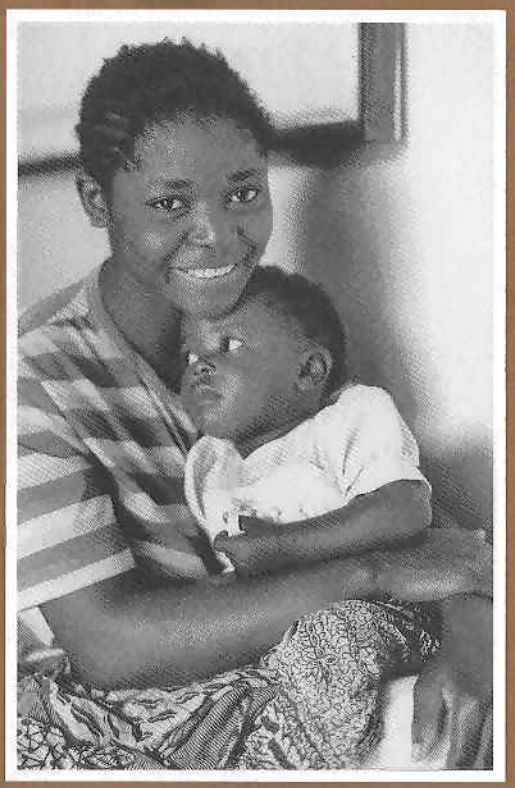
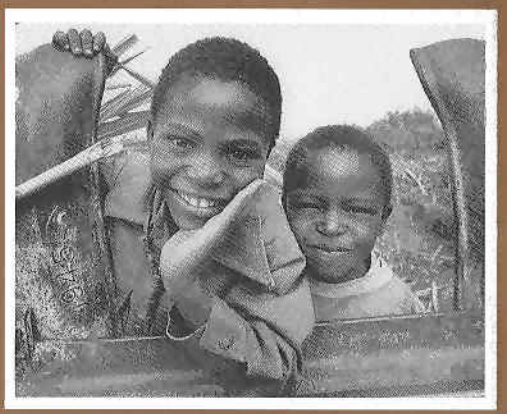
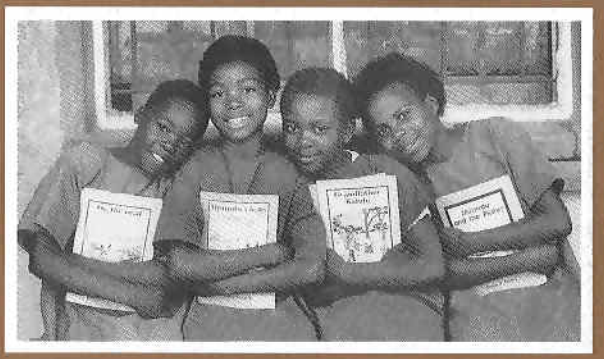
Trends in Demographic, Family Planning, and Health Indicators in Zambia 1980-1996







Central Statistical Office

Ministry of Health

DHS

Demographic and Health Surveys
Macro International Inc.

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Central Statistical Office
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Macro International Inc.
Calverton, Maryland, USA

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This report was prepared as 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 1996 Zambia Demographic and Health Survey (ZDHS) may be obtained from the Population and Demography Branch, Central Statistical Office, P.O. Box 31908, Lusaka, Zambia, Telephone: 25-25-75, Fax: 25-35-28. Additional information about the DHS program may be obtained by writing to: DHS, Macro International Inc., 11785 Beltsville Drive, Suite 300, Calverton, MD 20705, USA (Telephone: 301-572-0200; Fax: 301-572-0999; Internet: http://www.macroint.com/dhs/: E-mail: reports@macroint.com).

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CONTENTS

1 Introduction

This report presents important trends in key population, family planning, and health indicators in Zambia over the past 16 years. The primary objective of putting this information together is to assist policy makers and programme administrators in assessing the current situation, in order to better formulate future population, family planning, and maternal and child health programmes. In particular, the report addresses the prevailing demographic situation and describes trends in fertility, family planning, maternal and child health, infant and child mortality, and knowledge and prevalence of acquired immunodeficiency syndrome (AIDS) and sexually transmitted diseases (STDs).

This report highlights the 1996 Zambia Demographic and Health Survey (ZDHS) findings. The survey is a nationally representative sample of 7,286 households, 8,021 women age 15-49, and 1,849 men age 15-59. The survey was implemented by the Zambian Central Statistical Office (CSO) at the request of the Ministry of Health (MOH). Data collection took place between 18 July 1996 and 7 January 1997. The 1996 ZDHS is a follow-on to an earlier ZDHS survey carried out in 1992. The 1992 survey was also implemented by the CSO at the request of the MOH, and administered by the University of Zambia. Macro International Inc. provided technical assistance to both the 1992 and 1996 surveys through its USAID-funded Demographic and Health Surveys (DHS) Programme.

As in the 1992 survey, the main objective of the 1996 ZDHS survey was to provide policy makers and programme managers with timely and reliable data on fertility, mortality, family planning, maternal and child health, and knowledge of STDs and AIDS. In addition to information collected in 1992, the 1996 ZDHS interviewed men age 15-59 who were found in every fourth household sampled and included more detailed questions on knowledge, attitudes, and practices related to AIDS, and basic information necessary for the measurement of maternal mortality levels.

Most of the funding for the survey was provided by the U.S. Agency for International Development (USAID) through its mission in Zambia. The United Nations Population Fund (UNFPA) in Zambia provided funds to carry out the male survey. The United Nations Children's Fund (UNICEF) office in Zambia provided salt-testing kits to be used in the fieldwork. The Swedish International Agency for Development (SIDA) provided funds for the field staff training.

This report draws data from various sources, including the 1980 and 1990 Censuses of Population, Housing and Agriculture, and the 1992 ZDHS survey, to show the trends in the demographic, family planning, maternal and child health conditions over a period of about 16 years. Despite the availability of data from past censuses and surveys, this report addresses only the data which have a significant influence on family planning and health programmes. The analysis is also limited by the availability and comparability of data. Although the various sources present differences in methodology, geographic coverage, and estimation methods, figures based on the population censuses are presented alongside those based on the ZDHS surveys to show trends. For various topics, comparable data are only available from the 1992 ZDHS, limiting the analysis to the four years between 1992 and 1996.

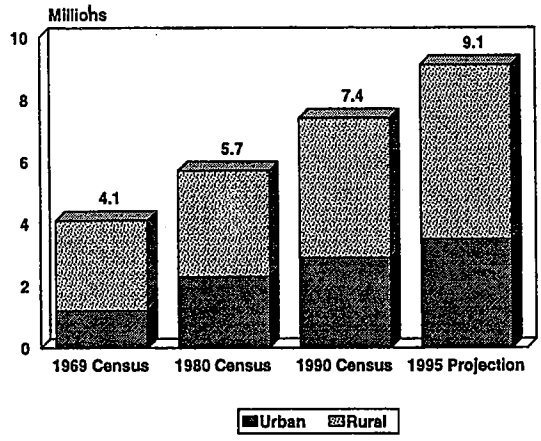
2 Demographic, Social, and Economic Indicators

2.1 Population Growth and Geographic Distribution

The population of Zambia was estimated to be 9.1 million in 1995, growing at an average annual rate of 3.3 percent. At this rate, the population will double in 21 years, reaching 18 million in 2016.

