pressure machine?	BLOOD PRESSURE MACHINE....1 2	
	IUCD (loop insertion) kit?	IUCD KIT.....1 2	
538	Does the dispensary have the following types of staff who are trained in family planning provision?	YES NO	
	Rural Medical Aides?	RURAL MEDICAL AIDES.....1 2	
	Nurses?	NURSES.....1 2	
	MCH Aides?	MCH AIDES.....1 2	
	Midwives?	MIDWIVES.....1 2	
540	Are the following types of staff, if available, trained in IUCD (loop) insertion?	YES NO NA	
	Rural Medical Aides?	RURAL MEDICAL AIDES.....1 2 7	
	Nurses?	NURSES.....1 2 7	
	MCH Aides?	MCH AIDES.....1 2 7	
541	During an average month, how many women come to get family planning for the first time?	NEW PATIENTS.....☐☐☐	
542	During an average month, how many women come because they need more family planning (resupply)?	RESUPPLY PATIENTS.....☐☐☐	

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
543	Do you fill out an MCH 3 form (Taarifa ya mahudhurio ya akina mama na watoto kwa mwezi au mwaka) regularly?	YES.....1 NO.....2	→ 545
544	What do you do this form?	SEND TO MOH.....1 SEND TO DISTRICT OFFICER.....2 SEND TO ZONAL OFFICE.....3 KEEP IN FILE.....4 NOTHING/DON'T KNOW.....8	

CONTRACEPTIVE METHOD AVAILABILITY:
Now I would like to ask you about which family planning methods are available at this dispensary. I must also see the methods when we are finished. ASK ABOUT THE FIRST METHOD. IF THIS METHOD IS AVAILABLE FROM THE DISPENSARY, MOVE ACROSS THE TABLE. IF THE METHOD IS NOT AVAILABLE NOW, ASK Q.550 AND THEN BEGIN AGAIN WITH THE NEXT METHOD.

METHOD	545 Is (METHOD) available now?	546 How many days per week is (METHOD) available?	547 In what year did you first offer (METHOD)?	548 Is your stock of (METHOD) in date or out of date?	549 METHOD SEEN/NOT SEEN STATUS	550 How many weeks ago did you run out of (METHOD)? [a]
01 Pill	YES.....1 NO.....2 550 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	WKS.
02 IUCD (loop)	YES.....1 NO.....2 550 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	WKS.
03 Injection	YES.....1 NO.....2 550 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	WKS.
04 Foaming tablets, foam/jelly	YES.....1 NO.....2 550 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	SEEN.....1 NOT SEEN....2	WKS.
06 Other Specify	YES.....1 NO.....2 550 ↵		19			

CODES: [a] 97 = Never stocked method

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
551	Do you have your contraceptives delivered or must you go get them?	DELIVERED.....1 PICK THEM UP.....2	→ 553
552	How far (in kilometers) must you go to get them?	KM. TO PICK UP CONTRACEPTIVES.....	
553	What is your position or title here?	_____	

QUESTIONS 554 AND 555 ARE TO BE ANSWERED BY THE INTERVIEWER AFTER THE FACILITY VISIT IS COMPLETE.

554	DID THE INFORMANT SEEM KNOWLEDGEABLE?	YES.....1 NO.....2	
555	ADDITIONAL COMMENTS:		

SECTION 6. Name:_____ **PHARMACY VISIT** Date: _____

IF THE PHARMACY OR MEDICAL STORE IS 30 KILOMETERS OR LESS AWAY, IT IS TO BE VISITED. COMPLETE QUESTIONS 600 AND 602 UPON ARRIVAL AT THE FACILITY BASED ON YOUR OWN OBSERVATIONS. THEN FIND A KNOWLEDGEABLE SOURCE AT THE FACILITY TO ANSWER THE REMAINING QUESTIONS.

COMPLETE VISIT

IF THIS FACILITY HAS ALREADY BEEN VISITED FOR A DIFFERENT CLUSTER, RECORD DHS CLUSTER NUMBER HERE: ☐☐☐
IF THE FACILITY HAS ALREADY BEEN VISITED, A SECOND VISIT IS NOT NEEDED.

