Zambia

Demographic and Health Survey 1996

Central Statistical Office
Ministry of Health

Demographic and Health Surveys
Macro International Inc.

World Summit for Children Indicators: Zambia 1996

		Value
	BASIC INDICATORS	
Childhood mortality	Infant mortality rate	109 per 1,000
	Under-five mortality rate	197 per 1,000
Maternal mortality	Maternal mortality ratio	649 per 100,000
Childhood undernutrition	Percent stunted	42.4
	Percent wasted	4.2
	Percent underweight	23.5
Clean water supply	Percent of households within 15 minutes of a safe water supply[1]	46.8
Sanitary excreta disposal	Percent of households with flush toilets or VIP latrines	18.0
Basic education	Percent of women 15-49 with completed primary education	48.1
	Percent of men 15-49 with completed primary education	65.7
	Percent of girls 6-12 attending school	57.1
	Percent of boys 6-12 attending school	55.8
	Percent of women 15-49 who are literate	66.5
Children in especially difficult situations	Percent of children who are orphans (both parents dead)	1.5
	Percent of children who do not live with their natural mother	20.2
	Percent of children who live in single adult households	4.4
	SUPPORTING INDICATORS	
Women's Health		
Birth spacing	Percent of births within 24 months of a previous birth[2]	19.3
Safe motherhood	Percent of births with medical antenatal care	95.6
	Percent of births with antenatal care in first trimester	11.4
	Percent of births with medical assistance at delivery	46.5
	Percent of births in a medical facility	46.5
	Percent of births at high risk	59.5
Family planning	Contraceptive prevalence rate (any method, married women)	25.9
	Percent of currently married women with an unmet demand for family planning	26.5
	Percent of currently married women with an unmet need for family planning to avoid a high-risk birth	21.7
Nutrition		
Maternal nutrition	Percent of mothers with low BMI	9.1
Low birth weight	Percent of births at low birth weight (of those reporting numeric weight)	11.1
Breastfeeding	Percent of children under 4 months who are exclusively breastfed	24.9
Child Health		
Vaccinations	Percent of children whose mothers received tetanus toxoid vaccination during pregnancy	84.5
	Percent of children age 12-23 months with measles vaccination	86.5
	Percent of children age 12-23 months fully vaccinated	78.3
Diarrhoea control	Percent of children with diarrhoea in preceding 2 weeks who received oral rehydration therapy (sugar-salt-water solution or ORS)	56.5
Acute respiratory infection	Percent of children with acute respiratory infection in preceding 2 weeks who were taken to a health facility or provider	70.7

[1] Piped, well, and bottled water
[2] First births are excluded.

Zambia Demographic and Health Survey 1996

Central Statistical Office
Lusaka, Zambia

Ministry of Health
Lusaka, Zambia

Macro International Inc.
Calverton, Maryland USA

September 1997

This report summarises the findings of the 1996 Zambia Demographic and Health Survey (ZDHS) conducted by the Central Statistical Office at the request of the Ministry of Health. Macro International Inc. provided technical assistance. Funding was provided by the U.S. Agency for International Development (USAID), the United Nations Population Fund (UNFPA), the Swedish International Development Agency (SIDA), and the government of Zambia.

The ZDHS 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 Zambia survey may be obtained from the Central Statistical Office, P.O. Box 31908, Lusaka, Zambia (telephone: 251-377/80/81/85, 252-575, 250-195; fax: 253-528). Additional information about the DHS programme may be obtained from Macro International Inc., 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 USA (telephone: 301-572-0200 and fax: 301-572-0999).

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PREFACE

The 1996 Zambia Demographic and Health Survey (ZDHS) is a nationwide sample survey of men and women of reproductive age designed to provide information on background characteristics of respondents, reproduction, contraceptive knowledge and use, and nutrition of children. Also collected was information on marriage, fertility, AIDS and other sexually-transmitted diseases, and maternal, child, and infant mortality rates. Zambia carried out the same type of survey in 1992; however, the 1996 ZDHS was more comprehensive than the 1992 ZDHS, as it covered additional information.

The survey was conducted by the Central Statistical Office on behalf of the Ministry of Health and with substantial financial assistance from the U.S. Agency for International Development (USAID) through Macro International Inc. of Calverton, Maryland and the United Nations Population Fund (UNFPA).

The major objective of the 1996 ZDHS was to provide the country with data useful for policy formulation, and monitoring, implementation, and evaluation of some major government programmes and projects. ZDHS data are also useful to researchers, non-governmental organisations and the public for advocacy in the areas of social progress.

Background work on the 1996 ZDHS commenced in August 1995. The exercise of mapping and listing households followed in March, 1996. Fieldwork began in July of the same year and went on until January 1997. Data entry and verification began in August 1996 and continued until January 1997. This was followed by tabulation production and drafting of the preliminary report, which was published in February 1997.

The success of the survey accrues to the dedicated support and involvement of a large number of institutions and individuals. I extend my thanks to Mr Emmanuel Silanda, Assistant Director in charge of Social Statistics at the Central Statistical Office, Mr Kumbutso Dzekedzeke, Survey Director, Ms Margaret Tembo, Assistant Survey Director, Rev. Charles Banda, Head of the Population and Demography Branch, Ms Samantha Mulendema, Data Processing Supervisor, all the Provincial Statistical Officers, the Provincial Medical Officers of Lusaka, Southern, and Western Provinces, and other field and office staff whose efforts were instrumental in the successful implementation of this survey and the finalisation of this report.

The survey would not have been implemented without the financial support of collaborating partners in the health reforms programmes in Zambia. The U. S. Agency for International Development (USAID) office in Zambia provided the bulk of financial support to carry out the survey through Macro International Inc. The United Nations Population Fund (UNFPA) financed the men's survey, while the Swedish International Development Agency (SIDA) contributed to financing the training of field staff. The United Nations Children's Fund (UNICEF) provided the kits for testing iodine levels in salt as well as the services of its procurement unit to expeditiously procure the weighing scales. In this regard, I highly appreciate the keen interest and active support throughout this survey of Mr Paul Hartenberger, Director, Office of Population and Health (USAID), Mr Kemal Mustafa, UNFPA Resident Representative, Dr Anders Nordstrom, Project Officer (SIDA), and other staff of USAID, UNFPA, UNICEF and SIDA who supported this survey.

My sincere appreciation also goes to the members of the National Health Survey Management Committee and the ZDHS Technical Committee.

Many thanks go to the authors of the various chapters of this report for their effort in its production.

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This report presents results of the 1996 ZDHS. The data will be particularly useful to planners, policy makers and the community at large.

David S. Diangamo
Director of Census and Statistics

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This following people contributed to the preparation of this report:

Kumbutso Dzekedzeke, CSO/UNFPA
Margaret Tembo, CSO
Emmanuel M. Silanda, CSO
Charles Banda, CSO
Modesto F.C. Banda, CSO
Patrick Mumba Chewe, CSO
Record J.S. Malungo, University of Zambia (UNZA)
Paul Chishimba, Ministry of Health
Mutinta Nseluke-Hambayi, Food, Security, Health and Nutrition Information System (FHANIS)
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Martin Wulfe, Macro International Inc.
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SUMMARY OF FINDINGS

The 1996 Zambia Demographic and Health Survey (ZDHS) is a nationally representative survey conducted by the Central Statistical Office at the request of the Ministry of Health, with the aim of gathering reliable information on fertility, childhood and maternal mortality rates, maternal and child health indicators, contraceptive knowledge and use, and knowledge and prevalence of sexually transmitted diseases (STDs) including AIDS. The survey is a follow-up to the Zambia DHS survey carried out in 1992.

FERTILITY

Fertility Trends. The 1996 ZDHS survey results indicate that the level of fertility in Zambia is continuing to decline. At current fertility levels, a Zambian woman will give birth to an average of 6.1 children during her reproductive period, a decline from the level of 6.5 prevailing during the late 1980s and early 1990s. Despite the decline, fertility in Zambia remains one of the highest in sub-Saharan Africa. Results from DHS surveys in neighbouring countries show that the fertility level in Botswana is 4.9 births per woman, in Namibia 5.4, in Tanzania 5.8 and in Zimbabwe 4.3 births per woman.

Fertility Differentials. Some women are apparently leading the fertility decline. For example, fertility levels are substantially lower among urban women (5.1 children per woman on average) than among rural women (6.9 children). Moreover, women who have received some secondary education have the lowest level of fertility, with a total fertility rate of 4.5, compared to a rate of 6.8 children per woman for those with no education, a difference of more than two children.

Age at First Birth. Childbearing begins early in Zambia, with over one-third of women becoming mothers by the time they reach age 18 and around two-thirds having had a child by the time they reach age 20. The median age at first birth falls between 18 and 19 years.

Moreover, 31 percent of teenage women (age 15-19) have begun childbearing, with 24 percent having had a child already and 7 percent carrying their first child. Adolescent childbearing seems to be declining somewhat—in 1992, 34 percent of teenagers either had already given birth or were pregnant with their first child.

Birth Intervals. The majority of Zambian children (81 percent) are born after a "safe" birth interval (24 or more months apart), with 36 percent born at least 36 months after a prior birth. Nevertheless, 19 percent of non-first births occur less than 24 months after the preceding birth. The overall median birth interval is 32 months.

Fertility Preferences. Survey data indicate that there is a strong desire for children and a preference for large families in Zambian society. They also indicate that men are considerably more pronatalist than women. Among those with six or more children, 22 percent of married women want to have more children, compared to 44 percent of married men. Both men and women desire large families. More than half (56 percent) of all women report five or more children as ideal and another 23 percent want to have four children. Only 7 percent of women report a two-child family as ideal. Overall, women report a mean ideal number of children of 5.3, compared to 5.9 for men.

Despite the high fertility preferences, the data indicate that there has been a decline in ideal family size among women in Zambia, from an average of 5.8 children in 1992 to 5.3 in 1996. Women's desire for additional children has also declined somewhat over the past 5 years. The proportion of women who want no more children increased from 24 percent in 1992 to 29 percent in 1996.

Unplanned Fertility. Despite the increasing level of contraceptive use, ZDHS data indicate that unplanned pregnancies are still common. Overall, more than one-third of births in the five years prior to the survey were reported to be unplanned—29 percent were mistimed (wanted later) and 7 percent were unwanted. If unwanted births could be eliminated altogether, the total fertility rate in Zambia would be 5.2 births per woman instead of the actual level of 6.1.

FAMILY PLANNING

Increasing Use of Contraception. The contraceptive prevalence rate in Zambia has increased significantly over the past five years, rising from 15 percent in 1992 to 26 percent in 1996. Use of modern methods has increased from 9 percent of married women in 1992 to 14 percent in 1996. Use of traditional methods increased from 6 to 12 percent. The pill is the most widely used method (7 percent of married women), followed by withdrawal (5 percent) and condoms (4 percent).

Differentials in Family Planning Use. Differentials in current use of family planning by province are large. Forty-two percent of married women in North-Western Province are currently using a contraceptive method, compared to only 11 percent of those in Luapula Province. However, most users in North-Western Province are using traditional methods; Lusaka and Copperbelt Provinces have the highest levels of use of modern methods. There are large differentials in current use by level of education. Only 17 percent of currently married women with no formal education are currently using a method, compared with 55 percent of those with higher than secondary education.

Source of Contraception. Six in ten users obtain their methods from public sources, while 24 percent use non-governmental medical sources and shops and friends account for the remaining 13 percent. Government health centres (41 percent) and government hospitals (16 percent) are the most common sources of contraceptive methods.

Knowledge of Contraceptive Methods. Knowledge of contraceptive methods is nearly universal, with 96 percent of all women and men knowing at least one method of family planning. Knowledge of at least one contraceptive method has increased since 1992, from 89 to 96 percent of all women. There has also been an increase over the last five years in the proportion of women who know specific family planning methods. For example, the proportion of women who have heard of condoms has increased from 72 percent in 1992 to 92 percent in 1996 and the proportion who have heard of injectables increased from 38 percent to 53 percent during the same period.

Family Planning Messages. One reason for the increase in level of contraceptive awareness is that family planning messages are prevalent. Over 40 percent of the women and over half of the men interviewed reported that they had heard a family planning message in the months prior to the survey, mostly on radio.

Unmet Need for Family Planning. ZDHS data show that there is a considerable unmet need for family planning services in Zambia. Overall, 27 percent of married women are in need of services—19 percent for spacing their next birth and 8 percent for limiting births. If all women who say they want to space or limit their children were to use methods, the contraceptive use rate would be increased from 26 to 52 percent of married women. Currently, less than half of this "total demand" for family planning is being met.

MATERNAL AND CHILD HEALTH

Maternal Health Care. ZDHS data show some encouraging results regarding maternal health care, as well as to some areas in which improvements could be made. Results show that most Zambian mothers receive antenatal care, 3 percent from a doctor and 93 percent from a nurse or trained midwife. Similarly, tetanus toxoid coverage is relatively widespread in Zambia; for 85 percent of births in the five years preceding

the survey, the mothers received at least one tetanus toxoid injection during pregnancy. Less encouraging is the fact that more than half of births still occur at home and, consequently, less than half are assisted by trained medical personnel. Proper medical attention during pregnancy and hygienic conditions during delivery can reduce the risk of complications and infections that can cause death or serious illness for either the mother or the newborn. There has been little change in these maternal health indicators since 1992. The survey results indicate that maternal mortality in Zambia is high—649 maternal deaths per 100,000 births.

High Childhood Mortality. One of the more disturbing findings from the survey is that child survival has not improved over the past few years. Currently, the infant mortality rate is 109 deaths per 1,000 births and under-five mortality is 197 per 1,000 births, a slight increase from the rates of 107 and 191, respectively, that were derived from the 1992 ZDHS. Under-five mortality rates are highest in Luapula and Eastern Provinces, where approximately one in four children does not live to the fifth birthday.

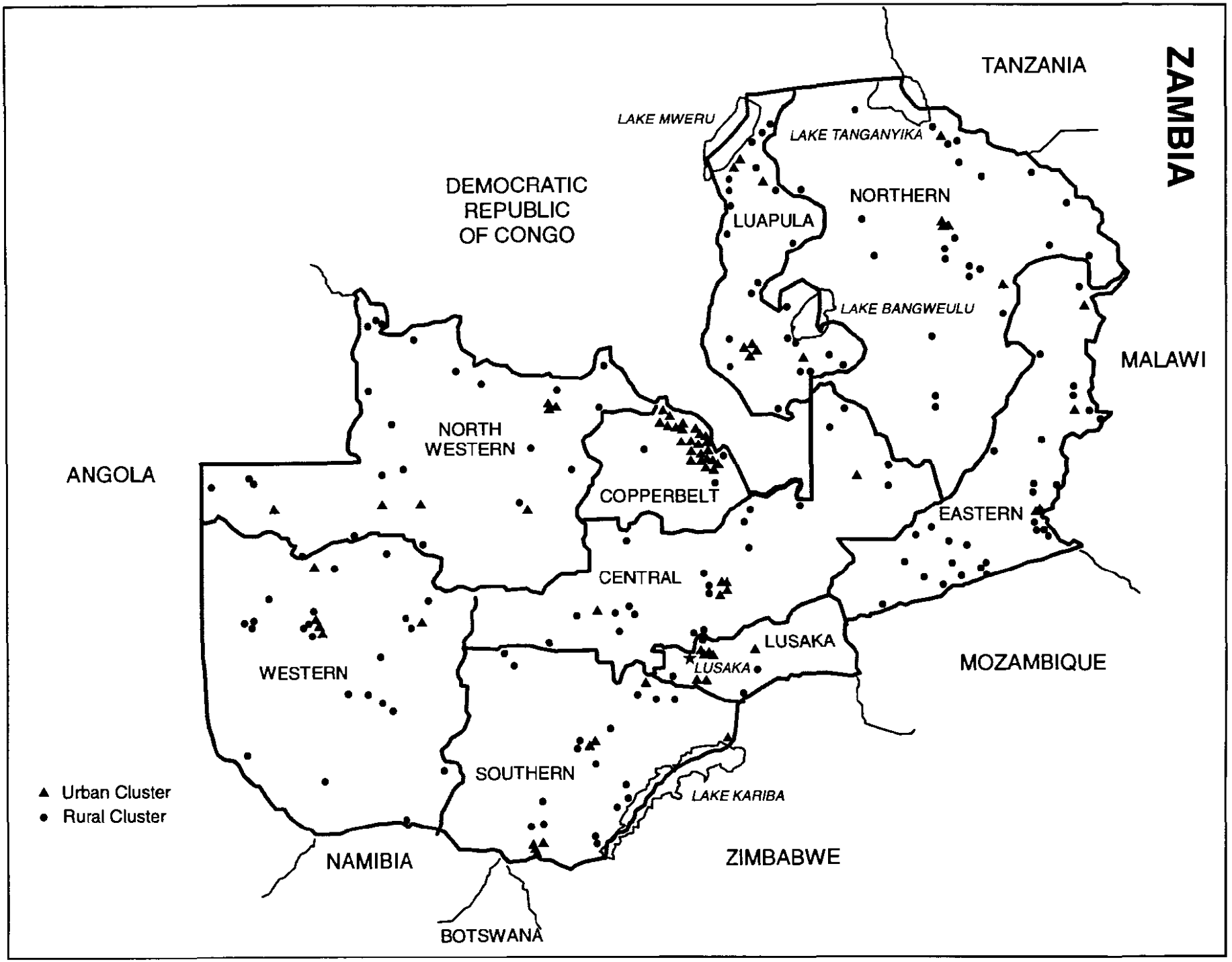
Childhood Vaccination Coverage. Vaccination coverage against the most common childhood illnesses has increased recently. The proportion of children age 12-23 months who are considered to be fully immunised has increased from 67 in 1992 to 78 percent in 1996. Only 2 percent of children 12-23 months have not received any vaccinations.

Childhood Health. ZDHS data indicate that Zambian mothers are reasonably well-informed about childhood illnesses and that a high proportion are treated appropriately. For example, 71 percent of children with symptoms of respiratory illness during the two weeks before the survey were taken to a health facility or health care provider for treatment. Over half of children with diarrhoea during the same period received some type of oral rehydration treatment (fluid made from an ORS packet, a homemade solution, or increased fluids). Ninety-four percent of mothers know about the use of sugar-salt-water solutions for treating diarrhoea; yet when asked about specific eating and drinking regimes for sick children, only three-quarters say that a child who is sick with diarrhoea should get more to drink.

Breastfeeding Practices. The ZDHS results indicate that breastfeeding is almost universally practised in Zambia, with a median duration of 20 months. Since breastfeeding has beneficial effects on both the child and the mother, it is encouraging to note that supplementation of breast milk starts relatively late in Zambia. In the first two months, only 11 percent of children have received supplements other than water and breast milk. However, by 4-5 months, 77 percent of children are given some form of food supplementation. Also encouraging is the fact that there is negligible use of infant formula and bottlefeeding is not commonly practised.

Childhood Nutritional Status. Overall, 42 percent of Zambian children under age five are classified as stunted (low height-for-age) and 18 percent as severely stunted. Four percent of children under five in Zambia are wasted (low weight-for-height). Comparison with the 1992 ZDHS shows little change in these measures over time.

Knowledge and Behaviour Regarding AIDS. Survey results indicate that virtually all respondents had heard of AIDS. Common sources of information were friends/relatives, the radio, and health workers. The vast majority of respondents—80 percent of women and 94 percent of men—say they have changed their behaviour in order to avoid contracting AIDS, mostly by restricting themselves to one sexual partner. Although almost all respondents say they know about the condom, only one-quarter of women and about half of men used condoms at some time during the 12 months prior to the survey. Most respondents say they use condoms both for family planning and for disease prevention. The practice of giving money, gifts or favours in exchange for sex is not uncommon in Zambia—11 percent of women and 24 percent of men say they have engaged in this in the 12 months before the survey.


ZAMBIA
TANZANIA
LAKE MWERU
LAKE TANGANYIKA
DEMOCRATIC
REPUBLIC
OF CONGO
NORTHERN
LUAPULA
LAKE BANGWEULU
MALAWI
NORTH
WESTERN
ANGOLA
COPPERBELT
EASTERN
CENTRAL
LUSAKA
LUSAKA
MOZAMBIQUE
WESTERN
SOUTHERN
LAKE KARIBA
Urban Cluster
Rural Cluster
NAMIBIA
ZIMBABWE
BOTSWANA

CHAPTER 1

INTRODUCTION

1.1 History, Geography and Economy

History

Historical and archaeological evidence indicates that by the year 1500, much of modern Zambia was occupied by farming people who were ancestors of the present inhabitants. In the late nineteenth century, various parts of what was to become Northern Rhodesia were administered by the British South Africa Company. In 1924, the British Colonial Office assumed responsibility for administering the territory, and in 1953, Northern Rhodesia (Zambia) and Southern Rhodesia (Zimbabwe) joined Nyasaland (Malawi) to form the Central African Federation of Rhodesia and Nyasaland, despite the opposition of Northern Rhodesia's Africans. The Federation was, however, dissolved in 1963. In October 1964, Zambia gained her political independence and adopted a multiparty system of government. In December 1972, Zambia became a one-party state until 1991 when a multi-party system was re-introduced.

Geography

Zambia is a land-locked country covering an area of 752,612 square kilometres and consisting of about 2.5 percent of the area of Africa. It shares borders with Zaire and Tanzania in the north; Malawi and Mozambique in the east; Zimbabwe and Botswana in the south; Namibia in the southwest and Angola in the west. Administratively, the country is divided into nine provinces and 67 districts. Four of ten Zambians live in urban areas, most of which are located along the old line of rail.

Zambia lies between 8 and 18 degrees south latitude and between 20 and 35 degrees east longitude. It has a tropical climate and vegetation with three distinct seasons: the cool dry winter from May to August, a hot dry season during September and October and warm wet season from November to April.

Among the main river water sources in Zambia are the Zambezi, Kafue, Luangwa and Luapula. The country also has major lakes such as Tanganyika, Mweru, Bangweulu and the man-made Kariba. The northern part of the country receives the highest precipitation, with an annual average ranging from 1,100 mm to over 1,400 mm. The southern and eastern parts of the country have less rainfall, ranging from 600 mm to 1,100 mm annually, which often results in droughts.

Economy

Zambia has a mixed economy consisting of a modern and urban-oriented sector confined to the line of rail, and a rural agricultural sector. For a long time, the modern sector has been dominated by parastatal organisations, while private businesses have predominated in the construction and agricultural sectors. Since 1991, with the introduction of a liberalised market-oriented economy, the parastatals have been privatised and, in some cases, liquidated.

Copper mining is the country's main economic activity, accounting for 95 percent of export earnings and contributing 45 percent of government revenue during the decade following the attainment of political independence (i.e., 1965-1975). This situation was sharply changed by the drastic decline in world copper prices in late 1974 and 1975. The prices rose in 1978 but only to drop sharply between 1981 and 1982. The combined effects of the fall in copper prices, a rise in oil prices, the slow pace of industrialisation and a heavy dependence on imports have put the country's economy under serious pressure.

Copper production reached its peak at 713,000 tonnes in 1976 and has been fluctuating ever since; production fell to 607,000 tonnes in 1980 and continued falling to 459,000 tonnes in 1986 before the slight rise in 1987 to 483,100 tonnes. By 1996, copper production fell to between 300-400,000 metric tonnes (MoFED, 1996b). The decline in copper production can be attributed to many factors including increased cost of production as a result of the continued fall in the grade of ore and reduction in investment in advanced technology. The overvalued exchange rate that existed for a long time contributed to the high cost of copper production.

Before the closure of the Kabwe mines in 1994 due to reduced ore levels, the production of zinc and lead had also been showing a downward trend. About 10,600 tonnes of zinc and 3,900 tonnes of lead were produced in 1990 compared with 32,700 tonnes of zinc and 10,000 tonnes of lead produced in 1980 (NCDP, 1984).

Cobalt production also declined from 3,309 tonnes in 1980 to 2,407 tonnes in 1983, after which production levels began to increase to 5,055 tonnes in 1988, marking the highest production level during the 1980-90 period. The production of coal rose from 579,000 tonnes in 1980 to 604,000 tonnes in 1982, after which it started to decline to reach 330,000 tonnes in 1990 (NCDP,1989).

Agriculture contributes 15 percent of Zambia's gross domestic product (GDP), and employs 75 percent of the labour force. The agricultural sector is expected to provide both food-stuffs and industrial raw materials to rural and urban consumers and producers. Ninety percent of the farming population consists of small-scale farmers, while less than 10 percent are medium-scale farmers, and less than 3 percent are part of the large-scale sector. Maize is the country's staple as well as a major cash crop, accounting for 75 percent of the land cropped and 85 percent of the crop output. Other crops include cotton, groundnuts, sunflower, millet, tobacco, cassava, and vegetables. In 1995, the government launched the Agricultural Sector Investment Programme (ASIP) aimed at boosting agricultural production and streamlining the marketing of agricultural inputs and produce.

About 42 million hectares are potentially suitable for agriculture. However, only 2.5 million hectares (6 percent) of this land are cropped annually (MoFED, 1996a). Of all the cultivated land, only 50,000 hectares (2 percent) are irrigated. This implies heavy dependency on rainfall to sustain agricultural production. With erratic rainfall in the major agricultural production areas of Southern and Eastern Provinces, an appropriate irrigation policy needs to be put in place. More than 10 million hectares of land are also used for the raising of 2.2 million cattle, 500,000 goats, 70,000 sheep, 300,000 pigs and 20 million poultry (CSO, 1994).

Under the structural adjustment programme being implemented in Zambia, the average annual inflation rate was reduced from 191 percent (December 1991-November 1992) to 53 percent and 45 percent in 1994 and 1995, respectively. Amidst the declining economic situation, the total long-term debt rose from $60 million in 1971 to $7.3 billion in 1991, representing an increase in per capita indebtedness from $160 to $900. By the end of October 1993, Zambia's debt burden was $6.8 billion. In the same year, Zambia's external debt service payments totaled $375 million net of debt relief, which represented 35 percent of exports (MoFED, 1996c). Currently, approximately 70 percent of the total external finance flow to Zambia is reallocated to debt service, principally to the international finance institutions.

The poor economic performance since the mid-1970s has consequently led to lower GDP. For instance, GDP per capita (in constant 1977 prices) declined from $350 in 1980 to $264 in 1994, representing an average annual decline of 2 percent. In the interim periods, fluctuations were observed. In 1989, the GDP grew by a meagre 0.1 percent in contrast to 6.3 percent in 1988. Real output declined on average by about 1.0 percent annually between 1989 and 1991 (NCDP, 1994).

In an effort to halt the economic recession, the Movement for Multiparty Democracy (MMD) Government has launched an Economic Recovery Programme (ERP) to turn around the "protracted decline of the economy into sustained positive real growth, and consequent improvement in living standards and the quality of life of the people" (Republic of Zambia, 1992).

1.2 Population

The 1969, 1980 and 1990 national censuses reported total populations of 4.0 million, 5.7 million and 7.8 million respectively, with growth rate of 2.7 percent per annum in 1990 (see Table 1.1). The growth rates vary by province, ranging from 1.5 percent in Copperbelt Province to 4.2 - 4.4 percent in Central and Eastern Provinces during the 1980-90 intercensal period (data not shown).

Table 1.1 Demographic characteristics

Selected demographic indicators, Zambia 1969, 1980 and 1990

	Census year		
Indicator	*1969*	*1980*	*1990*
Population (millions)	4.0	5.7	7.8
Density (pop./sq. km.)	5.3	7.5	10.4
Percent urban	29.4	39.9	38.0
Crude birth rate (per 1,000)	47.7	50.0	44.0
Crude death rate (per 1,000)	19.7	16.7	18.3
Growth rate (per 1,000)	28.0	33.3	25.7
Total fertility rate	7.1	7.2	6.7
Completed family size (women age 40-49)	5.1[a]	6.7[a]	7.0
Infant mortality rate	141	97	123
Life expectancy at birth			
Male	41.8	50.4	46.1
Female	45.0	52.5	47.6

[a] Reported figures
Sources: Central Statistical Office, 1974, 1985a,1985b, and 1995b.

The population density in Zambia increased from 5.3 people per square kilometre in 1969 to 7.5 in 1980 and 10.4 in 1990. The average density in 1990 ranged from 50 people or more pr square kilometre in Lusaka and Copperbelt Provinces to 5 or fewer people per square kilometre in Wester and North-Western Provinces. In addition to being the most densely populated provinces, Lusaka and Copperbelt are also the most urbanised areas in the country.

There has been a steady flow of people to mining towns and urban centres. As a result, the proportion of the population living in urban areas has increased steadily from 29 percent in 1969 to 38 percent in 1990. The proportion of urban population varies by province, from 91 percent in Copperbelt Province to 9 percent in Eastern Province. While the urban population has grown by 2.7 percent per annum during the 1980-90 decade, the rural population has increased by 3.5 percent in the same period. During 1969-80, the urban population grew much faster than the rural population (5.8 vs. 1.6 percent annually). Thus, the speed of migration to the urban areas has slowed considerably during the 1980-90 period, compared with the earlier period (CSO, 1995).

The crude birth rate as estimated from the census data increased from 48 per 1,000 population in 1969 to 50 in 1980 and dropped to 44 in 1990. The crude death rate is estimated to have increased slightly from 17 per 1,000 during 1975-80 to 18 during 1985-90 (CSO, 1995). Total fertility rates estimated from the 1969 and 1980 censuses are in the neighbourhood of 7.0 births per woman. The rate declined to 6.7 births per woman in 1990.

Life expectancy at birth for males increased from 42 years in 1969 to 50 years in 1980 and was estimated to have declined to 44 years by 1990. Zambian women live, on average, 2 to 3 years longer than men; however, the gap appears to have narrowed in 1990. Mortality levels are highest in Eastern, Luapula and Western Provinces, followed by Northern and Southern Provinces, with Lusaka, Copperbelt and Central Provinces experiencing the lowest mortality rates (data not shown). Life expectancy at birth ranged from 45 years in Eastern Province to 57 years in Copperbelt (CSO, 1985b). The overall infant mortality rate declined from 141 deaths per 1,000 live births in the mid-1960s (based on the 1969 census) to 97 in the late 1970s, after which it increased to 123 in the late 1980s.

1.3 The Population Policy and National Population and Development Programme of Action

For the first decade and a half after independence, Zambia did not view the high rate of population growth as a development problem. The only concern then was with the high rate of migration from rural to urban areas and the uneven spatial distribution of the population. The results of the 1980 Population and Housing Census exposed the rapidity with which the population was expanding and the implied adverse effect on development and individual welfare. This led the government to reappraise the role of population in national development efforts. The government realised that the nation's development planning and plan implementation processes should not only aim at accommodating the increased demands for goods and services brought about by population growth, but should also aim at influencing those aspects of the country's sociocultural life that underpin high levels of reproduction and thus of population growth.

In 1984, the then National Commission for Development Planning (NCDP) was given a mandate to initiate a draft population policy which would aim at achieving a population growth rate consistent with the growth rate of the economy. The National Population Policy was accepted in May 1989. Since then, the country's population growth rate has remained high and continues to act as a serious impediment towards sustainable development.

The original population policy was revised in December 1996 to redefine or clarify its objectives. Another important rationale for the revision of the population policy was to take account of new concerns which include HIV/AIDS, teenage pregnancy, poverty, and gender issues.

The objectives of the revised policy are:

1. To ensure that population issues and other development concerns are mutually integrated in the planning and implementation processes so as to attain development;

2. To ensure that all couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so in order to enhance the health of families;

3. To establish and continuously update a national population-related database and information system that will pool pertinent data and information from various sources with a view to ensure availability of timely, population-related data;

4. To enhance participation among opinion leaders and the general public in population and development issues in order to generate and sustain commitment;

5. To contribute to the reduction of maternal, infant and child mortality in order to increase life expectancy;

6. To contribute to the reduction of HIV/AIDS and other sexually transmitted diseases so as to improve the general health status of the population;

7. To promote fair distribution of the population between rural and urban areas so as to ensure balanced development;

8. To promote productive employment opportunities for women in order to promote gender equality;

9. To improve the population's access to appropriate, affordable and quality reproductive health services including family planning and sexual health in order to have a healthy nation;

10. To promote the incorporation of population and gender education into school curricula at all levels in order to increase the knowledge and understanding of population and gender issues; and

11. To promote and maintain equal access to education for both sexes at all levels in order to raise literacy levels.

Donor and non-governmental agencies such as the United Nations Population Fund (UNFPA), International Planned Parenthood Federation (IPPF) through its Zambian affiliate, the Planned Parenthood Association of Zambia (PPAZ), and the Family Life Movement of Zambia (FLMZ) provide material, financial and technical assistance and operate family planning clinics, supplementing the efforts of the Ministry of Health (MOH).

1.4 Health Priorities and Programmes

The Government's commitment to the objectives of attaining health for all means not only improving the accessibility of health services and reducing mortality and morbidity, but also improving the quality of life of all Zambians. One of the strategies for achieving this objective is the Primary Health Care (PHC) programme, which constitutes an important component of the health care delivery system. To ensure that the PHC programme operates efficiently in tackling the main health problems of the individual, the family, and the community, the health service has been decentralised, with the responsibility of planning, implementing, monitoring, and managing PHC programmes falling to the districts. The integrated health plans developed out of the District Health Boards' Basic Health Programme constitute the PHC package.

The reformulated PHC programme aims, among other things, to tackle the main health problems in the community, focusing on the needs of the underserved, high risk, and vulnerable groups. Thus, attention is paid to the rural and peri-urban areas where the health needs of the people are greatest, with particular emphasis placed on maternal and child care, family planning, nutrition, control of communicable diseases (e.g., diarrhoea, cholera, dysentery, sexually transmitted diseases, HIV/AIDS, malaria, etc.), immunisation, and environmental sanitation in order to secure adequate health care for all Zambians.

The National Population and Development Programme and Health Reforms establishes the government's commitment to improve the health of the population by progress towards the achievement of the following targets by the year 2000:

- To reduce the percentage of underweight children (0-5 years) from 23 to 18 percent.
- To bring under control 80 percent of tuberculosis cases.
- To increase accessibility to and acceptability of family planning services and appropriate use of information in order to increase family planning use.
- To improve the quality of, access to and utilisation of maternal and child health services in order to reduce maternal deaths and complications.
- To reduce the incidence of sexually transmitted diseases (STDs), AIDS, and reproductive tract infections.
- To reduce the incidence of induced abortions in order to reduce maternal complications and deaths.
- To increase the percentage of the population having adequate sanitation from 66 to 75 percent in urban areas and from 37 to 57 percent in rural areas in 5 years' time (MOH, 1992).

The implementation of all these aspects of the PHC programmes requires multi-sectoral action and close collaboration among the various government institutions. The government has therefore set up multi-sectoral PHC committees as an integral part of the PHC basic supportive manpower, and inter-sectoral collaboration with other ministries has been given prominence.

1.5 Objectives and Organisation of the Survey

Objectives

The Zambia Demographic and Health Survey (ZDHS) is a nationwide sample survey of women of reproductive age designed to provide information on fertility, family planning, child survival and health of children.

The primary objectives of the ZDHS are:

i) To collect up-to-date information on fertility, infant and child mortality and family planning;

ii) To collect information on health-related matters such as breastfeeding, antenatal care, children's immunisations and childhood diseases;

iii) To assess the nutritional status of mothers and children;

iv) To support dissemination and utilisation of the results in planning, managing and improving family planning and health services in the country; and

v) To enhance the survey capabilities of the institutions involved in order to facilitate the implementation of surveys of this type in the future.

Organisation

The ZDHS was conducted by the Central Statistical Office. Macro International Inc. of Calverton, Maryland provided technical assistance to the project through its contract with the U.S. Agency for International Development (USAID). Funding for the survey was supplied by Macro International (from USAID), the United Nations Population Fund (UNFPA), the Swedish International Development Agency (SIDA), and the government of Zambia (through the Central Statistical Office). The UNICEF office in Zambia contributed to the survey by providing salt-testing kits for use in data collection.

Sample

In preparation for the 1990 Census of Population, Housing and Agriculture, the entire country was demarcated into Census Supervisory Areas (CSAs). Each CSA was in turn divided into Standard Enumeration Areas (SEAs) of roughly equal size. The ZDHS sample was selected from this frame in three stages. First, 312 CSAs were selected from this frame with probability proportional to size. One SEA was then selected from each CSA, again with probability proportional to size. After a household listing operation in all selected SEAs, a systematic sample of households was then selected. Every fourth household was identified as selected for the men's survey, meaning that, in addition to interviewing women age 15-49, interviewers also interviewed men age 15-59. As a result of oversampling of households in Luapula, North-Western and Western Provinces in order to produce province-level estimates for some variables, the ZDHS sample is not self-weighting at the national level. A more detailed description of the sample design is presented in Appendix A.

Questionnaires

Three types of questionnaires were used for the ZDHS: the Household Questionnaire, the Women's Questionnaire and the Men's Questionnaire. The contents of these questionnaires were based on the DHS Model "B" Questionnaire, which is designed for use in countries with low levels of contraceptive use. Additions and modifications to the model questionnaires were made after consultation with a number of institutions, including the University of Zambia, the Ministry of Health, the Planned Parenthood Association of Zambia (PPAZ), and the National Commission for Development Planning. The questionnaires were developed in English and then translated into and printed in seven of the most widely spoken languages (Bemba, Kaonde, Lozi, Lunda, Luvale, Nyanja and Tonga).

The Household Questionnaire was used to list all the usual members and visitors of a selected household. Some basic information was collected on the characteristics of each person listed, including his/her age, sex, education, and relationship to the head of the household. The main purpose of the Household Questionnaire was to identify women and men who were eligible for the individual interview. In addition, information was collected on the household itself, such as the source of water, type of toilet facilities, material used for the floor of the house, and ownership of various consumer goods.

The Women's Questionnaire was used to collect information from women age 15-49 about the following topics:

Background characteristics (education, religion, etc.);
Reproductive history;
Knowledge and use of family planning methods;
Antenatal and delivery care;
Breastfeeding and weaning practices;
Vaccinations and health of children under age five;
Marriage;
Fertility preferences;

Husband's background and respondent's work;
Awareness of AIDS; and
Maternal mortality.

The Men's Questionnaire was used to collect information from men age 15-59 years in every fourth household about the following topics:

Background characteristics (education, religion, etc.);
Reproductive history;
Knowledge and use of family planning methods;
Marriage;
Fertility preferences; and
Awareness of AIDS.

In addition, the interviewing teams measured the height and weight of all children under age five and their mothers.

Fieldwork

The fieldwork for the ZDHS was carried out by 11 interviewing teams. In general, each team consisted of one supervisor, one field editor, five interviewers and one driver. In total, there were 11 supervisors, 11 field editors, 56 interviewers, and 11 drivers. Of the interviewers, 45 were women and 11 were men. Fieldwork commenced on 15 July 1996 and was completed on 6 January 1997. The persons involved in the survey are listed in Appendix D.

Table 1.2 is a summary of response rates from the household and the individual interviews. A total of 8,016 households were selected; of these 7,286 were successfully interviewed. The shortfall is due primarily to dwellings being vacant at the time they were visited by the interviewing team. Of the 7,365 households that were occupied, 99 percent were successfully interviewed. In these households, 8,298 women were identified as eligible for the individual interview and 8,021 were successfully interviewed. The number of men eligible for individual interview was 2,043, among whom 1,849 were successfully interviewed, resulting in the eligible men's response rate of 91 percent.

Table 1.2 Results of the household and individual interviews

Number of households, number of interviews, and response rates, Zambia 1996

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households sampled	2,329	5,687	8,016
Households occupied	2,230	5,135	7,365
Households interviewed	2,205	5,081	7,286
Household response rate	98.9	98.9	98.9
Individual interviews			
Number of eligible women	3,124	5,174	8,298
Number of eligible women interviewed	3,001	5,020	8,021
Number of eligible men	794	1,249	2,043
Number of eligible men interviewed	698	1,151	1,849
Eligible woman response rate	96.1	97.0	96.7
Eligible man response rate	87.9	92.2	90.5

CHAPTER 2

CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

Information on the characteristics of the households and the individual women interviewed in the survey is essential for the interpretation of survey findings and can provide an approximate indication 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 Zambia Demographic and Health Survey (ZDHS) collected information on all usual residents and visitors who spent the previous night in the household. In this survey, the household was defined as a person or group of people living together and sharing a common source of food.

Age and Sex

The distribution of the household population in the ZDHS is shown in Table 2.1 by five-year age groups, according to sex and urban-rural residence. The age distribution is typical of high fertility populations, i.e., a much higher proportion of the population in the younger than in the older age groups. Examination of the single-year age distributions (see Figure 2.1 and Appendix C.1) indicates slight distortions of the data due to misreporting of date of birth and/or age and preference for particular digits, though this preference is much less pronounced than in census data and data in many other countries.

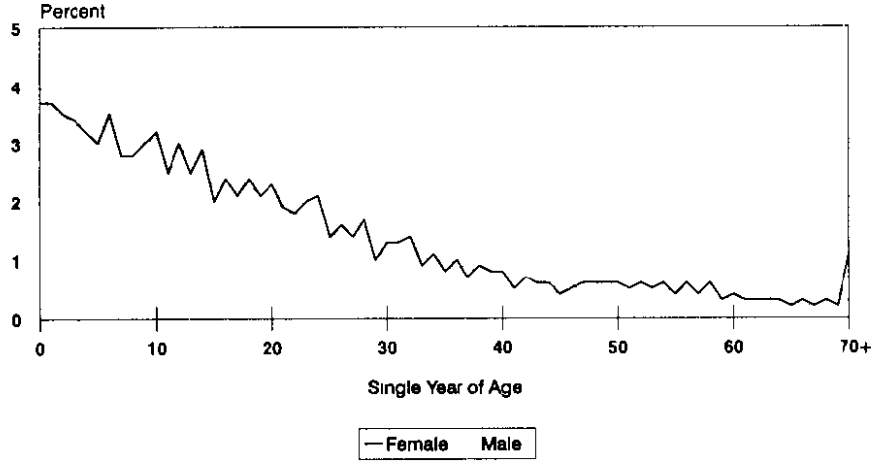
Table 2.1 Household population by age, residence and sex

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

Age group	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	17.3	16.9	17.1	18.0	17.9	17.9	17.7	17.5	17.6
5-9	15.1	14.3	14.7	16.4	15.7	16.0	15.8	15.1	15.5
10-14	13.6	14.3	13.9	15.2	14.2	14.7	14.5	14.2	14.4
15-19	11.7	13.1	12.4	10.5	9.6	10.0	11.0	11.0	11.0
20-24	10.7	11.5	11.1	8.5	9.2	8.8	9.4	10.1	9.8
25-29	8.1	8.3	8.2	6.5	6.3	6.4	7.2	7.1	7.1
30-34	6.7	6.7	6.7	5.2	5.5	5.3	5.8	6.0	5.9
35-39	4.9	4.3	4.6	4.3	4.1	4.2	4.6	4.2	4.4
40-44	4.0	3.6	3.8	2.6	2.8	2.7	3.1	3.1	3.1
45-49	2.7	2.3	2.5	2.1	2.9	2.5	2.4	2.7	2.5
50-54	2.0	1.9	2.0	2.0	3.5	2.7	2.0	2.8	2.4
55-59	1.2	1.1	1.1	2.0	3.0	2.5	1.7	2.3	2.0
60-64	0.9	0.8	0.9	2.5	2.1	2.3	1.9	1.6	1.7
65-69	0.5	0.5	0.5	1.8	1.7	1.7	1.3	1.2	1.2
70-74	0.4	0.3	0.4	1.2	0.7	0.9	0.9	0.5	0.7
75-79	0.2	0.1	0.1	0.8	0.5	0.6	0.5	0.3	0.4
80+	0.1	0.0	0.1	0.6	0.3	0.5	0.4	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	7,524	7,743	15,267	11,051	11,664	22,727	18,575	19,407	37,994

Note: Totals include a small number of persons whose sex was not stated.

Figure 2.1
Distribution of De Facto Household Population by Single Year of Age and Sex



ZDHS 1996

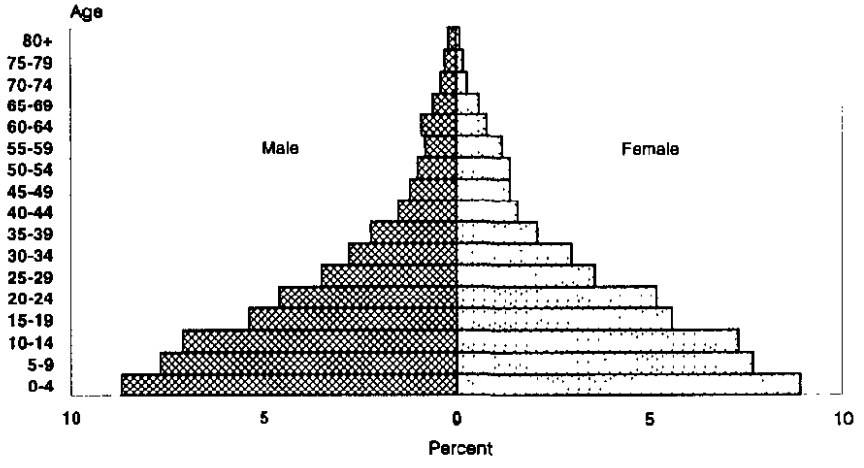
When population is distributed in five-year age groups, age misreporting is minimal (Figure 2.2). The relatively large number of women at age 50-54 and men age 60-64 is suggestive of transfer of some women from age group 45-49 to 50-54 and men from age group 55-59 to 60-64, presumably a deliberate attempt on the part of interviewers to reduce their workload. This pattern has been observed in other DHS surveys (Rutstein and Bicego, 1990). However, the impact of this phenomenon on the quality of the data is minimal because the shifting is not pronounced.

Table 2.2 shows that the de jure population structures derived from the 1969, 1980 and 1990 Population and Housing Censuses and the 1992 and 1996 ZDHS surveys have changed little over time. Dependency ratios are also shown. They are the ratio of the number of persons age 0-14 and 65 and over divided by the number of persons age 15-64. The ratio is an indication of the dependency responsibility of adults in their productive years. The ratio varies over time. After reaching 111 dependents per 100 population age 15-64 in 1980, the ratio dropped to 98 in 1992 and 1996. The dependency burden in Zambia is similar to that found in other African countries. With close to 50 percent of the population under age 15 and about 3 percent over age 64, there is one dependent person for each adult in the population. As in many rapidly growing populations, old age dependency is minimal compared to child dependency.

Household Composition

Table 2.3 shows data on households by the sex of the head of household, household size and the mean household size by residence. The table shows that the vast majority of households in Zambia are headed by males (77 percent), with only 23 percent headed by females. This represents a decline in the proportion of male-headed households from 83 percent in 1990 (CSO, 1995). Female-headed households are more common in rural than in urban areas (25 compared to 20 percent).

Figure 2.2
Population Pyramid, Zambia 1996



ZDHS 1996

Table 2.2 Population by age from selected sources

Percent distribution of the de jure population by broad age group, 1969, 1980, 1990, 1992 and 1996, Zambia

Age group	1969 Census	1980 Census	1990 Census	1992 ZDHS	1996 ZDHS
<15	46.4	49.8	46.2	46.7	46.8
15-64	51.3	47.4	51.9	50.6	50.5
65+	2.3	2.8	2.9	2.6	2.7
Missing	0.0	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0
Median age	-	15.3	16.8	16.3	16.4
Dependency ratio	0.95	1.11	0.92	0.98	0.98

Sources: Central Statistical Office, 1985a and 1985b, Central Statistical Office, 1995

Household composition usually affects the allocation of resources (financial, emotional etc.) available to the household members. Financial resources are usually limited in situations where women are heads of households. The well-being of a household's members is also affected by its size. Where the size of the household is large, crowding is likely and can lead to health problems. In the 1996 ZDHS, the average size of households was 5.4 persons, compared to 5.6 in the 1992 ZDHS. Results from the survey further show that the average household size is larger in urban areas than in rural areas (5.7 compared to 5.1 persons). While households with one to six members are common in both rural and urban areas of Zambia, large households

Table 2.3 Household composition

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

Characteristic	Residence		
	Urban	Rural	Total
Household headship			
Male	79.8	75.2	76.9
Female	20.2	24.8	23.1
Number of usual members			
1	4.9	6.7	6.0
2	9.2	10.6	10.1
3	11.4	14.3	13.2
4	12.5	14.6	13.8
5	13.3	14.7	14.1
6	11.4	11.6	11.6
7	11.9	9.9	10.6
8	8.5	6.1	7.0
9+	16.9	11.5	13.5
Total	100.0	100.0	100.0
Mean size	5.7	5.1	5.4
Percent with foster children	25.1	25.1	25.1
Total	100.0	100.0	100.0

Note: Table is based on de jure members, i.e., usual residents.

with nine or more persons are more common in urban than rural areas (17 percent compared to 12 percent).

One-quarter of Zambian households contain a foster child or children, that is, persons under 15 years of age who have neither parent in the household.

Table 2.4 presents data on fosterhood and orphanhood for children under 15 years of age. Household structure has been influenced by the high rates of rural-urban migration experienced by the country over the past two decades, coupled with urban-rural migration in the recent past. Overall, 62 percent of children under age 15 are living with both parents, while 19 percent live with only their mothers, 5 percent live with only their fathers, and 14 percent are "fostered" or not living with either parent. Although parental mortality accounts for only a small proportion of children not living with both parents, it is a factor; 9 percent of children under 15 have a deceased father, 4 percent have a deceased mother, and 2 percent have neither father nor mother. Given the projected population below 15 years in 1996 of 4.2 million (CSO, 1995b), almost half a million are orphans, among whom 307,000 have a mother but no father, 122,000 have a father but no mother, and 63,000 do not have either a father or a mother. As expected, the percentage of children living with both parents decreases with age, mostly because older children are more likely than younger children to live with only their fathers or to be fostered. Almost one-quarter of children age 10-14 live without either parent. Of course, the likelihood that one or the other parent has died is also higher among older children; 14 percent of children age 10-14 have lost their fathers and 8 percent have lost their mothers. Differences in fosterhood and orphanhood by other background characteristics are minimal and may be due to differences in the age distribution of children. The one exception is Western Province, where only 44 percent of children under 15 live with both parents and 30 percent live only with their mothers.

Education

On the eve of independence, Zambia had barely 1,000 Africans with secondary school certificates and only 109 university graduates. Development plans were therefore designed to provide educated and skilled manpower for the civil service and industry. The govemment adopted a policy of achieving universal first level education; one of the major objectives of the Fourth National Development Plan (1989-1993) was to reach this goal of universal primary education by the year 2000.

Zambia's formal education is based on a three-tier system. Under this system, primary education consists of 7 years and secondary education of 5 years (2 years junior secondary and 3 years senior secondary). Graduates of secondary school may then choose to further their education either by attending university for a four-year course leading to a degree or by attending a vocational or technical institute for a two- or three-year certificate/diploma course. The goal is for the nation to meet its manpower requirements in the social, economic and political sectors, as well as achieving national development and modernisation.

Table 2.4 Fosterhood and orphanhood

Percent distribution of de jure children under age 15 by survival status of parents and child's living arrangements, according to selected background characteristics, Zambia 1996

Characteristic	Living with both parents	Living with mother but not father		Living with father but not mother		Not living with either parent				Missing/ Don't know if father/ mother alive	Total	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Father only alive	Mother only alive	Both dead			
Age												
0-2	75.3	18.9	2.5	0.8	0.1	1.6	0.3	0.1	0.0	0.3	100.0	4,157
3-5	66.6	14.6	4.2	2.5	0.8	7.7	1.3	1.2	0.7	0.4	100.0	3,732
6-9	58.9	12.0	5 6	4.0	1.5	10.8	2.0	2.9	1.6	0.7	100.0	4,826
10-14	50.2	9.5	7.4	5.2	2.0	13.3	2.7	4.0	3.0	2.8	100.0	5,596
Sex												
Male	61.6	13.0	5.8	3.5	1.3	8.1	1.7	2.3	1.6	1 0	100.0	9,072
Female	61.4	13.7	4.5	3.1	1.1	9.6	1.7	2.1	1.4	1 4	100.0	9,229
Residence												
Urban	61.6	12.4	6.3	4.3	1.4	7.1	1.7	1.9	2.0	1.2	100.0	7,040
Rural	61.5	13.9	4.4	2.7	1.0	10.0	1.7	2.4	1.2	1.2	100 0	11,271
Province												
Central	60.2	12.2	4.0	4.0	1.2	10.4	1.5	2.7	2.6	1.2	100.0	1,695
Copperbelt	62.4	11.0	6 7	3.9	2.1	8.0	1.7	1.6	1.5	1.1	100.0	3,365
Eastern	68.6	12.3	3 9	1.4	1.0	7.6	1.0	1.7	0.7	1.7	100.0	2,670
Luapula	63.5	13.7	5 8	1.2	0.9	7.5	3.1	1.8	1.3	1.4	100.0	1,612
Lusaka	60 6	13.2	5.9	4.0	1.1	7.6	1.9	2.5	2.1	1.1	100.0	2,637
Northern	64 3	14.0	5.5	1.1	0.8	7.9	1.2	2.3	1.7	1.1	100.0	2,173
North-Western	57.4	14.6	3.1	4.4	0.6	15.2	1.6	1.9	0.9	0.5	100.0	755
Southern	61.0	12.2	3.3	4.2	1.1	10.5	1.7	3.4	1.2	1.4	100.0	2,113
Western	44.4	23.3	6.2	7.6	1.2	11.1	2.1	2.5	1.0	0.7	100.0	1,290
Total	61.5	13.4	5.1	3.3	1.2	8.9	1.7	2.2	1.5	1.2	100.0	18,311

Note: By convention, *foster* children are those who are not living with either parent. This includes *orphans*, i.e., children whose parents are both dead. Total includes a few persons whose sex was not stated.

Tables 2.5.1 and 2.5.2 show the educational level of the female and male household population by selected background characteristics. Three-quarters of females and 82 percent of males have at least some education, while 16 percent of females and 25 percent of males have attended secondary school or higher education. Educational coverage has deteriorated slightly since 1992; the proportion of females with no education increased from 24 percent in 1992 to 25 percent in 1996, while the proportion of males who have never been to school increased from 15 to 18 percent.

There is evidence that the differential in educational attainment by sex is narrowing (Figure 2.3). For example, while among people in their early fifties the proportion of women with no education is about four times the proportion of men with no education (58 compared to 15 percent); among those age 15-19 the difference is considerably smaller (9 percent compared to 7 percent).

For both males and females, the proportion of persons with no education is much higher in rural areas than in urban areas. Rural men are more than twice as likely to have never attended school (24 percent) as urban dwellers (9 percent). Of the provinces, Eastern Province has the highest proportion of both men and women with no education, while Copperbelt Province has the lowest percentage.

Table 2.5.1 Educational level of the female household population

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

Background characteristic	No education	Primary	Secondary	Higher	Don't know/ missing	Total	Number	Median years of schooling
Age[1]								
6-9	53.4	44.6	0.0	0.0	2.0	100.0	2,345	0.0
10-14	12.4	84.5	2.7	0.0	0.3	100.0	2,761	3.6
15-19	8.5	62.3	29.2	0.0	0.0	100.0	2,129	6.7
20-24	11.0	56.6	30.7	1.6	0.1	100.0	1,967	7.1
25-29	12.6	57.2	26.2	4.0	0.0	100.0	1,375	7.2
30-34	13.1	60.1	21.7	5.1	0.0	100.0	1,156	7.0
35-39	13.8	62.5	18.5	5.1	0.0	100.0	811	6.6
40-44	19.9	53.8	19.6	6.5	0.2	100.0	609	6.6
45-49	38.4	53.4	7.3	0.6	0.3	100.0	520	2.2
50-54	58.2	38.8	1.8	0.6	0.6	100.0	549	0.0
55-59	61.6	35.6	1.8	0.7	0.3	100.0	440	0.0
60-64	64.3	33.1	0.8	0.9	0.9	100.0	311	0.0
65+	74.9	21.9	0.0	0.9	2.3	100.0	451	0.0
Residence								
Urban	12.7	57.1	26.4	3.4	0.3	100.0	6,203	6.3
Rural	33.5	59.0	6 5	0.3	0.7	100.0	9,223	2.6
Province								
Central	21.3	62.2	14.1	2.0	0.4	100.0	1,390	4.4
Copperbelt	13.8	59.4	24.5	1.9	0.3	100.0	2,817	5.9
Eastern	43.9	50.1	5.0	0.0	0.9	100.0	2,138	1.0
Luapula	28.8	60.5	10.2	0.4	0.2	100.0	1,356	3.1
Lusaka	15.7	54.6	24.6	4.6	0.4	100.0	2,382	6.1
Northern	28.4	62.4	8.0	0.4	0.7	100.0	1,829	3.2
North-Western	33 2	54.7	11.2	0.3	0.6	100.0	599	2.6
Southern	22.6	64.8	10.9	1.2	0.5	100.0	1,675	4.0
Western	31.5	56.4	10.1	1.2	0.8	100.0	1,241	3.1
Total	25.1	58.2	14.5	1.6	0.5	100.0	15,426	4.0

[1] Excludes one woman with age missing

Table 2.6 presents enrolment rates by age, sex and residence. Six in ten children aged 6-15 years are currently enrolled in school. Enrolment is substantially higher in urban areas than in rural areas. Boys and girls age 6-15 have a virtually equal chance of being enrolled (60 percent compared to 59 percent). Enrolment after age 15 drops substantially; only 33 percent of older teenagers and 6 percent of those in their early twenties are still in school. The proportions are higher in urban areas than in rural areas in all age groups. At age 16 and older, women are much less likely than men to be enrolled in school, presumably due to cultural norms which encourage girls to drop out of school, possibly to get married and start a family. Enrolment rates in 1996 are lower than those in 1992, probably because the data collection period encompassed school holidays (July-August) in which some children were reported as not enrolled in school.

Table 2.5.2 Educational level of the male household population

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

Background characteristic	No education	Primary	Secondary	Higher	Don't know/ missing	Total	Number	Median years of schooling
Age[1]								
6-9	54.1	44.1	0.0	0.0	1.7	100.0	2,383	0.0
10-14	12.5	85.9	1.2	0.0	0.4	100.0	2,702	3.4
15-19	7.2	64.0	28.4	0.1	0.2	100.0	2,045	6.6
20-24	7.1	48.2	42.3	2.0	0.3	100.0	1,740	7.7
25-29	5.8	45.5	42.9	5.5	0.2	100.0	1,329	7.9
30-34	6.2	44.9	41.3	7.5	0.1	100.0	1,072	7.9
35-39	4.8	44.3	40.2	10.7	0.0	100.0	845	8.0
40-44	6.1	43.8	38.2	11.9	0.0	100.0	583	8.0
45-49	9.6	50.6	31.5	7.7	0.5	100.0	438	7.5
50-54	15.3	61.8	15.9	6.3	0.7	100.0	369	5.9
55-59	19.8	65.7	8.7	5.0	0.8	100.0	307	4.4
60-64	31.0	59.5	6.1	2.3	1.1	100.0	345	3.3
65+	38.4	54.5	5.1	0.9	1.1	100.0	567	2.3
Residence								
Urban	9.0	50.6	34.1	5.9	0.4	100.0	6,011	7.3
Rural	23.7	61.5	13.2	0.9	0.6	100.0	8,716	3.9
Province								
Central	16.7	57.0	23.9	2.0	0.5	100.0	1,438	5.5
Copperbelt	9.2	52.8	33.3	4.1	0.6	100.0	2,776	7.1
Eastern	32.8	53.9	11.7	0.5	1.0	100.0	2,075	2.8
Luapula	16.6	67.2	14.9	1.1	0.3	100.0	1,237	4.4
Lusaka	12.3	50.5	29.2	7.6	0.4	100.0	2,354	7.1
Northern	15.6	64.3	18.4	1.0	0.7	100.0	1,717	4.8
North-Western	23.1	58.5	15.3	2.1	0.9	100.0	490	3.9
Southern	18.5	61.9	17.0	2.3	0.3	100.0	1,568	4.9
Western	24.4	57.6	14.9	2.6	0.4	100.0	1,072	4.1
Total	17.7	57.1	21.7	3.0	0.6	100.0	14,727	5.2

[1] Excludes one man with education missing

Table 2.6 School enrolment

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

	Male			Female			Total		
Age group	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6-10	61.2	40.3	48.3	63.2	41.2	49.3	62.2	40.7	48.8
11-15	83.9	67.6	73.9	81.3	63.9	71.2	82.6	65.8	72.5
6-15	71.7	52.8	60.1	72.0	51.2	59.4	71.9	52.0	59.7
16-20	50.6	35.7	42.4	32.9	14.7	23.3	41.3	25.1	32.6
21-24	13.5	5.5	9.2	4.2	1.4	2.6	8.5	3.3	5.7

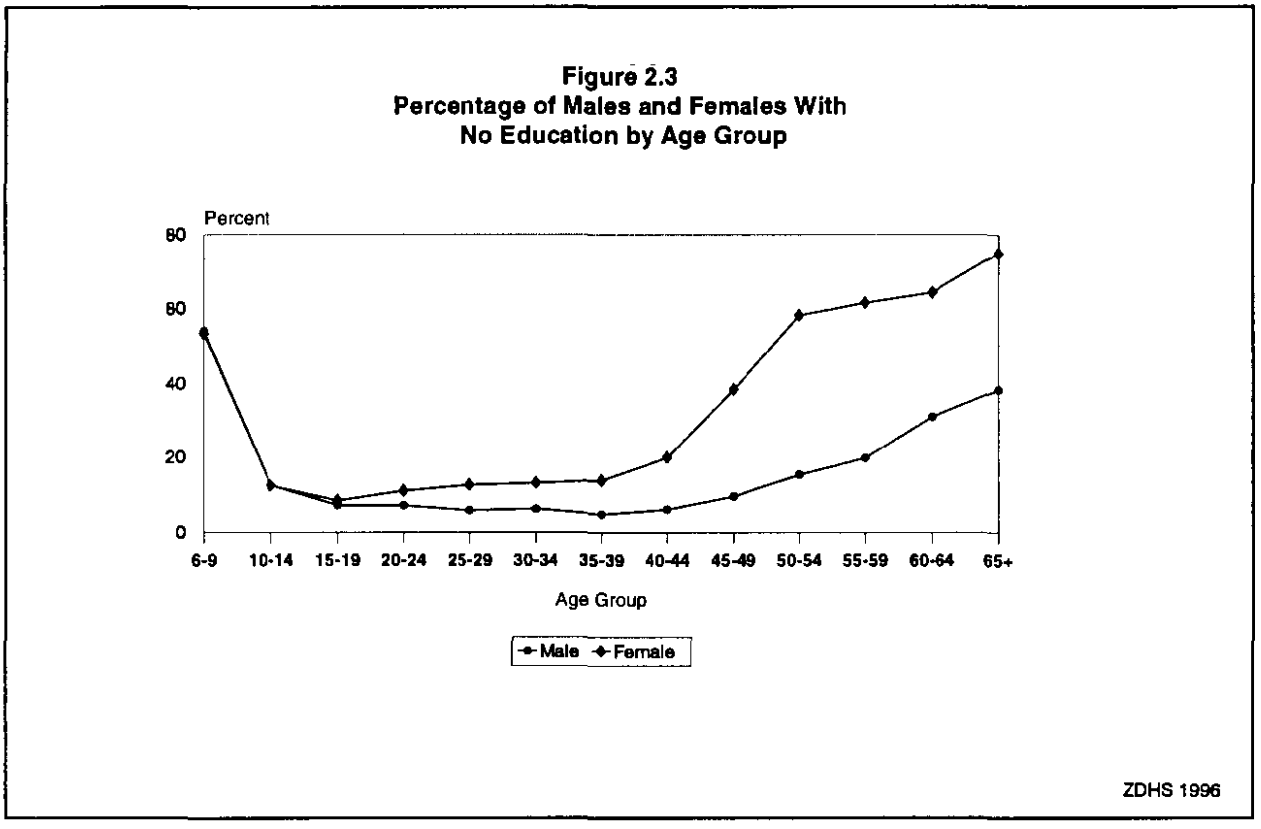


Figure 2.3
Percentage of Males and Females With No Education by Age Group

2.2 Housing Characteristics

Socioeconomic conditions were assessed by asking respondents specific questions relating to their household environment. Table 2.7 presents housing characteristics such as type of drinking water, sanitation facilities, quality of the floor and crowding. This information is important in that it helps determine the health status and reflects wealth and disposable income of the members of the household.

Electricity is available to only 17 percent of the households in Zambia. Moreover, most of those with electricity are urban households (44 percent) compared to 2 percent of rural households.

Sources of drinking water differ considerably by area of residence. In urban areas, piped water is the primary source; 47 percent of households have water piped into the residence and 34 percent obtain water from a public tap. In rural areas, public traditional wells (31 percent), public shallow wells (20 percent), and rivers and streams (22 percent) are the main sources of drinking water. More than half of households are within 15 minutes from their source for drinking water. The proportion of these households is 76 percent in urban areas, compared to 39 percent in rural areas.

Eighteen percent of Zambian households have a flush toilet, 53 percent have traditional pit latrines, and 29 percent have no sanitation facilities at all. Modern sanitation facilities are absent from virtually all rural households. Traditional pit latrines are common in both urban and rural areas (49 percent and 55 percent, respectively).

Table 2.7 Housing characteristics

Percent distribution of households by housing characteristics, according to urban-rural residence, Zambia 1996

Characteristic	Residence		
	Urban	Rural	Total
Electricity			
Yes	44.1	1.5	17.3
No	55.8	98.3	82.5
Missing/Don't know	0.1	0.2	0.2
Total	100.0	100.0	100.0
Source of drinking water			
Piped into residence	46.7	1.7	18.4
Public tap	33.9	5.3	15.9
Well in residence	3.6	3.1	3.3
Public shallow well	2.2	20.1	13.4
Public traditional well	5.1	31.2	21.5
Borehole	4.7	12.5	9.6
Spring	0.2	1.6	1.1
River/stream	0.8	22.3	14.4
Pond/lake	0.3	1.6	1.1
Other	2.4	0.4	1.2
Missing/Don't know	0.2	0.1	0.1
Total	100.0	100.0	100.0
Time to water source (minutes)			
<15 minutes	75.8	39.2	52.7
Median time to source	1.0	20.1	10.8
Sanitation facility			
Own flush toilet	41.2	1.0	15.9
Shared flush toilet	4.4	0.2	1.7
Traditional pit toilet	48.6	55.0	52.6
Ventilated improved pit latrine	0.3	0.4	0.4
No facility/bush	4.8	42.9	28.8
Other	0.3	0.1	0.1
Missing/Don't know	0.4	0.4	0.4
Total	100.0	100.0	100.0
Floor material			
Earth/sand	14.9	88.4	61.1
Wood planks	0.6	0.1	0.3
Parquet/polished wood	1.0	0.0	0.4
Terrazzo tile	3.3	0.1	1.3
Concrete/cement	79.9	11.2	36.7
Other	0.2	0.0	0.1
Missing	0.2	0.2	0.2
Total	100.0	100.0	100.0
Persons per sleeping room			
1-2	56.6	53.4	54.6
3-4	35.9	35.9	35.9
5-6	5.5	7.2	6.6
7+	1.3	3.0	2.4
Missing/Don't know	0.7	0.5	0.6
Total	100.0	100.0	100.0
Mean persons per room	2.7	2.9	2.8
Iodine reading (parts per million)[1]			
Not iodised	9.8	6.6	7.7
Iodised	80.6	76.5	78.1
Not tested/Missing	9.6	16.9	14.2
Total	100.0	100.0	100.0

[1] *Not iodised* includes households in which the respondent reported that the salt was not iodised, or the test indicated that the salt contained less than 25 ppm (no colour change). *Iodised* means that the salt contained 25 or more ppm.

The majority of Zambian households live in residences with earthen (61 percent) floors and 37 percent occupy houses with cement floors. Concrete or cement flooring is most common for urban households (80 percent), whilst earthen floors are most common for rural households (88 percent).

Information was collected on the number of rooms households use for sleeping (a measure of crowding). The majority of households have one or two persons per sleeping room, while in one third of the households, three or four persons share a room for sleeping. Although there are more people per household in urban areas (see Table 2.3), the dwelling units there must consist of more bedrooms, since there is almost no difference between urban and rural households in number of people per sleeping room.

One of the objectives of the 1996 ZDHS was to establish the prevalence of use of iodised salt. For this purpose, the interviewers were given kits developed by UNICEF which allow the identification of the iodine content by the change in the salt colour after the application of a special liquid. The content was measured in five levels, from 0-24, 25-49, 50-74, 75-99, and 100+ parts per million (ppm). However, according to UNICEF recommendation, the change in colour should be considered as an approximation of the iodine concentration and the test is most useful in determining whether the salt contains iodine or not. The salt is considered usefully iodised if it contains a minimum of about 20 ppm of iodine. Data from the 1996 ZDHS show that in 14 percent of households, the test was not conducted, either because the respondent could not provide the salt or because of the interviewer's negligence. In the majority of the households (78 percent), the salt was usefully iodised (25 or more ppm) and in 8 percent of the households either the respondent reported that the salt was not iodised or the test indicated that the iodine content was less than 25 ppm. Urban households are more likely to have iodised salt than rural households.

Household Durable Goods

Respondents were asked about ownership of particular household goods such as radios and televisions (to assess access to media), refrigerators (to assess food storage) and modes of transportation (bicycle, motorcycle, car). Ownership of these items is also indicative of the household's social and economic well-being. The results presented in Table 2.8 indicate that 44 percent of households own a radio (65 percent in urban areas and 31 percent in rural areas) and 17 percent own a television (43 percent in urban areas and 2 percent in rural areas). Seven percent of households own refrigerators (17 percent in urban and 1 percent in rural areas). Thus, televisions and refrigerators are mostly restricted to urban areas, presumably as a result of lack of electricity and/or financial resources in rural areas.

Table 2.8 Household durable goods

Percentage of households possessing various durable consumer goods, according to urban-rural residence, Zambia 1996

	Residence		
Durable good	Urban	Rural	Total
Radio	64.9	31.0	43.5
Television	43.4	2.1	17.4
Refrigerator	16.7	0.5	6.5
Bicycle	14.7	30.5	24.6
Motorcycle	0.9	0.5	0.6
Private car	5.7	0.9	2.7
None of the above	28.1	55.1	45.1
Number of households	2,702	4,584	7,286

Twenty-five percent of the households own a bicycle, while only 3 percent own a car and less than one percent own a motorcycle. Bicycles are the only household possession listed that are more common among rural than urban bouseholds. The proportion of households owning a private car is 6 percent in urban areas and 1 percent in rural areas.

2.3 Background Characteristics of Survey Respondents

General Characteristics

Women were asked two questions in the individual interview to assess their age: "In what month and year were you born?" and "How old were you at your last birthday?" Interviewers were trained to probe 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.

Table 2.9 Age distribution of women 1980, 1990, 1992 and 1996

Percent distribution of women of reproductive age, Zambia 1980, 1990, 1992 and 1996

Age group	1980 Census	1990 Census	1992 ZDHS	1996 ZDHS
15-19	24.6	27.4	28.1	25.0
20-24	20.0	21.5	20.4	22.8
25-29	16.3	16.1	16.7	16.0
30-34	13.3	12.4	13.0	13.5
35-39	10.5	8.5	9.3	9.5
40-44	8.6	7.9	7.2	7.1
45-49	6.7	6.2	5.4	6.2
Total	100.0	100.0	100.0	100.0

Sources: Central Statistical Office, 1995

Table 2.9 presents the age distribution of women in the 1992 and 1996 ZDHS surveys compared with that of women enumerated in the 1980 and 1990 censuses. Although the proportion of all women who are of reproductive age is virtually the same in both cases (44 percent of the female population), the age structure for women 15-49 in the 1996 ZDHS is older than that for women 15-49 in the 1990 census. Specifically, the proportion of women age 15-19 is lower in the 1996 ZDHS than in the 1990 census (25 percent compared with 27 percent). It is not clear whether this difference is real or whether it is the result of some pattern of age misreporting, or high mortality among women in the reproductive ages (15-49).

Table 2.10 reflects the high level of urbanisation in Zambia; 45 percent of women 15-49 and 46 percent of men 15-59 live in urban areas. The data show further that one in five respondents lives in Copperbelt Province, 17 percent in Lusaka Province, and 13 percent in Eastern Province. Northern and Southern Provinces each accounts for 10-11 percent of respondents, while Central, Luapula, and Western Provinces each accounts for about 8 percent of the respondents. North-Western Province has the smallest proportion of respondents (3 percent). The distribution of respondents by urban-rural residence and province differs somewhat from that recorded in 1992, because the sample for the 1996 survey was based on the actual population recorded in the 1990 Census of Population, Housing and Agriculture, while that in the 1992 ZDHS was based on pre-census estimates.

The majority of respondents have had formal schooling. Only 13 percent of women and 7 percent of men have never attended school, more than half have gone to primary school, and more than 25 percent attended secondary or higher education. Nine in ten women and more than eight in ten men are not currently attending school

Data in Table 2.10 show that 25 percent of women 15-49 and 44 percent of men 15-59 in the sample have never been married, 61 percent of women and 51 percent of men are currently married or living together, and 14 percent of women and 5 percent of men are no longer in union. The percentage of women in union declined from 67 percent in 1980 to 63 percent in 1992 and to 61 percent in 1996. One in four respondents reported themselves as Catholics, while seven in ten are Protestants.

Bemba is the largest ethnic group, accounting for 36 percent of respondents. Nineteen percent of respondents belong to the Nyonja group, while 15 percent comprise the Tonja language group. The Northwestern group (comprising Luvale, some Lunda groups, Kaonde, and other smaller tribes in North-Western Province) is the fourth largest group with 9 percent of the respondents. The Baroste language group (including Lozi) comprises about 7 percent of respondents, with Mambwe and Tumbuka accounting for 6 percent each.

Differentials in Characteristics Between Spouses

Table 2.11 shows the age and educational differentials between female respondents and their husbands or partners. On average, husbands are almost 7 years older than their wives. For 80 percent of the couples, both husband and wife have attended formal schooling, while for 16 percent only one of the spouses is educated and for 4 percent of the couples, neither has gone to school.

Differentials in Education

Table 2.12 presents the distribution of respondents by education, according to selected characteristics. Education is inversely related to age; that is, older men and women are generally less educated than younger men and women. For instance, 37 percent of women age 45-49 years have had no formal schooling, compared to only 8 percent of the women age 15-19 years. In the case of men, 10 percent of men aged 45-49 have had no formal schooling, compared to 7 percent of men age 15-19 years.

Rural residents are educationally disadvantaged compared to urban residents. One in five rural women of childbearing age has never been to school, compared to only 6 percent of urban women. The corresponding proportions for men are 10 percent and 3 percent, respectively. Conversely, four times as many urban women have gone beyond the primary level as rural women (46 percent compared to 13 percent). Data in Table 2.12 also indicate that women residing in Copperbelt and Lusaka Provinces are more likely to have received secondary education, followed by women in Central, Southern and North-Western Provinces. The same pattern is found among men age 15-59. The differences by province in the percentage of women and men who have had only primary schooling are minor.

Table 2.10 Background characteristics of respondents

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

Background characteristic	Women			Men		
		Number of women			Number of men	
	Weighted percent	Weighted	Un-weighted	Weighted percent	Weighted	Un-weighted
Age						
15-19	25.0	2,003	1,982	24.9	460	458
20-24	22.8	1,830	1,823	21 8	404	395
25-29	16.0	1,286	1,280	13.8	255	253
30-34	13.5	1,081	1,083	12 2	225	230
35-39	9.5	758	768	9.9	184	186
40-44	7.1	568	569	6 5	121	121
45-49	6.2	494	516	4 5	83	84
50-54	NA	NA	NA	3.5	65	68
55-59	NA	NA	NA	2.8	52	54
Residence						
Urban	44.9	3,604	3,001	46 1	852	698
Rural	55.1	4,417	5,020	53.9	997	1,151
Province						
Central	8 1	653	748	8.5	157	185
Copperbelt	19.8	1,588	1,129	21 4	396	288
Eastern	13 4	1,075	1,118	13.7	254	276
Luapula	9 0	726	896	8.2	151	196
Lusaka	17.5	1,403	1,074	17.1	316	220
Northern	10 9	872	783	12.0	221	205
North-Western	3.6	288	567	2.6	48	94
Southern	10.2	816	846	9.4	173	189
Western	7.5	600	860	7.1	132	196
Education						
No education	13.3	1,067	1,168	6.9	127	138
Primary	58.9	4,721	4,833	50.7	938	990
Secondary	25 0	2,007	1,828	37 1	686	634
Higher	2 8	226	191	5 3	98	87
Don't know/missing	0 0	1	1	0 0	0	0
Currently attending school						
Yes	8 8	703	673	15.1	279	265
No	90.7	7,278	7,310	83 6	1,545	1,562
Missing	0.5	40	38	1 3	25	22
Current marital status						
Never married	25 3	2,032	1,986	44.0	814	796
Married	60.3	4,839	4,888	51.0	943	962
Living together	0 8	63	61	0.1	1	2
Widowed	4.1	327	313	1.1	21	19
Divorced	7 2	574	591	2.1	39	43
Not living together	2.3	184	180	1.7	31	27
Missing	0.0	2	2	0.0	0	0
Religion						
Catholic	24 0	1,927	1,853	24.7	457	452
Protestant	74.4	5,965	6,029	71 6	1,324	1,321
Muslim	0 3	22	18	0.5	8	9
Other	0 3	27	25	0.6	11	12
Missing	0 3	25	25	0 1	3	2
Ethnicity						
Bemba	35.6	2,854	2,670	35.7	660	629
Tonga	15.4	1,232	1,242	14.8	273	286
Northwestern	9 2	737	1,016	8.5	157	204
Baroste	7.5	604	730	6.4	118	149
Nyanja	18 5	1,486	1,389	20.0	370	337
Mambwe	5 7	455	385	5.8	108	94
Tumbuka	5.5	441	396	5.8	107	100
Other	2.3	185	166	2.6	48	43
Don't know/missing	0 3	28	27	0.4	7	7
Total	100.0	8,021	8,021	100.0	1,849	1,849

Table 2.11 Differential characteristics between spouses

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

Differential characteristic	Percent/ Years	Number of couples
Age difference (percent) (husband minus wife)		
Wife older	2.0	16
0-4 years	34.5	283
5-9 years	45.3	372
10-14 years	12.5	103
15 years +	5.8	48
Mean age difference (years)		
1st wife	6.5	805
2nd wife	*	17
All wives	6.6	822
Education (percent)		
Both husband and wife not educated	3.8	31
Wife educated, husband not	3.2	27
Husband educated, wife not	13.2	108
Both husband and wife educated	79.8	656
Total	100.0	822

Note: An asterisk indicates the mean is based on less than 25 couples and has been suppressed.

Access to Media

Men and women were asked if they usually read a newspaper, listen to the radio or watch television at least once a week. This information is important to programme planners seeking to reach men and women with family planning and health messages through the media. Table 2.13 shows that whilst 36 percent of the women and 44 percent of men interviewed listen to the radio daily, 25 percent of women and 45 percent of men read a newspaper on a weekly basis, and 29 percent of women and 38 percent of men watch television at least once a week. There are few variations in media access by age of the respondents, except among the oldest age groups for whom access is more limited. Urban residents are much more likely to have access to mass media than rural residents. Compared to data from the 1992 ZDHS, it appears as if women are reading newspapers and listening to the radio less often and watching television more often; however, comparisons are difficult since the wording of the questions differed.

Employment

Women were asked whether they were employed and if so, how often they worked. Table 2.14 gives this information according to different background characteristics. Overall, 54 percent of women were not working, 21 percent were working all year, 19 percent worked seasonally, and 6 percent worked occasionally. A high proportion of women aged 15-19 (76 percent) and 20-24 (57 percent) were not employed compared to those aged 25 years and older, in part due to their being at school. Over half of the women both in rural and urban areas were not currently employed. Rural women are more likely to have seasonal jobs than urban women; about 30 percent of women in rural areas work seasonally, compared to only 6 percent in urban areas. However, the reverse is true for women working throughout the year. Twenty-nine percent of women in urban areas worked all year, while in rural areas the proportion is only about 9 percent. The reason for this could be that most of the women in rural areas are engaged in farming which is seasonal, while women in urban areas are more likely to be involved in full-time, formal employment or in businesses such as sale of second-hand clothes and vegetables at the market. Women with secondary or higher education are more likely to work all year than women with less education.

Table 2.15 shows data on employed women by type of employment and whether the woman earns cash, according to age, residence, and level of education acquired. Younger women are more likely to be employed by a relative, while women age 25-39 tend to be self-employed and receive cash earnings. Urban women have a better chance of receiving cash payment for their work than rural women; while 95 percent of urban women work for cash, only 73 percent of rural women receive cash for their work. Among women in urban areas, six in ten are self-employed with cash payment, and 29 percent are employed by a non-relative and receive cash payment. In rural areas, the corresponding proportions are 58 percent and 5 percent, respectively.

Table 2.12 Level of education by background characteristics

Percent distribution of respondents by highest level of education attended, according to selected background characteristics, Zambia 1996

Background characteristic	Level of education: No education	Primary	Secondary	Higher	Total	Number of women/ men
WOMEN						
Age						
15-19	8.4	61.6	30.0	0.1	100.0	2,003
20-24	10.9	57.3	29.9	1.9	100.0	1,830
25-29	11.7	57.1	27.0	4.2	100.0	1,286
30-34	13.1	60.6	21.2	5.0	100.0	1,081
35-39	14.1	62.9	17.8	5.2	100.0	758
40-44	20.6	53.5	19.1	6.8	100.0	568
45-49	37.3	54.3	7.8	0.6	100.0	494
Residence						
Urban	5.6	48.1	40.7	5.6	100.0	3,604
Rural	19.6	67.6	12.2	0.6	100.0	4,417
Province						
Central	7.9	61.4	26.8	3.8	100.0	653
Copperbelt	5.8	50.8	40.0	3.4	100.0	1,588
Eastern	32.7	58.4	8.9	0.0	100.0	1,075
Luapula	15.6	66.3	17.4	0.7	100.0	726
Lusaka	7.8	48.1	36.8	7.3	100.0	1,403
Northern	11.8	71.9	15.5	0.8	100.0	872
North-Western	18.5	60.7	20.1	0.7	100.0	288
Southern	10.0	68.5	19.2	2.3	100.0	816
Western	18.6	61.3	18.1	2.0	100.0	600
Total	13.3	58.9	25.0	2.8	100.0	8,021
MEN						
Age						
15-19	6.9	62.7	30.5	0.0	100.0	460
20-24	6.8	50.4	40.9	2.0	100.0	404
25-29	6.2	40.1	46.6	7.1	100.0	255
30-34	8.5	42.7	42.0	6.8	100.0	225
35-39	1.4	44.1	42.5	12.0	100.0	184
40-44	6.5	42.4	36.3	14.9	100.0	121
45-49	9.7	51.7	32.4	6.1	100.0	83
50-54	7.6	60.8	20.0	11.6	100.0	65
55-59	18.2	62.7	11.2	7.9	100.0	52
Residence						
Urban	2.7	34.9	53.2	9.2	100.0	852
Rural	10.4	64.2	23.4	2.0	100.0	997
Province						
Central	7.2	43.5	44.7	4.6	100.0	157
Copperbelt	2.8	37.6	53.7	5.9	100.0	396
Eastern	19.2	58.7	21.3	0.8	100.0	254
Luapula	5.1	64.7	26.6	3.6	100.0	151
Lusaka	5.2	38.1	43.6	13.0	100.0	316
Northern	2.1	64.6	31.2	2.1	100.0	221
North-Western	3.1	63.6	27.5	5 8	100.0	48
Southern	5.6	60.8	32.4	1.2	100.0	173
Western	11.9	56.5	24.7	7.0	100.0	132
Total	6.9	50.7	37.1	5 3	100.0	1,849

Table 2.13 Access to mass media

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

	Women						Men					
		Mass media						Mass media				
Background characteristic	No mass media	Read news-paper weekly	Watch tele-vision weekly	Listen to radio daily	All three media	Number of women	No mass media	Read news-paper weekly	Watch tele-vision weekly	Listen to radio daily	All three media	Number of men
Age												
15-19	47.9	26.5	32.3	34.7	11.7	2,003	39.3	42.1	38.7	34.4	18.2	460
20-24	48.5	24.2	29.5	36.3	11.2	1,830	36.6	42.1	41.4	46.8	24.8	404
25-29	46.5	25.5	30.6	40.7	13.9	1,286	28.8	50.6	38.5	49 5	24.2	255
30-34	44.9	26.1	28.8	41.2	13.3	1,081	32.6	45.7	37.0	46.0	19.0	225
35-39	48.8	24.2	27.2	36.9	11.1	758	29.3	50.1	40.8	51.3	24.6	184
40-44	55.7	24.5	24.7	31.2	11.4	568	29.5	47.3	35.1	52.0	22.2	121
45-49	65.0	13.5	14.2	25.4	4.6	494	31.3	39.4	39.6	52.1	18.5	83
50-54	NA	NA	NA	NA	NA	NA	34.7	48.8	32.3	46.3	24.8	65
55-59	NA	NA	NA	NA	NA	NA	58.9	29.9	8.7	24.3	4.9	52
Residence												
Urban	22.5	40.0	57.5	57.3	24.4	3,604	11.6	65.9	73.4	64.5	43.1	852
Rural	70.8	12.0	5.4	19.2	1.2	4,417	54.7	26.4	7.7	27.1	2.8	997
Province												
Central	47.3	11.4	26.9	39.7	4.4	653	38.2	33.1	27.6	45.5	14.4	157
Copperbelt	22.9	37.8	59.7	56.7	23.6	1,588	9.4	62.0	78.1	64.3	39.7	396
Eastern	67.5	17.8	3.6	19.6	1.0	1,075	35.7	40.8	7.3	41.5	1.9	254
Luapula	71 5	7.6	6.5	22.9	1.5	726	42.2	37.8	14.5	26.6	5.2	151
Lusaka	18.2	48.3	60.3	62.5	31.4	1,403	8.5	72.2	81.2	70.8	55.3	316
Northern	79.5	4.7	5.9	14.4	0.9	872	81.1	6.9	5.1	15.4	1.7	221
North-Western	72.8	12.9	8.2	16.9	1.8	288	53.3	25.6	14.1	34.7	8.3	48
Southern	50.1	31.7	15.7	25.6	5.2	816	58.2	34.0	12.5	18.6	6.5	173
Western	75.4	6.3	8.1	19.5	1.8	600	45.2	39.4	9.4	31.4	5.9	132
Education												
No education	81.1	1.0	6.9	15.2	0.1	1,067	71.1	2.9	8.3	23.5	0.0	127
Primary	56.6	16.6	18.7	30.1	4.8	4,721	46.6	31.0	24.2	33.6	10.4	938
Secondary	19.5	50.1	57.6	57.5	28.6	2,007	16.3	65.0	56.7	58.1	34.9	686
Higher	3.9	77.4	86.2	77.6	58.5	226	4.8	86.8	76.9	78.0	58.9	98
Total	49.1	24.6	28.8	36.3	11.6	8,021	34.8	44.6	38.0	44.4	21.3	1,849

NA = Not applicable

Virtually all women who are currently employed in Copperbelt, Eastern, Lusaka, North-Western and Southern Provinces earn cash, while in Western Province the majority of women who work do not receive cash payment. There is a considerable variation of employment status by the woman's level of education. Nine in ten women with higher than secondary education are employed by a non-relative with cash payment. On the other hand, eight in ten women with no education are self-employed. Among these women, 20 percent did not receive cash earnings.

Table 2.14 Employment

Percent distribution of women by employment status and continuity of employment, according to background characteristics, Zambia 1996

Background characteristic	Not currently employed		Currently employed				Missing	Total	Number
	Did not work in last 12 months	Worked in last 12 months	All year						
			5+ days per week	<5 days per week	Season-ally	Occasion-ally			
Age									
15-19	74.3	1.9	5.7	1.5	11.8	4.7	0.1	100.0	2,003
20-24	54.7	2.6	14.8	3.0	19.1	5.8	0.1	100.0	1,830
25-29	42.9	3.7	23.3	2.6	20.8	6.6	0.1	100.0	1,286
30-34	38.8	2.2	24.4	4.6	22.5	7.4	0.1	100.0	1,081
35-39	38.7	2.4	29.1	2.2	22.2	5.4	0.1	100.0	758
40-44	36.2	1.9	31.2	3.9	22.2	4.5	0.0	100.0	568
45-49	41.8	1.7	18.8	1.5	28.9	7.2	0.0	100.0	494
Residence									
Urban	52.1	3.6	29.4	2.7	5.9	6.2	0.1	100.0	3,604
Rural	51.8	1.5	8.6	2.6	29.9	5.5	0.1	100.0	4,417
Province									
Central	46.4	3.5	20.4	4.0	21.6	4.1	0.1	100.0	653
Copperbelt	57.5	4.3	24.9	3.3	4.0	5.8	0.1	100.0	1,588
Eastern	73.1	0.5	5.7	1.0	17.9	1.6	0.2	100.0	1,075
Luapula	34.5	0.6	9.3	2.1	48.1	5.4	0.0	100.0	726
Lusaka	54.9	3.2	33.4	1.0	3.8	3.8	0.0	100.0	1,403
Northern	34.4	3.7	11.6	4.5	36.2	9.6	0.0	100.0	872
North-Western	25.6	0.2	6.0	2.5	42.8	22.4	0.5	100.0	288
Southern	63.0	1.5	14.4	2.3	9.4	9.2	0.1	100.0	816
Western	42.3	1.1	12.9	4.9	36.3	2.6	0.0	100.0	600
Education									
No education	55.7	1.3	9.1	1.9	28.0	4.0	0.0	100.0	1,067
Primary	51.6	2.5	14.4	2.9	22.0	6.5	0.1	100.0	4,721
Secondary	54.9	2.9	24.5	2.9	8.9	5.9	0.0	100.0	2,007
Higher	15.1	1.8	75.5	0.0	6.4	1.2	0.0	100.0	226
Total[1]	51.9	2.4	18.0	2.7	19.1	5.8	0.1	100.0	8,021

[1] Total includes one woman with missing information on education

Occupation

Tables 2.16.1 and 2.16.2 show data on employed women and men by their current occupation. For those working in agriculture, the data are presented by type of land holding. The agriculture sector accounts for 36 percent of employed women 15-49. Four in ten women are engaged in sales and services, while 10-11 percent of women work in skilled manual jobs.