The proportion of the population living in urban areas has increased steadily from 29 percent in 1969 to 39 percent in 1990. By 1995, the urban population was projected to number 3.4 million persons (CSO, 1996) (Figure 1). The most urbanised area in the country is Lusaka Province, site of the capital, where 4 of 5 people live in urban areas.

Figure 1
Population by Urban-Rural Residence
1969-1995



Uneven distribution of the population among provinces has become a major concern of the Zambian Government. There are significant variations in population density across provinces. Copperbelt and Lusaka Provinces have 45 persons per square kilometre, compared with less than 6 per square kilometre in Northern, Western, and North-Western Provinces (CSO, 1994:3-4).

2.2 Age Distribution

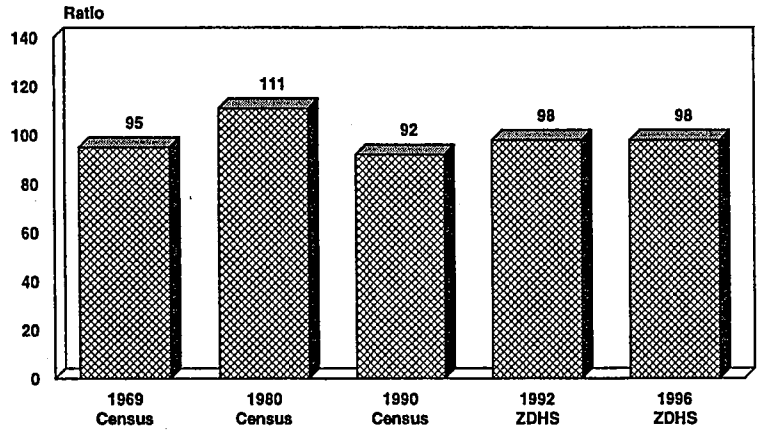
The age distribution of the Zambian population changed little between 1980 and 1996. This is typical of high fertility/high mortality populations which show a higher proportion of younger persons in the overall population. In 1996, children under 15 years represented 47 percent of the population, indicating a high level of fertility. The proportion has remained at the same level since 1969, with a temporary increase to 50 percent in 1980.

The dependency ratio—defined as the number of children age 0-14 and adults 65 years and older for every 100 persons age 15-64—represents the economic dependency of adults in their productive years. Except for a peak of 111 in 1980, the ratio has remained in the 92-98 range. The persistent high dependency ratio indicates that the economic burden on persons in the productive age groups who support those in the non-productive age groups in Zambia has not lessened substantially in the past 16 years (Figure 2).

2.3 Educational Attainment

Data from the 1996 ZDHS indicate that the Government of Zambia is no closer to realising its goal of universal first level of education (7 years) than it was in 1992. The proportion of females age six and older with no education increased slightly from 24 percent in 1992 to 25 percent in 1996, while the proportion of males with no education increased from 15 to 18 percent over the same period (Figure 3). Conversely, the proportion of females and males with some primary education has deteriorated since 1992.

Figure 2
Dependency Ratios
1969-1996

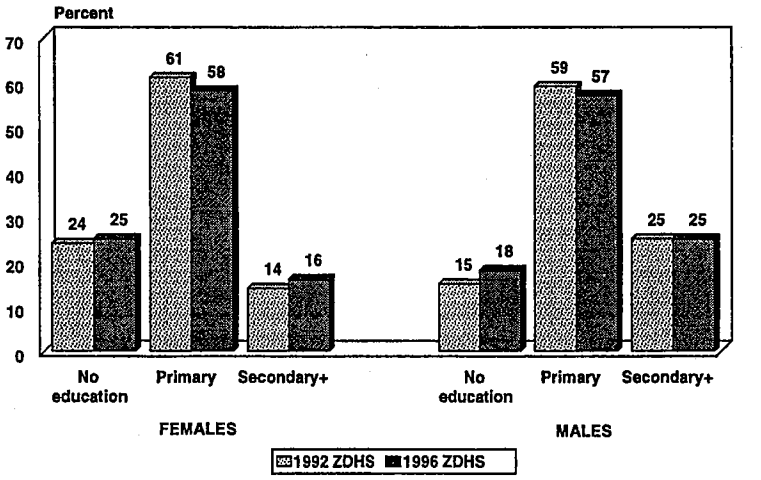


Note: *Dependency ratio is* the number of dependents age 0-14 and 65 years and over per 100 persons age 15-64 years.

There has been some improvement in higher education, at least for females. In 1992, 14 percent of females age six and over had attended secondary or higher education, while by 1996, the proportion had increased to 16 percent. For males, the proportion attending secondary or higher education remained at 25 percent for both 1992 and 1996 (Figure 3).

In general, males receive more education than women. In every age group 10 and over, the median years of schooling for males is consistently higher than for females.

Figure 3
Educational Attainment Among Females and Males
Age Six Years and Over, 1992 and 1996



3 Marriage and Fertility

3.1 Age at First Marriage

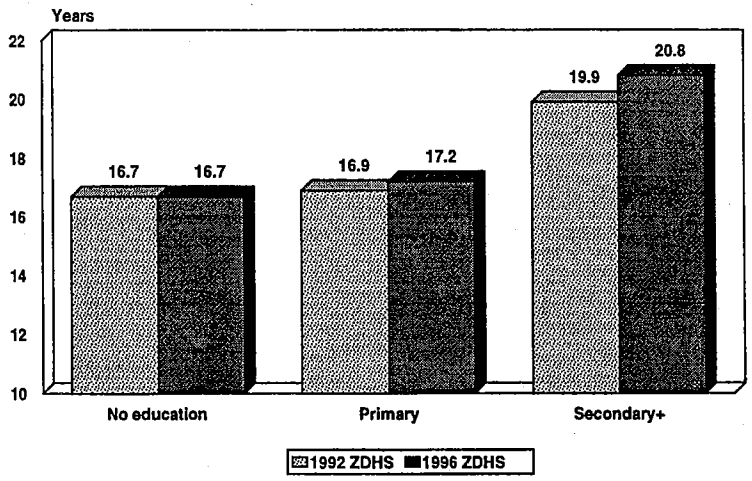
Marriage is universal in Zambia; by the end of their reproductive years, all but 1 percent of women have been married. However, there are indications that women are marrying at a later age. The median age at first marriage for women 25-49 has increased from 17.4 years in 1992 to 17.7 years in 1996. According to

the 1996 ZDHS data, women who have secondary or higher education marry more than four years later than women with no education. Between 1992 and 1996, the largest in crease in age at marriage was among women with secondary or higher education (Figure 4).

Urban women generally marry about one year later than their rural counterparts. The gap was wider in 1996 (18.3 years compared with 17.4 years) than in 1992 (17.5 years compared with 17.2 years).

There are significant differentials in the median age at marriage by province. Women in Lusaka and Western Provinces marry at an older age than women in other provinces—18.5 years or older, compared with under 17 years in North-Western and Luapula Provinces.

