ETHIOPIA TREND REPORT

Trends in Demographic and Reproductive Health Indicators in Ethiopia

Further analysis of the 2000 and 2005 Demographic and Health Surveys Data

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Macro International Inc.
Calverton, Maryland USA

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USAID
FROM THE AMERICAN PEOPLE

This report presents the findings from a trend analysis undertaken as part of the follow-up to the 2005 Ethiopia Demographic and Health Survey. Funding was provided by the U.S. Agency for International Development through the MEASURE DHS project. Macro International provided technical assistance. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID.

The Demographic and Health Surveys program is designed to collect, analyze, and disseminate data on fertility, family planning, maternal and child health, nutrition, and HIV/AIDS. Additional information about the MEASURE DHS project can be obtained from Macro International Inc., DHR Division, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (telephone: 301-572-0200; fax: 301-572-0999; email: reports@orcmacro.com; internet: www.measuredhs.com).

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1. INTRODUCTION

This report highlights trends in key demographic and health indicators in Ethiopia from data collected in the two demographic and health surveys: the 2000 Ethiopia Demographic and Health Survey (EDHS) and the 2005 EDHS. Specifically, the report discusses changes in demographic and reproductive health outcomes over the last five years, including changes in fertility, knowledge and practice of family planning, maternal and child health, and infant and child morbidity and mortality. In addition, this report also compares Ethiopia with other sub-Saharan African countries that have data from similarly conducted demographic and health surveys.

The primary objective of this report is to provide information needed by planners, policymakers and program administrators to assess the current situation and trends, and to design more effective population and reproductive health programs aimed at achieving more positive outcomes in the years to come.

1.1 Data Sources

Demographic data collection in Ethiopia began with the establishment of the Central Statistical Office (currently referred to as the Central Statistical Agency or CSA) in 1960. Population and housing censuses of Addis Ababa and Asmara cities in 1961 and 1963, respectively, were the first socio-demographic data collection carried out by CSA. These censuses were conducted by city authorities with technical guidance from CSA. In these two operations, basic demographic data on fertility, mortality and migration were collected. Following these two operations, the first round of the multi-purpose National Sample Survey started in 1964. The operations of these surveys continued for four years from 1964 to 1967, covering the settled rural population of all the regions (except Eritrea and Bale) and 195 urban centers. The second round of the National Sample Survey was conducted during 1969-1970 and covered the settled rural population in all the regions (except Eritrea) and 91 major urban centers (CSA, 1991a). In addition, various need-based health and nutrition surveys were also conducted in the 1980s and 1990s in the country, including the 1982/83 Rural Health Survey, the 1982/83 Rural Nutrition Survey, and the 1992 National Rural Nutritional Surveillance System. However, the contents and coverage of these surveys were limited (CSA, 1999); and hence, the findings were not easily comparable nationally.

To fulfill the increasing demand for national and regional level socio-economic and demographic data, the Ethiopian government carried out two national population and housing censuses, the first and the second national level census in 1984 and 1994, respectively, the National Family and Fertility Survey (NFFS) in 1990, and the 2000 and 2005 Ethiopia Demographic and Health Surveys (EDHS).

This trend report discusses key findings from the two EDHS surveys and also compares Ethiopia to other countries in sub-Saharan Africa. Both the EDHS surveys sampled nationally representative populations, were conducted by the same organization (the CSA in 2000 and the Population and Housing Census Commission Office (PHCCO), now merged with the CSA in 2005), and managed by the same core group of survey personnel. In addition, the EDHS surveys were conducted as part of the worldwide Demographic and Health Surveys project funded by the United States Agency for International Development (USAID), with technical assistance from the US-based private entity, Macro International Inc., which has been monitoring the DHS surveys since its inception in the early 1980s, using standard data collection tools. This consistency allows Ethiopia to be compared with other sub-Saharan African countries which have also conducted similar DHS surveys. Wherever possible, data from other surveys conducted in Ethiopia are also included to allow comparison over a longer period of time, but

caution should be exercised in interpreting trend data with non-DHS type surveys since these surveys have not been conducted in the same way nor do they cover the same groups of people.

1.2 Health Policy and Priorities

The current strategy to improve overall health in Ethiopia is outlined in the third cycle of the Health Sector Development Programme (HSDP III). The program focuses on poverty-related health conditions, communicable diseases such as malaria, diarrhea, and health problems affecting mothers and children. In addition, there is a stronger focus in rural areas, and in extending health services from static to outreach facilities. Data from the EDHS surveys will provide insight into the effectiveness of the HSDP over the last five years and give new direction for improving the general well-being of mothers and children.