Table 2.15 Employer and form of earnings

Percent distribution of currently employed women by employer and form of earnings, according to background characteristics, Zambia 1996

Background characteristic	Self-employed		Employed by a non-relative		Employed by a relative		Missing	Total	Number of women
	Earns cash	Does not earn cash	Earns cash	Does not earn cash	Earns cash	Does not earn cash			
Age									
15-19	47.8	12.1	11.9	1.2	16.0	10.9	0.0	100.0	475
20-24	55.3	14.0	15.4	0.8	9.7	4.8	0.1	100.0	780
25-29	63.2	10.2	16.0	0.0	7.5	3.0	0.0	100.0	685
30-34	67.1	8.3	14.7	0.0	6.2	3.8	0.0	100.0	637
35-39	59.7	11.8	17.9	0.8	5.3	4.3	0.2	100.0	447
40-44	54.7	12.7	22.5	0.8	4.5	4.8	0.0	100.0	351
45-49	61.0	19.3	8.2	0.2	6.2	5.1	0.0	100.0	279
Residence									
Urban	60.1	3.1	29.1	0.5	5.9	1.4	0.0	100.0	1,596
Rural	57.7	19.0	4.8	0.5	10.0	7.9	0.0	100.0	2,059
Province									
Central	48.9	23.6	15.3	1.4	8.9	1.9	0.0	100.0	327
Copperbelt	73.0	0.4	21.6	0.2	3.4	1.3	0.0	100.0	604
Eastern	89.3	0.3	5.0	0.0	5.4	0.0	0.0	100.0	283
Luapula	57.6	25.2	3.3	0.4	6.3	7.3	0.0	100.0	471
Lusaka	52.4	0.2	38.3	0.5	6.8	1.8	0.0	100.0	588
Northern	47.1	18.1	5.2	1.1	18.2	10.3	0.0	100.0	540
North-Western	81.8	6.3	4.2	0.0	6.6	0.9	0.2	100.0	212
Southern	67.9	2.9	20 4	0.3	7.8	0.3	0.3	100.0	290
Western	26.6	35.4	8.9	0.6	8.6	19.9	0.0	100.0	340
Education									
No education	59.5	19.5	3.7	0.6	6.4	10.4	0.0	100.0	459
Primary	63.7	14.2	6.6	0.6	9.4	5.4	0.0	100.0	2,161
Secondary	56 5	5.1	28.3	0.4	7.5	2.2	0.1	100.0	847
Higher	10.8	0.4	86.6	0.0	1.8	0.4	0.0	100.0	188
Total[1]	58.8	12.1	15.4	0.5	8.2	5.1	0.0	100.0	3,655

[1] Total includes one woman with missing information on education

Among men, 28 percent are not working, while 36 percent (or half of those who are employed) work in agricultural jobs. A large proportion of men age 15-19 are not working because most of them are in school. Men in their 30s and 40s are more likely to be engaged in professional, technical and management services, while sales and services are popular among women at all ages. As expected, rural respondents are more likely to be employed in agriculture, whilst the majority of urban women and men who are employed are involved in the professional, technical and management sector, the sales and services sector, and skilled manual jobs. One's education is associated with the type of occupation one does; those with no education are more likely to be engaged in agriculture, while women and men with higher than secondary education tend to work in professional, technical and management positions.

Table 2.16.1 Occupation: women

Percent distribution of currently employed women by occupation and type of agricultural land worked or type of non-agricultural employment, according to background characteristics, Zambia 1996

	Agricultural				Non-agricultural							
Background characteristic	Own land	Family land	Rented land	Other's land	Prof. tech./ manag.	Sales/ services	Skilled manual	Unskilled manual	Household and domestic	Missing	Total	Number of women
Age												
15-19	14.4	23.7	0.2	2.1	1.5	44.3	8.0	1.2	4.4	0.2	100.0	475
20-24	20.1	15.9	0.0	2.1	5.6	42.8	8.8	1.7	3.1	0.0	100.0	780
25-29	18.7	9.7	0.6	0.9	9.0	45.2	12.7	0.7	2.4	0.0	100.0	685
30-34	22.2	9.2	0.0	1.2	10.6	42.5	11.8	1.1	1.3	0.1	100.0	637
35-39	22.5	9.6	0.3	1.7	13.1	39.0	8.5	2.1	2.8	0.2	100.0	447
40-44	23.8	8.9	0.3	2.3	16.6	34.0	8.0	2.7	3.4	0.0	100.0	351
45-49	35.3	12.0	0.4	2.3	6.1	33.1	7.9	0.8	2.0	0.0	100.0	279
Residence												
Urban	2.7	1.7	0.1	0.6	17.1	61.1	9.0	2.1	5.7	0.0	100.0	1,596
Rural	35.7	21.5	0.4	2.6	2.0	26.0	10.4	0.9	0.5	0.1	100.0	2,059
Province												
Central	13.7	22.7	1.3	2.8	9.0	41.4	6.8	0.7	1.7	0.0	100.0	327
Copperbelt	2.2	0.4	0.3	0.2	14.2	68.9	8.3	2.5	2.9	0.0	100.0	604
Eastern	33.3	3.3	0.3	0.7	2.3	24.4	32.0	0.7	2.3	0.7	100.0	283
Luapula	57.3	16.2	0.0	1.0	1.7	20.5	1.9	0.9	0.5	0.0	100.0	471
Lusaka	0.7	2.1	0.0	0.8	20.1	55.3	8.6	2.4	10.0	0.0	100.0	588
Northern	26.1	33.4	0.2	1.1	2.8	29.9	6.0	0.2	0.4	0.0	100.0	540
North-Western	49.7	2.7	0.0	1.0	1.6	25.7	17.6	0.5	1.2	0.0	100.0	212
Southern	7.2	2.5	0.3	3.7	9.6	60.6	11.8	2.9	1.1	0.3	100.0	290
Western	24.8	29.9	0.0	6.5	5.6	22.6	9.0	1.0	0.6	0.0	100.0	340
Education												
No education	40.5	17.4	0.4	2.2	0.3	25.6	10.4	1.1	2.0	0.2	100.0	459
Primary	24.7	16.0	0.3	2.0	0.4	43.0	9.6	0.9	3.0	0.1	100.0	2,161
Secondary	6.3	5.2	0.0	1.0	16.3	53.6	11.7	2.8	3.1	0.0	100.0	847
Higher	2.5	0.0	0.0	0.6	88.7	5.4	1.4	1.4	0.0	0.0	100.0	188
Total[1]	21.3	12.8	0.3	1.7	8.6	41.3	9.8	1.4	2.7	0.1	100.0	3,655

Note: The "professional, technical, managerial" category includes professional, technical, clerical and managerial occupations.
[1] Total includes one woman with missing information on education

Decisionmaking On Use of Earnings

Women in employment receiving cash earnings were asked who decides on the use of their earnings. More than half of women reported making the decision themselves, 16 percent involved their husband/partner, and for 21 percent of women the decision was made by their husband/partner (Table 2.17). There is little difference by age in decisionmaking regarding earnings, except that younger women are more likely to have someone other than a husband decide how their earnings are spent, presumably because a lower proportion of younger women are married.

Table 2.16.2 Occupation: men

Percent distribution of men by employment status, occupation and type of agricultural land worked or type of non-agricultural employment, according to background characteristics, Zambia 1996

Background characteristic	Not currently working	Agricultural: Own land	Agricultural: Family land	Agricultural: Rented land	Agricultural: Other's land	Non-agricultural: Prof. tech / manag.	Non-agricultural: Sales/ services	Non-agricultural: Skilled manual	Non-agricultural: Unskilled manual	Non-agricultural: Household and domestic	Non-agricultural: Missing	Total	Number of men
Age													
15-19	70.4	1.4	13.5	0.0	3.4	0.0	5.7	1.4	2.1	2.1	0.0	100.0	460
20-24	28.2	8.5	20.4	0.0	9.7	3.4	15.0	5.8	3.0	5.6	0.4	100.0	404
25-29	9.9	18.9	13.9	0.3	5.2	6.1	17.0	19.5	4.0	5.1	0.0	100.0	255
30-34	7.4	24.0	7.7	0.0	8.3	13.1	13.1	19.3	5.2	2.0	0.0	100.0	225
35-39	6.0	25.5	5.8	0.4	10.6	20.3	10.2	14.8	4.5	1.9	0.0	100.0	184
40-44	4.2	27.6	6.8	0.7	6.6	10.6	20.6	17.2	4.9	0.9	0.0	100.0	121
45-49	7.2	24.8	8.0	0.0	6.8	8.9	12.7	22.0	3.8	5.7	0.0	100.0	83
50-54	10.3	40.3	7.4	0.0	1.0	9.1	7.8	17.0	6.0	1.1	0.0	100.0	65
55-59	14.0	61.3	1.5	0.0	7.8	2.2	7.0	2.1	4.1	0.0	0.0	100.0	52
Residence													
Urban	33.5	1.0	0.8	0.1	3.4	12.1	18.6	19.5	4.6	6.4	0.1	100.0	852
Rural	23.1	29.5	22.2	0.2	9.6	2.1	6.4	3.6	2.8	0.5	0.0	100.0	997
Province													
Central	34.3	11.1	10.9	0.0	6.9	7.2	13.0	8.4	5.7	2.4	0.0	100.0	157
Copperbelt	38.1	1.5	0.3	0.0	3.1	9.0	14.6	23.0	5.3	5.0	0.0	100.0	396
Eastern	13.7	39.7	30.5	0.4	2.5	2.3	6.9	2.8	0.9	0.0	0.4	100.0	254
Luapula	22.5	9.1	27.9	1.0	20.4	6.7	7.3	3.6	1.0	0.5	0.0	100.0	151
Lusaka	30.8	4.1	1.5	0.0	2.6	13.6	18.6	15.5	4.9	8.5	0.0	100.0	316
Northern	25.0	30.5	20.8	0.0	7.9	2.1	7.0	3.8	1.7	1.2	0.0	100.0	221
North-Western	19.5	38.2	0.0	0.0	6.3	4.6	12.1	6.3	10.8	1.0	1.0	100.0	48
Southern	25.2	26.2	13.8	0.0	12.6	1.7	8.9	7.9	1.7	2.0	0.0	100.0	173
Western	27.4	15.5	11.9	0.0	10.3	6.0	15.2	8.0	4.1	1.5	0.0	100.0	132
Education													
No education	19.0	30.7	23.5	0.7	10.6	0.0	7.4	3.6	3.3	1.2	0.0	100.0	127
Primary	26.7	21.0	16.9	0.2	8.6	0.6	10.3	7.8	4.4	3.3	0.2	100.0	938
Secondary	33.4	9.7	5.7	0.0	4.2	9.3	15.0	16.3	2.5	4.0	0.0	100.0	686
Higher	11.8	0.0	1.1	0.0	1.8	55.1	13.6	12.9	3.7	0.0	0.0	100.0	98
Total	27.9	16.4	12.4	0.1	6.7	6.7	12.0	10.9	3.6	3.2	0.1	100.0	1,849

Note: The "professional, technical, managerial" category includes professional, technical, clerical and managerial occupations.

Urban women are more likely than their rural counterparts to have their say in the use of cash they earned. Rural women tend to have their husbands make this decision. Women in the most urbanised parts of the country, Copperbelt and Lusaka Provinces, are most likely to decide for themselves, as are women in Southern Province. In Eastern Province, 47 percent of respondents decide themselves how to spend their earnings, while 45 percent report that their husbands decide. As expected, unmarried women are more likely to make the decision regarding their cash earnings than married women (84 percent compared to 43 percent). Among married women, three in ten say their husbands make the decision, 43 percent make the decision themselves, and 24 percent share the decision with their husbands/partners. The likelihood of making a decision on cash earnings increases with the woman's level of education. The proportion of women who decide for themselves how to spend their cash earnings is 49 percent among women with no education compared to 67 percent for women who have higher than secondary level of education.

Table 2.17 Decisions on use of earnings

Percent distribution of women receiving cash earnings by person who decides on use of earnings, according to background characteristics, Zambia 1996

Background characteristic	Person who decides how earnings are used						Total	Number of women
	Self only	Husband/ partner	Jointly with husband/ partner	Someone else	Jointly with someone	Missing		
Age								
15-19	50.9	15.4	4.7	24.9	4.2	0.0	100.0	360
20-24	52.6	25.8	14.3	5.4	1.6	0.3	100.0	627
25-29	57.2	21.5	17.8	2.1	1.3	0.0	100.0	595
30-34	59.0	21.5	17.8	1.1	0.6	0.0	100.0	560
35-39	59.8	20.1	19.0	0.5	0.6	0.0	100.0	370
40-44	66.9	13.2	18.0	0.0	1.0	0.9	100.0	287
45-49	58.7	24.5	15.8	0.0	1.1	0.0	100.0	210
Residence								
Urban	69.2	10.7	14.9	3.3	1.6	0.3	100.0	1,517
Rural	44.9	31.3	16.2	6.3	1.2	0.0	100.0	1,493
Province								
Central	52.6	30.4	9.5	6.6	1.0	0.0	100.0	239
Copperbelt	65.0	9.4	20.2	1.8	3 2	0.5	100.0	592
Eastern	47.3	45.2	4.4	2.8	0.3	0.0	100.0	282
Luapula	43.9	33.8	17.6	4.1	0.5	0.0	100.0	317
Lusaka	73.0	9.6	11.8	4.1	1.5	0.0	100.0	573
Northern	44.3	28.5	13.3	12.5	1.3	0.0	100.0	381
North-Western	43.9	16.3	37.2	1.5	1.0	0.0	100.0	197
Southern	63.3	14.5	17.1	3.7	1.0	0.5	100.0	278
Western	58.5	20.5	11.7	7.9	0.9	0.5	100.0	150
Education								
No education	49.4	32.0	13.3	4.5	0.8	0.0	100.0	319
Primary	52.7	25.0	15.3	5.6	1.4	0.2	100.0	1,722
Secondary	67.9	11.3	14.3	4.0	2.2	0.3	100.0	781
Higher	67.4	4.8	27.1	0.7	0.0	0.0	100.0	186
Marital status								
Currently married	42.9	32.1	23.9	0.5	0.2	0.2	100.0	1,953
Not married	83.5	0.2	0.0	12.6	3.7	0.0	100.0	1,057
Total[1]	57.2	20.9	15.5	4.8	1.4	0.2	100.0	3,010

[1] Includes one woman with missing information on education

Child Care

Working mothers with children under 5 were asked who took care of their children while they were at work. Table 2.18 shows that six in ten employed women have one or more children below the age of six living with them. Among these respondents who also work away from home, the most common caretaker of the children is the respondent herself, followed by other relatives and female children. The role of the husband or partner and male children in looking after children when the mother is away for work is minimal. This is true in all subgroups of employed women, except in urban areas and Lusaka, where a sizeable proportion of young children are taken care of by servants or hired help. Hired help is also common among children of women who work for someone else, most of whom are employed in the formal sector.

Table 2.18 Child care while working

Percentage of employed women (i.e., worked in the last 12 months) who have a child under six years of age, and the percent distribution of employed mothers who work away from home by person who cares for child while mother is at work, according to background characteristics, Zambia 1996

	Employed women		Child's caretaker, among employed women who work away from home and have children <6 years												
Background characteristic	One or more children <6	Number of women	Respondent	Husband/partner	Other female child	Other male child	Other relative	Neighbor/friend	Servant/hired help	Child is in school/institutional care	Not worked since birth of child	Other	Missing	Total	Number of employed mothers
Residence															
Urban	55.1	1,596	20.0	2.7	20.0	3.0	39.5	1.0	7.3	2.2	1.3	1.2	1.6	100.0	562
Rural	62.2	2,056	48.0	2.7	18.7	5.7	20.2	2.0	0.8	0.0	0.3	0.7	0.9	100.0	870
Province															
Central	62.8	327	28.8	3.9	18.8	4.2	33.8	1.7	3.0	3.3	0.0	1.1	1.4	100.0	136
Copperbelt	55.9	604	18.7	2.1	21.5	5.2	38.5	1.0	2.8	2.1	1.4	2.8	3.8	100.0	193
Eastern	63.7	283	58.4	1.4	11.9	2.7	22.5	0.0	3.1	0.0	0.0	0.0	0.0	100.0	69
Luapula	64.0	471	33.1	1.6	24.1	6.8	29.5	2.7	0.9	0.0	0.6	0.0	0.6	100.0	261
Lusaka	53.4	588	17.6	2.8	12.4	1.3	44.3	1.5	13.7	2.2	1.5	1.3	1.3	100.0	183
Northern	62.7	540	60.8	2.2	17.8	3.1	12.0	1.4	1.3	0.0	0.5	0.9	0.0	100.0	253
North-Western	64.1	212	59.1	0.6	13.8	0.6	24.7	0.6	0.0	0.0	0.0	0.0	0.6	100.0	85
Southern	55.4	290	25.3	8.5	19.7	7.5	31.3	1.4	4.1	0.0	1.4	0.0	0.9	100.0	95
Western	54.8	340	43.1	3.1	24.6	8.8	14.6	2.7	0.9	0.0	0.5	0.4	1.3	100.0	158
Education															
No education	60.1	459	41.7	2.6	30.6	4.2	13.6	2.7	0.0	0.0	1.6	1.4	1.7	100.0	187
Primary	61.2	2,162	43.6	3.1	20.1	5.7	23.3	1.6	0.4	0.2	0.4	1.0	0.6	100.0	867
Secondary	56.3	847	24.3	2.0	11.5	2.1	46.6	1.4	6.6	2.1	0.5	0.5	2.5	100.0	297
Higher	45.0	188	1.7	0.6	11.7	4.4	38.8	0.9	31.5	6.2	3.3	0.0	0.9	100.0	80
Work status															
For family member	55.4	484	45.8	2.7	21.8	4.5	21.9	0.3	1.2	0.0	0.8	0.6	0.3	100.0	202
For someone else	40.7	581	6.6	1.7	12.7	2.3	49.6	2.1	17.0	4.5	1.2	0.6	1.6	100.0	220
Self-employed	63.9	2,589	41.9	2.9	20.2	5.2	24.2	1.8	0.8	0.3	0.6	1.0	1.2	100.0	1,010
Occupation															
Agricultural	65.2	1,319	53.1	1.5	20.3	5.6	16.4	1.8	0.3	0.0	0.4	0.4	0.3	100.0	704
Non-agricultural	55.7	2,334	21.6	3.9	18.2	3.8	38.8	1.5	6.3	1.7	1.0	1.3	1.9	100.0	727
Employment status															
All year, full-time	54.6	1,440	19.2	2.2	20.9	3.5	37.0	2.1	9.2	1.7	1.1	1.1	2.0	100.0	506
All year, part-time	66.2	214	35.1	6.3	15.6	5.7	28.0	2.0	0.0	2.0	0.0	5.4	0.0	100.0	68
Seasonal	63.3	1,532	49.9	1.8	19.5	5.6	19.9	1.5	0.2	0.2	0.5	0.5	0.6	100.0	734
Occasional	55.7	467	35.1	7.8	13.0	3.3	37.1	0.4	0.0	1.1	1.1	0.0	1.1	100.0	123
Total	59.1	3,655	37.0	2.7	19.2	4.7	27.8	1.6	3.3	0.9	0.7	0.9	1.2	100.0	1,432

Note: Totals include one woman with work status missing, two women with occupation missing, and two women with employment status missing. Figures may not add to 100.0 due to rounding.

CHAPTER 3

FERTILITY

Fertility measures presented in this chapter are based on the reported reproductive histories of women in the age range of 15 to 49 years who were interviewed in the ZDHS. Each woman was asked to report the number of sons and daughters she had ever given birth to who were living with her, the number living away, and the number who had died. For each live birth, she was asked to report the name, sex, and date of birth. For living children, the children's ages and whether or not they were living with her were recorded. For deceased children, the age at death was also collected. This information allows for the calculation of completed fertility (number of children ever born) and current fertility.

This chapter also analyses levels of fertility by selected background characteristics of women which include age, residence, and education level. Factors related to fertility, including age at first birth, birth intervals, and teenage childbearing are also analysed.

3.1 Fertility Levels and Trends

Age-specific fertility rates for the three-year period preceding the survey are shown in Table 3.1, along with data from the 1980 and 1990 censuses and the 1992 ZDHS for comparison. The census estimates refer to the single years preceding the censuses (i.e., 1979 and 1989), while the DHS estimates refer to the three-year periods preceding the surveys. The sum of the age-specific fertility rates (known as the total fertility rate) is a useful means of summarising the level of fertility. It can be interpreted as the number of children a woman would have by the end of her childbearing years if she were to pass through those years bearing children at the currently observed rates. If fertility were to remain constant at the levels measured in the 1996 ZDHS, a Zambian woman would bear 6.1 children in her lifetime. This is lower than the rates from the previous sources, implying a decline of about 15 percent over the past 16 years. The pace of the fertility decline is slightly faster during the 1990 to 1996 period (9 percent) than during the 1980-90 period (7 percent).

Figure 3.1 shows that the most of the decline in fertility from 1990 is due to lower age-specific fertility rates for women 30 years and older. At the same time, while the peak of the age-specific fertility rates in 1990 is in the 25-29 age group, in the last two surveys the peak had shifted to age 20-24.

Age-specific fertility rates for the three-year period prior to the survey by urban and rural residence are presented in Table 3.2. In general, women in rural areas have about two more children than those in urban areas (6.9 births compared to 5.1 births). The most significant differences are found in women under age 30. Figure 3.2 shows that in urban areas, age-specific fertility rates peak at age 25-29, while in rural areas the peak is at age 20-24.

Table 3.1 Age-specific fertility rates over time

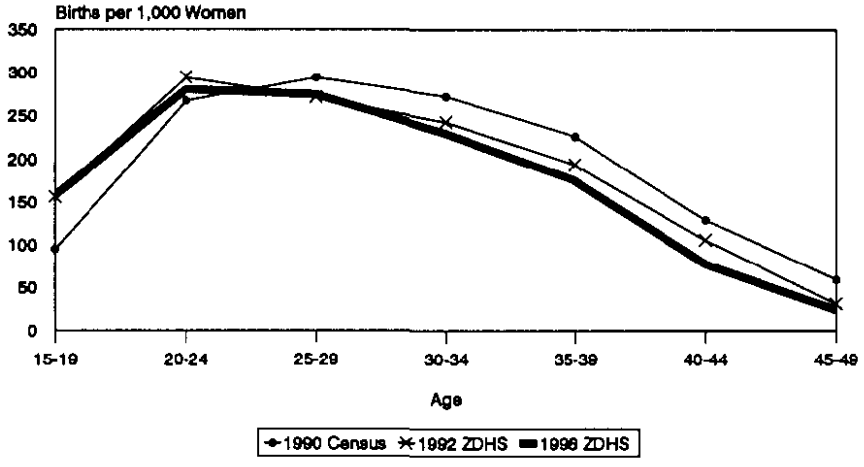
Age-specific fertility rates as adjusted in the 1980 and 1990 censuses and as reported in the 1992 and 1996 ZDHS

Age group	Census 1980	Census 1990	ZDHS 1992	ZDHS 1996
15-19	153	94	156	158
20-24	318	267	294	280
25-29	323	294	271	274
30-34	289	272	242	229
35-39	225	226	194	175
40-44	115	129	105	77
45-49	17	59	31	24
TFR 15-49	7.2	6.7	6.5	6.1

Note: The ZDHS rates refer to the three-year period preceding the surveys. The census figures were estimated using the Gompertz function, and refer to the year preceding the census.

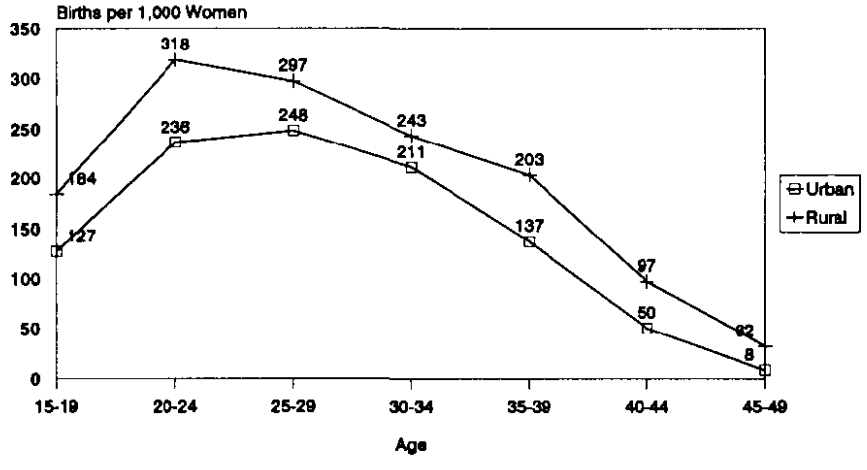
Source: Gaisie et al., 1993; Central Statistical Office, 1995

Figure 3.1
Age-Specific Fertility Rates
Zambia, 1990, 1992 and 1996



ZDHS 1996

Figure 3.2
Age-Specific Fertility Rates
by Residence



ZDHS 1996

Table 3.2 Current fertility rates

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

	Residence		
Age group	Urban	Rural	Total
15-19	127	184	158
20-24	236	318	280
25-29	248	297	274
30-34	211	243	229
35-39	137	203	175
40-44	50	97	77
45-49	8	32	24
TFR 15-49	5.08	6.86	6.08
TFR 15-44	5.04	6.70	5.96
GFR	182	239	213
CBR	43.7	46.1	45.2

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.
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

Differences in fertility according to selected background characteristics of women are shown in Table 3.3. There is considerable variation in fertility among the provinces. The total fertility rate (TFR) is more than 7 births per woman in Northern and Eastern Provinces. On the other hand, the TFR is lowest in Lusaka Province, where women average more than two fewer births than women in Northern and Eastern Provinces (4.9 vs. more than 7 births per woman). Women in Copperbelt and Western Provinces also have relatively low TFR compared to women in other provinces (see Figure 3.3).

Women's level of education appears to have an inverse relationship with their fertility. Women who have had no education have the highest TFR, while those who have completed higher levels of education tend to have fewer children.

The 1996 ZDHS data show that 12 percent of women in reproductive age are currently pregnant. Lusaka Province, which has the lowest TFR, also has the smallest percentage of currently pregnant women (10 percent). Eastern and Central Provinces, on the other hand, have the largest percentage of currently pregnant women (13 percent).

Another measure of trends in fertility is comparing the TFR with the mean number of children ever born to women at the end of their childbearing period, age 40-49. While the total fertility rate is a measure of current fertility, the latter measures past or completed fertility. Overall, women age 40-49 report having given birth to an average of 7.3 children. Comparing this with the TFR of 6.1 is another indication that there has been a decline in fertility of about one child over the last 20 years or so.

Table 3.3 Fertility by background characteristics

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

Background characteristic	Total fertility rate[1]	Percentage currently pregnant[1]	Mean number of children ever born to women age 40-49
Residence			
Urban	5.08	9.9	7.11
Rural	6.86	12.7	7.45
Province			
Central	6.25	13.3	7.24
Copperbelt	5.59	10.9	7.57
Eastern	7.06	13.5	7.49
Luapula	6.83	11.6	7.87
Lusaka	4.87	9.8	6.79
Northern	7.23	11.7	7.91
North-Western	6.23	10.8	7.36
Southern	6.16	12.1	6.84
Western	5.53	9.9	6.70
Education			
No education	6.82	13.2	7.72
Primary	6.66	12.4	7.48
Secondary+	4.53	8.7	6.16
Total	6.08	11.5	7.31

[1] Women age 15-49 years

Table 3.4 shows fertility trends in the four five-year periods before the survey. These data were derived from the respondents' birth histories. Figures in brackets represent partial fertility rates due to "truncation"—the fact that women age 50 years and older were not included in the survey—and the further back into time rates are calculated, the more severe is the truncation. For example, rates cannot be calculated for women in age group 45-49 for the period 5-9 years before the survey because those women would have been age 50-60 at the time of the survey and were not interviewed. The data show that fertility has been declining in all age groups, except at ages 20-24, where fertility remained at the same level in the periods 5-9 and 0-4 years prior to the survey.

Table 3.5 presents fertility rates for ever-married women by duration since first marriage for four five-year periods preceding the survey. The table is similar to Table 3.4 except that it is confined to ever-married women, and the woman's age is replaced by marriage duration at the birth of the child. Data in this table confirm the findings presented in Table 3.4: fertility has declined at all marriage durations.

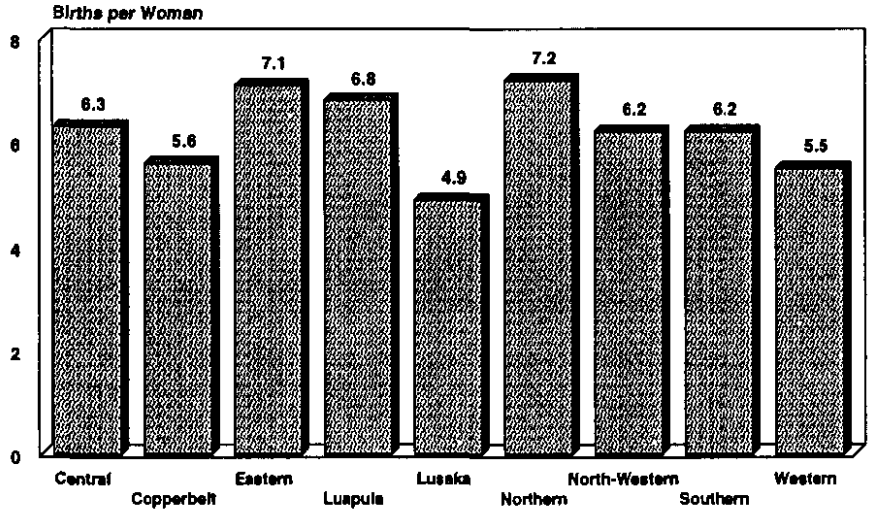
3.2 Children Ever Born

The distribution of women and men in different age categories by the number of children ever born is shown in Table 3.6 for all women and for currently married women, and for all men and currently married men. The mean number of children ever born and the mean number of living children in each five-year age group are also shown in the table.

On average, women have given birth to three children by their late twenties, six children by their late thirties, and almost eight children at the end of their reproductive years. The most significant difference between all women and currently married women is found in the youngest age group, because many women have not been married. Differences at older ages, though minimal, generally reflect the impact of marital dissolution (either divorce or widowhood).

The parity distribution for older, currently married women provides a measure of *primary infertility*—the proportion of women who are unable to have children at all. Voluntary childlessness is rare in Zambia, and married women with no live births are most likely unable to bear children. The ZDHS results suggest that primary infertility is low, with only about one percent of Zambian women unable to bear children. It should be noted that this estimate of primary infertility does not include women who may have had one or more births but who are unable to have more (*secondary infertility*).

Figure 3.3
Total Fertility Rates by Province



ZDHS 1996

Table 3.4 Trends in age-specific fertility rates

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

Woman's age at birth	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
15-19	156	166	179	198
20-24	285	284	303	322
25-29	270	280	304	319
30-34	231	257	277	[292]
35-39	174	188	[269]	-
40-44	76	[137]	-	-
45-49	[26]	-	-	-

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

The distribution of women by number of children ever born shows that one-quarter of women 15-19 have had at least one child, two-thirds of women 30-34 have four or more children, and one in three women 45-49 have ten or more children.

A comparison between currently married women and currently married men shows that for all age groups, men have fewer children than women. This is to be expected, since men marry and have children later than women. However, the gap narrows at older ages (eight children for both women and men age 45-49).

Table 3.5 Trends in fertility by marital duration

Fertility rates for ever-married women by number of years since first marriage, for five-year periods preceding the survey, Zambia 1996

Marriage duration at birth (years)	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
0-4	348	345	356	365
5-9	296	306	319	340
10-14	261	267	297	325
15-19	202	240	295	[282]
20-24	150	189	[243]	-
25-29	67	[113]	-	-

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

3.3 Birth Intervals

Research has shown that children born too close to a previous birth are at increased risk of dying. The risk is particularly high when the interval between births is less than two years. The percent distribution of births in the five years before survey by the number of months since the previous birth is shown in Table 3.7 by demographic and socioeconomic characteristics. First births have been excluded from the table.

The median birth interval is 32 months, 8 months longer than the minimum length considered safe. One in five births in the five-year period preceding the survey occurred less than two years after a previous birth, 45 percent between two to three years, and 36 percent three years or more after a previous birth. The age of the mother and birth order have a direct relationship with the length of the birth interval; younger women tend to have shorter birth intervals than older women. There is no significant variation in birth intervals by the sex of the child or urban-rural residence. As expected, children whose preceding sibling died have a shorter birth interval than those whose older sibling survived (33 months compared to 27 months), presumably because parents are eager to "replace" the child who died.

The median interval between births varies by province, ranging between 31 and 36 months. The interval is significantly higher in Western Province (36 months). Birth intervals also vary by mother's level of education. The median ranges between 32 and 33 months for children whose mothers had up to secondary education; however, for children whose mothers had attended higher education, the interval is 6 months longer (39 months).

3.4 Age at First Birth

The age at which childbearing begins has important demographic consequences for society as well as health consequences for the mother and child. From the demographic point of view, early initiation into childbearing is generally a major determinant of large family size and rapid population growth, particularly in countries where family planning is not widely used. From the health perspective, bearing children at a young age involves substantial risks to the health of both the mother and child. For instance, high maternal mortality rates are associated with frequent births and young and old age of mother. Early childbearing also tends to restrict educational and economic opportunities for women.

The distribution of women by age at first birth and current age is shown in Table 3.8. The majority of women in Zambia become mothers before reaching age 20. Older women started childbearing earlier than younger women, at a median age of 18.2 years among women 45-49 compared to 19.0 years among women 20-24. While about 45 percent of women age 35 years and over had their first child before age 18, the corresponding percentage among women 20-24 years is 35 percent, indicating a trend towards delayed childbearing.

Differentials in age at first birth by background characteristics are shown in Table 3.9. The median age at first birth for women aged 20-49 is 18.7 years. Generally speaking, variation in age at first birth is not pronounced in Zambia, except that urban women have a slightly higher median age at first birth than rural women (19.1 years compared to 18.5 years).

Table 3.6 Children ever born and living

Percent distribution of all women and currently married women age 15-49 and all men and currently married men age 15-59 by number of children ever born (CEB) and mean number ever born and living, according to five-year age groups, Zambia 1996

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															
15-19	76.1	19.8	3.8	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,003	0.28	0.24
20-24	21.2	28.0	28.1	16.2	5.2	1.2	0.1	0.0	0.0	0.0	0.0	100.0	1,830	1.60	1.30
25-29	8.1	14.1	16.4	22.0	20.9	12.7	4.5	1.2	0.0	0.1	0.0	100.0	1,286	2.96	2.44
30-34	3.8	6.8	10.5	12.7	14.0	17.5	16.1	11.9	4.3	1.8	0.5	100.0	1,081	4.46	3.61
35-39	1.4	6.5	6.3	6.6	9.6	11.7	14.5	11.4	13.7	9.8	8.6	100.0	758	5.90	4.86
40-44	1.3	3.4	3.2	5.3	7.4	11.4	12.5	11.4	12.9	12.5	18.6	100.0	568	6.85	5.63
45-49	0.9	2.2	3.2	3.2	5.8	6.7	9.3	10.5	14.2	12.7	31.4	100.0	494	7.84	6.05
Total	26.0	15.5	12.4	10.2	8.2	7.0	5.7	4.3	3.7	2.9	4.1	100.0	8,021	3.04	2.46
CURRENTLY MARRIED WOMEN															
15-19	35.2	51.4	12.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	498	0.79	0.66
20-24	10.5	25.4	33.9	21.4	6.9	1.8	0.1	0.0	0.0	0.0	0.0	100.0	1,207	1.95	1.59
25-29	4.4	9.3	15.8	23.6	24.0	15.7	5.8	1.5	0.0	0.0	0.0	100.0	969	3.31	2.74
30-34	2.6	5.1	8.7	11.6	14.0	18.9	17.4	13.7	5.1	2.2	0.7	100.0	857	4.76	3.88
35-39	0.6	4.9	5.6	5.8	7.8	11.3	13.8	12.5	15.4	12.0	10.2	100.0	586	6.29	5.22
40-44	1.5	1.9	3.3	4.4	5.2	11.3	10.7	11.6	13.6	15.0	21.6	100.0	419	7.23	5.96
45-49	1.1	2.1	3.1	2.6	5.5	5.5	9.0	9.6	12.9	12.9	35.7	100.0	367	8.06	6.28
Total	7.8	15.1	15.4	13.3	10.7	9.6	7.4	5.9	4.9	4.1	5.9	100.0	4,902	4.02	3.28
ALL MEN															
15-19	98.6	1.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	460	0.02	0.01
20-24	68.1	18.1	10.8	2.1	0.6	0.3	0.0	0.0	0.0	0.0	0.0	100.0	404	0.50	0.41
25-29	27.1	22.7	22.2	13.2	10.1	2.2	2.6	0.0	0.0	0.0	0.0	100.0	255	1.73	1.40
30-34	12.2	9.7	14.6	16.6	16.8	14.2	8.3	4.4	2.4	0.4	0.4	100.0	225	3.35	2.69
35-39	2.9	4.1	7.0	14.7	16.1	17.4	15.5	8.5	4.8	2.3	6.7	100.0	184	5.11	4.21
40-44	1.6	4.9	4.6	7.7	10.5	11.4	15.6	12.8	10.5	6.7	13.5	100.0	121	6.23	5.24
45-49	0.9	1.0	2.7	1.0	7.3	11.1	12.6	12.1	12.0	11.4	28.0	100.0	83	7.78	6.22
50-54	0.0	1.0	1.4	3.8	1.2	3.2	8.9	6.6	14.0	11.2	48.7	100.0	65	9.50	7.89
55-59	0.0	0.0	0.0	4.5	2.8	5.1	13.5	5.1	15.7	4.4	48.8	100.0	52	9.72	7.57
Total	45.0	9.4	8.4	6.6	6.3	5.3	5.2	3.1	2.9	1.7	6.0	100.0	1,849	2.64	2.15
CURRENTLY MARRIED MEN															
15-19	*	*	*	*	*	*	*	*	*	*	*	100.0	3	*	*
20-24	15.2	43.9	31.8	6.0	2.1	1.0	0.0	0.0	0.0	0.0	0.0	100.0	115	1.39	1.10
25-29	8.8	24.4	28.5	17.4	14.3	3.3	3.3	0.0	0.0	0.0	0.0	100.0	174	2.27	1.85
30-34	6.1	7.0	15.2	18.3	18.9	15.8	9.9	5.2	2.8	0.4	0.4	100.0	190	3.74	3.01
35-39	0.7	2.2	5.7	16.1	14.8	18.8	16.5	9.3	5.5	2.6	7.7	100.0	161	5.44	4.51
40-44	0.0	4.6	5.0	5.4	10.7	11.6	16.7	13.7	11.3	6.6	14.4	100.0	113	6.47	5.48
45-49	1.0	1.1	1.7	0.0	6.5	9.3	11.8	13.1	13.0	12.3	30.3	100.0	77	8.07	6.38
50-54	0.0	1.1	1.5	4.0	0.0	3.4	7.0	7.1	14.0	12.0	49.9	100.0	61	9.64	7.92
55-59	0.0	0.0	0.0	4.8	3.0	5.5	14.4	5.5	16.8	1.7	48.3	100.0	49	9.73	7.63
Total	5.1	12.4	14.0	11.7	11.2	9.8	9.6	6.1	5.7	3.2	11.3	100.0	944	4.84	3.94

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

Table 3.7 Birth intervals

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

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	14.3	34.5	39.9	9.0	2.4	100.0	24.2	88
20-29	8.2	14.4	48.7	17.8	10.9	100.0	30.4	2,924
30-39	4.4	10.6	41.7	22.2	21 1	100.0	33.8	2,106
40 +	4.9	7 3	32.4	22.1	33.3	100.0	38.5	460
Birth order								
2-3	7.7	13.6	44.9	18.0	15 9	100.0	31.3	2,422
4-6	6 1	12 7	45.6	20.2	15.3	100 0	31.7	2,010
7 +	5.1	10.7	41.9	22.4	19 9	100.0	33.9	1,145
Sex of prior birth								
Male	7.1	13.2	41 7	20.4	17.5	100.0	32 3	2,710
Female	6.1	12.1	47 2	19.0	15.5	100.0	31.6	2,868
Survival of prior birth								
Living	3.5	11 3	47.0	21.1	17.2	100 0	32.7	4,485
Dead	19.5	18 3	34.6	14.1	13 5	100 0	26.7	1,093
Residence								
Urban	6.9	12 9	43.8	19.2	17.2	100 0	32.0	2,165
Rural	6 4	12.6	45.0	20.0	16.1	100.0	31.8	3,413
Province								
Central	7.0	9 9	45 1	20.1	17.8	100 0	32.1	457
Copperbelt	7.4	15.6	45 0	15.9	16.2	100.0	31.0	1,042
Eastern	5.8	12.5	46.2	18 7	16.8	100.0	32.0	885
Luapula	8.3	13.3	46 0	16.5	15.9	100.0	30.8	540
Lusaka	6.4	12.0	43.3	20.8	17.6	100.0	32.2	808
Northern	7 0	15.3	40.2	22 9	14.7	100.0	32.3	684
North-Western	6.1	7.9	46.1	21 5	18.4	100.0	32.5	225
Southern	5.5	12.4	48.9	20 7	12 5	100.0	31.8	607
Western	4.9	7 0	38.6	26.6	22 9	100.0	35.8	329
Education								
No education	6 1	12.3	42 5	20.1	19.1	100 0	32.6	806
Primary	6.7	13 0	46.0	19.1	15 2	100.0	31.5	3,674
Secondary	6 3	12.5	42.7	21.5	17.0	100.0	32.8	1,003
Higher	9.1	6.5	26 1	19.1	39.3	100.0	39.2	94
Total	6.6	12.7	44.5	19.7	16.5	100.0	31.9	5,578

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

3.5 Teenage Fertility

Fertility among teenagers (women under age 20) has received increasing attention from various institutions concerned with their welfare. Table 3.10 shows the percentage of women aged 15-19 years who have become mothers or are pregnant with their first child. The sum of these two percentages represents the proportion of young women who have begun childbearing.

Table 3.8 Age at first birth

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

Current age	Women with no births	Age at first birth <15	15-17	18-19	20-21	22-24	25+	Total	Number of women	Median age at first birth
15-19	76.1	1.5	16.4	5.9	NA	NA	NA	100.0	2,003	a
20-24	21.2	4.5	30.8	28.1	12.4	3.1	NA	100.0	1,830	19.0
25-29	8.1	5.2	30.1	27.0	15.9	10.1	3.4	100.0	1,286	19.0
30-34	3.8	6.1	35.0	23.9	16.2	8.5	6.6	100.0	1,081	18.7
35-39	1.4	8.8	36.9	26.4	14.0	6.8	5.8	100.0	758	18.3
40-44	1.3	7.0	36.6	27.4	14.2	8.8	4.6	100.0	568	18.4
45-49	0.9	10.5	36.9	21.1	15.0	9.0	6.6	100.0	494	18.2

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

Table 3.9 Median age at first birth

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

Background characteristic	Current age 20-24	25-29	30-34	35-39	40-44	45-49	Age 20-49	Age 25-49
Residence								
Urban	19.4	19.6	19.3	18.5	18.8	17.7	19.1	19.0
Rural	18.7	18.6	18.4	18.2	18.2	18.5	18.5	18.4
Province								
Central	19.4	18.9	18.8	(18.3)	(18.5)	(18.6)	18.9	18.7
Copperbelt	19.2	19.2	19.1	18.3	(17.7)	(17.1)	18.7	18.5
Eastern	18.6	18.5	18.1	18.3	19.0	(18.9)	18.5	18.4
Luapula	19.1	18.8	18.0	18.2	(17.8)	(17.8)	18.4	18.2
Lusaka	19.3	19.7	19.7	18.5	(19.3)	(17.9)	19.3	19.3
Northern	18.8	19.2	18.8	(18.2)	(18.9)	(18.8)	18.8	18.8
North-Western	19.0	18.8	18.2	(16.7)	*	*	18.4	18.1
Southern	18.6	18.8	18.0	18.1	(18.2)	*	18.5	18.4
Western	18.8	19.3	19.2	18.8	(18.2)	(18.0)	18.8	18.7
Education								
No education	18.6	18.4	17.9	17.7	18.3	18.5	18.3	18.2
Primary	18.5	18.5	18.2	17.9	18.1	17.9	18.3	18.2
Secondary+	a	20.8	*	*	19.7	*	a	20.4
Total	19.0	19.0	18.7	18.3	18.4	18.2	18.7	18.6

Note: Figures in parentheses are based on 25-49 women, while an asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[a] Omitted because less than 50 percent of the women in the age group *x* to *x+4* have had a birth by age *x*

Table 3.10 Adolescent pregnancy and motherhood

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

Background characteristic	Percentage who are: Mothers	Pregnant with first child	Percentage who have begun child-bearing	Number of women
Age				
15	1.9	2.6	4.5	398
16	10.7	4.6	15.3	419
17	20.3	8.0	28.3	379
18	34.4	11.8	46.1	406
19	52.1	7.4	59.4	401
Residence				
Urban	20.4	6.2	26.6	956
Rural	27.0	7.5	34.4	1,048
Province				
Central	24.3	8.0	32.3	151
Copperbelt	22.9	7.0	29.9	430
Eastern	28.1	6.9	35.0	235
Luapula	16.8	5.8	22.6	196
Lusaka	20.4	8.3	28.6	358
Northern	25.1	6.3	31.4	227
North-Western	30.9	7.2	38.0	58
Southern	27.1	6.4	33.5	195
Western	28.2	4.5	32.7	154
Education				
No education	36.9	11.1	48.1	168
Primary	25.9	7.1	33.1	1,234
Secondary+	15.9	5.2	21.1	601
Total	23.9	6.8	30.7	2,003

Three of ten teenagers in Zambia have either already had a child (24 percent) or are pregnant with their first child (7 percent). Urban and better educated women tend to start childbearing later than rural women and women with less education. There is some variation between provinces. While in most provinces, one in four teenagers has become a mother, the proportion in Luapula is 17 percent and in North-Western almost twice as high (31 percent).

Whereas most teenage women who have begun childbearing have given birth only once, a small proportion have had two births. Table 3.11 shows the distribution of women age 15-19 by number of children ever born. Overall, three in four have not given birth, one in five has had one child, and 4 percent have two or more children.

Table 3.11 Children born to adolescent women

Percent distribution of women 15-19 by number of children ever born (CEB), according to single years of age, Zambia 1996

Age	Number of children ever born			Total	Mean number of CEB	Number of women
	0	1	2+			
15	98.1	1.9	0.0	100.0	0.02	398
16	89.3	10.4	0.3	100.0	0.11	419
17	79.7	19.4	0.9	100.0	0.21	379
18	65.6	30.3	4.1	100.0	0.39	406
19	47.9	36.9	15.1	100.0	0.69	401
Total	76.1	19.8	4.1	100.0	0.28	2,003

CHAPTER 4

FERTILITY REGULATION

4.1 Knowledge of Contraception

Determining the level of knowledge of contraceptive methods and services was a major objective of the Zambia Demographic and Health Survey (ZDHS), since knowledge of specific methods, places where they can be obtained and the general accessibility of the methods and services is a precondition for their use. Information about knowledge of contraceptive methods was collected by asking both women and men to name ways or methods by which a couple or an individual could delay or avoid pregnancy. If the respondent failed to mention a particular method spontaneously, the interviewer described the method and asked if he/she recognised it. Eight modern methods—the pill, IUCD, injectables, implants, vaginal methods (foaming tablets, jelly, sponge, and diaphragm), condom, female sterilisation, and male sterilisation were described as well as two traditional methods—natural family planning (periodic abstinence or the rhythm method) and withdrawal. Any other methods mentioned by the respondent, such as herbs, strings, beads, roots, or breastfeeding, were also recorded.

Data in Table 4.1 indicate that knowledge of any contraceptive method among women age 15-49 and men age 15-59 is almost universal; only 4 percent of women and men reported that they did not know any method of family planning. Except for condom, male sterilisation, and natural family planning, knowledge of individual methods is slightly higher among women than men. It is also higher among currently married women and men than among all women and men. Since it is currently married women and men who are at greatest risk of pregnancy, this chapter focuses primarily on them.

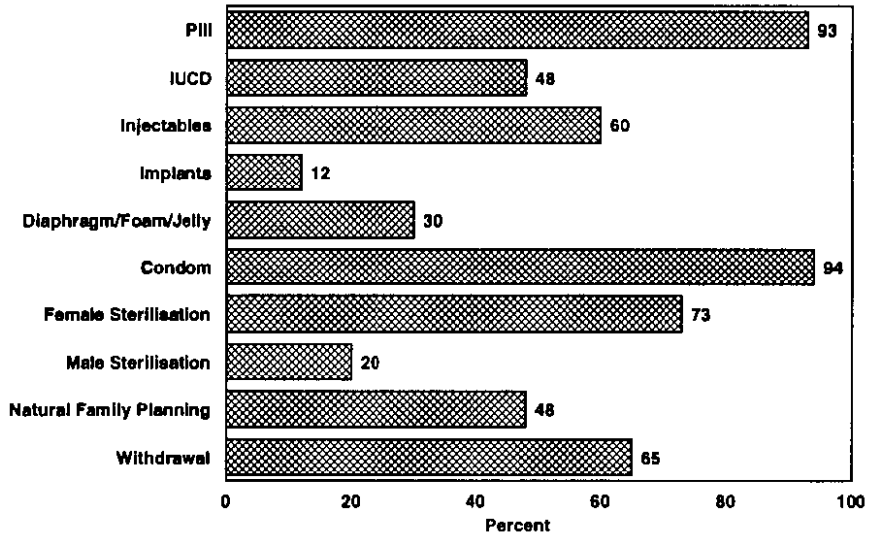
Table 4.1 Knowledge of contraceptive methods

Percentage of all women 15-49, of currently married women, of sexually active unmarried women, and of women with no sexual experience, and the percentage of all men 15-59, of currently married men, and of sexually active unmarried men who know specific contraceptive methods, by specific methods, Zambia 1996

	Women who know method				Men who know method		
Contraceptive method	All women	Currently married women	Sexually active unmarried women	No sexual experience	All men	Currently married men	Sexually active unmarried men
Any method	95.8	98.4	96.9	80.7	96.2	99.0	99.2
Any modern method	95.1	97.7	96.6	80.3	96.0	98.6	99.0
Pill	86.4	92.6	84.5	52.2	75.0	88.9	71.1
IUCD	42.4	47.9	41.0	13.1	27.5	33.8	24.2
Injectables	53.2	60.1	47.4	20.0	46.0	54.3	43.5
Implants	10.3	11.5	10.6	3.3	8.8	11.7	9.0
Diaphragm/foam/jelly	26.2	29.9	27.8	7.8	22.8	25.6	23.1
Condom	91.5	93.8	93.3	77.1	95.3	97.6	99.0
Female sterilisation	66.1	72.9	59.1	31.7	63.5	75.2	58.4
Male sterilisation	18.4	20.3	15.4	7.8	27.2	31.9	25.9
Any traditional method	64.8	74.6	59.4	21.6	70.7	83.6	67.2
Natural family planning	43.8	48.2	43.9	18.5	60.3	70.7	58.9
Withdrawal	53.8	64.9	47.5	6.7	53.6	68.5	45.7
Other	38.2	47.2	32.0	5.1	22.1	35.8	11.0
Number of women/men	8,021	4,902	492	944	1,849	944	303
Mean number of methods	5.3	5.9	5.0	2.4	5.0	5.9	4.7

In general, women and men are more knowledgable about modern contraceptives than about traditional methods. Three in four married women and four in five married men indicated that they have some knowledge about a traditional method. The most widely known methods by both women and men are the pill and condoms, known by about 90 percent or more of married women and men, female sterilisation, known by more than seven in ten women and men, and injectables, known by 60 percent of married women and 54 percent of married men (see Figure 4.1). The IUCD is known by about half of married women and one-third of married men. Much less widely known among the modern methods are diaphragm/foam jelly (known by 30 percent of married women and 26 percent of married men) and male sterilisation, known by one-fifth of women and one-third of men. The least known method is implants (12 percent). Men are more likely to know about traditional methods than women; knowledge of withdrawal is 65 percent among married women and 69 percent among married men, while 48 percent of women and 71 percent of men know about natural family planning. Knowledge of many methods—the condom in particular—is almost as high among sexually active unmarried people as among married women and men.

Figure 4.1
Percentage of Currently Married Women Who Know Specific Contraceptive Methods



ZDHS 1996

Knowledge of contraceptive methods among women has increased over time. The proportion of all women who know at least one method has increased from 89 percent in 1992 to 96 percent in 1996, while the proportion of currently married women who know a method has increased from 94 to 98 over the same time frame. Knowledge of some specific methods shows a more dramatic increase. For example, knowledge of injectables increased from 43 percent of married women in 1992 to 60 percent in 1996 and knowledge of condoms increased from 73 to 94 percent of married women over the same period (Gaisie et al., 1993:37).

4.2 Knowledge of Methods by Couples

Because the ZDHS involved interviewing men living in a subsample of the households in which individual women were interviewed, it is possible to match women and men who were married or living together. Table 4.2 shows the distribution of these 822 couples according to the correspondence between husbands and wives about contraceptive knowledge. In 72 percent of the couples, both the husband and wife know at least one method of contraception; in 16 percent of couples, only the husband knows a method, in 10 percent, only the wife knows a method; and in 2 percent, neither the wife nor the husband knows a method of contraception. The pill and condom are commonly known among couples (85 percent or more) as opposed to implant, diaphragm/foam/jelly and male sterilisation (11 percent or less). Injectables and the IUCD are more commonly known to wives than their husbands, while male sterilisation and natural family planning are more known among husbands than their wives.

Table 4.2 Knowledge of contraceptive methods among couples

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

Contraceptive method	Both know method	Only husband knows method	Only wife knows method	Neither knows method	Total
Any method	71.7	16.1	9.6	2.5	100.0
Any modern method	96.9	2.0	0.8	0.2	100.0
Pill	84.9	5.5	8.0	1.6	100.0
IUCD	23.7	10.2	24.9	41.2	100.0
Injectables	35.2	18.7	25.4	20.7	100.0
Implants	2.6	9.1	9.5	78.8	100.0
Diaphragm/Foam/Jelly	10.8	14.9	19.3	55.0	100.0
Condom	93.5	4.6	1.5	0.5	100.0
Female sterilisation	58.3	18.2	15.4	8.1	100.0
Male sterilisation	8.4	23.3	11.1	57.2	100.0
Any traditional method	71.7	16.1	9.6	2.5	100.0
Natural family planning	37.6	33.2	10.5	18.8	100.0
Other	8.7	8.6	9.6	73.1	100.0

Note: Figures are based on 822 couples.

4.3 Ever Use of Contraception

All women and men interviewed in the ZDHS who said that they had heard of a method of family planning were asked if they had ever used it. The results are presented in Table 4.3.1 for women and Table 4.3.2 for men.

Overall, 49 percent of Zambian women of reproductive age have used a method of family planning at some time. This compares with 58 percent of men age 15-59. The majority of these women and men have used a modern method (33 percent of women and 46 percent of men).

The proportions are higher for currently married women, 59 percent of whom have ever used a modern method of family planning. Among these women, the pill was the most widely used method (26 percent), followed by condom (19 percent). A large proportion of married women have used traditional family planning methods, including natural family planning (13 percent), withdrawal (26 percent), and other methods (16 percent). Forty percent of sexually active unmarried women have used a modern method, and 23 percent have used a traditional method.

Table 4.3.1 Ever use of contraception: women

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

		Modern method									Traditional method				
Age	Any method	Any modern method	Pill	IUCD	Injectables	Implant	Diaphragm/ Foam/ Jelly	Condom	Female sterili-sation	Male sterili-sation	Any traditional method	Natural family planning	With-drawal	Other methods	Number of women
ALL WOMEN															
15-19	18.9	13.7	2.6	0.0	0.1	0.0	0.2	11.7	0.0	0.0	8.3	3.5	4.6	2.8	2,003
20-24	51.7	36.3	18.9	0.3	0.8	0.0	0.5	24.9	0.0	0.1	28.6	10.4	19.8	8.5	1,830
25-29	63.7	45.6	31.6	0.9	2.1	0.0	2.1	25.9	0.2	0.0	38.2	16.1	25.7	12.5	1,286
30-34	63.8	41.7	32.1	2.2	2.2	0.0	3.9	17.2	1.1	0.0	40.2	16.2	29.2	17.0	1,081
35-39	61.6	37.3	29.5	2.8	3.6	0.1	3.3	12.8	2.8	0.3	37.8	13.8	27.0	19.6	758
40-44	65.3	41.6	33.2	6.3	5.5	0.2	2.8	7.1	8.5	0.2	35.9	13.7	23.0	24.0	568
45-49	51.2	24.1	18.9	1.6	2.9	0.0	2.1	3.7	5.6	0.0	31.1	9.2	21.2	22.2	494
Total	48.9	32.6	20.7	1.3	1.8	0.0	1.6	17.0	1.4	0.1	28.2	10.8	19.2	11.8	8,021
CURRENTLY MARRIED WOMEN															
15-19	38.2	25.8	6.5	0.0	0.3	0.0	0.4	20.8	0.0	0.0	19.6	4.3	13.9	7.8	498
20-24	58.3	40.6	22.7	0.2	0.8	0.0	0.7	27.0	0.0	0.1	33.6	10.5	24.3	10.4	1,207
25-29	64.3	45.0	32.8	1.0	2.4	0.0	1.6	24.5	0.2	0.0	40.7	15.6	28.4	13.5	969
30-34	66.2	42.5	33.0	2.2	1.8	0.0	3.9	16.4	1.4	0.0	43.0	16.8	31.8	18.8	857
35-39	63.1	37.4	29.5	2.7	3.8	0.1	3.6	11.5	3.6	0.4	39.7	14.3	28.5	19.6	586
40-44	65.1	39.6	30.8	6.1	5.5	0.0	2.8	5.7	10.1	0.3	34.7	12.1	22.5	27.6	419
45-49	51.0	23.3	17.8	1.0	2.0	0.0	2.0	3.1	6.2	0.0	31.4	9.5	21.8	22.9	367
Total	59.4	38.5	26.0	1.5	2.1	0.0	2.0	18.6	2.0	0.1	35.9	12.5	25.5	15.7	4,902
SEXUALLY ACTIVE UNMARRIED WOMEN															
Total	51.1	40.0	18.8	1.5	2.3	0.0	2.9	29.5	0.0	0.0	23.3	11.8	13.2	8.2	492

Table 4.3.2 Ever use of contraception: men

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

		Modern method								Traditional method				
Age	Any method	Any modern method	Pill	IUCD	Injectables	Diaphragm/ Foam/ Jelly	Condom	Female sterili-sation	Male sterili-sation	Any traditional method	Natural family planning	With-drawal	Other methods	Number of men
ALL MEN														
15-19	26.2	23.9	1.2	0.4	0.0	0.0	23.9	0.0	0.0	8.5	4.8	4.9	0.8	460
20-24	61.3	54.8	8.5	0.0	0.2	1.4	51.5	0.2	0.0	28.4	19.3	11.4	4.4	404
25-29	73.6	60.9	18.7	0.6	0.9	1.5	57.3	0.3	0.5	48.4	27.2	28.6	8.0	255
30-34	72.6	51.6	25.0	1.3	0.8	1.2	45.4	1.0	0.0	46.6	33.7	30.4	10.6	225
35-39	76.6	58.9	36.6	0.7	2.9	5.8	42.9	1.9	0.0	54.7	37.4	33.8	13.2	184
40-44	73.2	51.3	33.6	1.1	3.4	5.7	29.5	2.0	0.0	49.4	35.3	32.9	16.7	121
45-49	72.5	42.8	27.0	5.2	0.0	1.8	18.9	5.4	0.0	52.5	29.4	35.6	16.8	83
50-54	66.8	38.0	24.4	4.2	2.0	0.0	11.9	5.2	0.0	47.0	30.0	20.9	23.7	65
55-59	45.2	16.0	10.7	0.0	0.0	0.0	6.8	1.6	0.0	37.3	28.6	9.6	15.5	52
Total	58.2	45.5	16.0	0.9	0.9	1.7	38.3	1.0	0.1	34.4	22.5	19.5	8.0	1,849
CURRENTLY MARRIED MEN														
15-19	*	*	*	*	*	*	*	*	*	*	*	*	*	3
20-24	69.4	58.9	17.0	0.0	0.0	1.3	52.3	0.0	0.0	40.3	24.4	19.6	7.4	115
25-29	77.7	61.8	21.5	0.0	1.0	0.0	56.9	0.0	0.0	52.3	27.1	33.0	10.4	174
30-34	74.2	52.7	27.1	1.6	1.0	0.7	46.0	0.8	0.0	49.0	34.4	32.5	12.1	190
35-39	76.2	56.7	37.1	0.8	3.3	5.3	39.5	2.2	0.0	53.3	35.0	34.2	13.7	161
40-44	75.0	52.1	35.3	1.2	3.6	6.1	29.5	2.1	0.0	51.5	37.7	34.5	17.2	113
45-49	73.6	43.3	29.2	3.7	0.0	1.9	19.2	5.8	0.0	53.1	31.0	36.7	16.3	77
50-54	65.4	35.9	21.4	4.5	2.2	0.0	12.7	5.6	0.0	44.3	28.6	18.7	23.2	61
55-59	44.5	17.1	11.4	0.0	0.0	0.0	7.3	1.7	0.0	36.0	26.7	10.3	12.7	49
Total	72.5	52.1	26.4	1.2	1.5	2.1	39.4	1.7	0.0	48.8	31.2	29.7	13.2	944
SEXUALLY ACTIVE UNMARRIED MEN														
Total	70.3	66.3	8.8	1.1	0.0	2.7	64.0	0.5	0.0	26.6	17.6	12.3	3.9	303

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

Among married men, 39 percent have ever used condoms, 26 percent reported having a partner who used the pill, and 49 percent have used a traditional method. Seven in ten sexually active unmarried men have used a method of family planning. The most commonly used method among this group is condom (64 percent), followed by natural family planning (18 percent) and withdrawal (12 percent).

Trends in levels of ever use among women can be obtained by comparing the 1992 and 1996 ZDHS surveys. In 1992, 49 percent of married women said they had used a method of family planning at some time; by 1996, this figure had increased to 59 percent. Since the 1992 survey did not interview men, there are no comparable trends for men.

4.4 Current Use of Contraception

The level of current use of contraception is the most widely used and valuable measure of the success of a family planning programme. Furthermore, it can be used to estimate the reduction in fertility attributable to contraceptive use.

Current use of contraception is shown in Tables 4.4.1 and 4.4.2 for women and men, respectively. Although 98 percent of married women in Zambia have heard of family planning and nearly 60 percent have used a family planning method, only 26 percent reported that they were using a method at the time of the survey. Fourteen percent of married women are using modern methods, while 12 percent are using traditional methods. The most popular contraceptive methods are the pill (7 percent), withdrawal (5 percent), and condom (4 percent) (see Figure 4.2). Nineteen percent of all women interviewed and 24 percent of sexually active unmarried women are using some method of contraception.

Contraceptive use among men is more widespread than among women. Overall, 37 percent of married men are currently using a family planning method. The majority of these men use modern contraception, mainly the pill (11 percent) and condoms (8 percent). The latter method is by far the most widely used method among sexually active unmarried men (36 percent).

An inverted U-shaped pattern of prevalence by age is observed for all women and men and those who are currently married. Use is lower among younger persons, who tend to be in an early stage of family building, and among older persons, some of whom are no longer fecund and/or sexually active. The mix of methods used also varies according to the person's age. As expected, younger women are more likely to use non-permanent methods such as condoms, while older women tend to use permanent methods such as female sterilisation.

Almost one in four unmarried sexually active women uses some family planning method; 18 percent are using modern methods and 6 percent traditional methods. Sexually active unmarried men are more likely to use contraception than women. Four in ten of these men use modern methods, most often condoms (36 percent).

There has been a marked increase in contraceptive use since 1992. The contraceptive prevalence rate has increased from 15 to 26 percent of married women, a rise of 70 percent in 4 years (see Table 4.5). Most of the increase is the result of increased use of the pill and condoms; use of the pill jumped from 4 to 7 percent of married women, while use of condoms increased from 2 to 4 percent of married women.

Table 4.4.1 Current use of contraception: women

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

		Modern method								Traditional method						
Age	Any method	Any modern method	Pill	IUCD	Injectables	Diaphragm/ Foam/ Jelly	Condom	Female sterili-sation	Male sterili-sation	Any traditional method	Natural family planning	With-drawal	Other	Not currently using	Total	Number of women
ALL WOMEN																
15-19	7.4	4.7	1.1	0.0	0.1	0.1	3.5	0.0	0.0	2.7	0.3	1.0	1.4	92.6	100.0	2,003
20-24	20.3	12.3	6.4	0.1	0.7	0.0	5.1	0.0	0.0	8.0	1.7	2.8	3.5	79.7	100.0	1,830
25-29	25.7	15.5	9.1	0.4	1.2	0.0	4.6	0.2	0.0	10.2	1.8	4.0	4.4	74.3	100.0	1,286
30-34	24.4	12.7	7.7	0.1	1.1	0.3	2.5	1.1	0.0	11.7	2.1	5.0	4.6	75.6	100.0	1,081
35-39	26.6	15.2	6.7	1.0	1.3	0.0	3.2	2.8	0.3	11.3	2.1	4.1	5.1	73.4	100.0	758
40-44	26.0	15.8	3.2	1.6	1.6	0.0	1.1	8.5	0.0	10.2	3.5	2.4	4.4	74.0	100.0	568
45-49	15.2	8.0	1.6	0.5	0.0	0.0	0.2	5.6	0.0	7.2	1.0	1.6	4.7	84.8	100.0	494
Total	19.2	11.2	5.2	0.3	0.7	0.1	3.5	1.4	0.0	7.9	1.5	2.9	3.5	80.8	100.0	8,021
CURRENTLY MARRIED WOMEN																
15-19	16.9	8.8	2.8	0.0	0.3	0.0	5.7	0.0	0.0	8.1	0.0	4.0	4.1	83.1	100.0	498
20-24	24.6	14.7	8.7	0.1	0.7	0.0	5.1	0.0	0.0	10.0	1.7	3.7	4.6	75.4	100.0	1,207
25-29	28.3	16.0	10.2	0.6	1.4	0.0	3.7	0.2	0.0	12.3	1.8	5.2	5.4	71.7	100.0	969
30-34	27.9	14.2	8.7	0.1	0.9	0.4	2.7	1.4	0.0	13.8	2.3	6.1	5.4	72.1	100.0	857
35-39	31.2	17.2	7.2	1.0	1.7	0.0	3.3	3.6	0.4	14.0	2.7	5.4	5.9	68.8	100.0	586
40-44	30.0	18.1	3.6	1.5	2.1	0.0	0.8	10.1	0.0	11.9	3.5	2.9	5.5	70.0	100.0	419
45-49	17.8	8.5	1.6	0.4	0.0	0.0	0.3	6.2	0.0	9.3	1.3	2.1	5.9	82.2	100.0	367
Total	25.9	14.4	7.2	0.4	1.0	0.1	3.5	2.0	0.0	11.5	1.9	4.5	5.2	74.1	100.0	4,902
SEXUALLY ACTIVE UNMARRIED WOMEN																
Total	24.0	17.9	5.1	0.0	0.8	0.3	11.6	0.0	0.0	6.1	3.9	1.1	1.1	76.0	100.0	492

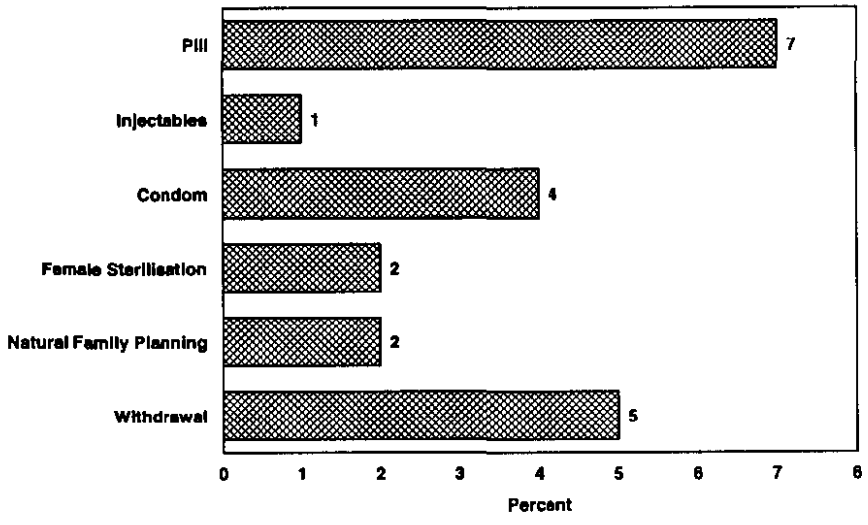
Table 4.4.2 Current use of contraception: men

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

		Modern method								Traditional method						
Age	Any method	Any modern method	Pill	IUCD	Injectables	Diaphragm/ Foam/ Jelly	Condom	Female sterili-sation	Male sterili-sation	Any traditional method	Natural family planning	With-drawal	Other	Not currently using	Total	Number of men
ALL MEN																
15-19	13.9	12.2	0.0	0.0	0.0	0.0	12.2	0.0	0 0	1.7	1 0	0 7	0.0	86.1	100.0	460
20-24	30.4	23 6	2.5	0.0	0.0	0 3	20.8	0.0	0.0	6.8	3 4	1.8	1 6	69.6	100.0	404
25-29	38.7	24 7	10.5	0 0	0.0	0.0	13.7	0.0	0.5	14.0	6.2	4.8	3.0	61.3	100.0	255
30-34	38.9	22.5	10.9	0.7	0.5	0 0	10.5	0.0	0.0	16.4	7.4	4.5	4.5	61.1	100.0	225
35-39	37.9	25.7	14.0	0.0	0.7	0.8	8.6	1.5	0.0	12.2	5.8	2.7	3.7	62.1	100.0	184
40-44	40.7	26.0	15.7	1.1	1.2	0.0	6.0	2.0	0.0	14 7	8.2	2.3	4.2	59.3	100.0	121
45-49	41.3	25.0	10.2	3.4	0 0	0.0	6.0	5.4	0.0	16.3	3.8	7.9	4.6	58.7	100.0	83
50-54	24.4	12.8	4.0	0.0	0.0	0.0	3.6	5.2	0.0	11.6	3.4	1.1	7.0	75.6	100.0	65
55-59	13.4	3.3	1.7	0.0	0.0	0.0	1.6	0.0	0 0	10.1	7.1	0.9	2.1	86.6	100.0	52
Total	29.7	20.2	6.4	0.3	0.2	0 2	12.4	0.7	0.1	9.4	4.3	2.6	2 5	70.3	100.0	1,849
CURRENTLY MARRIED MEN																
15-19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	100.0	3
20-24	29.7	13.5	2.3	0.0	0.0	0.0	11.2	0 0	0.0	16.2	6.7	5 1	4.4	70.3	100.0	115
25-29	40.8	20 7	13.3	0.0	0.0	0 0	7.5	0 0	0.0	20.1	8.6	7.0	4.4	59.2	100.0	174
30-34	41.6	23.0	11 5	0.8	0.6	0.0	10.2	0.0	0.0	18.6	8.0	5.3	5 3	58.4	100.0	190
35-39	38.0	26 6	15.3	0.0	0.8	0 9	7.8	1.8	0.0	11.4	4.9	3.1	3.3	62.0	100.0	161
40-44	42.9	27.2	16.8	1.2	1.3	0.0	5 7	2.1	0.0	15 7	8.7	2.4	4.5	57.1	100.0	113
45-49	42.8	25.1	11.1	1.7	0.0	0.0	6.5	5.8	0.0	17.7	4.1	8.6	5.0	57.2	100.0	77
50-54	26.1	13.7	4.3	0.0	0 0	0.0	3.8	5.6	0.0	12.4	3.7	1 2	7.5	73.9	100.0	61
55-59	14.3	3.5	1.8	0.0	0 0	0.0	1.7	0 0	0.0	10.8	7.5	1.0	2.2	85.7	100.0	49
Total	37 1	21.0	10.9	0.4	0.4	0.2	7.7	1 4	0.0	16.1	6.9	4.7	4.5	62.9	100.0	944
SEXUALLY ACTIVE UNMARRIED MEN																
Total	43.3	39.9	3.6	0.0	0.0	0.4	35.9	0.0	0.0	3.4	2.5	0 4	0.5	56.7	100.0	303

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

Figure 4.2
Percentage of Currently Married Women Age 15-49 Using Specific Contraceptive Methods



ZDHS 1996

Table 4.5 Trends in family planning use

Percentage of currently married women age 15-49 who are currently using specific family planning methods, Zambia 1992 and 1996

Method	ZDHS 1992	ZDHS 1996
Any method	15.2	25.9
Any modern method	8.9	14.4
Pill	4.3	7.2
IUCD	0.5	0.4
Injectables	0.1	1.0
Diaphragm/foam/jelly	0.1	0.1
Condom	1.8	3.5
Female Sterilisation	2.1	2.0
Any traditional method	6.3	11.5
Natural family planning	0.9	1.9
Withdrawal	3.0	4.5
Other	2.2	5.2
Number of women	4,457	4,902

4.5 Current Use by Background Characteristics

While overall only about one in four married women is using contraception, the ZDHS data show that some women are more likely to be using than others (Table 4.6.1). Women most likely to be using contraception are those living in urban areas as well as those in North-Western, Lusaka, Northern and Copperbelt Provinces, women who have higher education, and women with three or more children. Urban women are three times more likely to use modern methods than their rural counterparts (24 percent and 8 percent, respectively) (Figure 4.3). Urban women are more likely to depend on methods such as the pill (12 percent), condom (5 percent), and female sterilisation, whilst rural women depend on withdrawal (6 percent) and the pill (4 percent). Contraceptive prevalence among married women also varies widely by province, from a low of 11 percent in Luapula Province to 42 percent in North-Western Province. In North-Western, Northern, Southern, and Western Provinces, traditional methods predominate over modern methods and are used by 10 percent or more of women. In Lusaka, Copperbelt, and Central Provinces, on the other hand, modern methods are far more likely to be used than traditional methods. In Eastern and Luapula Provinces, use of modern and traditional methods is more or less the same.

Table 4.6.1 Current use of contraception by background characteristics: women

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

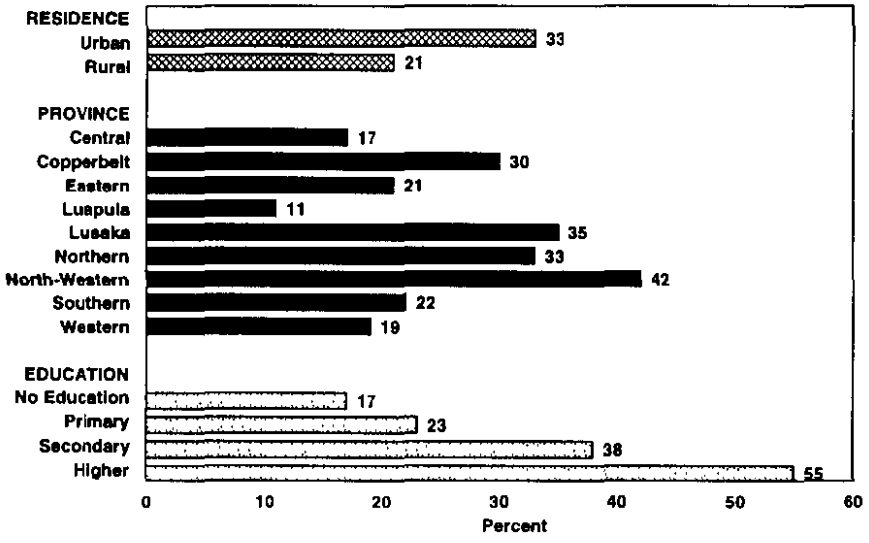
Background characteristic	Any method	Modern method								Traditional method				Not currently using	Total	Number of women
		Any modern method	Pill	IUCD	Injectables	Diaphragm/ Foam/ Jelly	Condom	Female sterilisation	Male sterilisation	Any traditional method	Natural family planning	Withdrawal	Other			
Residence																
Urban	33.3	23.6	12.2	0.9	2.2	0.1	4.7	3.3	0.1	9.7	3.0	3.0	3.8	66.7	100.0	1,972
Rural	20.9	8.2	3.9	0.1	0.3	0.0	2.7	1.2	0.0	12.7	1.1	5.5	6.1	79.1	100.0	2,930
Province																
Central	17.4	13.0	6.7	0.2	0.0	0.0	5.1	1.0	0.0	4.4	0.7	1.7	2.0	82.6	100.0	419
Copperbelt	29.8	20.1	9.3	0.3	1.3	0.0	3.8	5.3	0.0	9.7	2.6	3.2	4.0	70.2	100.0	910
Eastern	21.1	10.6	5.5	0.0	0.3	0.1	3.9	0.8	0.0	10.5	1.0	5.7	3.8	78.9	100.0	764
Luapula	10.9	6.7	3.9	0.0	0.0	0.2	1.2	1.4	0.0	4.1	1.5	0.7	2.0	89.1	100.0	448
Lusaka	35.3	27.4	13.9	2.0	3.9	0.2	5.3	2.0	0.2	8.0	3.5	2.1	2.3	64.7	100.0	796
Northern	33.0	8.0	4.9	0.0	0.5	0.0	2.0	0.6	0.0	25.0	0.8	12.6	11.5	67.0	100.0	552
North-Western	41.7	11.3	3.1	0.0	0.0	0.0	3.6	4.7	0.0	30.4	1.8	7.1	21.5	58.3	100.0	197
Southern	21.9	9.0	4.8	0.2	0.5	0.0	2.9	0.4	0.2	12.9	2.3	3.9	6.8	78.1	100.0	518
Western	18.7	8.7	4.7	0.2	0.0	0.0	1.9	1.9	0.0	10.1	0.9	5.1	4.0	81.3	100.0	298
Education																
No education	17.1	5.7	3.2	0.0	0.0	0.0	1.1	1.3	0.0	11.4	1.1	5.1	5.3	82.9	100.0	803
Primary	23.4	11.4	5.6	0.2	0.8	0.1	3.2	1.6	0.0	12.0	1.5	4.7	5.8	76.6	100.0	3,053
Secondary	37.9	27.1	14.4	1.0	2.0	0.1	6.0	3.4	0.1	10.7	3.3	3.7	3.7	62.1	100.0	924
Higher	55.4	48.4	21.0	5.5	6.0	0.0	8.1	7.2	0.7	7.0	6.0	1.0	0.0	44.6	100.0	122
Number of living children																
0	2.2	1.9	0.4	0.2	0.0	0.0	1.2	0.1	0.0	0.3	0.3	0.0	0.0	97.8	100.0	536
1	21.4	13.7	6.0	0.2	0.3	0.0	6.8	0.4	0.0	7.7	0.9	3.3	3.6	78.6	100.0	870
2	26.6	16.8	9.6	0.2	0.8	0.2	5.4	0.6	0.1	9.8	1.8	4.2	3.7	73.4	100.0	861
3	32.7	17.4	10.5	0.6	2.1	0.0	3.0	1.2	0.0	15.3	1.9	6.4	7.0	67.3	100.0	709
4+	31.7	15.9	7.4	0.7	1.3	0.1	2.0	4.3	0.1	15.7	2.8	5.6	7.3	68.3	100.0	1,925
Total	25.9	14.4	7.2	0.4	1.0	0.1	3.5	2.0	0.0	11.5	1.9	4.5	5.2	74.1	100.0	4,902

Table 4 6.2 Current use of contraception by background characteristics: men

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

Background characteristic	Any method	Modern method							Traditional method				Not currently using	Total	Number of men
		Any modern method	Pill	IUCD	Injectables	Diaphragm/ Foam/ Jelly	Condom	Female sterilisation	Any traditional method	Natural family planning	Withdrawal	Other			
Residence															
Urban	47.5	30.3	17.4	1.0	1.0	0.4	8.8	1.7	17.2	9.6	4.3	3.3	52.5	100.0	401
Rural	29.4	14.2	6.2	0.0	0.0	0.0	6.9	1.2	15.2	4.9	4.9	5.4	70.6	100.0	543
Province															
Central	39.1	22.0	11.1	0.0	0.0	0.0	10.9	0.0	17.0	8.1	5.4	3.5	60.9	100.0	83
Copperbelt	39.6	29.8	17.7	0.8	0.8	0.0	7.6	3.0	9.8	7.6	2.3	0.0	60.4	100.0	174
Eastern	44.3	23.6	7.9	0.0	0.7	0.0	13.7	1.2	20.7	8.1	5.4	7.2	55.7	100.0	150
Luapula	26.8	6.9	4.9	0.0	0.0	0.0	1.0	1.0	19.9	6.0	3.0	10.9	73.2	100.0	78
Lusaka	50.5	25.4	13.7	0.9	0.9	0.9	7.2	1.6	25.1	12.1	7.0	6.0	49.5	100.0	160
Northern	17.6	7.5	3.0	0.0	0.0	0.0	4.5	0.0	10.1	3.1	6.9	0.0	82.4	100.0	112
North-Western	52.6	25.0	9.0	0.0	0.0	0.0	14.5	1.4	27.6	1.4	11.2	15.1	47.4	100.0	36
Southern	29.6	17.8	11.6	1.4	0.0	0.0	4.0	0.9	11.8	5.2	0.9	5.7	70.4	100.0	95
Western	25.0	22.6	14.1	0.0	0.0	0.0	6.1	2.4	2.4	0.0	2.4	0.0	75.0	100.0	56
Education															
No education	23.1	8.3	4.5	0.0	0.0	0.0	3.9	0.0	14.8	2.5	2.5	9.7	76.9	100.0	71
Primary	27.8	13.4	6.1	0.0	0.0	0.0	5.9	1.3	14.4	5.5	3.8	5.1	72.2	100.0	454
Secondary	49.6	29.4	16.9	1.2	0.7	0.4	9.2	1.0	20.2	9.6	7.0	3.7	50.4	100.0	345
Higher	49.3	41.1	19.3	0.0	2.0	0.0	15.0	4.8	8.2	7.2	1.0	0.0	50.7	100.0	73
Number of living children															
0	6.8	4.7	1.1	2.1	0.0	0.0	1.5	0.0	2.1	0.0	2.1	0.0	93.2	100.0	72
1	38.7	22.2	9.0	0.0	0.0	0.0	13.2	0.0	16.6	7.8	4.6	4.1	61.3	100.0	138
2	43.2	21.3	11.9	0.9	0.0	0.0	8.5	0.0	21.9	10.0	7.8	4.1	56.8	100.0	151
3	36.7	21.5	11.2	0.0	1.1	0.0	8.7	0.5	15.2	6.7	5.3	3.2	63.3	100.0	137
4+	39.5	23.0	12.7	0.3	0.5	0.3	6.4	2.8	16.5	6.7	3.8	5.9	60.5	100.0	446
Total	37.1	21.0	10.9	0.4	0.4	0.2	7.7	1.4	16.1	6.9	4.7	4.5	62.9	100.0	944

Figure 4.3
Percentage of Currently Married Women Using a Contraceptive Method by Background Characteristics



ZDHS 1996

The largest differentials in current use of contraception are found among educational groups. Contraceptive use increases steadily with increasing level of education, from 17 percent among married women with no education to 55 percent of women with secondary or higher education. Better educated women are also more likely to use modern methods; women with secondary or higher education are eight times more likely to use modern methods than women with no education. Women with no education mostly use traditional methods such as withdrawal, while those with higher education are more likely to use the pill, condom, or female sterilisation. These women hardly use any traditional methods except for natural family planning.

Childless women seldom use any contraception, which suggests that they would like to have a child before regulating their childbearing. However, once they begin childbearing, regardless of the number of living children, there is little variation in the proportion of women who are using a method of family planning.

Data for men shown in Table 4.6.2 demonstrate basically the same pattern as that for women. Urban men, those living in North-Western and Lusaka Provinces, those who are better educated, and those who have had children are more likely than other men to be using contraception.

4.6 Number of Children at First Use of Contraception

In many cultures, family planning is used only when couples have already had as many children as they want. However, as the concept of family planning gains acceptance, couples may begin to use contraception for spacing births as well as for limiting family size. Moreover, unmarried young women may be particularly motivated to use family planning to avoid an unwanted pregnancy.

Table 4.7 shows the number of children ever-married respondents had when they first used contraception. In general, younger women are more likely to have started using contraception at lower parities than older women. For example, less than 20 percent of women in their 40s started to use contraception when they had either no children or only one child, compared to around 40 percent of women age 15-24. As a matter of interest, one observes that 12 percent of women 15-19 started using contraception before they had a child.

Table 4.7 Number of children at first use of contraception

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

Current age	Never used contra-ception	Number of living children at time of first use of contraception						Total	Number of women	Median number of children at first use
		0	1	2	3	4+	Missing			
15-19	61.5	12.1	25.1	1.1	0.0	0.0	0.2	100.0	546	1.3
20-24	43.7	7.6	33.9	11.4	2.9	0.0	0.5	100.0	1,428	1.6
25-29	36.6	4.2	30.4	16.0	7.5	4.8	0.5	100.0	1,163	1.9
30-34	36.0	2.6	24.9	14.9	9.6	11.6	0.4	100.0	1,051	2.3
35-39	38.1	2.3	21.6	9.5	8.6	19.8	0.1	100.0	748	2.7
40-44	35.0	1.7	17.5	9.3	10.8	24.9	0.8	100.0	561	3.3
45-49	48.7	0.5	17.2	6.3	5.5	21.4	0.4	100.0	491	3.3
Total	41.5	4.7	26.4	11.1	6.4	9.5	0.4	100.0	5,988	1.9

4.7 Knowledge of Fertile Period

A basic knowledge of reproductive physiology is useful for the successful practice of coitus- dependent methods such as withdrawal, condoms, or barrier methods, but it is especially important for users of natural family planning (also called periodic abstinence or the rhythm method). The successful practice of natural family planning depends on an understanding of when during the ovulatory cycle a women is most likely to conceive. Table 4.8 presents the percent distribution of all women respondents and those who have ever used natural family planning by reported knowledge of the fertile period in the ovulatory cycle.

Table 4.8 Knowledge of fertile period

Percent distribution of all women and of those who currently use natural family planning or the calendar rhythm method, by knowledge of the fertile period during the ovulatory cycle, Zambia 1996

Perceived fertile period	All women	Current users of: Natural family planning	Calendar rhythm
During menstrual period	1.0	0.7	0.0
Right after period has ended	20.1	20.9	18.1
In the middle of the cycle	13.3	40.6	45.9
Just before period begins	9.1	13.8	14.9
At any time	26.5	18.9	17.3
Other	0.4	0.0	0.0
Don't know	29.4	5.1	3.8
Missing	0.2	0.0	0.0
Total	100.0	100.0	100.0
Number	8,021	124	75

Note: Users of calendar rhythm are a subset of all natural family planning users.

Of all the women interviewed in the survey, 29 did not know when the fertile period occurs within the monthly cycle and 27 percent said that there is no particular time within the cycle when women are more likely to get pregnant. Only 13 percent of respondents gave the correct response, i.e., that a woman is most likely to conceive in the middle of her ovulatory cycle. Users of natural family planning are considerably more knowledgeable about their ovulatory cycle: 41 percent correctly identified the middle of the cycle as the fertile time. There is little difference in knowledge of the fertile period between all natural family planning users and the subset of these users who are using the calendar rhythm method.

4.8 Contraceptive Effects of Breastfeeding

Knowledge of the effect of breastfeeding on the risk of pregnancy is important for post-partum contraceptive programmes and programmes that promote the use of the lactational amenorrhoeic method (LAM). The effective use of breastfeeding as a contraceptive method depends on being able to satisfy several criteria: that the woman is post-partum amenorrhoeic (menstruation has not returned since the last birth), that she is exclusively or almost exclusively breastfeeding and that less than six months has passed since the birth. To satisfy the full criteria of the lactational amenorrhoeic method, a woman should also know that if any of the preceding criteria no longer hold, then she is at increased risk of a pregnancy and should no longer rely on breastfeeding. Because questions are not asked on knowledge of the full LAM criteria, true use of LAM is not ascertained. Women may be amenorrhoeic for periods longer than six months but they are at substantially increased risk of becoming pregnant before the return of menstrual bleeding.

Table 4.9 shows the distribution of currently married women by their perception of the effect of breastfeeding on the risk of pregnancy and the percentage of women who have ever relied on or are currently relying on breastfeeding to avoid pregnancy and those who meet the LAM criteria, according to selected background characteristics.

About half of currently married women say that breastfeeding has no impact on the risk of pregnancy. There is only slight variation according to the woman's age, urban-rural residence, and education. However, better educated women are more likely to know that breastfeeding decreases the chances of becoming pregnant. There are significant differentials in the perceived effect of breastfeeding on fertility by province. While only 6 percent of women in Central Province believe that breastfeeding can decrease the risk of pregnancy, the proportion in Copperbelt Province is 25 percent.