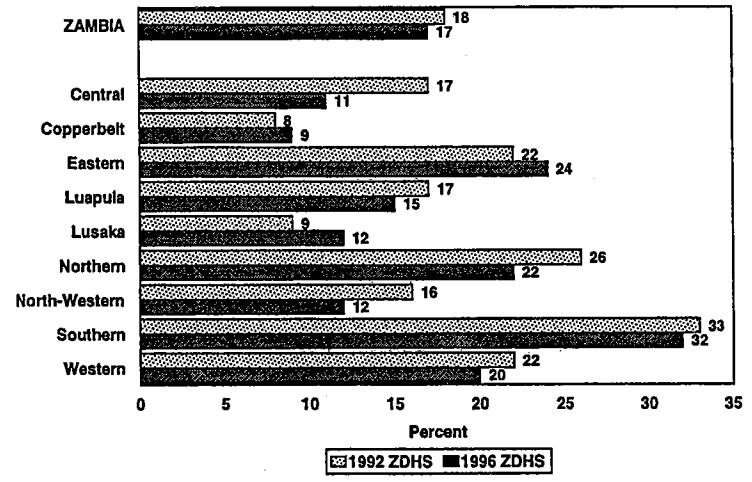
Figure 4
Median Age at First Marriage Among Women Age 25-49 by Education, 1992 and 1996



3.2 Polygynous Unions

In 1996, 17 percent of currently married women in Zambia were in a polygynous union. Polygyny is more common in rural than in urban areas (22 percent compared with 9 percent). The prevalence of polygyny at the national level has remained largely unchanged since 1992 (Figure 5). Polygyny is most common in Southern and Eastern Provinces (32 percent and 24 percent, respectively), and least common in Copperbelt Province (9 percent) (Figure 5).

Figure 5
Percentage of Currently Married Women Age 15-49 in a Polygynous Union by Province, 1992 and 1996



Better-educated women are less likely to be in a polygynous union than women with less education. For instance, 10 percent of women with secondary or higher education are in a polygynous union, compared with 24 percent among women who have no formal education.

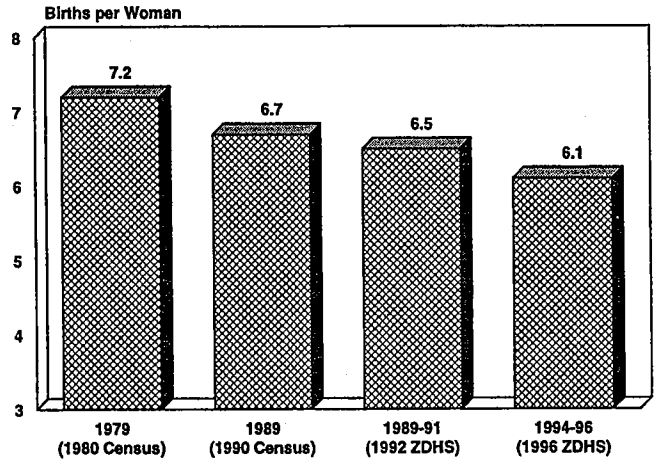
3.3 Trends in the Total Fertility Rate

The total fertility rate[1] measured in the 1996 ZDHS was 6.1, meaning that if current fertility levels prevailed, a Zambian woman would have an average of 6.1 children at the end of her childbearing years. This figure represents a substantial decline in fertility from 7.2 children per woman reported in 1979 (the 1980 Census) and 6.5 children per woman reported in the 1992 ZDHS. The pace of fertility decline was slightly faster in the period 1990-96 than in the period 1980-90 (Figure 6).

The total fertility rate in Zambia (6.1) is one of the highest in the region. Total fertility rates in selected neighbouring countries are: Niger (7.4), Uganda (6.9), Burkina Faso (6.9), Mali (6.7), Tanzania (5.8), Kenya (5.4), Botswana (4.9), and Zimbabwe (4.3).

The decline in fertility in Zambia may be attributed to lower age-specific fertility rates among women 30-39 years. Furthermore, there is evidence that the peak of the age-specific fertility rates has shifted from the 25-29 age group in 1990 to the 20-24 age group in 1992 and 1996.

Figure 6
Total Fertility Rates, Zambia, 1980-1996

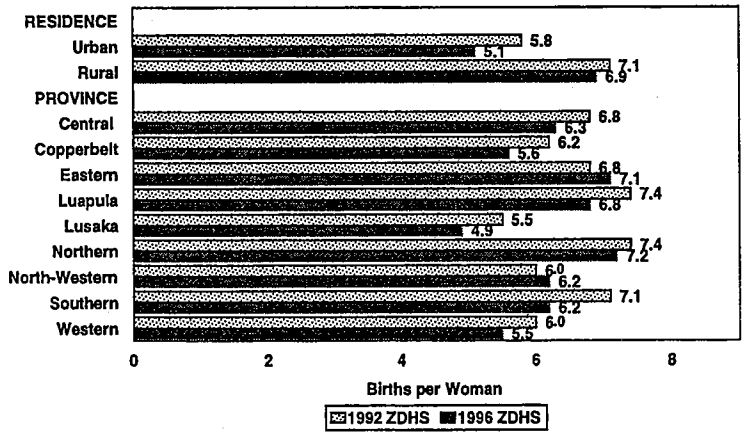


3.4 Fertility Differentials

Urban women have, on average, almost two children fewer than rural women (5.1 births compared with 6.9 births, respectively). Comparison of data from the 1992 and 1996 ZDHSs indicates that the urban-rural gap in fertility is widening; previously there was only a little over a one-child difference in the urban and rural total fertility rates (Figure 7).

Trends in fertility by province are complicated by the fact that in the 1992 ZDHS, for some provinces, rates were calcu-

Figure 7
Total Fertility Rates by Residence, 1992 and 1996



Note: In 1992, Eastern and Central were combined as were Luapula and Northern and North-Western and Western.

[1]The total fertility rate is the number of births a woman would have, on average, if the current age-specific fertility rates prevailed throughout her reproductive years.

lated for groups of provinces (due to the small sample size in some provinces). The three provinces for which separate estimates were produced for both surveys— Copperbelt, Lusaka, and Southern Provinces—all showed substantial declines in fertility. Lusaka Province has the lowest total fertility rate (4.9 births per woman). In Eastern and Northern Provinces the average number of births remains high (more than 7 births per woman).

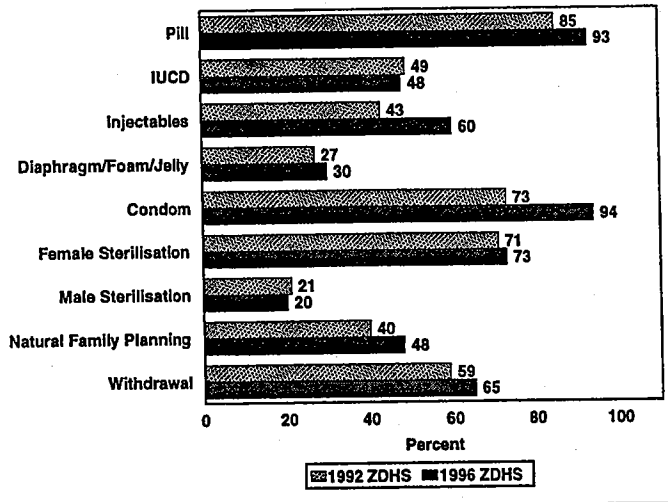
4 Family Planning

4.1 Knowledge of Contraception

Knowledge of at least one method of family planning is universal among women and men in Zambia. Married women and men are slightly more knowledgeable about family planning methods than those who are not married (never married, divorced, or widowed). Knowledge of family planning is less widespread among women who have had no sexual experience.