600	IF THIS IS THE FIRST FACILITY VISITED AFTER THE CLUSTER VISIT RECORD DISTANCE FROM CLUSTER FROM THE ODOMETER.	DISTANCE FROM CLUSTER.... ☐☐ NOT FIRST FACILITY VISITED.....95	
601	DO YOU THINK THAT THE ESTIMATE OF DISTANCE TO THE FACILITY GIVEN IN THE CLUSTER IS REASONABLE?	REASONABLE.....1 OVERESTIMATED.....2 UNDERESTIMATED.....3	
602	DO YOU THINK THAT THE ESTIMATE OF THE TIME TO THE FACILITY GIVEN IN THE CLUSTER IS REASONABLE?	REASONABLE.....1 OVERESTIMATED.....2 UNDERESTIMATED.....3	

QUESTIONS TO BE ASKED OF STAFF PERSON AT FACILITY:

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
603	How many hours per day is the pharmacy open?	HOURS PER DAY..... ☐☐	
604	How many days per week is the pharmacy open?	DAYS PER WEEK..... ☐	

MEDICATION AVAILABILITY AT THE FACILITY:
Now I would like to ask you about medications available at this facility. ASK Q.605 FOR EACH MEDICATION. IF THE MEDICATION IS AVAILABLE, ASK Q.606, IF NOT ASK Q.607. IF THE MEDICATION HAS AT SOME TIME BEEN AVAILABLE, ASK Q.608.

	MEDICATION	605 Is (MEDICATION) available now?	606 In the last 6 months have you run out of (MEDICATION)?	607 Have you ever had (MEDICATION)?	608 Why do you not have (MEDICATION) now? [a]
1	Chloroquine syrup	YES.....1 NO.....2 607 ↵	YES.....1 NO.....2 605 ↵	YES.....1 NO.....2 605 ↵	☐
2	Quinine	YES.....1 NO.....2 607 ↵	YES.....1 NO.....2 605 ↵	YES.....1 NO.....2 605 ↵	☐
3	Penicillin	YES.....1 NO.....2 607 ↵	YES.....1 NO.....2 605 ↵	YES.....1 NO.....2 605 ↵	☐
4	Iron tablets	YES.....1 NO.....2 607 ↵	YES.....1 NO.....2 605 ↵	YES.....1 NO.....2 605 ↵	☐
5	Folic acid	YES.....1 NO.....2 607 ↵	YES.....1 NO.....2 605 ↵	YES.....1 NO.....2 605 ↵	☐
6	ORS packets	YES.....1 NO.....2 607 ↵	YES.....1 NO.....2 605 ↵	YES.....1 NO.....2 605 ↵	☐
7	Condoms	YES.....1 NO.....2 607 ↵	YES.....1 NO.....2 609 ↵	YES.....1 NO.....2 609 ↵	☐

CODES: [a] Insufficient funds = 1; Unable to get resupply = 2; Not designated to carry = 3; Not interested in carrying = 4; Other = 5

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
609	In what year did the pharmacy open?	YEAR OPENED.....19[ ][ ]	
610	Is there a trained pharmacist available?	YES.....1 NO.....2	
611	Does the facility have the following items in working order? Running water? Electricity? Refrigerator?	YES NO RUNNING WATER.....1 2 ELECTRICITY.....1 2 REFRIGERATOR.....1 2	
612	Does this pharmacy carry family planning methods?	YES.....1 NO.....2	→ 617
613	What is your position or title here?	_____	→ 622

IF THE FAMILY PLANNING INFORMATION IS OBTAINED FROM A SECOND FACILITY, BEGIN QUESTIONNAIRE WITH Q.614.

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
614	How many hours per week is the pharmacy open?	HOURS PER WEEK.....[ ][ ]	
615	How many days per week is the pharmacy open?	DAYS PER WEEK.....[ ]	
616	In what year did this pharmacy open?	YEAR OPENED.....19[ ]	

CONTRACEPTIVE METHOD AVAILABILITY

Now I would like to ask you about which family planning methods are available at this pharmacy. ASK ABOUT THE FIRST METHOD. IF THIS METHOD IS AVAILABLE FROM THE PHARMACY, ASK Q.618, IF NOT, ASK Q.619. IF CONTRACEPTIVE HAS BEEN AVAILABLE, ASK Q.620.