Older women tend to have relied on breastfeeding to delay or avoid pregnancy more than younger women. While 5 percent or less of women age 15-24 have used breastfeeding to avoid pregnancy, the corresponding proportions for older women (age 30 and above) is 10 percent or higher. Urban women, women in Copperbelt Province and those with secondary or higher education are more likely to rely on breastfeeding as a method to avoid pregnancy than other women. Only 6 percent of women meet the LAM criteria.[1]

4.9 Source 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 methods. Such information is important to family planning programme officials. Since women often do not know exactly which category the source they use falls into (e.g. government hospital, mission health centre, etc.), interviewers were instructed to write the name of the source. Supervisors and field editors were to verify that the name and the type of sources were consistent, asking cluster informants for the names of local family planning sources if necessary. This practice was designed to improve the reporting of data on sources of family planning.

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

Table 4.9 Perceived contraceptive effect of breastfeeding

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

	Perceived risk of pregnancy associated with breastfeeding						Reliance on breastfeeding to avoid pregnancy			
Background characteristic	Un-changed	In-creased	De-creased	Depends	Don't know/ Missing	Total	Previ-ously	Cur-rently	Meet LAM criteria	Number of women
Age										
15-19	46.4	12.2	11.3	6.1	24.0	100.0	2.7	1.1	7.8	498
20-24	48.1	18.1	14.8	9.7	9.3	100.0	4.6	1.6	8.5	1,207
25-29	48.6	17.6	17.3	9.2	7.3	100.0	9.3	3.9	7.0	969
30-34	50.6	18.3	15.0	11.5	4.6	100.0	10.2	2.9	5.7	857
35-39	47.4	17.5	16.6	13.9	4.4	100.0	11.7	4.6	4.7	586
40-44	49.4	16.9	15.7	13.0	5.0	100.0	10.1	1.5	2.1	419
45-49	50.9	16.8	14.2	15.1	3.0	100.0	12.2	1.1	0.4	367
Residence										
Urban	46.0	15.2	19.2	12.7	6.9	100.0	10.9	3.4	5.4	1,972
Rural	50.5	18.5	12.5	9.5	9.0	100.0	6.4	2.0	6.5	2,930
Province										
Central	61.4	18.6	6.2	4.9	8.9	100.0	3.7	0.9	8.2	419
Copperbelt	36.4	14.1	25.4	17.6	6.5	100.0	14.6	4.0	5.7	910
Eastern	35.5	29.9	13.0	7.3	14.2	100.0	4.6	1.5	4.3	764
Luapula	26.7	25.1	15.0	25.3	7.9	100.0	10.0	2.9	5.4	448
Lusaka	53.3	14.0	15.1	7.6	10.0	100.0	8.1	2.5	5.2	796
Northern	49.0	22.5	10.9	11.9	5.6	100.0	5.6	1.2	5.7	552
North-Western	68.1	9.6	19.2	2.9	0.3	100.0	4.4	2.3	7.3	197
Southern	73.5	4.0	10.6	7.0	4.9	100.0	9.4	3.8	9.7	518
Western	66.6	6.8	16.4	2.6	7.7	100.0	7.5	3.3	5.6	298
Education										
No education	48.4	17.3	13.5	9.0	11.8	100.0	6.7	1.9	3.9	803
Primary	50.3	17.3	13.3	11.2	7.8	100.0	8.1	2.7	6.7	3,053
Secondary	44.5	17.7	20.7	10.7	6.4	100.0	6.4	2.8	5.7	924
Higher	43.2	8.8	32.2	10.9	4.8	100.0	4.8	0.6	5.9	122
Total	48.7	17.2	15.2	10.7	8.1	100.0	8.2	2.5	6.1	4,902

Table 4.10 and Figure 4.4 show the sources of supply for contraception methods. The data indicate that most users of modern methods (60 percent) obtain their methods from public (government) sources, while 24 percent rely on private medical sources and 13 percent use other private sources such as shops, friends, and relatives. Government health centres are the single most frequently reported source, serving 41 percent of users, followed by government hospitals (16 percent) and private hospitals and clinics (11 percent). Shops also provide for 11 percent of the users.

The source a woman uses to obtain contraceptive methods depends on many things, one of which is the type of method she has chosen. Most pill users obtain their method from public sources (75 percent), 59 percent from government health centres and 13 percent from government hospitals. Private medical sources provide for 20 percent of current pill users. Injectables users are also likely to obtain their method from public sources (71 percent), followed by private medical (25 percent). As with pill users, government healthcentres

Table 4.10 Source of supply for modern contraceptive methods

Percent distribution of women currently using modern contraceptive methods by most recent source of supply, according to specific methods, Zambia 1996

	Contraceptive method				
Source of supply	Pill	Inject-ables	Con-dom	Female sterili-sation	Total
Public	74.9	70.9	39.6	48.8	59.9
Government hospital	12.6	12.3	8.3	47.7	16.2
Government health centre	58.5	47.0	29.6	1.0	40.6
Government field worker	1.6	0.0	1.7	0.0	1.3
Other public	2.2	11.7	0.0	0.0	1.8
Medical private	20.0	24.8	17.1	50.6	23.8
Private hospital/clinic	8.9	13.6	2.7	34.7	10.8
Mission hospital/clinic	3.4	2.3	3.5	15.9	5.0
Pharmacy	4.1	0.0	7.4	0.0	4.3
Private doctor	0.6	2.3	1.4	0.0	1.0
Private mobile clinic	2.5	0.0	0.3	0.0	1.2
Private field worker	0.2	0.0	1.0	0.0	0.4
Other private	0.3	6.8	0.9	0.0	1.0
Other private	3.4	2.3	35.6	0.0	13.0
Shop	2.0	0.0	30.8	0.0	10.6
Friend/relative	0.8	0.0	3.3	0.0	1.4
Other	0.5	2.3	1.5	0.0	1.0
Don't know	0.0	0.0	3.9	0.0	1.2
Missing	1.6	2.0	3.8	0.7	2.1
Total[1]	100.0	100.0	100.0	100.0	100.0
Number of users	416	59	282	112	901

[1] Total includes 21 IUCD users, four condom users, and two users of male sterilisation.

are the single most important supplier for injectables users (47 percent). Condom users are about equally likely to use government health centres and private shops to obtain their method (about 30 percent each). Almost half of women who have been sterilised had the operation at a government hospital, while about one-third used a private hospital or clinic.

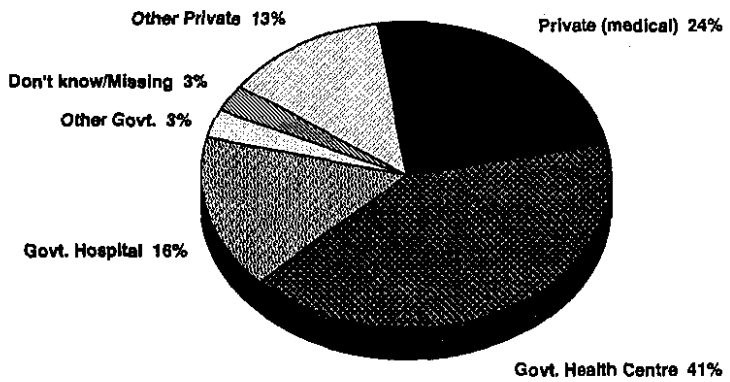
In the past few years, there has been a slight shift away from reliance on private medical sources towards greater use of other private sources for family planning methods. Since 1992, the proportion of users who get their methods from private medical sources has declined from 36 to 24 percent, while the proportion who obtain methods from other private sources has increased from 7 to 13 percent (Gaisie et al., 1993:46). This shift is due in part to increased use of condoms, many of which are purchased in shops. Public sources supply a slightly greater share of users now than in 1992 (60 vs. 56 percent).

4.10 Future Use of Contraception

Intention to use contraception in the future provides a forecast of potential demand for services and acts as a convenient summary indicator of disposition towards contraception among current nonusers. Table 4.11 shows the distribution of married women and men who are not currently using contraception by whether they intend to use family planning in the future. The distinction between intended use in the next 12 months and later on provides a more refined indication of demand in the near future.

More than half of married women who are currently not using contraception intend to use in the next 12 months, while 13 percent say that they will use contraception some time later. For men, the corresponding proportions are 33 percent and 23 percent, respectively. Three in ten married women and one in three men do not intend to use any contraception at all. The intention to use contraception is lowest among childless women and highest among women with two children.

Figure 4.4
Distribution of Current Users of Contraception by Source of Supply



ZDHS 1996

4.11 Reason For Nonuse of Contraception

It is crucial for the purpose of designing intervention mechanisms to identify reasons for nonuse of contraception. Table 4.12 presents the main reasons for not using contraception given by married women who are not using any contraceptive method and do not intend to use it in the future. Thirty-two percent of all women say they do not intend to use because they want children, while over one-third (38 percent) cite inability to conceive (either infecundity or menopause/hysterectomy) as the reason. Other reasons given by women include respondent opposed (7 percent), side effects (7 percent) and opposition of her husband or partner (3 percent).

Men cite similar reasons for nonuse as women, namely that they want more children (38 percent), or that infecundity or menopause obviates the need for contraception (29 percent). Contrary to popular belief, only 9 percent of men say that the reason they do not intend to use family planning is that they are opposed to it.

The main difference in the reasons for nonuse cited by younger and older respondents is that a much larger proportion of the former say they want to have more children, while the latter are more likely to cite infecundity as the reason for nonuse.

4.12 Preferred Method

Nonusers who said they intended to use family planning in the future were asked which method they preferred. The data are presented in Table 4.13. Most of these women say they would prefer to use the pill (55 percent), followed by injections (12 percent) and female sterilisation (6 percent). The same pattern of method preference is noted among women regardless of whether they intend to use in the next 12 months or later.

Table 4.11 Future use of contraception

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

Future intentions	Number of living children[1] 0	1	2	3	4+	Total for women	Total for men
Intend to use in next 12 months	26.1	51.2	56.4	56.7	54.8	52.1	33.2
Intend to use later	27.6	13.9	15.4	12.2	7.8	12.8	23.2
Unsure as to timing	1.1	2.1	0.7	1.0	0.6	1.0	1.3
Unsure as to intention	9.3	5.8	3.3	4.3	3.6	4.6	6.8
Do not intend to use	35.8	27.1	24.1	25.6	32.6	29.3	33.3
Missing	0.0	0.0	0.1	0.1	0.6	0.3	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women/men	331	697	652	540	1,415	3,633	594

[1] Includes current pregnancy

Table 4.12 Reasons for not using contraception

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

Reason for not using contraception	Women: Age <30	Women: Age 30-49	Women: Total	Men: Age <30	Men: Age 30-59	Men: Total
Want children	53.0	21.3	31.9	(76.4)	27.2	37.6
Side effects	11.2	4.6	6.8	(0.0)	6.1	4.9
Health concerns	1.1	2.2	1.8	(2.8)	2.0	2.2
Interferes with body	1.7	0.3	0.8	(0.0)	3.3	2.6
Knows no method	5.7	1.5	2.9	(2.8)	2.2	2.4
Knows no source	0.3	0.5	0.4	(2.8)	1.5	1.8
Hard to get	0.8	0.2	0.4	(0.0)	0.0	0.0
Religion	0.6	1.6	1.3	(1.6)	4.3	3.7
Respondent opposed	9.7	5.3	6.8	(3.3)	11.0	9.4
Partner opposed	4.5	2.4	3.1	(0.0)	0.6	0.5
Others opposed	0.5	0.0	0.1	(0.0)	0.5	0.4
Up to woman to use	NA	NA	NA	(1.8)	1.9	1.9
Infrequent sex	0.7	2.6	2.0	(6.2)	0.5	1.7
Menopausal/hysterectomy	0.1	23.2	15.6	(0.0)	24.3	19.2
Subfecund/infecund	7.5	29.8	22.4	(0.0)	12.3	9.7
Inconvenient	0.3	0.4	0.4	(2.2)	1.0	1.2
Other	1.0	3.1	2.4	(0.0)	0.0	0.0
Don't know	1.4	0.8	1.0	(0.0)	0.9	0.7
Missing	0.0	0.2	0.1	(0.0)	0.3	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women/men	354	710	1,064	42	157	198

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

NA = Not applicable

Table 4.13 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 timing of intended use, Zambia 1996

Preferred method of contraception	Intend to use: In next 12 months	After 12 months	Unsure about timing	Total
Pill	55.5	52.2	(46.2)	54.7
IUCD	1.5	1.3	(0.0)	1.4
Injectables	12.1	10.6	(14.9)	11.9
Diaphragm/Foam/Jelly	0.4	0.4	(0.0)	0.4
Condom	4.8	7.3	(10.7)	5.4
Female sterilisation	5.6	6.0	(9.3)	5.7
Periodic abstinence	1.9	2.4	(0.0)	2.0
Withdrawal	3.2	1.5	(0.0)	2.8
Norplant	0.5	1.8	(0.0)	0.7
Other	3.6	6.4	2.4	4.1
Don't know/Missing	10.9	10.1	(16.3)	10.8
Total	100.0	100.0	100.0	100.0
Number of women	1,892	464	36	2,393

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

4.13 Family Planning Communications

It is important to assess the coverage of radio and television messages so that the right channels of communication in population matters are utilised. Table 4.14 presents data on the proportion of women and men who have heard family planning messages on radio or television in the few months preceding the survey, according to selected background characteristics.

Fifteen percent of women reported that they heard a family planning message on both the radio and television, while 59 percent had not heard a message on either radio or television. In general, messages broadcast on radio are more commonly heard than those on television; 39 percent of women heard a message about family planning on the radio, compared to only 18 percent who heard a message on the television. Except at ages 15-19, there are only slight variations by age group in the exposure of women to family planning messages. Exposure to mass media is limited in rural areas; for example, 30 percent of women in urban areas have heard about family planning on both radio and television, compared to 4 percent of women in rural areas.

In the more urbanised provinces in the country—Central, Copperbelt, and Lusaka—women are much more likely to have access to mass media through radio and television than women in other provinces. However, in all provinces, the role of radio as a media for disseminating information is significant. Women with higher education are much more likely to have heard a family planning message on radio and television than those with less education.

Men who were interviewed show a pattern similar to women: family planning messages in the mass media are heard less commonly by male teenagers, by men in rural areas, and by less educated men.

Respondents were asked whether they consider it acceptable or not acceptable to air family planning messages over radio or television. The response is used to assess the level of popular support for family planning education and advertising on the radio or television.

Table 4.14 Exposure to family planning messages through the media

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

	Heard about family planning on radio or television											
	Women						Men					
Background characteristic	Heard on both	Radio only	Tele-vision only	Heard on neither	Total	Number of women[1]	Heard on both	Radio only	Tele-vision only	Heard on neither	Total	Number of men
Age												
15-19	10.9	16.4	2.7	69.7	100.0	2,003	14 2	21.0	4.0	60 9	100.0	460
20-24	15.3	25.3	2.6	56.8	100.0	1,830	20.6	28.9	4.8	45.7	100.0	404
25-29	20.0	26.4	1.9	51.6	100.0	1,286	23.6	41.0	1.6	33.8	100.0	255
30-34	19.6	29.9	1.2	49.1	100.0	1,081	25.0	37.9	1.7	35.4	100.0	225
35-39	16.0	25.3	3.3	55.3	100.0	758	27.3	32.2	4.8	35 7	100.0	184
40-44	15.7	23.4	2.3	58.4	100.0	568	22.2	39.2	4.3	34.3	100.0	121
45-49	9.9	20.0	1.0	69.0	100.0	494	21.6	35.9	4.1	38.5	100.0	83
50-54	NA	NA	NA	NA	NA	NA	29.3	32.7	2.6	35.4	100.0	65
55-59	NA	NA	NA	NA	NA	NA	9.3	28.3	0.0	62.4	100.0	52
Residence												
Urban	29.7	24.4	4.4	41.5	100.0	3,604	37.9	26.7	6.8	28.6	100.0	852
Rural	3.6	22.7	0.6	73.1	100.0	4,417	6.1	34.8	0.7	58.3	100.0	997
Province												
Central	13.3	20.3	2.6	63.8	100.0	653	16.3	29.3	5.3	49.0	100.0	157
Copperbelt	36.5	23.8	4.8	34.8	100.0	1,588	41.3	22.6	7.1	28.9	100.0	396
Eastern	1.2	24.6	0.3	73.8	100.0	1,075	4.6	48.7	0.7	46.1	100.0	254
Luapula	4.4	30.6	0.9	64.1	100.0	726	5.2	41.9	0.5	52.4	100.0	151
Lusaka	27.1	24.1	4.1	44.6	100.0	1,403	43.0	24.6	7.1	25.3	100.0	316
Northern	3.9	25.3	0.5	70.3	100.0	872	4.5	23.6	0.3	71.6	100.0	221
North-Western	2.9	23.4	0.3	73.2	100.0	288	16.5	64.8	0.0	18.7	100.0	48
Southern	9.5	20.5	1.9	68.1	100.0	816	7.6	26.4	1.4	64.6	100.0	173
Western	3.0	15.2	0.4	81.5	100.0	600	5.9	34.7	0.0	59.4	100.0	132
Education												
No education	3.3	16.7	0.4	79.4	100.0	1,067	5.5	35.2	1.6	57.7	100.0	127
Primary	9.9	24.3	1.5	64.2	100.0	4,721	11.6	30.7	1.8	55.8	100.0	938
Secondary	30.2	25.4	4.6	39.8	100.0	2,007	32.0	30.9	5.8	31.3	100.0	686
Higher	52.9	19.7	6.4	21.1	100.0	226	48.9	31.1	5.7	14.4	100.0	98
All women/men	15.3	23.5	2.3	58.9	100.0	8,021	20.7	31.1	3.5	44.6	100.0	1,849

Note: Figures may not add to 100.0 due to rounding and/or missing data.
NA = Not applicable
[1] Includes one woman with missing information on education

Eighty-seven percent of women and 82 percent of men report that such messages are acceptable to them (Table 4.15). Women in the oldest age group (45-49 years) are the least likely to find media messages on family planning acceptable. Acceptability is highest among women with higher education (95 percent) and lowest among women with no education (78 percent). The same is true for men (94 percent and 79 percent, respectively).

Table 4.15 Acceptability of media messages on family planning

Percentage of women and men who believe that it is acceptable to have messages about family planning on the radio or television, by selected background characteristics, Zambia 1996

	Acceptability of family planning messages on radio or television									
	Women					Men				
Background characteristic	Accept-able	Not accept-able	Unsure	Total	Number of women	Accept-able	Not accept-able	Unsure	Total	Number of men
Age										
15-19	81.3	11.8	6.9	100.0	2,003	70.5	7.4	22.1	100.0	460
20-24	91.3	6.5	2.2	100.0	1,830	83.2	8.4	8.5	100.0	404
25-29	92.7	6.0	1.3	100.0	1,286	90.8	6.6	2.6	100.0	255
30-34	89.3	9.1	1.6	100.0	1,081	92.0	5.8	2.1	100.0	225
35-39	88.6	10.1	1.3	100.0	758	85.2	10.4	4.4	100.0	184
40-44	82.3	16.4	1.2	100.0	568	90.4	8.1	1.4	100.0	121
45-49	74.0	21.6	4.4	100.0	494	81.6	18.4	0.0	100.0	83
50-54	NA	NA	NA	NA	NA	66.4	21.5	10.4	100.0	65
55-59	NA	NA	NA	NA	NA	71.3	15.5	13.3	100.0	52
Residence										
Urban	87.4	10.5	2.0	100.0	3,604	85.5	11.5	3.0	100.0	852
Rural	86.3	9.6	4.1	100.0	4,417	78.7	6.6	14.6	100.0	997
Province										
Central	85.7	12.7	1.6	100.0	653	92.1	5.3	2 6	100.0	157
Copperbelt	90.3	8.1	1.6	100.0	1,588	83.7	12.9	3.4	100.0	396
Eastern	80.6	10.0	9.4	100.0	1,075	90.3	6.9	2.8	100.0	254
Luapula	90.4	7.6	2.0	100.0	726	89.8	4.1	6.1	100.0	151
Lusaka	82.6	14.1	3.2	100.0	1,403	85.6	12.3	1.8	100.0	316
Northern	88.4	9.7	2.0	100.0	872	56.2	10.3	33.4	100.0	221
North-Western	96.6	3.4	0.0	100.0	288	100.0	0.0	0.0	100.0	48
Southern	90.1	9.2	0.8	100.0	816	69.1	4.2	26.7	100.0	173
Western	83.8	10.7	5.5	100.0	600	82.7	9.1	8.2	100.0	132
Education										
No education	77.9	14.2	7.9	100.0	1,067	78.9	12.8	8.3	100.0	127
Primary	86.5	10.4	3.2	100.0	4,721	75.5	9.1	15.3	100.0	938
Secondary	91.3	7.7	0.9	100.0	2,007	89.3	8.3	2.4	100.0	686
Higher	95.3	4.7	0.0	100.0	226	94.3	5.7	0.0	100.0	98
Total women/men	86.8	10.0	3.1	100.0	8,021	81.8	8.9	9.2	100.0	1,849

Note: Figures may not add to 100.0 due to rounding.
NA = Not applicable
[1] Includes one woman with no information on education

Women were asked whether they had received a message about family planning from print media in the few months prior to the survey. The results are presented in Table 4.16. More than one-third of the women received family planning messages from print media. Posters are the most likely source for women to receive such messages (29 percent), followed by newspapers or magazines (17 percent) and leaflets or brochures (11 percent). The proportion of women who receive messages through print media increases with age until the 30s and declines among older women. Half of urban women saw a message in print, compared to less than one-quarter of their rural counterparts. Women in Eastern Province, as well as those with no education are the least likely to receive any family planning messages in print.

Table 4.16 Family planning messages in print

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

Background characteristic	Type of print media containing family planning message					Number of women
	Any source	Newspaper/ magazine	Poster	Leaflet/ brochure	No source	
Age						
15-19	28.5	14.6	20.2	7.7	71.5	2,003
20-24	38.9	18.3	32.2	12.1	61.1	1,830
25-29	43.5	20.6	37.4	15.1	56.5	1,286
30-34	41.0	18.7	36.2	13.7	59.0	1,081
35-39	36.2	18.1	31.7	13.1	63.8	758
40-44	34.6	17.8	28.8	13.3	65.4	568
45-49	19.7	7.9	17.6	4.9	80.3	494
Residence						
Urban	51.6	30.1	41.3	18.3	48.4	3,604
Rural	22.5	6.5	19.7	5 9	77.5	4,417
Province						
Central	31.3	18.8	21.6	14.6	68.7	653
Copperbelt	54.3	28.9	45.3	19.9	45.7	1,588
Eastern	7.4	1.8	6.4	1.2	92.6	1,075
Luapula	35.9	9.4	34.3	5.5	64.1	726
Lusaka	45.5	31.1	34.1	17.0	54.5	1,403
Northern	31.2	11.0	27.9	8.0	68.8	872
North-Western	29.8	5.0	28.4	2.9	70.2	288
Southern	37.3	14.2	30 9	10.8	62.7	816
Western	24.5	6.7	21.0	8.2	75.5	600
Education						
No education	8.4	0.6	8.0	0.8	91.6	1,067
Primary	27.2	8.1	23.7	5.6	72.8	4,721
Secondary	63.5	40.4	48.5	25.5	36.5	2,007
Higher	92.0	75.5	80.4	58.6	8.0	226
Total[1]	35.6	17.1	29.4	11.4	64.4	8,021

[1] Total includes one woman with no information on education.

4.14 Contact of Nonusers with Family Planning Providers

One way to increase the level of knowledge about family planning and perhaps to increase use as well is to take advantage of "lost opportunities," instances in which health professionals make contact with women and men but neglect to discuss family planning. To assess the extent to which information is transferred through the health system, women interviewed in the ZDHS who were not currently using contraception were asked if they had contact with a family planning field worker in the previous 12 months or, if they had visited a health facility in the previous 12 months, whether any staff at the facility had spoken to them about family planning. Table 4.17 shows that only a small proportion of women (4 percent) were visited by a family planning worker. Of the 62 percent of women who visited a health facility in the 12 months before the survey, only about one-third (or 21 percent of nonusers) discussed family planning with a staff person at the facility. Overall, more than three-quarters of nonusers had no family planning contact in the 12 months preceding the survey. The lack of contact spreads across all categories—in urban and rural areas, at all ages, in all provinces and at all educational levels.

Table 4.17 Contact of nonusers with family planning providers

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

	Nonusers of family planning									
	Visited by family planning field worker			Not visited by family planning field worker						
	Visited health facility			Visited health facility						
Background characteristic	Dis-cussed FP	Did not discuss FP	Did not visit health facility	Dis-cussed FP	Did not discuss FP	Did not visit health facility	Missing	Total	No FP services or information provided	Number of non-users
Age										
15-19	0.7	0.6	0.9	7.1	41.2	49.5	0.1	100.0	90.7	1,855
20-24	2.0	1.1	2.0	23.1	42.2	29.5	0.1	100.0	71.7	1,459
25-29	2.9	1.4	2.0	28.5	38.5	26.4	0.3	100.0	64.9	956
30-34	2.3	1.2	1.1	27.9	39.7	27.9	0.0	100.0	67.5	818
35-39	3.4	0.8	1.6	28.2	34.4	31.6	0.0	100.0	66.0	557
40-44	2.4	0.0	2.1	18.0	38.3	39.2	0.0	100.0	77.5	420
45-49	1.2	1.2	1.9	12.0	32.2	51.5	0.0	100.0	83.7	419
Residence										
Urban	1.1	0.6	1.4	18.0	41.5	37.3	0.0	100.0	78.8	2,751
Rural	2.5	1.1	1.6	20.2	38.0	36.4	0.2	100.0	74.4	3,733
Province										
Central	2.3	0.8	2.9	12.7	29.1	52.1	0.1	100.0	81.2	563
Copperbelt	1.2	0.4	0.7	22.5	48.5	26.6	0.0	100.0	75.1	1,261
Eastern	2.6	0.7	0.4	33.5	28.7	33.6	0.4	100.0	62.4	895
Luapula	1.3	1.1	2.2	13.0	44.2	38.1	0.0	100.0	82.3	674
Lusaka	1.2	1.1	2.5	14.8	32.6	47.8	0.0	100.0	80.4	1,035
Northern	3.4	1.8	2.1	14.6	37.3	40.6	0.2	100.0	77.9	682
North-Western	0.5	0.3	0.0	26.3	48.8	24.1	0.0	100.0	72.9	192
Southern	2.3	1.0	1.1	20.5	47.0	28.2	0.0	100.0	75.1	672
Western	1.9	1.0	1.4	13.1	45.0	37.6	0.0	100.0	82.6	510
Education										
No education	1.5	0.9	0.9	18.3	36.0	42.2	0.2	100.0	78.2	926
Primary	2.1	0.9	1.7	20.3	37.8	37.1	0.1	100.0	74.8	3,894
Secondary	1.2	0.7	1.5	17.4	45.4	33.8	0.0	100.0	79.2	1,546
Higher	3.9	4.0	1.7	19.4	46.6	24.3	0.0	100.0	71.0	117
Total[1]	1.9	0.9	1.5	19.3	39.5	36.8	0.1	100.0	76.3	6,483

[1] Includes one woman with no information on education

4.15 Discussion of Family Planning with Husband

While husband-wife discussion about family planning and an agreement to use contraception is not a necessary precondition for adoption of certain methods, its absence may be a serious impediment. Inter-spousal communication is therefore an important intermediate step along the path to eventual adoption and sustained use. Lack of discussion may reflect a lack of personal interest, hostility to the subject or a customary reticence in talking about sex-related matters. Information is presented in Table 4.18 on the number of times married women discussed family planning matters with their husbands in the year preceding the survey.

Table 4.18 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 their husband in the year preceding the survey, according to current age, Zambia 1996

Age	Number of times family planning discussed				Total	Number of women
	Never	Once or twice	More often	Nothing ascertained		
15-19	44.0	35.9	20.1	0.0	100.0	467
20-24	34.6	34.7	30.5	0.2	100.0	1,191
25-29	27.5	35.1	37.2	0.2	100.0	959
30-34	29.6	34.0	36.2	0.2	100.0	842
35-39	31.4	33.8	34.6	0.2	100.0	558
40-44	43.5	25.6	30.8	0.2	100.0	372
45-49	62.6	25.2	12.0	0.2	100.0	333
Total	35.5	33.3	31.1	0.2	100.0	4,720

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

More than one-third of women said they never discussed family planning with their partners in the previous year, while one-third discussed the subject once or twice, and 31 percent discussed it more often. Women in the oldest age group (45-49) are the least likely to discuss family planning with their spouses.

4.16 Attitudes of Couples Toward Family Planning

In countries where contraceptive use is limited, widespread disapproval of contraception may act as a major barrier to adoption of methods. In the ZDHS, women were asked if they approved of a couple using family planning and, if they were married, whether they thought their husband approved of the use of family planning. With regard to the information on the husband's attitude, the wife may be wrong about her spouse's opinion. Her perception is important, however, since it may be a factor in shaping her behaviour.

In addition to concern about the data on husband's attitude, the attitudinal information is not suitable for precise or detailed interpretation because no attempt is made to uncover the depth of feeling or its origin. Nevertheless, the data portray the general climate of opinion. This information will be useful in the formation of family planning policies, by indicating the extent to which further education and publicity is needed to gain acceptance of the principle of contraception.

Table 4.19 shows that 56 percent of married women say that not only do they approve of family planning use, but that their husband approves as well. Sixteen percent of married women report that they approve of family planning but their husband does not. A very small percentage of women said the opposite—that they disapprove while their husband approves. In general, opposition to contraceptive use is not widespread: 84 percent of married women approve, 10 percent disapprove, and 5 percent are unsure. Fifty-eight percent of women say their husband approves of family planning use, while about 22 percent say their husband disapproves, and roughly 15 percent are unsure of their husband's attitude.

Table 4.19 Wives' perceptions of their husbands' attitudes toward family planning

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

Background characteristic	Both approve	Wife approves, husband disap-proves	Wife approves, husband's attitude unknown	Wife disap-proves, husband approves	Both disap-prove	Wife disapproves, husband's attitude unknown	Wife unsure	Missing	Total	Wife approves	Husband approves[1]	Number of women
Age												
15-19	49.3	10.7	21.5	1.1	5.6	3.7	7.8	0.2	100.0	81.5	51 4	467
20-24	58 4	14.6	14.8	1.3	4.8	1.2	4.9	0.1	100.0	87.8	60 6	1,191
25-29	62.8	16.3	8.9	0.7	5.1	2.5	3.7	0 0	100.0	88 0	63 8	959
30-34	60.8	16.6	10.5	1.2	4.6	1.7	4 4	0.1	100.0	87 9	62.9	842
35-39	55.8	17.2	9.0	2.5	6.3	4.2	4.9	0.1	100.0	82 0	58.8	558
40-44	46.4	18.3	14.0	1.3	11.4	2.6	5.9	0.0	100.0	78.8	49 7	372
45-49	35.1	17.1	14.6	2.5	11.6	5.6	13.6	0.0	100.0	66.7	40.1	333
Residence												
Urban	64.6	16.2	10.6	1.1	3.8	1 0	2.7	0.1	100.0	91.5	66.2	1,888
Rural	50.1	15.4	14.2	1.6	7.6	3.7	7.4	0.1	100.0	79 6	52.9	2,833
Province												
Central	48.4	17.7	9.9	2.3	10.8	3.8	7.0	0.0	100.0	76.0	52 2	414
Copperbelt	63 6	14.3	14.6	0.5	4.1	0 6	2.1	0.2	100 0	92 7	64.1	859
Eastern	57 3	13.7	10.9	1.5	5.5	1 2	9.9	0.1	100.0	81 8	60.5	724
Luapula	42 6	12.8	18.7	1.3	8.7	5 9	10.0	0.0	100.0	74 2	45.4	440
Lusaka	63.4	16.9	11.1	1.4	3.8	0.8	2.5	0 0	100.0	91.5	65 3	765
Northern	55.1	16.7	9.6	2.1	5.3	3.4	7.7	0.2	100.0	81.3	59.7	547
North-Western	76.0	16.8	2.7	0.3	3.6	0.3	0 0	0 3	100.0	95.6	76 3	185
Southern	54.1	19.8	12.9	1.1	4.8	5.0	2 4	0.0	100.0	86.8	55 3	502
Western	32.4	13.2	23.7	2.2	13.9	5.6	9.0	0.0	100.0	69.2	35 1	285
Education												
No education	38.0	15.7	16.7	1.1	10.1	5.1	13 3	0.0	100.0	70.4	41 1	750
Primary	53.7	16.8	13.6	1.7	6.5	2.6	5 0	0.1	100.0	84 1	56.2	2,970
Secondary	74.2	13.2	7.9	0.6	1.8	0.8	1 5	0.0	100.0	95 3	75 3	888
Higher	89.8	7.2	1.2	0.0	1.2	0.0	0 6	0.0	100.0	98.2	90 4	112
Total	55.9	15.7	12.8	1.4	6.1	2.6	5.6	0.1	100.0	84 4	58.2	4,720

[1] Includes cases in which the wife is unsure about her own attitude, but knows her husband's

The proportion of wives and husbands who approve of family planning use is slightly lower at the younger and older age groups. Urban residents are more likely to approve of contraceptive use than their rural counterparts. Approval of family planning use is highest in Copperbelt, Lusaka, and North-Western Provinces, as well as among those with the highest education.

The fact that both women and men in the same households were interviewed provides an opportunity to compare responses obtained from currently married women with those obtained from their husbands. Table 4.20 shows the percent distribution of the 822 matched couples by their perception of their spouse's attitudes, according to the spouse's actual attitude toward family planning.

The first thing to note in the table is the fact that 85 percent of both husbands and wives say they approve of family planning, while about 10 percent do not approve, and 5 percent are unsure. Generally speaking, when wives and husbands believe that their spouse approves of family planning they are correct; however, when they believe that their spouse disapproves, they are wrong. For example, among husbands whose wives perceived them as approving of family planning, 88 percent did indeed approve. However, among husbands whose wives believe them to disapprove of family planning, 76 percent say they actually

approve. These results imply that greater communication about family planning could improve these false preceptions. An alternative explanation is that respondents who disapprove of family planning are reluctant to report this view to interviewers.

Table 4.20 Spouse's perception of spouse's approval of family planning

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

Perception	Spouse's actual attitude			Total	Number of couples
	Approves	Disap-approves	Unsure		
Wife's perception of husband's attitude					
Approves	87.7	7.7	4.5	100.0	514
Disapproves	76.3	18.4	5.3	100.0	152
Don't know	82.6	10.9	6.5	100.0	156
Total	84.6	10.3	5.1	100.0	822
Husband's perception of wife's attitude					
Approves	88.6	6.9	4.4	100.0	623
Disapproves	80.0	15.1	4.9	100.0	87
Don't know	69.4	18.4	12.2	100.0	112
Total	85.1	9.3	5.5	100.0	822

CHAPTER 5

OTHER PROXIMATE DETERMINANTS OF FERTILITY

This chapter addresses the principal factors, other than contraception, which affect a woman's risk of becoming pregnant: nuptiality and sexual intercourse, post-partum amenorrhoea and abstinence from sexual relations, and secondary infertility.

While it is by no means exact, marriage is an indicator of exposure of women to the risk of pregnancy, and is therefore important for the understanding of fertility. Populations in which age at marriage is low also tend to experience early childbearing and high fertility; hence the motivation to examine 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 post-partum amenorrhoea and post-partum abstinence and the level of secondary infertility.

5.1 Marital Status

Table 5.1 shows data on the marital status of female and male respondents at the time of the survey. In this table, the term "married" is intended to mean legal or formal marriage, while "living together" designates an informal union. In subsequent tables, these two categories are combined and referred to collectively as "currently married" or "currently in union." The widowed, divorced, and no longer living together (separated) make up the remainder of the "ever-married" or "ever in union" category.

Six in ten Zambian women of reproductive age are currently in a marital union. The 1992 ZDHS reported a similar figure (61 percent); the same is true for the proportion never married (25 percent). The proportion of women who have never married drops drastically from 73 percent among women in their teens to 22 percent among women in their early twenties. On the other hand, the proportion divorced rises steeply after age group 15-19, where it stays relatively constant at about 7-12 percent among women 20 years and older. The proportion widowed rises gradually, and reaches 14 percent for women aged 45-49. The proportion of women living together with a man and no longer living together (separated) varies little across age groups.

In the case of men, overall, 44 percent have never married, more than half are married, and a small percentage are either living together or no longer in union. Very few men have been married at age 15-19, but by age 30 only 8 percent are still single. It is interesting to note that even in the oldest age group (55-59), nine in ten men are currently married, compared to only three-quarters of women age 45-49.

Table 5.1 Current marital status

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

Age	Current marital status							Number of men/ women
	Never married	Married	Living together	Widowed	Divorced	No longer living together	Total	
				WOMEN				
15-19	72.7	24.4	0.5	0.1	1.3	1.0	100.0	2,003
20-24	22.0	65.2	0.7	2.3	6.8	3.0	100.0	1,830
25-29	9.5	74.3	1.0	2.6	9.3	3.2	100.0	1,286
30-34	2.8	78.3	1.0	5.5	9.6	2.8	100.0	1,081
35-39	1.3	75.7	1.5	7.7	10.8	2.8	100.0	758
40-44	1.2	73.0	0.7	10.9	12.4	1.8	100.0	568
45-49	0.7	74.2	0.1	13.8	9.7	1.6	100.0	494
Total	25.3	60.3	0.8	4.1	7.2	2.3	100.0	8,021
				MEN				
15-19	99.2	0.6	0.0	0.0	0.0	0.2	100.0	460
20-24	68.3	28.6	0.0	0.0	0.6	2.6	100.0	404
25-29	23.2	68.3	0.0	1.1	3 8	3.6	100.0	255
30-34	8.1	84.6	0.0	1.2	4.3	1.7	100.0	225
35-39	1.8	87.3	0.4	3.4	4.4	2.8	100.0	184
40-44	0.7	93.4	0.0	0.9	5.0	0.0	100.0	121
45-49	1.1	92.3	0.0	3.3	3.3	0.0	100.0	83
50-54	0.0	93.7	0.0	3.2	0.9	2.3	100.0	65
55-59	0.0	92.4	1.2	6.4	0.0	0.0	100.0	52
Total	44.0	51.0	0.1	1.1	2.1	1.7	100.0	1,849

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

5.2 Polygyny

In Zambia, current marriages can be subdivided into polygynous and monogamous unions. This being the case, married women were asked in the ZDHS whether their husbands had other wives, and if so, how many.

Seventeen percent of the currently married women are in polygynous unions. At all age groups, polygyny is more common in rural than in urban areas. Polygyny varies by province (Figure 5.1). The rate is between 11 percent to 20 percent in five of the nine provinces in Zambia, 22 percent or more in Northern and Eastern Provinces, while Southern Province has the largest percentage of women in polygynous unions (32 percent). On the other extreme, women in Copperbelt Province are the least likely to have co-wives. Among women age 20 and 44 years, polygyny decreases with increasing level of education (Table 5.2).

The overall level of polygyny has changed little over the past few years. The proportion of currently married women in polygynous unions in 1992 was the same (17 percent) as in 1996.

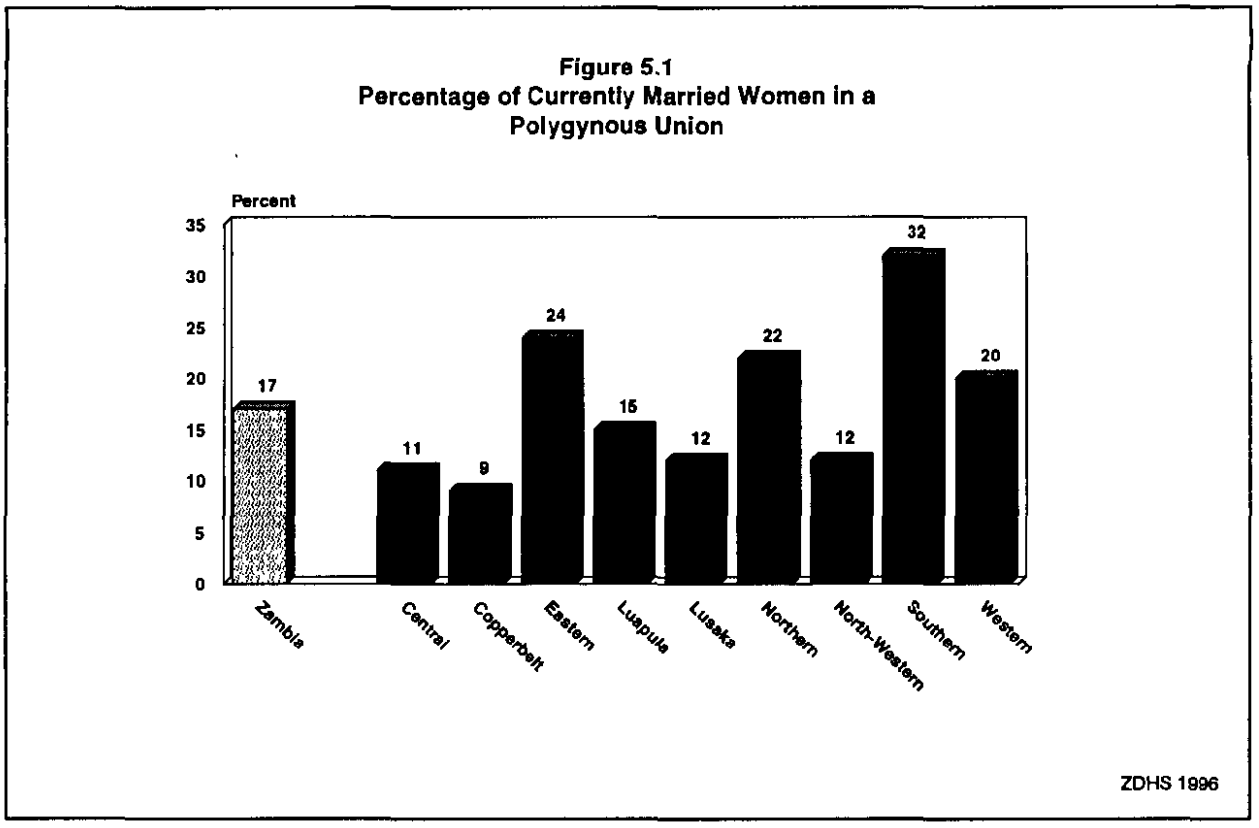


Figure 5.1
Percentage of Currently Married Women in a Polygynous Union

5.3 Age at First Marriage

ZDHS data show that half the women in Zambia marry before they reach age 18, and four in five marry before age 22. Cohort trends in age at marriage can also be described by comparing the distribution for successive age groups, as shown in Table 5.3.[1] The proportion of women married by age 15 decreased systematically from 26 percent among women age 45-49 to 4 percent among those 15-19. The reported median age at first union is 18.0 years for women age 20-49 years. The age at marriage appears to have increased over time from about 17 years among women now in their 40s to over 18 among women in their 20s. Another indication of the trend towards later age at marriage is the fact that the median age at first marriage among women age 20-49 has risen from 17.7 in 1992 to 18.0 in 1996.

Men marry considerably later than women. While 70 percent of women have been married by age 20, only 16 percent of men 25-59 were married at the same age. Among men age 25-59, one in three marry before they are 22 years old and 62 percent were married before age 25 years.

Table 5.4 presents a more detailed picture of the trends in the median age at marriage. The changes observed at the national level have been achieved primarily through changes in the behaviour of women in urban areas, where the median age at marriage has increased by 3 years between cohorts of women age 20-24 and 45-49. Increases of 2 years or more have taken place among women in Copperbelt, Lusaka, North-Western, and Western Provinces, whilst the increases in the median age at marriage among women in other

[1] For each cohort the accumulated percentages stop at the lower age boundary of the cohort to avoid censoring problems. For instance, for the cohort currently aged 20-24, accumulation stops with the percentage married by exact age 20.

provinces are less pronounced. Level of education attained is directly related to age at first marriage: the median age at first marriage is 16.7 years among women with no education compared with 20.8 years for women with secondary or higher schooling.

Table 5.2 Polygyny

Percentage of currently married women and men in a polygynous union, by age and selected background characteristics, Zambia 1996

Background characteristic	Current age								All women	All men
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+		
Residence										
Urban	3.8	5.3	8.9	12.2	12.7	13.0	15.9	NA	9.4	2.4
Rural	7.2	13.0	22.8	30.0	33.5	30.5	29.9	NA	22.3	13.4
Province										
Central	0.0	6.3	15.5	14.6	12.5	(13.8)	(20.4)	NA	11.2	8.6
Copperbelt	0.0	4.3	8.9	11.0	16.6	9.4	(11.6)	NA	8.5	1.1
Eastern	6.7	13.2	26.0	34.1	32.9	33.2	37.2	NA	24.3	16.9
Luapula	(4.3)	11.8	8.3	22.1	29.3	(21.7)	13.0	NA	15.0	6.0
Lusaka	4.0	5.2	10.9	17.4	14.2	15.3	(23.9)	NA	11.5	1.6
Northern	6.9	13.2	20.5	27.3	33.5	(36.9)	(39.2)	NA	22.2	14.5
North-Western	2.8	6.0	13.1	14.3	19.6	(18.4)	(18.0)	NA	12.0	6.9
Southern	23.5	20.9	29.9	38.1	49.0	(40.1)	(40.1)	NA	32.2	17.8
Western	(5.4)	11.1	20.6	22.3	20.8	33.3	(25.0)	NA	19.6	8.5
Education										
No education	9.2	17.7	23.6	30.9	29.7	26.1	25.5	NA	23.5	19.5
Primary	5.2	10.8	18.1	23.8	27.6	23.1	27.8	NA	18.0	11.1
Secondary+	6.4	4.2	9.5	13.5	13.5	18.4	(7.9)	NA	9.7	4.3
All women	6.0	10.0	16.6	22.5	25.1	22.8	25.6	NA	17.1	NA
All men	0.0	7.3	4.5	9.3	7.3	8.4	11.9	16.2	NA	8.7

Note: Figures in parentheses are based on 25-49 unweighted cases.
NA = Not applicable

Table 5.4 and Figure 5.2 show that men marry at a later age than women. Data in the last column in Table 5.4 also indicate that men marry on average 6 years later than women. There are slight variations in the median age at first marriage among men by residence and education.

5.4 Age at First Sexual Intercourse

While age at first marriage is often used as a proxy for first exposure to intercourse, the two events do not necessarily occur at the same time. Women may engage in sexual relations prior to marriage, especially if they are postponing the age at which they marry. The ZDHS asked women the age at which they first had sexual intercourse (see Tables 5.5 and 5.6). (Note that the information on age at first sexual intercourse in Tables 5.5 and 5.6 parallels the information on age at first marriage in Tables 5.3 and 5.4).

Table 5.3 Age at first marriage

Percentage of women and men who were first married by specific exact age and median age at first marriage, according to current age, Zambia 1996

WOMEN

Current age	Percentage who were first married by exact age: 15	18	20	22	25	Percentage who have never married	Number of women	Median age at first marriage
15-19	3.6	NA	NA	NA	NA	72.7	2,003	a
20-24	8.9	44.2	64.3	NA	NA	22.0	1,830	18.5
25-29	11.6	45.5	65.2	77.2	87.1	9.5	1,286	18.4
30-34	14.5	51.7	69.8	83.0	90.7	2.8	1,081	17.9
35-39	17.6	57.4	74.8	84.6	91.7	1.3	758	17.4
40-44	17.4	57.8	76.4	87.1	94.4	1.2	568	17.4
45-49	25.5	63.8	81.6	91.4	95.5	0.7	494	16.8
Women 20-49	13.7	50.4	69.4	80.6	87.0	9.5	6,018	18.0
Women 25-49	15.9	53.1	71.6	83.0	90.9	4.1	4,187	17.7

MEN

Current age	Percentage who were first married by exact age: 20	22	25	28	30	Percentage who have never married	Number of men	Median age at first marriage
25-29	14.3	37.4	62.1	NA	NA	23.2	255	23.4
30-34	15.7	36.5	61.8	77.3	86.4	8.1	225	23.3
35-39	16.1	34.5	64.3	79.8	86.7	1.8	184	23.5
40-44	20.3	33.1	57.1	80.7	86.7	0.7	121	23.8
45-49	13.7	27.6	62.8	83.4	88.7	1.1	83	23.6
50-54	13.2	23.9	67.4	85.2	91.3	0.0	65	23.6
55-59	20.2	37.5	52.7	72.6	76.4	0.0	52	24.6
Men 25-59	15.9	34.4	61.7	78.4	84.0	8.4	986	23.5

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

In many cases, sexual activity precedes marriage. By age 18, 70 percent of the women age 20-49 have had sexual intercourse, whereas only 50 percent have been married. Similarly, by age 20, 85 percent of women had intercourse, while 70 percent have married (see Table 5.5). Overall, the median age at first sexual intercourse is about 16 years, which is about 2 years earlier than the median age at first marriage of about 18. Analysis of cohorts indicates that there has been little change in the median age at first sexual intercourse over time. This is corroborated by data from the 1992 ZDHS which showed a median age at first sexual intercourse of 16.3 among women age 20-49.

In the case of men, by age 15 only one in four (24 percent) men age 15-59 years have had sexual intercourse compared to 90 percent by age 22 years. Like women, the percentage of men who have had sexual intercourse at different ages varies little by age group.

Table 5.4 Median age at first marriage

Median age at first marriage among women 20-49 years by current age, and selected background characteristics, and among men age 25-59 by background characteristics, Zambia 1996

Background characteristic	Current age						Women age 20-49	Women age 25-49	Men age 25-59
	20-24	25-29	30-34	35-39	40-44	45-49			
Residence									
Urban	19.7	19.5	18.6	17.6	17.9	16.7	18.7	18.3	24.4
Rural	17.8	17.7	17.5	17.3	16.9	16.9	17.5	17.4	22.8
Province									
Central	18.7	18.4	18.6	(18.1)	(17.3)	(17.0)	18.3	18.1	23.1
Copperbelt	18.8	18.7	18.7	17.7	17.1	(16.1)	18.2	17.9	24.0
Eastern	17.6	17.0	16.6	17.1	(17.4)	(16.9)	17.2	17.0	22.0
Luapula	17.7	17.6	16.8	16.7	(16.7)	(16.5)	17.2	16.9	22.8
Lusaka	a	20.2	19.1	17.7	(18.2)	(17.2)	19.1	18.7	24.7
Northern	17.7	17.9	17.7	(17.1)	(18.0)	(17.2)	17.7	17.6	23.9
North-Western	18.1	17.5	17.0	(15.9)	(16.1)	*	17.2	16.7	22.8
Southern	18.4	18.5	17.7	17.2	(17.9)	(17.5)	18.0	17.9	23.0
Western	a	20.2	(19.5)	18.3	(16.9)	(16.9)	19.0	18.5	24.9
Education									
No education	17.4	17.0	16.3	16.5	16.6	16.9	16.8	16.7	22.4
Primary	17.7	17.6	17.3	16.8	17.0	16.6	17.3	17.2	22.9
Secondary+	a	21.4	20.9	*	(20.2)	*	a	20.8	24.2
All women	18.5	18.4	17.9	17.4	17.4	16.8	18.0	17.7	23.5

Note: The median age for women 15-19 could not be determined because some women may still get married before reaching age 20. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed, while figures in parentheses are based on 25-49 women.
[a] Omitted because less than 50 percent of the women in the age group x to $x+4$ were first married by age x

If women do not wait for marriage to become sexually active, has the increasing age at marriage among women in urban areas and in Central, Copperbelt, and Luapula Provinces had any effect on delaying exposure to intercourse? Table 5.6 indicates some trend toward later initiation of sexual intercourse among younger urban women. While age at marriage has been increasing, the age of initiating sexual activity has remained almost unchanged, especially in Lusaka and Luapula Provinces. The median age at first sexual intercourse is lowest among women in North-Western Province (15.1 years for women 25-49 years), and in Southern and Western Provinces (16.0 years or younger). Women with secondary or higher education start having sexual intercourse later than women with less than secondary education.

Like women, urban men initiate sexual intercourse at a later age than rural men. Regional variations in this median are minimal. Overall, the median age at first sexual intercourse for men increases with increasing level of education.

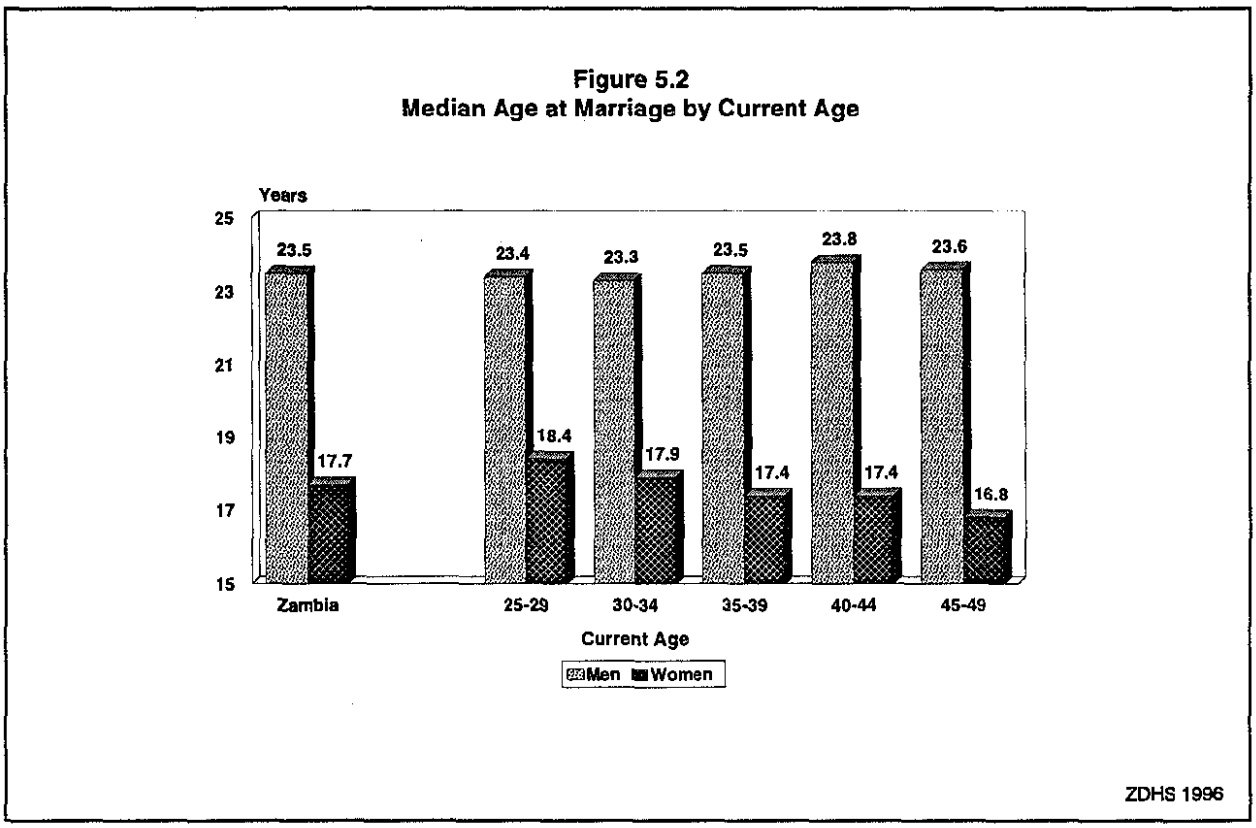


Figure 5.2
Median Age at Marriage by Current Age

5.5 Recent Sexual Activity

In the absence of contraception, the probability of pregnancy is related to the frequency of intercourse. Thus, information on sexual activity can be used to refine measures of exposure to pregnancy. Only 12 percent of women interviewed in the ZDHS had never had sexual intercourse. But not all women who have ever had intercourse are currently sexually active. Table 5.7.1 presents data on sexual activity among women in the four weeks preceding the survey by background characteristics and the length of abstinence among sexually inactive women.

Women are considered to be sexually active if they had intercourse at least once in the four weeks preceding the survey. Women who are not sexually active may be abstaining in the period following a birth, or may be abstaining for various other reasons. Just over half of women (52 percent) were sexually active in the month prior to the interview, while 13 percent were abstaining for post-partum reasons and 22 percent were abstaining for other reasons. Teenagers and women who have never been in a union are less likely to be sexually active than older women and women who are in a union. There are slight variations in the proportion of women who are sexually active according to various background characteristics such as marriage duration and residence. As expected, women who are using a method of family planning are more likely to be sexually active than those who are not.

Table 5.5 Age at first sexual intercourse

Percentage of women and 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, Zambia 1996

Current age	Percentage who had first intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Number of women/ men	Median age at first intercourse
				WOMEN				
15-19	21.7	NA	NA	NA	NA	41.7	2,003	a
20-24	21.7	69.1	86.2	NA	NA	5.2	1,830	a
25-29	24.6	69.4	84.4	90.4	94.4	0.5	1,286	16.4
30-34	25.4	68.6	83.2	90.3	93.3	0.5	1,081	16.4
35-39	26.9	71.0	84.4	90.1	93.1	0.1	758	16.3
40-44	23.7	69.5	84.2	89.7	93.7	0.0	568	16.6
45-49	28.7	71.5	85.8	91.2	94.0	0.0	494	16.3
Women 20-49	24.4	69.5	84.8	90.7	93.3	1.8	6,018	16.4
Women 25-49	25.6	69.7	84.2	90.3	93.7	0.3	4,187	16.4
				MEN				
15-19	39.3	NA	NA	NA	NA	33.8	460	a
20-24	31.9	70.2	82.6	NA	NA	10.6	404	16.0
25-29	28.7	69.4	83.0	91.5	98.1	0.9	255	16.4
30-34	28.4	69.9	80.1	90.6	93.0	1.4	225	16.0
35-39	24.7	64.4	83.7	92.4	96.1	0.0	184	16.6
40-44	13.0	59.2	80.0	90.8	96.3	0.0	121	17.3
45-49	15.6	42.9	65.6	83.9	92.7	0.0	83	18.6
50-54	20.8	50.4	67.1	87.0	94.5	0.0	65	18.0
55-59	17.5	65.9	84.4	89.0	92.4	0.0	52	16.6
Men 25-59	23.7	63.7	79.7	90.3	95.3	0.6	986	16.7

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

Among men age 15-59 years, 56 percent were sexually active in the four weeks preceding the survey, 33 percent were not sexually active in the same period, and 11 percent had never had sexual intercourse (Table 5.7.2). Sexual activity varies with age, marital status, level of education, and residence. Men in polygynous unions, rural men, and better educated men are more sexually active than other men.

Table 5.6 Median age at first intercourse

Median age at first intercourse among women 20-49 years by current age and selected background characteristics, and among men age 25-59 by background characteristics, Zambia 1996

Background characteristic	Current age						Women age 20-49	Women age 25-49	Men age 25-59
	20-24	25-29	30-34	35-39	40-44	45-49			
Residence									
Urban	17.0	17.1	16.8	16.9	16.9	16.3	16.9	16.9	17.4
Rural	16.2	15.9	16.1	16.0	16.4	16.2	16.1	16.1	16.0
Province									
Central	16.7	16.3	16.7	(16.7)	(16.4)	(16.2)	16.5	16.4	17.6
Copperbelt	16.9	16.9	16.6	16.8	(16.5)	(15.7)	16.8	16.7	17.3
Eastern	16.6	16.1	15.9	16.5	(16.9)	(16.2)	16.4	16.2	15.8
Luapula	16.4	16.5	16.0	16.4	(16.7)	(16.3)	16.3	16.3	15.9
Lusaka	17.0	16.9	17.4	16.5	(17.0)	(16.8)	16.9	16.9	17.8
Northern	16.7	17.0	17.1	(16.3)	(17.6)	(16.9)	16.9	17.0	15.1
North-Western	15.7	15.2	15.3	(14.7)	*	*	15.3	15.1	15.8
Southern	15.9	15.8	16.0	(15.7)	(16.0)	(16.4)	15.9	15.9	16.6
Western	15.7	16.0	16.2	15.7	16.2	(15.7)	15.9	16.0	17.9
Education									
No education	16.4	15.7	15.8	15.7	16.4	16.3	16.1	16.0	16.3
Primary	16.0	15.9	15.9	15.9	16.2	16.0	16.0	15.9	16.4
Secondary+	17.9	18.0	18.5	18.0	17.7	*	18.0	18.1	17.0
All women/men	16.6	16.4	16.4	16.3	16.6	16.3	16.4	16.4	16.7

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

5.6 Post-partum Amenorrhoea, Abstinence, and Insusceptibility

Post-partum protection from conception can be prolonged by breastfeeding, which can lengthen the duration of amenorrhoea (the period following a birth, but prior to the return of menses). Protection can also be prolonged by delaying the resumption of sexual relations. Table 5.8 presents the percentage of births whose mothers are post-partum amenorrhoeic and abstaining, as well as the percentage of births whose mothers are classified as still post-partum insusceptible to pregnancy for either reason; data are presented by months since the birth. On average, women are amenorrhoeic for more than 1 year (12.5 months) and abstain from sexual relations following a birth for 8.3 months. The average duration of the post-partum insusceptible period is 14.7 months.

Half of women in Zambia remain amenorrhoeic for at least 10 months following a birth; but only 22 percent abstain from sexual intercourse for this duration. The proportion remaining amenorrhoeic 18 months after birth drops significantly to 25 percent, and those still abstaining to 20 percent. Overall, three-quarters of women become susceptible to pregnancy within 20-21 months of giving birth.

The median durations of post-partum amenorrhoea, abstinence, and insusceptibility are presented in Table 5.9 by background characteristics of the mothers. Post-partum amenorrhoea generally lasts slightly longer among older (age 30 and above) than younger mothers (14 months compared to 11 months), and among

Table 5.7.1 Recent sexual activity: women

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

Background characteristic/ contraceptive method	Sexually active in last 4 weeks	Not sexually active in last 4 weeks: Abstaining (post-partum) 0-1 years	Abstaining (post-partum) 2+ years	Abstaining (not post-partum) 0-1 years	Abstaining (not post-partum) 2+ years	Missing	Never had sex	Total	Number of women
Age									
15-19	26.9	8.8	0.6	18.7	2.8	0.4	41.7	100.0	2,003
20-24	53.5	17.1	3.2	17.3	2.3	1.3	5.2	100.0	1,830
25-29	62.3	12.7	2.2	18.1	2.6	1.6	0.5	100.0	1,286
30-34	65.4	11.9	1.7	16.6	2.5	1.5	0.5	100.0	1,081
35-39	62.9	12.9	1.9	14.7	5.6	2.0	0.1	100.0	758
40-44	61.7	4.9	2.7	18.5	8.9	3.3	0.0	100.0	568
45-49	60.6	0.6	1.4	18.6	17.3	1.5	0.0	100.0	494
Duration of union (years)									
Never married	14.7	6.5	2.8	24.3	5.1	0.2	46.5	100 0	2,032
0-4	64.1	19.1	0.9	13.8	0.8	1.2	0.0	100.0	1,463
5-9	62.7	14.8	1.7	16.4	2.3	2.1	0.0	100.0	1,357
10-14	68.2	11.7	2.0	14.8	2.0	1.3	0.0	100.0	976
15-19	66.6	13.0	1.6	13.7	3.1	2.0	0.0	100.0	787
20-24	63.1	8.9	2.2	15.4	6.6	3.7	0.0	100.0	625
25-29	63.6	4.2	2.5	17.3	11.8	0.6	0.0	100.0	482
30+	58.8	0.6	1.3	20.9	16.4	2.0	0.0	100 0	300
Residence									
Urban	49.0	8.3	1.8	19.6	5.2	1.4	14.8	100.0	3,604
Rural	54.1	13.8	2.1	16.0	3.4	1.4	9.3	100.0	4,417
Province									
Central	56.3	9.0	2.4	16.8	4.0	2.1	9.4	100 0	653
Copperbelt	48.9	7.4	1.9	21.5	4.8	0.8	14.6	100.0	1,588
Eastern	55.5	12.5	1.3	16.8	3.7	1.9	8.3	100.0	1,075
Luapula	53.2	7.9	0.8	17.5	4.4	1.0	15.2	100.0	726
Lusaka	49.8	8.1	1.1	18.6	5.7	1.9	14.8	100.0	1,403
Northern	40.8	19.3	4.0	16.1	4.7	2.0	13.1	100.0	872
North-Western	54.7	21.9	1.8	10.9	2.5	1.4	6.8	100.0	288
Southern	61.4	11.4	1.0	14.3	2.6	0.5	8 7	100.0	816
Western	52.0	16.7	4.5	17.1	2.4	0.6	6.4	100.0	600
Education									
No education	56.3	12.0	1.9	17.4	6.1	1.3	4.9	100.0	1,067
Primary	54.2	12.8	1.7	15.8	3.3	1.5	10.8	100.0	4,721
Secondary	43.7	8.0	2.6	21.4	4.8	1.3	18.5	100.0	2,007
Higher	52.0	7.0	0.5	24.2	9.0	1.5	5.8	100.0	226
Contraceptive method[1]									
No method	46.5	11.6	2.2	18.6	5.0	1.5	14.5	100.0	6,483
Pill	84.7	0.9	0.6	12.2	0.0	1.2	0.3	100.0	416
Female sterilisation	81.1	3.2	0.0	10.8	5.0	0.0	0.0	100.0	114
Natural family planning	79.8	5.1	0.0	14.1	0.0	1.1	0.0	100.0	124
Other	66.8	16.6	1.4	14.2	0.4	0.6	0.0	100.0	858
Total	51.8	11.3	1.9	17.6	4.2	1.4	11.8	100.0	8,021

[1] Includes 21 users of IUCD

rural (14 months) compared to urban mothers (8 months). Mothers in Western, North-Western, Luapula, and Eastern Provinces show a particularly long median duration of amenorrhoea (13.7 months or longer), while those in Western, North-Western, and Northern Provinces tend to abstain for considerably longer periods (9-13 months) after a birth than women in other provinces. Despite the long amenorrhoeic and abstinence periods in Northern and North-Western Provinces, fertility is high (see Chapter 3).

Table 5.7.2 Recent sexual activity: men

Percent distribution of men by sexual activity in the four weeks preceding the survey, according to selected background characteristics, Zambia 1996

Background characteristic	Sexually active in last 4 weeks	Not sexually active in last 4 weeks	Never had sex	Total	Number of men
Age					
15-19	27.9	38.3	33.8	100.0	460
20-24	49.5	39.9	10.6	100.0	404
25-29	66.1	33.0	0.9	100.0	255
30-34	71.0	27.6	1.4	100.0	225
35-39	76.4	23.6	0.0	100.0	184
40-44	75.3	24.7	0.0	100.0	121
45-49	70.2	29.8	0.0	100.0	83
50-54	77.1	22.9	0.0	100.0	65
55-59	64.9	35.1	0.0	100.0	52
Marital status					
Never married	32.9	42.1	25.0	100.0	814
Polygynous union	85.7	14.3	0.0	100.0	82
Monogamous union	76.3	23.7	0.0	100.0	862
Formerly married	38.4	61.6	0.0	100.0	91
Residence					
Urban	53.8	36.5	9.7	100.0	852
Rural	57.4	30.5	12.1	100.0	997
Education					
No education	55.6	37.7	6.7	100.0	127
Primary	53.5	31.5	15.1	100.0	938
Secondary	57.1	35.5	7.4	100.0	686
Higher	68.6	28.6	2.9	100.0	98
Total	55.8	33.2	11.0	100.0	1,849

Mother's education has a direct relationship with the duration of amenorrhoea; the higher the level of education of the mother, the shorter the median duration of amenorrhoea. The median duration of amenorrhoea decreases from 14 months for women with no education to 8 months for women with secondary education and to 4 percent for women with higher education.

Table 5.8 Post-partum amenorrhoea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are post-partum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Zambia 1996

Months since birth	Amenor-rhoeic	Abstaining	Insus-ceptible	Number of births
< 2	96.6	92.9	97.8	193
2-3	92.0	70.3	94.8	267
4-5	81.1	46.5	85.0	236
6-7	68.7	32.9	75.4	210
8-9	65.5	32.3	71.6	223
10-11	50.7	22.1	58.4	270
12-13	47.9	22.7	55.7	288
14-15	39.8	21.3	49.6	251
16-17	33.6	14.6	40.2	247
18-19	25.1	20 2	35.9	219
20-21	19.1	13.8	25.3	246
22-23	10.1	9.2	15.7	255
24-25	6.0	9.1	13.6	294
26-27	2.0	8.5	9.4	237
28-29	0.6	4.7	5.3	241
30-31	3.7	7.6	10.6	191
32-33	0.8	4.3	5.0	243
34-35	1.6	2.7	4.1	251
Total	35.2	23.5	41.3	4,362
Median	11.5	4.7	14.1	-
Mean	13.2	9.0	15.3	-
Prevalence/ Incidence mean[1]	12.5	8.3	14.7	-

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

5.7 Termination of Exposure to Pregnancy

Later in life, the risk of pregnancy begins to decline with age, typically beginning around age 30. While the onset of infecundity is difficult to determine for any individual woman, there are ways of estimating it for a population. Table 5.10 presents an indicator of decreasing exposure to the risk of pregnancy for women age 30 and above, the prevalence of menopause, which includes women who are neither pregnant nor post-partum amenorrhoeic, but have not had a menstrual period in the six months preceding the survey. Overall, 8 percent of women 30-49 are menopausal according to this indicator. While the proportion is 2 percent or less among women in their 30s, it increases to 16 percent among women 44-45 years. By age 48-49, half of women have stopped menstruating.

Table 5.9 Median duration of post-partum insusceptibility by background characteristics

Median number of months of post-partum amenorrhoea, post-partum abstinence, and post-partum insusceptibility, by selected background characteristics, Zambia 1996

Background characteristic	Post-partum amenorrhoea	Post-partum abstinence	Post-partum insuscep-tibility	Number of women
Age				
<30	10.5	4.8	13.4	2,957
30+	13.8	4.5	15.0	1,404
Residence				
Urban	8.4	4.3	9.5	1,682
Rural	13.9	5.0	15.8	2,680
Province				
Central	8.3	3.9	9.5	363
Copperbelt	9.4	3.1	10.8	797
Eastern	13.7	5.0	15.4	677
Luapula	14.0	2.6	15.1	411
Lusaka	8.7	4.5	9.5	638
Northern	12.9	8.7	16.3	536
North-Western	14.1	9.8	18.9	177
Southern	12.3	4.3	15.8	477
Western	14.7	13.1	18.3	286
Education				
No education	13.9	5.3	15.5	609
Primary	12.3	4.7	14.5	2,798
Secondary	7.9	4.4	9.0	878
Higher	3.8	3.4	4.3	76
Total	11.5	4.7	14.1	4,362

Note: Medians are based on current status. Total includes one woman for whom information on education is missing.

Table 5.10 Termination of exposure to the risk of pregnancy

Indicators of menopause among currently married women age 30-49, Zambia 1996

	Menopause[1]	
Age	Percent	Number
30-34	0.6	857
35-39	1.8	586
40-41	4.5	183
42-43	10.8	168
44-45	15.6	134
46-47	26.9	137
48-49	52.1	163
Total	8.3	2,228

[1] Percentage of currently married women who are not pregnant, not post-partum amenorrhoeic, and whose last menstrual period occurred six or more months preceding the survey or who report that they are menopausal.

CHAPTER 6

FERTILITY PREFERENCES

Three questions were asked in the 1996 ZDHS which allow an assessment of the need for contraception and of levels of unwanted fertility. First, women and men were asked whether they wanted to have another child. Respondents who wanted more children were asked how long they would prefer to wait before having the next child. Finally, women and men were asked how many children they would like to have if they could start afresh.

Interpretation of data on fertility preferences has always been the subject of controversy. Survey questions have been criticised on the grounds that answers are misleading because:

- They reflect unformed ephemeral views, which are held with weak intensity and little conviction; and
- They do not take into account the effect of social pressures or the attitudes of other family members, particularly the husband who may exert a major influence on reproductive decisions. Also, women need the means to fulfill their desires.

The inclusion of women who are currently pregnant complicates the measurement of views on future childbearing. For these women, the question on desire for more children is rephrased to refer to desire for another child, after the one that they are expecting. To take into account the way in which the preference variable is defined for pregnant women, the results are classified by number of living children, including the current pregnancy as equivalent to a living child. Women who have been sterilised for contraceptive purposes are treated as wanting no more children.

6.1 Fertility Preferences

In the 1992 and 1996 ZDHS surveys, currently married women were asked "*Would you like to have (a/another) child or would you prefer not to have any (more) children?*" Interviewers were instructed to alter the wording depending on whether the respondent already had children or not. If the woman was pregnant, she was asked if she wanted to have another child after the one she was expecting. Women who said they did want to have another child were then asked how long they would like to wait before the birth of the next child.

Two-thirds of married women in Zambia want to have another child; however most of these women (39 percent of all married women in 1996) want to wait two or more years before having their next birth (Figure 6.1). The percentage of women who want no more children or have been sterilised has increased from 24 percent in 1992 to 28 percent in 1996. The majority of married women want either to space their next birth (want a child later) or to limit childbearing altogether (want no more children). These women are potentially in need of family planning services.

Table 6.1 shows that the desire for more children declines as the number of living children increases. There is a sizeable disparity in the fertility preferences of men and women; women want to limit births earlier than men. Whereas 62 percent of women with six or more children want no more, the corresponding percentage of men is 41 percent (Figure 6.2). Women would rather have their first child sooner than men; nine in ten women with no children want to have a child within two years, while among men the proportion is 58 percent. Figure 6.2 also shows there was little overall change in fertility preferences between 1992 and 1996.

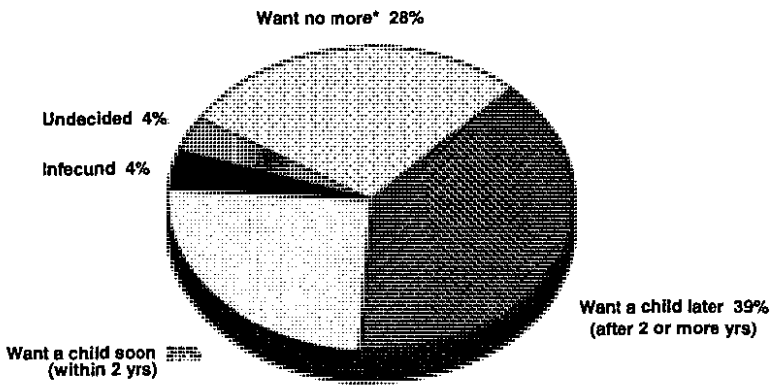
Table 6.1 Fertility preferences by number of living children

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

Desire for children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
WOMEN								
Have another soon[2]	86.3	36.7	28.0	20.3	18.0	11.5	5.9	25.2
Have another later[3]	3.4	53.6	54.9	50.8	44.9	29.7	15.3	38.8
Have another, undecided when	1.6	2.4	1.4	1.0	0.5	1.0	0.5	1.2
Undecided	0.7	1.9	1.6	2.7	3.6	4.3	3.3	2.6
Want no more	1.5	2.9	11.5	22.1	28.7	45.6	61.9	26.4
Sterilised	0.2	0.4	0.6	1.1	1.9	1.9	6.5	2.1
Declared infecund	6.3	2.1	2.0	1.8	2.3	5.7	6.4	3.6
Missing	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	343	883	881	771	552	476	996	4,902
MEN								
Have another soon[2]	57.5	42.5	35.2	35.8	31.2	20.4	18.8	31.7
Have another later[3]	32.4	51.8	49.5	47.6	32.2	31.8	22.0	37.3
Have another, undecided when	5.6	1.1	3.5	1.5	3.8	1.3	2.9	2.7
Undecided	0.0	0.0	1.6	4.0	3.9	4.0	5.0	3.0
Want no more	1.0	1.0	8.2	8.4	23.7	36.8	40.5	19.8
Sterilised	0.0	0.0	0.0	0.5	2.2	1.5	3.5	1.4
Declared infecund	3.4	3.6	2.0	2.2	2.9	4.2	7.3	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	72	138	151	137	97	98	252	944

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

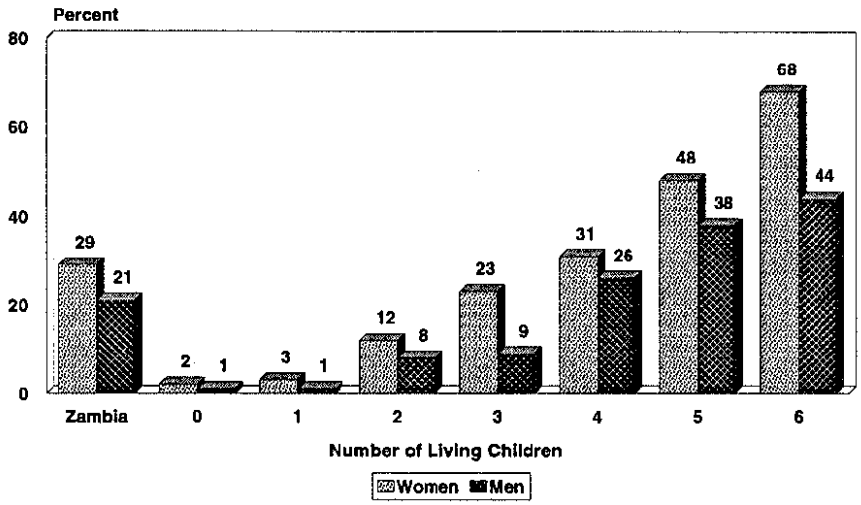
Figure 6.1
Fertility Preferences among Currently Married Women 15-49



* Includes sterilised women

ZDHS 1996

Figure 6.2
Percentage of Currently Married Women and Currently Married Men Who Want No More Children by Number of Living Children



Note: Includes sterilised women and men

ZDHS 1996

Table 6.2 shows the fertility preferences of women by age. The desire to have another child within two years declines with age, while the desire to limit childbearing increases with age. The proportion of women who want to have another child soon declines from 34 percent among women 15-19 years to 7 percent among women 45-49 years. Conversely, the percentage of women who do not want to have another child increases from 3 percent among women age 15-19 years to 61 percent among women age 45-49 years.

Table 6.2 Fertility preferences by age

Percent distribution of currently married women by desire for more children, according to age, Zambia 1996

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]	34.0	28.9	28.3	27.8	20.9	13.9	7.1	25.2
Have another later[2]	57.9	59.2	50.3	32.8	17.8	5.7	0.8	38.8
Have another, undecided when	3.6	1.3	0.4	0.9	1.1	1.5	0.6	1.2
Undecided	1.9	2.3	2.3	3.8	3.9	3.0	0.2	2.6
Want no more	2.6	7.9	18.1	30.8	48.7	56.9	61.1	26.4
Sterilised	0.0	0.0	0.2	1.4	4.0	10.1	6.2	2.1
Declared infecund	0.0	0.4	0.4	2.4	3.6	8.8	23.7	3.6
Missing	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	498	1,207	969	857	586	419	367	4,902

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

The fact that the 1996 ZDHS included interviews of men allows the linking of data from women and their husbands or partners. These data can be useful in comparing the fertility desires of couples. Table 6.3 shows the distribution of monogamous couples by desire for more children. In 60 percent of couples, both spouses want more children. The percentage of couples in which husbands want more children but wives do not (10 percent) is more than twice as high as the percentage of couples in which wives want more children but husbands do not (4 percent). Seventeen percent of couples agree on their desire not to have any more children. Not surprisingly, the highest level of agreement occurs among couples with no children, 96 percent of whom agree that they want a child.

Table 6.3 Desire for more children among monogamous couples

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

Number of living children	Both want more	Husband more/ wife no more	Wife more/ husband no more	Both want no more	Husband/ wife infecund	Other[1]	Total	Number of couples
Same number								
0	95.8	0.0	1.3	0.0	2.9	0.0	100.0	57
1-3	79.3	6.9	2.1	4.6	1.7	5.4	100.0	242
4-6	28.6	15.1	5.0	37.5	1.5	12.3	100.0	115
7+	(7.5)	(10.1)	(2.8)	(58.0)	(9.7)	(11.9)	100.0	41
Different number								
Husband > wife	56.5	11.7	5.9	15.5	5.3	5.1	100.0	213
Wife > husband	50.8	15.0	0.9	17.0	5.5	10.7	100.0	54
Total	59.6	9.9	3.6	16.7	3.6	6.7	100.0	722

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Undecided or missing

Women with different background characteristics differ as to their fertility preferences. Table 6.4 shows that urban women are more likely to want no more children than rural women, regardless of the number of children they already have. For instance, among women with two children, the proportion who want no more is twice as high in urban areas than in rural areas (18 percent vs. 7 percent). There are significant variations among provinces in the desire to stop childbearing. Overall, the percentage of women who want no more children is 30 percent or higher in Copperbelt, Lusaka, and Central Provinces, which may account in part for the fact that the latter two provinces have the lowest fertility in the country. There is a negative relationship between fertility preferences and level of education; women with no education are least likely to want to limit births, while those with higher levels of education are most likely to want no more children.

6.2 Need for Family Planning Services

Unmet need for family planning is derived by comparing current use of contraceptive methods with the desire to have no more children or to delay the next pregnancy. Women who are fecund and who either wish to postpone the next birth or who wish to stop childbearing altogether but are not using contraception are classified as having an unmet need for family planning. Pregnant women are considered to have an unmet need for spacing or limiting if their pregnancy was mistimed or unwanted, respectively. Similarly, amenorrhoeic non-contracepting women are classified as having unmet need if their last birth was mistimed or unwanted. Women who are using family planning methods constitute *met need* for family planning services. Women with unmet and met need constitute the total demand for family planning. Demand for family planning and the percentage of demand that is satisfied differs among women of different backgrounds.

Table 6.4 Desire to limit childbearing

Percentage of currently married women who want no more children, by number of living children and selected background characteristics, Zambia 1996

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	1.1	4.3	18.4	32.5	44.4	66.1	82.4	36.5
Rural	1.9	2.6	7.2	16.5	21.2	36.6	59.9	23.1
Province								
Central	0.0	3.1	15.4	30.5	36.0	53.2	67.3	31.9
Copperbelt	2.2	5.2	18.3	34.6	47.2	51.9	81.4	37.7
Eastern	0.0	2.1	4.5	14.2	18.0	44.5	63.6	22.3
Luapula	2.6	1.0	1.0	7.2	16.4	30.6	64.3	20.4
Lusaka	0.0	4.0	18.3	34.8	54.1	62.9	84.2	35.0
Northern	4.1	1.1	7.3	18.4	17.9	33.7	48.9	21.1
North-Western	10.4	8.8	5.8	15.6	26.6	51.4	63.4	26.6
Southern	0.0	2.4	16.7	13.2	9.4	45.4	67.7	25.5
Western	2.1	4.1	7.2	22.4	40.4	50.1	59.4	26.4
Education								
No education	3.6	1.3	5.1	14.9	27.7	40.1	65.3	28.7
Primary	1.1	3.6	8.2	19.6	24.0	43.8	66.9	26.4
Secondary	1.8	4.0	21.5	31.1	51.4	67.8	79.3	32.1
Higher	0.0	0.0	44.2	71.3	85.5	80.8	100.0	52.2
Total	1.6	3.3	12.1	23.2	30.6	47.5	68.4	28.5

Note: Women who have been sterilised are considered to want no more children.
[1] *Includes current pregnancy*

Table 6.5 shows that 27 percent of currently married women have an unmet need for family planning services, 19 percent for spacing purposes and 8 percent for limiting child bearing. There has been some reduction in the level of unmet need since 1992, when unmet need for family planning constituted 33 percent of married women, 21 percent for spacing purposes and 12 percent for limiting births (Figure 6.3) (Gaisie et al., 1993:73).

Unmet need for limiting generally increases with age, while unmet need for spacing decreases with age, resulting in a rather uniform level of total unmet need by age. Unmet need is almost identical among urban and rural women, while it is highest among women in Southern Province and lowest among women in North-Western and Western Provinces. As expected, women with higher education have lower unmet need than less educated women.

If all unmet need were to be satisfied, more than half of currently married women (52 percent) would be using family planning (total demand). Just under half of total demand is currently being satisfied. Women in North-Western and Lusaka Provinces have the highest percentage of demand for family planning satisfied. On the other hand, demand for family planning services is least satisfied in Luapula Province (29 percent).

Table 6.5 shows that unmet need, met need, and total demand for family planning services are lower among both unmarried women and all women than among married women. However, the percentage of demand satisfied is higher among unmarried women and all women than among married women.

Table 6.5 Need for family planning services

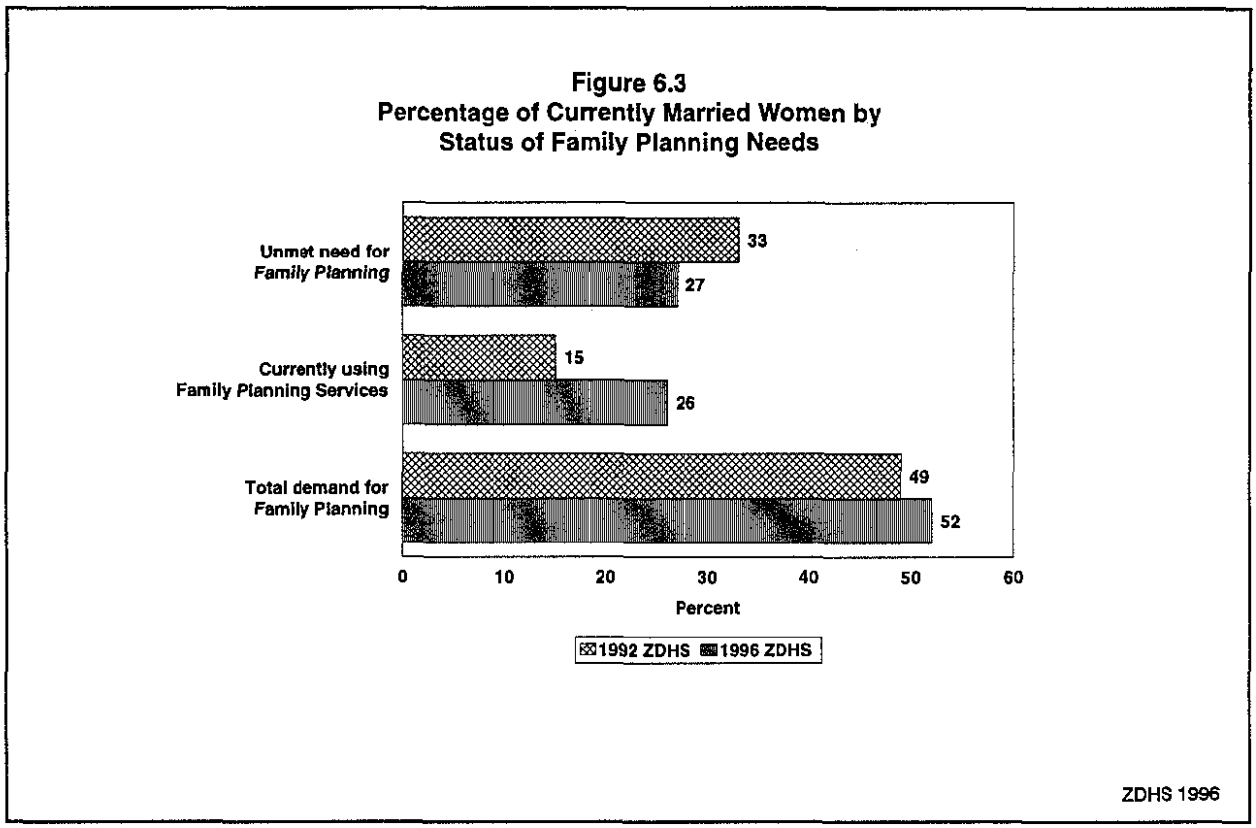
Percentage of currently married women with unmet need for family planning, met need for family planning, and the total demand for family planning services, by selected background characteristics, Zambia 1996

Background characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			Total demand for family planning			Percentage of demand satis-fied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
Age											
15-19	24.4	0.8	25.2	16.7	0.2	16.9	41.1	1.0	42.1	40.1	498
20-24	26.2	1.3	27.5	22.9	1.7	24.6	49.2	3.0	52.1	47.2	1,207
25-29	23.6	2.6	26.2	22.1	6.3	28.3	45.6	8.9	54.6	51.9	969
30-34	18.8	7.8	26.7	14.6	13.3	27.9	33.5	21.1	54.6	51.2	857
35-39	11.6	19.6	31.2	10.1	21.1	31.2	21.7	40.7	62.4	50.0	586
40-44	4.4	24.3	28.7	3.6	26.5	30.0	8.0	50.7	58.7	51.1	419
45-49	0.4	15.0	15.4	0.8	17.1	17.8	1.1	32.1	33.2	53.6	367
Residence											
Urban	16.9	9.7	26.6	18.1	15.2	33.3	35.0	24.9	59.9	55.6	1,972
Rural	19.9	6.6	26.5	14.3	6.6	20.9	34.2	13.2	47.4	44.1	2,930
Province											
Central	19.4	10.5	29.9	9.8	7.7	17.4	29.2	18.1	47.3	36.8	419
Copperbelt	18.2	10.2	28.4	15.2	14.6	29.8	33.4	24.8	58.2	51.1	910
Eastern	21.8	7.1	28.9	15.7	5.5	21.1	37.5	12.5	50.0	42.3	764
Luapula	20.9	5.2	26.2	5.5	5.4	10.9	26.4	10.6	37.1	29.4	448
Lusaka	15.1	8.4	23.5	19.4	15.9	35.3	34.5	24.3	58.9	60.0	796
Northern	18.5	6.6	25.1	25.1	7.9	33.0	43.6	14.4	58.1	56.8	552
North-Western	13.2	4.7	17.9	28.5	13.2	41.7	41.7	17.8	59.6	70.0	197
Southern	24.6	6.9	31.5	13.4	8.5	21.9	38.1	15.3	53.4	41.0	518
Western	10.8	7.5	18.2	11.5	7.3	18.7	22.2	14.7	37.0	50.7	298
Education											
No education	15.2	9.2	24.4	10.3	6.8	17.1	25.5	16.0	41.5	41.2	803
Primary	20.4	7.6	28.1	14.8	8.6	23.4	35.2	16.2	51.4	45.5	3,053
Secondary	17.1	7.4	24.5	23.8	14.1	37.9	40.9	21.5	62.4	60.7	924
Higher	10.5	7.0	17.4	18.0	37.4	55.4	28.4	44.4	72.8	76.1	122
Currently married women	18.7	7.8	26.5	15.8	10.0	25.9	34.5	17.9	52.4	49.4	4,902
Unmarried women	4.5	0.9	5.4	6.1	2.5	8.6	10.7	3.4	14.1	61.4	3,119
All women	13.2	5.1	18.3	12.1	7.1	19.2	25.2	12.2	37.5	51.1	8,021

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

[2] Using for *spacing* is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for *limiting* is defined as women who are using and who want no more children.