The method most widely known by both women and men is the condom, followed closely by the pill. Men also are more likely than women to know about male methods such as the condom and male sterilisation. Between 1992 and 1996 knowledge of all methods except the IUCD and male sterilisation increased among currently married women. Knowledge of injectables increased the most (40 percent), followed by the condom, natural family planning, and withdrawal (Figure 8).

Figure 8
Percentage of Currently Married Women Who Know Specific Contraceptive Methods, 1992 and 1996



4.2 Ever Use of Contraception

Almost 60 percent of married women age 15-49 and 73 percent of married men age 15-59 have used contraception at some time. Unlike in 1992, ever use of modern methods in 1996 was slightly higher than use of traditional methods (Figure 9).

Among currently married women, the most widely used contraceptive methods are the pill and withdrawal (26 percent each), followed by the condom (19 percent). Among currently married men, the most widely used methods are the condom (39 percent), natural family planning (31 percent), withdrawal (30 percent), and the pill (26 percent).

Figure 9
Ever Use of Contraceptive Methods Among Currently Married Women Age 15-49, 1992 and 1996

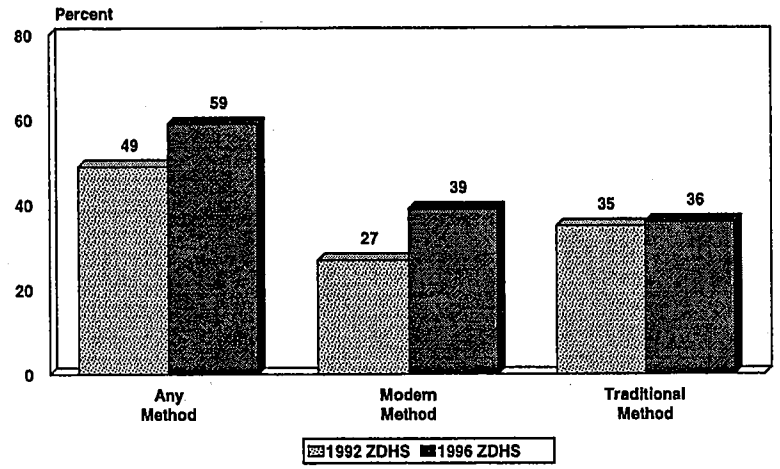
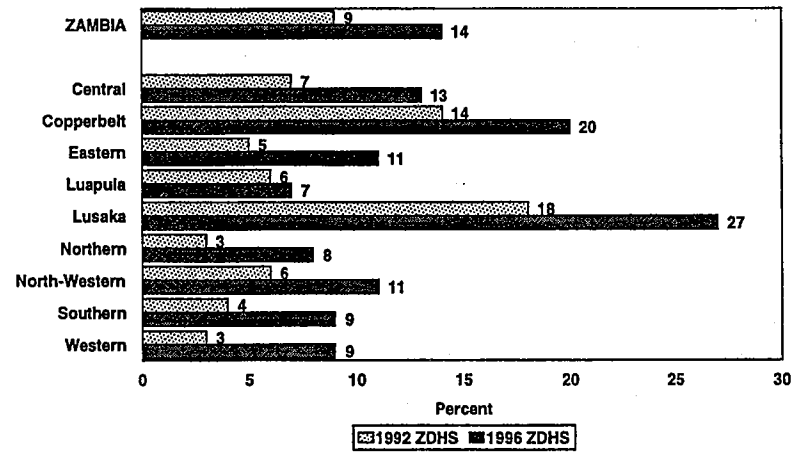


Figure 10
Current Use of Modern Contraceptive Methods Among Currently Married Women Age 15-49 by Province, 1992 and 1996



4.3 Current Use of Family Planning

One in four married women age 15-49 (26 percent) is currently using contraception. This represents an increase of more than 70 percent since 1992 when 15 percent were using contraception. The gain is due to a faster increase in use of traditional methods—80 percent in four years—than modern methods, which increased only 60 percent over the same period.

Married men are more likely to use contraception than married women. The most widely used methods reported by men are the pill (11 percent), condom (8 percent), and natural family planning (7 percent).

Women and men most likely to use contraception are those living in urban areas, in North-Western, Lusaka, Northern and Copperbelt Provinces, those with more education, and, among women, those who have three or more children.

The proportion of married women using modern contraceptive methods increased from 9 percent in 1992 to 14 percent in 1996 (Figure 10). Use of modern methods increased in all nine provinces, but showed the largest absolute increase among women in Lusaka (from 18 to 27 percent of married women). Women in Central, Copperbelt and Lusaka Provinces are more likely than women in the other provinces to use modern methods.

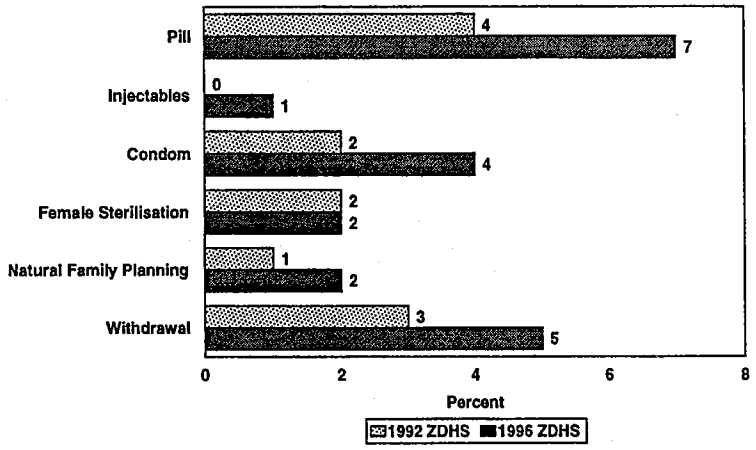
Current use of contraception among unmarried women who are sexually active is slightly lower than among currently married women (24 percent compared with 26 percent). The opposite is true among men: sexually active, unmarried men are more likely to use contraception than married men (43 percent compared with 37 percent). Four of five unmarried men use condoms.

4.4 Current Use of Specific Methods

The pill is the most widely used contraceptive method in Zambia. In absolute terms, use of the pill has increased more rapidly since 1992 than any other method (from 4 percent of married women in 1992 to 7 percent in 1996) (Figure 11).

Withdrawal is also a preferred method of contraception, reported by 5 percent of currently married women. Condom use has increased significantly in the 1992-1996 period from 2 to 4 percent, possibly due to the perceived increased risk of contracting the HIV/AIDS virus (Figure 11).