METHOD	617 Is (METHOD) available now?	618 In the last 6 months have you run out of (METHOD)?	619 Have you ever had (METHOD)?	620 Why do you not have (METHOD) now? [a]
01 Pill	YES.....1 NO.....2 619 ↵	YES.....1 NO.....2 617 ↵	YES.....1 NO.....2 617 ↵	[ ]
02 IUCD (loop)	YES.....1 NO.....2 619 ↵	YES.....1 NO.....2 617 ↵	YES.....1 NO.....2 617 ↵	[ ]
03 Foaming tablets/ foam/jelly	YES.....1 NO.....2 619 ↵	YES.....1 NO.....2 617 ↵	YES.....1 NO.....2 617 ↵	[ ]

CODES: [a] Insufficient funds = 1; Unable to get resupply = 2; Not designated to carry = 3; Not interested in carrying = 4; Other = 5

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
621	What is your position or title here?	_____	

QUESTIONS 622 TO 623 ARE TO BE ANSWERED BY THE INTERVIEWER AFTER THE FACILITY VISIT IS COMPLETED.

622	DID THE INFORMANT SEEM KNOWLEDGEABLE?	YES.....1 NO.....2	
623	ADDITIONAL COMMENTS:		

SECTION 7. Name:_____ **PRIVATE DOCTOR VISIT** Date: _____

IF THE PRIVATE DOCTOR'S PRACTICE IS 30 KILOMETERS OR LESS AWAY, HE/SHE IS TO BE VISITED. COMPLETE QUESTIONS 700 TO 702 UPON ARRIVAL BASED ON YOUR OWN OBSERVATIONS. THEN FIND A KNOWLEDGEABLE SOURCE AT THE DOCTOR'S OFFICE TO ANSWER THE REMAINING QUESTIONS.

COMPLETE VISIT

IF THIS FACILITY HAS ALREADY BEEN VISITED FOR A DIFFERENT CLUSTER, RECORD DHS CLUSTER NUMBER HERE: ☐☐☐
IF THE FACILITY HAS ALREADY BEEN VISITED, A SECOND VISIT IS NOT NEEDED.

700	IF THIS IS THE FIRST FACILITY VISITED AFTER THE CLUSTER VISIT RECORD DISTANCE FROM CLUSTER FROM THE ODOMETER.	DISTANCE FROM CLUSTER.... ☐☐ NOT FIRST FACILITY VISITED.....95	
701	DO YOU THINK THAT THE ESTIMATE OF DISTANCE TO THE FACILITY GIVEN IN THE CLUSTER IS REASONABLE?	REASONABLE.....1 OVERESTIMATED.....2 UNDERESTIMATED.....3	
702	DO YOU THINK THAT THE ESTIMATE OF THE TIME TO THE FACILITY GIVEN IN THE CLUSTER IS REASONABLE?	REASONABLE.....1 OVERESTIMATED.....2 UNDERESTIMATED.....3	

QUESTIONS TO BE ASKED OF STAFF PERSON AT FACILITY:

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
703	Approximately how many patients does the doctor (do you) see at this practice each day?	NUMBER OF PATIENTS..... ☐☐	
704	How many hours per week is the doctor (are you) available to see patients at this location?	HOURS PER WEEK..... ☐☐	
705	How many days per week is the doctor (are you) available to see patients at this location?	DAYS PER WEEK..... ☐	
706	In what year did the doctor (you) first begin to see patients at this location?	YEAR.....19☐☐	
707	Does this facility normally use disposable needles when giving injections?	YES.....1 NO.....2	→ 710
708	Is this facility out now or has it run out of its supply of disposable needles at any time in the last 6 months?	YES.....1 NO.....2	
709	Does this facility ever reuse disposable needles?	YES.....1 NO.....2	
710	What is the method MOST frequently used for the sterilisation of medical instruments?	ELECTRIC STERILISER.....1 AUTOCLAVE.....2 STEAM PRESSURE STERILISER.....3 BOIL OVER KEROSENE STOVE.....4 BOIL OVER CHARCOAL/WOOD STOVE.....5 OTHER_____6 NONE.....7	→ 712
711	Has the facility NOT been able to sterilise instruments for some reason (e.g. equipment broken, no electricity, no fuel) at any time in the last six months?	YES.....1 NO.....2	
712	Does the facility have the following items:	YES NO	
	Running water?	RUNNING WATER.....1 2	
	Electricity?	ELECTRICITY.....1 2	
	Refrigerator?	REFRIGERATOR.....1 2	
	Examination couch?	EXAM COUCH.....1 2	
	Examination light for gynecological examination?	LIGHT-GYN EXAMS.....1 2	
	Weighing scales for children?	WEIGHING SCALE-CHILD.....1 2	
	Blood pressure machine?	BLOOD PRESSURE MACHINE....1 2	
	IUCD (loop insertion) kit?	IUCD KIT.....1 2	
	Minilap kit for tubal ligation?	MINILAP KIT.....1 2	