Note that the specific methods used are not taken into account here.



6.3 Ideal Number of Children

In the ZDHS, information on what women consider the ideal family size was elicited through two questions. Women who had no children were asked *"If you could choose exactly the number of children to have in your whole life, how many would that be?"* For women who had children, the question was rephrased as follows: *"If you could go back to the time you did not have any children and would choose exactly the number of children to have in your whole life, how many would that be?"* The data obtained from these questions is shown in Table 6.6.

The data indicate that the vast majority of women were able to give a numeric response to the question. Only 5 percent of all women gave a non-numeric response such as "it is up to God," "any number," or "don't know." Those who gave numeric responses generally want large families. Almost 40 percent of women say they want at least six children, while 23 percent cite four children as ideal, and only 8 percent want two children or fewer. Preference for large families increases with increasing number of surviving children. For example, the percentage of women who want to have six or more children is 29 percent among those with two children, 56 percent among those with four children, and 71 percent among those who already have six or more children.

The mean ideal number of children is 5.3 children among all women. This ranges from 4.5 for women with no children to 7.1 among those with six or more children. Moreover, the data show that men are generally more pronatalist than women. Not only is the overall mean ideal family size higher among men than women (5.9 vs. 5.3), but it is also about half a child higher with each additional living child. These levels of ideal family size exceed the four children espoused as the ideal family size in the National Population Policy and imply that efforts to encourage smaller family size norms might be warranted. Nevertheless, comparison with data from the 1992 ZDHS suggest that there has been at least some reduction in ideal family size among women over time, from a mean of 5.8 children in 1992 to 5.3 children in 1996 (Gaisie et al., 1993:75).

Table 6.6 Ideal and actual number of children

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

Ideal number of children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
WOMEN								
0	0.6	0.0	0.0	0.0	0.2	0.2	0.2	0.2
1	1.5	1.9	0.5	0.4	0.2	0.1	0.1	0.9
2	13.4	7.8	7.0	2.8	2.2	2.8	2.6	7.0
3	12.0	13.2	7.2	7.2	2.4	1.6	1.2	7.8
4	26.8	29.1	29.1	21.7	21.5	8.0	11.4	22.9
5	17.3	18.9	21.5	22.5	12.8	20.0	6.7	17.1
6+	23.2	25.0	29.2	40.6	55.9	62.4	70.6	38.9
Non-numeric response	5.2	4.2	5.4	4.8	4.8	4.9	7.2	5.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,074	1,448	1,129	938	682	597	1,154	8,021
Mean ideal number for:								
All women	4.5	4.6	4.9	5.4	5.9	6.5	7.1	5.3
Number of women	1,966	1,387	1,068	893	649	568	1,071	7,602
Currently married women	5.2	4.8	5.0	5.4	5.9	6.5	7.2	5.7
Number of women	319	846	833	732	528	456	925	4,640
MEN								
0	0.3	0.0	0.0	0.0	0.0	0.0	1.0	0.3
1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2	7.0	3.2	7.9	0.4	0.0	2.1	1.6	4.7
3	11.9	12.9	10.2	2.4	4.6	3.7	1.9	8.8
4	25.5	30.0	28.5	21.7	16.3	12.8	7.5	22.2
5	18.6	17.2	14.6	19.4	15.4	11.7	6.5	15.9
6+	33.3	34.6	37.8	55.7	61.5	67.6	74.4	44.9
Non-numeric response	3.1	2.1	1.0	0.3	2.3	2.1	7.1	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	872	188	173	150	104	104	259	1,849
Mean ideal number for:								
All men	5.1	5.2	5.1	6.1	7.0	6.8	8.6	5.9
Number of men	844	184	171	149	102	102	241	1,793
Currently married men	5.4	5.2	5.1	6.0	6.9	6.9	8.8	6.6
Number of men	68	134	149	137	95	97	233	914

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

Table 6.7 presents data on the mean ideal number of children for women and men by background characteristics. The data show that women have consistently lower ideal family sizes than men, regardless of the background characteristic. It can be observed from the data in the table that the ideal family size in Western Province (6.3 for women and 7.2 for men) is the highest in Zambia, despite the fact that the fertility level in this province is not the highest. This suggests, as other research has pointed out, that there is an infertility problem in the province (CSO, 1985b and CSO, 1995). Lusaka and Copperbelt Provinces have the lowest ideal family size, along with lowest fertility rates and the highest contraceptive prevalence rates. Ideal family size decreases as the level of education increases.

Table 6.7 Mean ideal number of children by background characteristics

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

Background characteristic	Age 15-19	20-24	25-29	30-34	35-39	40-44	45-49	All women	All men
Residence									
Urban	3.9	4.2	4.4	5.1	5.2	6.0	7.0	4.6	5.1
Rural	5.2	5.1	5.8	6.3	7.0	7.3	8.1	5.9	6.6
Province									
Central	4.4	4.6	5.2	5.9	5.8	6.3	7.4	5.2	6.1
Copperbelt	4.1	4.4	4.6	5.2	4.9	5.9	7.2	4.7	5.2
Eastern	4.8	4.9	5.6	6.1	6.9	7.5	8.0	5.8	6.0
Luapula	5.4	5.6	5.9	6.9	7.1	7.8	8.4	6.2	6.1
Lusaka	3.7	3.9	4.2	4.8	5.3	5.7	6.8	4.4	5.0
Northern	5.2	4.9	5.5	6.1	6.6	6.6	7.8	5.7	6.8
North-Western	4.5	4.7	5.6	6.2	6.9	8.5	8.5	5.8	6.3
Southern	4.8	4.8	5.4	6.2	6.9	6.7	7.5	5.6	6.1
Western	5.3	5.6	6.0	6.4	7.4	7.9	8.6	6.3	7.2
Education									
No education	5.2	5.3	5.7	6.3	7.1	7.7	8.0	6.4	7.0
Primary	4.8	5.0	5.6	6.1	6.6	7.1	7.8	5.6	6.4
Secondary+	3.9	4.0	4.1	4.6	4.6	5.2	5.9	4.2	5.1
Total women/men	4.6	4.7	5.1	5.8	6.2	6.7	7.7	5.3	5.9

Note: Men age 50-59 have been omitted.

6.4 Fertility Planning

There are two ways of estimating levels of unwanted fertility from the ZDHS data. One is based on responses to a question as to whether each birth in the five years before the survey was planned (wanted then), mistimed (wanted, but at a later time), or unwanted (wanted no more children). These data are likely to result in underestimates of unplanned childbearing, since women may rationalise unplanned births and declare them as planned once they are born. Another way of measuring unwanted fertility utilises the data on ideal family size to calculate what the total fertility rate would be if all unwanted births were avoided. This measure may also suffer from underestimation to the extent that women are unwilling to report an ideal family size lower than their actual family size. Data using these two approaches are presented below.

Table 6.8 shows the distribution of births in the five years before the survey by whether they were wanted at the time of conception, wanted later, or not wanted at all. The data show that 36 percent of these births were unplanned, of which 29 percent were mistimed and 7 percent were unwanted. The proportion of births that were wanted at the time decreases with birth order and mother's age, while the proportion of births that were not wanted at all increases with birth order and age. Compared with 1992 ZDHS data (not shown), changes in levels of mistimed and unwanted births have been minimal since 1992.

Table 6.9 presents "wanted" fertility rates. The wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. For this purpose, unwanted births are defined as those which exceed the number considered ideal by the respondent. (Women who did not report a numeric ideal family size were assumed to want all their births.) This rate represents the level of fertility that would have prevailed in the three years preceding the survey if all unwanted births had been prevented. A comparison of the total wanted fertility rate and the actual total fertility rate suggests the potential demographic impact of the elimination of unwanted births.

Table 6.8 Fertility planning status

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

Birth order and mother's age	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Not wanted	Missing		
Birth order						
1	67.9	26.9	3.6	1.6	100.0	1,765
2	66.5	30.3	1.8	1.4	100.0	1,522
3	63.8	33.1	1.5	1.6	100.0	1,248
4+	58.1	28.6	11.6	1.7	100.0	3,542
Age at birth						
<20	62.2	33.0	3.3	1.5	100.0	1,698
20-24	65.2	31.3	2.1	1.5	100.0	2,516
25-29	64.6	30.1	3.4	1.9	100.0	1,801
30-34	61.5	26.3	10.7	1.5	100.0	1,163
35-39	57.4	20.8	20.1	1.8	100.0	648
40-44	48.3	12.4	38.5	0.9	100.0	214
45-49	(39.1)	(18.9)	(39.9)	(2.1)	100.0	38
Total	62.7	29.2	6.5	1.6	100.0	8,078

Note: Birth order includes current pregnancy. Figures in parentheses are based on 25-49 unweighted cases.

Table 6.9 Wanted fertility rates

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

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	4.1	5.1
Rural	6.1	6.9
Province		
Central	4.8	6.3
Copperbelt	4.4	5.6
Eastern	6.6	7.1
Luapula	5.9	6.8
Lusaka	4.0	4.9
Northern	6.5	7.2
North-Western	5.8	6.2
Southern	5.0	6.2
Western	5.1	5.5
Education		
No education	6.0	6.8
Primary	5.7	6.7
Secondary+	3.9	4.5
Total	5.2	6.1

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 3.3.

The wanted fertility rate is 5.2 births per woman for all of Zambia, a slight decline from 5.4 in 1992 (Gaisie, et al., 1993:78). The gap between actual and wanted fertility for urban women is one child. If the desired fertility level were realised, the total fertility rate for urban women would be 4.1 births per woman, two births fewer than that wanted by women in rural areas. Women in Lusaka Province have the lowest wanted as well as actual fertility rates (4.0 births and 4.9 births per woman). On the other hand, women in Eastern and Northern Provinces show the highest wanted and actual fertility rates (a total wanted fertility rate of about 6.5 and a total fertility rate of about 7.1). Women's education has a negative relationship with the level of wanted fertility; women with no education have the highest wanted fertility, while women with secondary or higher education have the lowest wanted fertility (6.0 vs 3.9 births per woman).

CHAPTER 7

INFANT AND CHILD MORTALITY

7.1 Introduction

This chapter presents information on mortality under age five in Zambia. Specifically, estimates of levels, trends and differentials in neonatal, postneonatal, infant, and child mortality are provided, as well as data on high-risk fertility behaviour. The data are disaggregated by sex, socioeconomic, and demographic characteristics, province, and other factors to identify segments of the population requiring special attention. Further, this information is useful for monitoring and evaluating population and health programmes and policies. Infant and child mortality rates are basic indicators of a country's socioeconomic situation and quality of life.

Estimates of childhood mortality are based on information from the birth history section of the questionnaire administered to individual women. The section began with questions about the aggregate childbearing experience of respondents (i.e., the number of sons and daughters who live with the mother, the number who live elsewhere and the number who have died). For each of these births, information was then collected on sex, month and year of birth, survivorship status, and current age, or, if the child had died, age at death.

This information is used to directly estimate mortality rates. In this report, mortality in early childhood is described using the following five rates:

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 between birth and the fifth birthday.

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

Examination of data relating to childhood mortality does not indicate that there are any serious biases in reporting (see Appendix C for details).

7.2 Levels and Trends in Infant and Child Mortality

Neonatal, postneonatal, infant, child, and under-five mortality rates are shown in Table 7.1 for five-year periods preceding the survey. Under-five mortality for the most recent five-year period (which roughly corresponds to the years mid-1992-mid-1996) is 197 per 1,000 births. This means that almost one in five children born in Zambia dies before reaching the fifth birthday. Half of the deaths under age five occur in the first year of life; the infant mortality rate is 109 deaths per 1,000 births and the child mortality rate is 98 per 1,000 children reaching one year of age. During infancy, the risk of death in the first month of life (35 per 1,000) is about half of that in the next 11 months (74 per 1,000).

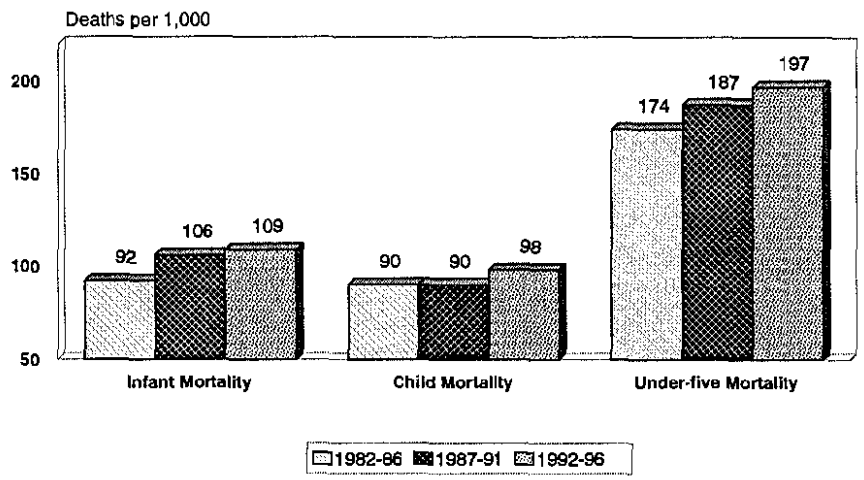
Table 7.1 Infant and child mortality

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

Years preceding survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality** ($_1q_0$)	Child mortality ($_4q_1$)	**Under-five mortality** ($_5q_0$)
0-4	35.4	73.5	108.9	98.4	196.6
5-9	37.0	69.2	106.2	89.9	186.5
10-14	36.9	55.3	92.2	90.2	174.1

The estimates in Table 7.1 and Figure 7.1 indicate that child survival in Zambia has deteriorated since the mid-1980s. Under-five mortality has increased from 174 deaths per 1,000 births in the period 10-14 years before the survey (approximately 1982-86) to 197 for the period 0-4 years before the survey, an increase of 13 percent. The pace of increase was faster for infant mortality than for child mortality; the infant mortality rate increased by 18 percent (from 92 per 1,000 births 10-14 years before the survey to 109 per 1,000 births 0-4 years before the survey), while the child mortality rate increased by 9 percent over the same period (from 90 to 98 per 1,000 births). It is interesting to note that, while postneonatal mortality rates have increased in the recent past, neonatal mortality rates show little change.

Figure 7.1
Trends in Infant and Child Mortality
Zambia, 1982-86 to 1992-1996



ZDHS 1996

Table 7.2 Trends in childhood mortality

Infant and under-five mortality rates from various sources, Zambia 1969-96

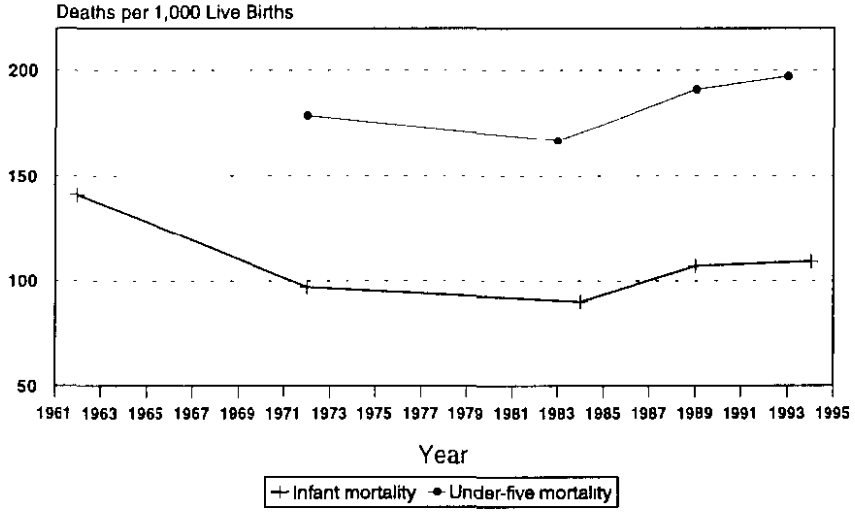
Indicator (Reference period)	1969 Census (1962)	1980 Census (1973)	1990 Census (1984)	1992 ZDHS (1987-1991)	1996 ZDHS (1992-1996)
Infant mortality rate	141	97	90	107	109
Under-five mortality	NA	179	167	191	197

Note: Estimates from the census data were obtained using indirect estimation methods and refer to a point some seven years prior to the census year. Data from the ZDHS surveys refer to the five-year period prior to the surveys.
NA = Not applicable

Source: CSO, 1995:4; Gaisie et al., 1993:81; Nsemukila, 1994:32

Further evidence that childhood mortality has either increased or remained at a high level comes from a comparison of data from the 1996 ZDHS with previous data sources. Table 7.2 and Figure 7.2 show infant and child mortality rates from various censuses as well as the 1992 ZDHS. The rates show a decline during the 1970s and 1980s, followed by an increase in the late 1980s and a levelling off in the early 1990s. The infant mortality rate for the five years before the 1992 ZDHS was 107 deaths per 1,000 live births, almost indistinguishable from the rate of 109 deaths per 1,000 live births as measured for the five years preceding the 1996 ZDHS.

Figure 7.2
Infant and Under-Five Mortality Rates, From Selected Sources, Zambia, 1969-1996



ZDHS 1996

7.3 Socioeconomic Differentials in Infant and Child Mortality

Differentials in the various mortality rates by selected background characteristics are presented in Table 7.3. The table focuses on basic socioeconomic characteristics, including urban-rural residence, province, and mother's educational level. A ten-year period is used to calculate the mortality estimates in order to have a sufficient number of cases in each category.

Table 7.3 Infant and child mortality by background characteristics

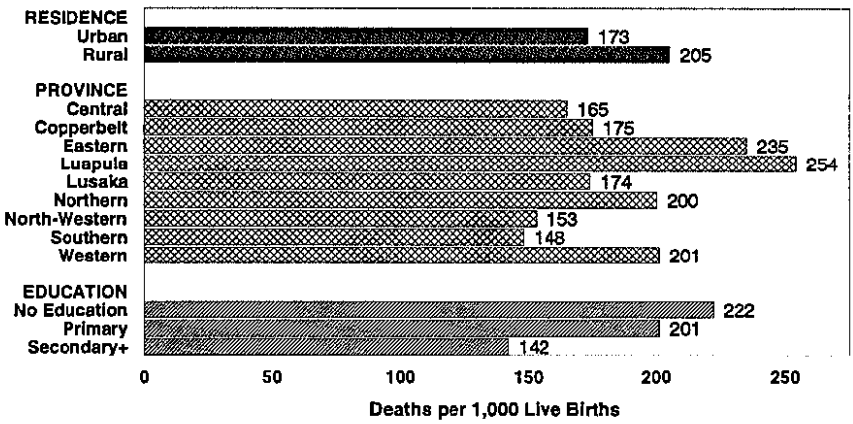
Infant and child mortality rates for the 10-year period preceding the survey, by selected socioeconomic characteristics, Zambia 1996

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality** (${}_1q_0$)	Child mortality (${}_4q_1$)	**Under-five mortality** (${}_5q_0$)
Residence					
Urban	32.3	59.7	91.9	89.6	173.3
Rural	38.6	79.3	117.9	98.1	204.5
Province					
Central	29.6	64.9	94.6	77.3	164.5
Copperbelt	28.7	53.3	81.9	101.8	175.4
Eastern	49.7	81.4	131.1	120.0	235.4
Luapula	32.9	124.8	157.8	114.5	254.2
Lusaka	35.5	64.8	100.3	82.1	174.1
Northern	36.5	88.8	125.3	85.7	200.2
North-Western	32.8	58.3	91.1	68.1	153.0
Southern	26.0	40.2	66.2	87.9	148.3
Western	55.8	73.3	129.1	82.8	201.2
Education					
No education	48.3	84.6	132.9	102.4	221.7
Primary	36.1	74.0	110.2	102.3	201.2
Secondary+	27.2	54.5	81.7	65.6	142.0
Medical maternity care[1]					
No antenatal or delivery care	(55.6)	104.0	159.5	NA	NA
Either antenatal or delivery care	37.1	77.1	114.3	NA	NA
Both antenatal and delivery care	31.1	67.3	98.4	NA	NA
Total	36.1	71.6	107.7	94.6	192.1

Note. Rates based on 250-499 cases (exposed children) are enclosed in parentheses.
NA = Not applicable
[1] Refers to births in the five years before the survey

Children in the rural areas of Zambia experience a higher risk of dying before age five than urban children (205 compared to 173 deaths per 1,000 births, respectively) (Figure 7.3). The urban-rural differential in mortality exists at every age group but is more notable during the postneonatal period. Postneonatal rates are 79 per 1,000 births in rural areas and 60 in urban areas.

Figure 7.3
Under-Five Mortality by Background Characteristics



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

ZDHS 1996

Differences in mortality by province are also quite marked. Childhood mortality is highest in Luapula and Eastern Provinces where almost one in four children do not reach their fifth birthday. It is only slightly lower in Western and Northern Provinces with 20 percent mortality before age five. On the other hand, under-five mortality is lowest in Southern and North-Western Provinces (around 150 per 1,000 births). These provincial differentials are roughly consistent with data from the 1990 census which shows the highest levels of under-five mortality in Eastern, Luapula, and Western Provinces; however, unlike the 1996 ZDHS, census data show the lowest levels in Copperbelt and Lusaka Provinces (Nsemukila, 1994:32).

Differences in early childhood mortality by education of the mother are large. Children born to mothers who have had no education are about one and a half times as likely to die before their fifth birthday as those born to mothers who have at least some secondary education (222 compared to 142 per 1,000 births, respectively). This educational advantage is apparent for the mortality rates in every age group; for example, infant mortality rates are 133 per 1,000 births to women with no education, compared to only 82 per 1,000 births to women with at least some secondary education.

Mortality rates in childhood also vary according to whether the mother received antenatal care or care during delivery or both. For example, the infant mortality rate for children born to women who received both antenatal and delivery care is 98 per 1,000 births, compared to 160 for children born to mothers who received neither antenatal nor delivery care.

7.4 Demographic Differentials in Infant and Child Mortality

The relationship between early childhood mortality and various demographic variables is examined in Table 7.4 and Figure 7.4 for the ten-year period preceding the survey. The results show that, as expected, male children have higher mortality rates than females at every age. The difference is especially pronounced in the neonatal period.

Table 7.4 Infant and child mortality by demographic characteristics

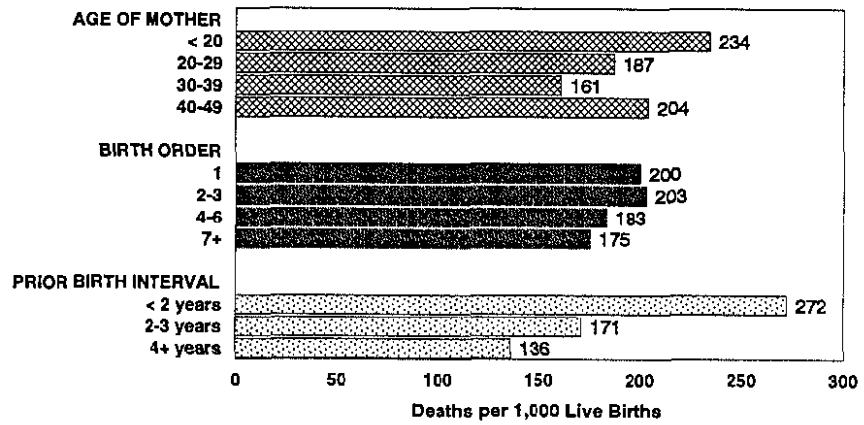
Infant and child mortality rates for the 10-year period preceding the survey, by selected demographic characteristics, Zambia 1996

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	42.5	73.8	116.3	96.5	201.6
Female	29.8	69.4	99.3	92.9	182.9
Age of mother at birth					
< 20	47.9	93.5	141.3	107.9	234.0
20-29	32.6	69.3	101.9	94.4	186.7
30-39	29.3	54.3	83.6	84.4	161.0
40-49	(59.6)	77.9	137.5	76.5	203.5
Birth order					
1	43.7	77.5	121.2	89.9	200.3
2-3	33.1	81.0	114.1	100.6	203.2
4-6	31.7	64.2	95.9	96.3	183.0
7+	39.2	57.9	97.1	86.5	175.2
Previous birth interval					
< 2 yrs	57.1	107.4	164.5	128.4	271.8
2-3 yrs	27.4	59.8	87.2	92.3	171.4
4 yrs +	22.5	54.3	76.7	64 1	135.9
Size at birth[1]					
Small/very small	76.8	81.3	158.1	-	-
Average or larger	27.8	71.3	99 2	-	-

Figures in parentheses are based on 250-499 births.
[1] Refers to births in the five years before the survey

The relationship between childhood mortality and mother's age at birth generally shows the expected U-shaped pattern with higher mortality for children of younger (less than age 20) and older (40-49 years old) mothers. For example, the infant mortality rate for children of mothers who were less than age 20 at the time of the child's birth (141 per 1,000) is 70 percent higher than the rate for children whose mothers were 30-39 at the time they gave birth (84 per 1,000). Among the children of mothers age 40-49, the infant mortality rate is again high (138 per 1,000). An exception to the U-shaped pattern is child mortality which decreases with the age of the mother. There is some consistency in the relationship between mortality rates and birth order. In general, higher order children tend to have lower mortality.

Figure 7.4
Under-Five Mortality by
Selected Demographic Characteristics



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

ZDHS 1996

The most consistent findings can be seen in the relationship between mortality rates and the length of the interval between births. The data show that short birth intervals significantly reduce a child's chances of survival. Children born less than two years after a previous birth are twice as likely to die in infancy than those born after an interval of four years or more (165 compared to 77 per 1,000). This relationship persists in all the age groups examined. This finding supports the importance of child spacing practices as a means of reducing mortality of young children.

As expected, a child's size at birth is related to his/her chances of survival. Children whose mothers say they were either small or very small at birth have considerably higher mortality rates than those who were of average or larger size.

7.5 High-Risk Fertility Behaviour

Previous research has shown strong relationships between fertility patterns and children's survival chances. Typically, infants and children have a greater probability of dying early if they are born to mothers who are especially young or old, if they are born after a short birth interval, or if they are of high birth order. Data to examine these relationships are presented in Table 7.5, which shows the distribution of births in the five years preceding the survey and of currently married women according to these categories of increased risk. In this analysis, 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. A "short birth interval" is defined by a birth occurring less than 24 months after a previous birth, and a child is of "high birth order" if the mother had previously given birth to three or more children (i.e., if the child is of birth order 4 or higher). First births, although often at increased risk, are classified in the "not in any high-risk category," because they are considered an unavoidable risk.

Table 7.5 High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality, and the percent distribution of currently married women at risk of conceiving a child with an elevated risk of mortality, by category of increased risk, Zambia 1996

Risk category	Births in 5 years preceding the survey		Percentage of currently married women[a]
	Percentage of births	Risk ratio	
Not in any high-risk category	26.3	1.00	19.0[b]
Unavoidable risk: first births	14.2	1.13	6.7
Single high-risk category			
Mother's age < 18	8.1	1.28	0.9
Mother's age > 34	0.2	*	2.5
Birth interval < 24 months	6.8	(1.28)	10.2
Birth order > 3	26.4	0.85	18.7
Subtotal	55.7	1.04	39.0
Multiple high-risk category			
Age <18 & birth interval <24[c] mo	0.4	*	0.9
Age >34 & birth interval <24 mo	0.0	NA	0.0
Age >34 & birth order >3	9.8	0.57	21.0
Age >34 & birth interval <24 & birth order >3	1.4	*	4.9
Birth interval <24 & birth order >3	6.4	(1.17)	15.2
Subtotal	18.0	0.88	42.0
In any high-risk category	73.7	1.00	81.0
Total	100.0	NA	100.0
Number	7,159	NA	4,902

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

Table 7.5 is further divided into two categories, with births falling into either single high-risk categories (such as those born to mothers below the age of 18 or over the age of 34, those born after an interval of less than 24 months and those of birth order higher than three) or multiple high-risk categories (such as those born after an interval of less than 24 months to mothers below the age of 18, children of birth order 4 or higher who are born to mothers over 34 years, etc.).

The results indicate that only one in four births in the five years prior to the survey are free from any high mortality risk due to their mother's fertility behaviour; more than half (56 percent) of children fall into at least one high-risk category; and almost one in five births is characterised by two or more high-risk factors. The most common high-risk category is high birth order (44 percent of all births).

Table 7.5 also indicates the relative risk of dying for children born in the five years before the survey by comparing the proportion dead in each high-risk category with the proportion dead among children not in any high-risk category. These risk ratios are presented in column 2. Births to mothers under age 18 and children born less than 24 months after the birth of their older sibling have a 28 percent higher risk of dying than those who are not in any risk category.

Column 3 of Table 7.5 shows the proportion of currently married women who fall into the various risk categories. Overall, four in five married women, if they became pregnant today, would conceive a child that would fall into a high-risk category. It is interesting to note that this percentage is higher than that for births (74 percent). To reduce the number of high-risk births, therefore, there is need for women to limit births.

CHAPTER 8

MATERNAL AND CHILD HEALTH

This chapter covers findings in the three main areas of maternal and child health. They are maternal and newborn care, immunisation, and common childhood illnesses and their treatment. The information is vital in identifying categories of mothers and their babies who are at risk and in providing information for planning appropriate improvements in services. The data presented in this chapter refer to all live births which occurred during the five years before the survey to women who were interviewed.

8.1 Antenatal Care and Delivery Assistance

Table 8.1 shows the percentage of live births in the five years preceding the survey by source of antenatal care, according to maternal and background characteristics. Interviewers were instructed to record all persons a woman had seen for care during pregnancy. In case more than one provider was seen, only the one with the highest qualification is represented in the table. For virtually all births (96 percent), mothers received antenatal care from a doctor, trained nurse, or midwife (Figure 8.1). Most women rely on a nurse or trained midwife (93 percent). Women received antenatal care from a traditional birth attendant (TBA) for less than 1 percent of births; no antenatal care was received for 4 percent of births. The Ministry of Health, in its health reform programme encourages community-based services provision within the framework of Primary Health Care. The findings of this survey, however, show that TBAs are little utilised as a source of antenatal care.

There are few differentials in the sources of antenatal services. Whereas nearly all the births to urban women receive antenatal care from medically trained providers (99 percent), about 6 percent of the births in rural areas do not benefit from any antenatal care at all. Pregnant women in urban areas have a higher chance of being attended to by a doctor than those in rural areas. Although almost all the women surveyed are likely to receive antenatal services from a health worker, women from Central, Copperbelt, and Lusaka Provinces are most likely to receive antenatal services from a doctor, in contrast to women in Eastern, Luapula, North-Western, and Western Provinces.

There is a strong relationship between education levels and use of antenatal services. Pregnant women with no education are less likely to seek antenatal services, whereas woman with secondary or higher education are more likely to receive antenatal care from either a doctor or a nurse/midwife. The main reason for this could be that mothers with no education are more likely to live in rural areas where access to information and services is more difficult. As the mother's level of education increases, so does the likelihood that she will be seen by a doctor during pregnancy; only 1 percent of births to mothers with no education receive antenatal care from a doctor, compared to 22 percent of births to mothers with higher than secondary education.

Antenatal care can be more effective when it is sought early in the pregnancy and continues through parturition. Obstetricians generally recommend that antenatal visits be made on a monthly basis to the 28th week (7th month), fortnightly to the 36th week (8th month) and then weekly until birth. Regular visits allow proper monitoring of the mother and the child throughout the pregnancy. If the first antenatal visit is made at the third month of pregnancy, this schedule translates to a total of 12 to 13 visits during the pregnancy.

Information about the number and timing of antenatal care visits is presented in Table 8.2. In 7 out of 10 births, women made four or more antenatal care visits. However, for a substantial number of births (23 percent), mothers made fewer than four visits. The median number of antenatal care visits was 5.2, implying that women are aware of the importance of frequent visits. However, this is far fewer than the recommended 12 visits.

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, Zambia 1996

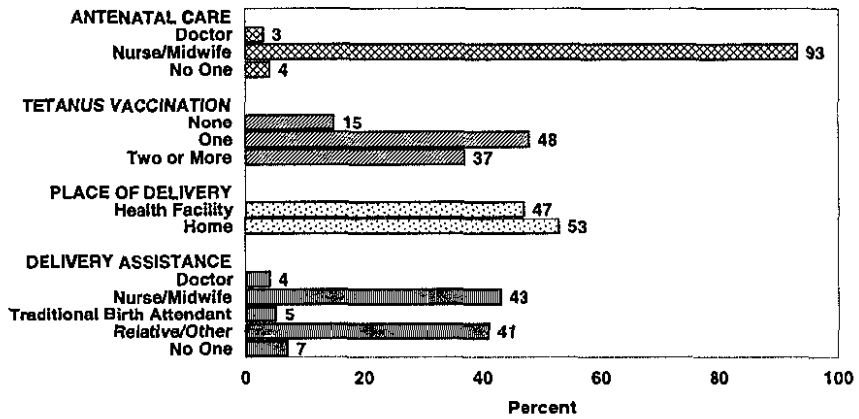
Background characteristic	Antenatal care provider[1]						Number of births
	Doctor	Nurse/ Trained midwife	Traditional birth attendant (TBA)	No one	Missing	Total	
Mother's age at birth							
< 20	2.1	92.9	0.6	4.1	0.2	100.0	1,525
20-34	2.6	93.5	0.4	3.3	0.2	100.0	4,819
35+	4.3	89.3	1.2	4.9	0.3	100.0	815
Birth order							
1	2.8	92.7	0.5	3.8	0.2	100.0	1,566
2-3	2.6	93.7	0.4	3.1	0.1	100.0	2,438
4-5	2.4	93.3	0.4	3.6	0.2	100.0	1,512
6+	2.8	91.4	1.0	4.4	0.3	100.0	1,643
Residence							
Urban	4.9	93.8	0.1	0.9	0.4	100.0	2,858
Rural	1.2	92.3	0.9	5.5	0.1	100.0	4,301
Province							
Central	5.4	88.7	0.4	5.2	0.3	100.0	587
Copperbelt	5.1	93.7	0.0	0.6	0.5	100.0	1,347
Eastern	0.5	96.4	0.1	2.9	0.2	100.0	1,103
Luapula	0.4	91.3	3.4	5.0	0.0	100.0	671
Lusaka	4.8	93.1	0.0	1.7	0.4	100.0	1,076
Northern	2.4	84.8	1.8	11.1	0.0	100.0	863
North-Western	0.5	95.5	0.0	3.8	0.2	100.0	287
Southern	1.0	97.5	0.0	1.5	0.0	100.0	764
Western	0.3	95.0	0.0	4.7	0.0	100.0	460
Mother's education							
No education	1.3	88.1	0.9	9.5	0.1	100.0	982
Primary	1.9	93.8	0.7	3.4	0.2	100.0	4,604
Secondary	4.4	94.7	0.1	0.7	0.1	100.0	1,437
Higher	22.1	77.3	0.0	0.0	0.6	100.0	135
Total	2.7	92.9	0.6	3.7	0.2	100.0	7,159

Note: Figures are for births in the period 0-59 months preceding the survey.
[1] If the respondent mentioned more than one provider, only the most qualified provider is considered.

For 6 in 10 births, the first antenatal check-up was received before the sixth month of gestation, while for 1 in 3 births, services were not received until the sixth month or later. The median number of months pregnant at first visit was 5.6, rather late if mothers are to receive the major benefits of antenatal care. Early identification of risk factors and medical conditions and initiation of prophylaxis where needed (e.g., against malaria or anaemia) is vital for prevention and early management of complications.

In response to the 1994 International Conference for Population and Development (ICPD) Action Resolutions, the government of the Republic of Zambia recognised the need to ensure the reproductive health of individuals. One important means of doing so is immunisation against neonatal tetanus. The recommended schedule to insure protection is for women to receive two or more doses of tetanus toxoid before the first birth, with three subsequent injections. Table 8.3 and Figure 8.1 present data on tetanus toxoid coverage during pregnancy for all births in the five years before the survey.

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



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

ZDHS 1996

Table 8.2 Number of antenatal care visits and stage of pregnancy

Percent distribution of live births in the five years preceding the survey by number of antenatal care visits, and by the stage of pregnancy at the time of the first visit, Zambia 1996

Characteristic	All births
Number of visits	
0	3.7
1	1.8
2-3	20.7
4+	71.3
Don't know/missing	2.5
Total	100.0
Median	5.2
Number of months pregnant at time of first visit	
No antenatal care	3.7
<6 months	60.7
6-7 months	33.0
8+ months	2.0
Don't know/missing	0.7
Total	100.0
Median	5.6
Number of births	7,159

Note: Figures are for births in the period 0-59 months preceding the survey.

For 4 in 10 births, the mother received two or more doses of tetanus toxoid during pregnancy, while for 48 percent, the mother received only one dose and for 15 percent, the mother did not receive any tetanus toxoid injection during that pregnancy. The higher the age of the woman at the time of birth, the higher the likeliness that she has not received two or more tetanus injections, increasing the risk of neonatal tetanus. A mother 35 years or older is twice as likely to have not received a tetanus toxoid injection as a mother less than 20 years of age. Similarly, births of higher order are less likely to be protected against tetanus than first or second births. The relationship between urban-rural residence and tetanus injections is not straightforward. While a higher percentage of women in rural than urban areas had received no tetanus injection during the pregnancy, a higher percentage had received two or more injections.

Tetanus toxoid coverage varies from one province to another. Births in Central, Eastern, Northern and Western Provinces are more likely to be protected against neonatal tetanus than those in the remaining provinces. At the same time, pregnant women in Northern Province have the highest chance of not receiving any tetanus toxoid injection. These women also have the lowest level of antenatal care coverage (Table 8.1). Women in Copperbelt, Luapula, and Southern Provinces have the lowest chance of receiving two or more doses of tetanus toxoid during a recent pregnancy.

Table 8.3 Tetanus toxoid vaccinations

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

Background characteristic	Number of tetanus toxoid injections					Number of births
	None	One dose	Two doses or more	Don't know/ Missing	Total	
Mother's age at birth						
< 20	12.2	42.3	44.5	1.0	100.0	1,525
20-34	13.7	50.2	35.1	1.0	100.0	4,819
35+	23.7	45.2	30.3	0.8	100.0	815
Birth order						
1	10.5	37.0	51.7	0.9	100.0	1,566
2-3	10.8	54.1	34.3	0.8	100.0	2,438
4-5	14.4	51.6	32.9	1.1	100.0	1,512
6+	24.1	45.9	28.9	1.2	100.0	1,643
Residence						
Urban	10.8	55.0	33.0	1.3	100.0	2,858
Rural	17.0	43.3	38.9	0.8	100.0	4,301
Province						
Central	15.1	39.4	43.9	1.5	100.0	587
Copperbelt	10.5	60.5	28.1	0.8	100.0	1,347
Eastern	12.5	36.5	49 9	1.1	100.0	1,103
Luapula	14.5	58.0	27.5	0.0	100.0	671
Lusaka	12.8	51.3	34.0	1.9	100.0	1,076
Northern	23.4	30.8	45.4	0.4	100.0	863
North-Western	18.1	48.0	33.7	0.2	100.0	287
Southern	16.4	56.0	26.8	0.8	100.0	764
Western	12.3	45.8	40.9	1.1	100.0	460
Mother's education						
No education	21.5	44.8	32.9	0.9	100.0	982
Primary	14.8	47.6	36.6	1.0	100.0	4,604
Secondary	9.4	51.8	37.9	0.9	100.0	1,437
Higher	7.8	43.0	48.6	0.6	100.0	135
Total	14.5	48.0	36.6	1.0	100.0	7,159

Note: Figures are for births in the period 0-59 months preceding the survey.

The survey reveals a strong relationship between education and tetanus toxoid vaccinations. The chances of being protected against tetanus increase with the level of education of the mother. Children of better educated women are more likely to have been protected against tetanus than children whose mothers have less education.

In the provision of the basic health package, the Ministry of Health, through the Central Board of Health, recognises child health and reproductive health as two of the six major thrusts in health provision. Maternal care has been identified as one area where support is most needed because of its effects on the health of both the mother and child. One aspect of maternal care is the place of delivery, as a woman is more at risk of dying when complications arise while delivering at home. Table 8.4 shows the distribution of births occurring in the five years before the survey according to place of delivery.

Table 8.4 Place of delivery

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

Background characteristic	Place of delivery			Total	Number of births
	Health facility	At home	Don't know/ Missing		
Mother's age at birth					
< 20	48.9	50.8	0.2	100.0	1,525
20-34	47.3	52.3	0.3	100.0	4,819
35+	37.4	62.1	0.5	100.0	815
Birth order					
1	55.6	44.2	0.2	100.0	1,566
2-3	48.4	51.3	0.2	100.0	2,438
4-5	43.7	55.9	0.4	100.0	1,512
6+	37.8	61.7	0.5	100.0	1,643
Residence					
Urban	76.7	22.8	0.5	100.0	2,858
Rural	26.5	73.2	0.2	100.0	4,301
Province					
Central	37.0	62.6	0.5	100.0	587
Copperbelt	75.2	24.3	0.6	100.0	1,347
Eastern	33.3	66.0	0.7	100.0	1,103
Luapula	27.7	72.3	0.0	100.0	671
Lusaka	73.8	25.7	0.5	100.0	1,076
Northern	24.3	75.7	0.0	100.0	863
North-Western	56.5	43.3	0.2	100.0	287
Southern	27.7	72.3	0.0	100.0	764
Western	37.3	62.7	0.0	100.0	460
Mother's education					
No education	24.0	75.7	0.3	100.0	982
Primary	40.7	58.9	0.4	100.0	4,604
Secondary	76.2	23.6	0.2	100.0	1,437
Higher	93.5	5.9	0.6	100.0	135
Antenatal care visits					
None	4.0	96.0	0.0	100.0	262
1-3 visits	31.9	68.0	0.1	100.0	1,611
4 or more visits	52.9	47.0	0.1	100.0	5,105
Don't know/Missing	58.2	32.3	9.5	100.0	181
Total	46.5	53.1	0.3	100.0	7,159

Note: Figures are for births in the period 0-59 months preceding the survey.

More than half of births in Zambia are delivered at home (53 percent), while 47 percent take place in health facilities (Figure 8.1). Survey findings show a relationship between the place of delivery and both the birth order and the mother's age. Younger mothers and mothers of lower parity have a higher chance of delivering in health facilities than older ones and those of higher parities. A birth to a woman in an urban area is three times more likely to have been delivered in a health institution than a birth in a rural area. This situation calls for concern because fertility levels are higher in rural areas.

There are marked differentials from one province to another regarding the proportion of deliveries taking place in health facilities. Approximately one in four births in Northern Province takes place in a health facility, compared to more than 70 percent of the births in Copperbelt and Lusaka Provinces. The regional differences reflect the expected pattern—the more rural provinces have fewer births delivered in health institutions than the more urbanised provinces.

There is a positive relationship between delivering in a health facility and the education level of the mother. A woman with higher than secondary education is about four times more likely to deliver in a health institution than a woman with no education. As education also correlates positively with having attended antenatal care facilities and having received two or more doses of tetanus toxoid, better educated women are more likely to have developed a relationship with the health workers and are aware of the advantages of delivering in a health facility. These women are also more likely to be better off economically than women with less education.

Delivery in a health facility is one aspect of safe motherhood, but also important are the qualifications of the person who attended to that delivery. Table 8.5 and Figure 8.1 show the distribution of live births in the five years before the survey by type of assistance during delivery. Just under half of births were assisted by medically trained personnel, of which about 4 percent were assisted by a doctor and 43 percent by a nurse or midwife. The others were mainly assisted by a relative (41 percent). Only a small number of births (5 percent) were assisted by traditional birth attendants. Assuming that relatives have not received any training in delivery care and given the fact that home deliveries are at higher risk of having a poor outcome for the mother and the child, the findings are a source of concern. There is a tendency among women, as they grow older and with higher parity, to deliver at home without any assistance.

Births to urban women are considerably more likely than those to rural women to be delivered with medically trained assistance, especially from a nurse or midwife. Rural women are most likely to be assisted by a relative during delivery. There are marked variations among the provinces regarding the type of assistance during the delivery. Births in the most urbanised provinces in the country—Lusaka and Copperbelt Provinces—are more likely than those in other provinces to be assisted by a doctor or a nurse or midwife during delivery. This is most likely due to variations in health care seeking behaviour, as well as to the availability of medical personnel. Although utilisation of traditional birth attendants is generally low (5 percent), their usage is more prominent in Luapula (12 percent) and Northern (11 percent) Provinces.

Mother's education has a very strong relationship with the probability of being attended to by a trained health worker during delivery. More than 90 percent of births to mothers with higher than secondary education are assisted by trained personnel during delivery, compared to only about one in four births to women without education, most of whom are assisted at delivery by relatives.

In line with the relation between number of antenatal visits and the place of delivery, the number of antenatal check-ups also has a positive relationship with assistance during delivery. The higher the number of visits a woman makes during her pregnancy, the more likely she will be assisted by trained personnel during the delivery.

Women who had a live birth in the five years preceding the survey were asked whether these children were delivered by caesarean section and what the birth weight was. Overall, 2 percent of babies were delivered by caesarean section. First births, births in urban areas, and births to women who have higher than secondary education have a higher chance of being delivered by caesarean section.

Table 8.5 Assistance during delivery

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

Background characteristic	Assistance during delivery							
	Doctor	Nurse/ Trained midwife	Traditional birth attendant[1]	Relative/ Other	No one	Don't know/ Missing	Total	Number of births
Mother's age at birth								
< 20	3.7	45.2	4.3	44.9	1.3	0.5	100.0	1,525
20-34	3.5	43.8	5.6	40.7	6.0	0.4	100.0	4,819
35+	3.9	33.6	5.8	36.6	19.9	0.3	100.0	815
Birth order								
1	6.0	49.5	5.0	38.4	0.7	0.5	100.0	1,566
2-3	3.0	45.5	5.3	43.1	2.7	0.4	100.0	2,438
4-5	2.3	41.2	5.0	43.3	8.0	0.3	100.0	1,512
6+	3.4	34.4	6.2	38.9	16.6	0.4	100.0	1,643
Residence								
Urban	7.5	69.4	1.4	17.4	3.8	0.6	100.0	2,858
Rural	1.0	25.4	8.0	56.9	8.4	0.2	100.0	4,301
Province								
Central	3.1	34.8	1.7	49.0	11.1	0.3	100.0	587
Copperbelt	7.1	68.1	2.2	18.1	3.8	0.7	100.0	1,347
Eastern	1.2	31.8	8.6	49.6	8.3	0.5	100.0	1,103
Luapula	0.5	26.5	11.7	52.1	9.2	0.0	100.0	671
Lusaka	9.6	64.5	0.7	20.6	4.0	0.6	100.0	1,076
Northern	0.5	23.5	10.5	55.4	10.0	0.0	100.0	863
North-Western	1.4	54.9	8.6	32.5	2.3	0.3	100.0	287
Southern	0.9	26.9	5.2	61.7	4.9	0.4	100.0	764
Western	1.8	35.5	1.8	54.8	6.1	0.0	100.0	460
Mother's education								
No education	1.2	22.8	8.4	58.6	8.7	0.3	100.0	982
Primary	2.7	38.1	5.5	45.7	7.6	0.5	100.0	4,604
Secondary	6.5	69.6	3.2	18.1	2.5	0.1	100.0	1,437
Higher	22.0	71.5	1.4	4.1	0.5	0.6	100.0	135
Antenatal care visits								
None	0.0	4.0	8.1	72.1	15.9	0.0	100.0	262
1-3 visits	2.2	29.8	5.8	52.7	9.3	0.2	100.0	1,611
4 or more visits	4.1	48.8	5.2	36.3	5.4	0.2	100.0	5,105
Don't know/Missing	6.7	52.2	2.0	29.1	2.0	7.9	100.0	181
Total	3.6	42.9	5.4	41.1	6.6	0.4	100.0	7,159

Note: Figures are for births in the period 0-59 months preceding the survey. If the respondent mentioned more than one attendant, only the most qualified attendant was considered in this table.
[1] Traditional midwife

Due to the large proportion of births that take place at home (see Table 8.6), birth weight records were unavailable for almost 60 percent of births that occurred in the five years before the survey. Of those babies with known birth weights according to health cards, only 5 percent had a birth weight less than 2.5 kilograms. Mothers were also asked about the size of these children at the time of birth; 14 percent of the babies were reported by their mothers to be small or very small, while 86 percent were reported to be of average or larger size.

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

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

		Birth weight			Size of child at birth					
Background characteristic	Delivery by C-section	Less than 2.5 kg	2.5 kg or more	Don't know/ Missing	Very small	Smaller than average	Average or larger	Don't know/ Missing	Total	Number of births
Age										
<20	2.1	6.3	37.4	56 3	4.5	13 9	81 2	0.4	100 0	1,525
20-34	1.7	4.8	39.7	55.5	2.8	9 7	87.2	0.3	100.0	4,819
35+	2 7	2.6	29 7	67.7	3 5	6 0	90.1	0.4	100.0	815
Birth order										
1	3.4	7.3	43.8	49.0	4.5	13.7	81 5	0.3	100.0	1,566
2-3	1.1	4.6	40.9	54.6	3.2	9 7	86.8	0 3	100.0	2,438
4-5	1.0	4.7	35.6	59.7	2.8	9.3	87.6	0.3	100.0	1,512
6+	2.3	3.1	30.7	66 2	2.6	8.2	88.9	0.4	100 0	1,643
Residence										
Urban	3 4	8.0	65.3	26 7	3.2	11 3	84 8	0.6	100 0	2,858
Rural	0.8	2 7	20 0	77.3	3.3	9 4	87.2	0.1	100.0	4,301
Province										
Central	2.0	3.8	28.2	68.0	5.7	14.6	79.4	0.3	100 0	587
Copperbelt	3.2	7 4	64.8	27.7	2 2	10.9	86.2	0.8	100.0	1,347
Eastern	1.5	3 4	24.3	72.3	0 2	4.8	94.9	0.2	100.0	1,103
Luapula	0 4	3.3	23.7	73 0	2.2	9 4	88.5	0.0	100 0	671
Lusaka	3 2	8.5	60 3	31.2	3.7	13 4	82.4	0.5	100.0	1,076
Northern	0.4	2.7	18 0	79.3	5.6	7.0	87 2	0.1	100.0	863
North-Western	2 3	4.8	53.7	41.6	2.9	15.6	81.4	0.2	100.0	287
Southern	1 2	2.2	22.4	75.4	3.5	12.7	83.8	0.0	100.0	764
Western	1.1	4.3	28.2	67.5	7 0	7.1	85.7	0 2	100.0	460
Mother's education										
No education	0.9	1 2	16.6	82.2	2.9	8.4	88 6	0.1	100.0	982
Primary	1 6	4.6	31 9	63.5	3.2	10 4	86.0	0 4	100.0	4,604
Secondary	2.9	7.4	68 6	23.9	3.5	10.3	86 1	0 2	100.0	1,437
Higher	8.3	11.0	79.8	9.2	6 0	12.3	81 1	0.6	100.0	135
Total	1.9	4.8	38.1	57.1	3.3	10.2	86.3	0 3	100.0	7,159

Note: Figures are for births in the period 0-59 months preceding the survey.

8.2 Childhood Immunisation

The 1996 ZDHS collected information on vaccination coverage for all children born in the five years preceding the survey. According to the World Health Organisation (WHO), for a child to be fully vaccinated, he or she should have received BCG, measles, and three doses each of DPT and polio vaccines. BCG protects against tuberculosis and DPT protects against diphtheria, pertussis, and tetanus. DPT is usually given with the polio vaccine at 4-week intervals starting from age 6 weeks. The measles vaccine is given at 9 months of age. The government of Zambia has adopted the WHO goal to ensure completion of vaccinations by 12 months of age; the target is to vaccinate 80 percent of all children fully by that age by the year 2000.

Table 8.7 Vaccinations by source of information

Percentage of children 12-23 months who had received specific vaccines at any time before the survey, by whether the information was from a vaccination card or from the mother, and the percentage vaccinated by 12 months of age, Zambia 1996

	Percentage of children who received:											
		DPT			Polio							
Source of information	BCG	1	2	3+	1	2	3+	Measles	All[1]	None	Percent of children	Number of children
Vaccinated at any time before the survey												
Vaccination card	81.6	81.2	79.1	76.1	81.4	79.2	76.5	73.9	71.7	0.1	81 8	1,102
Mother's report	15.8	15.5	13.3	9.6	16.0	14.6	7.9	12.7	6.7	1.9	18.2	245
Either source	97.4	96.7	92.5	85.7	97.3	93.8	84.4	86.5	78.3	1.9	100 0	1,347
Vaccinated by 12 months of age	96.7	95.8	90.5	80.0	96.5	91.8	78.7	75.8	66 8	2.8	-	1,347

Note: For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.
[1] Children who are fully vaccinated (i.e., those who have received BCG, measles, and three doses of DPT and polio).

Information presented in Table 8.7 was collected in two ways—from vaccination cards (under-five cards) and mothers' verbal reports. Most health institutions in the country provide under-five cards on which information on vaccination is recorded. When a card was presented to the interviewer, it was used as the source of information by directly transferring dates of vaccination on to the questionnaire. Besides collecting vaccination information from cards, there were two ways of collecting information from the mother herself. If a card was presented, but a vaccine was not recorded as having been given, the mother was asked to recall whether that particular vaccine had been given. In a situation where a mother was not able to present a card for a child at all, she was asked to recall whether the child had received BCG, polio, DPT, or measles vaccinations and the number of doses of polio and DPT.

Take 8.7 presents information on vaccination coverage according to the sources of information. The data presented are for children aged 12-23 months. This, therefore, includes only those children who have reached the age by which they should be fully vaccinated. Vaccination cards were available for 82 percent of children age 12-23 months; information for these children is shown on the first line in Table 8.7. Data based on mothers' reports for the 18 percent of children without cards are given on the second line. According to information from both the vaccination card and the mothers' reports, 97 percent of children 12-23 months have been vaccinated against tuberculosis and have received the first doses of DPT and polio. Coverage declines for subsequent doses of DPT and polio, so that only 84 to 86 percent of children receive the third doses of these vaccines. These figures represent a dropout rate of about 12 percent for DPT and polio. The coverage rate for measles (87 percent) is similar to that for the third doses of DPT and polio.

Overall, 78 percent of children 12-23 months are fully vaccinated, which means that the national target of 80 percent coverage by the year 2000 is very close to being realised. Only 3 percent of children have not received any vaccines.

As mentioned earlier, it is recommended that children complete the schedule of immunisations during their first year of life, i.e., by 12 months of age. Table 8.7 shows that, among children age 12-23 months at the time of interview, 67 percent had been fully vaccinated before their first birthday.

Table 8.8 shows the distribution of children who had received specific vaccines by the time of the survey. There is no significant difference in vaccination status by sex of child. Birth order, however, does influence immunisation rates, with first-born children more likely to be fully vaccinated than those that are sixth or higher in the family (84 percent compared to 71 percent, respectively). As expected, vaccination coverage is higher in urban than rural areas (Figure 8.2). The highest proportion of children who are fully vaccinated is in Southern Province (91 percent), while the lowest proportion is among children in Northern Province (59 percent). Education of the mother is associated with higher immunisation coverage.

Table 8.8 Vaccinations by background characteristics

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

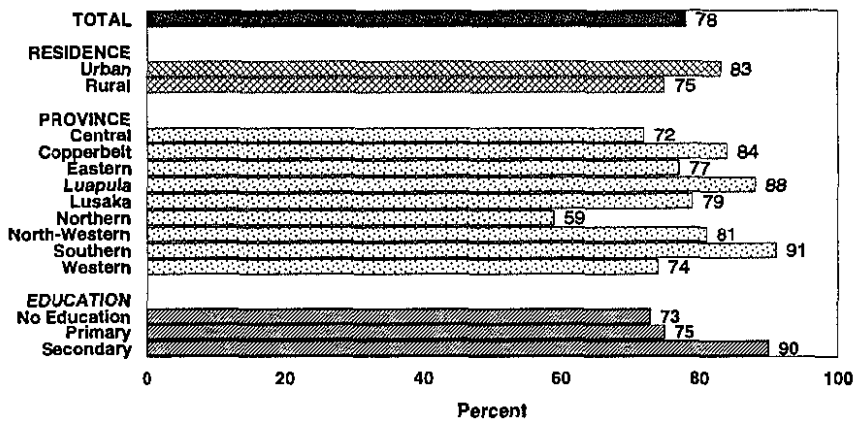
Background characteristic	Percentage of children who received:										Percent with vaccination card	Number of children
		DPT			Polio							
	BCG	1	2	3+	1	2	3+	Measles	All[1]	None		
Sex												
Male	97.4	96.4	91.9	84.6	97.0	92.8	83.4	86.2	78.2	2.1	81.9	640
Female	97.4	97.0	93.0	86.7	97.6	94.8	85.2	86.8	78.4	1.7	81.7	707
Birth order												
1	98.0	97.7	94.2	88.2	98.4	96.7	87.3	92.2	83.6	1.2	81.1	299
2-3	97.5	97.2	92.9	86.6	98.2	94.2	85.2	88.7	81.0	1.8	81.3	442
4-5	97.8	97.0	93.5	85.7	98.2	93.6	84.6	84.8	76.7	1.0	83.3	281
6+	96.3	94.7	89.4	82.0	94.5	90.9	80.2	80.0	71.2	3.5	81.9	324
Residence												
Urban	99.4	98.4	95.4	90.2	98.7	97.3	89.2	89.7	83.4	0.5	82.1	532
Rural	96.1	95.6	90.5	82.7	96.4	91.6	81.2	84.5	75.0	2.8	81.6	814
Province												
Central	97.4	97.4	94.0	81.6	98.3	93.2	76.1	86.3	71.8	1.7	72.2	88
Copperbelt	99.5	98.4	95.7	91.6	99.5	98.4	91.6	89.5	84.1	0.5	85.9	247
Eastern	97.5	96.3	92.5	84.5	95.8	93.8	83.7	86.6	77.3	2.5	81.4	226
Luapula	98.7	98.7	95.4	90.8	98.7	95.4	90.1	90.7	88.1	1.3	84.7	121
Lusaka	100.0	98.7	94.1	87.7	98.0	94.9	83.7	88.2	79.0	0.0	80.8	200
Northern	88.7	87.4	77.3	69.5	91.2	81.2	67.8	71.4	58.5	7.5	71.6	183
North-Western	99.0	99.0	93.5	83.7	99.0	94.6	86.9	90.3	80.5	1.0	82.9	47
Southern	99.4	100.0	98.8	94.2	100.0	98.8	94.8	96.8	91.0	0.0	90.7	153
Western	97.4	97.4	93.9	84.2	98.3	94.8	82.5	79.9	73.7	1.7	84.2	80
Mother's education												
No education	96.7	94.9	88.6	79.5	95.5	90.3	77.9	84.3	73.2	2.9	82.4	189
Primary	96.7	96.1	91.3	83.6	96.8	92.8	82.4	84.1	75.4	2.3	81.0	867
Secondary	100.0	99.5	98.4	96.8	100.0	99.4	94.0	95.4	90.4	0.0	85.4	271
Higher	*	*	*	*	*	*	*	*	*	*	*	19
All children	97.4	96.7	92.5	85.7	97.3	93.8	84.4	86.5	78.3	1.9	81.8	1,347

Note: An asterisk indicates that the rate is based on fewer than 25 children and has been suppressed.
[1] Children who are fully vaccinated (i.e., those who have received BCG, measles and three doses of DPT and polio)

Trends in vaccination coverage can be assessed by comparing coverage among children of different ages, since those age 24-35 months received their vaccinations roughly one year prior to those age 12-23 months, etc. To be comparable, the data refer only to vaccinations received before age 12 months. Table 8.9 shows information on the proportion of children age 12-59 months who had been vaccinated by 12 months

of age by their current age. The coverage figures are based on both the card and mothers' reports. Vaccination cards were seen by interviewers for 69 percent of the children aged 12-59 months. The proportion of children with cards decreases with increasing age, from 82 percent for children age 12-23 months to 55 percent of children age 48-59 months. This decline may be due to many reasons: unavailability of cards in health institutions in the past, genuine loss due to time, or the increase over time in coverage of immunisation services.

Figure 8.2
Percentage of Children Age 12-23 Months Who Have Received All Vaccinations by Background Characteristics



ZDHS 1996

Comparing vaccination coverage among different age groups of children shows that the proportion who were fully immunised by their first birthday rose gradually from 55 percent of those who were four years old at the time of the survey to 67 percent of those age one year. This analysis implies that immunisation coverage has been increasing over the past four years.

Another way to assess trends in immunisation coverage is to compare data from the 1992 and 1996 ZDHS surveys (Figure 8.3). This comparison shows that coverage has improved, from 67 percent of children age 12-23 months fully vaccinated in 1992 to 78 percent in 1996 (Gaisie et al., 1993:98).

The fact that there is a general increase in coverage indicates that the immunisation programme is increasingly achieving its goals to reach children. To meet the goal of 80 percent coverage in the next four years, more effort will be needed to encourage mothers to bring back their children for all the recommended vaccines and doses, especially for rural mothers and those in Northern Province.

Table 8.9 Vaccinations in first year of life

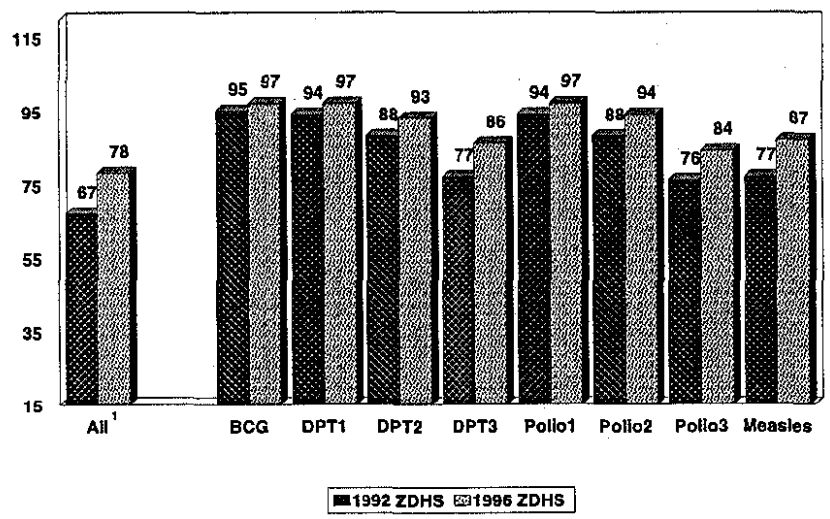
Percentage of children one to five years of age for whom a vaccination card was seen by the interviewer and the percentage vaccinated for BCG, DPT, polio, and measles during the first year of life, by current age of the child, Zambia 1996

Vaccine	Current age of child in months				All children 12-59 months
	12-23	24-35	36-47	48-59	
Vaccination card seen by interviewer	81.8	72.0	64.0	54.7	69.0
Percent vaccinated at 0-11 months[a]					
BCG	96.7	96.2	93.2	93.2	95.0
DPT 1	95.8	94.8	89.7	90.6	92.9
DPT 2	90.5	88.4	84.8	84.9	87.3
DPT 3	80.0	76.3	71.8	73.2	75.6
Polio 1	96.5	95.4	91.0	92.1	93.9
Polio 2	91.8	90.5	85.9	85.8	88.7
Polio 3	78.7	77.5	70.3	71.5	74.8
Measles	75.8	71.4	69.7	67.8	71.4
All vaccinations[b]	66.8	60.9	55.6	54.9	60.0
No vaccinations	2.8	4.5	6.4	7.0	5.0
Number of children	1,347	1,239	1,112	1,091	4,789

[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] Children who have received BCG, measles, and three doses each of DPT and polio vaccines

Figure 8.3
Trends in Vaccination Coverage Among Children Age 12-23 Months



[1]Includes BCG, measles, and three doses each of DPT and polio

ZDHS 1996

8.3 Acute Respiratory Infection

Medical records show that pneumonia is among the top three causes of hospital admissions and among the top five causes of infant mortality in Zambia. The ZDHS estimated the prevalence of respiratory infection by asking mothers if their children under the age of five had been ill in the two weeks before the survey with coughing accompanied by short, rapid breathing. Early diagnosis and treatment with antibiotics can prevent most deaths due to pneumonia. It should be noted that prevalence of respiratory illness as measured by the ZDHS, is based on a mother's subjective assessment of her child's symptoms.

Table 8.10 shows that 13 percent of children under five years of age were ill with a cough and rapid breathing during the two weeks before the survey. Seventy-one percent of these children were taken to a health facility or provider for treatment. The reported prevalence of symptoms suggestive of pneumonia peak in the first two years of life. The prevalence is similar for most background characteristics, except that it is lower for children in Luapula Province and children whose mothers have higher than secondary education.

Children in Copperbelt and Eastern Provinces with pneumonia symptoms are much more likely to be taken for treatment than their counterparts in other provinces; more than 80 percent are taken for treatment, compared to only about half of children in Central, Northern, and Western Provinces. Higher-order children, rural children, and those whose mothers have no education are less likely to be taken to a health provider when ill with respiratory problems.

8.4 Fever

Malaria is the major cause of hospital admissions and the number one killer among all age groups in Zambia. To assess the prevalence of malaria among children, mothers were asked whether their children under age five had a fever in the two weeks preceding the survey. Whereas fever is the primary symptom of malaria, fever can be a symptom of a large variety of diseases, including pneumonia, common colds/coughs, flu, etc.

Table 8.10 shows that 40 percent of children under five years of age were reported to have had fever in the two weeks preceding the survey. Fever is more common among children aged 6-11 months (56 percent) and decreases with age. Prevalence of fever is similar in the different sexes, birth order, and residence groups. It ranges from 27 percent of children in North-Western Province to 55 percent in Western Province. Fever becomes less common among children as mother's education increases.

8.5 Diarrhoea

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among Zambian children. The most important role that caretakers in the home can play in the prevention of dehydration is giving a child with diarrhoea an increased amount of fluids, possibly in the form of solution prepared from oral rehydration salts (ORS) or water, juices, soups, etc.; and preventing malnutrition (from diarrhoea) by continuing and increasing the feeding of children with diarrhoea. Dehydration can be treated by the use of ORS, or if dehydration is severe, intravenous fluids.

The most common treatment for dehydration is oral rehydration therapy (ORT)—solution prepared from commercially produced packets of oral rehydration salts (ORS, locally known as *madzi a moyo*), or a home-made solution of sugar, salt, and water. ORS is usually distributed through health facilities and pharmacies, while proper preparation of home-made solutions is taught in health centres.

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

Percentage of children under five years who were ill with a cough accompanied by short, rapid breathing (acute respiratory infection) during the two weeks preceding the survey, the percentage of ill children who were taken to a health facility, and the percentage of children with fever during the two weeks preceding the survey, by selected background characteristics, Zambia 1996

Background characteristic	Percentage of children with cough and rapid breathing	Percentage of children with cough and rapid breathing who were taken to a health facility or provider[1]	Percentage of children with a fever	Number of children
Child's age				
< 6 months	16.0	70.1	31.2	673
6-11 months	16.3	82.5	56.3	647
12-23 months	15.1	72.9	50.9	1,347
24-35 months	12.2	69.8	42.3	1,239
36-47 months	10.6	65.9	33.1	1,112
48-59 months	8.1	60.1	27.0	1,091
Sex				
Male	12.2	67.7	39.3	2,989
Female	13.1	73.4	40.8	3,120
Birth order				
1	11.5	71.5	38.0	1,292
2-3	13.3	73.5	40.5	2,057
4-5	12.7	73.6	40.6	1,306
6+	12.7	63.3	40.8	1,454
Residence				
Urban	12.6	78.4	38.1	2,445
Rural	12.7	65.6	41.4	3,664
Province				
Central	17.0	51.1	40.6	508
Copperbelt	11.1	84.1	36.2	1,171
Eastern	18.7	81.1	41.6	941
Luapula	5.2	(71.3)	39.5	545
Lusaka	12.5	70.0	38.8	909
Northern	9.7	53.7	44.5	744
North-Western	7.3	(86.1)	26.9	252
Southern	13.5	72.8	38.0	657
Western	15.6	52.9	54.7	381
Mother's education				
No education	13.3	57.9	44.1	829
Primary	12.5	71.3	40.8	3,897
Secondary	13.6	78.0	36.2	1,263
Higher	4.4	*	29.7	118
Total	12.7	70.7	40.1	6,109

Note: Figures are for children born in the period 0-59 months preceding the survey. Figures in parentheses are based on 25-49 children. An asterisk indicates that the rate is based on fewer than 25 children and has been suppressed.

[1] Includes health centre, hospital, clinic, and private doctor

Table 8.11 shows the prevalence of diarrhoea among children under the age of five. Nearly one in every four children had diarrhoea at some time during the two weeks before the survey and about 4 percent had diarrhoea with blood in the stool, generally an indication of dysentery. The peak of diarrhoea prevalence is in the weaning period, 6-23 months (40 percent and over).

Only small variations are found in the prevalence of diarrhoea by sex, birth order, and type of residence. Diarrhoea is more common among children whose mothers have less education than those whose mothers have higher education. Diarrhoea is more prevalent in Lusaka and Eastern Provinces, with the latter having the highest prevalence of bloody diarrhoea.

Table 8.12 shows data on knowledge among mothers of children under five about caring for a child with diarrhoea. Knowledge of ORS packets is nearly universal among Zambian mothers; 94 percent of women who had a birth in the five years preceding the survey had heard of or know about ORS packets. There were no marked differences in knowledge across different age groups of mothers or by urban-rural residence; but among provinces, mothers in Western Province are by far the least likely to know about ORS packets (74 percent, compared with 90 percent or more in the other provinces). Knowledge of ORS packets increases with increasing level of education of the mother.

Table 8.12 also shows that three-quarters of Zambian mothers know that they should increase the quantity of liquids given to children when they have diarrhoea. Thirteen percent of mothers erroneously believe that the quantity of liquids should be decreased. This misperception is particularly common among younger mothers, those who live in Eastern Province, and those with no education. Sixty-two percent of mothers know that it is best to increase the amount of solid food given to children when they have diarrhoea, while 16 percent believe it is better to decrease the amount. Variations by background characteristics in beliefs about feeding practices during diarrhoea are less pronounced than for beliefs about liquid intake.

Table 8.11 Prevalence of diarrhoea

Percentage of children under five years who had diarrhoea and diarrhoea with blood in the two weeks preceding the survey, by selected background characteristics, Zambia 1996

Background characteristic	Diarrhoea in the preceding 2 weeks		Number of children
	All diarrhoea	Diarrhoea with blood	
Child's age			
< 6 months	10.8	0.6	673
6-11 months	44.0	5.2	647
12-23 months	39.9	5.7	1,347
24-35 months	24.5	4.8	1,239
36-47 months	13.0	2.9	1,112
48-59 months	8.6	1.6	1,091
Sex			
Male	24.1	3.5	2,989
Female	22.9	3.9	3,120
Birth order			
1	23.4	2.5	1,292
2-3	24.0	3.4	2,057
4-5	23.6	4.5	1,306
6+	22.8	4.3	1,454
Residence			
Urban	23.8	2.4	2,445
Rural	23.3	4.5	3,664
Province			
Central	23.7	3.1	508
Copperbelt	20.8	2.7	1,171
Eastern	27.0	6.2	941
Luapula	20.9	1.3	545
Lusaka	28.7	2.7	909
Northern	21.8	3.4	744
North-Western	17.4	2.0	252
Southern	22.4	5.7	657
Western	23.3	4.9	381
Mother's education			
No education	24.2	4.8	829
Primary	24.3	3.8	3,897
Secondary	21.7	2.7	1,263
Higher	12.5	1.3	118
Total	23.5	3.7	6,109

Note: Figures are for children born in the period 0-59 months preceding the survey.

Table 8.12 Knowledge of diarrhoea care

Percentage of mothers with births in the last five years who know about the use of oral rehydration salts (ORS) for treatment of diarrhoea and the percent distribution by knowledge of appropriate feeding during diarrhoea, according to background characteristics, Zambia 1996

		Quantities that should be given during diarrhoea									
		Liquids				Solid foods					
Background characteristic	Know about ORS for treatment of diarrhoea	Less	Same	More	Don't know/ Missing	Less	Same	More	Don't know/ Missing	Total	Number of mothers
Age											
15-19	91.5	22.2	13 7	61.5	2.7	17 6	19.8	60.2	2.3	100 0	451
20-24	94.8	14 5	14.8	68.4	2.3	16 1	21.7	60.5	1.6	100.0	1,225
25-29	95 6	9.4	9.6	79.1	1.9	15.9	17.8	64.3	2.0	100.0	853
30-34	95 2	9 7	10.6	78 4	1.3	14 8	19.5	63.6	2.2	100.0	663
35+	93.4	9.2	11 2	78.5	1.1	16 4	20.8	62.0	0.7	100 0	598
Residence											
Urban	98.7	7 9	12.8	78.8	0.5	13.5	22.5	63.3	0.7	100.0	1,470
Rural	91.8	15.5	11.8	69.9	2.8	17.6	18 6	61 4	2.4	100.0	2,320
Province											
Central	95.3	14 0	13 1	70.2	2 6	15 6	21.2	61.5	1 6	100.0	305
Copperbelt	98.9	6.4	17.9	75 8	0.0	14.1	31.7	54.0	0.2	100.0	681
Eastern	98.6	25 4	7.4	63 1	4.2	21.0	8 6	66.6	3.8	100.0	589
Luapula	92.5	5.9	12.5	81 2	0 4	10.5	23.2	65 2	1.1	100.0	355
Lusaka	99.6	9.3	6.9	82.6	1 1	13.7	16.3	69.3	0 7	100.0	560
Northern	90.4	10.2	14.6	73.2	1.9	16.8	20.2	60 6	2.4	100.0	470
North-Western	92.5	6.9	9 5	83.6	0.0	11.1	20 3	68.7	0.0	100.0	156
Southern	93.8	15.7	8.1	73.1	3.1	21.5	16 6	58.6	3.2	100 0	411
Western	73.9	17.2	21 7	57.5	3.7	15.6	23 5	58.8	2.1	100 0	264
Mother's education											
No education	89 1	21.5	13.3	59.8	5 4	22.6	20.8	52.8	3.7	100 0	524
Primary	94.1	13.1	13 1	72.2	1.7	16 4	20.1	61.9	1 7	100.0	2,419
Secondary	98.8	6.3	9.8	83.5	0.5	10.6	20 0	68.6	0 8	100.0	778
Higher	100.0	0.0	0.0	100.0	0.0	15.7	15.1	69.2	0 0	100.0	68
Total	94.4	12.6	12.2	73.3	1.9	16 0	20 1	62.1	1.8	100.0	3,790

Table 8.13 shows the percentage of children with recent episodes of diarrhoea who received various treatments. About 4 in 10 children with diarrhoea are taken to a health facility or provider. Children in Southern, Western, and North-Western Provinces are more likely to be taken to a facility for treatment when they have diarrhoea than children in other provinces.

Overall, 54 percent of children with diarrhoea are treated with a solution made from ORS packets, while 4 percent are given home-made solutions of sugar, salt, and water. Variations in the use of either ORS or home-made solutions by background characteristics are not large, except that the chances of receiving either of these treatments increase with the education level of the mother.

Thirteen percent of children with diarrhoea are treated with antibiotics, while 25 percent were given home-made remedies other than sugar-salt-water solution. These remedies were more likely to be given to older children, children in rural areas, especially in Central, Eastern, and Western Provinces, and children whose mothers have less education.

Table 8.13 Treatment of diarrhoea

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

Background characteristic	Percentage taken to a health facility or provider[1]	Oral rehydration therapy (ORT)			Percentage receiving increased fluids	Percentage receiving neither ORS nor RHF nor increased fluids	Other treatments					Number of children
		ORS packet	RHF at home	Either ORS or RHF			Antibiotics, pill or syrup	Injection	Home remedy/ Other	No treatment	Missing	
Child's age												
< 6 months	41.0	48.9	2.5	51.5	44.4	38.9	17.1	0.0	20.7	25.7	0.0	73
6-11 months	50.3	62.6	5.1	64.8	58.5	23.1	11.1	0.0	23.8	16.0	0.0	285
12-23 months	47.3	57.0	3.4	59.6	56.1	23.5	12.9	0.6	22.7	13.1	0.0	537
24-35 months	37.5	46.6	4.3	49.8	61.2	23.2	11.4	0.0	28.0	11.8	0.2	303
36-47 months	39.4	49.3	1.6	50.9	60.1	26.6	16.0	2.3	26.7	13.3	0.0	144
48-59 months	36.3	44.6	2.4	47.0	58.0	25.8	9.7	0.0	35.6	15.0	0.0	93
Sex												
Male	45.0	56.0	4.1	58.6	57.1	25.0	14.1	0.8	25.6	13.4	0.0	721
Female	43.0	51.8	3.2	54.4	58.1	24.2	11.0	0.1	24.8	14.9	0.1	714
Birth order												
1	43.6	52.7	1.3	53.9	53.4	25.2	9.9	0.8	22.8	16.6	0.0	302
2-3	42.5	53.0	3.9	56.1	58.4	25.7	13.0	0.6	24.1	15.0	0.0	493
4-5	48.8	58.2	5.5	61.1	61.4	21.6	14.4	0.0	26.5	10.2	0.0	308
6+	42.1	52.5	3.7	55.0	56.5	25.3	12.6	0.2	27.7	14.5	0.2	332
Residence												
Urban	45.3	58.4	3.8	61.7	65.4	19.9	18.9	0.7	19.2	12.3	0.0	581
Rural	43.1	50.9	3.5	53.0	52.3	27.8	8.3	0.3	29.3	15.5	0.1	854
Province												
Central	19.8	49.0	5.7	53.1	53.5	30.2	7.9	0.6	30.8	15.7	0.0	120
Copperbelt	30.7	55.1	2.2	57.3	56.7	23.8	14.0	0.0	22.2	15.3	0.0	244
Eastern	52.9	48.7	3.1	50.9	44.4	29.3	11.8	0.5	33.6	13.9	0.0	254
Luapula	26.2	54.8	2.2	56.9	55.3	28.3	14.9	0.0	26.8	17.0	0.0	114
Lusaka	55.2	56.6	5.4	61.1	70.5	18.8	21.1	0.5	19.5	11.8	0.0	261
Northern	21.2	46.8	5.0	47.5	52.5	29.0	8.3	1.1	27.0	16.9	0.0	162
North-Western	61.9	59.5	4.7	61.9	60.4	21.9	10.2	0.0	24.4	11.6	0.0	44
Southern	72.2	64.9	1.8	66.7	76.4	13.0	8.1	0.0	15.4	8.8	0.0	147
Western	63.8	55.9	3.2	57.5	44.9	30.7	5.5	1.6	29.9	18.1	0.8	89
Mother's education												
No education	37.0	45.6	2.1	47.5	46.7	33.6	9.1	0.3	32.6	18.1	0.3	201
Primary	43.5	52.7	4.0	55.3	56.1	25.0	10.2	0.3	26.6	14.2	0.0	945
Secondary	49.7	62.8	3.7	65.8	69.2	17.5	22.5	0.7	15.3	11.5	0.0	275
Higher	*	*	*	*	*	*	*	*	*	*	*	15
Total	44.0	53.9	3.6	56.5	57.6	24.6	12.6	0.4	25.2	14.2	0.0	1,435

Note: An asterisk indicates the rate is based on fewer than 25 children and has been suppressed.
ORS = Oral rehydration salts
RHF = Recommended home fluids
[1] Includes health centre, hospital, and private doctor

To gauge the knowledge about drinking and eating standards for a child with diarrhoea, mothers with children under five who had had diarrhoea in the two weeks preceding the survey were asked about the drinking and eating patterns of these children. Table 8.14 shows that almost 6 in 10 children with diarrhoea were given more to drink than usual and 32 percent were given more to eat than usual (Table 8.14). However, 21 percent of children were given less fluids and 43 percent of children were given less solid food. These figures indicate that there is a need for further health education efforts to decrease the number of children becoming dehydrated or malnourished due to diarrhoea.

Table 8.14 Feeding practices during diarrhoea

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

Feeding practices	Total
Amount of fluids	
Same	21.0
Increase	57.6
Decrease	21.2
Don't know/missing	0.3
Amount of solid foods	
Same	25.2
Increase	31.6
Decrease	42.9
Don't know/missing	0.2
Total	100.0
Number of children	1,435

Note: Figures are for children born in the period 0-59 months preceding the survey.

CHAPTER 9

INFANT FEEDING, CHILDHOOD AND MATERNAL NUTRITION

This chapter covers two related topics: infant feeding (including breastfeeding practices, introduction of complementary weaning foods, and use of feeding bottles) and nutritional status of young children and their mothers. Height and weight measurements of the respondent's children under the age of five years and those of the mother were taken to determine their nutritional status.

9.1 Breastfeeding and Supplementation

Infant feeding has an impact on both the child and the mother. Feeding practices are important determinants of the child's nutritional status, which in turn influences the risk of dying. Frequent breastfeeding affects the mother through the biological suppression of the return to fertile status, thereby affecting the inter-birth interval and pregnancy outcome. These effects are influenced by both the duration and intensity of breastfeeding, and by the age at which the child receives foods and liquids.

The data presented in Table 9.1 show the percentage of children who were ever breastfed as well as the timing of breastfeeding initiation for all children who were ever breastfed. The data indicate that almost all Zambian children (98 percent) are breastfed for some period of time. More than half (58 percent) of children are put to the breast within an hour of birth and 91 percent within the first day. This is an improvement since 1992 when only 40 percent and 87 percent of the children were put to the breast within one hour and one day, respectively. There are few marked differences in timing of breastfeeding initiation except by province. While in Eastern and North-Western Provinces, 82 percent or more of children are put to the breast within the first hour of birth, less than half the children (41 percent) in Luapula Province are breastfed within the first hour.

Breast milk is safe, convenient, and contains all the nutrients needed by children in the first six months of life. In addition, it provides immunity to disease through the mother's antibodies. The percent distribution of children under age three years by breastfeeding status at the time of the survey is presented in Table 9.2, based on information about feeding practices in the 24 hours preceding the survey. Almost all children are breastfed for at least one year, with only 4 percent of children age 12-13 months not breastfed. By age 16-17 months, 13 percent of children are no longer being breastfed.

Children who are exclusively breastfed receive nothing apart from breast milk, not even plain water. The recommended exclusive breastfeeding duration is 6 months. Early supplementation is unnecessary and discouraged since the likelihood of contamination and the resulting risk of diarrhoea are high. Early supplementation also reduces breast milk output since the production and release of milk is modulated by the frequency and intensity of suckling.

Exclusive breastfeeding has improved in Zambia since 1992. For example, whereas in 1992 only 16 percent of children under 2 months of age were fed only breast milk (Gaisie et al., 1993:111), the figure had increased to 35 percent in 1996 (Table 9.2). The ZDHS results also show that the proportion of children below the age of 2 months receiving water in addition to breast milk has declined from 68 percent in 1992 to 54 percent in 1996. These results may be attributed to the intensive breastfeeding campaign implemented by the National Food and Nutrition Commission (NFNC) through the support of UNICEF in which hospitals have been made more baby friendly, campaigns to promote breastfeeding have been initiated, and staff were trained to counsel on breastfeeding.

Table 9.1 Initial breastfeeding

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

Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding: Within 1 hour of birth	Within 1 day of birth	Number of children
Sex				
Male	98.3	57.3	90.6	3,542
Female	98.1	59.0	92.2	3,617
Residence				
Urban	98.1	53.5	90.7	2,858
Rural	98.2	61.2	91.9	4,301
Province				
Central	98.8	46.7	88.4	587
Copperbelt	98.2	48.9	91.3	1,347
Eastern	97.1	87.3	95.7	1,103
Luapula	99.6	40.9	97.6	671
Lusaka	97.7	60.4	91.2	1,076
Northern	98.7	46.8	86.0	863
North-Western	98.8	82.0	98.2	287
Southern	98.6	62.5	94.2	764
Western	97.3	50.1	78.1	460
Mother's education				
No education	97.2	67.4	93.2	982
Primary	98.4	57.7	91.4	4,604
Secondary	98.4	53.7	90.5	1,437
Higher	96.3	53.1	90.3	135
Assistance at delivery				
Health professional	98.5	58.8	91.9	3,332
Traditional midwife	98.5	57.3	92.5	384
Other or none	97.8	57.8	91.2	3,416
Place of delivery				
Health facility	98.5	58.7	91.8	3,333
At home	97.9	57.8	91.4	3,803
All children	98.2	58.1	91.4	7,159

Note: Total includes 2 children for whose mother's education was missing, 27 children for whom data on assistance at delivery are missing and 24 children for whom data on place of delivery are missing.

As many as 46 percent children age 2-3 months and 77 percent of children 4-5 months are receiving supplements, in addition to breast milk. This implies that a greater number below the age of 6 months are at risk of being contaminated by low quality foods even though they started well. By age 8-9 months, almost all children (97 percent) are given complementary foods.

Table 9.2 Breastfeeding status

Percent distribution of living children by current breastfeeding status, according to child's current age in months, Zambia 1996

	Percentage of living children who are:					
			Breastfeeding and:			
Age in months	Not breast-feeding	Exclusively breast-fed	Plain water only	Comple-ments	Total	Number of living children
<2	0.5	34.5	54.3	10.7	100.0	190
2-3	0.4	20.2	33.7	45.7	100.0	259
4-5	1.2	5.2	16.4	77.3	100.0	223
6-7	0.6	1.4	4.7	93.3	100.0	191
8-9	2.2	0.0	1.1	96.7	100.0	206
10-11	3.7	0.0	1.8	94.5	100.0	250
12-13	3.9	0.3	0.8	94.9	100.0	270
14-15	5.4	0.0	0.9	93.7	100.0	226
16-17	13.2	0.0	0.6	86.2	100.0	221
18-19	22.4	0.0	1.7	75.9	100.0	186
20-21	44.4	0.6	0.0	55.0	100.0	223
22-23	69.0	0.0	0.0	31.0	100.0	220
24-25	82.0	0.0	0.3	17.7	100.0	253
26-27	91.5	0.0	0.0	8.5	100.0	209
28-29	94.3	0.0	0.0	5.7	100.0	204
30-31	94.7	0.0	0.0	5.3	100.0	161
32-33	95.5	0.0	0.6	4.0	100.0	208
34-35	99.0	0.0	0.0	1.0	100.0	205
0-3 months	0.4	26.3	42.4	30.9	100.0	449
4-6 months	1.2	4.2	13.1	81.6	100.0	321
7-9 months	1.5	0.3	1.9	96.3	100.0	300

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

Complementary foods are important as frequency of breastfeeding declines or stops altogether as the child gets older (Table 9.2). In Zambia, the percent of children receiving complementary foods drops by the time the children are 18-19 months old. This drop is due to the fact that children are fully weaned on an adult diet. This is the age at which malnutrition—particularly wasting and stunting—peaks as shown by previous studies (Gaisie et al., 1993; CSO, 1994). Breast milk plays a major role in complementing the nutrient content of bulky diets that are often inadequate to promote growth. Whilst most children are breastfed for a full year, 5 percent of those aged 12-13 months are reportedly not yet receiving supplements to their diet of breast milk and water.

Complementary foods are foods eaten by most family members and are often solid or mushy. These foods are introduced into the diet as early as one month after birth to 11 percent of breastfeeding children (Table 9.2). By age 4-5 months, 7 out of 10 breastfeeding children have complementary food introduced into their diets. By the time they are one and a half years old, over 75 percent are receiving supplements. Compared to the 1992 ZDHS, the number of children receiving complementary foods has declined. This may perhaps be due to rising household food insecurity for most Zambian households (CSO, 1994) and consequent reduction in number of meals consumed (NFNC/BASICS, 1995).

The median duration of breastfeeding is 20 months (Table 9.3 and Figure 9.1). Differentials in median duration of breastfeeding are minimal except that children are breastfed the longest in Western and Northern Provinces (22 months or longer).