Figure 11
Percentage of Currently Married Women Currently Using Specific Contraceptive Methods, 1992 and 1996

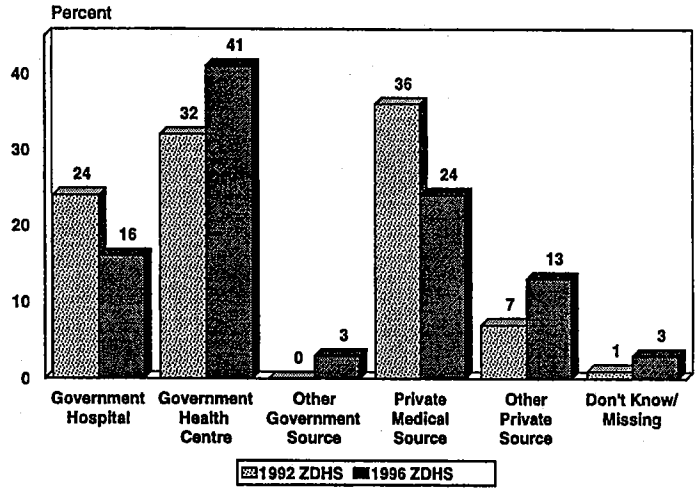


4.5 Source of Supply for Family Planning Methods

Most users of modern contraceptive methods obtain their method from a public/government source, (60 percent), 24 percent from a private medical source, and 13 percent from other private sources such as shops, friends and relatives. The most common service point is the government health centres, which supply 41 percent of family planning users (Figure 12).

Since 1992, use of government family planning services has increased, although use of government hospitals has decreased. Use of private sources has decreased slightly, with a shift away from medical private sources to other private sources such as shops.

Figure 12
Distribution of Current Users of Modern Methods by Source of Supply, 1992 and 1996



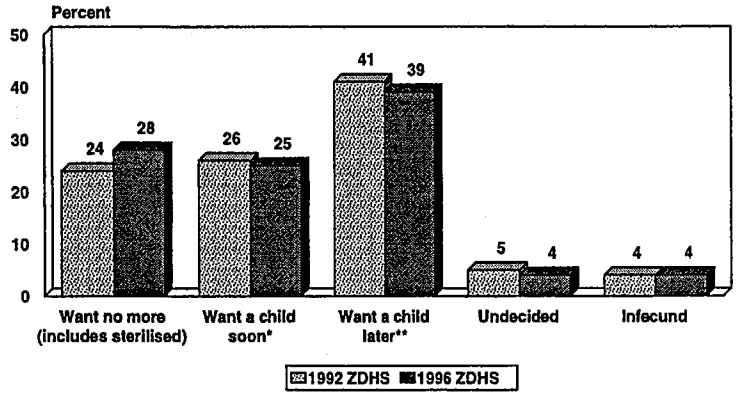
5 Fertility Preferences

5.1 Desire for Children

The decline in fertility in Zambia reflects the changing fertility preferences of women and men. The proportion of married women who report wanting no more children or who have been sterilised increased from 24 percent in 1992 to 28 percent in 1996 (Figure 13). Men are less likely than women to state that they do not want any more children (21 percent).

If all unwanted births were avoided, a Zambian woman would have an average of one less birth during her reproductive years—5.2 compared with 6.1 births. This is a decrease from 1992 when the wanted fertility rate was 5.4 and the total fertility rate was 6.5.

Figure 13
Fertility Preferences Among Currently Married Women Age 15-49, 1992 and 1996

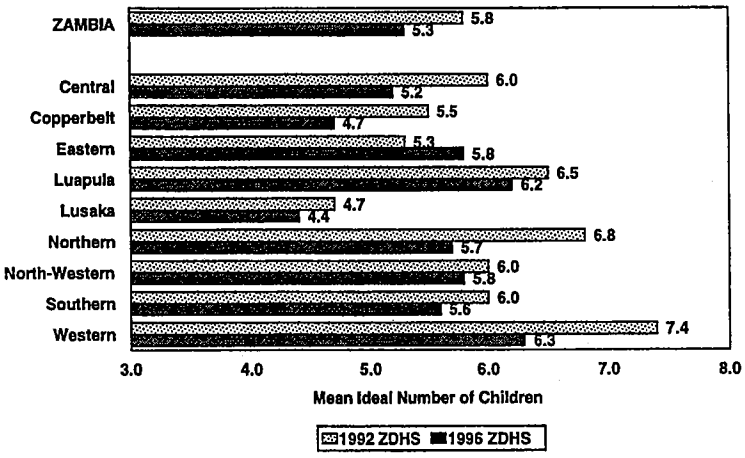


* Within 2 years
** After 2 or more years

5.2 Ideal Number of Children

A useful measure of fertility preferences is ideal family size or the number of children respondents say they would like to have if they could start again without any children. Among women age 15-49, the mean ideal family size has declined from 5.8 children in 1992 to 5.3 children in 1996 (Figure 14).

Figure 14
Mean Ideal Family Size Among Women Age 15-49 by Province, 1992 and 1996



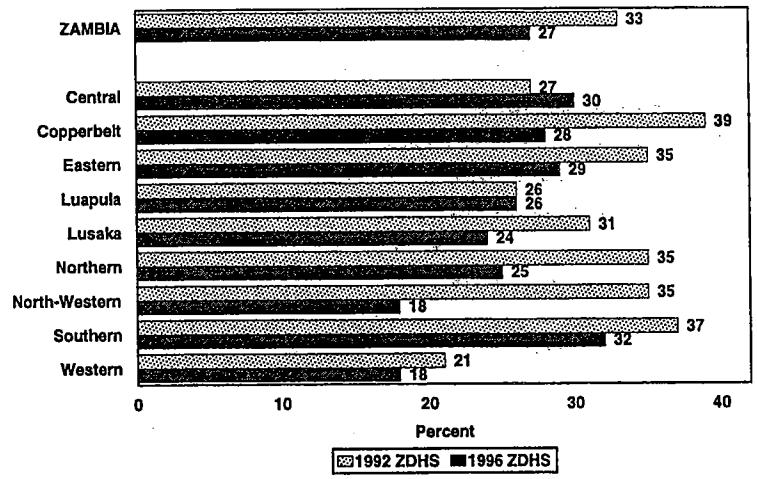
Mean ideal family size has declined from the 1992 level in all provinces except Eastern Province. The low levels of fertility in the two most urbanised provinces—Copperbelt and Lusaka—are consistent with the ideal family size. Women in these provinces are the only ones in the country whose ideal number of children is less than five (Figure 14).

Across various background characteristics, women consistently have a smaller ideal family size than men. This suggests that if the ideal number of children influences actual family size, and if men were to have the same ideal family size as women, fertility in Zambia would be lower than the current level.

5.3 Unmet Need for Family Planning Services

Unmet need for family planning is defined as the percentage of currently married women who do not use family planning despite the fact that they do not want any more children or want to delay their next birth. According to this definition, in 1996, 27 percent of married women in Zambia had an unmet need for family planning: 19 percent for spacing and 8 percent for limiting births. Unmet need has declined since 1992, from 33 to 27 percent (Figure 15).

Figure 15
Unmet Need for Family Planning Services Among Currently Married Women Age 15-49 by Province, 1992 and 1996



Combined with the 26 percent of married women who were using contraception in 1996 (met need for family planning), the total demand for family planning in Zambia is 52 percent. Hence, if all women who say they want to space or limit births were to use contraceptive methods, the contraceptive prevalence rate could double from 26 to 52 percent of married women. More than half of this demand has been satisfied.

Unmet need has declined since 1992 in all provinces except Central Province, where it increased from 27 to 30 percent, and in Luapula Province where it has remained steady at 26 percent. Declines in unmet need have been greatest in North-Western Province and to a lesser extent, Copperbelt and Northern Provinces (Figure 15).

There are marked variations in unmet need for family planning across provinces. The highest level is in Southern Province (32 percent), while the lowest level is in North-Western and Western Provinces (18 percent). The level in the remaining six provinces ranges from 24 to 30 percent.