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
713	Does the doctor (Do you) see patients routinely at this location for: Antenatal care? Delivery care? Postnatal care? Child growth monitoring?	YES NO ANTENATAL CARE.....1 2 DELIVERY CARE.....1 2 POSTNATAL CARE.....1 2 GROWTH MONITORING.....1 2	
714	Does the doctor (Do you) dispense ORS packets?	YES.....1 NO.....2	
715	Does the doctor (Do you) give vaccines?	YES.....1 NO.....2	→ 717
716	At any time in the last six months have you run out of vaccines?	YES.....1 NO.....2	
717	Are condoms available here?	YES.....1 NO.....2	→ 719
718	At any time in the last six months have you run out of condoms?	YES.....1 NO.....2	
719	Does this doctor (Do you) provide family planning services?	YES.....1 NO.....2	→ 724
720	What is your position or title here?		→ 735

IF THE FAMILY PLANNING INFORMATION IS OBTAINED FROM A SECOND DOCTOR, BEGIN QUESTIONNAIRE WITH Q.721.

721	How many hours per week is the doctor (are you) available to see patients at this location?	HOURS PER WEEK..... ☐☐	
722	How many days per week is the doctor (are you) available to see patients at this location?	DAYS PER WEEK..... ☐	
723	In what year did the doctor (you) first begin to see patients at this location?	YEAR.....19☐☐	
724	Is the doctor (Are you) trained in contraceptive sterilisation procedures (tubal ligation/vasectomy)?	YES.....1 NO.....2	
725	Is the doctor (Are you) trained in IUCD (loop) insertion?	YES.....1 NO.....2	

COMMENTS:

CONTRACEPTIVE METHOD AVAILABILITY:
Now I would like to ask you about which family planning methods are available from this doctor. ASK ABOUT THE FIRST METHOD. IF THIS METHOD IS AVAILABLE FROM THE DOCTOR, MOVE ACROSS THE TABLE. IF THE METHOD IS NOT AVAILABLE NOW, ASK Q.730 AND THEN BEGIN AGAIN WITH THE NEXT METHOD.

METHOD	726 Is (METHOD) available now?	727 How many days per week is (METHOD) available?	728 In what year did you first offer (METHOD)?	729 Is your stock of (METHOD) in date or out of date?	730 How many weeks ago did you run out out of (METHOD)? [a]
01 Pill	YES.....1 NO.....2 730 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	WKS.
02 IUCD (loop)	YES.....1 NO.....2 730 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	WKS.
03 Injection	YES.....1 NO.....2 730 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	WKS.
04 Foaming tablets/ foam/jelly	YES.....1 NO.....2 730 ↵		19	IN DATE.....1 OUT OF DATE.....2 BOTH.....3	WKS.
06 Other Specify	YES.....1 NO.....2 730 ↵		19		

CODES: [a] 97 = Never stocked method

No.	QUESTIONS	CODING CATEGORIES	SKIP TO
731	On average, how many patients visit monthly for family planning?	MONTHLY NUMBER OF FAMILY PLANNING PATIENTS.....	
732	Do you have your contraceptives delivered or must you go get them?	DELIVERED.....1 PICK THEM UP.....2	→ 734
733	How far (in kilometers) must you go to get them?	KM. TO PICK UP CONTRACEPTIVES.....	
734	What is your position or title here?	_____	

QUESTIONS 735 TO 736 ARE TO BE ANSWERED BY THE INTERVIEWER AFTER THE FACILITY VISIT IS COMPLETED.

735	DID THE INFORMANT SEEM KNOWLEDGEABLE?	YES.....1 NO.....2	
736	ADDITIONAL COMMENTS:		