Table 9.3 Median duration and frequency of breastfeeding

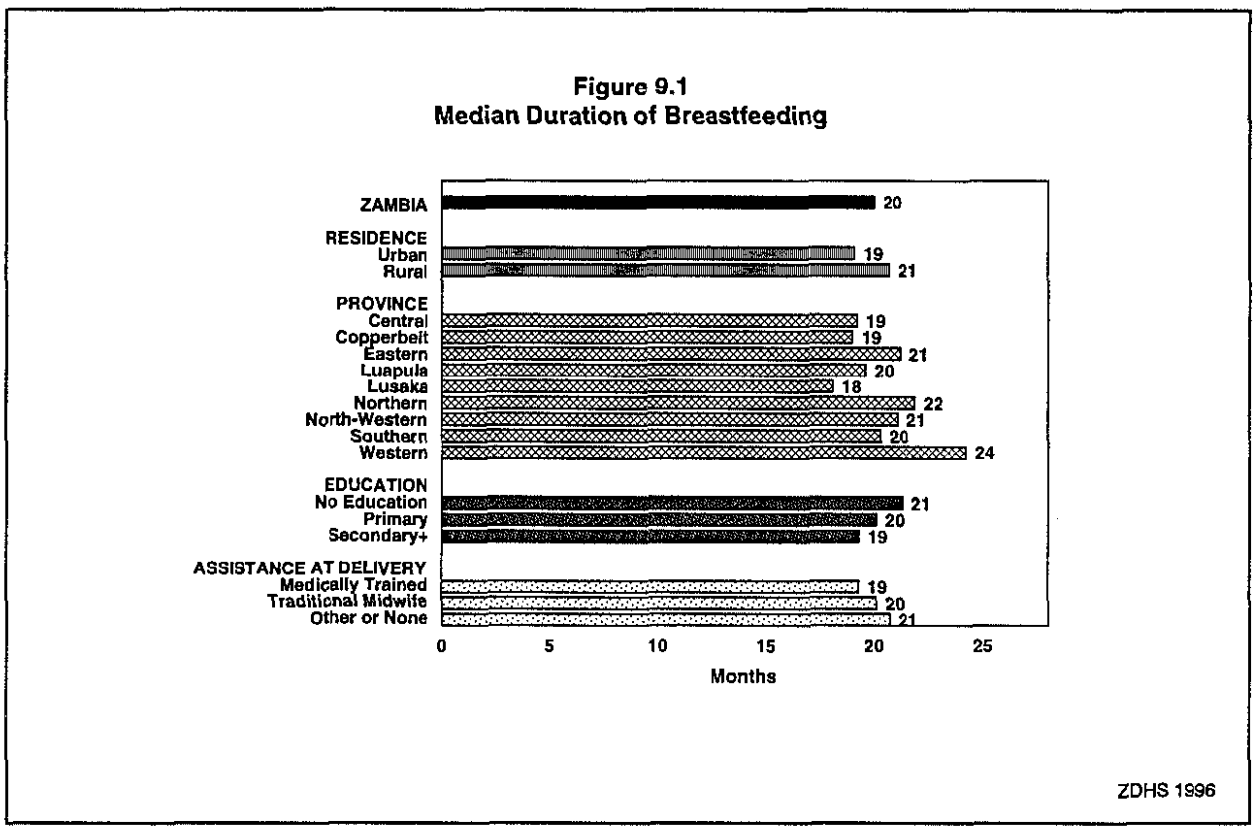
Median duration of any breastfeeding, exclusive breastfeeding, and full breastfeeding among children under three years of age, and the percentage of children under six months of age who were breastfed six or more times in the 24 hours preceding the survey, according to background characteristics, Zambia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

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
Sex						
Male	19.9	0.5	2.4	2,199	94.4	356
Female	20.2	0.6	2.6	2,250	94.3	317
Residence						
Urban	19.1	0.9	2.5	1,719	93.1	262
Rural	20.7	0.5	2.5	2,730	95.1	411
Province						
Central	19.2	0.5	3.1	368	86.6	65
Copperbelt	19.0	1.0	2 7	815	91.2	114
Eastern	21.2	0.4	1.8	690	93.4	103
Luapula	19.6	0.5	2.2	416	97.5	63
Lusaka	18.1	1.2	2.6	657	96.0	100
Northern	21.9	0.5	2.4	553	96.9	75
North-Western	21.1	0.4	2.5	179	100.0	31
Southern	20.3	1.2	4.4	480	97.7	77
Western	24.2	0.4	2.9	293	93.7	45
Education						
No education	21.3	0.4	1.8	622	95.7	82
Primary	20.1	0.6	2.8	2,856	94.5	439
Secondary+	19.3	1.1	2.4	971	93.0	150
Assistance at delivery						
Health professional	19.3	0.9	2.4	1,995	93.5	284
Traditional midwife	20.1	0.5	2.4	255	98.3	40
Other or none	20.7	0.5	2.7	2,191	94.5	348
Total	20.0	0.6	2.5	4,449	94.3	673
Mean	19.7	1.8	3.9	98.3	-	-
Prevalence/Incidence[3]	19.1	1.1	3.1	-	-	-

Note: Total includes one child for whom data on mother's education are missing, and one child for whom data on assistance at delivery are missing.
[1] Medians and means are based on current status
[2] Either exclusive breastfeeding or breastfeeding and plain water only
[3] Prevalence-incidence mean

Children are classified as *fully breastfed* if they are either exclusively breastfed or are receiving breast milk and water. The median duration of full breastfeeding is 3 months (Table 9.3). There is little variation in median duration of full breastfeeding.

Frequency of breastfeeding influences the production of milk and nutrition status of the baby. The delayed return to fertility is also enhanced by the frequency of breastfeeding. The data in Table 9.3 indicate that almost all children (94 percent), under the age of 6 months were fed six times or more in the 24 hours prior to the survey.



In addition to questions about breastfeeding, the ZDHS also included questions about the types of foods given to children during the 24 hours preceding the survey. The results in Table 9.4 show that two-thirds of children below the age of 3 years were fed grain, flour, or cereal, while about half received meat, poultry, fish, or eggs, and about one in three were given liquids other than breast milk, infant formula, and other milk (Table 9.4). There appears to be no age-related preference for foods, although preparation methods for these foods for the different age groups may differ. The bottom part of Table 9.4 presents the feeding pattern of children who are not breast fed. These children are much more likely to have started receiving supplements at an earlier age than children who are breastfed.

Bottle feeding is uncommon in Zambia (Table 9.4). Only 3 percent of babies age 0-1 months are being given a bottle and teat (nipple) in addition to being breastfed. However, the proportion of children who are bottle fed almost doubles at age 6-7 months. This follows a pattern of return to work by mothers after the maternity break of 3 months, which often is extended to about 5-6 months. Nevertheless, the practice reduces to the initial 3 percent by the age of one year and above, presumably since older children are more likely to feed on solid foods and require less bottle feeding. These findings are encouraging, since infants are particularly vulnerable to infections and use of unsterilised bottles with nipples is a prime source of infections.

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

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

Age (in months)	Breast milk only	Infant formula	Other milk	Other liquid	Meat/ poultry/ fish/ eggs	Grain/ flour/ cereal	Tubers/ plantains	Other	Using bottle with a nipple	Number of children
BREASTFEEDING CHILDREN										
0-1	34 7	2.5	3.5	2.5	0.4	2.5	0.4	2.1	3.3	189
2-3	20.3	2.3	2.9	6.4	2.5	21.0	3.8	18.8	4.4	258
4-5	5.2	6.4	8.6	12.8	14.1	53.8	5.8	32.1	3.1	221
6-7	1.4	6.2	8.9	30.9	42.0	73.4	14.6	56.1	5.9	190
8-9	0.0	1.8	14.1	43.0	52.6	86.0	21.8	67.0	2.1	202
10-11	0.0	2.3	16.3	46.7	65.2	83.6	26.8	68 5	3.2	241
12-13	0 3	1.7	17.8	52.6	63.7	82.9	27.9	70.1	2.8	260
14-15	0.0	1.0	15.9	50.3	62.0	83.1	31.4	72.9	1.9	214
16-17	0.0	1.5	16 6	58 1	70.8	84.2	40.9	77.5	2.9	192
18-23	0 4	0.0	14 3	50.2	62.3	81.6	36.3	69.4	1.4	337
24-29	0.0	0.9	20 2	38.0	67.8	91.2	39.9	72.2	0.0	75
30-35	*	*	*	*	*	*	*	*	*	20
0-3 months	26 4	2.4	3 1	4.7	1.6	13 2	2 3	11.7	3 9	448
4-6 months	4 2	5.5	8.1	18.1	20.5	58.2	8.4	39.3	2.6	317
7-9 months	0.3	4.1	13.0	39.4	51.5	83.6	19.6	63.7	4.7	295
Total	5 6	2 3	12 4	36 2	45.2	67.0	22.4	55.0	2.9	2,397
NON-BREASTFEEDING CHILDREN										
18-23	0 0	0 0	21 9	69 1	76.1	77.3	33.0	69.8	2.7	292
24-29	0.0	0.9	20 1	62.0	67 4	80.4	37.9	70.8	2.2	591
30-35	0.0	0 7	16 7	60.6	66.1	80.9	36.2	68.9	0.8	554

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

9.2 Nutritional Status of Children

The study of child health status in the ZDHS included body measurements for children under age five. These data known as anthropometric measurements are used to derive three indicators characterising the nutritional status of children. These indicators are important because children's nutritional status influences their susceptibility to disease and untimely death. Children's nutritional status reflects infant and child feeding practices as well as acute and chronic or recurrent infections. In the ZDHS, all children born since January 1991 were eligible for anthropometric measurement as were their mothers. Both the height and weight were measured; these data were used to construct the following indices for children:

- Height-for-age (stunting)
- Weight-for-height (wasting)
- Weight-for-age (underweight).

Not all children eligible to be weighed and measured are included in the results presented here; the height and weight measurements are missing for 8 percent of eligible children, and one or both of the measurements are grossly improbable in 3 percent of the cases. The month and year of birth is not known for a small number of children, which renders two of the indices (height-for-age, and weight-for-age) incalculable. Hence, height and weight data are shown for 89 percent of the eligible children. Although the term "height"

is used here, children younger than 24 months were measured lying down on a measuring board (recumbent length), while standing height was measured for older children.

As recommended by the World Health Organisation (WHO), the nutritional status of children in the survey is compared with an international reference population defined by the U.S. National Centre for Health Statistics (NCHS) and accepted by the U.S. Centres for Disease Control (CDC). Each of the three nutritional status indicators described below are expressed in standard deviation units (z-scores) from the median for the reference population. The 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. 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. In any large population, there is variation in height and weight; this variation approximates a normal distribution.

The height-for-age index is an indicator of linear growth retardation. Children whose height-for-age z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age, *stunted,* and are chronically malnourished. Children who are below minus three standard deviations (-3 SD) from the median of the reference population are considered severely stunted. Stunting reflects 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 malnutrition in a population and does not vary appreciably according to season of data collection. Stunted children are not immediately obvious in a population; a stunted three-year-old child could look like a well-fed two-year-old.

The weight-for-height index measures body mass in relation to body length, and describes current nutritional status. Children whose z-scores are below minus two standard deviations (-2 SD) from the median of the reference population are considered thin, *wasted,* and are acutely malnourished. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or recent episodes of illness, causing loss of weight and the onset of malnutrition. Children whose weight-for-height is below minus three standard deviations (-3 SD) 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; it takes into account both acute and chronic malnutrition. 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 (-2 SD) for each of the three indices.

Table 9.5 shows the percentage of children under five years of age classified as malnourished according to height-for-age, weight-for-height, and weight-for-age indices, by the child's age and selected demographic characteristics.

Forty-two percent of the children are classified as stunted and 18 percent are severely stunted (< -3 SD). The figures are high and suggest chronic food insecurity and probably repeated illnesses. Stunting is evident even among children under age 6 months (10 percent). The prevalence of stunting increases as children get older. At age 6-11 months, 24 percent of the children are stunted, and twice as many (48 percent) are stunted by age 12-23 months. Currently, 5 out of 10 children who are two years and older in Zambia are stunted. The prevalence of stunting varies slightly by other demographic characteristics. Few differences exist according to the sex of the child, birth order, and interval since preceding birth.

Table 9.5 Nutritional status of children by demographic characteristics

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

Background characteristic	Height-for-age (Stunting)		Weight-for-height (Wasting)		Weight-for-age (Underweight)		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							
<6 months	1.5	10.4	0.7	2.3	0.5	3.7	597
6-11 months	7.1	24.4	1.5	7.3	6.7	22.9	618
12-23 months	20.2	47.7	1.0	8.8	9.1	34.7	1,257
24-35 months	23.5	52.3	0.4	2.3	6.2	27.6	1,116
36-47 months	22.1	50.4	0.2	1.5	4.2	21.4	963
48-59 months	19.5	47.4	0.3	1.9	2.3	18.2	892
Sex							
Male	18.1	43.1	1.0	5.0	6.1	24.5	2,665
Female	17.0	41.7	0.3	3.3	4.6	22.5	2,778
Birth order							
1	17.4	45.2	0.4	4.2	5.0	24.4	1,074
2-3	16.6	40.4	0.6	4.4	5.0	22.5	1,825
4-5	17.3	40.2	0.9	3.6	5.4	22.5	1,203
6+	19.1	44.7	0.7	4.3	5.9	24.9	1,341
Birth interval							
First birth	17.4	45.0	0.4	4.2	5.0	24.3	1,079
< 24 months	21.1	43.6	0.6	4.0	5.3	24.3	784
24-47 months	17.1	42.1	0.8	4.1	5.4	23.1	2,851
48+ months	15.6	38.2	0.4	4.5	5.4	22.8	729
Total	17.5	42.4	0.6	4.2	5.3	23.5	5,443

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

[1] Includes children who are below -3 SD

Four percent of the children are wasted and less than 1 percent are severely wasted (<-3 SD). The weight-for-height indicator gives information about children's recent nutritional status. Wasting is highest for children between the age of 12-23 months. This is consistent with other study results in Zambia and elsewhere. Variations in the level of wasting by other demographic characteristics of the child are minimal.

Twenty-four percent of the children are classified as being underweight and 5 percent are severely underweight (i.e., below -3 SD). Weight-for-age is an index of chronic or acute malnutrition (or both), but does not distinguish between a child who is underweight because of stunting and one who is underweight because of wasting. Children under 6 months of age are the least likely to be stunted or wasted or underweight. This is most likely due to the positive effects of breastfeeding. As shown in Table 9.2, less than 1 percent of children of this age are not being breastfed. After 6 months of age, the percentage of children who are underweight rises substantially to 35 percent among those 12-23 months and remains relatively high. The likelihood of being underweight varies little by sex of the child, birth order, or interval between births.

The percentage of children under five years of age classified as malnourished according to the three anthropometric indices is presented in Table 9.6 by socio-economic characteristics. A much higher percentage of children in rural areas are stunted, wasted, and underweight than in urban areas. For example, 49 percent of rural children are stunted, compared to 33 percent of urban children. The percentage of children who are stunted is highest in the outlying provinces of Northern and Luapula Provinces (57 percent or higher). Lusaka and Copperbelt Provinces have the lowest percentages of stunted children. Stunting is inversely related to the level of education of the mother, ranging from one in two children among those whose mothers are uneducated to only 9 percent of children among those whose mothers have higher than secondary education. In general, the differentials in wasting and underweight by urban-rural residence and mother's education are the same as those for stunting. Luapula Province has the highest percentage of children who are stunted, wasted, and underweight. Figure 9.2 shows the percentage of children under five years of age who are stunted, by selected background characteristics of the mother.

Table 9.6 Nutritional status of children by background characteristics

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

	Height-for-age (Stunting)		Weight-for-height (Wasting)		Weight-for-age (Underweight)		
Background characteristic	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]	Number of children
Residence							
Urban	10.1	32.7	0.5	3.1	2.7	16.5	2,159
Rural	22.4	48.7	0.8	4.8	7.0	28.0	3,284
Province							
Central	12.6	38.1	1.3	6.1	4.8	19.9	458
Copperbelt	9.3	31.4	0.6	4.3	2.8	17.2	1,051
Eastern	22.7	48.1	0.4	2.7	5.6	26.0	866
Luapula	30.5	57.7	1.3	6.5	7.6	32.7	498
Lusaka	8.6	30.2	0.3	3.0	2.9	15.5	786
Northern	29.6	57.3	0.8	4.8	10.4	31.5	671
North-Western	19.3	47.4	0.7	2.3	4.8	27.1	224
Southern	13.6	39.5	0.2	3.5	4.5	21.1	564
Western	19.5	44.9	0.6	5.3	6.8	32.1	326
Education							
No education	23.1	50.1	0.8	5.9	7.1	30.9	757
Primary	19.3	44.7	0.7	4.2	6.0	24.8	3,472
Secondary	9.8	32.9	0.3	3.0	2.5	15.5	1,111
Higher	2.1	8.5	0.0	1.1	0.0	8.3	101
Total	17.5	42.4	0.6	4.2	5.3	23.5	5,443

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

[1] Includes children who are below -3 SD

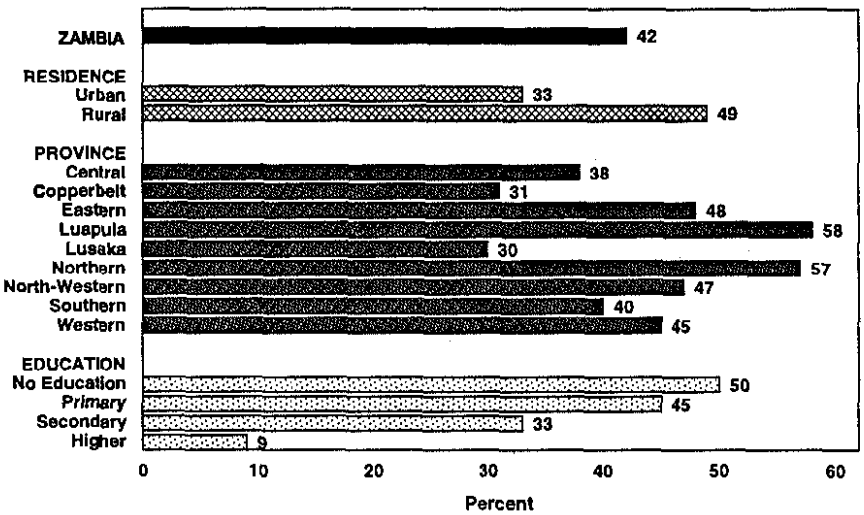


Figure 9.2
Percentage of Children under Five Who Are Stunted

ZDHS 1996

9.3 Nutritional Status of Mothers

As mentioned above, all mothers of children born since January 1991, approximately the five years preceding the survey, were weighed and measured. The objective was to determine the nutritional status of women of reproductive age. However, since weighing and measuring all respondents would add considerably to the length and cost of the fieldwork, it was decided to limit the anthropometric section to women with young children who would be measured anyway.[1] Women were weighed on an electronic bathroom-type scale which measured the weight to an accuracy of 100 grams. Their height was measured with an L-shaped wooden board that was specially designed for the DHS project. This information was used to construct the following indicators of mothers' nutritional status:

- Mean height (in centimetres)
- Mean weight (in kilograms)
- Body mass index.

Women who were pregnant at the time of the survey and those who had delivered within the two months before the interview day were excluded from the tables on weight and body mass index. Thus, data on height are available for 4,507 women, while data on weight are available for 3,677 women.

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

Table 9.7 presents the distribution of mothers by mean height and body mass index (BMI) by background characteristics. For each indicator, the mean is presented, as well as the proportion falling below certain arbitrary cut-off points. Height, as well as being a good indicator of socioeconomic status of the mother, is also used to identify mothers at nutritional risk. Height of mothers can be used to predict the risk of difficulty in delivering children, given the association between height and size of the pelvis. Also, the risk of giving birth to low-weight birth children is higher among women of small stature. Although the cut-off point at which the mother can be considered at risk varies between populations, it probably falls in the range of 140-150 centimetres. Indices of body mass are used to assess thinness or obesity. The most commonly used index is the BMI (also referred to as the Quetelet index), which is defined as weight in kilograms divided by the square of the height in metres. The main advantage of the BMI is that it does not require a reference table from a well-nourished population. For the BMI, a cut off point of 18.5 has been recommended for defining thinness, or acute undernutrition. Obesity has not been defined clearly in terms of the scale, though a BMI of 25.0 and above is usually considered obese.

Table 9.7 Nutritional status of mothers by background characteristics

Among mothers of children under five years, 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 (kg/m^2), by selected background characteristics, Zambia 1996

	Height			BMI		
Background characteristic	Mean	Percent <145 cm	Number of women	Mean	Percent <18 5 (kg/m^2)	Number of women
Age						
15-19	157.1	1.5	473	21.1	11.0	387
20-24	157.4	1.4	1,357	21.5	9.5	1,044
25-29	158.7	0.6	1,010	22.0	8.2	797
30-34	158.6	1.1	817	22.2	8.0	671
35-49	158.4	1.5	850	22.7	9.6	766
Residence						
Urban	159.0	0.5	1,851	22.6	7.8	1,543
Rural	157 5	1.7	2,656	21.4	10.1	2,122
Province						
Central	158.4	0.4	363	21.9	6 7	286
Copperbelt	158 8	0.6	837	22.6	7 6	681
Eastern	156.9	2.2	679	21.9	6.6	536
Luapula	155 7	2.9	412	21.6	9.3	331
Lusaka	159.5	1.1	705	22.9	6 5	590
Northern	157.3	1.1	530	21.4	10.4	433
North-Western	157.0	2.3	181	21.0	13.1	149
Southern	159.5	0.4	479	21 3	11.0	387
Western	158.3	0.4	320	20.6	19.0	271
Education						
No education	156.5	2.2	624	21.5	9.5	499
Primary	157.8	1.4	2,820	21.9	8.8	2,245
Secondary	161.0	0.2	960	22.2	10.2	838
Higher	161.5	0.0	102	23.7	4.2	82
Total[1]	158.1	1.2	4,507	21.9	9.1	3,665

Note· Table includes only women who had a birth in the five years preceding the survey. The BMI index excludes pregnant women and those who are less than two months post-partum.
[1] Total includes one woman for whom information on education is missing

The average height of the mothers measured in Zambia (158 centimetres) falls above the critical cut-off point of 145 centimetres. Only about one percent of mothers are shorter than 145 centimetres. Nine percent, or one in eleven mothers, are chronically undernourished (i.e., BMI under 18.5).

There are few differences among provinces for weight, height, and BMI of mothers. Teenage mothers are more likely to fall below the BMI cut off value of 18.5, as are rural compared with urban mothers (8 and 10 percent, respectively). Among the provinces, the proportion of mothers whose BMI falls below the cut-off point is highest in Western province (19 percent).

CHAPTER 10

MATERNAL MORTALITY

Although the level of maternal mortality is generally considered to be one of the most important indicators of Zambia's health, no reliable data are available at the national level and estimates vary widely. A study conducted in 1982-83 at the University Teaching Hospital in Lusaka estimated a maternal mortality ratio of 118 deaths per 100,000 births, while a study in Mongu district in Western Province in 1991-92 produced a maternal mortality ratio of 889 (Nsemukila, 1994:10). National-level estimates vary from 202 (UNICEF, 1995) to 940 (WHO, 1996:15) maternal deaths per 100,000 births.

Data were collected in the ZDHS that allow estimation of maternal mortality using a direct estimation procedure, as well as overall adult male and female mortality. The information concerns the survivorship of all live births of the respondent's natural mother (siblings). The direct approach to estimating adult and maternal mortality maximises use of the available data, using information on the age of surviving siblings, the age at death of siblings who died, and the number of years ago the sibling died. This allows the data to be aggregated to determine the number of person-years of exposure to mortality risk and the number of sibling deaths occurring in defined calendar periods. Rates of maternal and adult mortality are obtained by dividing maternal (or all female or male adult) deaths by person-years of exposure (Rutenberg and Sullivan, 1991).

10.1 The Data

Each female respondent was first asked to give the total number of her mother's live births. Then she was asked to provide a list of the children born to her mother starting with the first-born, and whether or not each sibling was still alive at the survey date. For living siblings, current age was collected; for deceased siblings, age at death and years since death were collected. Interviewers were instructed that when a respondent could not provide precise information on ages or years ago, approximate answers were acceptable. For sisters who died at ages 10 years or older, three questions were used to determine if the death was maternity-related: "*Was [NAME OF SISTER] pregnant when she died?*" and if negative, "*Did she die during childbirth?*" and if negative, "*Did she die within six weeks of the birth of a child or pregnancy termination?*"

The estimation of adult and maternal mortality requires reasonably accurate reporting of the number of sisters and brothers the respondent ever had, the number who have died, and the number of sisters who have died of maternity-related causes. There is no definitive procedure for establishing the completeness or accuracy of retrospective data on sibling survivorship. Table 10.1 shows the number of siblings reported by the respondents and the completeness of the reported data on current age, age at death, and years since death.

The sex ratio of enumerated siblings (the ratio of brothers to sisters) is 0.99, which is somewhat lower than the expected value of 1.02 or 1.03 and may indicate underreporting of brothers by respondents (see Table 10.1). In very few cases (one half of one percent), siblings' ages were not reported by the respondents. Respondents were highly knowledgeable about their siblings' survival status, with only 6 out of over 50,000 siblings missing this information. In the case of deceased siblings, complete reporting of age at death and years since death were also nearly universal; 96 percent of deceased siblings have both age at death and years since death reported. Rather than exclude the small number of siblings with missing data from further analysis, information on the birth order of siblings in conjunction with other information was used to impute the missing

data.[1] The sibling survivorship data, including cases with imputed values, were used in the direct estimation of adult and maternal mortality.

Table 10.1 Data on siblings

Number of siblings reported by female survey respondents and completeness of reported data on sibling age, age at death (AD) and years since death (YSD), Zambia 1996

	Sisters		Brothers		All siblings	
Siblings	Number	Percentage	Number	Percentage	Number	Percentage
All siblings	25,650	100.0	25,499	100.0	51,149	100.0
Living	20,851	81.3	20,233	79.3	41,083	80.3
Dead	4,796	18.7	5,264	20.6	10,060	19.7
Missing survival information	4	0.0	2	0.0	6	0.0
Living siblings	20,851	100.0	20,233	100.0	41,083	100.0
Age reported	20,750	99.5	20,146	99.6	40,896	99.5
Age missing	100	0.5	87	0.4	187	0.5
Dead siblings	4,796	100.0	5,264	100.0	10,060	100.0
AD and YSD reported	4,588	95.7	5,025	95.5	9,613	95.6
AD missing	36	0.7	41	0.8	77	0.8
YSD missing	63	1.3	66	1.3	129	1.3
Both AD and YSD missing	108	2.3	132	2.5	241	2.4

10.2 Direct Estimates of Adult Mortality

Another way to assess the quality of data used to estimate maternal mortality is to evaluate the plausibility and stability of overall adult mortality. It is reasoned that if estimated rates of overall adult mortality are implausible, rates based on a subset of deaths, i.e., maternal deaths in particular, are unlikely to be free of serious problems.

Table 10.2 presents the age-specific rates of female and male mortality (15-49 years) for the seven-year period before the survey. Since the number of deaths on which the rates are based is not large (only 1,128 female and 1,142 male deaths), the estimated five-year, age-specific rates are subject to considerable sampling variation. Generally, female mortality is higher than male mortality below age 30 and is lower than male mortality at ages 30 and above. As expected, mortality among both sexes increases with age, however the rates generally level off at age group 25-29 for women and age group 35-39 for men.

[1] The imputation procedure is based on the assumption that the reported birth ordering of sibling in the history is correct. The first step is to calculate birth dates. For each living sibling with a reported age and each dead sibling with complete information on both age at death and years since death, the birth date was calculated. For a sibling missing these data, a birth date was imputed within the range defined by the birth dates of the bracketing siblings. In the case of living siblings, an age was then calculated from the imputed birth date. In the case of dead siblings, if either the age at death or years since death was reported, that information was combined with the birth date to produce the missing information. If both pieces of information were missing, the distribution of the ages at death for siblings for whom the years since death was unreported, but age at death was reported, was used as a basis for imputing the age at death.

Table 10.2 Adult mortality rates

Estimated adult mortality rates for women and men in the period 0-6 years before the survey, Zambia 1996

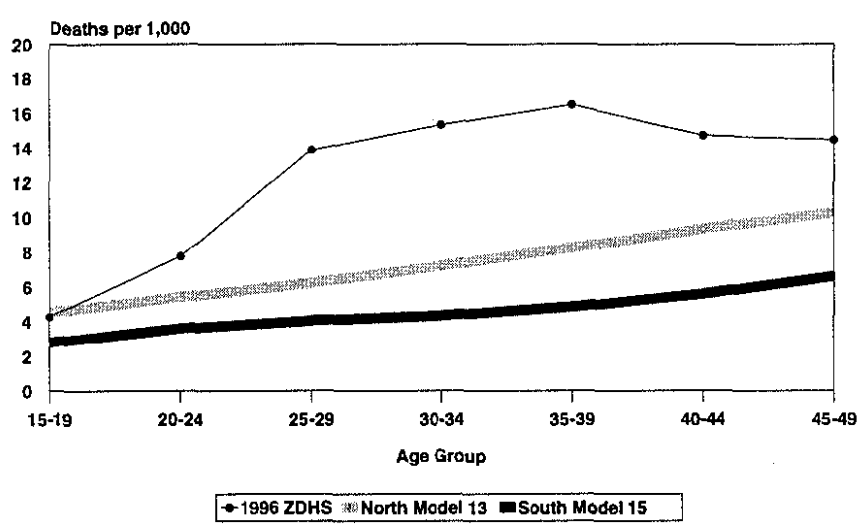
Age	Deaths	Exposure	Mortality rate
WOMEN			
15-19	102	23,813	4.29
20-24	188	24,321	7.74
25-29	278	20,068	13.86
30-34	241	15,749	15.32
35-39	178	10,781	16.48
40-44	93	6,305	14.70
45-49	48	3,326	14.45
15-49	1,128	104,364	10.61[a]
MEN			
15-19	80	23,312	3.42
20-24	132	24,470	5.38
25-29	238	20,355	11.67
30-34	270	15,426	17.51
35-39	224	10,085	22.23
40-44	130	5,769	22.53
45-49	69	3,249	21.34
15-49	1,142	102,665	11.32[a]

[a] Age-adjusted rates

10.2). Embodied in a model life table is a relationship between mortality during childhood and mortality during later years. Some models posit high child relative to adult mortality levels; others describe low child relative to adult mortality. So that by selecting model mortality schedules based on an observed under-five mortality level, one can assess whether adult rates are higher or lower than would be expected. Here, the ZDHS under-five mortality estimates of 183 per thousand for females and 202 per thousand for males (from Table 7.3) are used to enter the model mortality schedules: model North and South of the Coale-Demeny life tables.

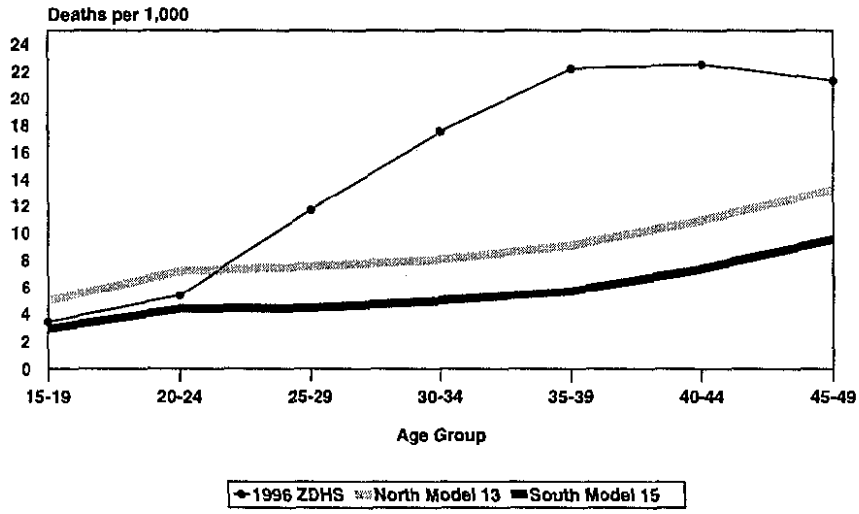
The figures show that adult mortality in Zambia substantially exceeds rates described in the reference schedules for a given childhood mortality level. This is especially true for male mortality in age 35 and above. These findings indicate that underreporting of deceased siblings is unlikely to be a serious problem in the ZDHS data. The fact that the estimated rates exceed model rates may be realistically explained by the recent deterioration in adult survival prospects due in part to the AIDS problem. An analysis of trends in adult mortality would be a useful extension to this line of inquiry; unfortunately, the sparseness of the data will not support a statistically reliable look across the relevant calendar periods.

Figure 10.1
Female Adult Mortality in Zambia for the Period 0-6 Years Before the Survey, by Age, from Various Sources



ZDHS 1996

Figure 10.2
Male Adult Mortality in Zambia for the Period 0-6 Years Before the Survey, by Age, from Various Sources



ZDHS 1996

10.3 Estimates of Maternal Mortality

Direct age-specific estimates of maternal mortality from the reported survivorship of sisters are shown in Table 10.3 for the 0-6 year period before the survey. The number of maternal deaths (147) is not large, so age-specific rates are subject to large sampling errors. However, the age-specific rates show a plausible pattern, being higher at the peak childbearing ages of the 20s and 30s than at the youngest and older age groups. For the entire childbearing period (15-49) for the seven-year period before the survey (1990-1996), the rate of mortality due to causes related to pregnancy and childbearing is 1.34 maternal deaths per 1,000 woman-years of exposure. Maternal deaths represent approximately 13 percent of all deaths to women aged 15-49.

Table 10.3 Direct estimates of maternal mortality

Direct estimates of maternal mortality for the period 0-6 years before the survey, Zambia 1996

Age	Deaths	Exposure	Mortality rate[1]
15-19	18	23,813	0.75
20-24	34	24,321	1.40
25-29	43	20,068	2.14
30-34	31	15,749	1.96
35-39	16	10,781	1.46
40-44	3	6,305	0.50
45-49	3	3,326	0.82
15-49	147	104,364	1.34[a]
General Fertility Rate (GFR)			0.206[a]
Maternal Mortality Ratio (MMR)[2]			649

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

The maternal mortality rate can be converted to a maternal mortality ratio and expressed per 100,000 live births by dividing the rate by the general fertility rate of 0.206 operating during the same time period. In this way, the obstetrical risk of pregnancy and childbearing is underlined. By direct estimation procedures, the maternal mortality ratio is estimated as 649 maternal deaths per 100,000 live births during 1990-1996.

CHAPTER 11

AIDS AND OTHER SEXUALLY TRANSMITTED DISEASES

11.1 Background

HIV/AIDS remains a major concern in Zambia due to continuing high prevalence rates. Sero-surveillance data from antenatal clinics from 1994 show a great diversity in the spread of HIV across the country, ranging from 2 percent to 32 percent (National AIDS/Sexually Transmitted Diseases/Tuberculosis and Leprosy Program (NASTLP, 1994). Sentinel survey data are collected every two years from a sample of women attending antenatal clinics. All provinces have sentinel sites, one each in rural and urban areas.

Since 1984, when AIDS was first recognised as a threat to public health, the Ministry of Health has spearheaded various strategies to contain and limit the spread of HIV infection. The strategies have ranged from protection of the blood supply to information dissemination and campaigns to change social attitudes and behaviour.

Information, Education and Communication (IEC) messages have been used to educate the population at large about sexually transmitted diseases (STDs). There is a correlation between STDs and vulnerability to HIV infection. AIDS control measures have been directed at sensitising the public that STDs are avoidable with the practice of responsible sexual behaviour and treatable once infected.

11.2 Sexual Behaviour

Messages advocating behavioural change have been an important strategy for containing the spread of HIV/AIDS and assisting those already infected to live positively. IEC programmes have encouraged women and men to practice safe sex, which has been interpreted as abstinence when not in a continuous union with a partner who can be trusted to remain faithful, and faithfulness to one partner. When this behaviour cannot be practiced, people are encouraged to use condoms.

Women and men interviewed in the ZDHS were asked about their sexual behaviour, the number of sexual partners in the 12 months preceding the survey, and receipt of payment for sexual relations. Data in Tables 11.1.1 and 11.1.2 show that virtually all married women have only one sex partner, their spouse or partner. Among unmarried women, six in ten do not have any sex partner and the majority of those who are sexually active have only one partner.

Men are much more active sexually than women; 14 percent of married men have two or three partners, and 4 percent had four or more partners in the 12 months preceding the survey. Unmarried men are also more active sexually than unmarried women (61 percent compared to 38 percent). Young married men are more likely to have multiple partners than older married men. For example, one in five married men 20-24 years of age reported having two or three partners, and 12 percent had four or more partners, including their wives, while among men age 50 and above, less than 3 percent have multiple partners.

Exchange of sex for money or gifts is a coping strategy for dealing with poverty and may not be perceived as commercial sex work. Nearly 11 percent of the women and 24 percent of the men interviewed reported exchanging sex for money or gifts during the 12 months prior to the survey (Table 11.2). Respondents who were not currently in union were much more likely to report this relationship. Unmarried young women (below age 25) and unmarried men, particularly those age 25-39, were more likely to be involved in sex for money/gift relationships. Almost 40 percent of unmarried men of all ages indicated involvement in a money/material exchange. Women respondents were either less likely to have engaged in a commercial relationship or less likely to admit to it.

Table 11.1.1 Number of recent sexual partners: women

Percent distribution of currently married women and of currently unmarried women by the number of sexual partners in the 12 months preceding the survey, according to selected background characteristics, Zambia 1996

	Currently married women														Unmarried women							
	Number of partners including spouse							Number of partners excluding spouse							Number of partners							
Background characteristic	0	1	2-3	4+	Don't know/ Missing	Total	Mean	0	1	2-3	4+	Total	Mean	Number of women	0	1	2-3	4+	Don't know/ Missing	Total	Mean	Number of women
Age																						
15-19	2 0	96.6	1.3	0.2	0 0	100.0	1.0	98.6	0.6	0 6	0.2	100.0	0.0	498	68.9	25.0	5.0	0.7	0.4	100.0	0.4	1,506
20-24	3 4	94.6	1.8	0.1	0.1	100 0	1 0	98.1	1.2	0.6	0.1	100.0	0.0	1,207	52.6	36.3	8.5	1.1	1.5	100.0	0.6	623
25-29	2.8	95.5	1.4	0.3	0 0	100.0	1.0	98.3	1 2	0.2	0.3	100.0	0.0	969	42.3	45.5	8.1	1.0	3.0	100.0	0.7	317
30-39	4 1	94 7	1.2	0.0	0.0	100.0	1.0	98.8	1.0	0.3	0.0	100.0	0.0	1,443	50.4	40.4	4.5	0.4	4.3	100.0	0.5	397
40-49	5.0	93.1	1.3	0.2	0.3	100.0	1.0	98.5	1.1	0.2	0.2	100.0	0.0	786	67.3	25.8	3.6	0.8	2.4	100.0	0.5	276
Marital duration																						
0-4	2.9	95 5	1 5	0 1	0.0	100.0	1.0	98.3	0.9	0.6	0.1	100.0	0.0	1,277	NA	NA	NA	NA	NA	NA	NA	0
5-9	3.7	94 4	1 7	0 1	0.1	100.0	1.0	98.2	1.4	0.4	0.1	100.0	0.0	1,077	NA	NA	NA	NA	NA	NA	NA	0
10-14	2.1	96 4	1 3	0 2	0.0	100.0	1.0	98 4	1.2	0.2	0.2	100.0	0.0	820	NA	NA	NA	NA	NA	NA	NA	0
15+	4.8	93 8	1 2	0.1	0.2	100 0	1.0	98 7	0.9	0.3	0 1	100.0	0.0	1,728	NA	NA	NA	NA	NA	NA	NA	0
Residence																						
Urban	2.3	96.0	1 3	0.2	0.2	100 0	1.0	98.4	1.0	0.4	0 2	100.0	0.0	1,972	61.6	30.6	5.7	0.9	1.2	100.0	0 5	1,633
Rural	4.5	94 0	1 5	0.0	0.0	100.0	1.0	98.5	1.1	0.4	0 0	100.0	0.0	2,930	59.2	32.2	6.0	0.6	2.0	100.0	0.5	1,486
Education																						
No education	5.7	92.6	1.4	0.2	0.2	100 0	1 0	98.4	1.2	0.2	0.2	100.0	0.0	803	62.7	30.3	5.2	0.3	1.6	100 0	0 4	264
Primary	3 7	94.6	1.5	0.1	0 0	100.0	1.0	98.4	1 1	0.4	0.1	100.0	0.0	3,053	59.7	30.9	6.6	0.8	2.0	100.0	0.5	1,668
Secondary	1 9	96.8	1.2	0.1	0 0	100.0	1.0	98.7	0.8	0.4	0.1	100.0	0.0	924	62.2	31.2	4.8	0.9	0.9	100.0	0.5	1,082
Higher	1.1	96.7	1.1	0.0	1.1	100.0	1.0	98.9	1.1	0.0	0.0	100.0	0.0	122	48.0	43.4	6.2	0.0	2.4	100.0	0.6	104
Total[1]	3 6	94.8	1 4	0 1	0.1	100.0	1.0	98.4	1.1	0.4	0.1	100.0	0.0	4,902	60.4	31.4	5.9	0.8	1.6	100.0	0.5	3,119

NA = Not applicable
[1] Includes one woman with no information on education

Table 11.1.2 Number of recent sexual partners: men

Percent distribution of currently married men and of currently unmarried men by the number of sexual partners in the 12 months preceding the survey, according to selected background characteristics, Zambia 1996

	Currently married men															Unmarried men							
	Number of partners including spouse							Number of partners excluding spouse								Number of partners							
Background characteristic	0	1	2-3	4+	Don't know/ Missing	Total	Mean	0	1	2-3	4+	Don't know/ Missing	Total	Mean	Number of men	0	1	2-3	4+	Don't know/ Missing	Total	Mean	Number of men
Age																							
15-19	*	*	*	*	*	100.0	*	*	*	*	*	*	100.0	*	3	49.4	21.5	20.4	8.5	0.3	100.0	1.2	457
20-24	1.6	66.5	19.9	12.0	0.0	100 0	1.9	68.1	15.6	9 3	7.0	0.0	100.0	0.9	115	30.6	33.8	21.7	13.7	0.2	100.0	1.7	288
25-29	0.6	74.6	19.5	5.3	0.0	100.0	1.4	75 3	15 6	6.6	2.5	0.0	100.0	0.4	174	13.4	39.1	31.6	14.9	0.9	100.0	2.0	81
30-39	2.1	78.3	16.3	3.0	0 3	100.0	1.3	79 5	15 0	4.4	0.9	0.2	100.0	0.3	352	30.0	37.0	23.7	9.3	0.0	100.0	2.3	57
40-49	4.4	85.0	8.1	2.6	0.0	100.0	1.1	89.4	6.2	3.4	1.1	0.0	100.0	0.2	189	*	*	*	*	*	100.0	*	14
50-59	5.3	90.8	1.4	1.3	1.2	100.0	1.0	97.3	0.8	1.9	0.0	0.0	100.0	0.1	110	*	*	*	*	*	100.0	*	8
Marital duration																							
0-4	1.2	73.0	18.1	7.7	0.0	100.0	1.6	73.6	14.2	7.9	4.3	0.0	100.0	0.6	234	NA	NA	NA	NA	NA	NA	NA	0
5-9	1.7	78.1	17.4	2.8	0.0	100.0	1.3	79.2	14.8	4.9	1.1	0.0	100.0	0.3	202	NA	NA	NA	NA	NA	NA	NA	0
10-14	3.3	77.6	14.5	4.2	0.4	100.0	1.3	80.6	13.5	4.3	1.2	0.4	100.0	0.3	160	NA	NA	NA	NA	NA	NA	NA	0
15+	3.7	83.9	9.2	2.8	0.5	100.0	1.2	87.9	7.5	3.6	1.0	0.0	100.0	0.2	347	NA	NA	NA	NA	NA	NA	NA	0
Residence																							
Urban	2.9	81.3	12.7	2.7	0.3	100.0	1.2	83.9	11.6	3.7	0.8	0.0	100.0	0.3	401	36.2	28.7	23.2	10.5	1.4	100.0	1.6	451
Rural	2.4	77.0	15.0	5.4	0.2	100.0	1.4	79.3	11.9	6.0	2.7	0.1	100.0	0.4	543	40.9	27.5	20.6	10.6	0.3	100.0	1.4	454
Education																							
No education	3.2	77.2	15.7	2 0	1.9	100.0	1.3	82.2	11 2	5 7	1.0	0.0	100.0	0.3	71	27.1	32.4	26.7	13.8	0.0	100.0	1.6	56
Primary	3.3	76.7	14.6	5.3	0.3	100 0	1.4	79.5	12.5	5.6	2.2	0.2	100.0	0.4	454	42.8	25.6	17.9	13.1	0.6	100.0	1.5	484
Secondary	1.9	80.5	14.3	3.3	0 0	100.0	1.3	82.4	11.2	4.4	2.0	0.0	100.0	0.3	345	34.8	30.5	26.4	6.8	1.5	100.0	1.3	341
Higher	1.0	86.5	8 0	4.4	0.0	100.0	1.2	85.5	10.0	4.4	0.0	0.0	100.0	0.2	73	*	*	*	*	0.0	100.0	*	25
Total	2.6	78 9	14.0	4.2	0.3	100.0	1.3	81.3	11.7	5 0	1.9	0.1	100.0	0.4	944	38.5	28.1	21.9	10.6	0.9	100.0	1.5	905

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted men and has been suppressed.
NA = Not applicable

11.3 Knowledge About Sexually Transmitted Diseases (STDs)

Women and men were asked if they knew of diseases that are transmitted sexually. If so, the respondents were asked which ones they knew. Knowledge of sexually transmitted diseases (STDs) other than AIDS is generally high among women and men (73 percent or higher) (Table 11.3). However, the knowledge level for STDs is usually not as high as that for AIDS (90 percent or higher). Men, on average, were more knowledgeable about STDs than women. Furthermore, men are more likely than women to identify AIDS as a sexually transmitted disease. The overall pattern of knowledge about STDs is similar for women and men. Older respondents, those who have ever been married, and those with more education are more likely to know about STDs than other respondents. The least knowledgeable group is adolescent girls and boys age 15-19, although boys tended to have more knowledge of STDs than girls.

Table 11.2 Payment for sexual relations

Among women and men who ever had sexual intercourse, percentage who have given money, gifts or favours in exchange for sex in the past 12 months, by marital status, according to selected background characteristics, Zambia 1996

Background characteristic	Women						Men					
	Currently married		Not currently married		All women		Currently married		Not currently married		All men	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Age												
15-19	8.2	498	38.4	670	25.5	1,168	*	3	39.3	301	38.9	304
20-24	4.9	1,207	28 4	528	12 0	1,735	25 3	115	36.1	246	32 7	361
25-29	3.7	969	19.7	310	7 6	1,279	13.2	174	46.7	79	23 6	253
30-39	2.6	1,443	16.2	391	5 5	1,834	14 0	352	42.7	54	17 8	406
40-49	1.7	786	9.0	276	3.6	1,062	11.9	189	*	14	13 5	204
50-64	NA	NA	NA	NA	NA	NA	4.4	110	*	8	4 1	118
Residence												
Urban	3 4	1,972	23.7	1,100	10.7	3,071	14.8	401	30 8	369	22.5	769
Rural	4.0	2,930	27.5	1,075	10.3	4,006	12.8	543	47.5	333	26.0	876
Education												
No education	3.2	803	18 3	212	6 4	1,015	8.9	71	50 2	47	25 5	118
Primary	4.2	3,053	29 8	1,160	11 2	4,213	14.9	454	48 2	342	29 2	796
Secondary	3.4	924	23 5	712	12.2	1,636	13.8	345	27 0	290	19.9	636
Higher	1.1	122	4.4	91	2.5	213	9.9	73	*	22	12 5	95
Total	3.8	4,902	25.6	2,175	10.5	7,077	13 6	944	38.7	702	24 3	1,646

Note: An asterisk indicates that a figure is based on fewer than 25 men and has been suppressed
NA = Not applicable

Place of residence seems to be more closely related to knowledge of STDs for women than for men. The gap in knowledge between urban and rural women is much larger than that between urban and rural men (Table 11.3). Knowledge of STDs among women is substantially lower in Eastern Province than in other areas of the country.

11.4 Health Seeking Behaviour for Treatment of STDs

Less than 3 percent of women and 7 percent of men reported that they had an STD in the 12-month period prior to the survey. Among the women, syphilis and gonorrhoea (both approximately 1 percent) were the most commonly mentioned STDs, while among men, gonorrhoea, discharge from the penis, and genital sores or ulcers (4 percent, 4 percent, and 3 percent, respectively) were the most commonly reported ailments (Table 11.4). STDs are more common among women and men in their 20s and 30s, those who have been been married and those who are better educated.

Respondents reporting STD infections in the 12 months preceding the survey were asked about their behaviour in seeking treatment and informing sexual partners. They were also asked about measures taken to avoid infecting their partners. Women were slightly more likely to seek treatment than men (99 percent vs. 91 percent). Also, more than 91 percent of women said they had informed their partner(s) of their status. Approximately 66 percent of men indicated that they had informed their partner(s) of their status (Table 11.5.). There were differences in terms of marital status. A higher percentage of married women and men said they informed partner(s) compared to men and women not currently married or in union. More than half of women reported that their partner was already infected, hence they had taken no action to avoid infecting their partners.

11.5 Knowledge About AIDS

In addition to general questions on knowledge of STDs, respondents in the 1996 ZDHS were asked if they had ever heard about AIDS. Tables 11.6.1 and 11.6.2 show the percentage of respondents who answered affirmatively, according to the sources of AIDS information. Results indicate that knowledge of AIDS is nearly universal among respondents (just under 100 percent). There is no significant difference between women and men in level of knowledge of AIDS, but sources of information vary. Over 60 percent of women and nearly the same percentage of men said they relied on friends or relatives for information. Overall, information disseminated through other sources was more likely to be received by men than women, except communications through health workers. Fifty-three percent of the women reported receiving information from this source compared to 26 percent of men.

There were differences according to background characteristics in source of knowledge of AIDS. Dependency on friends for information about AIDS was more apparent in rural areas compared to urban areas. The dominant sources of information for rural populations were friends (72 percent) and health workers (57 percent) compared to urban populations whose major sources of information were radio (66 percent) and friends (51 percent).

11.6 Knowledge of Ways to Avoid AIDS

Less than 10 percent of the respondents believe that AIDS is unavoidable (Tables 11.7.1 and 11.7.2). There were only slight variations between women and men in identifying methods to avoid AIDS. The majority of women and men cite faithfulness with one partner (49 percent for both women and men) and condom use (38 percent of women and 49 percent of men). More men (40 percent) than women (29 percent) identified abstinence as an option, irrespective of their background and residence.

Older and better educated persons are more likely to cite having one sexual partner as a means of avoiding AIDS, while younger men cite condoms. The responses of respondents from North-Western Province deserve mention; women in this province are especially likely to cite limiting to one sexual partner as a means of AIDS prevention (81 percent), while men are likely to say that avoiding sex with prostitutes is a good way to avoid the disease (70 percent).

Table 11.3 Knowledge of sexually transmitted diseases

Percentage of women and men who know of specific sexually transmitted diseases, by selected background characteristics, Zambia 1996

Background characteristic	Women							Men						
	Syphilis	Gonorrhoea	HIV/AIDS[1]	Genital warts	Other	Don't know any	Number of women	Syphilis	Gonorrhoea	HIV/AIDS[1]	Genital warts	Other	Don't know any	Number of men
Age														
15-19	56.4	57.6	85.8	3.4	1.2	9.1	2,003	61.9	63.3	92.8	5.1	2.0	4.1	460
20-24	73.5	76.1	88.5	6.1	1.3	5.5	1,830	85.6	87.9	94.8	7.7	0.8	1.4	404
25-29	76.2	78.4	89.9	6.4	1.3	4.2	1,286	93.0	93.0	93.9	11.6	1.3	0.3	255
30-39	78.6	79.1	91.3	7.0	1.8	3.3	1,840	89.8	91.7	92.9	10.7	1.7	1.0	409
40-49	74.2	76.6	87.9	5.8	0.9	4.5	1,062	85.5	89.8	93.3	7.7	2.0	1.4	204
50-59	NA	NA	NA	NA	NA	NA	NA	90.0	90.6	95.2	12.8	3.8	0.0	118
Current marital status														
Never married	61.3	62.6	87.5	3.6	1.1	6.8	2,032	72.0	74.6	93.9	6.6	1.3	2.6	814
Had sex	69.1	70.8	87.8	5.1	0.5	5.4	1,087	79.3	81.9	95.0	7.6	0.9	1.0	611
Never had sex	52.3	53.2	87.2	1.9	1.7	8.4	944	50.3	52.6	90.8	3.4	2.7	7.5	203
Currently married	73.5	75.3	88.9	6.0	1.3	5.4	4,902	89.8	91.2	93.1	9.9	2.1	1.0	944
Formerly married	77.3	79.3	89.4	7.9	1.9	3.8	1,086	88.6	87.8	95.9	13.0	0.7	1.7	91
Residence														
Urban	79.6	76.9	90.3	5.2	1.3	3.1	3,604	85.3	86.2	92.4	8.2	1.9	1.2	852
Rural	63.8	69 1	87.2	6.0	1.3	7.6	4,417	79.1	81.6	94.7	8.9	1.5	2.2	997
Province														
Central	73.5	73.1	90.7	30.2	1.4	4.2	653	83.4	90.5	92.7	0.5	4.0	0.5	157
Copperbelt	86.1	85.1	89.9	3.4	1.3	2.9	1,588	88.7	87.6	92.6	9.6	1.3	2.9	396
Eastern	34.6	56.8	81.3	1.1	0.0	16.0	1,075	83.4	92.6	97.1	2.2	1.4	0.4	254
Luapula	89.4	90.2	90.5	1.6	0.1	3.1	726	97.4	98.5	95.4	0.5	0.5	0.0	151
Lusaka	72.2	64.0	90.8	2.5	0.7	3.8	1,403	80.2	85.1	88.2	3.2	1.9	0.8	316
Northern	80.4	67.5	88.9	3.4	1.1	3.3	872	82.1	79.8	96.3	9.5	0.9	3.2	221
North-Western	64.5	67.6	81.7	6.7	16.3	14.4	288	71.7	82.0	88.2	3.4	4.1	9.6	48
Southern	68.6	72.8	95.5	4.4	0.8	3.4	816	80.7	49.0	96.4	21.4	0.5	1.4	173
Western	59.8	75.7	82.0	9.8	0.6	4.1	600	48.7	79.6	95.9	33.3	3.6	1.6	132
Education														
No education	53.0	58.2	79.1	3.2	0.8	15.5	1,067	73.2	82.2	89.7	6.3	1.2	3.7	127
Primary	69.3	72.1	89.1	5.8	1.4	5.4	4,721	76.4	78.6	93.4	7.8	2.1	2.6	938
Secondary	81.6	79.5	92.0	5.4	1.3	1.3	2,007	89.4	88.6	93.9	9.5	1.2	0.5	686
Higher	93.2	90.8	92.1	16.1	3.0	0.0	226	94.8	100.0	98.7	12.5	2.2	0.0	98
Total	70.9	72.6	88.6	5.7	1.3	5.5	8,021	81.9	83.7	93.6	8.6	1.7	1.7	1,849

Note: Figures are based on *spontaneous* knowledge of sexually transmitted diseases (i.e., without probing).
[1] See Tables 11.6.1 and 11.6.2 for level of knowledge of HIV/AIDS *after probing*.

Table 11.4 Self-reporting of sexually transmitted diseases in the last year

Percentage of women and men who report having had specific sexually transmitted diseases (STDs) in the 12 months preceding the survey, by background characteristics, Zambia 1996

	Women							Men								
Background characteristic	Any STD	Syphilis	Gonorrhoea	HIV/ AIDS	Genital warts	Other	Number of women	Any STD	Syphilis	Gonorrhoea	HIV/ AIDS	Genital warts	Discharge from penis	Sore/ ulcer on penis	Other	Number of men
Age																
15-19	1.3	0.6	0 6	0.0	0.2	0.0	2,003	3.3	0.3	2.0	0.0	0.0	2.2	1.3	0.0	460
20-24	2.8	1.2	1.3	0.2	0.1	0.1	1,830	7.6	1.8	4.3	0.0	0.4	3.6	3.5	0.0	404
25-29	2.8	1.4	1.4	0.2	0.2	0.0	1,286	9.6	3.4	6.4	0.8	0.3	6.2	4.1	0.0	255
30-39	2.5	1.1	1.3	0.1	0.0	0.1	1,840	9.1	2.4	4.1	0.0	0.0	4.5	4.1	0.3	409
40-49	2.0	0.4	1.4	0.0	0.1	0.1	1,062	8.1	1.5	5.0	0.0	0.3	6.2	3.9	0.0	204
50-64	NA	NA	NA	NA	NA	NA	NA	2.2	1.6	1.2	0.0	0.0	0.5	0.5	0.0	118
Marital duration																
Never married	0.7	0.2	0.3	0.0	0.1	0.0	2,032	4.8	1.4	2.6	0.2	0 1	2.5	2.2	0.0	814
Currently married	2.5	1.1	1.3	0.1	0.1	0.1	4,902	7.9	1.8	4.5	0.1	0.2	4.4	3.4	0.1	944
Formerly married	4.1	2.0	2.1	0.4	0.1	0.3	1,086	14.3	4.5	7.6	0.0	0.0	11.9	6.7	0.0	91
Residence																
Urban	2.3	1.3	1.0	0.1	0.1	0.0	3,604	7.2	2.6	3.4	0.2	0.2	4.2	3.4	0.1	852
Rural	2.2	0.8	1.3	0.1	0.1	0.1	4,417	6.5	1.1	4.2	0.1	0.2	3.7	2.7	0.0	997
Province																
Central	2.8	1.6	0.6	0.3	0.6	0.1	653	11.4	4.0	6.0	0.5	0.0	6.6	5.0	0.7	157
Copperbelt	2.1	0.9	1.1	0.0	0.0	0.2	1,588	6.9	2.0	2.6	0.3	0.0	3.9	3.0	0.0	396
Eastern	2.8	1.1	1.7	0.3	0.0	0.0	1,075	4.1	0.8	3.0	0.0	0.0	2.4	2.6	0.0	254
Luapula	2.2	0.8	1.5	0.0	0.0	0.0	726	4.6	1.0	3.6	0.0	0.0	3.0	1.0	0.0	151
Lusaka	1.6	1.1	0.4	0.0	0.2	0.0	1,403	7.5	2.7	4.5	0.0	0.5	4.0	3.5	0.0	316
Northern	2.2	0.8	1.2	0.1	0.1	0.1	872	8.9	1.9	3.8	0.0	0.0	3.2	4.0	0.0	221
North-Western	2.1	0.9	1.3	0.0	0.0	0.0	288	5.3	1.2	4.1	0.0	0.0	4.3	0.0	0.0	48
Southern	2.6	1.2	1.4	0.2	0.1	0.0	816	1.9	0.0	1.4	0.0	0.5	1.0	0.0	0.0	173
Western	2.4	0.4	1.9	0.1	0.1	0.1	600	11.1	1.0	8.5	0.0	0.5	9.5	6.0	0.0	132
Education																
No education	1.8	0.5	1.1	0.0	0.2	0.0	1,067	2.6	0.6	0.9	0.0	1 2	0.9	0.6	0.0	127
Primary	2.4	1.1	1.2	0.2	0.1	0.1	4,721	6.5	1 2	4.2	0.1	0.2	4.0	2.8	0.0	938
Secondary	2.3	1.1	1.1	0.0	0.1	0.1	2,007	8.4	3 0	4 1	0.2	0.0	4.5	3.8	0.2	686
Higher	0.5	0.5	0.0	0.0	0.0	0.0	226	4.9	0.0	2.9	0.0	0.0	2.8	2.0	0.0	98
Total	2.3	1.0	1.1	0.1	0.1	0.1	8,021	6.9	1.8	3.8	0.1	0.2	3.9	3.0	0.1	1,849

Note: Total includes one woman with missing information on education.

NA = Not applicable

Table 11.5 Action taken by respondents who reported having had a sexually transmitted disease in the past year

Among women and men who reported having had a sexually transmitted disease (STD) in the 12 months prior to the survey, the percentage who sought advice or treatment, the percentage who informed their partner(s), and the percentage who took measures to avoid infecting their partner(s), by selected background characteristics, Zambia 1996

Background characteristic	Among respondents who had an STD: Percent who sought treatment	Percent who informed partners	Percentage who took action to avoid infecting partner: Avoid sex	Used condoms	Took medicine	Other	Partner infected/ no measures taken	No measures taken	Number of men/ women
WOMEN									
Age									
<30	97.8	93.4	7.3	2.0	22.6	0.0	55.9	15.7	114
30+	100.0	87.7	5.4	0.0	30.1	0.0	51.6	15.2	67
Marital status									
Currently married	98.9	94.0	3.0	1.8	25.7	0.0	57.3	13.9	122
Not currently married	98.0	85.6	14.0	0.0	24.8	0.0	48.1	18.9	58
Residence									
Urban	98.4	95.5	9.3	1.6	19.9	0.0	57.2	15.1	82
Rural	98.8	87.7	4.3	0.9	30.0	0.0	52.0	15.9	99
Education									
No education	*	*	*	*	*	*	*	*	19
Primary	97.8	89.2	6.5	0.8	28.2	0.0	52.7	15.6	114
Secondary	(100.0)	(94.2)	(9.7)	(2.9)	(15.0)	(0.0)	(54.5)	(20.5)	46
Higher	*	*	*	*	*	*	*	*	1
Total	98.6	91.2	6.6	1.2	25.4	0.0	54.3	15.5	181
MEN									
Age									
<30	86.2	57.0	44.3	6.9	33.2	1.7	12.6	21.0	70
30+	96.1	76.4	54.0	12.0	46.4	0.0	11.6	8.8	56
Marital status									
Currently married	97.0	76.4	52.7	7.3	50.7	1.6	16.3	4.5	74
Not currently married	81.5	50.4	42.9	11.8	22.5	0.0	6.1	31.2	52
Residence									
Urban	95.4	64.9	51.0	8.8	42.1	0.0	12.5	12.9	61
Rural	86.0	66.4	46.4	9.5	36.3	1.8	11.8	18.1	65
Education									
No education	*	*	*	*	*	*	*	*	3
Primary	90.1	63.7	49.6	8.4	36.2	1.9	10.2	15.4	61
Secondary	91.1	71.0	47.2	7.8	40.2	0.0	15.9	13.4	58
Higher	*	*	*	*	*	*	*	*	5
Total	90.6	65.6	48.6	9.1	39.1	0.9	12.1	15.5	127

Note: Figures in parentheses are based on 25-49 women; an asterisk indicates a figure is based on fewer than 25 respondents and has been suppressed.

Table 11.6.1 Knowledge of AIDS and sources of AIDS information: women

Percentage of women who have ever heard of AIDS, percentage who have received information about AIDS from specific sources, and mean number of sources of information about AIDS, by background characteristics, Zambia 1996

Background characteristic	Ever heard of AIDS	Sources of AIDS information												Number	Mean number of sources[1]
		Radio	TV	Newspaper	Pamphlet	Health worker	Mosque/church	School	Community meeting	Friend/Relative	Work place	Live drama	Other source		
Age															
15-19	99.3	46.8	22.0	9.0	6.7	33.1	3.6	31.0	4.0	62.2	0.1	6.4	0.9	2,003	2.3
20-24	99.8	55.8	22.7	12.3	8.4	57.1	5.1	9.8	5.8	60.2	0.8	5.1	0.8	1,830	2.4
25-29	99.6	60.4	24.1	11.6	8.2	65.8	4.2	4.2	6.1	60.2	1.7	5.3	0.6	1,286	2.5
30-39	99.7	59.2	21.9	9.2	8.2	61.3	4.9	1.5	7.4	64.1	2.3	4.5	1.0	1,840	2.5
40-49	99.3	50.7	15.3	6.4	7.5	52.4	6.5	1.7	7.0	69.9	1.9	3.4	2.0	1,062	2.3
Marital status															
Never married	99.1	49 2	28.0	14.7	8.4	32.2	4.3	33.5	4.2	55.6	1.0	7.3	0.9	2,032	2.4
Currently in union	99.7	56.6	18.8	7.8	7.4	60.5	4.6	3.8	6.4	65.7	1.2	4.1	1.0	4,902	2.4
Formerly in union	99.6	53.9	21.9	10.3	8 3	56.9	6.0	3.1	7.1	63.8	2.2	5.5	1.3	1,086	2 4
Residence															
Urban	99.9	66.1	42.0	17.5	10.7	47.6	4.9	14.4	7.4	51.2	2.3	6.3	1.4	3,604	2.7
Rural	99.3	44.8	4.9	3.7	5.4	57.1	4.6	8.6	4.7	72.4	0.4	4.1	0.6	4,417	2.1
Province															
Central	99.7	50.6	22.8	9.9	8.4	45.2	2.0	7.9	11.1	45.2	1.3	2.0	0.6	653	2.1
Copperbelt	100.0	72.1	47.3	13.9	8.8	45.0	6.0	14.9	9.3	53.0	1.5	4.4	2.7	1,588	2.8
Eastern	98.5	45.1	1.2	2.8	2.6	50.5	0.9	4.4	0.8	77.9	0.0	2.9	0.1	1,075	1.9
Luapula	99.9	75.7	7.0	4.8	8.7	57.7	5.2	11.4	4.2	82.0	1.4	5.1	0.1	726	2.6
Lusaka	99.8	63.0	42.4	20.9	11.3	44.4	3.4	12.3	6.7	47.3	2.5	6.4	0.8	1,403	2.6
Northern	99.6	52 4	6.9	6.2	6.6	61.6	12.7	8.7	4.3	78.7	0.6	4.6	1 6	872	2.5
North-Western	98.9	52.7	8.7	5.5	14.0	79.1	14.6	11.1	3.0	89.3	1.4	6.4	0 0	288	2.9
Southern	99.7	28.3	7.7	7.0	6.3	64.6	1.1	15.1	5.1	57.9	1.5	4.7	0.2	816	2.0
Western	99.3	21.6	3.9	4.1	5.2	58.7	2.3	12.8	5 4	65.6	0.6	11.8	0.7	600	1.9
Education															
No education	98.1	38.9	3.9	0.0	2.5	46.1	4.3	0.4	2.8	80.3	0.4	1.6	0.5	1,067	1.9
Primary	99.7	51.2	13.6	3.5	5.5	55.1	4.6	7.5	6.1	68.2	0.4	4.1	0.8	4,721	2.2
Secondary	99.9	67.7	44.4	25.0	13.5	52.0	5.3	24.9	6.8	44.3	1.7	8.4	1.5	2,007	3.0
Higher	100.0	75.4	69.3	57.4	29.6	44.9	5.3	17.5	8.2	34.0	18.9	13.0	2.7	226	3.8
Total[2]	99.6	54.4	21.6	9.9	7.8	52 8	4 7	11.2	5.9	62.9	1.3	5.1	1.0	8,021	2.4

[1] Mean number of sources is based on respondents who have heard of AIDS.
[2] Total includes one woman with missing information on education.

Table 11.6.2 Knowledge of AIDS and sources of AIDS information: men

Percentage of men who have ever heard of AIDS, percentage who have received information about AIDS from specific sources, and mean number of sources of information about AIDS, by background characteristics, Zambia 1996

		Sources of AIDS information													
Background characteristic	Ever heard of AIDS	Radio	TV	News-paper	Pam-phlet	Health worker	Mosque/ church	School	Com-munity meet-ing	Friend/ Rela-tive	Work place	Live drama	Other source	Num-ber	Mean number of sources[1]
Age															
15-19	98.5	64.9	30.8	20.1	17.8	10.5	5.9	37.8	5.2	58.2	0.7	3.1	1.2	460	2.6
20-24	100.0	76.9	29.7	26.4	23.4	26.0	5.7	22.7	5.6	63.1	3.3	1.9	3.2	404	2.9
25-29	99.7	83.7	37.8	36.5	33.3	32.7	3.6	12.5	4.1	54.9	4.6	2.1	2.5	255	3.1
30-39	99.8	82.3	34.8	34.3	27.7	35.7	6.6	4.7	8.1	55.5	8.9	1.9	2.5	409	3.0
40-49	99.7	82.0	35.0	39.5	27.6	32.1	2.6	1.7	8.5	59.5	8.3	1.3	5.3	204	3.0
50-64	99.6	70.3	26.3	30.0	26.2	30.5	5.6	3.7	10.2	62.0	6.9	1.1	6.0	118	2.8
Marital status															
Never married	99.1	70.4	32.0	25.7	21.2	16.3	5.5	32.8	5.7	60.6	1.5	3.0	1.7	814	2.8
Currently in union	99.8	81.1	32.1	32.6	27.6	34.4	4.8	5.5	6.9	56.8	8.0	1.4	3.8	944	3.0
Formerly in union	100.0	76.9	42.8	34.6	31.0	29.2	8.7	5.6	8.6	59.6	2.3	1.4	4.5	91	3.1
Residence															
Urban	99.8	84.5	60.5	46.0	34.2	27.5	7.7	17.7	7.6	56.4	8.6	2.2	2.7	852	3.6
Rural	99.2	69.1	8.7	15.7	17.1	25.1	3.3	17.4	5.4	60.6	1.7	2.1	3.0	997	2.3
Province															
Central	100.0	71.8	28.9	24.8	8.4	8.4	0.0	11.3	8.6	48.0	0.0	0.0	18.1	157	2.3
Copperbelt	100.0	83.1	65.9	41.9	22.9	30.2	9.0	15.9	11.1	57.6	7.6	5.2	2.3	396	3.5
Eastern	100.0	90.7	5.2	12.5	7.7	17.7	2.6	3.7	3.6	48.8	0.9	3.3	1.1	254	2.0
Luapula	99.5	84.7	16.0	18.5	42.5	33.7	5.6	19.4	1.0	62.7	3.0	1.0	0.5	151	2.9
Lusaka	99.2	86.5	69.0	59.3	53.8	30.7	6.1	18.5	4.7	49.4	11.3	0.5	0.5	316	3.9
Northern	98.4	74.7	7.3	28.6	27.8	22.1	1.2	37.3	5.1	72.2	3.3	2.8	0.0	221	2.9
North-Western	97.8	80.8	11.9	8.0	16.1	26.4	2.2	5.5	13.4	72.1	2.2	0.0	0.0	48	2.4
Southern	99.0	41.9	6.9	8.6	15.4	39.8	12.6	20.4	8.9	70.6	1.2	0.0	0.0	173	2.3
Western	100.0	44.2	4.9	10.5	5.6	21.0	2.1	19.3	2.5	67.2	5.0	0.5	8.2	132	1.9
Education															
No education	98.5	67.0	9.2	5.9	6.7	17.1	2.2	2.9	1.1	68.0	0.0	2.4	1.6	127	1.9
Primary	99.2	70.1	17.2	16.3	17.9	25.1	4.7	16.5	4.8	66.0	3.8	1.6	3.0	938	2.5
Secondary	99.9	84.7	52.9	47.4	34.4	29.5	6.2	22.2	8.8	49.5	5.9	2.5	3.2	686	3.5
Higher	100.0	86.5	68.4	64.3	50.0	25.9	8.9	13.7	12.2	39.4	14.6	4.2	1.1	98	3.9
Total	99.5	76.2	32.6	29.7	25.0	26.2	5.3	17.5	6.4	58.6	4.9	2.1	2.9	1,849	2.9

[1] Mean number of sources is based on respondents who have heard of AIDS.

Table 11.7.1 Knowledge of ways to avoid AIDS: women

Percentage of women who have heard of AIDS and who know of specific ways to avoid AIDS and percentage with misinformation, by selected background characteristics, Zambia 1996

Background characteristic	No way to avoid AIDS	Ways to avoid AIDS: Abstain from sex	Use condoms	Have only one sexual partner	Avoid sex with prostitutes	Avoid homosexuals	Avoid transfusions	Avoid injections	Avoid kissing	Avoid mosquito bites	Avoid traditional healers	Other ways[1]	Don't know any way	Percentage with misinformation[1]	Number of women
Age															
15-19	9.9	35.4	35.0	34.0	3.1	0.0	2.1	3.6	0.3	0.0	0.1	5.0	22.6	5.5	1,989
20-24	8.6	26.6	42.8	49.3	4.2	0.2	3.8	5.4	0.4	0.1	0.3	5.0	14.3	5.7	1,826
25-29	7.9	23.7	46.1	55.0	5.2	0.0	4.4	7.4	0.2	0.1	0.3	4.9	13.3	5.2	1,282
30-39	7.9	26.4	38.9	56.8	5.1	0.0	4.3	6.6	0.3	0.0	0.3	4.9	12.9	5.4	1,834
40-49	7.9	29.1	27.3	53.9	3.7	0.1	2.7	5.4	0.4	0.0	0.4	4.8	17.2	5.4	1,055
Current marital status															
Never married	8.6	38.6	40.6	34.6	3.2	0.1	3.6	5.2	0.3	0.1	0.1	5.5	19.1	6.1	2,014
Currently married	8.4	23.6	36.3	55.5	4.8	0.1	3.4	5.9	0.3	0.0	0.3	4.8	15.2	5.3	4,888
Formerly married	9.3	32.6	44.2	44.4	3.7	0.1	3.2	4.7	0.4	0.0	0.5	4.3	15.8	5.2	1,081
Residence															
Urban	6.1	32.5	50.3	50.8	4.8	0.1	5.1	5.8	0.4	0.1	0.1	4.1	10.1	4.6	3,599
Rural	10.5	25.4	28.7	47.0	3.8	0.0	2.1	5.3	0.3	0.1	0.4	5.6	21.3	6.1	4,386
Province															
Central	17.1	17.6	34.8	33.0	1.0	0.0	1.6	3.1	0.1	0.0	0.1	3.5	27.8	3.7	651
Copperbelt	4.8	28.7	47.7	47.9	2.3	0.1	3.5	4.5	0.3	0.1	0.0	5.3	7.8	5.5	1,588
Eastern	10.3	13.9	21.5	45.5	1.1	0.0	0.8	3.9	0.3	0.0	0.0	2.3	29.0	2.5	1,059
Luapula	15.7	37.3	33.1	31.6	0.7	0.0	3.2	8.9	0.3	0.1	0.0	7.3	25.7	7.6	725
Lusaka	5.3	36.3	54.0	57.9	8.6	0.1	7.6	6.3	0.5	0.0	0.2	2.0	9.7	2.6	1,400
Northern	3.0	53.0	18.9	55.9	2.9	0.1	3.2	4.5	0.4	0.1	0.1	7.2	8.3	7.6	868
North-Western	9.1	14.1	32.9	81.1	24.6	0.2	5.4	11.4	0.5	0.0	2.3	29.0	9.1	31.1	285
Southern	7.6	22.0	48.1	55.4	3.3	0.0	1.8	7.4	0.4	0.1	0.9	2.1	12.7	3.5	813
Western	14.1	18.2	35.8	38.1	6.2	0.1	2.3	3.8	0.0	0.1	0.5	3.3	27.2	3.8	596
Education															
No education	13.8	21.4	20.3	45.6	4.4	0.1	1.0	3.0	0.1	0.0	0.1	4.5	28.1	4.7	1,047
Primary	9.4	27.4	34.9	46.9	4.1	0.0	2.0	4.4	0.4	0.0	0.3	4.2	18.4	4.8	4,707
Secondary	4.6	34.1	53.7	51.3	4.3	0.1	5.9	8.4	0.3	0.0	0.2	6.0	6.5	6.5	2,005
Higher	1.7	38.9	62.0	77.5	4.6	0.0	22.5	15.4	0.0	1.0	0.2	12.1	2.2	12.9	226
Total[2]	8.6	28.6	38.4	48.7	4.2	0.1	3.4	5.5	0.3	0.1	0.3	4.9	16.3	5.5	7,986

[1] Includes avoiding mosquito bites, kissing, and seeking protection from a traditional healer
[2] Total includes one woman with missing information on education

Table 11.7.2 Knowledge of ways to avoid AIDS: men

Percentage of men who have heard of AIDS and who know of specific ways to avoid AIDS and percentage with misinformation, by selected background characteristics, Zambia 1996

Background characteristic	No way to avoid AIDS	Ways to avoid AIDS: Abstain from sex	Use condoms	Have only one sexual partner	Avoid sex with prostitutes	Avoid homosexuals	Avoid transfusions	Avoid injections	Avoid kissing	Avoid mosquito bites	Avoid traditional healers	Other ways	Don't know any way	Percentage with misinformation[1]	Number of men
Age															
15-19	2.7	43.4	54.5	29.0	6.4	0.0	3.2	4.1	1.2	0.5	1.0	6.5	8.1	8.3	453
20-24	4.0	44.9	54.6	42.6	10.5	0.2	9.5	6.5	1.0	0.2	0.0	7.0	6.3	8.2	404
25-29	1.4	39.7	48.8	59.3	10.5	0.4	7.9	9.1	0.6	0.0	1.3	9.2	3.0	11.1	254
30-39	2.1	33.1	49.0	59.3	15.2	0.3	10.2	11.3	0.7	0.0	0.6	8.7	3.6	9.9	408
40-49	0.9	32.9	41.8	64.4	12.4	0.6	5.9	6.2	1.0	0.0	0.4	7.5	2.4	8.9	203
50-59	0.0	40.4	26.1	57.8	17.8	0.0	11.9	7.4	0.0	0.0	2.0	5.9	2.2	7.9	117
Marital status															
Never married	3.2	47.6	54.7	31.7	7.6	0.1	6.1	5.9	1.0	0.3	0.7	7.0	7.5	8.5	806
Currently married	1.4	32.4	43.4	62.9	14.1	0.3	8.8	8.7	0.8	0.1	0.6	8.0	2.8	9.5	942
Formerly married	3.4	42.7	62.5	50.4	13.6	1.4	10.1	6.0	0.0	0.0	1.4	8.0	5.9	9.5	91
Residence															
Urban	1.3	42.5	57.8	54.7	8.5	0.4	12.1	8.7	1.5	0.3	0.8	6.0	2.0	8.5	850
Rural	3.2	37.0	42.0	43.4	13.6	0.1	3.8	6.2	0.3	0.1	0.7	8.9	7.6	9.5	990
Province															
Central	7.2	28.8	58.5	39.4	0.5	0.5	3.0	2.8	1.4	0.0	0.5	4.8	9.8	6.0	157
Copperbelt	1.1	56.1	56.5	43.0	11.6	0.7	5.8	6.4	1.3	0.0	2.3	4.8	2.3	8.4	396
Eastern	1.1	43.1	36.9	59.8	6.4	0.0	0.7	4.3	0.0	0.0	0.0	8.1	1.5	8.1	254
Luapula	2.1	22.1	57.5	65.1	3.6	0.0	8.2	7.2	3.1	1.0	0.0	29.7	3.6	31.3	150
Lusaka	0.5	23.7	60.5	75.7	1.8	0.0	21.2	11.4	0.9	0.5	0.8	5.7	0.5	7.9	314
Northern	0.0	51.6	27.7	48.7	13.1	0.0	6.0	9.1	0.3	0.0	0.0	6.4	9.1	6.7	218
North-Western	0.0	3.2	15.1	37.9	69.6	2.3	12.1	16.2	0.0	0.0	0.0	6.7	0.0	6.7	47
Southern	8.8	38.6	50.7	16.7	33.0	0.0	4.4	8.2	0.0	0.0	0.5	4.9	12.4	5.4	172
Western	3.1	47.8	50.9	17.2	11.3	0.0	4.5	5.0	0.0	0.0	0.0	3.1	11.8	3.1	132
Education															
No education	3.8	31.8	34.7	45.8	7.5	0.0	0.4	1.7	0.0	0.0	0.0	6.1	9.3	6.1	125
Primary	2.7	38.1	44.5	43.4	12.5	0.2	3.4	4.3	0.8	0.2	0.6	5.9	6.9	7.3	931
Secondary	1.7	41.5	56.5	54.0	10.7	0.4	12.6	11.2	1.1	0.2	0.9	9.3	2.2	11.0	686
Higher	1.1	50.1	63.7	64.8	7.8	0.0	22.2	16.7	0.8	0.0	1.3	13.4	1.1	15.5	98
Total	2.3	39.6	49.3	48.6	11.2	0.2	7.6	7.4	0.9	0.2	0.7	7.6	5.0	9.0	1,839

[1] Includes avoiding mosquito bites, kissing, and seeking protection from a traditional healer

11.7 Perceptions of Risks of AIDS

Women's and men's knowledge of AIDS transmission, symptoms and chances for cure is similar (Tables 11.8.1 and 11.8.2). Over 80 percent of women and men know that a healthy-looking person can have the HIV virus and that AIDS is almost always fatal.

Between 10 to 19 percent of women and 4 to 11 percent of men in all age categories are ignorant of the risk of HIV transmission from healthy-looking people. Although this is a small number compared to those who do know, it is potentially consequential in AIDS control measures. Even a small percentage of the population who do not adopt behavioural change measures because of ignorance can remain a vector for infecting the larger population.

More than 90 percent of respondents realise that AIDS is incurable and over 80 percent know that it can be transmitted from mother to newborn baby. A higher percentage of women than men are aware of the latter means of transmission. Over two-thirds of respondents say they know someone who either has AIDS or has died of AIDS.

11.8 Perceptions of the Risk of AIDS

Respondents were asked questions to assess their perception of the risk of contracting AIDS. Men were more confident than women about avoiding AIDS (57 percent of men reporting no risk at all, compared to 45 percent of women) (Table 11.9). Thirty-seven percent of married women said they were not at risk of acquiring AIDS, whilst 12 percent perceived themselves to be at great risk. Rural men and those who live in Northern Province are most likely to say that they have no chance of getting AIDS. In addition, unmarried respondents and men who had sex only with their wives tend to say that their chances of getting AIDS are limited.

11.9 Reasons for Perceptions of AIDS Risk

Respondents were asked to explain why they think their risk of getting AIDS is nil or small, moderate or great. The results are presented in Tables 11.10.1 and 11.10.2. Limiting one's sexual partners was indicated most commonly as a reason why respondents believe themselves to be at low risk of getting AIDS. Abstaining from sex and using condoms were also cited.

Less confidence was expressed in the faithfulness of the partner, however, as 83 percent of women and 27 percent of men expressed this as a reason for their being at high risk (Table 11.10.2). Women's vulnerability to AIDS was perceived as due to the spouse being unfaithful, while men who feel themselves to be vulnerable to AIDS cite having more than one partner as the cause of their high risk.

11.10 AIDS Prevention Behaviour

ZDHS respondents were asked whether they had changed their behaviour in any way to avoid acquiring the AIDS virus. Results are shown in Tables 11.11.1 and 11.11.2. Twenty percent of women and 6 percent of men said they had not changed their behaviour. Both women (57 percent) and men (48 percent) indicated that they had restricted themselves to one partner. Roughly 10 percent of both women and men said they decided to maintain their virginity to avoid AIDS, while the same proportion said they stopped having sex altogether to reduce their risk. Ten percent of women and men said that they asked their spouses to be faithful. One in five men said they started using condoms, compared to 2 percent of women. Age, residence, and level of education have little effect on behavioural change. Marital status is, however an important factor. Restricting themselves to one sexual partner is the most often cited preventive measure among married persons, while among those never married, 40 percent of women and 22 percent of men said they would retain their virginity.

Table 11.8.1 Awareness of AIDS-related health issues: women

Percent distribution of women who have heard of AIDS by responses to questions on AIDS-related health issues, according to selected background characteristics, Zambia 1996

Background characteristic	Can a healthy-looking person have the AIDS virus?			Is AIDS a fatal disease?			Can AIDS be cured?			Can AIDS be transmitted from mother to child?			Do you know someone with AIDS?			Number of women
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	
Age																
15-19	75 0	19 0	5.9	84.9	13.4	1.6	4.0	93.2	2.0	82.5	9.8	7.5	59.0	38.7	2.4	1,989
20-24	82.7	13.6	3.7	87.9	11.3	0.8	2.5	96.1	0.9	90.2	5.7	3.7	65.1	33.3	1.5	1,826
25-29	86.3	10.9	2.8	87.4	11.5	1.0	3.1	95.2	1.3	91.6	4.8	3.2	70.8	27.8	1.4	1,282
30-39	86.0	10.0	4.0	87.3	11.9	0.7	3.4	94.9	1.5	91.8	4.6	3.4	71.6	27.1	1.2	1,834
40-49	80.3	13.0	6.7	88.0	10.4	1.5	3.8	93.6	2.3	89.7	6.0	3.9	72.9	25.5	1.5	1,055
Marital duration																
Never married	78.0	17.1	4.9	85.3	13.3	1.3	4.3	93.5	1.4	84.2	9.1	6.3	60.9	37.0	2.0	2,014
Currently married	83.2	12.6	4.2	87.7	11.3	1.0	2.7	95.3	1.6	90.3	5.5	3.9	69.4	29.0	1.5	4,888
Formerly married	82.6	11.9	5.5	86.7	12.0	1.3	4.2	93.6	1.9	90.4	5 1	4.1	67.4	31.0	1.6	1,081
Residence																
Urban	89.8	8.3	1.9	85.9	13.2	0.9	4.3	93.9	1.2	92.0	5.3	2.4	68.3	30.3	1.4	3,599
Rural	75.2	18.0	6.8	87.8	10.8	1.3	2.6	95.2	1.9	86.2	7.2	6.2	65.9	32.2	1.9	4,386
Province																
Central	78.4	18.1	3.5	81.0	16.8	2.0	2.8	93.7	3.1	90.4	5 2	4.0	74.3	24.9	0.6	651
Copperbelt	88.9	8.8	2.3	81.2	17.8	1.0	4.2	93.8	0.9	91.0	5.7	3.2	71.0	27.3	1.5	1,588
Eastern	80.5	10.1	9.4	98.1	1.4	0.5	2.3	95.9	1.2	86.9	5.0	7.7	53.8	43.8	2.4	1,059
Luapula	73.0	24.4	2.6	95.3	4.4	0.2	1.0	97.9	0.8	85.8	10.1	3.8	82.8	15.2	2.0	725
Lusaka	92.8	5.3	1.8	89.7	9.3	0.9	3.9	94.4	1 4	92.3	4.6	2.8	60.4	38.4	1.2	1,400
Northern	78.6	15.8	5.6	83.7	14.3	1.9	3.6	93.9	2.4	87.2	7.1	5.4	68.2	28.0	3.8	868
North-Western	66.4	33.6	0.0	94.2	5.7	0.0	4.8	94.5	0.0	95.2	4.6	0.2	83.7	16.3	0.0	285
Southern	82.7	12.4	5.0	81 4	17.7	0.9	4.0	94.6	1.4	87.4	7.4	4.7	57.7	41.9	0.4	813
Western	64.6	23.2	12.3	81 1	16.2	2.6	2.9	93.2	3.6	81.4	9.9	8.3	70.8	27.6	1.5	596
Education																
No education	70.4	18.0	11.6	88.5	9.4	2.0	3.1	93.0	3.3	80.8	9.1	10.0	56.7	40.0	3.3	1,047
Primary	79.0	16.2	4.8	86.8	12.0	1.2	2.9	95.1	1.6	88.3	6.9	4.5	67.3	31.0	1.7	4,707
Secondary	92.4	6.6	1.0	87.1	12.3	0.6	4.5	94.2	0 8	93.4	4.3	1 9	70.4	28.7	0.8	2,005
Higher	98.7	1.3	0.0	81.8	17.9	0.3	4.7	94.8	0.5	96.0	1.7	1.7	79.4	20.6	0.0	226
Total[1]	81.8	13.6	4.6	87.0	11.9	1.1	3.3	94.6	1.6	88.8	6.4	4.5	67.0	31.3	1.6	7,986

Note: Figures may not add to 100.0 due to rounding and missing data.
[1] Total includes one woman with missing information on education.