6 Maternal and Child Care

6.1 Antenatal Care

Given the high level of antenatal care coverage in 1992, there was only a slight increase in 1996. The proportion of births for which the mother received antenatal care from a doctor, nurse, midwife, or clinical officer increased from 92 percent in 1992 to 96 percent in 1996 (Figure 16). Coverage increased in all provinces except Lusaka Province. Currently, at least 90 percent of pregnant women receive antenatal care in all provinces except Northern Province, where antenatal care coverage is 87 percent.

Six in ten women start receiving antenatal care in their first or second trimester of pregnancy and one in three during the 6th or 7th month. The median number of antenatal care visits is 5.2, a slight decrease from the 1992 figure of 5.3 visits.

Figure 16
Antenatal Care from a Doctor or a Nurse-Midwife for Births in the 5 Years Preceding the Survey by Province, 1992 and 1996

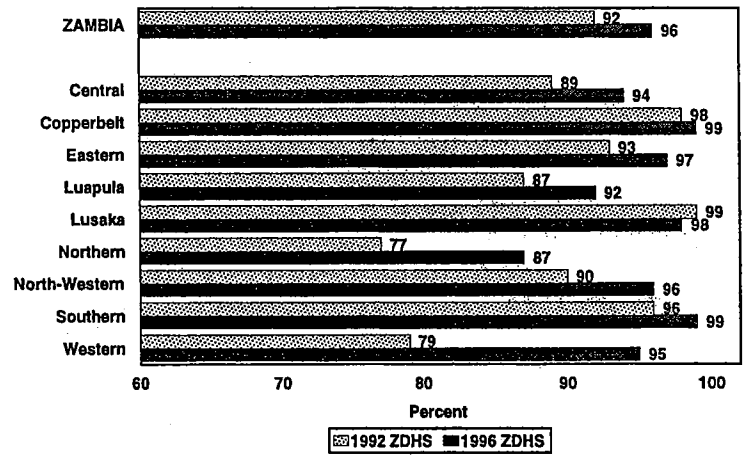
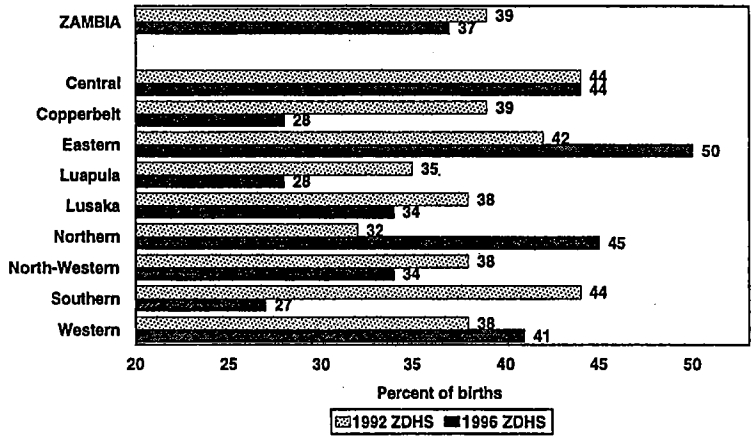


Figure 17
Tetanus Toxoid Coverage by Province, 1992 and 1996



Note: Births in the 5 years preceding the survey for which the mother received two or more tetanus toxoid injections during pregnancy.

As in 1992, the median duration of pregnancy at the time of the first antenatal care visit was 5.6 months. To receive the full benefits of antenatal care, mothers need to initiate antenatal care visits earlier in their pregnancy.

6.2 Tetanus Toxoid Coverage

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus, one of the principal causes of death among infants in developing countries. For children to be fully protected, a pregnant woman should receive two doses of the tetanus toxoid vaccine.

In Zambia between 1992 and 1996, there was a slight decline in overall tetanus toxoid coverage from 39 to 37 percent among mothers with births in the five years before the surveys. The decline occurred in half of the provinces, but the most notable decline was in Southern Province (from 44 to 27 percent). On the other hand, Eastern, Northern and Western Provinces showed substantial improvement in tetanus toxoid coverage (Figure 17).

6.3 Place of Delivery

Currently more than half of births in Zambia are delivered at home (53 percent), with the remaining 47 percent occurring in health facilities (Figure 18). Although virtually all births delivered in health facilities are attended by medically trained personnel, home deliveries are often attended by relatives who may not have sufficient training.

Figure 18
Delivery in a Health Facility for Births in the Five Years Preceding the Survey by Province, 1992 and 1996

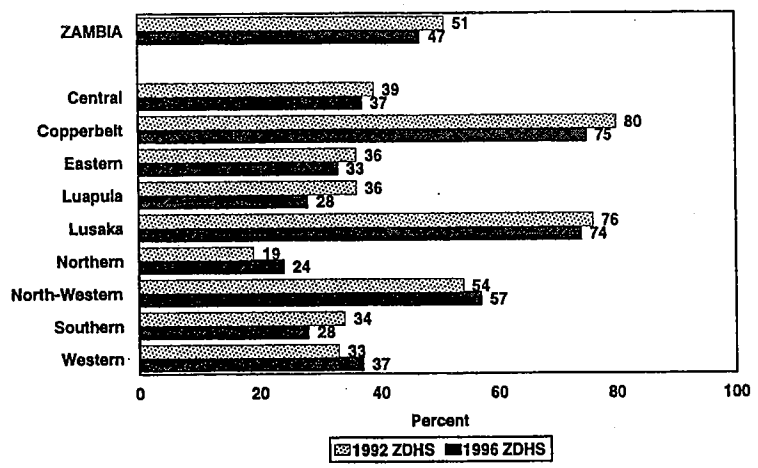
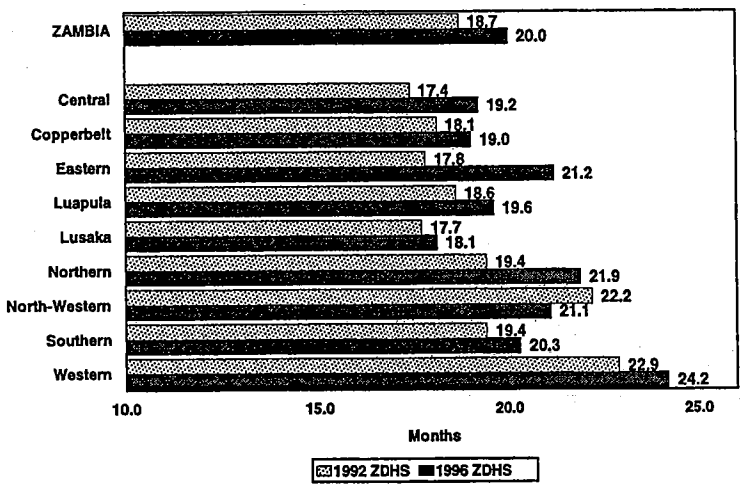


Figure 19
Median Duration of Breastfeeding by Province, 1992 and 1996



There are marked differentials among provinces regarding the proportion of deliveries taking place in health facilities. Babies in Northern, Luapula, and Southern Provinces are the least likely to be born in a health facility (28 percent or less), while those in the most urbanised areas of the country, Copperbelt and Lusaka Provinces, are more likely to be born in a health facility (74 percent or higher).