Table 11.8.2 Awareness of AIDS-related health issues: men

Percent distribution of men who have heard of AIDS by responses to questions on AIDS-related health issues, according to selected background characteristics, Zambia 1996

Background characteristic	Can a healthy-looking person have the AIDS virus?			Is AIDS a fatal disease?			Can AIDS be cured?			Can AIDS be transmitted from mother to child?			Do you know someone with AIDS?			Number of men
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know	
Age																
15-19	80.5	10.6	8.9	88.6	9.0	2.4	3.3	86.9	9.4	70.6	11.1	17.4	54.1	40.6	5.3	453
20-24	89.1	5.6	5.2	89.5	8.4	1.9	3.4	91.6	4.2	79.3	6.6	13.9	67.1	29.2	3.7	404
25-29	94.6	4.1	1.2	88.4	11.3	0.3	5.7	92.6	1.6	88.3	4.1	7.7	77.0	21.3	1.8	254
30-39	90.8	5.9	3.3	91.5	8.5	0.0	4.8	93.1	1.8	87.8	4.5	7.0	80.4	17.6	2.0	408
40-49	88.2	7.7	4.1	91.0	8.3	0.6	2.5	94.0	3.2	90.3	4.3	5.5	77.5	21.1	1.5	203
50-64	83.4	11.0	5.6	92.7	6.5	0.8	6.5	86.0	6.2	79.1	7.7	13.2	72.0	26.0	2.0	117
Marital duration																
Never married	83.5	8.9	7.6	89.7	8.5	1.7	3.7	88.1	7.5	74.3	8.9	16.1	59.5	36.0	4.5	806
Currently married	91.4	5.7	2.8	90.2	9.0	0.8	3.9	93.9	2.0	87.9	4.6	7.2	77.1	20.9	2.0	942
Formerly married	86.2	8.6	5.2	89.2	10.8	0.0	10.0	83.6	5.0	78.4	8.7	13.0	83.5	14.8	1.6	91
Residence																
Urban	91.5	6.6	1.8	87.9	11.8	0.3	4.1	93.6	1.4	91.4	4.6	3.8	67.4	29.5	3.1	850
Rural	84.3	7.8	7.8	91.7	6.4	1.9	4.1	88.4	7.3	72.9	8.6	17.9	71.6	25.3	3.1	990
Province																
Central	88.8	8.6	2.6	93.3	5.3	1.5	2.1	91.1	6.8	90.9	2.6	6.5	73.8	25.0	1.2	157
Copperbelt	91.3	7.7	1.0	78.7	19.6	1.8	7.4	91.0	0.3	92.8	5.4	1.8	72.6	23.8	3.6	396
Eastern	92.4	5.7	1.8	98.5	1.1	0.4	1.1	97.5	0.7	88.9	7.2	2.9	74.9	23.3	1.8	254
Luapula	86.2	9.7	4.1	97.9	2.1	0.0	2.1	95.4	2.5	84.7	5.1	10.2	81.5	9.7	8.8	150
Lusaka	91.8	5.2	2.9	90.9	9.1	0.0	3.1	95.0	1.4	93.0	4.2	2.2	54.6	43.5	1.9	314
Northern	75.0	6.6	18.4	92.5	4.8	2.7	2.8	77.2	20.0	63.2	3.7	32.0	67.7	30.4	2.0	218
North-Western	98.9	1.1	0.0	97.9	2.1	0.0	0.0	100.0	0.0	97.7	1.1	1.2	62.7	37.3	0.0	47
Southern	94.1	1.7	4.1	90.3	9.2	0.5	8.6	87.1	4.3	59.8	7.6	32.6	74.8	19.6	5.6	172
Western	66.7	19.9	13.4	84.4	11.6	3.5	5.1	85.8	8.6	43.6	28.1	27.3	67.3	30.1	2.6	132
Education																
No education	74.4	15.0	10.5	93.3	5.1	1.5	3.2	91.1	5.6	70.4	12.5	16.4	53.1	43.2	3.7	125
Primary	84.5	8.7	6.8	90.3	8.0	1.7	3.8	89.1	6.5	74.3	8.6	16.4	68.7	27.9	3.5	931
Secondary	93.6	4.3	2.1	89.1	10.2	0.6	4.3	93.0	2.1	91.6	3.4	5.0	71.7	25.6	2.6	686
Higher	93.5	4.2	2.2	87.7	12.3	0.0	6.7	91.2	2.1	93.6	4.4	2.0	85.7	12.1	2.2	98
Total	87.7	7.3	5.1	89.9	8.9	1.2	4.1	90.8	4.6	81.5	6.7	11.4	69.7	27.2	3.1	1,839

Table 11.9 Perception of the risk of getting AIDS

Percent distribution of women and men who know about AIDS by their perception of the risk of getting AIDS, according to selected background characteristics, Zambia 1996

Background characteristic	Perceived risk of getting AIDS: women								Perceived risk of getting AIDS: men						
	No risk at all	Small	Mod-erate	Great	Has AIDS	Don't know	Total	Number of women	No risk at all	Small	Mod-erate	Great	Don't know	Total	Number of men
Age															
15-19	64.4	22.0	8.9	4.6	0.0	0.1	100.0	1,989	69.7	22.2	5.4	2.3	0.4	100.0	453
20-24	40.5	26.1	24.0	9.4	0.0	0.0	100.0	1,826	57.0	29.5	9.0	4 6	0.0	100.0	404
25-29	37.9	26.3	25.3	10.5	0.0	0.0	100.0	1,282	44.7	35.9	13.3	6.1	0.0	100.0	254
30-39	34.9	24.5	27.8	12.6	0.1	0.0	100.0	1,834	52.4	33.9	10.9	2.6	0.2	100.0	408
40-49	43.9	22.8	22.1	11.0	0.2	0.0	100.0	1,055	50.0	32.6	15.8	1.6	0.0	100.0	203
50-59	NA	NA	NA	NA	NA	NA	NA	NA	64.4	26.2	7.5	1.9	0.0	100.0	117
Marital status															
Never married	65.3	22.9	8.2	3.5	0.0	0.1	100.0	2,014	64 4	25.7	7 0	2.7	0.2	100.0	806
Currently married	36.9	24.4	26.8	11.9	0.0	0.0	100.0	4,888	52.0	33.2	12.0	2.7	0 1	100.0	942
Formerly married	45.7	26.5	18.8	8.6	0.4	0.1	100.0	1,081	44.9	29.7	11 3	14.2	0 0	100.0	91
No. of sexual partners other than spouse in last 12 months															
0	46.3	23.6	20.6	9.4	0.1	0.0	100.0	6,679	64.7	27.8	6.0	1.4	0.1	100.0	1,110
1	41.6	30.0	20.8	7.4	0.1	0.0	100.0	1,027	48.5	35.7	11.0	4.6	0.2	100.0	363
2-3	30.4	19.0	35.4	15.3	0.0	0.0	100.0	201	45.1	30.8	18.3	5.8	0.0	100.0	246
4+	(30.6)	(13.7)	(32.7)	(23.0)	(0.0)	(0.0)	100.0	29	35.0	28.0	24.2	12.0	0.8	100.0	112
Residence															
Urban	46.9	27.0	19.3	6.7	0.1	0.0	100.0	3,599	49.6	34.5	11.6	4.2	0.1	100.0	850
Rural	43.8	22.1	22.5	11.5	0.1	0.0	100.0	4,386	63.6	25.6	8.2	2.5	0.2	100 0	990
Province															
Central	51.2	13.0	29.0	6.8	0.1	0.0	100.0	651	50.5	35.5	9.8	4.2	0 0	100.0	157
Copperbelt	58.5	10.7	27.9	2.9	0.0	0.0	100.0	1,588	59.4	21.7	15.5	3.5	0.0	100.0	396
Eastern	56 8	11.9	22.8	8.5	0.0	0.0	100.0	1,059	58.2	35.5	4.1	1.5	0.7	100.0	254
Luapula	41.6	27.4	7.0	23.9	0.0	0.0	100.0	725	60.0	36.9	1.5	1.6	0.0	100.0	150
Lusaka	36.2	46.7	10.5	6.5	0.0	0.1	100.0	1,400	38.1	49.7	9.8	2.4	0.0	100.0	314
Northern	41.4	27.5	19.0	11.8	0.4	0.0	100.0	868	88.3	5.6	3.0	3.0	0.0	100 0	218
North-Western	28.2	32.0	33.3	6 6	0.0	0.0	100.0	285	69.0	20.5	9.2	1.2	0.0	100 0	47
Southern	38.3	29.8	21.5	10.3	0.2	0.0	100.0	813	36.9	39.1	18.5	5.5	0.0	100 0	172
Western	31.5	22.8	29.6	15.8	0.1	0 1	100.0	596	68.4	10.7	12.9	7.6	0.5	100.0	132
Education															
No education	45.9	22 8	20.2	11 1	0.0	0 0	100.0	1,047	52.4	34.7	7.3	4.2	1.4	100.0	125
Primary	44.3	23.4	22.2	10.0	0.1	0.0	100.0	4,707	61.9	27.2	7.9	3.0	0.0	100.0	931
Secondary	49.6	25.1	18.6	6.7	0.0	0.0	100.0	2,005	55.2	30.4	11.0	3.4	0.1	100 0	686
Higher	23.4	44.0	22.1	10.5	0.0	0.0	100.0	226	31.3	41.7	22.7	4.3	0.0	100 0	98
Total[1]	45.2	24.3	21.1	9.3	0.1	0.0	100.0	7,986	57.1	29.7	9 8	3 3	0.1	100 0	1,839

[1] Total includes one woman with missing information on education. Figures in parentheses are based on 25-49 women.
NA = Not applicable

Table 11.10.1 Reason for perception of small/no risk of getting AIDS

Among women and men who think they have small or no risk of getting AIDS, the percentage giving specific reasons for that perception, by marital status, Zambia 1996

Marital status	Abstain from sex	Use condoms	One sex partner/ limit partners	Spouse has no other partner	Avoid prosti-titutes	No homo-sexual contact	No blood trans-fusions	No injec-tions	Other	Number of men/ women
				WOMEN						
Never married	68.8	6.2	25.5	0.7	0.0	0.0	1.4	0.9	2.9	1,776
Currently married	1.7	1.4	92.7	12.2	0.0	0.0	0.7	0.5	3.1	2,995
Formerly married	67.7	6.8	26.1	0.9	0.0	0.0	0.8	0.6	3.6	780
Total	32.4	3.7	61.8	6.9	0.0	0.0	1.0	0.7	3 1	5,552
				MEN						
Never married	53.8	24.0	34.2	1.4	6.9	0.1	2.0	2.5	5.6	726
Currently married	5.3	8.2	93.3	13.9	7.7	0.0	4.5	3.0	4.8	802
Formerly married	36.8	16.7	48.6	3.8	8.8	0.0	1.1	1.9	9.8	68
Total	28.7	15.7	64.5	7.8	7.4	0.0	3.2	2.7	5.4	1,597

Table 11.10.2 Reason for perception of moderate/great risk of getting AIDS

Among women and men who think they have moderate or great risk of getting AIDS, the percentage giving specific reasons for that perception, by marital status, Zambia 1996

Marital status	Don't use condom	Multiple sex partners	Spouse has multiple partners	Have sex with prostitutes	Had blood transfusion	Had injections	Other	Number
				WOMEN				
Never married	14.5	22.1	54.5	0.0	1.0	2.5	12.4	236
Currently married	5.2	5.5	91.4	0.0	0.8	1.7	2.7	1,893
Formerly married	15.7	21.6	55.1	0.0	1.7	4.2	14.8	297
Total	7.4	9.1	83.4	0.0	0.9	2.1	5.1	2,426
				MEN				
Never married	29.5	60.9	17.9	7.6	0.0	4.2	7.8	78
Currently married	8.5	61.4	31.8	0.0	3.4	10.8	6.9	139
Formerly married	*	*	*	*	*	*	*	23
Total	15.1	60.6	27.4	4.2	2.5	7.6	8.3	240

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

Table 11.11.1 AIDS prevention behaviour: women

Percentage of women who have heard of AIDS by changes in behaviour in order to avoid AIDS, according to perception of AIDS risk and selected background characteristics, Zambia 1996

Background characteristic	No change in behaviour	Change in behaviour to avoid AIDS: Kept virginity	Stopped sex	Began using condoms	Restricted to one partner	Fewer partners	Asked spouse to be faithful	Other sexual behaviour	Non-sexual behaviour	Number of women
Perception of AIDS risk										
Among those who believe AIDS always fatal										
Small/no risk	19.8	13.9	12.4	2.3	51.9	1.6	8.1	0.2	21.3	4,796
Moderate risk	21.0	0.4	3.3	2.1	67.5	3.8	15.3	0.4	22.2	1,489
Great risk/has AIDS	23.7	0.7	7.8	2.8	61.2	4.6	11.2	0.2	24.5	658
Among those who do not believe AIDS always fatal, or don't know										
Small/no risk	15.8	17.3	11.9	3.0	55.1	1.5	8.7	0.4	17.1	755
Moderate risk	17.8	0.4	2.9	3.7	67.7	8.8	10.0	0.0	18.4	192
Great risk/has AIDS	14.7	0.9	5.7	0.0	75.5	9.6	11.8	0.0	16.1	93
Age										
15-19	19.2	35.6	9.5	2.7	34.8	2.8	3.5	0.1	20.9	1,989
20-24	18.2	4.9	10.2	3.2	62.2	2.7	11.8	0.3	19.2	1,826
25-29	18.8	0.6	8.0	2.8	67.0	2.8	12.7	0.4	20.3	1,282
30-39	20.2	0.3	8.9	1.7	66.2	2.3	13.4	0.3	21.5	1,834
40-49	24.5	0.2	14.6	1.2	58.1	1.6	8.9	0.1	25.7	1,055
Marital status										
Never married	17.2	40.0	16.5	4.5	25.0	3.4	1.1	0.2	18.9	2,014
Currently married	21.7	0.1	0.7	0.9	73.5	1.6	15.3	0.2	22.8	4,888
Formerly married	16.4	0.4	39.3	5.3	38.4	5.0	1.8	0.3	18.2	1,081
Residence										
Urban	14.0	13.3	12.5	3.8	54.7	2.9	10.3	0.2	15.4	3,599
Rural	24.7	7.6	7.9	1.2	58.0	2.2	9.5	0.2	25.9	4,386
Province										
Central	14.9	8.7	10.9	2.3	66.1	4.4	1.4	0.2	16.3	651
Copperbelt	12.2	13.4	12.6	3.8	54.6	4.1	12.5	0.4	14.1	1,588
Eastern	56.1	3.4	2.8	0.5	34.2	0.4	2.7	0.0	56.5	1,059
Luapula	9.7	15.0	10.3	0.6	68.7	0.8	6.1	0.0	11.6	725
Lusaka	15.0	13.6	11.4	4.0	53.8	1.2	9.9	0.0	15.7	1,400
Northern	13.1	12.2	15.8	1.2	56.1	1.8	18.0	0.4	14.3	868
North-Western	17.0	4.6	8.0	1.4	68.3	7.4	48.6	0.9	23.4	285
Southern	17.1	7.5	6.0	1.6	67.1	2.8	4.2	0.2	17.3	813
Western	20.5	4.8	8.4	4.1	62.9	3.4	6.8	0.4	21.5	596
Education										
No education	31.9	3.5	6.7	0.3	54.9	1.6	8.1	0.1	32.6	1,047
Primary	20.5	9.2	8.9	1.8	58.5	2.5	10.3	0.2	21.4	4,707
Secondary	12.3	16.6	13.6	4.1	52.4	3.1	10.2	0.3	14.6	2,005
Higher	19.4	5.8	14.7	9.0	59.8	1.2	6.7	0.6	22.7	226
Total[1]	19.9	10.2	9.9	2.4	56.5	2.5	9.9	0.2	21.2	7,986

Note: The "no change" category includes those who say they "don't know."
[1] Total includes two women who did not know about their risk status and one woman with missing information on education.

Table 11.11.2 AIDS prevention behaviour: men

Percentage of men who have heard of AIDS by changes in behaviour in order to avoid AIDS, according to perception of AIDS risk and selected background characteristics, Zambia 1996

Background characteristic	No change in behaviour	Change in behaviour to avoid AIDS: Kept virginity	Stopped sex	Began using condoms	Restricted to one partner	Fewer partners	Asked spouse to be faithful	Avoid sex with prostitutes	Other sexual behaviour	Non-sexual behaviour	Number of men
Perception of AIDS risk											
Among those who believe AIDS always fatal											
Small/no risk	5.0	11.1	11.9	18.0	51.3	16.6	10.6	10.6	4.4	20.1	1,447
Moderate risk	6.7	0.0	3.8	33.0	40.9	38.1	6.1	16.7	4.9	16.4	152
Great risk/has AIDS	5.0	0.0	5.3	29.4	34.2	36.6	5.7	6.5	1.2	21.7	53
Among those who do not believe AIDS always fatal, or don't know											
Small/no risk	13.8	12.3	8.4	11.2	39.6	14.8	7.3	12.9	8.4	14.7	149
Moderate risk	7.1	0.0	7.7	44.3	14.1	49.8	13.5	9.7	3.0	11.1	28
Great risk/has AIDS	*	*	*	*	*	*	*	*	*	*	7
Age											
15-19	7.3	29.9	20.2	17.6	18.0	16.3	1.0	6.4	3.8	17.9	453
20-24	4.6	10.0	12.7	28.6	38.1	25.3	5.7	10.5	3.9	19.3	404
25-29	3.5	0.8	6.7	28.6	58.0	26.2	11.7	10.5	5.8	18.5	254
30-39	4.4	0.5	5.2	16.5	69.5	17.0	15.0	15.2	6.0	22.7	408
40-49	6.9	0.0	3.5	8.8	68.9	18.6	20.4	12.4	5.3	16.9	203
50-64	13.3	0.0	7.9	4.5	70.2	7.2	19.5	17.8	2.1	18.5	117
Marital status											
Never married	6.2	22.3	20.2	25.0	21.6	20.6	1.6	7.6	3.7	16.8	806
Currently married	6.0	0.0	1.6	13.4	71.8	17.7	17.9	14.1	5.5	22.1	942
Formerly married	2.3	0.0	21.5	34.3	41.0	27.1	1.4	13.6	4.2	12.6	91
Residence											
Urban	6.8	8.3	14.8	23.5	48.5	17.0	10.2	8.5	5.8	12.3	850
Rural	5.1	11.0	7.3	16.0	48.2	21.5	9.7	13.6	3.7	25.3	990
Province											
Central	10.6	1.5	12.3	23.2	38.2	15.0	0.0	0.5	4.3	12.4	157
Copperbelt	8.5	7.6	20.7	19.3	46.3	18.6	4.4	11.6	8.9	12.9	396
Eastern	1.8	5.5	5.7	21.3	51.6	31.1	1.1	6.4	4.4	58.6	254
Luapula	2.0	9.2	10.3	20.0	62.0	19.5	8.8	3.6	6.1	9.7	150
Lusaka	4.7	10.8	8.3	29.7	56.3	15.5	18.8	1.8	3.3	6.5	314
Northern	1.0	27.8	7.8	6.7	45.6	17.4	21.2	13.1	3.0	14.4	218
North-Western	0.0	14.2	3.5	8.6	71.1	4.2	19.3	69.6	2.1	26.0	47
Southern	2.2	10.5	5.2	22.9	35.5	23.1	9.5	33.0	2.2	17.8	172
Western	22.1	0.5	9.6	7.7	38.3	18.4	14.2	11.3	1.0	19.9	132
Education											
No education	10.2	6.8	4.7	15.9	43.6	26.1	7.0	7.5	2.1	31.3	125
Primary	5.6	13.5	8.7	15.7	46.2	20.3	9.6	12.5	3.2	20.1	931
Secondary	4.3	6.5	14.7	24.5	50.6	17.9	10.5	10.7	7.0	16.0	686
Higher	14.0	1.5	9.7	24.5	58.4	13.6	12.9	7.8	5.6	19.8	98
Total[1]	5.9	9.8	10.7	19.5	48.3	19.4	9.9	11.2	4.7	19.3	1,839

Note: The "no change" category includes those who say "don't know." An asterisk indicates that a figure is based on fewer than 25 respondents and has been suppressed.

[1] Total includes three men who did not know about their risk status.

Data regarding knowledge of condoms as a disease-prevention measure are presented in Table 11.12. Knowledge of condoms by women and men is nearly universal. Women are more likely to obtain information about condoms through public sources (54 percent) than men (38 percent). Over 25 percent of women and 17 percent of men had knowledge of condoms but could not identify a source for them.

ZDHS respondents who had had sexual intercourse in the 12 months preceding the survey were asked if they had used a condom for family planning, for disease prevention, or both and whether they had used a condom the last time they had sex (Tables 11.3.1 and 11.13.2). The results show that condoms are used both for family planning and as a prophylactic against disease. More men (46 percent) had used condoms as a form of family planning than women (21 percent). This suggests that men may use condoms with partners apart from their spouse to avoid unwanted pregnancies as well as STDs. However, when asked if a condom was used during the last intercourse, less than 5 percent of women and 6 percent of men stated that they used it. It is interesting to note that women and men are more likely to have used condoms with their spouses than with other partners.

Table 11.12 Knowledge of condoms

Among women and men who have heard of AIDS and who have had sexual intercourse, the percentage who know about condoms and the percent distribution by knowledge of a source for condoms, according to selected background characteristics, Zambia 1996

		Source for condoms: women								Source for condoms: men						
Background characteristic	Know about condoms[1]	Public sector	Private medical sector	Private pharmacy	Other source	Don't know a source/ missing	Total	Number of women	Know about condoms	Public sector	Private medical sector	Private pharmacy	Other source	Don't know a source/ missing	Total	Number of men
Age																
15-19	94.2	41.3	6.9	1.8	17.0	33.0	100.0	1,162	99.1	32.4	4.7	2.2	42.4	18.4	100.0	301
20-24	97.6	55.9	10.0	1.9	12.0	20.2	100.0	1,732	100 0	42.2	6.9	4.9	35.1	10.8	100.0	361
25-29	98.6	60.9	10.4	2.0	10.2	16.6	100.0	1,275	99.5	45.9	8.0	4.4	34.7	6.9	100.0	253
30-39	97.2	58.9	9.0	1.7	8.4	22.0	100.0	1,829	99.5	38.1	10.6	5.1	31.4	14.7	100.0	405
40-49	89.8	45.0	6.9	1.4	6.6	40.1	100.0	1,055	98.7	37.9	12.3	5.2	21.2	23.3	100.0	203
50-59	NA	NA	NA	NA	NA	NA	100.0		96.0	24.9	7.2	5.9	16.9	45.0	100.0	117
Marital status																
Never married	95.3	42.6	6.5	3.5	19.9	27.5	100.0	1,081	99.4	32.1	5.5	4.6	43.1	14.7	100.0	607
Currently married	96.1	55.9	9.8	1.3	8.7	24.2	100.0	4,888	99.1	42.2	10.3	4.4	25.1	18.0	100.0	942
Formerly married	95.6	53.7	6.7	2.0	11.0	26.7	100.0	1,081	99.1	37.7	5.8	4.9	37.3	14.3	100.0	91
Residence																
Urban	98.3	51.8	7.2	3.3	17.1	20.5	100.0	3,069	99.8	25.9	5.9	9.3	48.2	10.6	100.0	767
Rural	94.1	54.9	10.0	0.5	5.9	28.6	100.0	3,984	98.6	49.0	10.3	0.3	18.6	21.8	100.0	873
Province																
Central	97.9	52.7	4.7	3.4	11.0	28.1	100.0	591	100.0	30.0	5.6	2.0	44.7	17.8	100.0	150
Copperbelt	98.0	36.8	13.5	2.0	22.4	25.2	100.0	1,356	100.0	22.3	11.2	11.8	41.3	13.4	100.0	357
Eastern	90.6	52.7	5.4	0.2	7.5	34.2	100.0	973	98.5	64.2	1.1	0.0	21.0	13.7	100.0	240
Luapula	96.3	53.2	16.7	0.1	5.4	24.6	100.0	614	100.0	48.5	20.8	0.0	25.6	5.1	100.0	137
Lusaka	97.8	60.6	3.0	5.1	9.6	21.7	100.0	1,196	99.5	26.5	1.1	7.5	54.5	10.4	100.0	277
Northern	95.0	52.8	6.2	0.0	8.2	32.7	100.0	754	98.5	40.1	7.5	0.5	14.1	37.8	100.0	156
North-Western	96.1	61.2	18.6	1 0	4.2	15.0	100.0	266	100.0	79.8	7.4	2.8	1.2	8.8	100.0	40
Southern	96.3	58.4	12.3	1.1	9.0	19.2	100.0	744	98.4	38.6	14.8	3.1	24.1	19.4	100.0	154
Western	94.5	72.6	5.9	0.2	5.2	16.1	100.0	558	97.4	42.0	12.0	1.0	16.7	28.2	100.0	130
Education																
No education	87.1	43.6	7.1	0.5	4.7	44.0	100.0	1,001	95.8	38.4	4.7	4.3	15.7	36.9	100.0	116
Primary	96.4	54.3	8.3	1.0	9.8	26.5	100.0	4,203	99 1	42.0	8 0	1.7	26.0	22 3	100.0	794
Secondary	99.7	56.6	10.7	3.6	16.2	12.8	100.0	1,635	99.8	33.9	8.8	7.7	42.0	7.6	100.0	635
Higher	99.4	61.0	11.7	7.5	16.3	3.5	100.0	213	100.0	35.3	11.4	6.5	42.8	4.0	4.0	95
Total	95.9	53.5	8.8	1.8	10.8	25.1	100.0	7,052	99.2	38 2	8.3	4.5	32.5	16.6	100.0	1,640

[1] Includes knowledge of condoms for either family planning or disease prevention

Table 11.13.1 Use of condoms: women

Among women who had sexual intercourse in the 12 months preceding the survey, the percentage who have ever used condoms for family planning or to avoid STDs, and the percentage who used a condom during last sexual intercourse with a spouse/partner in the four weeks preceding the survey, according to selected background characteristics, Zambia 1996

Background characteristic	Ever used condom for:				Used condom during last sexual intercourse with:					
	Family planning	To avoid STDs	Either reason	Number of women	Spouse	Number of women	Other	Number of women	Any partner	Number of women
Perception of AIDS risk										
Among those who believe AIDS always fatal										
Small/no risk	20.2	15.8	26.6	3,244	4.9	2,502	1.4	767	4.1	3,244
Moderate risk	24.4	18.8	30.9	1,366	5.5	1,138	3.2	256	5.2	1,366
Great risk/has AIDS	16.2	13.4	22.0	581	5.0	487	2.0	104	4.5	581
Among those who do not believe AIDS always fatal, or don't know										
Small/no risk	18.7	16.7	26.0	488	6.5	374	1.1	117	5.3	488
Moderate risk	22.8	18.1	31.2	179	3.1	139	(4.3)	47	3.5	179
Great risk/has AIDS	17.8	14.5	23.0	83	3.0	69	*	16	5.4	83
Age										
15-19	21.9	23.1	30.5	954	7.6	487	0.8	474	4.1	954
20-24	28.0	21.1	36.2	1,459	7.0	1,165	2.4	318	6.1	1,459
25-29	27.1	17.9	32.7	1,121	4.8	939	2.4	198	4.4	1,121
30-39	16.5	12.6	22.6	1,577	5.2	1,380	2.9	215	5.0	1,577
40-49	5.5	5.5	8.5	830	0.7	738	4.7	102	1.2	830
Marital status										
Never married	29.5	38.6	43.3	717	*	0	0.0	717	0.0	717
Currently married	19.0	11.7	23.9	4,711	5.1	4,709	35.6	76	5.6	4,711
Formerly married	23.9	28.5	34.7	513	*	0	0.0	513	0.0	513
Residence										
Urban	28.7	22.7	36.6	2,549	6.9	1,921	2.6	658	5.8	2,549
Rural	14.6	11.7	20.1	3,392	3.8	2,788	1.6	649	3.5	3,392
Province										
Central	23.7	16.0	29.5	515	5.5	412	4.2	116	5.1	515
Copperbelt	25.5	18.6	32.4	1,132	5.6	888	3.8	263	5.3	1,132
Eastern	17.9	16.9	25.6	847	4.2	724	2.2	129	3.9	847
Luapula	5.0	7.3	10.5	522	2.5	445	1.0	81	2.3	522
Lusaka	28.6	23.3	36.2	1,000	7.8	779	1.2	231	6.4	1,000
Northern	18.8	6.0	22.1	585	4.5	497	0.0	88	3.8	585
North-Western	17.0	8.0	19.0	219	4.4	182	0.0	41	3.7	219
Southern	18.1	18.6	27.8	670	5.2	505	1.8	172	4.4	670
Western	18.7	19.8	23.2	452	3.3	277	1.5	185	2.6	452
Education										
No education	7.3	7.2	11.7	847	2.2	751	2.1	108	2.2	847
Primary	16.8	13.4	23.0	3,606	4.3	2,932	2.7	722	4.0	3,606
Secondary	35.9	28.0	44 8	1,315	9.4	907	0.9	420	6.7	1,315
Higher	50.7	35.0	55.2	173	11.1	119	2.4	55	8.4	173
Change in sexual behaviour										
No change	16.0	7.6	18.9	1,238	3.6	1,024	2.7	228	3.5	1,238
Kept virginity	13.2	27.5	*	5	*	2	*	3	*	5
Stopped sex	16.7	22.5	27.7	191	(8.6)	27	0.8	166	1.9	191
Began using condoms	77.5	100.0	100.0	170	(41.1)	42	3.6	133	13.0	170
Restricted self to one partner	20.1	16.3	26.9	4,187	5.4	3,474	1.3	746	4.7	4,187
Fewer partners	25.3	38.1	44.5	182	2.8	75	5.4	131	4.4	182
Asked spouse to be faithful	23.6	8.3	26.1	750	5.2	718	(1.9)	37	5.1	750
Other sexual behaviour	25.9	27.6	*	10	*	9	*	1	*	10
Non-sexual behaviour	16.2	7.7	19.2	1,301	3.7	1,072	2.5	245	3.5	1,301
Total	20.7	16.4	27.2	5,941	5.1	4,709	2.1	1,307	4.5	5,941

Note: Figures in parentheses are based on 25 to 49 women; an asterisk indicates a figure is based on fewer than 25 women and has been suppressed.

Table 11.13.2 Use of condoms: men

Among men who had sexual intercourse in the 12 months preceding the survey, the percentage who have ever used condoms for family planning or to avoid STDs, and the percentage who used a condom during last sexual intercourse with a spouse/partner in the four weeks preceding the survey, according to selected background characteristics, Zambia 1996

	Ever used condom for:				Used condom during last sexual intercourse with:							
Background characteristic	Family planning	To avoid STDs	Either reason	Number of men	Spouse	Number of men	Regular partner	Number of men	Someone else	Number of men	Any partner	Number of men
Perception of AIDS risk												
Among those who believe AIDS always fatal												
Small/no risk	44.3	46.8	53.1	1,117	7.2	694	2.7	149	3.4	274	5.7	1,117
Moderate risk	56.3	58.6	63.6	149	13.8	80	6.9	30	6.3	39	10.5	149
Great risk/has AIDS	46.2	60.5	63.0	52	*	20	*	21	*	12	1.3	52
Among those who do not believe AIDS always fatal, or don't know												
Small/no risk	42.4	39.5	51.0	113	12.0	69	9.7	19	*	24	9.0	113
Moderate risk	68.0	66.9	75.7	28	*	18	0.0	6	*	4	*	28
Great risk/has AIDS	80.5	91.2	*	7	*	2	0.0	1	*	3	*	7
Age												
15-19	44.0	50.1	51.2	231	*	5	0.0	68	0.0	158	0.0	231
20-24	61.0	65.3	69.9	314	17.5	103	0.8	101	1.3	110	6.4	314
25-29	59.7	59.7	67.7	243	7.3	163	(5.8)	33	(9.2)	48	7.5	243
30-39	46.2	47.3	56.8	384	8.5	331	(21.3)	25	*	28	10.2	384
40-49	26.5	28.0	35.9	192	4.2	177	0.0	2	*	13	4.3	192
50-64	10.7	11.7	17.2	106	4.9	105	*	0	*	1	4.9	106
Marital status												
Never married	55.8	62.0	64.0	475	*	2	0.0	182	0.0	291	0.0	475
Currently married	40.4	40.3	49.4	916	8.2	866	*	17	(38.2)	33	9.9	916
Formerly married	54.7	62.9	65.7	78	*	16	(0.0)	28	(0.0)	34	0.0	78
Residence												
Urban	56.1	59.0	66.2	674	10.5	379	4.0	130	1.8	165	7.1	674
Rural	37.7	39.7	45.5	795	6.1	506	2.7	98	4.9	192	5.4	795
Province												
Central	51.9	58.5	66.8	135	7.8	78	(2.1)	36	*	21	5.9	135
Copperbelt	43.9	50.6	55.3	306	10.2	161	(10.5)	68	1.7	77	8.1	306
Eastern	50.0	43.5	51.3	223	9.0	142	(0.0)	30	3.5	51	6.5	223
Luapula	27.6	38.2	43.2	123	2.0	78	*	5	1.9	41	1.9	123
Lusaka	69.9	65.8	74.8	257	12.2	159	(0.0)	38	(1.8)	61	7.9	257
Northern	20.6	30.8	36.5	123	4.8	96	*	4	*	23	5.6	123
North-Western	24.2	35.4	42.5	37	(6.4)	32	*	1	*	4	8.3	37
Southern	48.6	46.7	53.0	143	4.3	89	(0.0)	26	(9.1)	27	4.4	143
Western	36.3	39.7	42.4	122	(8.3)	49	(0.0)	21	1.2	52	3.9	122
Education												
No education	27.5	31.5	34.9	106	5.0	61	*	12	(2.3)	33	3.6	106
Primary	36.7	40.6	45.6	713	6.4	421	4.4	106	2.6	186	5.1	713
Secondary	59.8	61.0	68.4	560	9.0	328	3.0	107	5.5	125	7.1	560
Higher	57.9	54.3	68.6	89	14.9	74	*	2	*	13	12.3	89
Change in sexual behaviour												
No change	34.5	25.7	39.2	81	7.2	51	0.0	8	0.0	21	4.5	81
Kept virginity	0.0	0.0	*	1	*	0	*	0	*	1	*	1
Stopped sex	40.0	44.7	51.2	84	*	18	*	17	(0.0)	48	0.0	84
Began using condoms	89.2	100.0	100.0	342	17.0	110	3.9	101	5.5	131	8.7	342
Restricted self to one partner	41.6	41.8	49.8	854	7.8	658	1.4	97	4.0	99	6.6	854
Fewer partners	54.2	60.3	63.5	348	7.2	138	7.0	75	3.4	134	5.7	348
Asked spouse to be faithful	36.8	36.9	45.5	177	6.8	157	*	10	*	11	8.0	177
Avoid sex with prostitutes	37.6	41.2	48.8	179	5.4	124	0.0	25	4.4	30	4.5	179
Other sexual behaviour	45.8	50.4	58.9	70	4.1	51	*	9	*	11	6.8	70
Non-sexual behaviour	43.6	45.9	51.2	294	9.2	190	3.4	39	4.8	65	7.5	294
Total	46.1	48.5	55.0	1,469	8.0	884	3.5	228	3.5	357	6.2	1,469

Note: Figures in parentheses are based on 25 to 49 men; an asterisk indicates a figure is based on fewer than 25 men and has been suppressed.

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APPENDIX A

SURVEY DESIGN

APPENDIX A

SAMPLE DESIGN

A.1 Introduction

The 1996 ZDHS covered the population residing in private households in the country. The design for the ZDHS called for a representative probability sample of approximately 8,000 completed individual interviews with women between the ages of 15 and 49. It is designed principally to produce reliable estimates for the country as a whole, for the urban and the rural areas separately, and for each of the nine provinces in the country. In addition to the sample of women, a sub-sample of about 2,000 men between the ages of 15 and 59 was also designed and selected to allow for the study of AIDS knowledge and other topics.

A.2 Sampling Frame

Zambia is divided administratively into nine provinces and 57 districts. For the Census of Population, Housing and Agriculture of 1990, the whole country was demarcated into census supervisory areas (CSAs). Each CSA was in tum divided into standard enumeration areas (SEAs) of approximately equal size. For the 1992 ZDHS, this frame of about 4,200 CSAs and their corresponding SEAs served as the sampling frame. The measure of size was the number of households obtained during a quick count operation carried out in 1987. These same CSAs and SEAs were later updated with new measures of size which are the actual numbers of households and population figures obtained in the census. The sample for the 1996 ZDHS was selected from this updated CSA and SEA frame.

A.3 Characteristics of the ZDHS Sample

The sample for ZDHS was selected in three stages. At the first stage, 312 primary sampling units corresponding to the CSAs were selected from the frame of CSAs with probability proportional to size, the size being the number of households obtained from the 1990 census. At the second stage, one SEA was selected, again with probability proportional to size, within each selected CSA. An updating of the maps as well as a complete listing of the households in the selected SEAs was carried out. The list of households obtained was used as the frame for the third-stage sampling in which households were selected for interview. Women between the ages of 15 and 49 were identified in these households and interviewed. Men between the ages of 15 and 59 were also interviewed, but only in one-fourth of the households selected for the women's survey.

A.4 Sample Allocation

Table A.1 and A.2 show the distribution of the population in Zambia as projected to 1996 to the nine provinces and by urban and rural areas.

The provinces, stratified by urban and rural areas, were the sampling strata. There were thus 18 strata. A proportional allocation of the target number of 8,000 women to the 18 strata would yield the sample distribution presented in Table A.3.

The proportional allocation would result in a completely self-weighting sample but would not allow for reliable estimates for at least three of the nine provinces, namely Luapula, North-Western and Western. Results of other demographic and health surveys show that a minimum sample of 800-1,000 women is required in order to obtain estimates of fertility and childhood mortality rates at an acceptable level of sampling errors. It was decided to allocate a sample of 1,000 women to each of the three largest provinces, and a sample of 800

women to the two smallest provinces. The remaining provinces got samples of 850 women. Within each province, the sample was distributed approximately proportionally to the urban and rural areas. Table A.4 shows the proposed sample allocation.

Table A.1 Projected population to 1996

Province	Urban	Rural	Total
Central	276,926	657,729	934,655
Copperbelt	1,429,128	185,476	1,614,604
Eastern	117,703	1,200,323	1,318,026
Luapula	117,913	520,444	638,357
Lusaka	1,191,573	163,985	1,355,558
Northern	126,197	928,510	1,054,707
North-Western	75,686	407,365	483,051
Southern	269,465	882,334	1,151,799
Western	78,363	652,775	731,138
Zambia	3,682,954	5,598,941	9,281,895

Table A.2 Population distribution

Province	Urban	Rural	Total
Central	29.6	70.4	10.1
Copperbelt	88.5	11.5	17.4
Eastern	8.9	91.1	14.2
Luapula	18.5	81.5	6.9
Lusaka	87.9	12.1	14.6
Northern	12.0	88.0	11.4
North-Western	15.7	84.3	5.2
Southern	23.4	76.6	12.4
Western	10.7	89.3	7.9
Zambia	39.7	60.3	100.0

Table A.3 Proportional sample allocation

Province	Urban	Rural	Total
Central	239	567	806
Copperbelt	1,232	160	1,392
Eastern	101	1,035	1,136
Luapula	102	448	550
Lusaka	1,027	141	1,168
Northern	109	800	909
North-Western	65	351	416
Southern	232	761	993
Western	67	563	630
Zambia	3,174	4,826	8,000

Table A.4 Proposed non-proportional sample allocation

Province	Urban	Rural	Total
Central	252	598	850
Copperbelt	885	115	1,000
Eastern	89	911	1,000
Luapula	148	652	800
Lusaka	879	121	1,000
Northern	102	748	850
North-Western	126	674	800
Southern	199	651	850
Western	91	759	850
Zambia	2,771	5,229	8,000

The number of households that would yield the target number of 8,000 women with complete interviews was calculated as follows:

$$\textit{Number of HHs} = \frac{\textit{Number of women}}{\textit{Number of women per HH} \times \textit{Overall response rate}}$$

According to the results of the 1992 ZDHS, the number of women age 15-49 was estimated to be 1.4 per urban household, and 1.0 per rural household. The overall response rate found in the same survey was about 93 percent. A more conservative overall response rate of 90 percent (95 percent for households and 95 percent for women) would be more appropriate. Using these two parameters in the above equation, it was expected that approximately 8,000 households would be selected in order to yield the target sample of women, distributed as in Table A.5.

The number of sample points (or clusters) to be selected for each stratum was calculated by dividing the number of women in the stratum by the average take in the cluster. Analytical studies of surveys of the same nature suggest that the optimum number of women to be interviewed is around 20-25 in each urban

cluster and 30-35 in each rural cluster. If on average 20 women were to be selected in each urban cluster and 30 women in each rural cluster (i.e., selecting on average 16 households in each urban cluster and 34 households in each rural cluster), the distribution of sample points would be as in Table A.6.

Table A.5 Number of households to yield target of women

Province	Urban	Rural	Total
Central	200	664	864
Copperbelt	702	128	830
Eastern	71	1,012	1,083
Luapula	117	714	841
Lusaka	698	134	832
Northern	81	831	912
North-Western	100	749	849
Southern	158	723	881
Western	72	843	915
Zambia	2,199	5,808	8,007

Table A.6 Number of sample points

Province	Urban	Rural	Total
Central	13	20	33
Copperbelt	44	4	48
Eastern	4	30	34
Luapula	7	21	28
Lusaka	44	4	48
Northern	5	24	29
North-Western	6	22	28
Southern	10	21	31
Western	5	25	30
Zambia	138	171	309

While examining these figures, it was noticed that because of rounding errors, the number of clusters in some provinces would yield a slightly smaller number of women than expected. The number of clusters were then rearranged in each stratum so that (1) it was an even number, but in such a way that (2) the sample size in each province did not fall short of the recommended size. The even number of clusters is recommended for the purpose of calculating sampling errors in which the first step is to form pairs of homogeneous clusters (Table A.7).

Table A.7 Proposed number of sample points

Province	Urban	Rural	Total
Central	12	20	32
Copperbelt	44	4	48
Eastern	4	30	34
Luapula	8	22	30
Lusaka	44	4	48
Northern	6	24	30
North-Western	8	22	30
Southern	10	20	30
Western	6	24	30
Zambia	142	170	312

Table A.8 Number of households to be selected

Province	Urban	Rural	Total
Central	192	680	872
Copperbelt	704	136	840
Eastern	64	1,020	1,084
Luapula	128	748	876
Lusaka	704	136	840
Northern	96	816	912
North-Western	128	748	876
Southern	160	680	840
Western	96	816	912
Zambia	2,272	5,780	8,052

Tables A.8 and A.9 show the resulting number of households to be selected and the number of women with completed interviews when the number of clusters to be selected is as proposed in Table A.7.

Table A.9 Expected number of women with completed interviews

Province	Urban	Rural	Total
Central	242	612	854
Copperbelt	887	122	1,009
Eastern	82	918	1,000
Luapula	161	673	834
Lusaka	887	122	1,009
Northern	121	734	855
North-Western	161	673	834
Southern	202	612	814
Western	121	734	855
Zambia	2,864	5,200	8,064

A.5 Stratification and Systematic Selection of Clusters

A cluster is the ultimate area unit retained in the survey. In the 1992 ZDHS and the 1996 ZDHS, the cluster corresponds exactly to an SEA selected from the CSA that contains it. In order to decrease sampling errors of comparisons over time—between 1992 and 1996—it was decided that as many as possible of the 1992 clusters be retained. After carefully examining the 262 CSAs that were included in the 1992 ZDHS, locating them in the updated frame and verifying their SEA composition, it was decided to retain 213 CSAs (and their corresponding SEAs)[1]. This amounted to almost 70 percent of the new sample. Only 99 new CSAs and their corresponding SEAs were selected.

As in the 1992 ZDHS, stratification of the CSAs was only geographic. In each stratum, the CSAs were listed by districts ordered geographically. The procedure for selecting CSAs in each stratum consisted of:

(1) calculating the sampling interval for the stratum:

$$I = \frac{\sum_i M_i}{a}$$

where ΣM_i is the size of the stratum (total number of households in the stratum according to the sampling frame) and a is the number of CSAs to be selected in the stratum;

(2) calculating the cumulated size of each CSA;

(3) calculating the series of sampling numbers R, $R+I$, $R+2I$, ..., $R+(a-1)I$, where R is a random number between 1 and I;

(4) comparing each sampling number with the cumulated sizes.

[1]The reasons for not retaining the remaining 49 CSAs are as followed: (1) the urban sample of Copperbelt Province is smaller in the 1996 ZDHS than in the 1992 ZDHS so that all clusters in urban Copperbelt are not needed; (2) the SEA composition of certain CSAs was changed during the actual census; and (3) there were errors in the old frame concerning the urban/rural specifications.

The CSA to be selected was the first CSA whose cumulated size was greater or equal to the sampling number.

In each CSA, only one SEA was selected at random (using a random number between 1 and the number of SEAs in the CSA.) The final sample of CSAs (and their corresponding SEAs) shows that of the 57 districts that exist in the country, 55 will be covered by ZDHS.

A.6 Sampling Probabilities

The sampling probabilities were calculated separately for each sampling stage, and independently for each stratum. We use the following notations:

P_1: first-stage sampling probability (CSAs)
P_2: second-stage sampling probability (SEAs)
P_3: third-stage sampling probability (households)

Let a_h be the number of CSAs selected in stratum h, M_{hi} the size (population according to the census frame) of the ith CSA in stratum h, and ΣM_{hi} the total size of stratum h (population according to the census frame). The probability of inclusion of the ith CSA in the sample is calculated as follows:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum_i M_{hi}}$$

In the second stage, we selected one SEA in each CSA. The probability of selection of the jth SEA in the ith CSA is:

$$P_{2hij} = \frac{m_{hij}}{\sum_i m_{hij}}$$

where m_{hij} is the size of the jth SEA according to the census frame.

In order for the sample to be self-weighting within stratum h, the overall probability $f_h = P_{1hi} \cdot P_{2hij} \cdot P_{3hij}$ must be the same for each household within the stratum, where f_h is the sampling fraction calculated separately for stratum h.

$$f_h = \frac{n_h}{N_h}$$

where n_h is the number of households selected in the stratum, and N_h is the estimated number of households that exist in the stratum in 1996, at the time of fieldwork.

The selection of the households is systematic with equal probability and the selection interval will be calculated as follows:

$$I_{hij} = \frac{1}{P_{3hij}} = \frac{P_{1hi} \cdot P_{2hij}}{f_h}$$

Because of the non-proportional distribution of the sampling to the different strata, sampling weights were required to ensure the actual representativity of the sample at the national level.

A.7 Sample Implementation

A team of 11 listers, 11 mappers and 9 supervisors, all were staff of the Central Statistical Office (CSO), were trained to conduct a mapping and household listing operation in all selected sample areas. One mapper, a lister and a supervisor were assigned to each province, except in Copperbelt and Lusaka Provinces where two mappers and two listers were assigned. Mapping and household listing was carried out in March through July 1996. Not more than fifty days were spent on mapping and households listing in each province. However, the starting times differed in each province, and in some provinces work was disrupted more often than in others. In Copperbelt, Eastern, Lusaka, Central and Northern Provinces, household mapping and listing was completed in May, in Luapula and North-Western Provinces in June, and in Southern and Western Provinces, in July. Once the households in each selected cluster were mapped and listed, the maps and lists were sent to the CSO central office in Lusaka where they were checked for completion. Discrepancies between the actual and listed number of households were evaluated. In most of the clusters, the number of households listed was less than expected. After evaluation, households to be interviewed for the women's and men's surveys in each cluster were selected by two persons trained for the purpose.

Results of the sample implementation by province and urban and rural residence are presented in Tables A.10.1 and A.10.2. The results indicate that of the 8,016 households selected in the survey, 91 percent were successfully interviewed. Four percent of the dwellings were found vacant or destroyed, 4 percent of the households were not at home, and in one percent of the households there was no competent respondent. The response rate at the household level is 99 percent. In these households, there were 8,298 women age 15-49, 97 percent of whom were successfully interviewed. The response rate for the women survey is 96 percent. There is some variation in response rate by province and urban/rural areas. The rate is 95 percent or lower in Northern, Copperbelt, North-Western, Lusaka, and Central Provinces, and 98 percent or higher in Eastern and Luapula Provinces.

Table A.10.2 presents the results for the men's survey. The overall response rate is lower than that for women (90 percent). The rates range from 80 percent in Lusaka to 95 percent in Eastern province.

A.8 Fieldwork

All questionnaires were translated into seven major languages spoken in Zambia, namely Bemba, Kaonde, Lozi, Lunda, Luvale, Nyanja and Tonga. Pretest training and fieldwork took place from April 23 to May 17, 1996. During a three-week period, 12 male and 19 female interviewers were trained to carry out the pretest. Two teams were formed, each consisting of a supervisor, a field editor, four male interviewers and four female interviewers. The pretest fieldwork was conducted for eight days, during which approximately 150 interviewers were completed. Discussions with the pretest field staff were held, and necessary modifications to questionnaires were made based on the experience of the pretest exercise.

For the main survey fieldwork, 63 nurses/midwives were recruited through the Provincial Medical Officers. All of the 31 male field staff were from CSO. The survey field staff were selected based on, among others, their ability to conduct interviews in one or more major languages. Fourteen of the nurses/midwives participated in the 1992 ZDHS. Training of the field staff for the main survey took place for four weeks between June 18 and July 10, 1996. Following the DHS guidelines, the training course consisted of instructions regarding interviewing techniques and field procedures, a detailed review of the items on the questionnaires, instruction and practice in weighing and measuring children and women. Mock interviews were conducted among the trainees, and with men and women of eligible age in areas outside the ZDHS sample points. Interviewers were selected on the basis of their overall performance in class, scores on the tests given in class and performance during practice field interviews. From among those selected, candidates suitable as field editors and supervisors were selected. The supervisors and field editors were given additional training in coordination of fieldwork, methods of field editing and data quality control procedures.

Table A.10.1 Sample implementation: women

Percent distribution of households and eligible women in the ZDHS sample by results of the interviews and household, eligible women, and overall response rates, according to region and residence, Zambia 1996

	Region									Residence		
Result	Central	Copper-belt	Eastern	Luapula	Lusaka	Northern	North-Western	Southern	Western	Urban	Rural	Total
Selected households												
Completed ©	92.7	95.1	95.9	90.5	94.2	85.1	79.6	96.1	88.7	94 7	89.3	90.9
Household present but no competent respondent at home (HP)	0.3	0.5	0.4	0.1	1.5	0.7	0.7	0.3	0.8	0.9	0.5	0 6
Refused (R)	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Dwelling not found (DNF)	0.3	0.0	0 2	0.6	0.0	0.9	0.0	0 3	0.8	0.0	0.5	0.3
Household absent (HA)	2.2	1.7	1.0	3.6	1.3	5.2	14.3	0 6	2.6	1.2	4.5	3.6
Dwelling vacant (DV)	3.5	1.4	1 4	3.3	2.2	6.7	2.7	2.7	5.9	2.4	3.7	3 3
Dwelling destroyed (DD)	0.7	0.8	0 6	1.6	0.2	1.1	2.4	0.1	1.0	0.4	1.2	1.0
Other (O)	0.2	0.5	0.4	0 2	0.2	0.3	0 2	0.0	0.2	0.2	0.3	0 3
Total percent	100.0	100.0	100.0	100 0	100.0	100.0	100.0	100.0	100.0	100 0	100.0	100.0
Number	861	845	1,154	866	867	941	861	711	910	2,329	5,687	8,016
Household response rate (HRR)[1]	99.3	99 5	99.4	99.2	98.1	98.2	99.0	99.4	98.3	98 9	98.9	98.9
Eligible women												
Completed (EWC)	95.5	95.0	99.0	98.6	96.6	95.0	95.6	96.5	97.5	96.1	97.0	96 7
Not at home (EWNH)	2.9	4.0	0.6	1.0	1.9	3 8	3.5	2.3	1.7	3.0	2.0	2.3
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)	0.0	0.3	0.3	0.0	0.8	0.5	0.7	0 1	0.0	0.4	0.2	0.3
Partly completed (EWPC)	0.1	0.2	0 0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Incapacitated (EWI)	0 8	0.3	0.1	0 3	0.5	0.7	0.2	1.0	0.3	0.4	0.5	0 5
Other (EWO)	0.6	0.2	0.0	0.1	0 0	0.0	0.0	0.1	0.3	0.1	0 2	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	783	1,189	1,129	909	1,112	824	593	877	882	3,124	5,174	8,298
Eligible woman response rate (EWRR)[2]	95.5	95.0	99.0	98.6	96 6	95.0	95.6	96.5	97.5	96.1	97 0	96.7
Overall response rate (ORR)[3]	94.8	94.5	98.4	97.8	94.7	93.3	94.6	95.9	95.8	95.0	96 0	95.6

Note· The household response rate is calculated for completed households as a proportion of completed, no competent respondent, refused, and dwelling not found. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other." The overall response rate is the product of the household and woman response rates.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF}$$

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

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

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

$$ORR = HRR * EWRR$$

Table A.10.2 Sample implementation: men

Percent distribution of households and eligible men in the ZDHS sample by results of the interviews and household, eligible men, and overall response rates, according to region and residence, Zambia 1996

	Region									Residence		
Result	Central	Copper-belt	Eastern	Luapula	Lusaka	Northern	North-Western	Southern	Western	Urban	Rural	Total
Selected households												
Completed ©	94.4	92.2	96.8	92 1	94 0	89 2	81.9	94 4	88 4	95.2	90.0	91.6
Household present but no competent respondent at home (HP)	0.0	0.0	0.4	0.5	1.4	0.4	0 9	0.0	0.4	0.8	0.3	0.4
Refused (R)	0.0	0.0	0 0	0.0	0.9	0 0	0.5	0.0	0.0	0 3	0.1	0 1
Dwelling not found (DNF)	0.5	0.0	0 4	0.5	0 0	0.4	0.0	0.0	0 9	0 0	0.4	0.3
Household absent (HA)	2 3	3.2	1 1	2.8	0 5	3.3	13 9	0.6	2.1	0 5	4.4	3.3
Dwelling vacant (DV)	1 9	2 8	1.4	3.3	2.8	5.4	2.3	5.1	7.3	2.7	3.9	3.5
Dwelling destroyed (DD)	0.9	1.4	0.0	0.9	0.5	1 2	0.5	0.0	0.4	0.3	0 8	0.6
Other (O)	0 0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0 0	0.1	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	216	217	285	214	216	241	216	178	233	589	1,427	2,016
Household response rate (HRR)[1]	99.5	100.0	99.3	99.0	97.6	99.1	98 3	100 0	98.6	98.8	99.2	99.0
Eligible men												
Completed (EMC)	88.5	88.9	95.8	95.6	81.5	89.5	88 7	94 0	92 9	87 9	92.2	90 5
Not at home (EMNH)	8.1	8.6	3.5	2 9	12 6	10.5	6 6	3.0	4.7	8 3	6.1	7 0
Postponed (EMP)	0 0	0.3	0.0	0.0	0.4	0.0	0.0	0 5	0 0	0 1	0.2	0.1
Refused (EMR)	0.0	0.3	0.0	0.0	1 9	0.0	0 0	0.5	0.5	0.9	0 1	0.4
Partly completed (EMPC)	0.0	0.0	0.0	0.0	0.0	0 0	0 0	0.5	0.0	0.1	0 0	0.0
Incapacitated (EMI)	1.9	0.9	0.3	1.0	1 1	0.0	0.9	1.5	1.9	0.9	1.1	1 0
Other (EMO)	1 4	0.9	0.3	0.5	2.6	0.0	3.8	0.0	0.0	1.8	0.4	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	209	324	288	205	270	229	106	201	211	794	1,249	2,043
Eligible man response rate (EMRR)[2]	88 5	88 9	95 8	95.6	81.5	89.5	88.7	94.0	92.9	87 9	92 2	90 5
Overall response rate (ORR)[3]	88.1	88 9	95.1	94.6	79.5	88.7	87.2	94 0	91 6	86.8	91.4	89 6

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, refused, and dwelling not found. The eligible man response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other." The overall response rate is the product of the household and man response rates.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF}$$

[2] Using the number of eligible men falling into specific response categories, the eligible man response rate (EMRR) is calculated as:

$$\frac{EMC}{EMC + EMNH + EMP + EMR + EMPC + EMI + EMO}$$

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

$$ORR = HRR * EMRR$$

The ZDHS fieldwork was carried out by 11 teams, each consisting of one team leader, one female field editor, four female interviewers, one male interviewer and a driver. Data collection took place over a five-month period from July 15, 1996 to January 6, 1997.

A.9 Data Processing

The completed questionnaires were returned to the CSO headquarters for data processing. The data processing staff first checked whether all household and individual questionnaires for selected households and eligible women and men were indeed present for all clusters, along with field control forms. Missing information was relayed to the respective team. They then edited the questionnaires, coded open-ended questions, entered the data, and ran the secondary editing program. The data were processed by a team consisting of five data entry clerks, three office editors, and one data entry supervisor. Data processing was accomplished using a computer program developed for DHS surveys, Integrated System for Survey Analysis (ISSA).

APPENDIX B

ESTIMATES OF SAMPLING ERRORS

APPENDIX B

ESTIMATES OF SAMPLING ERRORS

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the ZDHS to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the ZDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the ZDHS sample is the result of a two-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the ZDHS is the ISSA Sampling Error Module. This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$var(r) = \frac{1-f}{x^2} \sum_{h=1}^{H} \left[\frac{m_h}{m_h - 1} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - r.x_{hi} \ , \ and \ \ z_h = y_h - r.x_h$$

where h represents the stratum which varies from 1 to H,

m_h is the total number of clusters selected in the hth stratum,
y_{hi} is the sum of the values of variable y in the ith cluster in the hth stratum,
x_{hi} is the sum of the number of cases in the ith cluster in the hth stratum, and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the ZDHS, there were 312 non-empty clusters. Hence, 312 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(R) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1) r_{(i)}$$

where r is the estimate computed from the full sample of 312 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 311 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, ISSA computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the ZDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for the nine provinces. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.13 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to child-bearing.

The confidence interval (e.g., as calculated for *children ever born to women aged 15-49*) can be interpreted as follows: the overall average from the national sample is 3.037 and its standard error is .038. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 3.037±2×.038. There is a high probability (95 percent) that the *true* average number of children ever born to all women aged 15 to 49 is between 2.961 and 3.113.

Sampling errors are analyzed for the national sample and for two separate groups of estimates: (1) means and proportions, and (2) complex demographic rates. The relative standard errors (SE/R) for the

means and proportions range between 0.2 percent and 20 percent with an average of 3.5 percent; the highest relative standard errors are for estimates of very low values (e.g., *currently using injections* among women who were currently using a contraceptive method). If estimates of very low values (less than 10 percent) were removed, than the average drops to 2.1 percent. So in general, the relative standard errors for most estimates for the country as a whole is small, except for estimates of very small proportions. The relative standard error for the total fertility rate is small, 2 percent. However, for the mortality rates, the average relative standard error is somewhat higher, 4.6 percent.

There are differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *secondary education or higher,* the relative standard errors as a percent of the estimated mean for the whole country, for the rural areas, and for Northern Province are 4 percent, 7.8 percent, and 13.5 percent, respectively.

For the total sample, the value of the design effect (DEFT), averaged over all variables, is 1.27 which means that, due to multi-stage clustering of the sample, variance is increased by a factor of 1.6 over that in an equivalent simple random sample.

Finally, the 1996 ZDHS sample consisted mostly of the same enumeration areas selected for the 1992 ZDHS; therefore, there was a strong interest in the calculation of sampling errors for the *change* in rates between the two surveys. Because the two samples were not independent, it is possible to detect change in a particular rate during the period between the two surveys with a smaller sample than if the two samples had been independent. To obtain a measure of the sampling error of the difference in rates between the two surveys, say, for example, the contraceptive prevalence rate, it is necessary to calculate the correlation between the values of the contraceptive prevalence rate for the two surveys at the cluster level and then apply the following formula to calculate the corresponding sampling error:

$$se(p_1 - p_2) = \sqrt{se^2(p_1) + se^2(p_2) - 2 * \rho * \sqrt{se^2(p_1) * se^2(p_2)}} \quad .$$

Sampling errors of the difference in knowledge and use of contraception for married women interviewed in the 1992 and 1996 ZDHS surveys are given in Table B.14.

Table B.1 List of selected variables for sampling errors, Zambia, 1996

Variable	Description	Base population
	WOMEN	
No education	Proportion	All women 15-49
With secondary education or higher	Proportion	All women 15-49
Never married (in union)	Proportion	All women 15-49
Currently married (in union)	Proportion	All women 15-49
Married before age 20	Proportion	Women 25-49
Had first sexual intercourse before 18	Proportion	Women 25-49
Children ever born	Mean	All women 15-49
Children ever born to women over 40	Mean	Women aged 40-49
Children surviving	Mean	All women 15-49
Knowing any contraceptive method	Proportion	Currently married women 15-49
Knowing any modern contraceptive method	Proportion	Currently married women 15-49
Ever used any contraceptive method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using injections	Proportion	Currently married women 15-49
Currently using condom	Proportion	Currently married women 15-49
Currently using female sterilisation	Proportion	Currently married women 15-49
Currently using periodic abstinence	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Using public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women 15-49
Want to delay at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	All women 15-49
Mothers received tetanus injection	Proportion	Births in last 5 years
Mothers received medical care at birth	Proportion	Births in last 5 years
Had diarrhoea in the last 2 weeks	Proportion	Children under 5
Treated with ORS packets	Proportion	Children under 5 with diarrhoea in last 2 weeks
Consulted medical personnel	Proportion	Children under 5 with diarrhoea in last 2 weeks
Having health card, seen	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT vaccination (3 doses)	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received measles vaccination	Proportion	Children 12-23 months
Fully immunised	Proportion	Children 12-23 months
Weight-for-height (< -2 SD)	Proportion	Children under 5 who were measured
Height-for-age (< -2 SD)	Proportion	Children under 5 who were measured
Weight-for-age (< -2 SD)	Proportion	Children under 5 who were measured
Total fertility rate (3 years)	Rate	Women-years of exposure to child-bearing
Neonatal mortality rate	Rate	Number of births exposed to risk of dying
Postneonatal mortality rate	Rate	Number of births exposed to risk of dying
Infant mortality rate	Rate	Number of births exposed to risk of dying
Child mortality rate	Rate	Number of births exposed to risk of dying
Under-five mortality rate	Rate	Number of births exposed to risk of dying
	MEN	
No education	Proportion	All men 15-59
With secondary education or higher	Proportion	All men 15-59
Never married (in union)	Proportion	All men 15-59
Currently married (in union)	Proportion	All men 15-59
Knowing any contraceptive method	Proportion	Currently married men 15-59
Knowing any modern contraceptive method	Proportion	Currently married men 15-59
Ever used any contraceptive method	Proportion	Currently married men 15-59
Currently using any method	Proportion	Currently married men 15-59
Currently using a modern method	Proportion	Currently married men 15-59
Currently using pill	Proportion	Currently married men 15-59
Currently using injections	Proportion	Currently married men 15-59
Currently using condom	Proportion	Currently married men 15-59
Currently using female sterilisation	Proportion	Currently married men 15-59
Currently using periodic abstinence	Proportion	Currently married men 15-59
Currently using withdrawal	Proportion	Currently married men 15-49
Want no more children	Proportion	Currently married men 15-59
Want to delay at least 2 years	Proportion	Currently married men 15-59
Ideal number of children	Mean	All men 15-59

[1] For total (0-4 years)

Table B.2 Sampling errors - National sample: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.133	0.008	8021	8021	2.158	0.060	0 117	0.149
With secondary education or higher	0.278	0.011	8021	8021	2.125	0.040	0.256	0.300
Never married (in union)	0.253	0.006	8021	8021	1.168	0.024	0 241	0.265
Currently married (in union)	0.611	0.007	8021	8021	1.288	0.011	0.597	0 625
Married before age 20	0.694	0.008	6039	6018	1.388	0.012	0.678	0.710
Had first sexual intercourse before 18	0.695	0.008	6039	6018	1.344	0.012	0.679	0.711
Children ever born	3.037	0.038	8021	8021	1.119	0.013	2.961	3.113
Children ever born to women over 40	7.314	0.097	1085	1062	1.062	0.013	7.120	7.508
Children surviving	2.465	0.030	8021	8021	1.070	0.012	2.405	2.525
Knowing any contraceptive method	0.984	0.002	4949	4902	1.016	0.002	0.980	0.988
Knowing any modern method	0.977	0.002	4949	4902	1.062	0.002	0.973	0.981
Ever used any contraceptive method	0.594	0.011	4949	4902	1.630	0.019	0.572	0.616
Currently using any method	0.259	0.008	4949	4902	1.272	0.031	0.243	0.275
Currently using a modern method	0.144	0.006	4949	4902	1.237	0.042	0.132	0.156
Currently using pill	0.072	0.005	4949	4902	1.237	0.069	0.062	0.082
Currently using injections	0.010	0.002	4949	4902	1.507	0.200	0.006	0.014
Currently using condom	0 035	0.003	4949	4902	1.212	0.086	0.029	0.041
Currently using female sterilisation	0.020	0.002	4949	4902	1.163	0.100	0.016	0.024
Currently using periodic abstinence	0.019	0 002	4949	4902	1.167	0.105	0.015	0.023
Currently using withdrawal	0.045	0.003	4949	4902	1.184	0.067	0.039	0.051
Using public sector source	0.599	0 024	830	901	1.431	0.040	0.551	0.647
Want no more children	0.264	0.008	4949	4902	1.254	0.030	0.248	0.280
Want to delay at least 2 years	0.388	0.008	4949	4902	1.137	0.021	0.372	0 404
Ideal number of children	5.320	0.040	7603	7602	1.536	0.008	5 240	5.400
Mothers received tetanus injection	0.845	0.008	7248	7159	1.597	0.009	0.829	0.861
Mothers received medical care at birth	0.465	0.015	7248	7159	2.009	0.032	0.435	0.495
Had diarrhoea in the last 2 weeks	0.235	0.006	6177	6109	1.113	0.026	0.223	0.247
Treated with ORS packets	0.539	0.014	1431	1435	1.032	0.026	0.511	0.567
Consulted medical personnel	0.440	0.018	1431	1435	1.272	0.041	0.404	0.476
Having health card, seen	0.818	0.011	1348	1347	1.018	0.013	0.796	0.840
Received BCG vaccination	0.974	0.005	1348	1347	1 063	0.005	0.964	0.984
Received DPT vaccination (3 doses)	0.857	0.013	1348	1347	1.337	0.015	0.831	0.883
Received polio vaccination (3 doses)	0.844	0.013	1348	1347	1.249	0.015	0.818	0.870
Received measles vaccination	0.865	0.011	1348	1347	1 163	0.013	0.843	0.887
Fully immunised	0.783	0.014	1348	1347	1.265	0.018	0.755	0.811
Weight-for-height	0.042	0.003	5503	5443	1.170	0 071	0.036	0.048
Height-for-age	0.424	0.008	5503	5443	1.213	0.019	0.408	0.440
Weight-for-age	0.235	0.006	5503	5443	1.057	0.026	0.223	0 247
Total fertility rate (3 years)	6.080	0.119	NA	22190	1.278	0.020	5 842	6.318
Neonatal mortality rate (0-4 years)	35.361	2.395	7387	7290	1.018	0.068	30.571	40.151
Postneonatal mortality rate (0-4 years)	73.512	3.649	7426	7330	1.122	0.050	66.214	80.810
Infant mortality rate (0-4 years)	108 873	4.166	7428	7332	1.054	0.038	100.541	117.205
Child mortality rate (0-4 years)	98.423	4.307	7587	7491	1.092	0.044	89.809	107.037
Under-five mortality rate (0-4 years)	196.580	5.465	7630	7536	1.081	0.028	185.650	207.510
MEN								
No education	0.069	0.007	1849	1849	1.246	0.101	0.055	0 083
With secondary education or higher	0.424	0.014	1849	1849	1.216	0.033	0.396	0 452
Never married (in union)	0.440	0.013	1849	1849	1.122	0.030	0.414	0.466
Currently married (in union)	0.510	0.013	1849	1849	1.083	0.025	0.484	0.536
Knowing any contraceptive method	0.990	0.003	964	944	1.018	0.003	0.984	0.996
Knowing any modern method	0.986	0.004	964	944	1.012	0.004	0.978	0.994
Ever used any contraceptive method	0.725	0.014	964	944	0.967	0.019	0.697	0.753
Currently using any method	0.371	0.014	964	944	0.914	0.038	0.343	0.399
Currently using a modern method	0.210	0.013	964	944	0.955	0.062	0.184	0.236
Currently using pill	0.109	0.009	964	944	0.908	0.083	0.091	0.127
Currently using injections	0.004	0.002	964	944	1.163	0.500	0.000	0.008
Currently using condom	0.077	0.009	964	944	1.017	0.117	0.059	0.095
Currently using female sterilisation	0.014	0.004	964	944	0.936	0.286	0.006	0 022
Currently using periodic abstinence	0.069	0.010	964	944	1.205	0.145	0 049	0.089
Currently using withdrawal	0.047	0.007	964	944	1.010	0.149	0.033	0.061
Want no more children	0.198	0.014	964	944	1.075	0.071	0.170	0.226
Want to delay at least 2 years	0.373	0 015	964	944	0.967	0 040	0.343	0.403
Ideal number of children	5.865	0.084	1779	1793	1.168	0.014	5.697	6.033

NA = Not applicable

Table B.3 Sampling errors - Urban sample: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.056	0.005	3001	3604	1 248	0 089	0 046	0 066
With secondary education or higher	0.463	0.019	3001	3604	2.053	0.041	0.425	0.501
Never married (in union)	0.308	0.009	3001	3604	1.116	0.029	0.290	0.326
Currently married (in union)	0.547	0.011	3001	3604	1.158	0.020	0.525	0.569
Married before age 20	0.607	0.015	2202	2648	1.433	0 025	0.577	0 637
Had first sexual intercourse before 18	0.627	0.013	2202	2648	1.296	0.021	0 601	0 653
Children ever born	2 656	0.060	3001	3604	1.137	0 023	2 536	2 776
Children ever born to women over 40	7 108	0.153	352	424	0.934	0 022	6.802	7 414
Children surviving	2.221	0.048	3001	3604	1.073	0 022	2.125	2 317
Knowing any contraceptive method	0.991	0.002	1634	1972	0.861	0 002	0.987	0 995
Knowing any modern method	0.989	0.002	1634	1972	0.886	0.002	0.985	0 993
Ever used any contraceptive method	0.709	0.015	1634	1972	1.319	0.021	0 679	0.739
Currently using any method	0 333	0.014	1634	1972	1.221	0.042	0.305	0 361
Currently using a modern method	0.236	0.011	1634	1972	1.065	0 047	0 214	0 258
Currently using pill	0.122	0.009	1634	1972	1.114	0.074	0 104	0 140
Currently using injections	0.022	0.004	1634	1972	1.184	0.182	0 014	0 030
Currently using condom	0.047	0.006	1634	1972	1.139	0.128	0.035	0.059
Currently using female sterilisation	0.033	0.005	1634	1972	1.120	0.152	0.023	0.043
Currently using periodic abstinence	0.030	0.005	1634	1972	1.178	0.167	0.020	0.040
Currently using withdrawal	0.030	0 005	1634	1972	1.162	0.167	0 020	0.040
Using public sector source	0.579	0.031	502	614	1.419	0.054	0.517	0.641
Want no more children	0.331	0.015	1634	1972	1 285	0.045	0 301	0.361
Want to delay at least 2 years	0.367	0.014	1634	1972	1.142	0.038	0.339	0.395
Ideal number of children	4.579	0 050	2885	3463	1 351	0.011	4.479	4.679
Mothers received tetanus injection	0.880	0.008	2389	2858	1.134	0.009	0.864	0 896
Mothers received medical care at birth	0.769	0 016	2389	2858	1 579	0 021	0.737	0 801
Had diarrhoea in the last 2 weeks	0.238	0.010	2045	2445	1 009	0 042	0.218	0 258
Treated with ORS packets	0.584	0.023	478	581	0.979	0.039	0.538	0.630
Consulted medical personnel	0.453	0.029	478	581	1.215	0.064	0.395	0 511
Having health card, seen	0.821	0.018	449	532	0.982	0.022	0.785	0.857
Received BCG vaccination	0.994	0.003	449	532	0 905	0 003	0 988	1 000
Received DPT vaccination (3 doses)	0.902	0.017	449	532	1 208	0 019	0.868	0 936
Received polio vaccination (3 doses)	0.892	0.019	449	532	1.289	0.021	0.854	0 930
Received measles vaccination	0.897	0.015	449	532	1.015	0 017	0.867	0 927
Fully immunised	0.834	0.022	449	532	1.264	0.026	0.790	0 878
Weight-for-height	0.031	0.004	1812	2159	0 977	0 129	0.023	0 039
Height-for-age	0.327	0.013	1812	2159	1 134	0 040	0.301	0.353
Weight-for-age	0.165	0.008	1812	2159	0.853	0 048	0 149	0 181
Total fertility rate (3 years)	5.082	0.163	NA	9920	1.195	0 032	4 756	5 408
Neonatal mortality rate (0-9 years)	32.252	2.705	4327	5172	0 897	0.084	26.842	37.662
Postneonatal mortality rate (0-9 years)	59.677	4.265	4334	5181	1.106	0.071	51.147	68.207
Infant mortality rate (0-9 years)	91.929	5.232	4335	5182	1.086	0.057	81.465	102.393
Child mortality rate (0-9 years)	89.556	6.242	4366	5217	1.217	0 070	77 072	102.040
Under-five mortality rate (0-9 years)	173.252	7.830	4375	5228	1.183	0.045	157 592	188.912
MEN								
No education	0.027	0.007	698	852	1.103	0 259	0.013	0.041
With secondary education or higher	0.624	0.022	698	852	1.174	0.035	0 580	0 668
Never married (in union)	0.467	0.018	698	852	0.970	0 039	0.431	0.503
Currently married (in union)	0.470	0.018	698	852	0.926	0 038	0.434	0.506
Knowing any contraceptive method	0.996	0.004	327	401	1.107	0 004	0 988	1 000
Knowing any modern method	0.993	0.005	327	401	1.077	0.005	0.983	1 000
Ever used any contraceptive method	0.854	0.021	327	401	1.067	0 025	0.812	0.896
Currently using any method	0.475	0.025	327	401	0.910	0.053	0.425	0.525
Currently using a modern method	0.303	0.023	327	401	0.901	0 076	0.257	0.349
Currently using pill	0.174	0.018	327	401	0.868	0 103	0 138	0.210
Currently using injections	0 010	0.006	327	401	1.042	0.600	0.000	0.022
Currently using condom	0 088	0.015	327	401	0.967	0.170	0 058	0 118
Currently using female sterilisation	0.017	0.006	327	401	0.838	0 353	0 005	0 029
Currently using periodic abstinence	0 096	0.019	327	401	1.155	0.198	0.058	0 134
Currently using withdrawal	0 043	0.012	327	401	1.045	0 279	0 019	0 067
Want no more children	0.278	0.024	327	401	0.979	0.086	0.230	0 326
Want to delay at least 2 years	0 353	0.026	327	401	0.979	0 074	0.301	0.405
Ideal number of children	5.070	0.109	692	844	1.193	0.021	4.852	5 288

NA = Not applicable

Table B.4 Sampling errors - Rural sample: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.196	0.014	5020	4417	2.513	0.071	0.168	0.224
With secondary education or higher	0.128	0.010	5020	4417	2.087	0.078	0.108	0.148
Never married (in union)	0.208	0.007	5020	4417	1.157	0.034	0 194	0.222
Currently married (in union)	0.663	0.009	5020	4417	1.357	0.014	0 645	0.681
Married before age 20	0.763	0.008	3837	3369	1.159	0.010	0.747	0.779
Had first sexual intercourse before 18	0.749	0.010	3837	3369	1.369	0 013	0.729	0.769
Children ever born	3.347	0.044	5020	4417	1.005	0.013	3.259	3.435
Children ever born to women over 40	7.451	0.125	733	638	1.135	0.017	7 201	7.701
Children surviving	2.663	0.035	5020	4417	0.970	0.013	2 593	2.733
Knowing any contraceptive method	0 979	0.003	3315	2930	1.077	0.003	0.973	0 985
Knowing any modern method	0.968	0.003	3315	2930	1.119	0.003	0 962	0 974
Ever used any contraceptive method	0.517	0.016	3315	2930	1.893	0.031	0 485	0.549
Currently using any method	0 209	0.009	3315	2930	1.329	0.043	0.191	0.227
Currently using a modern method	0.082	0.007	3315	2930	1.526	0.085	0.068	0.096
Currently using pill	0.039	0.005	3315	2930	1.365	0.128	0.029	0.049
Currently using injections	0.003	0.002	3315	2930	2.553	0.667	0.000	0.007
Currently using condom	0.027	0.003	3315	2930	1.239	0.111	0.021	0 033
Currently using female sterilisation	0.012	0.002	3315	2930	1.078	0.167	0 008	0.016
Currently using periodic abstinence	0.011	0.002	3315	2930	0.933	0.182	0.007	0.015
Currently using withdrawal	0.055	0.005	3315	2930	1.220	0.091	0.045	0.065
Using public sector source	0.641	0.036	328	287	1.349	0.056	0.569	0.713
Want no more children	0.219	0.009	3315	2930	1.188	0.041	0.201	0.237
Want to delay at least 2 years	0.402	0.010	3315	2930	1.122	0.025	0.382	0 422
Ideal number of children	5.941	0.056	4718	4139	1.685	0 009	5.829	6.053
Mothers received tetanus injection	0.822	0.012	4859	4301	1.821	0 015	0.798	0.846
Mothers received medical care at birth	0.264	0.018	4859	4301	2.463	0.068	0.228	0 300
Had diarrhoea in the last 2 weeks	0.233	0.008	4132	3664	1.191	0.034	0.217	0.249
Treated with ORS packets	0.509	0.018	953	854	1.060	0.035	0.473	0.545
Consulted medical personnel	0.431	0.022	953	854	1.307	0.051	0.387	0.475
Having health card, seen	0.816	0.013	899	814	1.046	0.016	0.790	0.842
Received BCG vaccination	0.961	0.007	899	814	1.152	0 007	0.947	0.975
Received DPT vaccination (3 doses)	0.827	0.018	899	814	1.442	0.022	0.791	0.863
Received polio vaccination (3 doses)	0.812	0.017	899	814	1.261	0.021	0.778	0.846
Received measles vaccination	0.845	0.016	899	814	1 275	0 019	0 813	0.877
Fully immunised	0.750	0.019	899	814	1.312	0.025	0.712	0 788
Weight-for-height	0.048	0.005	3691	3284	1 289	0.104	0.038	0.058
Height-for-age	0.487	0.011	3691	3284	1.315	0 023	0.465	0.509
Weight-for-age	0.280	0.009	3691	3284	1.169	0.032	0.262	0.298
Total fertility rate (3 years)	6.861	0.137	NA	12270	1.234	0.020	6.587	7.135
Neonatal mortality rate (0-9 years)	38.585	2.617	8960	7920	1.139	0.068	33.351	43.819
Postneonatal mortality rate (0-9 years)	79.348	3.784	8989	7946	1.205	0.048	71.780	86.916
Infant mortality rate (0-9 years)	117.933	4.497	8990	7946	1.167	0.038	108 939	126 927
Child mortality rate (0-9 years)	98.131	4.275	9076	8025	1.119	0.044	89.581	106.681
Under-five mortality rate (0-9 years)	204.491	5.798	9107	8052	1.147	0.028	192.895	216.087
MEN								
No education	0.104	0.012	1151	997	1.360	0.115	0.080	0.128
With secondary education or higher	0.253	0.015	1151	997	1.170	0.059	0.223	0.283
Never married (in union)	0.417	0.018	1151	997	1.271	0.043	0.381	0.453
Currently married (in union)	0.545	0.018	1151	997	1.239	0.033	0.509	0.581
Knowing any contraceptive method	0.985	0.005	637	543	1.032	0.005	0.975	0.995
Knowing any modern method	0.981	0.005	637	543	1.013	0.005	0.971	0.991
Ever used any contraceptive method	0.629	0.018	637	543	0.923	0.029	0.593	0 665
Currently using any method	0.294	0.017	637	543	0.936	0.058	0 260	0.328
Currently using a modern method	0.142	0.014	637	543	0.994	0.099	0.114	0 170
Currently using pill	0.062	0.009	637	543	0.928	0.145	0.044	0.080
Currently using injections	0.000	0.000	637	543	Und	Und	0.000	0 000
Currently using condom	0.069	0.010	637	543	1.016	0.145	0.049	0.089
Currently using female sterilisation	0.012	0.004	637	543	1.000	0.333	0 004	0.020
Currently using periodic abstinence	0.049	0.010	637	543	1.188	0.204	0 029	0.069
Currently using withdrawal	0.049	0.008	637	543	0.955	0.163	0.033	0.065
Want no more children	0.139	0.015	637	543	1.127	0.108	0.109	0.169
Want to delay at least 2 years	0.389	0.018	637	543	0.934	0.046	0.353	0 425
Ideal number of children	6.573	0.116	1087	949	1.137	0.018	6 341	6.805

NA = Not applicable
Und = Undefined

Table B.5 Sampling errors - Central province: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.079	0.011	748	653	1.115	0.139	0.057	0.101
With secondary education or higher	0.306	0.025	748	653	1.510	0.082	0.256	0.356
Never married (in union)	0.228	0.015	748	653	0.978	0.066	0.198	0.258
Currently married (in union)	0.641	0.022	748	653	1.272	0.034	0.597	0.685
Married before age 20	0.702	0.021	578	502	1.094	0.030	0.660	0.744
Had first sexual intercourse before 18	0.679	0.019	578	502	0.980	0.028	0.641	0.717
Children ever born	3.033	0.112	748	653	1.029	0.037	2.809	3.257
Children ever born to women over 40	7.236	0.326	101	85	1.133	0.045	6.584	7.888
Children surviving	2.562	0.098	748	653	1.031	0.038	2.366	2.758
Knowing any contraceptive method	0.998	0.002	491	419	0.948	0.002	0.994	1.000
Knowing any modern method	0.995	0.003	491	419	1.011	0.003	0.989	1.000
Ever used any contraceptive method	0.527	0.024	491	419	1.043	0.046	0.479	0.575
Currently using any method	0.174	0.022	491	419	1.256	0.126	0.130	0.218
Currently using a modern method	0.130	0.019	491	419	1.266	0.146	0.092	0.168
Currently using pill	0.067	0.014	491	419	1.241	0.209	0.039	0.095
Currently using injections	0.000	0.000	491	419	Und	Und	0.000	0.000
Currently using condom	0.051	0.011	491	419	1.128	0.216	0.029	0.073
Currently using female sterilisation	0.010	0.004	491	419	0.920	0.400	0.002	0.018
Currently using periodic abstinence	0.007	0.006	491	419	1.510	0.857	0.000	0.019
Currently using withdrawal	0.017	0.005	491	419	0.903	0.294	0.007	0.027
Using public sector source	0.629	0.048	71	67	0.823	0.076	0.533	0.725
Want no more children	0.309	0.022	491	419	1.045	0.071	0.265	0.353
Want to delay at least 2 years	0.313	0.010	491	419	0.473	0.032	0.293	0.333
Ideal number of children	5.175	0.118	627	553	1.315	0.023	4.939	5.411
Mothers received tetanus injection	0.834	0.018	687	587	1.111	0.022	0.798	0.870
Mothers received medical care at birth	0.379	0.030	687	587	1.329	0.079	0.319	0.439
Had diarrhoea in the last 2 weeks	0.237	0.021	595	508	1.172	0.089	0.195	0.279
Treated with ORS packets	0.490	0.045	143	120	0.993	0.092	0.400	0.580
Consulted medical personnel	0.198	0.038	143	120	1.042	0.192	0.122	0.274
Having health card, seen	0.722	0.033	104	88	0.742	0.046	0.656	0.788
Received BCG vaccination	0.974	0.006	104	88	0.406	0.006	0.962	0.986
Received DPT vaccination (3 doses)	0.816	0.038	104	88	0.985	0.047	0.740	0.892
Received polio vaccination (3 doses)	0.761	0.052	104	88	1.219	0.068	0.657	0.865
Received measles vaccination	0.863	0.044	104	88	1.278	0.051	0.775	0.951
Fully immunised	0.718	0.055	104	88	1.215	0.077	0.608	0.828
Weight-for-height	0.061	0.015	536	458	1.407	0.246	0.031	0.091
Height-for-age	0.381	0.021	536	458	0.911	0.055	0.339	0.423
Weight-for-age	0.199	0.016	536	458	0.900	0.080	0.167	0.231
Total fertility rate (3 years)	6.251	0.452	NA	1827	1.456	0.072	5.347	7.155
Neonatal mortality rate (0-9 years)	29.604	6.305	1254	1071	1.214	0.213	16.994	42.214
Postneonatal mortality rate (0-9 years)	64.949	8.996	1261	1077	1.173	0.139	46.957	82.941
Infant mortality rate (0-9 years)	94.553	9.664	1261	1077	1.065	0.102	75.225	113.881
Child mortality rate (0-9 years)	77.264	10.167	1267	1081	1.050	0.132	56.930	97.598
Under-five mortality rate (0-9 years)	164.511	14.122	1274	1087	1.178	0.086	136.267	192.755
MEN								
No education	0.072	0.015	185	157	0.808	0.208	0.042	0.102
With secondary education or higher	0.493	0.038	185	157	1.021	0.077	0.417	0.569
Never married (in union)	0.393	0.042	185	157	1.177	0.107	0.309	0.477
Currently married (in union)	0.528	0.039	185	157	1.073	0.074	0.450	0.606
Knowing any contraceptive method	1.000	0.000	97	83	Und	0.000	1.000	1.000
Knowing any modern method	1.000	0.000	97	83	Und	0.000	1.000	1.000
Ever used any contraceptive method	0.810	0.038	97	83	0.949	0.047	0.734	0.886
Currently using any method	0.391	0.052	97	83	1.053	0.133	0.287	0.495
Currently using a modern method	0.220	0.051	97	83	1.214	0.232	0.118	0.322
Currently using pill	0.111	0.038	97	83	1.180	0.342	0.035	0.187
Currently using injections	0.000	0.000	97	83	Und	Und	0.000	0.000
Currently using condom	0.109	0.029	97	83	0.900	0.266	0.051	0.167
Currently using female sterilisation	0.000	0.000	97	83	Und	Und	0.000	0.000
Currently using periodic abstinence	0.081	0.038	97	83	1.350	0.469	0.005	0.157
Currently using withdrawal	0.054	0.025	97	83	1.068	0.463	0.004	0.104
Want no more children	0.202	0.055	97	83	1.339	0.272	0.092	0.312
Want to delay at least 2 years	0.325	0.045	97	83	0.934	0.138	0.235	0.415
Ideal number of children	6.143	0.209	184	156	0.906	0.034	5.725	6.561

NA = Not applicable
Und = Undefined

Table B.6 Sampling errors - Copperbelt province: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.058	0.014	1129	1588	2.077	0.241	0.030	0.086
With secondary education or higher	0.434	0.026	1129	1588	1.778	0.060	0.382	0.486
Never married (in union)	0.293	0.014	1129	1588	1.008	0.048	0.265	0.321
Currently married (in union)	0.573	0.015	1129	1588	1.017	0.026	0.543	0.603
Married before age 20	0.666	0.020	820	1158	1.218	0.030	0.626	0.706
Had first sexual intercourse before 18	0.642	0.024	820	1158	1.425	0.037	0.594	0.690
Children ever born	2.821	0.087	1129	1588	0.972	0.031	2.647	2.995
Children ever born to women over 40	7.566	0.233	137	196	0.923	0.031	7.100	8.032
Children surviving	2.354	0.072	1129	1588	0.949	0.031	2.210	2.498
Knowing any contraceptive method	0.997	0.002	641	910	0.963	0.002	0.993	1.000
Knowing any modern method	0.996	0.003	641	910	0.970	0.003	0.990	1.000
Ever used any contraceptive method	0.685	0.031	641	910	1.697	0.045	0.623	0.747
Currently using any method	0.298	0.018	641	910	1.011	0.060	0.262	0.334
Currently using a modern method	0.201	0.017	641	910	1.052	0.085	0.167	0.235
Currently using pill	0.093	0.011	641	910	0.983	0.118	0.071	0.115
Currently using injections	0.013	0.005	641	910	1.096	0.385	0.003	0.023
Currently using condom	0.038	0.009	641	910	1.230	0.237	0.020	0.056
Currently using female sterilisation	0.053	0.010	641	910	1.124	0.189	0.033	0.073
Currently using periodic abstinence	0.026	0.006	641	910	0.971	0.231	0.014	0.038
Currently using withdrawal	0.032	0.009	641	910	1.281	0.281	0.014	0.050
Using public sector source	0.416	0.062	165	227	1.617	0.149	0.292	0.540
Want no more children	0.324	0.020	641	910	1.081	0.062	0.284	0.364
Want to delay at least 2 years	0.343	0.016	641	910	0.867	0.047	0.311	0.375
Ideal number of children	4.694	0.110	1055	1482	1.926	0.023	4.474	4.914
Mothers received tetanus injection	0.886	0.012	954	1347	1.010	0.014	0.862	0.910
Mothers received medical care at birth	0.752	0.034	954	1347	2.052	0.045	0.684	0.820
Had diarrhoea in the last 2 weeks	0.208	0.014	828	1171	1.006	0.067	0.180	0.236
Treated with ORS packets	0.551	0.034	171	244	0.894	0.062	0.483	0.619
Consulted medical personnel	0.307	0.043	171	244	1.214	0.140	0.221	0.393
Having health card, seen	0.859	0.024	173	247	0.885	0.028	0.811	0.907
Received BCG vaccination	0.995	0.005	173	247	0.981	0.005	0.985	1.000
Received DPT vaccination (3 doses)	0.916	0.024	173	247	1.163	0.026	0.868	0.964
Received polio vaccination (3 doses)	0.916	0.019	173	247	0.924	0.021	0.878	0.954
Received measles vaccination	0.895	0.023	173	247	1.009	0.026	0.849	0.941
Fully immunised	0.841	0.026	173	247	0.926	0.031	0.789	0.893
Weight-for-height	0.043	0.008	741	1051	1.055	0.186	0.027	0.059
Height-for-age	0.314	0.021	741	1051	1.165	0.067	0.272	0.356
Weight-for-age	0.172	0.015	741	1051	1.017	0.087	0.142	0.202
Total fertility rate (3 years)	5.587	0.240	NA	43695	1.038	0.043	5.107	6.067
Neonatal mortality rate (0-9 years)	28.666	4.577	1685	2374	0.958	0.160	19.512	37.820
Postneonatal mortality rate (0-9 years)	53.255	7.497	1688	2379	1.316	0.141	38.261	68.249
Infant mortality rate (0-9 years)	81.921	7.914	1689	2380	1.108	0.097	66.093	97.749
Child mortality rate (0-9 years)	101.782	10.266	1700	2396	1.192	0.101	81.250	122.314
Under-five mortality rate (0-9 years)	175.365	11.413	1705	2404	1.074	0.065	152.539	198.191
MEN								
No education	0.028	0.007	288	396	0.739	0.250	0.014	0.042
With secondary education or higher	0.597	0.033	288	396	1.148	0.055	0.531	0.663
Never married (in union)	0.500	0.028	288	396	0.945	0.056	0.444	0.556
Currently married (in union)	0.440	0.027	288	396	0.934	0.061	0.386	0.494
Knowing any contraceptive method	1.000	0.000	128	174	Und	0.000	1.000	1.000
Knowing any modern method	0.992	0.008	128	174	0.978	0.008	0.976	1.000
Ever used any contraceptive method	0.799	0.032	128	174	0.886	0.040	0.735	0.863
Currently using any method	0.396	0.038	128	174	0.873	0.096	0.320	0.472
Currently using a modern method	0.298	0.031	128	174	0.759	0.104	0.236	0.360
Currently using pill	0.177	0.023	128	174	0.683	0.130	0.131	0.223
Currently using injections	0.008	0.007	128	174	0.970	0.875	0.000	0.022
Currently using condom	0.076	0.023	128	174	0.981	0.303	0.030	0.122
Currently using female sterilisation	0.030	0.011	128	174	0.694	0.367	0.008	0.052
Currently using periodic abstinence	0.076	0.024	128	174	1.036	0.316	0.028	0.124
Currently using withdrawal	0.023	0.013	128	174	0.990	0.565	0.000	0.049
Want no more children	0.298	0.031	128	174	0.765	0.104	0.236	0.360
Want to delay at least 2 years	0.393	0.042	128	174	0.972	0.107	0.309	0.477
Ideal number of children	5.183	0.152	286	394	1.121	0.029	4.879	5.487

NA = Not applicable
Und = Undefined

Table B.7 Sampling errors - Eastern province: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.327	0.037	1118	1075	2.644	0.113	0.253	0.401
With secondary education or higher	0.089	0.017	1118	1075	1.980	0.191	0.055	0.123
Never married (in union)	0.177	0.011	1118	1075	0.940	0.062	0.155	0.199
Currently married (in union)	0.711	0.018	1118	1075	1 333	0.025	0.675	0.747
Married before age 20	0.790	0 013	874	840	0.959	0.016	0.764	0 816
Had first sexual intercourse before 18	0.690	0 013	874	840	0.836	0.019	0.664	0.716
Children ever born	3.512	0.103	1118	1075	1 094	0.029	3.306	3.718
Children ever born to women over 40	7 488	0.249	170	161	1.020	0.033	6 990	7.986
Children surviving	2.654	0 075	1118	1075	1.032	0.028	2.504	2.804
Knowing any contraceptive method	0.956	0 007	796	764	0.974	0.007	0.942	0.970
Knowing any modern method	0.943	0 008	796	764	1 006	0.008	0.927	0.959
Ever used any contraceptive method	0.463	0.028	796	764	1.590	0 060	0.407	0.519
Currently using any method	0.211	0.020	796	764	1.404	0.095	0.171	0.251
Currently using a modern method	0.106	0.014	796	764	1.280	0.132	0.078	0 134
Currently using pill	0.055	0.010	796	764	1.240	0 182	0 035	0 075
Currently using injections	0.003	0.000	796	764	0 116	0 000	0.003	0.003
Currently using condom	0.039	0.010	796	764	1.453	0.256	0.019	0 059
Currently using female sterilisation	0.008	0.003	796	764	1 030	0 375	0 002	0.014
Currently using periodic abstinence	0 010	0.004	796	764	1.178	0.400	0 002	0 018
Currently using withdrawal	0.057	0.010	796	764	1.260	0.175	0 037	0.077
Using public sector source	0.685	0.063	97	96	1.338	0 092	0 559	0.811
Want no more children	0.215	0.015	796	764	1.060	0 070	0 185	0.245
Want to delay at least 2 years	0 414	0.023	796	764	1.333	0.056	0 368	0 460
Ideal number of children	5 778	0 092	1098	1056	1.372	0.016	5 594	5.962
Mothers received tetanus injection	0 864	0.011	1149	1103	0.974	0.013	0 842	0 886
Mothers received medical care at birth	0.330	0.037	1149	1103	2.250	0.112	0.256	0.404
Had diarrhoea in the last 2 weeks	0 270	0 016	981	941	1.100	0.059	0.238	0.302
Treated with ORS packets	0.487	0 034	264	254	1 048	0.070	0.419	0.555
Consulted medical personnel	0.529	0.043	264	254	1.310	0 081	0.443	0 615
Having health card, seen	0.814	0.025	235	226	0 997	0 031	0.764	0 864
Received BCG vaccination	0.975	0.010	235	226	0.967	0.010	0.955	0.995
Received DPT vaccination (3 doses)	0.845	0 031	235	226	1.263	0.037	0.783	0.907
Received polio vaccination (3 doses)	0.837	0 022	235	226	0.883	0.026	0.793	0 881
Received measles vaccination	0.866	0 023	235	226	1.012	0 027	0 820	0 912
Fully immunised	0.773	0 029	235	226	1.040	0.038	0 715	0 831
Weight-for-height	0.027	0.008	902	866	1 444	0 296	0.011	0.043
Height-for-age	0 481	0.021	902	866	1.244	0.044	0 439	0 523
Weight-for-age	0.260	0.013	902	866	0.857	0.050	0.234	0.286
Total fertility rate (3 years)	7.058	0.245	NA	3010	1.081	0.035	6.568	7.548
Neonatal mortality rate (0-9 years)	49 676	4.583	2174	2084	0.821	0 092	40.510	58 842
Postneonatal mortality rate (0-9 years)	81 428	5.564	2187	2097	0.880	0.068	70 300	92 556
Infant mortality rate (0-9 years)	131.104	7.105	2187	2097	0.881	0.054	116.894	145.314
Child mortality rate (0-9 years)	120.001	8.682	2209	2118	1.044	0 072	102.637	137 365
Under-five mortality rate (0-9 years)	235.372	9.123	2222	2130	0 861	0.039	217.126	253 618
MEN								
No education	0 192	0.039	276	254	1.623	0.203	0 114	0 270
With secondary education or higher	0 221	0 034	276	254	1.358	0.154	0.153	0 289
Never married (in union)	0.398	0.032	276	254	1 071	0.080	0.334	0.462
Currently married (in union)	0.590	0 034	276	254	1.135	0.058	0.522	0 658
Knowing any contraceptive method	1.000	0.000	164	150	Und	0 000	1.000	1.000
Knowing any modern method	0.988	0.008	164	150	0.980	0.008	0.972	1.000
Ever used any contraceptive method	0.831	0 035	164	150	1.204	0.042	0.761	0 901
Currently using any method	0.443	0.034	164	150	0 878	0 077	0.375	0 511
Currently using a modern method	0.236	0.034	164	150	1 025	0.144	0.168	0.304
Currently using pill	0.079	0 020	164	150	0.955	0.253	0.039	0 119
Currently using injections	0.007	0.007	164	150	1 115	1 000	0 000	0 021
Currently using condom	0.137	0.028	164	150	1 052	0 204	0.081	0.193
Currently using female sterilisation	0.012	0.009	164	150	1 016	0 750	0.000	0.030
Currently using periodic abstinence	0.081	0 025	164	150	1.170	0 309	0 031	0 131
Currently using withdrawal	0 054	0 017	164	150	0.942	0.315	0 020	0 088
Want no more children	0 142	0.029	164	150	1.061	0 204	0 084	0.200
Want to delay at least 2 years	0.343	0.024	164	150	0.638	0.070	0.295	0.391
Ideal number of children	6.046	0.287	260	239	1.569	0 047	5.472	6.620

NA = Not applicable
Und = Undefined

Table B.8 Sampling errors - Luapula province: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.156	0.027	896	726	2.196	0.173	0.102	0.210
With secondary education or higher	0.181	0.033	896	726	2.579	0.182	0.115	0.247
Never married (in union)	0.249	0.011	896	726	0.780	0.044	0.227	0.271
Currently married (in union)	0.617	0.014	896	726	0.835	0.023	0.589	0.645
Married before age 20	0.813	0.018	654	529	1.150	0.022	0.777	0.849
Had first sexual intercourse before 18	0.750	0.014	654	529	0.805	0.019	0.722	0.778
Children ever born	3.317	0.114	896	726	1 028	0.034	3 089	3.545
Children ever born to women over 40	7.872	0.383	127	103	1.379	0 049	7.106	8 638
Children surviving	2.546	0.090	896	726	1.008	0.035	2 366	2.726
Knowing any contraceptive method	0.996	0.002	554	448	0.957	0 002	0.992	1 000
Knowing any modern method	0.989	0.005	554	448	1.039	0 005	0.979	0.999
Ever used any contraceptive method	0.248	0.033	554	448	1.819	0.133	0.182	0.314
Currently using any method	0.109	0.021	554	448	1.616	0 193	0.067	0.151
Currently using a modern method	0.067	0.015	554	448	1.444	0.224	0.037	0.097
Currently using pill	0.039	0.010	554	448	1.213	0.256	0.019	0.059
Currently using injections	0.000	0.000	554	448	Und	Und	0.000	0 000
Currently using condom	0.012	0.006	554	448	1.208	0.500	0 000	0.024
Currently using female sterilisation	0.014	0.005	554	448	1.001	0.357	0.004	0.024
Currently using periodic abstinence	0.015	0.004	554	448	0.690	0.267	0.007	0.023
Currently using withdrawal	0.007	0.004	554	448	0.984	0.571	0.000	0.015
Using public sector source	0.698	0.072	39	32	0.963	0.103	0.554	0.842
Want no more children	0.190	0.022	554	448	1.296	0.116	0.146	0.234
Want to delay at least 2 years	0.433	0.024	554	448	1.134	0.055	0.385	0.481
Ideal number of children	6.173	0.093	784	635	1.237	0.015	5.987	6.359
Mothers received tetanus injection	0.855	0.029	830	671	2.016	0.034	0.797	0.913
Mothers received medical care at birth	0.270	0 035	830	671	1.895	0.130	0.200	0.340
Had diarrhoea in the last 2 weeks	0.209	0.017	675	545	1.059	0.081	0.175	0.243
Treated with ORS packets	0.548	0.042	141	114	0.967	0.077	0 464	0.632
Consulted medical personnel	0.262	0 035	141	114	0.897	0.134	0 192	0.332
Having health card, seen	0.847	0.028	150	121	0.937	0.033	0.791	0 903
Received BCG vaccination	0.987	0.009	150	121	1.001	0.009	0.969	1.000
Received DPT vaccination (3 doses)	0 908	0.037	150	121	1.556	0.041	0.834	0.982
Received polio vaccination (3 doses)	0.901	0.042	150	121	1.737	0.047	0.817	0 985
Received measles vaccination	0.907	0.026	150	121	1.091	0.029	0.855	0 959
Fully immunised	0.881	0.038	150	121	1.428	0.043	0 805	0.957
Weight-for-height	0 065	0.014	616	498	1.398	0.215	0.037	0.093
Height-for-age	0.577	0.014	616	498	0.750	0.024	0.549	0 605
Weight-for-age	0.327	0.019	616	498	0.952	0.058	0 289	0.365
Total fertility rate (3 years)	6.832	0.248	NA	1952	1.099	0.036	6 336	7.328
Neonatal mortality rate (0-9 years)	32.937	4 510	1528	1236	0.898	0.137	23.917	41 957
Postneonatal mortality rate (0-9 years)	124.834	12.319	1530	1238	1.275	0 099	100.196	149 472
Infant mortality rate (0-9 years)	157.771	11.600	1530	1238	1.081	0.074	134.571	180.971
Child mortality rate (0-9 years)	114.462	12.852	1554	1258	1.246	0.112	88 758	140.166
Under-five mortality rate (0-9 years)	254.175	15.612	1556	1259	1.129	0.061	222.951	285.399
MEN								
No education	0.051	0.015	196	151	0.930	0 294	0.021	0.081
With secondary education or higher	0.302	0.045	196	151	1.358	0.149	0.212	0.392
Never married (in union)	0.449	0.045	196	151	1.259	0.100	0.359	0 539
Currently married (in union)	0.515	0.042	196	151	1.177	0 082	0.431	0.599
Knowing any contraceptive method	1.000	0.000	101	78	Und	0.000	1.000	1.000
Knowing any modern method	1.000	0.000	101	78	Und	0.000	1.000	1.000
Ever used any contraceptive method	0.634	0.064	101	78	1.321	0.101	0.506	0.762
Currently using any method	0.268	0 059	101	78	1.324	0.220	0.150	0.386
Currently using a modern method	0.069	0.020	101	78	0.784	0.290	0.029	0.109
Currently using pill	0 049	0.020	101	78	0.924	0.408	0.009	0.089
Currently using injections	0.000	0.000	101	78	Und	Und	0.000	0.000
Currently using condom	0.010	0.010	101	78	1.013	1.000	0.000	0.030
Currently using female sterilisation	0.010	0.010	101	78	1.004	1.000	0.000	0.030
Currently using periodic abstinence	0.060	0.025	101	78	1.046	0.417	0.010	0.110
Currently using withdrawal	0.030	0.016	101	78	0.937	0.533	0.000	0.062
Want no more children	0.169	0.039	101	78	1.041	0 231	0.091	0.247
Want to delay at least 2 years	0.337	0.052	101	78	1.102	0.154	0.233	0.441
Ideal number of children	6.088	0.283	183	141	1 562	0.046	5.522	6.654

NA = Not applicable

Und = Undefined

Table B.9 Sampling errors - Lusaka province: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.078	0 009	1074	1403	1.045	0.115	0 060	0.096
With secondary education or higher	0.441	0.033	1074	1403	2 178	0.075	0.375	0 507
Never married (in union)	0.285	0.018	1074	1403	1.273	0.063	0.249	0 321
Currently married (in union)	0.568	0.020	1074	1403	1.302	0.035	0.528	0 608
Married before age 20	0 569	0.030	800	1045	1.692	0.053	0.509	0.629
Had first sexual intercourse before 18	0.622	0.024	800	1045	1.383	0.039	0.574	0.670
Children ever born	2.545	0.116	1074	1403	1.370	0.046	2.313	2.777
Children ever born to women over 40	6.788	0.215	125	164	0.752	0.032	6.358	7.218
Children surviving	2.145	0.092	1074	1403	1.267	0.043	1.961	2.329
Knowing any contraceptive method	0.982	0.004	613	796	0.784	0.004	0 974	0.990
Knowing any modern method	0 980	0.005	613	796	0.810	0.005	0 970	0.990
Ever used any contraceptive method	0 690	0.024	613	796	1.271	0 035	0.642	0.738
Currently using any method	0 353	0.025	613	796	1.293	0 071	0.303	0.403
Currently using a modern method	0.274	0.019	613	796	1.054	0.069	0.236	0 312
Currently using pill	0 139	0.015	613	796	1.071	0.108	0.109	0 169
Currently using injections	0.039	0.011	613	796	1 377	0.282	0.017	0 061
Currently using condom	0.053	0.009	613	796	0.940	0.170	0.035	0.071
Currently using female sterilisation	0.020	0.005	613	796	0.878	0 250	0.010	0 030
Currently using periodic abstinence	0.035	0.009	613	796	1.242	0 257	0.017	0.053
Currently using withdrawal	0.021	0.006	613	796	0 978	0 286	0.009	0.033
Using public sector source	0.649	0.036	219	287	1.119	0.055	0.577	0.721
Want no more children	0.328	0 027	613	796	1 415	0.082	0.274	0.382
Want to delay at least 2 years	0.388	0.026	613	796	1 296	0.067	0.336	0.440
Ideal number of children	4 435	0.099	1064	1389	1.567	0.022	4.237	4.633
Mothers received tetanus injection	0.852	0.019	830	1076	1.352	0.022	0.814	0.890
Mothers received medical care at birth	0 742	0.035	830	1076	1.922	0.047	0 672	0.812
Had diarrhoea in the last 2 weeks	0 287	0.017	700	909	0.949	0 059	0 253	0.321
Treated with ORS packets	0.566	0.035	200	261	0.964	0.062	0.496	0.636
Consulted medical personnel	0.552	0.045	200	261	1.209	0 082	0.462	0.642
Having health card, seen	0 808	0.034	154	200	1.065	0.042	0 740	0 876
Received BCG vaccination	1.000	0.000	154	200	Und	0.000	1.000	1 000
Received DPT vaccination (3 doses)	0.877	0.031	154	200	1.157	0.035	0.815	0 939
Received polio vaccination (3 doses)	0.837	0.041	154	200	1.358	0.049	0 755	0 919
Received measles vaccination	0 882	0.024	154	200	0.903	0 027	0 834	0 930
Fully immunised	0 790	0 045	154	200	1.371	0.057	0.700	0 880
Weight-for-height	0.030	0.006	606	786	0 924	0 200	0 018	0 042
Height-for-age	0.302	0 019	606	786	1 011	0 063	0.264	0 340
Weight-for-age	0.155	0.015	606	786	1 000	0.097	0.125	0 185
Total fertility rate (3 years)	4.870	0.346	NA	3892	1.305	0.071	4.178	5 562
Neonatal mortality rate (0-9 years)	35.470	5.817	1513	1962	1.116	0.164	23 836	47 104
Postneonatal mortality rate (0-9 years)	64.817	6.146	1514	1963	0.889	0.095	52.525	77.109
Infant mortality rate (0-9 years)	100.287	8.453	1514	1963	0.986	0.084	83.381	117.193
Child mortality rate (0-9 years)	82.062	8.855	1524	1976	1.048	0.108	64.352	99.772
Under-five mortality rate (0-9 years)	174 120	12.620	1525	1977	1.098	0.072	148.880	199 360
MEN								
No education	0.052	0.014	220	316	0.925	0 269	0.024	0.080
With secondary education or higher	0.566	0.034	220	316	1.017	0 060	0.498	0.634
Never married (in union)	0.422	0.032	220	316	0.967	0.076	0.358	0 486
Currently married (in union)	0.504	0 027	220	316	0 796	0.054	0.450	0.558
Knowing any contraceptive method	0.991	0.009	112	160	1.035	0.009	0 973	1.000
Knowing any modern method	0.991	0.009	112	160	1.035	0.009	0.973	1.000
Ever used any contraceptive method	0.900	0.026	112	160	0.898	0.029	0 848	0.952
Currently using any method	0.505	0.036	112	160	0.758	0.071	0.433	0.577
Currently using a modern method	0.254	0.037	112	160	0.897	0.146	0.180	0.328
Currently using pill	0 137	0.027	112	160	0.835	0.197	0.083	0.191
Currently using injections	0.009	0.009	112	160	1.025	1.000	0.000	0.027
Currently using condom	0.072	0.024	112	160	0.958	0 333	0.024	0.120
Currently using female sterilisation	0.016	0.012	112	160	0.977	0.750	0 000	0 040
Currently using periodic abstinence	0.121	0.035	112	160	1.128	0.289	0.051	0.191
Currently using withdrawal	0.070	0.024	112	160	1.008	0 343	0.022	0 118
Want no more children	0.233	0.044	112	160	1 087	0.189	0.145	0.321
Want to delay at least 2 years	0.335	0 039	112	160	0 873	0 116	0.257	0.413
Ideal number of children	4.955	0.176	218	313	0 966	0.036	4 603	5.307

NA = Not applicable

Und = Undefined

Table B.10 Sampling errors - Northern province: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.118	0.019	783	872	1.670	0.161	0.080	0.156
With secondary education or higher	0.163	0.022	783	872	1.677	0.135	0.119	0.207
Never married (in union)	0.230	0.017	783	872	1.133	0.074	0.196	0.264
Currently married (in union)	0.634	0.021	783	872	1.215	0.033	0.592	0.676
Married before age 20	0.771	0.016	579	645	0.896	0.021	0.739	0.803
Had first sexual intercourse before 18	0.633	0.021	579	645	1.072	0.033	0.591	0.675
Children ever born	3.298	0.093	783	872	0.822	0.028	3.112	3.484
Children ever born to women over 40	7.911	0.358	100	111	1.445	0.045	7.195	8.627
Children surviving	2.636	0.080	783	872	0.858	0.030	2.476	2.796
Knowing any contraceptive method	0.996	0.004	493	552	1.471	0.004	0.988	1.000
Knowing any modern method	0.981	0.006	493	552	1.024	0.006	0.969	0.993
Ever used any contraceptive method	0.840	0.027	493	552	1.633	0.032	0.786	0.894
Currently using any method	0.330	0.022	493	552	1.020	0.067	0.286	0.374
Currently using a modern method	0.080	0.016	493	552	1.304	0.200	0.048	0.112
Currently using pill	0.049	0.016	493	552	1.622	0.327	0.017	0.081
Currently using injections	0.005	0.004	493	552	1.186	0.800	0.000	0.013
Currently using condom	0.020	0.007	493	552	1.192	0.350	0.006	0.034
Currently using female sterilisation	0.006	0.003	493	552	1.020	0.500	0.000	0.012
Currently using periodic abstinence	0.008	0.004	493	552	1.005	0.500	0.000	0.016
Currently using withdrawal	0.126	0.013	493	552	0.845	0.103	0.100	0.152
Using public sector source	0.727	0.079	48	49	1.213	0.109	0.569	0.885
Want no more children	0.206	0.021	493	552	1.152	0.102	0.164	0.248
Want to delay at least 2 years	0.450	0.024	493	552	1.058	0.053	0.402	0.498
Ideal number of children	5.694	0.088	711	789	1.080	0.015	5.518	5.870
Mothers received tetanus injection	0.762	0.044	769	863	2.371	0.058	0.674	0.850
Mothers received medical care at birth	0.240	0.045	769	863	2.342	0.188	0.150	0.330
Had diarrhoea in the last 2 weeks	0.218	0.020	664	744	1.254	0.092	0.178	0.258
Treated with ORS packets	0.468	0.041	144	162	0.931	0.088	0.386	0.550
Consulted medical personnel	0.212	0.050	144	162	1.421	0.236	0.112	0.312
Having health card, seen	0.716	0.043	164	183	1.187	0.060	0.630	0.802
Received BCG vaccination	0.887	0.029	164	183	1.164	0.033	0.829	0.945
Received DPT vaccination (3 doses)	0.695	0.053	164	183	1.427	0.076	0.589	0.801
Received polio vaccination (3 doses)	0.678	0.046	164	183	1.222	0.068	0.586	0.770
Received measles vaccination	0.714	0.048	164	183	1.319	0.067	0.618	0.810
Fully immunised	0.585	0.046	164	183	1.159	0.079	0.493	0.677
Weight-for-height	0.048	0.009	598	671	1.022	0.188	0.030	0.066
Height-for-age	0.573	0.028	598	671	1.354	0.049	0.517	0.629
Weight-for-age	0.315	0.019	598	671	0.935	0.060	0.277	0.353
Total fertility rate (3 years)	7.227	0.353	NA	2399	1.151	0.049	6.521	7.933
Neonatal mortality rate (0-9 years)	36.506	4.979	1403	1573	0.919	0.136	26.548	46.464
Postneonatal mortality rate (0-9 years)	88.776	7.078	1406	1576	0.922	0.080	74.620	102.932
Infant mortality rate (0-9 years)	125.282	9.121	1406	1576	0.955	0.073	107.040	143.524
Child mortality rate (0-9 years)	85.679	9.554	1425	1598	1.084	0.112	66.571	104.787
Under-five mortality rate (0-9 years)	200.227	14.112	1428	1601	1.103	0.070	172.003	228.451
MEN								
No education	0.021	0.008	205	221	0.757	0.381	0.005	0.037
With secondary education or higher	0.333	0.023	205	221	0.700	0.069	0.287	0.379
Never married (in union)	0.484	0.043	205	221	1.232	0.089	0.398	0.570
Currently married (in union)	0.507	0.041	205	221	1.181	0.081	0.425	0.589
Knowing any contraceptive method	0.969	0.017	102	112	0.976	0.018	0.935	1.000
Knowing any modern method	0.969	0.017	102	112	0.976	0.018	0.935	1.000
Ever used any contraceptive method	0.387	0.044	102	112	0.910	0.114	0.299	0.475
Currently using any method	0.176	0.031	102	112	0.813	0.176	0.114	0.238
Currently using a modern method	0.075	0.019	102	112	0.722	0.253	0.037	0.113
Currently using pill	0.030	0.016	102	112	0.937	0.533	0.000	0.062
Currently using injections	0.000	0.000	102	112	Und	Und	0.000	0.000
Currently using condom	0.045	0.021	102	112	1.033	0.467	0.003	0.087
Currently using female sterilisation	0.000	0.000	102	112	Und	Und	0.000	0.000
Currently using periodic abstinence	0.031	0.017	102	112	0.976	0.548	0.000	0.065
Currently using withdrawal	0.069	0.023	102	112	0.902	0.333	0.023	0.115
Want no more children	0.165	0.040	102	112	1.089	0.242	0.085	0.245
Want to delay at least 2 years	0.529	0.037	102	112	0.737	0.070	0.455	0.603
Ideal number of children	6.818	0.245	205	221	1.127	0.036	6.328	7.308

NA = Not applicable
Und = Undefined

Table B.11 Sampling errors - North-Western province: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.185	0.024	567	288	1.460	0.130	0.137	0.233
With secondary education or higher	0.208	0.034	567	288	1.997	0.163	0.140	0.276
Never married (in union)	0.173	0.018	567	288	1.125	0.104	0.137	0.209
Currently married (in union)	0.683	0.023	567	288	1.188	0.034	0.637	0.729
Married before age 20	0.779	0.023	453	230	1.190	0.030	0.733	0.825
Had first sexual intercourse before 18	0.894	0.013	453	230	0.877	0.015	0.868	0.920
Children ever born	3.304	0.151	567	288	1.210	0.046	3.002	3.606
Children ever born to women over 40	7.363	0.535	76	39	1.466	0.073	6.293	8.433
Children surviving	2.809	0.121	567	288	1.097	0.043	2.567	3.051
Knowing any contraceptive method	0.987	0.005	386	197	0.938	0.005	0.977	0.997
Knowing any modern method	0.966	0.010	386	197	1.124	0.010	0.946	0.986
Ever used any contraceptive method	0.763	0.030	386	197	1.376	0.039	0.703	0.823
Currently using any method	0.417	0.024	386	197	0.968	0.058	0.369	0.465
Currently using a modern method	0.113	0.012	386	197	0.747	0.106	0.089	0.137
Currently using pill	0.031	0.009	386	197	1.053	0.290	0.013	0.049
Currently using injections	0.000	0.000	386	197	Und	Und	0.000	0.000
Currently using condom	0.036	0.011	386	197	1.217	0.306	0.014	0.058
Currently using female sterilisation	0.047	0.012	386	197	1.126	0.255	0.023	0.071
Currently using periodic abstinence	0.018	0.006	386	197	0.919	0.333	0.006	0.030
Currently using withdrawal	0.071	0.015	386	197	1.126	0.211	0.041	0.101
Using public sector source	0.445	0.100	58	29	1.521	0.225	0.245	0.645
Want no more children	0.219	0.022	386	197	1.026	0.100	0.175	0.263
Want to delay at least 2 years	0.420	0.020	386	197	0.786	0.048	0.380	0.460
Ideal number of children	5.757	0.124	566	287	1.298	0.022	5.509	6.005
Mothers received tetanus injection	0.817	0.024	565	287	1.320	0.029	0.769	0.865
Mothers received medical care at birth	0.563	0.044	565	287	1.762	0.078	0.475	0.651
Had diarrhoea in the last 2 weeks	0.174	0.017	495	252	0.985	0.098	0.140	0.208
Treated with ORS packets	0.595	0.076	86	44	1.354	0.128	0.443	0.747
Consulted medical personnel	0.619	0.070	86	44	1.260	0.113	0.479	0.759
Having health card, seen	0.829	0.043	93	47	1.098	0.052	0.743	0.915
Received BCG vaccination	0.990	0.010	93	47	0.987	0.010	0.970	1.000
Received DPT vaccination (3 doses)	0.837	0.042	93	47	1.083	0.050	0.753	0.921
Received polio vaccination (3 doses)	0.869	0.042	93	47	1.212	0.048	0.785	0.953
Received measles vaccination	0.903	0.050	93	47	1.613	0.055	0.803	1.000
Fully immunised	0.805	0.053	93	47	1.279	0.066	0.699	0.911
Weight-for-height	0.023	0.009	440	224	1.305	0.391	0.005	0.041
Height-for-age	0.474	0.030	440	224	1.187	0.063	0.414	0.534
Weight-for-age	0.271	0.024	440	224	1.039	0.089	0.223	0.319
Total fertility rate (3 years)	6.226	0.341	NA	812	1.161	0.055	5.544	6.908
Neonatal mortality rate (0-9 years)	32.818	5.749	1013	515	0.940	0.175	21.320	44.316
Postneonatal mortality rate (0-9 years)	58.311	10.256	1015	516	1.204	0.176	37.799	78.823
Infant mortality rate (0-9 years)	91.128	12.224	1016	517	1.171	0.134	66.680	115.576
Child mortality rate (0-9 years)	68.098	9.247	1021	519	1.061	0.136	49.604	86.592
Under-five mortality rate (0-9 years)	153.021	13.643	1025	521	1.056	0.089	125.735	180.307
MEN								
No education	0.031	0.017	94	48	0.932	0.548	0.000	0.065
With secondary education or higher	0.333	0.063	94	48	1.279	0.189	0.207	0.459
Never married (in union)	0.194	0.035	94	48	0.854	0.180	0.124	0.264
Currently married (in union)	0.753	0.033	94	48	0.740	0.044	0.687	0.819
Knowing any contraceptive method	1.000	0.000	71	36	Und	0.000	1.000	1.000
Knowing any modern method	0.986	0.014	71	36	0.977	0.014	0.958	1.000
Ever used any contraceptive method	0.749	0.064	71	36	1.235	0.085	0.621	0.877
Currently using any method	0.526	0.055	71	36	0.926	0.105	0.416	0.636
Currently using a modern method	0.250	0.041	71	36	0.784	0.164	0.168	0.332
Currently using pill	0.090	0.028	71	36	0.811	0.311	0.034	0.146
Currently using injections	0.000	0.000	71	36	Und	Und	0.000	0.000
Currently using condom	0.145	0.036	71	36	0.843	0.248	0.073	0.217
Currently using female sterilisation	0.014	0.013	71	36	0.964	0.929	0.000	0.040
Currently using periodic abstinence	0.014	0.014	71	36	1.017	1.000	0.000	0.042
Currently using withdrawal	0.112	0.039	71	36	1.041	0.348	0.034	0.190
Want no more children	0.200	0.053	71	36	1.100	0.265	0.094	0.306
Want to delay at least 2 years	0.533	0.073	71	36	1.220	0.137	0.387	0.679
Ideal number of children	6.300	0.250	89	45	0.940	0.040	5.800	6.800

NA = Not applicable
Und = Undefined

Table B.12 Sampling errors - Southern province: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.100	0.016	846	816	1.561	0.160	0.068	0.132
With secondary education or higher	0.215	0.031	846	816	2.219	0.144	0.153	0.277
Never married (in union)	0.245	0.014	846	816	0.966	0.057	0.217	0.273
Currently married (in union)	0.635	0.021	846	816	1.276	0.033	0.593	0.677
Married before age 20	0.695	0.020	641	621	1.080	0.029	0.655	0.735
Had first sexual intercourse before 18	0.797	0.022	641	621	1.374	0.028	0.753	0.841
Children ever born	3.146	0.092	846	816	0.902	0.029	2.962	3.330
Children ever born to women over 40	6.841	0.254	102	101	0.857	0.037	6.333	7.349
Children surviving	2.649	0.068	846	816	0.788	0.026	2.513	2.785
Knowing any contraceptive method	0.975	0.004	547	518	0.583	0.004	0.967	0.983
Knowing any modern method	0.972	0.005	547	518	0.669	0.005	0.962	0.982
Ever used any contraceptive method	0.574	0.037	547	518	1.742	0.064	0.500	0.648
Currently using any method	0.219	0.020	547	518	1.106	0.091	0.179	0.259
Currently using a modern method	0.090	0.010	547	518	0.816	0.111	0.070	0.110
Currently using pill	0.048	0.007	547	518	0.756	0.146	0.034	0.062
Currently using injections	0.005	0.005	547	518	1.667	1.000	0.000	0.015
Currently using condom	0.029	0.007	547	518	1.026	0.241	0.015	0.043
Currently using female sterilisation	0.004	0.003	547	518	1.069	0.750	0.000	0.010
Currently using periodic abstinence	0.023	0.006	547	518	0.909	0.261	0.011	0.035
Currently using withdrawal	0.039	0.011	547	518	1.341	0.282	0.017	0.061
Using public sector source	0.650	0.095	66	67	1.613	0.146	0.460	0.840
Want no more children	0.249	0.019	547	518	1.007	0.076	0.211	0.287
Want to delay at least 2 years	0.418	0.025	547	518	1.178	0.060	0.368	0.468
Ideal number of children	5.576	0.066	842	812	0.846	0.012	5.444	5.708
Mothers received tetanus injection	0.828	0.016	805	764	1.074	0.019	0.796	0.860
Mothers received medical care at birth	0.278	0.035	805	764	1.845	0.126	0.208	0.348
Had diarrhoea in the last 2 weeks	0.224	0.019	693	657	1.183	0.085	0.186	0.262
Treated with ORS packets	0.649	0.041	155	147	1.038	0.063	0.567	0.731
Consulted medical personnel	0.722	0.043	155	147	1.167	0.060	0.636	0.808
Having health card, seen	0.907	0.021	161	153	0.921	0.023	0.865	0.949
Received BCG vaccination	0.994	0.006	161	153	1.031	0.006	0.982	1.000
Received DPT vaccination (3 doses)	0.942	0.032	161	153	1.734	0.034	0.878	1.000
Received polio vaccination (3 doses)	0.948	0.031	161	153	1.745	0.033	0.886	1.000
Received measles vaccination	0.968	0.015	161	153	1.093	0.015	0.938	0.998
Fully immunised	0.910	0.044	161	153	1.952	0.048	0.822	0.998
Weight-for-height	0.035	0.007	597	564	0.922	0.200	0.021	0.049
Height-for-age	0.395	0.023	597	564	1.108	0.058	0.349	0.441
Weight-for-age	0.211	0.022	597	564	1.226	0.104	0.167	0.255
Total fertility rate (3 years)	6.162	0.313	NA	2257	1.162	0.051	5.536	6.788
Neonatal mortality rate (0-9 years)	26.019	4.355	1501	1427	1.021	0.167	17.309	34.729
Postneonatal mortality rate (0-9 years)	40.221	5.186	1503	1429	0.944	0.129	29.849	50.593
Infant mortality rate (0-9 years)	66.240	7.376	1503	1429	1.044	0.111	51.488	80.992
Child mortality rate (0-9 years)	87.934	9.783	1512	1438	1.176	0.111	68.368	107.500
Under-five mortality rate (0-9 years)	148.349	10.890	1514	1441	1.099	0.073	126.569	170.129
MEN								
No education	0.056	0.020	189	173	1.163	0.357	0.016	0.096
With secondary education or higher	0.336	0.040	189	173	1.164	0.119	0.256	0.416
Never married (in union)	0.401	0.045	189	173	1.258	0.112	0.311	0.491
Currently married (in union)	0.551	0.047	189	173	1.305	0.085	0.457	0.645
Knowing any contraceptive method	0.974	0.015	106	95	0.979	0.015	0.944	1.000
Knowing any modern method	0.974	0.015	106	95	0.979	0.015	0.944	1.000
Ever used any contraceptive method	0.638	0.041	106	95	0.870	0.064	0.556	0.720
Currently using any method	0.296	0.034	106	95	0.760	0.115	0.228	0.364
Currently using a modern method	0.178	0.039	106	95	1.040	0.219	0.100	0.256
Currently using pill	0.116	0.028	106	95	0.888	0.241	0.060	0.172
Currently using injections	0.000	0.000	106	95	Und	Und	0.000	0.000
Currently using condom	0.040	0.022	106	95	1.171	0.550	0.000	0.084
Currently using female sterilisation	0.009	0.009	106	95	0.970	1.000	0.000	0.027
Currently using periodic abstinence	0.052	0.024	106	95	1.094	0.462	0.004	0.100
Currently using withdrawal	0.009	0.008	106	95	0.920	0.889	0.000	0.025
Want no more children	0.142	0.029	106	95	0.859	0.204	0.084	0.200
Want to delay at least 2 years	0.298	0.064	106	95	1.444	0.215	0.170	0.426
Ideal number of children	6.143	0.209	180	166	0.888	0.034	5.725	6.561

NA = Not applicable
Und = Undefined

Table B.13 Sampling errors - Western province: Zambia 1996

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.186	0.030	860	600	2.277	0.161	0.126	0.246
With secondary education or higher	0.201	0.027	860	600	1.944	0.134	0.147	0.255
Never married (in union)	0.328	0.027	860	600	1.665	0.082	0.274	0.382
Currently married (in union)	0.497	0.029	860	600	1.678	0.058	0.439	0.555
Married before age 20	0.573	0.025	640	446	1.288	0.044	0.523	0.623
Had first sexual intercourse before 18	0.812	0.016	640	446	1.056	0.020	0.780	0.844
Children ever born	2.914	0.120	860	600	1.198	0.041	2.674	3.154
Children ever born to women over 40	6.701	0.193	147	103	0.809	0.029	6.315	7.087
Children surviving	2.296	0.083	860	600	1.023	0.036	2.130	2.462
Knowing any contraceptive method	0.974	0.011	428	298	1.454	0.011	0.952	0.996
Knowing any modern method	0.958	0.016	428	298	1.644	0.017	0.926	0.990
Ever used any contraceptive method	0.482	0.026	428	298	1.083	0.054	0.430	0.534
Currently using any method	0.187	0.018	428	298	0.961	0.096	0.151	0.223
Currently using a modern method	0.087	0.016	428	298	1.158	0.184	0.055	0.119
Currently using pill	0.047	0.011	428	298	1.060	0.234	0.025	0.069
Currently using injections	0.000	0.000	428	298	Und	Und	0.000	0.000
Currently using condom	0.019	0.005	428	298	0.813	0.263	0.009	0.029
Currently using female sterilisation	0.019	0.008	428	298	1.190	0.421	0.003	0.035
Currently using periodic abstinence	0.009	0.004	428	298	0.781	0.444	0.001	0.017
Currently using withdrawal	0.051	0.012	428	298	1.136	0.235	0.027	0.075
Using public sector source	0.776	0.065	67	47	1.257	0.084	0.646	0.906
Want no more children	0.246	0.026	428	298	1.259	0.106	0.194	0.298
Want to delay at least 2 years	0.311	0.022	428	298	0.984	0.071	0.267	0.355
Ideal number of children	6.302	0.137	856	597	1.465	0.022	6.028	6.576
Mothers received tetanus injection	0.867	0.017	659	460	1.098	0.020	0.833	0.901
Mothers received medical care at birth	0.373	0.037	659	460	1.690	0.099	0.299	0.447
Had diarrhoea in the last 2 weeks	0.233	0.019	546	381	1.062	0.082	0.195	0.271
Treated with ORS packets	0.559	0.043	127	89	0.931	0.077	0.473	0.645
Consulted medical personnel	0.638	0.063	127	89	1.437	0.099	0.512	0.764
Having health card, seen	0.842	0.026	114	80	0.729	0.031	0.790	0.894
Received BCG vaccination	0.974	0.015	114	80	0.978	0.015	0.944	1.000
Received DPT vaccination (3 doses)	0.842	0.038	114	80	1.102	0.045	0.766	0.918
Received polio vaccination (3 doses)	0.825	0.042	114	80	1.163	0.051	0.741	0.909
Received measles vaccination	0.799	0.049	114	80	1.262	0.061	0.701	0.897
Fully immunised	0.737	0.056	114	80	1.316	0.076	0.625	0.849
Weight-for-height	0.053	0.008	467	326	0.801	0.151	0.037	0.069
Height-for-age	0.449	0.030	467	326	1.301	0.067	0.389	0.509
Weight-for-age	0.321	0.022	467	326	0.996	0.069	0.277	0.365
Total fertility rate (3 years)	5.532	0.252	NA	1673	1.140	0.046	5.028	6.036
Neonatal mortality rate (0-9 years)	55.785	8.893	1216	848	1.201	0.159	37.999	73.571
Postneonatal mortality rate (0-9 years)	73.347	9.562	1219	850	1.197	0.130	54.223	92.471
Infant mortality rate (0-9 years)	129.132	13.733	1219	850	1.249	0.106	101.666	156.598
Child mortality rate (0-9 years)	82.769	8.578	1230	858	0.910	0.104	65.613	99.925
Under-five mortality rate (0-9 years)	201.213	14.776	1233	860	1.124	0.073	171.661	230.765
MEN								
No education	0.119	0.033	196	132	1.441	0.277	0.053	0.185
With secondary education or higher	0.317	0.044	196	132	1.333	0.139	0.229	0.405
Never married (in union)	0.500	0.026	196	132	0.727	0.052	0.448	0.552
Currently married (in union)	0.424	0.039	196	132	1.109	0.092	0.346	0.502
Knowing any contraceptive method	0.963	0.018	83	56	0.872	0.019	0.927	0.999
Knowing any modern method	0.963	0.018	83	56	0.872	0.019	0.927	0.999
Ever used any contraceptive method	0.517	0.054	83	56	0.981	0.104	0.409	0.625
Currently using any method	0.250	0.052	83	56	1.077	0.208	0.146	0.354
Currently using a modern method	0.226	0.050	83	56	1.073	0.221	0.126	0.326
Currently using pill	0.141	0.044	83	56	1.137	0.312	0.053	0.229
Currently using injections	0.000	0.000	83	56	Und	Und	0.000	0.000
Currently using condom	0.061	0.029	83	56	1.114	0.475	0.003	0.119
Currently using female sterilisation	0.024	0.018	83	56	1.041	0.750	0.000	0.060
Currently using periodic abstinence	0.000	0.000	83	56	Und	Und	0.000	0.000
Currently using withdrawal	0.024	0.016	83	56	0.953	0.667	0.000	0.056
Want no more children	0.130	0.045	83	56	1.216	0.346	0.040	0.220
Want to delay at least 2 years	0.339	0.039	83	56	0.739	0.115	0.261	0.417
Ideal number of children	7.225	0.315	174	117	0.831	0.044	6.595	7.855

NA = Not applicable
Und = Undefined

Table B.14 Sampling errors of differences

Sampling errors of the difference between values of selected indicators for currently married women from the 1992 and 1996 ZDHS

	Value R_{92} (1)	SE (R_{92}) (2)	Value R_{96} (3)	SE (R_{96}) (4)	Coefficient of correlation (5)	R_{96}-R_{92} (6)	SE (R_{96}-R_{92}) (7)	Col.(7)/ Col.(6) (8)	Col.(6)- 2(Col.(7)) (9)	Col.(6)+ 2(Col.(7)) (10)
Know a method										
Total	0.940	0.005	0.985	0.002	0.103	0.045	0.005	0.111	0.035	0.055
Urban	0.972	0.005	0.990	0.002	0.036	0.018	0.005	0.278	0.008	0.028
Rural	0.913	0.008	0.979	0.004	0.067	0.066	0.009	0.136	0.048	0.084
Central	0.751	0.029	0.997	0.003	0.491	0.246	0.028	0.114	0.190	0.302
Copperbelt	0.992	0.003	0.997	0.002	0.360	0.005	0.003	0.600	-0.001	0.011
Eastern	0.925	0.010	0.960	0.011	0.083	0.035	0.014	0.400	0.007	0.063
Luapula	0.941	0.017	0.997	0.003	0.150	0.056	0.017	0.304	0.022	0.090
Lusaka	0.957	0.008	0.981	0.004	0.053	0.024	0.009	0.375	0.006	0.042
Northern	0.961	0.011	1.000	0.000	0.000	0.039	0.011	0.282	0.017	0.061
North-Western	0.917	0.036	0.980	0.005	-0.333	0.063	0.038	0.603	-0.013	0.139
Southern	0.971	0.007	0.974	0.006	0.299	0.003	0.008	2.667	-0.013	0.019
Western	0.956	0.018	0.967	0.017	0.589	0.011	0.016	1.455	-0.021	0.043
Know a modern method										
Total	0.908	0.007	0.979	0.002	0.232	0.071	0.007	0.099	0.057	0.085
Urban	0.965	0.005	0.989	0.002	-0.012	0.024	0.005	0.208	0.014	0.034
Rural	0.860	0.011	0.968	0.004	0.213	0.108	0.011	0.102	0.086	0.130
Central	0.720	0.031	0.994	0.005	0.525	0.274	0.029	0.106	0.216	0.332
Copperbelt	0.989	0.004	0.995	0.003	0.239	0.006	0.004	0.667	-0.002	0.014
Eastern	0.897	0.012	0.949	0.011	0.296	0.052	0.014	0.269	0.024	0.080
Luapula	0.888	0.017	0.991	0.005	0.190	0.103	0.017	0.165	0.069	0.137
Lusaka	0.947	0.008	0.979	0.005	0.019	0.032	0.009	0.281	0.014	0.050
Northern	0.839	0.035	0.979	0.005	0.678	0.140	0.032	0.229	0.076	0.204
North-Western	0.909	0.036	0.954	0.009	-0.189	0.045	0.039	0.867	-0.033	0.123
Southern	0.954	0.016	0.974	0.006	0.457	0.020	0.014	0.700	-0.008	0.048
Western	0.854	0.039	0.948	0.023	0.472	0.094	0.035	0.372	0.024	0.164
Ever used a method										
Total	0.491	0.013	0.614	0.013	0.577	0.123	0.012	0.098	0.099	0.147
Urban	0.592	0.016	0.722	0.016	0.444	0.130	0.017	0.131	0.096	0.164
Rural	0 406	0.018	0.495	0.021	0.546	0.089	0.019	0.213	0.051	0.127
Central	0.331	0.029	0.539	0.045	0.453	0.208	0.041	0.197	0.126	0 290
Copperbelt	0.594	0.027	0.695	0.032	0.479	0.101	0.030	0.297	0.041	0.161
Eastern	0.386	0.033	0.494	0.026	0.831	0.108	0.018	0.167	0.072	0.144
Luapula	0.186	0.036	0.238	0.059	0.493	0.052	0.052	1.000	-0.052	0.156
Lusaka	0.595	0.022	0.690	0.024	0.426	0.095	0.025	0.263	0.045	0.145
Northern	0.798	0.009	0.864	0.035	-0.234	0.066	0.038	0.576	-0.010	0.142
North-Western	0.481	0.033	0.730	0 050	-0.110	0.249	0.063	0.253	0.123	0 375
Southern	0.327	0.042	0.549	0.023	0.376	0.222	0.040	0.180	0.142	0.302
Western	0.620	0.033	0.500	0.030	0.136	-0.120	0.041	-0.342	-0.202	-0.038
Currently using a method										
Total	0.153	0.009	0.275	0.010	0.418	0.122	0.010	0.082	0.102	0.142
Urban	0.208	0.014	0.339	0.015	0.385	0.131	0.016	0.122	0.099	0.163
Rural	0.106	0.011	0.205	0.012	0.258	0.099	0.014	0.141	0.071	0.127
Central	0.093	0.023	0.178	0.041	0.273	0.085	0.041	0.482	0.003	0.167
Copperbelt	0.190	0.016	0.299	0.020	0.415	0.109	0.020	0.183	0.069	0.149
Eastern	0.098	0.027	0.223	0.024	0.548	0.125	0.024	0.192	0.077	0.173
Luapula	0.067	0.025	0.109	0.031	0.678	0.042	0.023	0.548	-0.004	0.088
Lusaka	0.238	0.025	0.355	0.026	0.375	0.117	0.029	0.248	0.059	0.175
Northern	0.209	0 033	0.374	0.031	0.009	0.165	0 045	0.273	0.075	0.255
North-Western	0.095	0.019	0.406	0.035	0.423	0.311	0.032	0.103	0.247	0.375
Southern	0.085	0.018	0.223	0.024	0.731	0.138	0.016	0.116	0.106	0.170
Western	0.184	0.015	0.178	0.022	-0.009	-0.006	0.027	-4.500	-0.060	0.048
Currently using a modern method										
Total	0.087	0.007	0.169	0.008	0.513	0.082	0.007	0.085	0.068	0.096
Urban	0.151	0.013	0.245	0.012	0.380	0.094	0.014	0.149	0.066	0 122
Rural	0.032	0.005	0.087	0.011	0.279	0.055	0.011	0.200	0.033	0.077
Central	0.068	0.017	0.150	0.039	0.269	0.082	0.038	0.463	0 006	0.158
Copperbelt	0.133	0.019	0.205	0.017	0.489	0.072	0.018	0.250	0.036	0.108
Eastern	0.047	0.013	0.121	0.021	0.437	0.074	0.019	0.257	0 036	0.112
Luapula	0.034	0.020	0.064	0.023	0.880	0.030	0.011	0.367	0.008	0 052
Lusaka	0.173	0.021	0.273	0.020	0.329	0.100	0.024	0.240	0.052	0.148
Northern	0.038	0.019	0.115	0.024	0.262	0.077	0.026	0.338	0.025	0 129
North-Western	0.059	0.016	0.116	0.020	0.387	0.057	0.020	0.351	0.017	0.097
Southern	0.043	0.011	0.108	0.018	0.683	0.065	0.013	0.200	0.039	0.091
Western	0.029	0.015	0.074	0.018	0.297	0.045	0.020	0.444	0.005	0.085

Note: Values in this table will differ from those in the 1992 and 1996 ZDHS reports because they are based only on the 213 clusters common to both surveys.

APPENDIX C

DATA QUALITY TABLES

APPENDIX C

DATA QUALITY TABLES

The purpose of this Appendix is to provide the data user with a view of the general quality of the ZDHS data. The tables in this appendix refer to possible *non-sampling* errors: digit preference, rounding or heaping on certain ages or dates; omission of events occurring further in the past; deliberate distortion of information by some interviewers in an attempt to lighten their workloads; non-cooperation of the respondent in providing information or refusal to be measured and weighed, etc. A description of the magnitude of such non-sampling errors is provided in the following paragraphs.

The distribution of the de facto household population by single year of age is presented in Table C.1. The data show very little preference to report ages that end in zeros and fives (age "heaping" or digit preference) that is commonly found in countries where ages are not known well. There is some evidence of irregularities in the age distribution. However, it is difficult to find any pattern to these results and they may be due to random errors.

There is some evidence that interviewers "displaced" women age 15 and 49 years and men age 15 and 59 years outside of the eligible age range (15-49) and (15-59) respectively, presumably in order to avoid the need to interview them. For example, the number of women and men age 15 is substantially lower than the number age 16, 14 and 13. For women, the number reported at age 14 (572) is more than that reported at age 13 (485) and 178 more than that at age 15 (394). At the other end of the range, the number of women age 49 is lower than the number age 50. The number of men age 59 is also lower than the number age 60, implying that interviewers assigned an age of 50 (or 51) and 60 (or 61) to women and men respectively, in order to avoid interviewing them. A comparative study of DHS surveys noted some severe displacement out of the eligible age range (Rutstein and Bicego, 1990).

Differential rates of response by age for female and male respondents are also shown in Table C.2. The data do not indicate any strong pattern of response rates by age. The five-year age distribution of respondents is as expected, namely that the percentage of respondents decreases with age.

Information on the completeness of reporting selected important variables is provided in Table C.3. Overall, the percentage of cases with missing information is extraordinarily low. Month of birth was missing for one percent of births that occurred in the 15 years before the survey and remarkably, both month and year were recorded for all the cases. Age at death was missing for an infinitesimal proportion of non-surviving births. Only for the size of child at birth and the anthropometric measurements are there sizeable proportions for which data are missing. While about 10 percent of births in the last 59 months have missing information on size at birth, 8 percent of children under five were not measured. The missing information on the size of the child at birth could be attributed to the child not having been weighed at birth or interviewer negligence. The computer programs have treated the "don't know" and "not stated" as missing information. The main reason for not measuring children was that the child was not present, either because he/she did not live with the mother or because he/she was not at home. Very few mothers refused to let their children be measured.

According to Tahle C.4, the information on birth dating is of good quality: both month and year of birth were provided for 98 percent of all births and for 99 percent of surviving children. As expected, information on birth dates is more complete for children who were still living at the time of the survey than for those who had died. Still, both month and year of birth were provided for 97 percent of dead children. Sex ratios are somewhat on the low side; the expected value would be 102 to 103, while those from the ZDHS are often less than 100. This indicates some possible undercounting of male births.

There is very little evidence of transference of births out of 1991 to earlier years. In fact, the ratio of births in 1991 to the average of the two adjoining years is 94 which shows fewer births in 1991 than the average births of the two adjoining years.

Measurement of childhood deaths through retrospective household surveys often suffers from underreporting of deaths, in particular those deaths which occur very early in infancy. If early neonatal deaths are selectively underreported, the result would be an abnormally low ratio of deaths under seven days to all neonatal deaths and an abnormally low ratio of neonatal to infant mortality. Changes in these ratios over time can be examined to detect the hypothesis that underreporting of early infant deaths is more common for births that occurred longer before the survey.

Table C.5 shows the distribution of deaths under one month of age by age at death in days, while Table C.6 shows the distribution of deaths under two years of age by age at death in months. The data suggest that early infant deaths have *not* been severely underreported in the ZDHS, since the percentage of neonatal deaths occurring in the first 6 days (next-to-last row in Table C.5) and the percentage of infant deaths occurring during the neonatal period (next-to-last row in Table C.6) are reasonable. The former proportions increase over time, implying that some early infant deaths were not reported in the earlier periods; however, much, if not all, of this pattern can be attributed to heaping on 7 days at death, which is more severe for the earlier periods.

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Zambia 1996

	Males		Females			Males		Females	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
<1	741	4.0	712	3.7	37	157	0.8	132	0.7
1	658	3.5	719	3.7	38	192	1.0	184	0.9
2	654	3.5	678	3.5	39	143	0.8	157	0.8
3	607	3.3	665	3.4	40	155	0.8	148	0.8
4	627	3.4	618	3.2	41	88	0.5	104	0.5
5	560	3.0	590	3.0	42	123	0.7	135	0.7
6	661	3.6	683	3.5	43	118	0.6	114	0.6
7	574	3.1	544	2.8	44	100	0.5	108	0.6
8	589	3.2	544	2.8	45	76	0.4	81	0.4
9	559	3.0	574	3.0	46	104	0.6	99	0.5
10	584	3.1	630	3.2	47	77	0.4	110	0.6
11	483	2.6	489	2.5	48	92	0.5	122	0.6
12	562	3.0	585	3.0	49	89	0.5	108	0.6
13	495	2.7	485	2.5	50	72	0.4	121	0.6
14	577	3.1	572	2.9	51	64	0.3	101	0.5
15	409	2.2	394	2.0	52	70	0.4	114	0.6
16	435	2.3	470	2.4	53	58	0.3	94	0.5
17	400	2.2	400	2.1	54	105	0.6	121	0.6
18	420	2.3	461	2.4	55	56	0.3	72	0.4
19	381	2.1	405	2.1	56	72	0.4	117	0.6
20	422	2.3	455	2.3	57	57	0.3	78	0.4
21	331	1.8	373	1.9	58	59	0.3	109	0.6
22	340	1.8	353	1.8	59	63	0.3	63	0.3
23	310	1.7	387	2.0	60	77	0.4	75	0.4
24	337	1.8	399	2.1	61	70	0.4	58	0.3
25	244	1.3	275	1.4	62	47	0.3	57	0.3
26	301	1.6	308	1.6	63	54	0.3	56	0.3
27	263	1.4	273	1.4	64	97	0.5	66	0.3
28	336	1.8	334	1.7	65	57	0.3	42	0.2
29	185	1.0	185	1.0	66	45	0.2	56	0.3
30	223	1.2	247	1.3	67	36	0.2	41	0.2
31	174	0.9	246	1.3	68	56	0.3	59	0.3
32	287	1.5	274	1.4	69	46	0.2	37	0.2
33	189	1.0	182	0.9	70+	327	1.8	217	1.1
34	199	1.1	207	1.1	Don't know/ missing	1	0.0	1	0.0
35	162	0.9	154	0.8					
36	192	1.0	185	1.0					
					Total	18,575	100.0	19,407	100.0

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.

Table C.2 Age distribution of eligible and interviewed women and men

Percent distribution of the de facto household population of women age 10-54 and men age 10-69, five-year age distribution of interviewed women age 15-49 and men age 15-59, and the percentage of eligible women and men who were interviewed (weighted) by five-year age groups, Zambia 1996

Age	Household population		Persons interviewed		Percent interviewed (weighted)
	Number	Percent	Number	Percent	
			WOMEN		
10-14	2,761	NA	NA	NA	NA
15-19	2,129	24.9	2,043	24.7	95.9
20-24	1,967	23.0	1,902	23.0	96.7
25-29	1,375	16.1	1,333	16.1	96.9
30-34	1,156	13.5	1,127	13.6	97.5
35-39	811	9.5	781	9.4	96.2
40-44	609	7.1	583	7.0	95.7
45-49	520	6.1	506	6.1	97.3
50-54	549	NA	NA	NA	NA
15-49	8,568	100.0	8,274	100.0	96.6
			MEN		
10-14	721	NA	NA	NA	NA
15-19	522	24.3	479	24.8	91.8
20-24	459	21.3	417	21.6	90.8
25-29	316	14.7	274	14.2	86.6
30-34	267	12.4	235	12.2	87.9
35-39	208	9.7	189	9.8	91.1
40-44	147	6.8	130	6.7	88.1
45-49	95	4.4	84	4.3	87.9
50-54	77	3.6	67	3.5	87.8
55-59	60	2.8	56	2.9	93.5
60-64	107	NA	NA	NA	NA
65+	79	NA	NA	NA	NA
15-59	2,152	100.0	1,932	100.0	89.8

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.
NA = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Zambia 1996

Subject	Reference group	Percentage missing information	Number of cases
Birth date	Births in last 15 years		
Month only		1.02	17,535
Month and year		0.00	17,535
Age at death	Deaths to births in last 15 years	0.19	3,076
Age/date at first union[1]	Ever-married women	0.49	5,989
Respondent's education	All women	0.02	8,021
Child's size at birth	Births in last 35 months	9.53	3,396
Anthropometry[2]	Living children age 0-35 months		
Height missing		7.94	6,109
Weight missing		7.35	6,109
Height or weight missing		8.05	6,109
Diarrhoea in last 2 weeks	Living children age 0-35 months	3.55	6,109

[1] Both year and age missing
[2] Child not measured

Table C.4 Births by calendar years

Distribution of births by calendar years for living (L), dead (D), and all (T) children, according to reporting completeness, sex ratio at birth, and ratio of births by calendar year, Zambia 1996

	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar ratio[3]			Male			Female		
Year	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T
96	1,242	241	1,483	99.5	97.7	99.2	93.5	93.2	93.5	NA	NA	NA	600	116	716	642	125	766
95	1,172	247	1,419	99.7	97.5	99.3	84.9	110.4	88.9	99.2	96.0	98.6	538	130	668	634	117	751
94	1,121	274	1,395	99.3	98.2	99.1	101.7	124.7	105.8	105.6	123.5	108.7	565	152	717	556	122	678
93	951	197	1,148	99.7	96.0	99.0	89.1	87.2	88.8	85.6	66.6	81.6	448	92	540	503	105	608
92	1,100	317	1,417	99.1	98.3	98.9	92.8	110.3	96.5	117.3	144.5	122.5	530	166	696	571	151	721
91	925	242	1,167	99.2	95.0	98.3	92.7	124.2	98.5	94.4	92.8	94.0	445	134	579	480	108	588
90	861	204	1,065	98.6	97.5	98.4	101.5	77.9	96.5	96.3	94.7	96.0	434	89	523	427	115	542
89	863	189	1,052	98.8	98.8	98.8	97.4	122.2	101.4	102.2	88.8	99.5	426	104	530	437	85	522
88	827	222	1,049	99.0	97.7	98.8	104.3	118.8	107.2	100.1	116.5	103.2	422	120	543	405	101	506
87	789	192	980	98.6	97.3	98.3	94.9	122.7	99.8	NA	NA	NA	384	106	490	405	86	491
92-96	5,586	1,276	6,862	99.5	97.6	99.1	92.3	105.8	94.7	NA	NA	NA	2,681	656	3,337	2,905	620	3,525
87-91	4,265	1,048	5,313	98.9	97.2	98.5	98.0	111.8	100.6	NA	NA	NA	2,111	553	2,664	2,154	495	2,649
82-86	3,299	744	4,043	98.9	95.9	98.3	96.7	101.2	97.5	NA	NA	NA	1,622	374	1,996	1,677	370	2,047
77-81	2,286	567	2,853	98.2	94.8	97.5	103.6	119.8	106.6	NA	NA	NA	1,163	309	1,472	1,123	258	1,381
< 77	1,940	704	2,644	98.3	95.7	97.6	112.9	107.2	111.4	NA	NA	NA	1,029	364	1,393	911	340	1,251
All	17,375	4,339	21,715	98.9	96.5	98.4	98.1	108.4	100.1	NA	NA	NA	8,606	2,257	10,863	8,769	2,083	10,852

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 C.5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods preceding the survey, Zambia 1996

Age at death (in days)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1	54	43	42	21	159
1	38	33	15	14	100
2	23	18	10	17	69
3	22	16	17	5	60
4	7	11	7	4	28
5	8	6	5	1	20
6	5	3	1	1	11
7	29	33	30	27	119
8	2	1	3	0	6
9	2	1	1	3	6
10	6	2	0	2	9
11	1	0	0	0	1
12	2	3	1	0	6
13	0	0	1	0	1
14	36	29	21	15	102
15	0	0	1	0	1
16	0	1	0	0	1
17	0	0	1	0	1
18	0	2	0	0	2
19	1	0	0	0	1
20	0	3	1	1	5
21	10	11	11	8	40
23	1	0	0	0	1
25	0	1	0	0	1
26	0	1	0	0	1
28	1	3	0	1	4
30	2	0	5	1	9
Total 0-30	249	219	174	122	765
Percent early neonatal[1]	62.8	59.1	56.4	51.8	58.5

[1] (0-6 days/0-30 days) * 100

Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at ages under one month, for five-year periods preceding the survey, Zambia 1996

Age at death (in months)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1[a]	251	219	174	123	767
1	52	37	32	21	141
2	39	40	31	18	128
3	65	34	20	21	140
4	51	47	27	12	136
5	33	28	18	14	93
6	38	52	39	29	158
7	40	33	13	12	97
8	45	36	40	17	138
9	43	45	20	16	125
10	24	31	7	11	72
11	33	24	10	4	71
12	41	46	35	21	143
13	12	9	16	3	40
14	16	13	9	6	44
15	17	12	6	5	41
16	16	13	8	4	41
17	8	8	5	2	23
18	22	33	17	19	91
19	11	11	11	2	36
20	14	14	11	4	43
21	9	6	6	3	25
22	8	6	4	0	18
23	3	5	5	1	14
24+	4	3	1	1	10
1 year	50	59	32	38	179
Total 0-11	713	626	430	296	2,065
Percent neonatal[b]	35.2	35.0	40.5	41.4	37.1

[a] Includes deaths under 1 month reported in days
[b] (Under 1 month/under 1 year) * 100

APPENDIX D

PERSONS INVOLVED IN THE ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY

APPENDIX D

PERSONS INVOLVED IN THE 1996 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY

David Diangamo (Director of Census and Statistics)
Sam Nyaywa (Chairman, National Health Surveys Management Committee)
Emmanuel Silanda (Assistant Director of Census and Statistics)

Survey Director
Kumbutso Dzekedzeke

Assistant Director
Margaret Tembo

Trainers
Kumbutso Dzekedzeke
Record Malungo
Sikwanda Makono
Chipo Sikazwe
Wingrey Michelo
Augustus Kapungwe
Wendy Kalunde
Dorothy Namuchimba

Guest Lecturer
Mwape Lubilo

Sampler
Batista Chilopa

Data Processing Staff
Samantha Mulendema
George Namasiku
Makoselo C. Bowa
Norrias Chisamu
Kelvin Katungu
Jayne Mundia
Evans Mwiya
Palo Mutale
Winter Njapau
Boniface Haachongo
Shyton Sakala

Office Editors
Margaret Tembo
Elijah Malumo
Ivy Dimuna
Mukatimui Sifuniso

Typists
Webster Chileshe
Makoselo C. Bowa
Anthony Nkelo

Data Collection Teams

Central Province

Supervisor: Alfred M. Kaili
Field Editor: Beatrice Shankanga
Interviewers:
Richard Siakanede
Edith Mpukani
Majorie K. Chishimba
Agatha Chinyimba
Caren Wamundila

Copperbelt Province I

Supervisor: Dick Chitansha
Field Editor: Mary N. Benkeni
Interviewers:
Mike M. Yambwa
Charity Banda
Nellie Chibamba
Melody Kunda
Angelina Chipemba

Copperbelt Province II

Supervisor: Mary C. Mkandawire
Field Editor: Batista Chilopa
Interviewers:
Edward Phiri
Annie Nakambale
Tasila Mushanga
Beatrice L. Nakaanda
Juness Kunda

Eastern Province

Supervisor: Ackim S. Tembo
Field Editor: Agnes Zimba
Interviewers:
Dick M. Phiri
Joy C. Mbewe
Eneles B. Lukhelo
Grace Banda
Rosaria Longwa

Luapula Province

Supervisor: Patrick M. Chewe
Field Editor: Miniver Mungolo
Interviewers:
Webster Malama
Annie Kaoma
Dorothy L. Machimu
Justina M. N. Katebe
Victoria C. Chilalika

Lusaka Province I

Supervisor: Mushota Kabaso
Field Editor: Mambwe Nakamba
Interviewers:
Moses S. Nyirenda
Grace Lipalile
Margaret Hamayuwa
Dorothy Tembo
Gwen Mutemwakwenda

Lusaka Province II

Supervisor: Mary S. Tembo
Field Editor: Milika Nyirenda
Interviewers:
Anderson Ngoma
Rosario Ngoma
Christine Chuzu
Njavwa Nakamba
Mary Njovu
Boniface Haachongo

Northern Province

Supervisor: Bupe Musonda
Field Editor: Mirriam Nakufa
Interviewers:
Geofrey Nsama
Annie Mhlanga
Mercy Nachande
Lucy Nachilima
Mildred C. Zimba

North-Western Province

Supervisor: Abiun K. Machona
Field Editor: Mary Fweka
Interviewers:
Justine K. Makasa
Riza Sweta
Annie Maseka
Dorothy Matondo
Catherine M.Sakapondi

Southern Province

Supervisor: Webster Chileshe
Field Editor: Agnes Simoonga
Interviewers:
Steadwell Mulambo
Nellie Muchimba
Cotridah H. Lweendo
Rosemary Chibbonta
Dorothy Chilekwa

Western Province

Supervisor: Joseph N. Sitali
Field Editor: Cecilia Kalaluka
Interviewers:
Chipalo Kaliki
Munalula Ilukena
Macubeni Mubuyaeta
Charity Mutti
Harriet K. Kalimukwa
Martha B. Mapanza

APPENDIX E

QUESTIONNAIRE

1996 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY
HOUSEHOLD QUESTIONNAIRE

IDENTIFICATION	
CLUSTER NUMBER.....	
PROVINCE _____	
DISTRICT _____	
HOUSEHOLD NUMBER.....	
NAME OF HOUSEHOLD HEAD _____	
URBAN/RURAL (urban=1, rural=2).....	
LUSAKA/OTHER CITY/TOWN/VILLAGE..... (Lusaka=1, Other city=2, Town=3, Village=4)	
HOUSEHOLD SELECTED FOR MEN'S SURVEY? (YES=1, NO=2).....	

INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY / MONTH / YEAR
INTERVIEWER'S NAME	_____	_____	_____	NAME
RESULT*	_____	_____	_____	RESULT
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS
TIME	_____	_____		

*RESULT CODES:
1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL IN HOUSEHOLD
TOTAL ELIG. WOMEN
TOTAL ELIG. MEN
LINE NUMBER OF RESP. TO HOUSEHOLD SCHEDULE

LANGUAGE OF QUESTIONNAIRE: ENGLISH [0 | 1]

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

H EN 1

HOUSEHOLD SCHEDULE

Now we would like some information about the people who usually live in your household or who are staying with you now.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD*	RESIDENCE		SEX	AGE	EDUCATION (IF AGE 6 YEARS OR OLDER)			MARITAL STATUS IF AGE 12 YEARS OR OLDER	PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 15 YEARS OLD****				ELIGIBILITY WOMEN	ELIGIBILITY
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?	Does (NAME) usually live here?	Did (NAME) stay here last night?	Is (NAME) male or female?	How old is (NAME)?	Has (NAME) ever been to school?	IF ATTENDED SCHOOL: What is the highest level of school (NAME) attended? What is the highest grade (NAME) completed at that level?**	IF AGE LESS THAN 25 YEARS: Is (NAME) still in school?	Is (NAME) married, living together, separated divorced, or never married? ***	Is (NAME)'s natural mother alive?	IF ALIVE: Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER	Is (NAME)'s natural father alive?	IF ALIVE: Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-59 (IF HOUSEHOLD FALLS IN MEN'S SAMPLE).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(16A)
			YES NO	YES NO	M F	IN YEARS	YES NO	LEVEL GRADE	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

H EN 2

LINE (1)	RESIDENTS/VISITORS (2)	RELATIONSHIP (3)	RESIDENCE (4)	RESIDENCE (5)	SEX (6)	AGE (7)	EDUCATION (8)	EDUCATION (9)	EDUCATION (10)	MAR.STAT. (11)	PARENTAL SURVIVORSHIP AND RESIDENCE (12)	PARENTAL SURVIVORSHIP AND RESIDENCE (13)	PARENTAL SURVIVORSHIP AND RESIDENCE (14)	PARENTAL SURVIVORSHIP AND RESIDENCE (15)	ELIG. (16)	ELIG. (16A)
			YES NO	YES NO	M F	IN YEARS	YES NO	LEVEL GRADE	YES NO		YES NO DK		YES NO DK			
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
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

TICK HERE IF CONTINUATION SHEET USED ☐

Just to make sure that I have a complete listing:

1) Are there any other persons such as small children or infants that we have not listed? YES ☐ → ENTER EACH IN TABLE NO ☐

2) In addition, are there any other people who may not be members of your family, such as domestic servants, lodgers or friends who usually live here? YES ☐ → ENTER EACH IN TABLE NO ☐

3) Are there any guests or temporary visitors staying here, or anyone else who slept here last night that have not been listed? YES ☐ → ENTER EACH IN TABLE NO ☐

* CODES FOR Q.3
RELATIONSHIP TO HEAD OF HOUSEHOLD:
01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = CO-WIFE
10 = OTHER RELATIVE
11 = ADOPTED/FOSTER/STEP CHILD
12 = NOT RELATED
98 = DON'T KNOW

** CODES FOR Q.9
EDUCATION LEVEL:
1 = PRIMARY
2 = SECONDARY
3 = HIGHER
8 = DON'T KNOW

EDUCATION GRADE:
00 = LESS THAN 1 YEAR COMPLETED

*** CODES FOR Q.11
MARITAL STATUS
1 = MARRIED
2 = LIVING TOGETHER
3 = SEPARATED
4 = DIVORCED
5 = WIDOWED
6 = NEVER MARRIED

**** Q.12 THROUGH Q.14:
These questions refer to the biological parents of the child. Record 00 if parent not member of household.

H EN 3

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
17	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO HOME OR PLOT.....11 PUBLIC TAP.....12 WELL WATER WELL IN RESIDENCE/YARD/PLOT..21 PUBLIC SHALLOW WELL.....22 PUBLIC TRADITIONAL WELL.....23 PUBLIC BOREHOLE.....24 SURFACE WATER SPRING.....31 RIVER/STREAM.....32 POND/LAKE.....33 RAINWATER.....41 TANKER TRUCK.....51 BOTTLED WATER.....61 OTHER_____ 96 (SPECIFY)	 →19 →19 →19 →19
18	How long does it take to go there, get water, and come back?	MINUTES..... [ ][ ][ ] ON PREMISES.....996	
19	What kind of toilet facility does your household have?	FLUSH TOILET OWN FLUSH TOILET.....11 SHARED FLUSH TOILET.....12 PIT TOILET/LATRINE TRADITIONAL PIT TOILET.....21 VENTILATED IMPROVED PIT (VIP) LATRINE.....22 NO FACILITY/BUSH/FIELD.....31 OTHER_____ 96 (SPECIFY)	
20	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	
21	How many rooms in your household are used for sleeping?	ROOMS..... [ ][ ]	
22	MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND/MUD.....11 RUDIMENTARY FLOOR WOOD PLANKS/BOARDS.....21 FINISHED FLOOR WOODEN TILE.....31 CERAMIC/TERRAZO/ MARBLE TILE.....32 CEMENT/CONCRETE.....33 OTHER_____ 96 (SPECIFY)	
23	Does any member of your household own: A bicycle? A motorcycle? A car?	YES NO BICYCLE.....1 2 MOTORCYCLE.....1 2 CAR.....1 2	
24	We would like to check whether the salt used in your household is iodized. May we see a sample of the salt used to cook meal eaten by members of your household last night?	IODIZED.....1 NOT IODIZED.....2 NOT TESTED.....3 NO SALT AT HOME.....4	 →IND. QRE.
25	RECORD IODATE SCORE	0.....01 25.....02 50.....03 75.....04 100+.....05	

1996 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY
QUESTIONNAIRE FOR INDIVIDUAL WOMEN

IDENTIFICATION	
CLUSTER NUMBER.....	
PROVINCE_____	
DISTRICT_____	
HOUSEHOLD NUMBER.....	
NAME OF HOUSEHOLD HEAD _____	
URBAN/RURAL (urban=1, rural=2).....	
LUSAKA/OTHER CITY/TOWN/VILLAGE..... (Lusaka=1, Other city=2, Town=3, Village=4)	
NAME AND LINE NUMBER OF WOMAN _____	

INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY MONTH YEAR
INTERVIEWER'S NAME	_____	_____	_____	NAME
RESULT*	_____	_____	_____	RESULT
NEXT VISIT: DATE	_____	_____		TOTAL NO. OF VISITS
TIME	_____	_____		

*RESULT CODES:
1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 INCAPACITATED
7 OTHER _____ (SPECIFY)

LANGUAGE OF QUESTIONNAIRE** ENGLISH	0 1
LANGUAGE USED IN INTERVIEW**.....	
RESPONDENT'S LOCAL LANGUAGE**.....	
TRANSLATOR USED (1=NOT AT ALL; 2=SOMETIME; 3=ALL THE TIME)..	

**LANGUAGE CODES: 01 ENGLISH, 02 BEMBA, 03 KAONDE, 04 LOZI, 05 LUNDA, 06 LUVALE, 07 NYANJA, 08 TONGA, 09 OTHER

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

W EN 1

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
101	RECORD THE TIME.	HOUR..... [ ][ ] MINUTES..... [ ][ ]	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city, in a town, or in a village?	LUSAKA.....1 OTHER CITY.....2 TOWN.....3 VILLAGE.....4	
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 a city, in a town, or in a village?	LUSAKA.....1 OTHER CITY.....2 TOWN.....3 VILLAGE.....4	
105	In what month and year were you born?	MONTH..... [ ][ ] DON'T KNOW MONTH.....98 YEAR..... [ ][ ] DON'T KNOW YEAR.....98	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS..... [ ][ ]	
107	Have you ever attended school?	YES.....1 NO.....2	→114
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY.....1 SECONDARY.....2 HIGHER.....3	
109	How many years did you complete at that level? COMMENT _____	YEARS..... [ ][ ]	
110	CHECK 106: AGE 24 OR BELOW [ ] ↓ AGE 25 OR ABOVE [ ]		→113
111	Are you currently attending school?	YES.....1 NO.....2	→113
112	What was the main reason you stopped attending school?	GOT PREGNANT.....01 GOT MARRIED.....02 TO CARE FOR YOUNGER CHILDREN...03 FAMILY NEEDED HELP ON FARM OR IN BUSINESS.....04 COULD NOT PAY SCHOOL FEES.....05 NEEDED TO EARN MONEY.....06 GRADUATED/HAD ENOUGH SCHOOLING.07 DID NOT PASS ENTRANCE EXAMS....08 DID NOT LIKE SCHOOL.....09 SCHOOL NOT ACCESSIBLE/TOO FAR..10 OTHER_____ 96 (SPECIFY) DON'T KNOW.....98	

W EN 2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
113	CHECK 108: PRIMARY ☐ SECONDARY OR HIGHER ☐		→115
114	Can you read and understand a letter or newspaper easily, with difficulty, or not at all?	EASILY.....1 WITH DIFFICULTY.....2 NOT AT ALL.....3	→116
115	How often do you usually read a newspaper or magazine? Would you say every day, every other day, at least once a week, at least once a month, a few times a year, or never? CIRCLE ONLY ONE ANSWER.	EVERYDAY.....1 EVERY OTHER DAY.....2 AT LEAST ONCE A WEEK.....3 AT LEAST ONCE A MONTH.....4 FEW TIMES A YEAR.....5 NEVER.....6	
116	How often do you usually listen to a radio? Would you say every day, every other day, at least once a week, at least once a month, a few times a year, or never? CIRCLE ONLY ONE ANSWER.	EVERYDAY.....1 EVERY OTHER DAY.....2 AT LEAST ONCE A WEEK.....3 AT LEAST ONCE A MONTH.....4 FEW TIMES A YEAR.....5 NEVER.....6	
117	How often do you usually watch television? Would you say every day, every other day, at least once a week, at least once a month, a few times a year, or never? CIRCLE ONLY ONE ANSWER.	EVERYDAY.....1 EVERY OTHER DAY.....2 AT LEAST ONCE A WEEK.....3 AT LEAST ONCE A MONTH.....4 FEW TIMES A YEAR.....5 NEVER.....6	
118	What religion are you?	CATHOLIC.....1 PROTESTANT.....2 MUSLIM.....3 OTHER_____4 (SPECIFY)	
119	What tribe do you belong to?	_____ ☐☐	
120	CHECK COLUMN (8) INTERVIEWER'S ASSIGNMENT SHEET THE WOMAN INTERVIEWED IS NOT A USUAL RESIDENT ☐ THE WOMAN INTERVIEWED IS A USUAL RESIDENT ☐		→201
121	Now I would like to ask about the place in which you usually live. What is the name of the place in which you usually live? _____ (NAME OF PLACE) Is that a city, town, or village?	LUSAKA.....1 OTHER CITY.....2 TOWN.....3 VILLAGE.....4	
122	In which province is that located?	CENTRAL.....01 COPPERBELT.....02 EASTERN.....03 LUAPULA.....04 LUSAKA.....05 NORTHERN.....06 NORTH-WESTERN.....07 SOUTHERN.....08 WESTERN.....09 OUTSIDE ZAMBIA.....10	

W EN 3

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
123	Now I would like to ask about the household in which you usually live. What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO HOME/PLOT.....11 PUBLIC TAP.....12 WELL WATER WELL IN RESIDENCE/YARD/PLOT..21 PUBLIC SHALLOW WELL.....22 PUBLIC TRADITIONAL WELL.....23 PUBLIC BOREHOLE.....24 SURFACE WATER SPRING.....31 RIVER/STREAM.....32 POND/LAKE.....33 RAINWATER.....41 TANKER TRUCK.....51 BOTTLED WATER.....61 OTHER_____ 96 (SPECIFY)	 125 125 125 125
124	How long does it take to go there, get water, and come back?	MINUTES..... [ ][ ][ ] ON PREMISES.....996	
125	What kind of toilet facility does your household have?	FLUSH TOILET OWN FLUSH TOILET.....11 SHARED FLUSH TOILET.....12 PIT TOILET/LATRINE TRADITIONAL PIT TOILET.....21 VENTILATED IMPROVED PIT (VIP) LATRINE.....22 NO FACILITY/BUSH/FIELD.....31 OTHER_____ 96 (SPECIFY)	
126	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	
127	How many rooms in your household are used for sleeping?	ROOMS..... [ ][ ]	
128	Could you describe the main material of the floor of your home?	NATURAL FLOOR EARTH/SAND/MUD.....11 RUDIMENTARY FLOOR WOOD PLANKS/BOARDS.....21 FINISHED FLOOR WOODEN TILE.....31 CERAMIC/TERRAZO/ MARBLE TILE.....32 CEMENT/CONCRETE.....33 OTHER _____96 (SPECIFY)	
129	Does any member of your household own: A bicycle? A motorcycle? A car?	YES NO BICYCLE.....1 2 MOTORCYCLE.....1 2 CAR.....1 2	

W EN 4

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO 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 baby who cried or showed signs of life but survived only a few hours or days?	YES.....1 NO.....2	 →208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD..... [ ][ ] GIRLS DEAD..... [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL.	TOTAL..... [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in total_____births during your life. Is that correct? YES [ ] ↓ NO [ ] → PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: ONE OR MORE BIRTHS [ ] ↓ NO BIRTHS [ ]		→227

W EN 5

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.

212 What name was given to your (first/next) baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday? OR: In what season was he/she born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	218 IF ALIVE Is (NAME) living with you?	219 IF DEAD: How old was (NAME) when he/she died? IF '1 YR.', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	220 FROM YEAR OF BIRTH OF (NAME) SUBTRACT YEAR OF PREVIOUS BIRTH. IS THE DIFFERENCE 4 OR MORE?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
01	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3		
02	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
03	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
04	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
05	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
06	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
07	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2

212 What name was given to your next baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday? OR: In what season was he/she born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	218 IF ALIVE Is (NAME) living with you?	219 IF DEAD: How old was (NAME) when he/she died? IF '1 YR.', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	220 FROM YEAR OF BIRTH OF (NAME) SUBTRACT YEAR OF PREVIOUS BIRTH. IS THE DIFFERENCE 4 OR MORE?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and NAME)?
08	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
09	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
10	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2
11	SING..1 MULT..2	BOY...1 GIRL..2	MONTH.. YEAR...	YES..1 NO...2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS....1 MONTHS..2 YEARS...3	YES....1 NO.....2 (NEXT BIRTH)	YES..1 NO...2

222	FROM YEAR OF INTERVIEW SUBTRACT YEAR OF LAST BIRTH. IS THE DIFFERENCE 4 YEARS OR MORE?	YES.....1 → GO TO 223 NO.....2 → GO TO 224
223	Have you had any live births since the birth of (NAME OF LAST BIRTH)?	YES.....1 NO.....2

224 COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:

NUMBERS ARE SAME ☐ → CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED. ☐

FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED. ☐

FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED. ☐

FOR AGE AT DEATH 12 MONTHS OR 1 YR.: PROBE TO DETERMINE EXACT NUMBER OF MONTHS. ☐

NUMBERS ARE DIFFERENT ☐ → (PROBE AND RECONCILE)

225 CHECK 215 AND ENTER THE NUMBER OF BIRTHS SINCE JANUARY 1991.
IF NONE, RECORD '0'. ☐

W EN 7

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
227	Are you pregnant now?	YES.....1 NO.....2 UNSURE.....8	 236
228	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS.	MONTHS..... [ ][ ]	
229	At the time you became pregnant, did you want to become pregnant <u>then</u>, did you want to wait until <u>later</u>, or did you <u>not want</u> to have any more children at all?	THEN.....1 LATER.....2 NOT WANT MORE CHILDREN.....3	
236	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO.....1 [ ][ ] WEEKS AGO.....2 [ ][ ] MONTHS AGO.....3 [ ][ ] YEARS AGO.....4 [ ][ ] IN MENOPAUSE.....994 BEFORE LAST BIRTH.....995 NEVER MENSTRUATED.....996	
237	Between the first day of a woman's period and the first day of her <u>next</u> period, are there certain times when she has a greater chance of becoming pregnant than other times?	YES.....1 NO.....2 DON'T KNOW.....8	 301
238	During which times of the monthly cycle does a woman have the greatest chance of becoming pregnant?	DURING HER PERIOD.....01 RIGHT AFTER HER PERIOD HAS ENDED.....02 IN THE MIDDLE OF THE CYCLE.....03 JUST BEFORE HER PERIOD BEGINS..04 OTHER_____ 96 (SPECIFY) DON'T KNOW.....98	

W EN 8

SECTION 3. CONTRACEPTION

Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy.

CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY.
THEN PROCEED DOWN COLUMN 302, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED.
THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 301 OR 302, ASK 303.