Comparison of the 1992 and 1996 ZDHS results shows that, in general, the proportion of births delivered in a health facility has declined from 51 to 47 percent (Figure 18). However, small increases are found in Northern, North-Western, and Western Provinces.

6.4 Breastfeeding

Almost all Zambian children are breastfed for some period of time. The duration of breastfeeding has lengthened since 1992. In 1996, children were breastfed for a median duration of 20 months, over one month longer than reported in 1992 (Figure 19).

The median duration of breastfeeding is more than two years in Western Province and between 20 and 22 months in Eastern, Northern, North-Western and Southern provinces. Children in Lusaka are breastfed for the shortest duration (18 months). Longer durations of breastfeeding are noted in all provinces in 1996 compared with those in 1992, except there was a slight decrease in North-Western Province from 22 months in 1992 to 21 months in 1996.

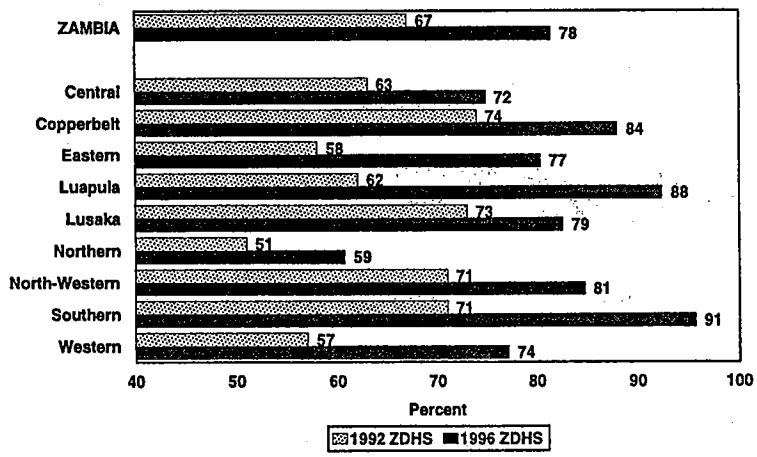
6.5 Child Immunisation

In the ZDHS surveys, information on vaccination coverage was collected in two ways: from vaccination cards shown to the interviewer and from mothers' verbal reports. In 1996, four of five children age 12-23 months (78 percent) had been fully immunised against the six preventable childhood diseases:

tuberculosis, measles, diphtheria, pertussis, tetanus, and polio. This was an improvement from the level of immunisation reported in 1992 (67 percent) (Figure 20).

Vaccination coverage varies by province; it is highest in Southern Province (91 percent) and lowest in Northern Province (59 percent). In the remaining seven provinces, the coverage ranges from 72 to 88 percent. Coverage has increased in all provinces relative to 1992.

Figure 20
Percentage of Children Age 12-23 Months Fully Immunised by Province, 1992 and 1996



Note: *Fully Immunised* means a child received BCG, measles, and three doses each of DPT and polio vaccine.

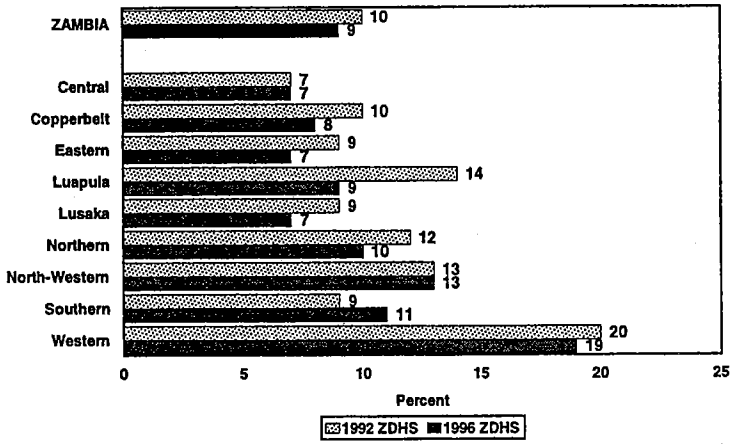
7 Mothers' and Children's Nutritional Status

7.1 Mothers' Nutritional Status

The ZDHS included anthropometric measurements for children under five years of age and their mothers. Indicators used to measure the mother's nutritional status are mean height, mean weight, and body mass index (BMI).[2] The measurements for children include height (or length for children under two years) in centimetres and weight in kilogrammes

The average height of mothers in Zambia is 158 centimetres, which is above the critical cut-off point of 145 cm. This figure has not changed since 1992. Only about 1 percent of mothers are shorter than 145 cm.

Figure 21
Percentage of Mothers of Children Under Age Five Who Are Chronically Malnourished, 1992 and 1996



Note: Malnourished refers to a *body mass index* (weight in kilogrammes divided by height in metres squared) under 18.5

[2]Body Mass Index (BMI), also known as the Quetelet Index, is defined as weight in kilogrammes divided by height in metres squared. The main advantage of the BMI is that it does not require a reference table compiled from a well-nourished population. A person with a BMI of less than 18.5 is said to suffer from acute energy deficiency.

The mean BMI among mothers has changed little since 1992, declining only slightly from 22.4 to 21.9. Similarly, the proportion of mothers with a BMI lower than the cut-off point of 18.5 has declined from 10 to 9 percent since 1992 (Figure 21). The proportion of mothers with BMIs lower than 18.5 is most notable in Western Province where it reaches 19 percent (Figure 21). In contrast, only 7 percent of mothers in Lusaka, Eastern, and Central Provinces have low BMIs.

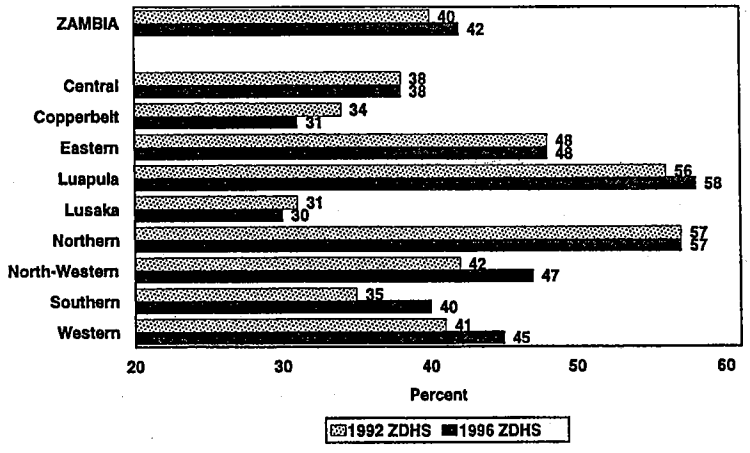
7.2 Children's Nutritional Status

Three indices were constructed to measure children's nutritional status: *height-for-age* to measure the level of chronic malnutrition or stunting, *weight-for-height* to measure acute malnutrition or wasting, and *weight-for-age* (underweight). Height-for-age is an indicator of linear growth retardation. In 1996, 42 percent of children under five were classified as stunted, 18 percent of whom were severely stunted. The corresponding proportions in 1992 were 40 percent and 15 percent, respectively (Figure 22). These figures indicate a deterioration in children's nutritional status in Zambia.

Luapula and Northern Provinces have the highest proportion of children who are short for their age (57 percent or higher), while Copperbelt and Lusaka Provinces show the lowest proportion (31 percent or less). Stunting has increased in some provinces and decreased in mothers since 1992 (Figure 22).

The weight-for-height index (wasting) is used to indicate children's recent nutritional status. Severe wasting represents failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of recent illness or seasonal variations in the food supply. Overall, little change has occurred in the prevalence of wasting since 1992 (5 percent compared with 4 percent in 1996). Wasting varies only slightly across provinces and over time.

Figure 22
Percentage of Children Under Five Who Are Chronically Malnourished (Stunted), 1992 and 1996



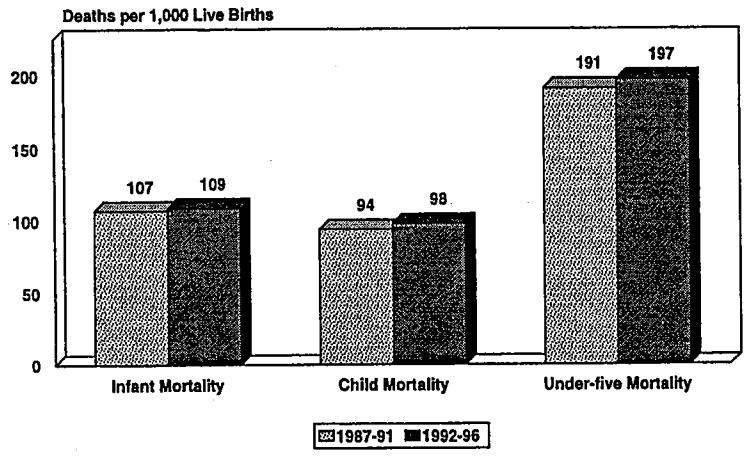
Note: Children are classified as stunted (short for their age) if their height-for-age Z-score is below -2 SD from the median of the reference population.

8 Infant and Child Mortality

8.1 Trends in Infant and Child Mortality

There is evidence of persistent high levels of infant and child mortality from the 1992 and 1996 ZDHS surveys. Data show that child survival in Zambia has deteriorated since the mid-1980s. Overall, the infant mortality rate has increased from 107 deaths per 1,000 live births (for the period 1987-1991) to 109 deaths per 1,000 live births (for the period 1992-1996). At the same time, under-five mortality increased from 191 to 197 deaths per 1,000 live births (Figure 23).

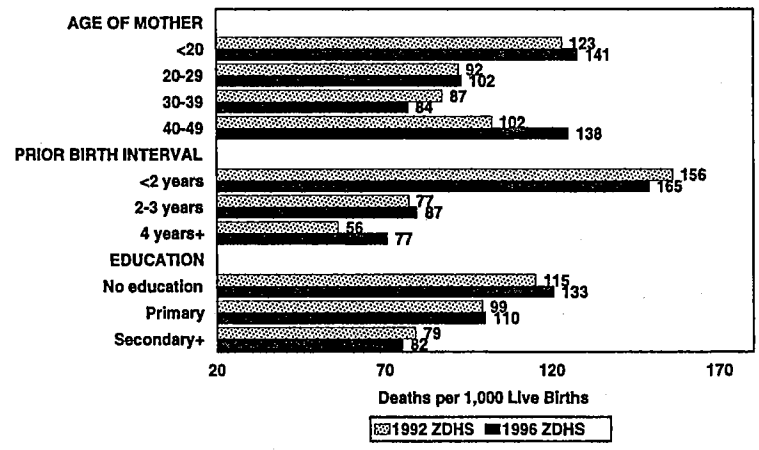
Figure 23
Trends in Infant and Child Mortality
Zambia, 1987-1991 to 1992-1996



8.2 Differentials in Infant and Child Mortality

Results from the 1992 and 1996 ZDHS surveys indicate there has been little change in the differentials in infant and child mortality. Children in rural areas experience higher mortality risks than urban children. Childhood survival risks are directly associated with mother's education: children born to the least educated mothers have the highest mortality rates, while those born to better educated woman have less risk of dying in childhood. Rather than decreasing, the data imply that the educational differentials may be increasing over time (Figure 24).

Figure 24
Infant Mortality Rates by Background Characteristics, 1992 and 1996



Note: Rates refer to the 10-year period before the survey.

At every age, male children experience a greater risk of dying than female children. Mother's age at delivery is also an important factor in child survival. Children whose mothers were between the age of 30 and 39 have the lowest mortality risks.

Comparison of the findings from the 1992 and 1996 ZDHS surveys shows that in almost all subgroups of the population, infant mortality rates have increased (Figure 24).

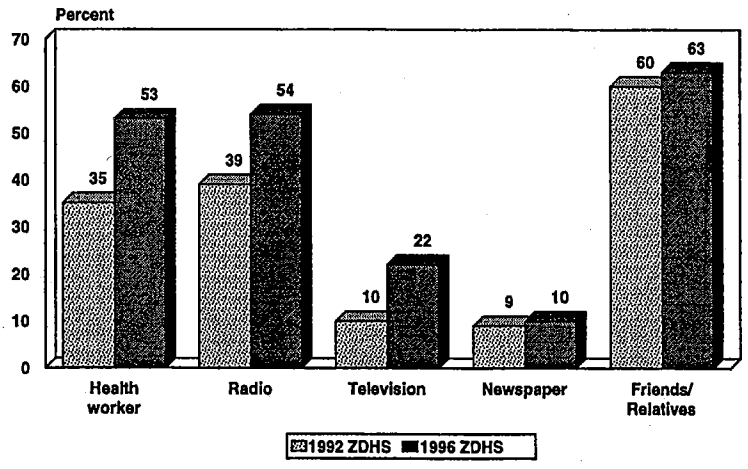
9 Sexually Transmitted Diseases (STDs)

The 1996 ZDHS collected more detailed information about women's and men's knowledge of STDs and AIDS, perceptions about the risk of getting AIDS, sources of information about AIDS, and sexual behaviours used to avoid AIDS. Most of these questions were not collected in the 1992 ZDHS, thus limiting the analysis of trends.

Knowledge of STDs such as syphilis and gonorrhoea is high in Zambia—more than 70 percent among women and more than 80 percent among men. However, knowledge of AIDS is even higher—89 percent and 94 percent, respectively. On the other hand, genital warts are known by 9 percent or less of women and men.

The source of information about AIDS cited most frequently by respondents varies by sex. Women most often mentioned friends and relatives (63 percent), radio (54 percent), and health workers (53 percent). For men, radio plays a more important role in providing information about AIDS than friends and relatives (76 percent and 59 percent, respectively). Television and printed materials also have a significant role in disseminating information about AIDS. Since 1992, the role of health workers and the mass media (radio and television in particular) has increased substantially. It is encouraging to note that more than half of women reported hearing messages about AIDS on the radio or from health workers, while the proportion who obtained information about AIDS from television more than doubled from 10 percent in 1992 to 22 percent in 1996 (Figure 25).

Figure 25
Sources of Information About AIDS Among Women Age 15-49, 1992 and 1996



More than 2 percent of women and 7 percent of men reported having an STD in the 12 months preceding the survey. The most commonly reported STD is gonorrhoea (1 percent of women and 4 percent of men). Variations are found between subgroups of the population. Formerly married women and men are almost twice as likely to report having had an STD as those who are currently married. The prevalence of STDs is highest among men in Central and Western Provinces; prevalence is also high among men age 25 to 39 and among those with secondary education.

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