	301 Which ways or methods have you heard about?	302 Have you ever heard of (METHOD)? SPONTANEOUS YES	PROBED YES	NO	303 Have you ever used (METHOD)?
01	PILL Women can take a pill every day.	1	2	3	YES.....1 NO.....2
02	IUCD Women can have a loop or coil placed inside them by a doctor or a nurse.	1	2	3	YES.....1 NO.....2
03	INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	1	2	3	YES.....1 NO.....2
04	IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for several years.	1	2	3	YES.....1 NO.....2
05	FOAMING TABLETS/JELLY Women can place a sponge, suppository, diaphragm, jelly, or cream inside themselves before intercourse.	1	2	3	YES.....1 NO.....2
06	CONDOM Men can put a rubber sheath on their penis during sexual intercourse.	1	2	3	YES.....1 NO.....2
07	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	1	2	3	Have you ever had an operation to avoid having any more children? YES.....1 NO.....2
08	MALE STERILIZATION Men can have an operation to avoid having any more children.	1	2	3	Have you ever had a partner who had an operation to avoid having children? YES.....1 NO.....2
09	NATURAL FAMILY PLANNING Couples can avoid having sexual intercourse on the days of the month when the woman is more likely to become pregnant.	1	2	3	YES.....1 NO.....2
10	WITHDRAWAL Men can be careful and pull out before climax.	1	2	3	YES.....1 NO.....2
11	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	1 _____ (SPECIFY)		3	YES.....1 NO.....2
		_____ (SPECIFY)			YES.....1 NO.....2

304 CHECK 303:

NOT A SINGLE "YES" (NEVER USED) ☐ ↓

AT LEAST ONE "YES" (EVER USED) ☐ → GO TO 309

W EN 9

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
305	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES.....1 NO.....2	 →331
307	What have you used or done? CORRECT 303 AND 304 (AND 302 IF NECESSARY).		
309	Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. How many living children did you have at that time, if any? IF NONE, RECORD '00'.	NUMBER OF CHILDREN..... [ ][ ]	
310	When you first used family planning, did you want to have another child but at a later time, or did you not want to have another child at all?	WANTED CHILD LATER.....1 DID NOT WANT ANOTHER CHILD.....2 OTHER_____ 6 (SPECIFY)	
311	CHECK 303: WOMAN NOT STERILIZED [ ] ↓ WOMAN STERILIZED [ ]		→314A
312	CHECK 227: NOT PREGNANT OR UNSURE [ ] ↓ PREGNANT [ ]		→332
313	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES.....1 NO.....2	 →331
314 314A	Which method are you using? CIRCLE '07' FOR FEMALE STERILIZATION.	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 FOAMING TABLETS/JELLY.....05 CONDOM.....06 FEMALE STERILIZATION.....07 MALE STERILIZATION.....08 NATURAL FAMILY PLANNING.....09 WITHDRAWAL.....10 OTHER_____ 96 (SPECIFY)	 →326 →318 →323 →326
315A	At the time you first started using the pill, did you consult a doctor or a nurse?	YES.....1 NO.....2 DK.....8	
315B	At the time you last got pills, did you consult a doctor or a nurse?	YES.....1 NO.....2	
315C	May I see the package of pills you are now using? RECORD NAME OF BRAND IF PACKAGE IS SEEN.	PACKAGE SEEN.....1 BRAND NAME_____ [ ][ ] PACKAGE NOT SEEN.....2	→317
316	Do you know the brand name of the pills you are now using? RECORD NAME OF BRAND.	BRAND NAME _____ [ ][ ] DON'T KNOW.....98	
317	How much does one packet (cycle) of pills cost you?	KWACHA COST..... [ ][ ][ ][ ] FREE.....9996 DON'T KNOW.....9998	 →326

W EN 10

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
318	Where did the sterilization take place? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL.....11 GOVERNMENT HEALTH CENTER.....12 OTHER PUBLIC_____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC.....21 MISSION HOSPITAL/CLINIC.....22 PRIVATE DOCTOR.....23 MOBILE CLINIC.....24 OTHER PRIVATE MEDICAL_____ 26 (SPECIFY) OTHER_____ 96 (SPECIFY) DON'T KNOW.....98	→319
318A	How long did it take to travel from your home to (PLACE MENTIONED IN 318)? IF LESS THAN 2 HOURS, RECORD MINUTES. OTHERWISE, RECORD HOURS.	MINUTES.....1 [ ][ ][ ] HOURS.....2 [0][ ][ ] DK.....9998	
318B	Was it easy or difficult to get there?	EASY.....1 DIFFICULT.....2	
319	Do you regret that (you/your husband) had the operation not to have any (more) children?	YES.....1 NO.....2	→321
320	Why do you regret the operation?	RESPONDENT WANTS ANOTHER CHILD..1 PARTNER WANTS ANOTHER CHILD.....2 SIDE EFFECTS.....3 CHILD DIED.....4 OTHER_____6 (SPECIFY)	
321	In what month and year was the sterilization performed?	MONTH..... [ ][ ] YEAR..... [ ][ ]	→327
323	You said that you have avoided having sexual intercourse on certain days of the month to avoid getting pregnant. How do you determine which days of your monthly cycle not to have sexual relations?	BASED ON CALENDAR.....1 BASED ON BODY TEMPERATURE.....2 BASED ON CERVICAL MUCUS (BILLINGS METHOD).....3 BASED ON BODY TEMPERATURE AND CERVICAL MUCUS.....4 NO SPECIFIC SYSTEM.....5 OTHER_____6 (SPECIFY)	
326	For how many months have you been using (METHOD) continuously? IF LESS THAN 1 MONTH, RECORD '00'.	MONTHS..... [ ][ ] 8 YEARS OR LONGER.....96	

W EN 11

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
327	CHECK 314: CIRCLE METHOD CODE:	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 FOAMING TABLETS/JELLY.....05 CONDOM.....06 FEMALE STERILIZATION.....07 MALE STERILIZATION.....08 NATURAL FAMILY PLANNING.....09 WITHDRAWAL.....10 OTHER METHOD.....96	 →328C →334 →332
328	Where did you obtain (METHOD) the last time? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL.....11 GOVERNMENT HEALTH CENTER.....12 FIELDWORKER.....13 OTHER PUBLIC_____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC.....21 MISSION HOSPITAL/CLINIC.....22 PHARMACY.....23 PRIVATE DOCTOR.....24 MOBILE CLINIC.....25 FIELD WORKER.....26 OTHER PRIVATE MEDICAL_____ 27 (SPECIFY) OTHER SOURCE SHOP.....31 FRIENDS/RELATIVES.....33 OTHER_____ 36 (SPECIFY) DON'T KNOW.....98	 →328C →328C →328C
328A	How long does it take to travel from your home to this place? IF LESS THAN 2 HOURS, RECORD MINUTES. OTHERWISE, RECORD HOURS.	MINUTES.....1 [ ][ ][ ] HOURS.....2 [0][ ][ ] DK.....9998	
328B	Is it easy or difficult to get there?	EASY.....1 DIFFICULT.....2	
328C	Did you talk to your husband/partner about (METHOD) before you started to use it?	YES.....1 NO.....2	
328D	Did you talk to your husband/partner about (METHOD) after you started to use it?	YES.....1 NO.....2	 →334

W EN 12

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
331	What is the main reason you are not using a method of contraception to avoid pregnancy?	NOT MARRIED.....11 FERTILITY-RELATED REASONS NOT HAVING SEX.....21 INFREQUENT SEX.....22 MENOPAUSAL/HYSTERECTOMY.....23 SUBFECUND/INFECUND.....24 POSTPARTUM/BREASTFEEDING.....25 WANTS (MORE) CHILDREN.....26 PREGNANT.....27 OPPOSITION TO USE RESPONDENT OPPOSED.....31 HUSBAND OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 OTHER_____ 96 (SPECIFY) DON'T KNOW.....98	
332	Do you know of a place where you can obtain a method of family planning?	YES.....1 NO.....2	→334
333	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL.....11 GOVERNMENT HEALTH CENTER.....12 FIELD WORKER.....15 OTHER PUBLIC_____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC.....21 MISSION HOSPITAL/CLINIC.....22 PHARMACY.....23 PRIVATE DOCTOR.....24 MOBILE CLINIC.....25 FIELD WORKER.....26 OTHER PRIVATE MEDICAL_____ 27 (SPECIFY) OTHER SOURCE SHOP.....31 FRIENDS/RELATIVES.....32 OTHER_____ 36 (SPECIFY)	
334	Were you visited by a family planning program worker in the last 12 months?	YES.....1 NO.....2	

W EN 13

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
335	Have you visited a health facility for any reason in the last 12 months?	YES.....1 NO.....2	 →337
336	Did any staff member at the health facility speak to you about family planning methods?	YES.....1 NO.....2	
337	Do you think that breastfeeding can affect a woman's chance of becoming pregnant?	YES.....1 NO.....2 DON'T KNOW.....8	 →401
338	Do you think a woman's chance of becoming pregnant is increased or decreased by breastfeeding?	INCREASED.....1 DECREASED.....2 DEPENDS.....3 DON'T KNOW.....8	→401
339	CHECK 210: ONE OR MORE BIRTHS ☐ ↓ NO BIRTHS ☐		→401
340	Have you ever relied on breastfeeding as a method of avoiding pregnancy?	YES.....1 NO.....2	 →401
341	CHECK 227 AND 311: NOT PREGNANT OR UNSURE AND NOT STERILIZED ☐ ↓ EITHER PREGNANT OR STERILIZED ☐		→401
342	Are you currently relying on breastfeeding to avoid getting pregnant?	YES.....1 NO.....2	

W EN 14

SECTION 4A. PREGNANCY AND BREASTFEEDING

401	CHECK 225: ONE OR MORE BIRTHS SINCE JAN. 1991 ☐	NO BIRTHS SINCE JAN. 1991 ☐ → (GO TO 465)	
402	ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1991 IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 2 BIRTHS, USE CONTINUATION SHEETS). Now I would like to ask you some more questions about the health of all your children born in the past five years. (We will talk about one child at a time.)		
403	LINE NUMBER FROM Q212	LAST BIRTH LINE NUMBER..... ☐☐	NEXT-TO-LAST BIRTH LINE NUMBER..... ☐☐
404	FROM Q212 AND Q216	NAME _____ ALIVE ☐ DEAD ☐	NAME _____ ALIVE ☐ DEAD ☐
405	At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you want no (more) children at all?	THEN.....1 (GO TO 407) LATER.....2 NO MORE.....3 (GO TO 407)	THEN.....1 (GO TO 407) LATER.....2 NO MORE.....3 (GO TO 407)
406	How much longer would you like to have waited?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ DON'T KNOW.....998	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ DON'T KNOW.....998
407	When you were pregnant with (NAME), did you see anyone for antenatal care for this pregnancy? IF YES: Whom did you see? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B CLINICAL OFFICER.....C OTHER PERSON TRADITIONAL BIRTH ATTENDANT.....D OTHER_____ X (SPECIFY) NO ONE.....Y (GO TO 410)	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B CLINICAL OFFICER.....C OTHER PERSON TRADITIONAL BIRTH ATTENDANT.....D OTHER_____ X (SPECIFY) NO ONE.....Y (GO TO 410)
408	How many months pregnant were you when you first received antenatal care?	MONTHS..... ☐☐ DON'T KNOW.....98	MONTHS..... ☐☐ DON'T KNOW.....98
409	How many times did you receive antenatal care during this pregnancy?	NO. OF TIMES..... ☐☐ DON'T KNOW.....98	NO. OF TIMES..... ☐☐ DON'T KNOW.....98
409A	Were you given an antenatal card or do you have a card or a book for this pregnancy? May see the card (book) please?	YES, SEEN.....1 YES, NOT SEEN.....2 NO CARD/BOOK.....3	YES, SEEN.....1 YES, NOT SEEN.....2 NO CARD/BOOK.....3
410	When you were pregnant with (NAME) were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES.....1 NO.....2 (GO TO 412) DON'T KNOW.....8	YES.....1 NO.....2 (GO TO 412) DON'T KNOW.....8
411	During this pregnancy, how many times did you get this injection?	TIMES..... ☐ DON'T KNOW.....8	TIMES..... ☐ DON'T KNOW.....8

	FROM Q.212	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
412	Where did you give birth to (NAME)?	HOME YOUR HOME.....11 OTHER HOME.....12 PUBLIC SECTOR GOVT. HOSPITAL.....21 GOVT. HEALTH CENTER...22 OTHER PUBLIC _____ 26 (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/CLINIC..31 MISSION HOSP./CLINIC..32 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY) OTHER_____ 96 (SPECIFY)	HOME YOUR HOME.....11 OTHER HOME.....12 PUBLIC SECTOR GOVT. HOSPITAL.....21 GOVT. HEALTH CENTER...22 OTHER PUBLIC _____ 26 (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/CLINIC..31 MISSION HOSP./CLINIC..32 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY) OTHER_____ 96 (SPECIFY)
413	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING.	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B CLINICAL OFFICER.....C OTHER PERSON TRADITIONAL BIRTH ATTENDANT.....D RELATIVE/FRIEND.....E COMMUNITY HEALTH WORKER.....F OTHER_____ X (SPECIFY) NO ONE.....Y	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B CLINICAL OFFICER.....C OTHER PERSON TRADITIONAL BIRTH ATTENDANT.....D RELATIVE/FRIEND.....E COMMUNITY HEALTH WORKER.....F OTHER_____ X (SPECIFY) NO ONE.....Y
414	Around the time of the birth of (NAME), did you have any of the following problems: Long labor, that is, did your regular contractions last more than 12 hours? Excessive bleeding that was so much that you feared it was life threatening? A high fever with bad smelling vaginal discharge? Convulsions not caused by fever?	YES NO LABOR MORE THAN 12 HOURS...1 2 EXCESSIVE BLEEDING.....1 2 FEVER/BAD SMELLING VAG. DISCHARGE.....1 2 CONVULSIONS.....1 2	YES NO LABOR MORE THAN 12 HOURS...1 2 EXCESSIVE BLEEDING.....1 2 FEVER/BAD SMELLING VAG. DISCHARGE.....1 2 CONVULSIONS.....1 2
415	Was (NAME) delivered by caesarian section?	YES.....1 NO.....2	YES.....1 NO.....2
416	When (NAME) was born, was he/she: very large, larger than average, average, smaller than average, or very small?	VERY LARGE.....1 LARGER THAN AVERAGE.....2 AVERAGE.....3 SMALLER THAN AVERAGE.....4 VERY SMALL.....5 DON'T KNOW.....8	VERY LARGE.....1 LARGER THAN AVERAGE.....2 AVERAGE.....3 SMALLER THAN AVERAGE.....4 VERY SMALL.....5 DON'T KNOW.....8

W EN 16

	FROM Q. 212	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
417	Was (NAME) weighed at birth?	YES.....1 NO.....2 (GO TO 419)	YES.....1 NO.....2 (GO TO 420)
418	How much did (NAME) weigh? RECORD WEIGHT FROM HEALTH CARD, IF AVAILABLE.	KILOGRAMS FROM CARD.....1 [ ][ ]. KILOGRAMS FROM RECALL.....2 [ ][ ]. DON'T KNOW.....998	KILOGRAMS FROM CARD.....1 [ ][ ]. KILOGRAMS FROM RECALL.....2 [ ][ ]. DON'T KNOW.....998
419	Has your period returned since the birth of (NAME)?	YES.....1 (GO TO 421) NO.....2 (GO TO 422)	
420	Did your period return between the birth of (NAME) and your next pregnancy?		YES.....1 NO.....2 (GO TO 424)
421	For how many months after the birth of (NAME) did you <u>not</u> have a period?	MONTHS..... [ ][ ] DON'T KNOW.....98	MONTHS..... [ ][ ] DON'T KNOW.....98
422	CHECK 227: RESPONDENT PREGNANT?	NOT PREGNANT [ ] PREGNANT OR UNSURE [ ] (GO TO 424)	
423	Have you resumed sexual relations since the birth of (NAME)?	YES.....1 NO.....2 (GO TO 425)	
424	For how many months after the birth of (NAME) did you <u>not</u> have sexual relations?	MONTHS..... [ ][ ] DON'T KNOW.....98	MONTHS..... [ ][ ] DON'T KNOW.....98
425	Did you ever breastfeed (NAME)?	YES.....1 NO.....2 (GO TO 431)	YES.....1 NO.....2 (GO TO 431)
426	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY.....000 HOURS.....1 [ ][ ] DAYS.....2 [ ][ ]	IMMEDIATELY.....000 HOURS.....1 [ ][ ] DAYS.....2 [ ][ ]
427	CHECK 404: CHILD ALIVE?	ALIVE [ ] DEAD [ ] (GO TO 429)	ALIVE [ ] DEAD [ ] (GO TO 429)
428	Are you still breastfeeding (NAME)?	YES.....1 (GO TO 432) NO.....2	YES.....1 (GO TO 432) NO.....2
429	For how many months did you breastfeed (NAME)?	MONTHS..... [ ][ ] DON'T KNOW.....98	MONTHS..... [ ][ ] DON'T KNOW.....98

W EN 17

	FROM Q.212	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
430	Why did you stop breastfeeding (NAME)?	MOTHER ILL/WEAK.....01 CHILD ILL/WEAK.....02 CHILD DIED.....03 NIPPLE/BREAST PROBLEM...04 NOT ENOUGH MILK.....05 MOTHER WORKING.....06 CHILD REFUSED.....07 WEANING AGE/AGE TO STOP.08 BECAME PREGNANT.....09 STARTED USING CONTRACEPTION.....10 OTHER_____ 96 (SPECIFY)	MOTHER ILL/WEAK.....01 CHILD ILL/WEAK.....02 CHILD DIED.....03 NIPPLE/BREAST PROBLEM...04 NOT ENOUGH MILK.....05 MOTHER WORKING.....06 CHILD REFUSED.....07 WEANING AGE/AGE TO STOP.08 BECAME PREGNANT.....09 STARTED USING CONTRACEPTION.....10 OTHER_____ 96 (SPECIFY)
431	CHECK 404: CHILD ALIVE?	ALIVE ☐ (GO TO 434) DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 440)	ALIVE ☐ (GO TO 434) DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 440)
432	How many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF NIGHTTIME FEEDINGS..... ☐☐	NUMBER OF NIGHTTIME FEEDINGS..... ☐☐
433	How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYLIGHT FEEDINGS..... ☐☐	NUMBER OF DAYLIGHT FEEDINGS..... ☐☐
434	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
435	At any time yesterday or last night, was (NAME) given any of the following: Plain water? Sugar water? Juice? Tea? Baby formula? Tinned or powdered milk? Fresh milk? Any other liquids? Any solid or mushy food made from grain such as maize, rice, wheat and soybean? Any solid or mushy food made from tuber such as cassava, sweet potato and yam? Eggs, fish, or poultry? Meat? Any other solid or semi-solid foods?	YES NO DK PLAIN WATER.....1 2 8 SUGAR WATER.....1 2 8 JUICE.....1 2 8 TEA.....1 2 8 BABY FORMULA.....1 2 8 TINNED/POWDR'D MLK..1 2 8 FRESH MILK.....1 2 8 OTHER LIQUIDS.....1 2 8 FOOD MADE FROM GRAIN.....1 2 8 FOOD MADE FROM TUBER.....1 2 8 EGGS/FISH/POULTRY...1 2 8 MEAT.....1 2 8 OTHER SOLID/ SEMI-SOLID FOODS..1 2 8	YES NO DK PLAIN WATER.....1 2 8 SUGAR WATER.....1 2 8 JUICE.....1 2 8 TEA.....1 2 8 BABY FORMULA.....1 2 8 TINNED/POWDR'D MLK..1 2 8 FRESH MILK.....1 2 8 OTHER LIQUIDS.....1 2 8 FOOD MADE FROM GRAIN.....1 2 8 FOOD MADE FROM TUBER.....1 2 8 EGGS/FISH/POULTRY...1 2 8 MEAT.....1 2 8 OTHER SOLID/ SEMI-SOLID FOODS..1 2 8

W EN 18

	FROM Q. 212	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
436	CHECK 435: FOOD OR LIQUID GIVEN YESTERDAY?	"YES" TO ONE OR MORE ☐ ▼ "NO/DK" TO ALL ☐ ▼ (GO TO 438)	"YES" TO ONE OR MORE ☐ ▼ "NO/DK" TO ALL ☐ ▼ (GO TO 438)
437	(Aside from breastfeeding,) how many times did (NAME) eat yesterday, including both meals and snacks? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES..... ☐ DON'T KNOW.....8	NUMBER OF TIMES..... ☐ DON'T KNOW.....8
438	On how many days during the last seven days was (NAME) given any of the following:	RECORD THE NUMBER OF DAYS.	RECORD THE NUMBER OF DAYS.
	Plain water?	PLAIN WATER..... ☐	PLAIN WATER..... ☐
	Any kind of milk (other than breast milk)?	MILK..... ☐	MILK..... ☐
	Liquids other than plain water or milk?	OTHER LIQUIDS..... ☐	OTHER LIQUIDS..... ☐
	Any solid or mushy food made from grain such as maize, rice, wheat and soybean?	FOOD MADE FROM GRAIN..... ☐	FOOD MADE FROM GRAIN..... ☐
	Any solid or mushy food made from tuber such as cassava, sweet potato and yam?	FOOD MADE FROM TUBER..... ☐	FOOD MADE FROM TUBER..... ☐
	Eggs, fish, or poultry?	EGGS/FISH/POULTRY..... ☐	EGGS/FISH/POULTRY..... ☐
	Meat?	MEAT..... ☐	MEAT..... ☐
	Any other solid or semi-solid foods? IF DON'T KNOW, RECORD '8'	OTHER SOLID/SEMI-SOLID FOODS..... ☐	OTHER SOLID/SEMI-SOLID FOODS..... ☐
439		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 440.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 440.

W EN 19

440	ENTER LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1991 IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 2 BIRTHS USE ADDITIONAL QUESTIONNAIRES).		
441	LINE NUMBER FROM Q212	LAST BIRTH LINE..... [ ][ ]	NEXT-TO-LAST BIRTH LINE..... [ ][ ]
442	FROM Q212 AND Q216	NAME _____ ALIVE [ ] DEAD [ ] (GO TO 442 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 465.)	NAME _____ ALIVE [ ] DEAD [ ] (GO TO 442 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 465.)
443	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it please?	YES, SEEN.....1 (GO TO 445) YES, NOT SEEN.....2 (GO TO 447) NO CARD.....3	YES, SEEN.....1 (GO TO 445) YES, NOT SEEN.....2 (GO TO 447) NO CARD.....3
444	Did you ever have a vaccination card for (NAME)?	YES.....1 (GO TO 447) NO.....2	YES.....1 (GO TO 447) NO.....2
445	(1) COPY VACCINATION DATES FOR EACH VACCINE FROM THE CARD. (2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED.	DAY MO YR	DAY MO YR
	BCG	BCG.... [ ][ ][ ][ ][ ][ ]	BCG.... [ ][ ][ ][ ][ ][ ]
	Polio 1	P1..... [ ][ ][ ][ ][ ][ ]	P1..... [ ][ ][ ][ ][ ][ ]
	Polio 2	P2..... [ ][ ][ ][ ][ ][ ]	P2..... [ ][ ][ ][ ][ ][ ]
	Polio 3	P3..... [ ][ ][ ][ ][ ][ ]	P3..... [ ][ ][ ][ ][ ][ ]
	DPT 1	D1..... [ ][ ][ ][ ][ ][ ]	D1..... [ ][ ][ ][ ][ ][ ]
	DPT 2	D2..... [ ][ ][ ][ ][ ][ ]	D2..... [ ][ ][ ][ ][ ][ ]
	DPT 3	D3..... [ ][ ][ ][ ][ ][ ]	D3..... [ ][ ][ ][ ][ ][ ]
	Measles	MEA.... [ ][ ][ ][ ][ ][ ]	MEA.... [ ][ ][ ][ ][ ][ ]
446	Has (NAME) received any vaccinations that are not recorded on this card? RECORD 'YES' ONLY IF RESPONDENT *MENTIONS BCG, POLIO 1-3, DPT 1-3,* AND/OR MEASLES VACCINE(S).	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY *COLUMN IN 445*) NO.....2 DON'T KNOW.....8 (GO TO 449)	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY *COLUMN IN 445*) NO.....2 DON'T KNOW.....8 (GO TO 449)

W EN 20

	FROM Q. 212	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
447	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases?	YES.....1 NO.....2 (GO TO 449) DON'T KNOW.....8	YES.....1 NO.....2 (GO TO 449) DON'T KNOW.....8
448	Please tell me if (NAME) received any of the following vaccinations:		
448A	A BCG vaccination against tuberculosis, that is, an injection in the left arm or shoulder that caused a scar?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
448B	Polio vaccine, that is, drops in the mouth?	YES.....1 NO.....2 (GO TO 448E) DON'T KNOW.....8	YES.....1 NO.....2 (GO TO 448E) DON'T KNOW.....8
448C	IF YES: How many times?	NUMBER OF TIMES..... [ ]	NUMBER OF TIMES..... [ ]
448D	When was the first polio vaccine given?	JUST AFTER BIRTH.....1 TWO MONTHS OR LATER.....2	JUST AFTER BIRTH.....1 TWO MONTHS OR LATER.....2
448E	DPT vaccination, that is, an injection usually given at the same time as polio drops?	YES.....1 NO.....2 (GO TO 448G) DON'T KNOW.....8	YES.....1 NO.....2 (GO TO 448G) DON'T KNOW.....8
448F	IF YES: How many times?	NUMBER OF TIMES..... [ ]	NUMBER OF TIMES..... [ ]
448G	An injection to prevent measles?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
449	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES.....1 NO.....2 (GO TO 450) DON'T KNOW.....8	YES.....1 NO.....2 (GO TO 450) DON'T KNOW.....8
449A	Did you seek advice or treatment for the fever?	YES.....1 NO.....2 (GO TO 450)	YES.....1 NO.....2 (GO TO 450)
449B	Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED.	PUBLIC SECTOR GVT. HOSPITAL.....A GVT. HEALTH CENTER.....B COMMUNITY HEALTH WORKER.C MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....D MISSION HOSP./CLINIC....E PHARMACY.....F PRIVATE DOCTOR.....G OTHER PRIVATE SECTOR SHOP.....H TRADITIONAL HEALER.....I OTHER_____X (SPECIFY)	PUBLIC SECTOR GVT. HOSPITAL.....A GVT. HEALTH CENTER.....B COMMUNITY HEALTH WORKER.C MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....D MISSION HOSP./CLINIC....E PHARMACY.....F PRIVATE DOCTOR.....G OTHER PRIVATE SECTOR SHOP.....H TRADITIONAL HEALER.....I OTHER_____X (SPECIFY)
450	Has (NAME) been ill with a cough at any time in the last 2 weeks?	YES.....1 NO.....2 (GO TO 454) DON'T KNOW.....8	YES.....1 NO.....2 (GO TO 454) DON'T KNOW.....8
451	When (NAME) was ill with a cough, did he/she breathe faster than usual with short, fast breaths?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8

	FROM Q. 212	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
452	Did you seek advice or treatment for the cough?	YES.....1 NO.....2 (GO TO 454)	YES.....1 NO.....2 (GO TO 454)
453	Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED.	PUBLIC SECTOR GVT. HOSPITAL.....A GVT. HEALTH CENTER.....B COMMUNITY HEALTH WORKER.C MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....D MISSION HOSP./CLINIC....E PHARMACY.....F PRIVATE DOCTOR.....G OTHER PRIVATE SECTOR SHOP.....H TRADITIONAL HEALER.....I OTHER_____X (SPECIFY)	PUBLIC SECTOR GVT. HOSPITAL.....A GVT. HEALTH CENTER.....B COMMUNITY HEALTH WORKER..C MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC.....D MISSION HOSP./CLINIC.....E PHARMACY.....F PRIVATE DOCTOR.....G OTHER PRIVATE SECTOR SHOP.....H TRADITIONAL HEALER.....I OTHER_____X (SPECIFY)
453A	CHECK 453: MORE THAN ONE PROVIDER MENTIONED ☐	ONLY ONE PROVIDER MENTIONED ☐ → 454	
453B	Which provider did you go to first?	PUBLIC SECTOR GVT. HOSPITAL.....A GVT. HEALTH CENTER.....B COMMUNITY HEALTH WORKER.C MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....D MISSION HOSP./CLINIC....E PHARMACY.....F PRIVATE DOCTOR.....G OTHER PRIVATE SECTOR SHOP.....H TRADITIONAL HEALER.....I OTHER_____X (SPECIFY)	PUBLIC SECTOR GVT. HOSPITAL.....A GVT. HEALTH CENTER.....B COMMUNITY HEALTH WORKER..C MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC.....D MISSION HOSP./CLINIC.....E PHARMACY.....F PRIVATE DOCTOR.....G OTHER PRIVATE SECTOR SHOP.....H TRADITIONAL HEALER.....I OTHER_____X (SPECIFY)
454	Has (NAME) had diarrhoea in the last two weeks?	YES.....1 NO.....2 (GO TO 464) DON'T KNOW.....8	YES.....1 NO.....2 (GO TO 464) DON'T KNOW.....8
455	Was there any blood in the stools?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
456	On the worst day of the diarrhoea, how many bowel movements did (NAME) have?	NUMBER OF BOWEL MOVEMENTS..... ☐☐ DON'T KNOW.....98	NUMBER OF BOWEL MOVEMENTS..... ☐☐ DON'T KNOW.....98
457	Was he/she given the same amount to drink as before the diarrhoea, or more, or less?	SAME.....1 MORE.....2 LESS.....3 DON'T KNOW.....8	SAME.....1 MORE.....2 LESS.....3 DON'T KNOW.....8
458	Was he/she given the same amount of food to eat as before the diarrhoea, or more, or less?	SAME.....1 MORE.....2 LESS.....3 DON'T KNOW.....8	SAME.....1 MORE.....2 LESS.....3 DON'T KNOW.....8

W EN 22

	FROM Q. 212	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
459	Was anything given to treat the diarrhoea?	YES.....1 NO.....2 (GO TO 461) DK.....8	YES.....1 NO.....2 (GO TO 461) DK.....8
460	What was given to treat the diarrhoea? Anything else? RECORD ALL MENTIONED.	FLUID FROM ORS PACKET....A HOMEMADE SUGAR/SALT SOLUTION.....B ANTIBIOTIC PILL OR SYRUP.C OTHER PILL OR SYRUP.....D INJECTION.....E (I.V.) INTRAVENOUS.....F HOME REMEDIES/ HERBAL MEDICINES.....G OTHER_____X (SPECIFY)	FLUID FROM ORS PACKET....A HOMEMADE SUGAR/SALT SOLUTION.....B ANTIBIOTIC PILL OR SYRUP.C OTHER PILL OR SYRUP.....D INJECTION.....E (I.V.) INTRAVENOUS.....F HOME REMEDIES/ HERBAL MEDICINES.....G OTHER_____X (SPECIFY)
461	Did you seek advice or treatment for the diarrhoea?	YES.....1 NO.....2 (GO TO 464)	YES.....1 NO.....2 (GO TO 464)
462	Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED.	PUBLIC SECTOR GVT. HOSPITAL.....A GVT. HEALTH CENTER.....B COMMUNITY HEALTH WORKER.C MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....D MISSION HOSP./CLINIC....E PHARMACY.....F PRIVATE DOCTOR.....G OTHER PRIVATE SECTOR SHOP.....H TRADITIONAL HEALER.....I OTHER_____X (SPECIFY)	PUBLIC SECTOR GVT. HOSPITAL.....A GVT. HEALTH CENTER.....B COMMUNITY HEALTH WORKER.C MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....D MISSION HOSP./CLINIC....E PHARMACY.....F PRIVATE DOCTOR.....G OTHER PRIVATE SECTOR SHOP.....H TRADITIONAL HEALER.....I OTHER_____X (SPECIFY)
464		GO BACK TO 442 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 465.	GO BACK TO 442 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 465.

W EN 23

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
465	When a child has diarrhoea, should he/she be given less to drink than usual, about the same amount, or more than usual?	LESS TO DRINK.....1 ABOUT SAME AMOUNT TO DRINK.....2 MORE TO DRINK.....3 DON'T KNOW.....8	
466	When a child has diarrhoea, should he/she be given less to eat than usual, about the same amount, or more than usual?	LESS TO EAT.....1 ABOUT SAME AMOUNT TO EAT.....2 MORE TO EAT.....3 DON'T KNOW.....8	
467	When a child is sick with diarrhoea, what signs of illness would tell you that he or she should be taken to a health facility or health worker? RECORD ALL MENTIONED.	REPEATED WATERY STOOLS.....A ANY WATERY STOOLS.....B REPEATED VOMITING.....C ANY VOMITING.....D BLOOD IN STOOLS.....E FEVER.....F MARKED THIRST.....G NOT EATING/NOT DRINKING WELL....H GETTING SICKER/VERY SICK.....I NOT GETTING BETTER.....J SUNKEN EYES.....K OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
468	When a child is sick with a cough, what signs of illness would tell you that he or she should be taken to a health facility or health worker? RECORD ALL MENTIONED.	FAST BREATHING.....A DIFFICULT BREATHING.....B NOISY BREATHING.....C FEVER.....D UNABLE TO DRINK.....E NOT EATING/NOT DRINKING WELL....F GETTING SICKER/VERY SICK.....G NOT GETTING BETTER.....H CHEST INDRAWING.....I OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
468A	When a child is sick with a fever, what signs of illness would tell you that he or she should be taken to a health facility or health worker? RECORD ALL MENTIONED.	FEVER TWO OR MORE DAYS.....A SEIZURES/SHAKING.....B CHEST INDRAWING.....C NOT EATING/NOT DRINKING WELL....D GETTING SICKER/VERY SICK.....E NOT GETTING BETTER.....F OTHER_____ X (SPECIFY) DON'T KNOW.....Z	

W EN 24

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
469	CHECK 460 (ALL COLUMNS): NO CHILD RECEIVED ORS ☐ ANY CHILD RECEIVED ORS ☐		→473
470	Have you ever heard of a special product called Madzi-a-Moyo or ORS packet you can get for the treatment of diarrhea?	YES.....1 NO.....2	→472
471	Have you ever seen packets like this before? SHOW PACKETS.	YES.....1 NO.....2	→476
472	Have you ever prepared a solution with one of these packets to treat diarrhoea in yourself or someone else? SHOW PACKETS.	YES.....1 NO.....2	→475
473	The last time you prepared Madzi-a-Moyo or 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	→475
474	How much water did you use to prepare Madzi-a-Moyo or ORS packet the last time you made it?	1/2 LITRE (BANANA CUP).....01 750 MLS.....02 1 LITRE.....03 1 1/2 LITRES.....04 2 LITRES.....05 FOLLOWED PACKAGE INSTRUCTIONS..06 OTHER_____07 (SPECIFY) DK.....98	
475	Where can you get Madzi-a-Moyo or ORS packet? PROBE: Anywhere else? RECORD ALL PLACES MENTIONED.	PUBLIC SECTOR GOVERNMENT HOSPITAL.....A GOVERNMENT HEALTH CENTER.....B COMMUNITY HEALTH WORKER.....C MEDICAL PRIVATE SECTOR PRIVATE HOSPITAL/CLINIC.....D MISSION HOSPITAL/CLINIC.....E PHARMACY.....F PRIVATE DOCTOR.....G OTHER PRIVATE SECTOR SHOP.....H TRADITIONAL HEALER.....I OTHER_____X (SPECIFY)	
476	CHECK 460 (ALL COLUMNS): HOME-MADE FLUID GIVEN TO ANY CHILD ☐ HOME-MADE FLUID NOT GIVEN TO ANY CHILD OR 460 NOT ASKED ☐		→501
477	Where did you learn to prepare the home fluid made from sugar, salt and water that was given to (NAME) when he/she had diarrhoea?	PUBLIC SECTOR GOVERNMENT HOSPITAL.....11 GOVERNMENT HEALTH CENTER.....12 COMMUNITY HEALTH WORKER.....13 MEDICAL PRIVATE SECTOR PRIVATE HOSPITAL/CLINIC.....21 MISSION HOSPITAL/CLINIC..... 22 PHARMACY.....23 PRIVATE DOCTOR.....24 OTHER PRIVATE SECTOR SHOP.....31 TRADITIONAL HEALER.....32 OTHER_____ 41 (SPECIFY)	

W EN 25

SECTION 5. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
501	PRESENCE OF OTHERS AT THIS POINT.	YES NO CHILDREN UNDER 10.....1 2 HUSBAND/PARTNER.....1 2 OTHER MALES.....1 2 OTHER FEMALES.....1 2	
502	Are you currently married or living with a man?	YES, CURRENTLY MARRIED.....1 YES, LIVING WITH A MAN.....2 NO, NOT IN UNION.....3	→507
503	Do you currently have a regular sexual partner, an occasional sexual partner, or no sexual partner at all?	REGULAR SEXUAL PARTNER.....1 OCCASIONAL SEXUAL PARTNER.....2 NO SEXUAL PARTNER.....3	
504	Have you ever been married or lived with a man?	YES, FORMERLY MARRIED.....1 YES, LIVED WITH A MAN.....2 NO.....3	→511 →515F
506	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED.....1 DIVORCED.....2 SEPARATED.....3	→511
507	Is your husband/partner living with you now or is he staying elsewhere?	LIVES WITH HER.....1 STAYING ELSEWHERE.....2	
507A	WRITE THE NAME OF HER HUSBAND OR PARTNER. OBTAIN HIS LINE NUMBER FROM THE HOUSEHOLD SCHEDULE. IF HE IS NOT LISTED IN THE HOUSEHOLD, WRITE '00'	_____ (NAME) [ ][ ]	
508	Does your husband/partner have any other wives besides yourself?	YES.....1 NO.....2 DON'T KNOW.....8	→511
509	How many other wives does he have?	NUMBER..... [ ][ ] DON'T KNOW.....98	→511
510	Are you the first, second,.....wife?	RANK..... [ ][ ]	
511	Have you been married or lived with a man only once, *or more than once?*	ONCE.....1 *MORE THAN ONCE*.....2	
512	CHECK 511: MARRIED/LIVED WITH A MAN ONLY ONCE [ ] → In what month and year did you start living with your husband/partner? MARRIED/LIVED WITH A MAN MORE THAN ONCE [ ] → Now we will talk about your first husband/partner. In what month and year did you start living with him?	MONTH..... [ ][ ] DON'T KNOW MONTH.....98 YEAR..... [ ][ ] DON'T KNOW YEAR.....98	→514
513	How old were you when you started living with him?	AGE..... [ ][ ]	

W EN 26

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
514	CHECK 502: CURRENTLY MARRIED OR LIVING WITH A MAN ☐	NOT IN UNION ☐	→515F
515	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family planning issues. When was the last time you had sexual intercourse with (your husband/the man you are living with)?	NEVER.....000 DAYS AGO.....1 ☐☐ WEEKS AGO.....2 ☐☐ MONTHS AGO.....3 ☐☐ YEARS AGO.....4 ☐☐ BEFORE LAST BIRTH.....996	→608
515A	CHECK 301 AND 302: KNOWS CONDOM ☐ → The last time you had sex with (your husband/ the man you are living with), was a condom used? DOES NOT KNOW CONDOM ☐ → Some men use a condom, which means that they put a rubber sheath on their penis during sexual intercourse. The last time you had sex with (your husband/ the man you are living with), was a condom used?	YES.....1 NO.....2 DOES NOT KNOW.....8	
515B	Have you had sex with anyone other than (your husband/ the man you are living with) in the last 12 months?	YES.....1 NO.....2	→517
515C	When was the last time you had sexual intercourse with someone other than (your husband/ the man you are living with)?	DAYS AGO.....1 ☐☐ WEEKS AGO.....2 ☐☐ MONTHS AGO.....3 ☐☐ BEFORE LAST BIRTH.....996	
515D	Was a condom used that time?	YES.....1 NO.....2 DOES NOT KNOW.....8	
515E	In the last 12 months, how many different persons other than (your husband/the man you are living with) have you had sex with?	NUMBER OF PERSONS..... ☐☐ DOES NOT KNOW.....98	→517
515F	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family planning issues. When was the last time you had sexual intercourse (if ever)?	NEVER.....000 DAYS AGO.....1 ☐☐ WEEKS AGO.....2 ☐☐ MONTHS AGO.....3 ☐☐ YEARS AGO.....4 ☐☐ BEFORE LAST BIRTH.....996	→608

W EN 27

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
515G	*CHECK 301 AND 302:* KNOWS CONDOM ☐ → The last time you had sex, was a condom used? DOES NOT KNOW CONDOM ☐ → Some men use a condom, which means that they put a rubber sheath on their penis during sexual intercourse. The last time you had sex, was a condom used?	YES.....1 NO.....2 DOES NOT KNOW.....8	
515H	CHECK 515F: LESS THAN 12 MONTHS SINCE LAST SEX ☐ ↓ 12 MONTHS OR LONGER SINCE LAST SEX ☐		→517
515I	In the last 12 months, how many different persons have you had sex with?	NUMBER OF PERSONS..... ☐☐ DOES NOT KNOW.....98	
517	Do you know of a place where you can get condoms?	YES.....1 NO.....2	→519
518	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL.....11 GOVERNMENT HEALTH CENTER.....12 COMMUNITY HEALTH WORKER.....13 OTHER PUBLIC_____ 14 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC.....21 MISSION HOSPITAL/CLINIC.....22 PHARMACY.....23 PRIVATE DOCTOR.....24 MOBILE CLINIC.....25 OTHER PRIVATE MEDICAL_____ 26 (SPECIFY) OTHER SOURCE SHOP.....31 FRIENDS/RELATIVES.....33 OTHER_____ 36 (SPECIFY)	
519	How old were you when you first had sexual intercourse?	AGE..... ☐☐ FIRST TIME WHEN MARRIED.....96	

W EN 28

SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
601	CHECK 314: NEITHER STERILIZED ☐ ▼ HE OR SHE STERILIZED ☐		→612
602	CHECK 227: NOT PREGANT OR UNSURE ☐ ▼ Now I have some questions about the future. Would you like to have (a/another) child or would you prefer not to have any (more) children? PREGNANT ☐ ▼ Now I have some questions about the future. After the child you are expecting now, would you like to have another child or would you prefer not to have any more children?	HAVE (A/ANOTHER) CHILD.....1 NO MORE/NONE.....2 SAYS SHE CAN'T GET PREGNANT.....3 UNDECIDED/DON'T KNOW.....8	 →606 →604
603	CHECK 227: NOT PREGANT OR UNSURE ☐ ▼ How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ ▼ After the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ SOON/NOW.....993 SAYS SHE CAN'T GET PREGNANT...994 AFTER MARRIAGE.....995 OTHER_____ 996 (SPECIFY) DON'T KNOW.....998	 →606
604	CHECK 227: NOT PREGNANT OR UNSURE ☐ ▼ PREGNANT ☐		→607
605	If you became pregnant in the next few weeks, would you be happy, unhappy, or would it not matter very much?	HAPPY.....1 UNHAPPY.....2 WOULD NOT MATTER.....3	
606	CHECK 313: USING A METHOD? NOT ASKED ☐ ▼ NOT CURRENTLY USING ☐ ▼ CURRENTLY USING ☐		→612
607	Do you think you will use a method to delay or avoid pregnancy within the next 12 months?	YES.....1 NO.....2 DON'T KNOW.....8	→609
608	Do you think you will use a method at any time in the future?	YES.....1 NO.....2 DON'T KNOW.....8	 →610
609	Which method would you prefer to use?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 FOAMING TABLETS/JELLY.....05 CONDOM.....06 FEMALE STERILIZATION.....07 MALE STERILIZATION.....08 NATURAL FAMILY PLANNING.....09 WITHDRAWAL.....10 OTHER_____ 96 (SPECIFY) UNSURE.....98	→612

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
610	What is the main reason that you think you will never use a method?	NOT MARRIED.....11 FERTILITY-RELATED REASONS INFREQUENT SEX.....22 MENOPAUSAL/HYSTERECTOMY.....23 SUBFECUND/INFECUND.....24 WANTS MORE CHILDREN.....26 OPPOSITION TO USE RESPONDENT OPPOSED.....31 HUSBAND OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 OTHER_____ 96 (SPECIFY) DON'T KNOW.....98	→612
611	Would you ever use a method if you were married?	YES.....1 NO.....2 DON'T KNOW.....8	
612	CHECK 216: HAS LIVING CHILDREN ☐ → If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ → If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NUMBER..... ☐☐ OTHER_____ 96 (SPECIFY)	→614
613	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter?	BOYS NUMBER..... ☐☐ OTHER_____ 96 (SPECIFY) GIRLS NUMBER..... ☐☐ OTHER_____ 96 (SPECIFY) EITHER NUMBER..... ☐☐ OTHER_____ 96 (SPECIFY)	
614	Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE.....1 DISAPPROVE.....2 NO OPINION.....3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
615	Is it acceptable or not acceptable to you for information on family planning to be provided: On the radio? On the television?	ACCEPT-ABLE / NOT ACCEPT-ABLE / DK RADIO.....1 / 2 / 8 TELEVISION.....1 / 2 / 8	
616	In the last few months have you heard or read about family planning: On the radio? On the television? In a newspaper or magazine? From a poster? From leaflets or brochures? From live drama? From a doctor or a nurse? From a community health worker?	YES / NO RADIO.....1 / 2 TELEVISION.....1 / 2 NEWSPAPER OR MAGAZINE.....1 / 2 POSTER.....1 / 2 LEAFLETS OR BROCHURES.....1 / 2 LIVE DRAMA.....1 / 2 DOCTOR OR NURSE.....1 / 2 COMMUNITY HEALTH WORKER ....1 / 2	
618	In the last few months have you discussed the practice of family planning with your husband, partner, friends, neighbors, or relatives?	YES.....1 NO.....2	→620
619	With whom? Anyone else? RECORD ALL MENTIONED.	HUSBAND/PARTNER.....A MOTHER.....B FATHER.....C SISTER(S).....D BROTHER(S).....E DAUGHTER.....F MOTHER-IN-LAW.....G FRIENDS/NEIGHBORS.....H COMMUNITY HEALTH WORKER.....I LOCAL COMMUNITY LEADER.....J RELIGIOUS LEADER.....K OTHER_____ X (SPECIFY)	
620	CHECK 502: YES, CURRENTLY MARRIED [ ] YES, LIVING WITH A MAN [ ] NO, NOT IN UNION [ ]		→701
621	Spouses/partners do not always agree on everything. Now I want to ask you about your husband's/partner's views on family planning. Do you think that your husband/partner approves or disapproves of couples using a method to avoid pregnancy?	APPROVES.....1 DISAPPROVES.....2 DON'T KNOW.....8	
622	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	
623	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	
624	Who do you think should decide on the number of children a couple should have?	WIFE.....1 HUSBAND.....2 BOTH.....3 NO ONE.....4 OTHER_____.6 (SPECIFY) DON'T KNOW.....8	

W EN 31

SECTION 7. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
701	CHECK 502 AND 504: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ FORMERLY MARRIED/ LIVED WITH A MAN ☐ NEVER MARRIED AND NEVER IN UNION ☐		703 709
702	How old was your husband/partner on his last birthday?	AGE..... ☐☐	
703	Did your (last) husband/partner ever attend school?	YES.....1 NO.....2	 706
704	What was the highest level of school he attended: primary, secondary, or higher?	PRIMARY .....1 SECONDARY.....2 HIGHER.....3 DON'T KNOW.....8	 706
705	How many years did he complete at that level?	YEARS..... ☐☐ DON'T KNOW.....98	
706	What is (was) your (last) husband/partner's occupation? That is, what kind of work does (did) he mainly do?	_____ ☐☐ _____ _____	
707	CHECK 706: WORKS (WORKED) IN AGRICULTURE ☐ DOES (DID) NOT WORK IN AGRICULTURE ☐		709
708	(Does/did) your husband/partner work mainly on his own land or on family land, or (does/did) he rent land, or (does/did) he work on someone else's land?	HIS LAND.....1 FAMILY LAND.....2 RENTED LAND.....3 SOMEONE ELSE'S LAND.....4	
709	Aside from your own housework, are you currently working?	YES.....1 NO.....2	712
710	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	712
711	Have you done any work in the last 12 months?	YES.....1 NO.....2	 801
712	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
713	CHECK 712: WORKS IN AGRICULTURE ☐ DOES NOT WORK IN AGRICULTURE ☐		715
714	Do you work mainly on your own land or on family land, or do you rent land, or work on someone else's land?	OWN LAND.....1 FAMILY LAND.....2 RENTED LAND.....3 SOMEONE ELSE'S LAND.....4	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
715	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER.....1 FOR SOMEONE ELSE.....2 SELF-EMPLOYED.....3	
716	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR.....1 SEASONALLY/PART OF THE YEAR.....2 ONCE IN A WHILE.....3	→718 →719
717	During the last 12 months, how many months did you work?	NUMBER OF MONTHS..... [ ][ ]	
718	(In the months you worked,) How many days a week did you usually work?	NUMBER OF DAYS..... [ ]	→720
719	During the last 12 months, approximately how many days did you work?	NUMBER OF DAYS..... [ ][ ][ ]	
720	Do you earn cash for your work? PROBE: Do you make money for working?	YES.....1 NO.....2	 →723
721	How much do you usually earn for this work? KWACHA _____ PROBE: Is this by the day, by the week, or by the month? PER _____	KWACHA PER HOUR..1 [ ][ ][ ][ ][ ][ ][ ] PER DAY...2 [ ][ ][ ][ ][ ][ ][ ] PER WEEK..3. [ ][ ][ ][ ][ ][ ][ ] PER MONTH.4 [ ][ ][ ][ ][ ][ ][ ] PER YEAR..5 [ ][ ][ ][ ][ ][ ][ ] OTHER_____ 99999996 (SPECIFY)	
722	CHECK 502: YES, CURRENTLY MARRIED YES, LIVING WITH A MAN [ ] Who mainly decides how the money you earn will be used: you, your husband/partner, you and your husband/partner jointly, or someone else? NO, NOT IN UNION [ ] Who mainly decides how the money you earn will be used: you, someone else, or you and someone else jointly?	RESPONDENT DECIDES.....1 HUSBAND/PARTNER DECIDES.....2 JOINTLY WITH HUSBAND/PARTNER....3 SOMEONE ELSE DECIDES.....4 JOINTLY WITH SOMEONE ELSE.....5	
723	Do you usually work at home or away from home?	HOME.....1 AWAY.....2	→801A
724	CHECK 217 AND 218: IS A CHILD LIVING AT HOME WHO IS AGE 5 OR LESS? YES [ ] NO [ ]		→801A
725	Who usually takes care of (NAME OF YOUNGEST CHILD AT HOME) while you are working?	RESPONDENT.....01 HUSBAND/PARTNER.....02 OLDER FEMALE CHILD.....03 OLDER MALE CHILD.....04 OTHER RELATIVES.....05 NEIGHBORS.....06 FRIENDS.....07 SERVANTS/HIRED HELP.....08 CHILD IS IN SCHOOL.....09 INSTITUTIONAL CHILDCARE.....10 HAS NOT WORKED SINCE LAST BIRTH.....95 OTHER_____ 96 (SPECIFY)	

SECTION 8. AIDS AND OTHER SEXUALLY TRANSMITTED DISEASES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
801A	Have you heard about diseases that can be transmitted through sexual intercourse?	YES.....1 NO.....2	 →801K
801B	Which diseases do you know? RECORD ALL RESPONSES	SYPHILIS .....A GONORRHEA .....B AIDS.....C GENITAL WARTS/CONDYLOMATA.....D OTHER_____ W (SPECIFY) OTHER_____ X (SPECIFY) DOES NOT KNOW.....Z	
801C	CHECK 515 AND 515F: HAS HAD SEXUAL INTERCOURSE ☐ ↓ HAS NEVER HAD SEXUAL INTERCOURSE ☐		→801K
801D	During the last twelve months, did you have any of these diseases?	YES.....1 NO.....2 DOES NOT KNOW.....8	 →801K
801E	Which of the diseases did you have? RECORD ALL RESPONSES	SYPHILIS .....A GONORRHEA .....B AIDS.....C GENITAL WARTS/CONDYLOMATA.....D OTHER_____ W (SPECIFY) OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
801F	The last time you had (DISEASE(S) FROM 801E) did you seek advice or treatment?	YES.....1 NO.....2	 →801H
801G	Where did you seek advice or treatment? Any other place or person? RECORD ALL MENTIONED	PUBLIC SECTOR GOVT. HOSPITAL.....A HEALTH CENTER.....B OTHER PUBLIC SECTOR.....C MEDICAL PRIVATE SECTOR PRIVATE HOSPITAL/CLINIC.....D MISSION HOSPITAL/CLINIC.....E PHARMACY.....F PRIVATE DOCTOR.....G MOBILE CLINIC.....H OTHER MED. PRIVATE SECTOR.....I OTHER SHOP.....J RELATIVES/FRIENDS.....K TRADITIONAL HEALER.....L OTHER_____ X (SPECIFY) DOES NOT KNOW.....Z	
801H	When you had (DISEASE(S) FROM 801E) did you inform your partner(s)?	YES.....1 NO.....2	
801I	When you had (DISEASE(S) FROM 801E) did you do something not to infect your partner(s)?	YES.....1 NO.....2 PARTNER ALREADY INFECTED.....3	 →801K

W EN 34

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
801J	What did you do? RECORD ALL MENTIONED	NO SEXUAL INTERCOURSE.....A USED CONDOMS.....B TOOK MEDICINES.....C OTHER_____ X (SPECIFY)	
801K	CHECK 801B DID NOT MENTION 'AIDS' ☐ MENTIONED 'AIDS' ☐		802
801L	Have you ever heard of an illness called AIDS?	YES.....1 NO.....2	811C
802	From which sources of information have you learned most about AIDS? Any other sources? RECORD ALL MENTIONED	RADIO.....A TV.....B NEWSPAPERS/MAGAZINES.....C PAMPLETS/POSTERS.....D HEALTH WORKERS.....E MOSQUES/CHURCHES.....F SCHOOLS/TEACHERS.....G COMMUNITY MEETINGS.....H FRIENDS/RELATIVES.....I WORK PLACE.....J LIVE DRAMA.....K OTHER.....X (SPECIFY)	
802B	How can a person get AIDS? Any other ways? RECORD ALL MENTIONED	SEXUAL INTERCOURSE.....A SEXUAL INTERCOURSE WITH MULTIPLE PARTNERS.....B SEX WITH PROSTITUTES.....C NOT USING CONDOM.....D HOMOSEXUAL CONTACT.....E BLOOD TRANSFUSION.....F INJECTIONS.....G KISSING.....H MOSQUITO BITES.....I CONTAMINATED RAZOR BLADE.....J OTHER_____W (SPECIFY) OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
803	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	807
804	What can a person do? Any other ways? RECORD ALL MENTIONED	SAFE SEX.....A ABSTAIN FROM SEX.....B USE CONDOMS.....C AVOID MULTIPLE SEX PARTNERS.....D AVOID SEX WITH PROSTITUTES.....E AVOID SEX WITH HOMOSEXUALS.....F AVOID BLOOD TRANSFUSIONS.....G AVOID INJECTIONS.....H AVOID KISSING.....I AVOID MOSQUITO BITES.....J SEEK PROTECTION FROM FROM TRADITIONAL HEALER.....K OTHER_____W (SPECIFY) OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	

W EN 35

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
805	CHECK 804: MENTIONED 'SAFE SEX' ☐	DID NOT MENTION 'SAFE SEX' ☐	→807
806	What does "safe sex" mean to you? RECORD ALL MENTIONED	ABSTAIN FROM SEX.....B USE CONDOMS.....C AVOID MULTIPLE SEX PARTNERS.....D AVOID SEX WITH PROSTITUTES.....E AVOID SEX WITH HOMOSEXUALS.....F OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
807	Is it possible for a healthy-looking person to have the AIDS virus?	YES.....1 NO.....2 DOES NOT KNOW.....8	
808	Do you think that persons with AIDS almost never die from the disease, sometimes die or almost always die from the disease?	ALMOST NEVER.....1 SOMETIMES.....2 ALMOST ALWAYS.....3 DOES NOT KNOW.....8	
808A	Can AIDS be cured?	YES.....1 NO.....2 DOES NOT KNOW.....8	
808B	Can AIDS be transmitted from mother to child?	YES.....1 NO.....2 DOES NOT KNOW.....8	
808C	Do you personally know someone who has AIDS or has died of AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	→809
808D	How many people that you personally know now have AIDS?	NUMBER OF PERSONS..... ☐☐	
808E	How many people that you personally know have died of AIDS?	NUMBER OF PERSONS..... ☐☐	
809	CHECK 801E: IF RESPONDENT HAS AIDS, CIRCLE 5. Do you think your chances of getting AIDS are small, moderate, great, or no risk at all?	SMALL.....1 MODERATE.....2 GREAT.....3 NO RISK AT ALL.....4 HAS AIDS.....5	→809B →811A
809A	Why do you think that you have (no risk/a small chance) of getting AIDS? Any other reasons? RECORD ALL MENTIONED	ABSTAIN FROM SEX.....B USE CONDOMS.....C HAVE ONLY ONE SEX PARTNER.....D LIMITED NUMBER OF SEX PARTNERS..E SPOUSE HAS NO OTHER PARTNER.....F NO HOMOSEXUAL CONTACT.....G NO BLOOD TRANSFUSIONS.....H NO INJECTIONS.....I OTHER_____X (SPECIFY)	→811A
809B	Why do you think that you have a (moderate/great) chance of getting AIDS? Any other reasons? RECORD ALL MENTIONED	DO NOT USE CONDOMS.....C MORE THAN ONE SEX PARTNER.....D MANY SEX PARTNERS.....E SPOUSE HAS OTHER PARTNER(S).....F HOMOSEXUAL CONTACT.....G HAD BLOOD TRANSFUSION.....H HAD INJECTIONS.....I OTHER_____X (SPECIFY)	

W EN 36

NO.	QUESTIONS AND FILTERS	CODES	GO TO
811A	Since you heard of AIDS, have you changed your behavior to prevent getting AIDS? IF YES, what did you do? Anything else? RECORD ALL MENTIONED	DIDN'T START SEX.....A STOPPED ALL SEX.....B STARTED USING CONDOMS.....C RESTRICTED SEX TO ONE PARTNER...D REDUCED NUMBER OF PARTNERS.....E ASK SPOUSE TO BE FAITHFUL.....F NO MORE HOMOSEXUAL CONTACTS.....G STOPPED INJECTIONS.....I OTHER_____W (SPECIFY) OTHER_____X (SPECIFY) NO BEHAVIOR CHANGE.....Y	→811C →811F →811C
811B	Has your knowledge of AIDS influenced or changed your decisions about having sex or your sexual behavior? IF YES, In what way? RECORD ALL MENTIONED	DIDN'T START SEX.....A STOPPED ALL SEX.....B STARTED USING CONDOMS.....C RESTRICTED SEX TO ONE PARTNER...D REDUCED NUMBER OF PARTNERS.....E NO MORE HOMOSEXUAL CONTACTS.....G OTHER_____X (SPECIFY) NO CHANGE IN SEXUAL BEHAVIOR....Y DOES NOT KNOW.....Z	
811C	Some people use a condom during sexual intercourse to avoid getting AIDS or other sexually transmitted diseases. Have you ever heard of this?	YES.....1 NO.....2	→811F
811D	CHECK 515 AND 515F: HAS HAD SEXUAL INTERCOURSE ☐ ↓ HAS NEVER HAD SEXUAL INTERCOURSE ☐		→813
811E	We may already have talked about this. Have you ever used a condom during sex to avoid getting or transmitting diseases, such as AIDS?	YES.....1 NO.....2	→811G
811F	CHECK 515 AND 515F: HAS HAD SEXUAL INTERCOURSE ☐ ↓ HAS NEVER HAD SEXUAL INTERCOURSE ☐		→813
811G	Have you given or received money, gifts or favours in return for sex at any time in the last 12 months?	YES.....1 NO.....2	
812	Would you say that you approve or disapprove of couples using condoms to avoid contracting or spreading AIDS and other sexually transmitted diseases?	APPROVE.....1 DISAPPROVE.....2 NO OPINION.....3	
813	Is it acceptable or not acceptable to you for information on AIDS to be provided: On the radio? On the television?	ACCEPTABLE / NOT ACCEPTABLE / DK RADIO.....1 / 2 / 8 TELEVISION.....1 / 2 / 8	
814	In the last few months have you heard or read about AIDS: On the radio? On the television? In a newspaper or magazine? From a poster? From leaflets or brochures? From live drama? From a doctor or a nurse? From a community health worker?	YES / NO RADIO.....1 / 2 TELEVISION.....1 / 2 NEWSPAPER OR MAGAZINE.....1 / 2 POSTER.....1 / 2 LEAFLETS OR BROCHURES.....1 / 2 LIVE DRAMA.....1 / 2 DOCTOR OR NURSE.....1 / 2 COMMUNITY HEALTH WORKER ....1 / 2	

SECTION 9. MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
901	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died. How many children did your mother give birth to, including you?	*NUMBER OF BIRTHS TO NATURAL MOTHER*..... [ ][ ]	
902	CHECK 901: TWO OR MORE BIRTHS [ ]	ONLY ONE BIRTH (RESPONDENT ONLY) [ ]	916
903	How many of these births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS..... [ ][ ]	

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	[1]	[2]	[3]	[4]	[5]	[6]
904 What was the name given to your mother's (first born, second born,..)?	----------	----------	----------	----------	----------	----------
905 Is (NAME) male or female?	MALE.....1 FEMALE.....2	MALE.....1 FEMALE.....2	MALE.....1 FEMALE.....2	MALE.....1 FEMALE.....2	MALE.....1 FEMALE.....2	MALE.....1 FEMALE.....2
906 Is (NAME) still alive?	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [2]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [3]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [4]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [5]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [6]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [7]
907 How old is (NAME)?	GO TO [2]	GO TO [3]	GO TO [4]	GO TO [5]	GO TO [6]	GO TO [7]
908 In what year did (NAME) die?	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98
909 How many years ago did (NAME) die?						
910 How old was (NAME) when she/he died?	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [2]	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [3]	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [4]	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [5]	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [6]	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [7]
911 Was (NAME) pregnant when she died?	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2
912 Did (NAME) die during childbirth?	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2
913 Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915
914 Was her death due to complications of pregnancy or childbirth?	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2
915 How many children did (NAME) give birth to during her lifetime?	GO TO [2]	GO TO [3]	GO TO [4]	GO TO [5]	GO TO [6]	GO TO [7]

IF NO MORE BROTHERS OR SISTERS, GO TO 916

904 What was the name given to your mother's (first born, second born,..)?	[7]	[8]	[9]	[10]	[11]	[12]
905 Is (NAME) male or female?	MALE.....1 FEMALE.....2	MALE.....1 FEMALE.....2	MALE.....1 FEMALE.....2	MALE.....1 FEMALE.....2	MALE.....1 FEMALE.....2	MALE.....1 FEMALE.....2
906 Is (NAME) still alive?	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [8]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [9]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [10]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [11]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [12]	YES.....1 NO.....2 GO TO 908 DK.....8 GO TO [13]
907 How old is (NAME)?	GO TO [8]	GO TO [9]	GO TO [10]	GO TO [11]	GO TO [12]	GO TO [13]
908 In what year did (NAME) die?	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98	19 GO TO 910 DK.....98
909 How many years ago did (NAME) die?						
910 How old was (NAME) when she/he died?	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [8]	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [9]	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [10]	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [11]	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [12]	IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [13]
911 Was (NAME) pregnant when she died?	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2	YES.....1 GO TO 914 NO.....2
912 Did (NAME) die during childbirth?	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2	YES.....1 GO TO 915 NO.....2
913 Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915	YES.....1 NO.....2 GO TO 915
914 Was her death due to complications of pregnancy or childbirth?	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2
915 How many children did (NAME) give birth to during her lifetime?	GO TO [8]	GO TO [9]	GO TO [10]	GO TO [11]	GO TO [12]	GO TO [13]

IF NO MORE BROTHERS OR SISTERS, GO TO 916

916	RECORD THE TIME.	HOUR..... MINUTES.....

SECTION 10. HEIGHT AND WEIGHT

1001	CHECK 215:	ONE OR MORE BIRTHS SINCE JAN. 1991 ☐	NO BIRTHS SINCE JAN. 1991 ☐ → END

IN 1002 (COLUMNS 2 AND 3) RECORD THE LINE NUMBER FOR EACH CHILD BORN SINCE JANUARY 1991 AND STILL ALIVE. IN 1003 AND 1004 RECORD THE NAME AND BIRTH DATE FOR THE RESPONDENT AND FOR ALL LIVING CHILDREN BORN SINCE JANUARY 1991. IN 1006 AND 1008 RECORD HEIGHT AND WEIGHT OF THE RESPONDENT AND THE LIVING CHILDREN. (NOTE: ALL RESPONDENTS WITH ONE OR MORE BIRTHS SINCE JANUARY 1991 SHOULD BE WEIGHED AND MEASURED EVEN IF ALL OF THE CHILDREN HAVE DIED. IF THERE ARE MORE THAN 2 LIVING CHILDREN BORN SINCE JANUARY 1991, USE CONTINUATION SHEETS).

		1 RESPONDENT	2 YOUNGEST LIVING CHILD	3 NEXT-TO-YOUNGEST LIVING CHILD
1002	LINE NO. FROM Q.212		☐☐	☐☐
1003	NAME FROM Q.212 FOR CHILDREN	(NAME) _____	(NAME) _____	(NAME) _____
1004	DATE OF BIRTH FROM Q.215, AND ASK FOR DAY OF BIRTH		DAY..... ☐☐ MONTH..... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH..... ☐☐ YEAR..... ☐☐
1005	BCG SCAR ON TOP OF LEFT SHOULDER		SCAR SEEN.....1 NO SCAR.....2	SCAR SEEN.....1 NO SCAR.....2
1006	HEIGHT (in centimeters)	☐☐☐.☐	☐☐☐.☐	☐☐☐.☐
1007	WAS LENGTH/HEIGHT OF CHILD MEASURED LYING DOWN OR STANDING UP?		LYING.....1 STANDING.....2	LYING.....1 STANDING.....2
1008	WEIGHT (in kilograms)	☐☐☐.☐	0☐☐.☐	0☐☐.☐
1009	DATE WEIGHED AND MEASURED	DAY..... ☐☐ MONTH..... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH..... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH..... ☐☐ YEAR..... ☐☐
1010	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)

1011 NAME OF MEASURER: _____ ☐☐ NAME OF ASSISTANT: _____ ☐☐

W EN 41

INTERVIEWER'S OBSERVATIONS

To be filled in after completing interview

Comments about Respondent: _____

_____

_____

Comments on Specific Questions: _____

_____

_____

Any Other Comments: _____

_____

_____

SUPERVISOR'S OBSERVATIONS

_____

_____

_____

Name of Supervisor: _____ Date: _____

EDITOR'S OBSERVATIONS

_____

_____

_____

Name of Editor: _____ Date: _____

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1996 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY
MEN'S QUESTIONNAIRE
FOR MEN AGED 15-59

IDENTIFICATION

CLUSTER NUMBER.....

PROVINCE _____

DISTRICT _____

HOUSEHOLD NUMBER.....

NAME OF HOUSEHOLD HEAD _____

URBAN/RURAL (urban=1, rural=2).....

LUSAKA/OTHER CITY/TOWN/VILLAGE.....
(Lusaka=1, Other city=2, Town=3, Village=4)

NAME AND LINE NUMBER OF MAN _____

NAME AND LINE NUMBER OF FIRST WIFE _____

NAME AND LINE NUMBER OF SECOND WIFE _____

NAME AND LINE NUMBER OF THIRD WIFE _____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR
INTERVIEWER'S NAME				NAME
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NO. OF VISITS
TIME				

*RESULT CODES:
1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 INCAPACITATED
7 OTHER _____ (SPECIFY)

LANGUAGE OF QUESTIONNAIRE** ENGLISH 0 1

LANGUAGE USED IN INTERVIEW**.....

RESPONDENT'S LOCAL LANGUAGE**.....

TRANSLATOR USED (1=NOT AT ALL; 2=SOMETIME; 3=ALL THE TIME)..

**LANGUAGE CODES: 01 ENGLISH, 02 BEMBA, 03 KAONDE, 04 LOZI, 05 LUNDA, 06 LUVALE, 07 NYANJA, 08 TONGA, 09 OTHER

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

M EN 1

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
101	RECORD THE TIME.	HOUR..... [ ][ ] MINUTES..... [ ][ ]	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city, in a town, or in a village?	LUSAKA.....1 OTHER CITY.....2 TOWN.....3 VILLAGE.....4	
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 a city, in a town, or in a village?	LUSAKA.....1 OTHER CITY.....2 TOWN.....3 VILLAGE.....4	
105	In what month and year were you born?	MONTH..... [ ][ ] DON'T KNOW MONTH.....98 YEAR..... [ ][ ] DON'T KNOW YEAR.....98	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS..... [ ][ ]	
107	Have you ever attended school?	YES.....1 NO.....2	111
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY.....1 SECONDARY.....2 HIGHER.....3	
109	How many years did you complete at that level? COMMENT _____	YEARS..... [ ][ ]	
110	CHECK 108: PRIMARY [ ] SECONDARY OR HIGHER [ ]		112
111	Can you read and understand a letter or newspaper easily, with difficulty, or not at all?	EASILY.....1 WITH DIFFICULTY.....2 NOT AT ALL.....3	113
112	How often do you usually read a newspaper or magazine? Would you say every day, every other day, at least once a week, at least once a month, a few times a year, or never? CIRCLE ONLY ONE ANSWER.	EVERYDAY.....1 EVERY OTHER DAY.....2 AT LEAST ONCE A WEEK.....3 AT LEAST ONCE A MONTH.....4 FEW TIMES A YEAR.....5 NEVER.....6	
113	How often do you usually listen to a radio? Would you say every day, every other day, at least once a week, at least once a month, a few times a year, or never? CIRCLE ONLY ONE ANSWER.	EVERYDAY.....1 EVERY OTHER DAY.....2 AT LEAST ONCE A WEEK.....3 AT LEAST ONCE A MONTH.....4 FEW TIMES A YEAR.....5 NEVER.....6	
114	How often do you usually watch television? Would you say every day, every other day, at least once a week, at least once a month, a few times a year, or never? CIRCLE ONLY ONE ANSWER.	EVERYDAY.....1 EVERY OTHER DAY.....2 AT LEAST ONCE A WEEK.....3 AT LEAST ONCE A MONTH.....4 FEW TIMES A YEAR.....5 NEVER.....6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
115	Are you currently working?	YES.....1 NO.....2	→117
116	Have you done any work in the last 12 months?	YES.....1 NO.....2	→124
117	What is your occupation, that is, what kind of work do you mainly do?	_____ [ ][ ] _____ _____	
118	CHECK 117: WORKS IN AGRICULTURE [ ] ↓ DOES NOT WORK IN AGRICULTURE [ ]		→120
119	Do you work mainly on your own land or on family land, or do you rent land, or work on someone else's land?	OWN LAND.....1 FAMILY LAND.....2 RENTED LAND.....3 SOMEONE ELSE'S LAND.....4	
120	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER.....1 FOR SOMEONE ELSE.....2 SELF-EMPLOYED.....3	
121	Do you usually work at this job throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR.....1 SEASONALLY/PART OF THE YEAR.....2 ONCE IN A WHILE.....3	→123
122	During the last 12 months, how many months did you work at this job?	NUMBER OF MONTHS..... [ ][ ]	
123	How much do you earn for this work? KWACHA _____ PROBE: Is this by the hour, by the day, by the week, by the month or by the year? PER _____	KWACHA PER HOUR..1 [ ][ ][ ][ ][ ][ ][ ] PER DAY...2 [ ][ ][ ][ ][ ][ ][ ] PER WEEK..3. [ ][ ][ ][ ][ ][ ][ ] PER MONTH.4 [ ][ ][ ][ ][ ][ ][ ] PER YEAR..5 [ ][ ][ ][ ][ ][ ][ ] OTHER_____ 99999996 (SPECIFY)	
124	What religion are you?	CATHOLIC.....1 PROTESTANT.....2 MUSLIM.....3 OTHER_____ 4 (SPECIFY)	
125	What tribe do you belong to?	_____ [ ][ ]	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
201	Now I would like to ask about your children. I am interested only in your own children. Do not include children you may have adopted or care for as a father but whose real father is someone else. Have you ever had children?	YES.....1 NO.....2	→206
202	Do you have any sons or daughters 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 who are alive but do not live with you?	YES.....1 NO.....2	→206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE..... [ ][ ] DAUGHTERS ELSEWHERE..... [ ][ ]	
206	Have you ever had a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but survived only a few hours or days?	YES.....1 NO.....2	→208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD..... [ ][ ] GIRLS DEAD..... [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL..... [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in total ____ children during your life. Is that correct? YES [ ] NO [ ] → PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: HAS HAD CHILDREN [ ] HAS NEVER HAD CHILDREN (NONE) [ ]		→301
210A	In what month and year was your last child born?	MONTH..... [ ][ ] YEAR..... [ ][ ]	
210B	CHECK 210A, LAST CHILD: BORN SINCE JANUARY 1991 [ ]	BEFORE JANUARY 1991 [ ]	→301
211	When you were expecting your last born child, did you want to have the child then, did you want to wait until later, or did you not want to have any (more) children at all?	THEN.....1 LATER.....2 NOT AT ALL.....3	

SECTION 3. CONTRACEPTION

Now I would like to talk about family planning-the various ways or methods that a couple can use to delay or avoid a pregnancy.

CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY.
THEN PROCEED DOWN COLUMN 302, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY.
CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED.
THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 301 OR 302, ASK 303.

	301 Which ways or methods have you heard about?	302 Have you ever heard of (METHOD)?		303 Have you ever used (METHOD)?
	SPONTANEOUS YES	PROBED YES	NO	
01 PILL Women can take a pill every day.	1	2	3	YES.....1 NO, DOES NOT KNOW.....2
02 IUCD Women can have a loop or coil placed inside them by a doctor or a nurse.	1	2	3	YES.....1 NO, DOES NOT KNOW.....2
03 INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	1	2	3	YES.....1 NO, DOES NOT KNOW.....2
04 IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for several years.	1	2	3	YES.....1 NO, DOES NOT KNOW.....2
05 FOAMING TABLETS/JELLY Women can place a sponge, suppository, diaphragm, jelly, or cream inside themselves before intercourse.	1	2	3	YES.....1 NO, DOES NOT KNOW.....2
06 CONDOM Men can put a rubber sheath on their penis during sexual intercourse.	1	2	3	YES.....1 NO.....2
07 FEMALE STERILIZATION Women can have an operation to avoid having any more children.	1	2	3	Have you ever had a partner who had an operation to avoid having children? YES.....1 NO, DOES NOT KNOW.....2
08 MALE STERILIZATION Men can have an operation to avoid having any more children.	1	2	3	Have you ever had an operation to avoid having any more children? YES.....1 NO.....2
09 NATURAL FAMILY PLANNING Couples can avoid having sexual intercourse on the days of the month when the woman is more likely to become pregnant.	1	2	3	YES.....1 NO, DOES NOT KNOW.....2
10 WITHDRAWAL Men can be careful and pull out before climax.	1	2	3	YES.....1 NO.....2
11 Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	1 _____ (SPECIFY) _____ (SPECIFY)		3	YES.....1 NO.....2 YES.....1 NO.....2

304 CHECK 303:

NOT A SINGLE "YES" (NEVER USED) ☐ ▼

AT LEAST ONE "YES" (EVER USED) ☐ → SKIP TO 307

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
305	Have you or any of your partners ever used anything or tried in any way to delay or avoid pregnancy?	YES.....1 NO.....2	→309
306	What have you used or done? CORRECT 303 AND 304 (AND 302 IF NECESSARY).		
307	Are you or your partner currently doing something or using a method to delay or avoid a pregnancy?	YES.....1 NO.....2	→309
308	Which method are you using?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 FOAMING TABLETS/JELLY.....05 CONDOM.....06 FEMALE STERILIZATION.....07 MALE STERILIZATION.....08 NATURAL FAMILY PLANNING.....09 WITHDRAWAL.....10 OTHER METHOD_____96 (SPECIFY)	→401
309	What is the main reason you are not using a method of contraception to avoid pregnancy?	NOT MARRIED.....11 FERTILITY-RELATED REASONS NOT HAVING SEX.....21 INFREQUENT SEX.....22 WIFE MENOPAUSAL/HYSTERECTOMY.23 WIFE SUBFECUND/INFECUND.....24 POSTPARTUM/BREASTFEEDING.....25 WANTS (MORE) CHILDREN.....26 WIFE PREGNANT.....27 OPPOSITION TO USE RESPONDENT OPPOSED.....31 WIFE/PARTNER OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 UP TO THE WOMAN TO USE.....61 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	

M EN 6

SECTION 4. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
401	Are you currently married or living with a woman?	YES, CURRENTLY MARRIED.....1 YES, LIVING WITH A WOMAN.....2 NO, NOT IN UNION.....3	 →402A →404
402 402A	How many wives do you have? How many women are you living with as if you are married?	NUMBER OF WIVES..... [ ][ ]	
403	WRITE THE LINE NUMBERS FROM THE HOUSEHOLD QUESTIONNAIRE FOR HIS WIFE/WIVES. IF A WIFE DOES NOT LIVE IN THE HOUSEHOLD, WRITE '00'. THE NUMBER OF BOXES FILLED MUST EQUAL THE NUMBER OF WIVES.	[ ][ ] [ ][ ] [ ][ ] [ ][ ] [ ][ ] [ ][ ] [ ][ ] [ ][ ]	→407
404	Do you currently have a regular sexual partner, an occasional sexual partner or no sexual partner at all?	REGULAR SEXUAL PARTNER.....1 OCCASIONAL SEXUAL PARTNER.....2 NO SEXUAL PARTNER.....3	
405	Have you ever been married or lived with a woman?	YES, FORMERLY MARRIED.....1 YES, LIVED WITH A WOMAN.....2 NO.....3	 →407 →410F
406	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED.....1 DIVORCED.....2 SEPARATED.....3	
407	Have you been married or lived with a woman only once, or more than once?	ONCE.....1 MORE THAN ONCE.....2	
408	CHECK 407: MARRIED/LIVED WITH A WOMAN ONLY ONCE [ ] → In what month and year did you start living with your wife/woman? MARRIED/LIVED WITH A WOMAN MORE THAN ONCE [ ] → Now we will talk about your first wife/woman you lived with. In what month and year did you start living with her?	MONTH..... [ ][ ] DOES NOT KNOW MONTH.....98 YEAR..... [ ][ ] DOES NOT KNOW YEAR.....98	 →409A
409	How old were you when you started living with her?	AGE..... [ ][ ]	

M EN 7

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
409A	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A WOMAN ☐	NOT IN UNION ☐	→410F
410	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family planning issues. When was the last time you had sexual intercourse with (your wife/the woman you are living with)?	DAYS AGO.....1 ☐☐ WEEKS AGO.....2 ☐☐ MONTHS AGO.....3 ☐☐ YEARS AGO.....4 ☐☐	
410A	CHECK 301 AND 302: KNOWS CONDOM ☐ → The last time you had sex with (your wife/ the woman you are living with), did you use a condom? DOES NOT KNOW CONDOM ☐ → Some men use a condom, which means that they put a rubber sheath on their penis during sexual intercourse. The last time you had sex with (your wife/the woman you are living with) did you use a condom?	YES.....1 NO.....2 DOES NOT KNOW/NOT SURE.....8	
410B	Have you had sex with anyone other than (your wife/ the woman you are living with) in the last 12 months?	YES.....1 NO.....2	→410J
410C	When was the last time you had sexual intercourse with someone other than (your wife/the woman you are living with)?	DAYS AGO.....1 ☐☐ WEEKS AGO.....2 ☐☐ MONTHS AGO.....3 ☐☐	
410D	Did you use a condom that time?	YES.....1 NO.....2 DOES NOT KNOW/NOT SURE.....8	
410E	In the last 12 months, how many different persons other than (your wife/the woman you are living with) have you had sex with?	NUMBER OF PERSONS..... ☐☐ DOES NOT KNOW.....98	→410J
410F	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family planning issues. When was the last time you had sexual intercourse (if ever)?	NEVER.....000 DAYS AGO.....1 ☐☐ WEEKS AGO.....2 ☐☐ MONTHS AGO.....3 ☐☐ YEARS AGO.....4 ☐☐	→509

M EN 8

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
410G	CHECK 301 AND 302: KNOWS CONDOM ☐ → The last time you had sex, did you use a condom? DOES NOT KNOW CONDOM ☐ → Some men use a condom, which means that they put a rubber sheath on their penis during sexual intercourse. The last time you had sex, did you use a condom?	YES.....1 NO.....2 DOES NOT KNOW.....8	
410H	CHECK 410F: LESS THAN 12 MONTHS SINCE LAST SEX ☐ ↓ 12 MONTHS OR LONGER SINCE LAST SEX ☐		→410J
410I	In the last 12 months, how many different persons have you had sex with?	NUMBER OF PERSONS..... ☐☐ DOES NOT KNOW.....98	
410J	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A WOMAN ☐ → The last time you had sex, was it with your (wife/the woman you live with), a regular partner, an acquaintance, someone you paid for sex, or someone else? NOT CURRENTLY MARRIED AND NOT LIVING WITH A WOMAN ☐ → The last time you had sex, was it with a regular partner, an acquaintance, someone you paid for sex, or someone else?	WIFE/WOMAN LIVES WITH.....1 REGULAR PARTNER.....2 ACQUAINTANCE.....3 SOMEONE HE PAID FOR SEX.....4 SOMEONE ELSE.....5	
413	Do you know of a place where you can get condoms?	YES.....1 NO.....2	→416
414	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL.....11 GOVERNMENT HEALTH CENTER.....12 FIELDWORKER.....13 OTHER PUBLIC_____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC.....21 MISSION HOSPITAL/CLINIC.....22 PHARMACY.....23 PRIVATE DOCTOR.....24 MOBILE CLINIC.....25 FIELD WORKER.....26 OTHER PRIVATE MEDICAL_____ 27 (SPECIFY) OTHER SOURCE SHOP.....31 FRIENDS/RELATIVES.....33 OTHER_____ 36 (SPECIFY)	
416	How old were you when you first had sexual intercourse?	AGE..... ☐☐ FIRST TIME WHEN MARRIED.....96	

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SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
501	CHECK 401: NOT IN UNION ☐ CURRENTLY MARRIED OR LIVING WITH A WOMAN ☐		→503
502	CHECK 404: REGULAR SEXUAL PARTNER ☐ OCCASIONAL SEXUAL PARTNER ☐ NO SEXUAL PARTNER ☐		→505A
503	Is your wife (or one of your wives)/partner pregnant now?	YES.....1 NO.....2 UNSURE.....8	→505A
504	When she became pregnant, did you want her to become pregnant then, did you want her to wait until later, or did you not want this pregnancy at all?	THEN.....1 LATER.....2 NOT AT ALL.....3	→505B
505	A) WIFE/PARTNER NOT PREGNANT OR UNSURE OR NO WIFE/PARTNER ☐ Now I have some questions about the future. Would you like to have (a/another) child or would you prefer not to have any (more) children? B) WIFE/PARTNER PREGNANT ☐ Now I have some questions about the future. After the child your wife/partner is expecting, would you like to have another child or would you prefer not to have any more children?	HAVE (A/ANOTHER) CHILD.....1 NO MORE/NONE.....2 SAYS WIFE CAN'T GET PREGNANT....3 SAYS HE CAN'T HAVE ONE ANY MORE.4 UNDECIDED/DOES NOT KNOW.....8	→507
506	CHECK 503: WIFE/PARTNER NOT PREGNANT OR UNSURE OR NO WIFE/PARTNER ☐ How long would you like to wait from now before the birth of (a/another) child? WIFE/PARTNER PREGNANT ☐ After the child your wife/partner is expecting, how long would you like to wait before the birth of another child?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ SOON/NOW.....993 SAYS WIFE CAN'T GET PREGNANT..994 AFTER MARRIAGE.....995 OTHER_____ 996 (SPECIFY) DOES NOT KNOW.....998	
507	CHECK 308: USING A METHOD? NOT ASKED ☐ NOT CURRENTLY USING ☐ CURRENTLY USING ☐		→512
508	Do you think you will use a method to delay or avoid pregnancy within the next 12 months?	YES.....1 NO.....2 DOES NOT KNOW.....8	→510
509	Do you think you will use a method delay or avoid pregnancy at any time in future?	YES.....1 NO.....2 DOES NOT KNOW.....8	→511

M EN 10

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
510	Which method would you prefer to use?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 FOAMING TABLETS/JELLY.....05 CONDOM.....06 FEMALE STERILIZATION.....07 MALE STERILIZATION.....08 NATURAL FAMILY PLANNING.....09 WITHDRAWAL.....10 OTHER_____ 96 (SPECIFY) UNSURE.....98	→512
511	What is the main reason that you think you will never use a method?	NOT MARRIED.....11 FERTILITY-RELATED REASONS INFREQUENT SEX.....22 WIFE MENOPAUSAL/HYSTERECTOMY..23 WIFE SUBFECUND/INFECUND.....24 WANTS MORE CHILDREN.....26 OPPOSITION TO USE RESPONDENT OPPOSED.....31 WIFE OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 UP TO THE WOMAN TO USE.....61 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
512	CHECK 202 AND 204: HAS LIVING CHILDREN ☐ — If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ — If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NUMBER..... ☐☐ OTHER_____ 96 (SPECIFY)	→514
513	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter?	BOYS NUMBER..... ☐☐ OTHER_____ 96 (SPECIFY) GIRLS NUMBER..... ☐☐ OTHER_____ 96 (SPECIFY) EITHER NUMBER..... ☐☐ OTHER_____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
514	Would you say that you approve or disapprove of couples using a method to avoid pregnancy?	APPROVES.....1 DISAPPROVES.....2 NO OPINION.....3	
515	Is it acceptable or not acceptable to you for information on family planning to be provided: On the radio? On the television?	ACCEPT-ABLE / NOT ACCEPT-ABLE / DOES NOT KNOW RADIO.....1 2 8 TELEVISION.....1 2 8	
516	In the last few months have you heard about family planning: On the radio? On the television? In a newspaper or magazine? From a poster? From leaflets or brochures? From live drama? From a doctor or a nurse? From community health worker?	YES NO RADIO.....1 2 TELEVISION.....1 2 NEWSPAPER OR MAGAZINE.....1 2 POSTER.....1 2 LEAFLETS OR BROCHURES.....1 2 LIVE DRAMA.....1 2 DOCTOR OR NURSE.....1 2 COMMUNITY HEALTH WORKER.....1 2	
518	In the last few months have you discussed the practice of family planning with your (wife, partner), friends, neighbors, or relatives?	YES.....1 NO.....2	→520
519	With whom? Anyone else? RECORD ALL MENTIONED.	WIFE/PARTNER.....A MOTHER.....B FATHER.....C SISTER(S).....D BROTHER(S).....E DAUGHTER.....F MOTHER-IN-LAW.....G FRIENDS/NEIGHBORS.....H COMMUNITY HEALTH WORKER.....I LOCAL COMMUNITY LEADER.....J RELIGIOUS LEADER.....K OTHER_____ X (SPECIFY)	
520	CHECK 401: CURRENTLY MARRIED ☐ ↓ / LIVING WITH A WOMAN ☐ ↓ / NOT IN UNION ☐		→601A
521	Spouses do not always agree on everything. Now I want to ask you about your wife's /the woman you live with's views on family planning. Do you think that your wife /the woman you live with approves or disapproves of couples using a method to avoid pregnancy?	APPROVES.....1 DISAPPROVES.....2 DOES NOT KNOW.....8	
522	How often have you talked to your wife/the woman you live with about family planning in the past year?	NEVER.....1 ONCE OR TWICE.....2 MORE OFTEN.....3	

M EN 12

SECTION 6. AIDS AND OTHER SEXUALLY TRANSMITTED DISEASES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
601A	Have you heard about diseases that can be transmitted through sexual intercourse?	YES.....1 NO.....2	→601F
601B	Which diseases do you know? RECORD ALL RESPONSES	SYPHILIS.....A GONORRHEA.....B AIDS.....C GENITAL WARTS/CONDYLOMATA.....D OTHER_____ W (SPECIFY) OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
601C	CHECK 410 AND 410F: HAS HAD SEXUAL INTERCOURSE ☐	HAS NEVER HAD SEXUAL INTERCOURSE ☐	→601F
601D	During the last twelve months, did you have any of these diseases?	YES.....1 NO.....2 DOES NOT KNOW.....8	→601F
601E	Which of the diseases did you have? RECORD ALL RESPONSES	SYPHILIS.....A GONORRHEA.....B AIDS.....C GENITAL WARTS/CONDYLOMATA.....D OTHER_____ W (SPECIFY) OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
601F	During the last twelve months, did you have a discharge from your penis?	YES.....1 NO.....2 DOES NOT KNOW.....8	
601G	During the last twelve months, did you have a sore or ulcer on your penis?	YES.....1 NO.....2 DOES NOT KNOW.....8	
601H	CHECK 601E, 601F AND 601G HAD ONE OR MORE DISEASES ☐	NONE OF THE DISEASES ☐	→601N
601I	The last time you had (DISEASE FROM 601E/DISCHARGE/SORE) did you seek advice or treatment?	YES.....1 NO.....2	→601JA
601J	Where did you seek advice or treatment? Any other place or person? RECORD ALL MENTIONED	PUBLIC SECTOR GOVERNMENT HOSPITAL.....11 GOVERNMENT HEALTH CENTER.....12 FIELDWORKER.....13 OTHER PUBLIC_____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC.....21 MISSION HOSPITAL/CLINIC.....22 PHARMACY.....23 PRIVATE DOCTOR.....24 MOBILE CLINIC.....25 FIELD WORKER.....26 OTHER PRIVATE MEDICAL_____ 27 (SPECIFY) OTHER SOURCE SHOP.....31 FRIENDS/RELATIVES.....33 OTHER_____ 36 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
601JA	CHECK 410 AND 410F: HAS HAD SEXUAL INTERCOURSE ☐	HAS NEVER HAD SEXUAL INTERCOURSE ☐	→601N
601K	When you had (DISEASE FROM 601E/DISCHARGE/SORE) did you inform your partner(s)?	YES.....1 NO.....2	
601L	When you had (DISEASE FROM 601E/DISCHARGE/SORE) did you do something not to infect your partner(s)?	YES.....1 NO.....2 PARTNER ALREADY INFECTED.....3	→601N
601M	What did you do? RECORD ALL MENTIONED	NO SEXUAL INTERCOURSE.....A USED CONDOMS.....B TOOK MEDICINES.....C OTHER_____ X (SPECIFY)	
601N	CHECK 601B DID NOT MENTION 'AIDS' ☐	MENTIONED 'AIDS' ☐	→602
601O	Have you ever heard of an illness called AIDS?	YES.....1 NO.....2	→611C
602	From which sources of information have you learned most about AIDS? Any other sources? RECORD ALL MENTIONED	RADIO.....A TV.....B NEWSPAPERS/MAGAZINES.....C PAMPLETS/POSTERS.....D HEALTH WORKERS.....E MOSQUES/CHURCHES.....F SCHOOLS/TEACHERS.....G COMMUNITY MEETINGS.....H FRIENDS/RELATIVES.....I WORK PLACE.....J OTHER_____X (SPECIFY)	
602B	How can a person get AIDS? Any other ways? RECORD ALL MENTIONED	SEXUAL INTERCOURSE.....A SEXUAL INTERCOURSE WITH MULTIPLE PARTNERS.....B SEX WITH PROSTITUTES.....C NOT USING CONDOM.....D HOMOSEXUAL CONTACT.....E BLOOD TRANSFUSION.....F INJECTIONS.....G KISSING.....H MOSQUITO BITES.....I CONTAMINATED RAZOR BLADES.....J OTHER_____W (SPECIFY) OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
603	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	→607

M EN 14

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	GO TO
604	What can a person do? Any other ways? RECORD ALL MENTIONED	SAFE SEX.....A ABSTAIN FROM SEX.....B USE CONDOMS.....C AVOID MULTIPLE SEX PARTNERS.....D AVOID SEX WITH PROSTITUTES.....E AVOID SEX WITH HOMOSEXUALS.....F AVOID BLOOD TRANSFUSIONS.....G AVOID INJECTIONS.....H AVOID KISSING.....I AVOID MOSQUITO BITES.....J SEEK PROTECTION FROM FROM TRADITIONAL HEALER.....K OTHER_____W OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
605	CHECK 604: MENTIONED "SAFE SEX" ☐	DID NOT MENTION "SAFE SEX" ☐	→607
606	What does "safe sex" mean to you? RECORD ALL MENTIONED	ABSTAIN FROM SEX.....B USE CONDOMS.....C AVOID MULTIPLE SEX PARTNERS.....D AVOID SEX WITH PROSTITUTES.....E AVOID SEX WITH HOMOSEXUALS.....F OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
607	Is it possible for a healthy-looking person to have the AIDS virus?	YES.....1 NO.....2 DOES NOT KNOW.....8	
608	Do you think that persons with AIDS almost never die from the disease, sometimes die, or almost always die from the disease?	ALMOST NEVER.....1 SOMETIMES.....2 ALMOST ALWAYS.....3 DOES NOT KNOW.....8	
608A	Can AIDS be cured?	YES.....1 NO.....2 DOES NOT KNOW.....8	
608B	Can AIDS be transmitted from mother to child?	YES.....1 NO.....2 DOES NOT KNOW.....8	
608C	Do you personally know someone who has AIDS or has died of AIDS?	YES.....1 NO.....2 DOES NOT KNOW.....8	→609
608D	How many people that you personally know now have AIDS?	NUMBER OF PERSONS..... ☐☐	
608E	How many people that you personally know have died of AIDS?	NUMBER OF PERSONS..... ☐☐	
609	CHECK 601E: IF RESPONDENT HAS AIDS, CIRCLE 5. Do you think your chances of getting AIDS are small, moderate, great, or no risk at all?	SMALL.....1 MODERATE.....2 GREAT.....3 NO RISK AT ALL.....4 HAS AIDS.....5	→609B →611A
609A	Why do you think that you have (NO RISK/A SMALL CHANCE) of getting AIDS? Any other reasons? RECORD ALL MENTIONED	ABSTAIN FROM SEX.....B USE CONDOMS.....C HAVE ONLY ONE SEX PARTNER.....D LIMITED NUMBER OF SEX PARTNERS..E AVOID SEX WITH PROSTITUTES.....F SPOUSE HAS NO OTHER PARTNER.....G NO HOMOSEXUAL CONTACT.....H NO BLOOD TRANSFUSIONS.....I NO INJECTIONS.....J OTHER_____X (SPECIFY)	→611A

NO.	QUESTIONS AND FILTERS	CODES	GO TO
609B	Why do you think that you have a (MODERATE/GREAT) chance of getting AIDS? Any other reasons? RECORD ALL MENTIONED	DO NOT USE CONDOMS.....C MORE THAN ONE SEX PARTNER.....D MANY SEX PARTNERS.....E SEX WITH PROSTITUTES.....F SPOUSE HAS OTHER PARTNER(S).....G HOMOSEXUAL CONTACT.....H HAD BLOOD TRANSFUSION.....I HAD INJECTIONS.....J OTHER_____X (SPECIFY)	
611A	Since you heard of AIDS, have you changed your behavior to prevent getting AIDS? IF YES, what did you do? Anything else? RECORD ALL MENTIONED	DIDN'T START SEX.....A STOPPED ALL SEX.....B STARTED USING CONDOMS.....C RESTRICTED SEX TO ONE PARTNER...D REDUCED NUMBER OF PARTNERS.....E AVOID SEX WITH PROSTITUTES.....F ASK SPOUSE TO BE FAITHFUL.....G NO MORE HOMOSEXUAL CONTACTS.....H STOPPED INJECTIONS.....J OTHER_____W (SPECIFY) OTHER_____X (SPECIFY) NO BEHAVIOR CHANGE.....Y	A, B → 611C C → 611F D–H → 611C
611B	Has your knowledge of AIDS influenced or changed your decisions about having sex or your sexual behavior? IF YES, In what way? RECORD ALL MENTIONED	DIDN'T START SEX.....A STOPPED ALL SEX.....B STARTED USING CONDOMS.....C RESTRICTED SEX TO ONE PARTNER...D REDUCED NUMBER OF PARTNERS.....E AVOID SEX WITH PROSTITUTES.....F NO MORE HOMOSEXUAL CONTACTS.....G OTHER_____X (SPECIFY) NO CHANGE IN SEXUAL BEHAVIOR....Y DOES NOT KNOW.....Z	
611C	Some people use a condom during sexual intercourse to avoid getting AIDS or other sexually transmitted diseases. Have you ever heard of this?	YES.....1 NO.....2	2 → 611F
611D	CHECK 410 AND 410F: HAS HAD SEXUAL INTERCOURSE ☐ ↓ HAS NEVER HAD SEXUAL INTERCOURSE ☐		→ 613
611E	We may already have talked about this. Have you ever used a condom during sex to avoid getting or transmitting diseases, such as AIDS?	YES.....1 NO.....2	→ 611G
611F	CHECK 410 AND 410F: HAS HAD SEXUAL INTERCOURSE ☐ ↓ HAS NEVER HAD SEXUAL INTERCOURSE ☐		→ 613
611G	Have you given or received money, gifts or favors in return for sex at any time in the last 12 months?	YES.....1 NO.....2	
613	RECORD THE TIME.	HOUR..... ☐☐ MINUTE..... ☐☐	

M EN 16

INTERVIEWER'S OBSERVATIONS

To be filled in after completing interview

Comments about Respondent: _____

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_____

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 Editor: _____ Date: _____

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