2. DEMOGRAPHIC, SOCIAL AND ECONOMIC INDICATORS

2.1 Population Size

Despite Ethiopia's long history, there were no estimates of the total population of Ethiopia prior to the 1900s. Available estimates indicate that the population increased fourfold between 1900 and 1988. The total population of the country in 1900 was estimated at 11.8 million and this doubled to 23.6 million in 1960, sixty years later. Since then, there has been a steady increase in the population. Data from the 1984 and 1994 Population and Housing Censuses show that the overall population of the country increased at an annual rate of about 2.3 percent between 1960 and 1970, 2.5 percent between 1970 and 1980, 2.8 percent between 1980 and 1990, and 2.9 percent between 1990 and 1995 (CSA, 1991a; CSA, 1998).

Table 2.1 provides a summary of the basic demographic indicators based on data from the 1984 and 1994 Population and Housing Censuses. Between 1984 and 1994, there was a 26 percent increase in the overall population of Ethiopia from 43 million to 54 million. The Central Statistical Agency (CSA) projects that Ethiopia's population could range anywhere from 104 million to 115 million by the year 2015 (Library of Congress, 2005). Despite the 20 percent increase in the proportion of the urban population over the decade, Ethiopia has remained one of the least urbanized countries in the world, with only about 14 percent of the country urbanized in 1994. Female life expectancy at birth in 1994 was about three years higher than male life expectancy.

Table 2.1
Trend in Basic Demographic Indicators

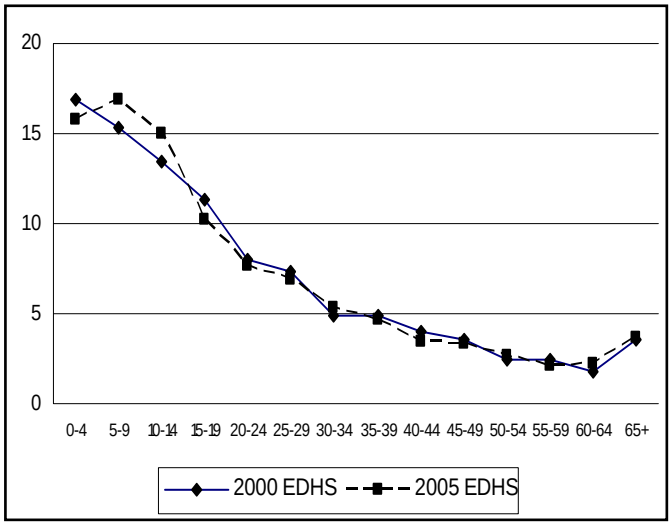
Indicator	1984 Census[1]	1994 Census[2]	Percent Change
Population (millions)	42.6	53.5	25.6
Intercensal Growth Rate (percent)	3.1[a]	2.9	-6.5
Population Density (pop./km^2)	34.0	48.6	42.9
Percent Urban	11.4	13.7	20.2
Life Expectancy at Birth (years)			
Male	51.1	50.9	-0.4
Female	53.4	53.5	0.2

[1] Including Eritrea; CSA, 1991[a]
[2] CSA, 1998
[a] Estimated from Non-census Data

2.2 Composition of the Household Population

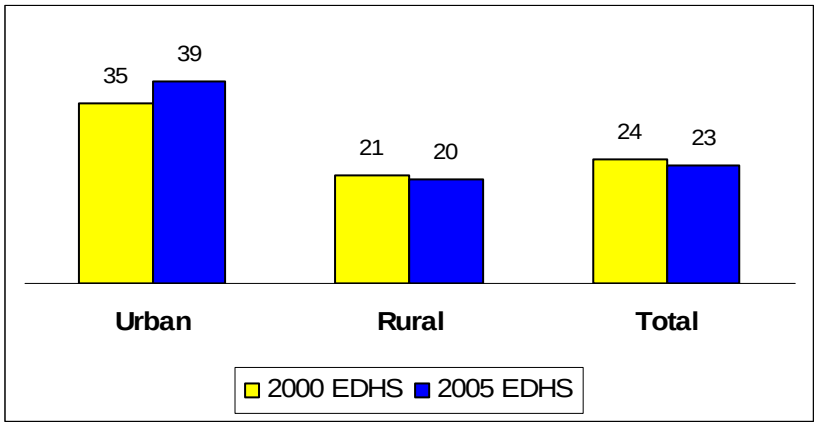
Age is an important demographic variable and is the primary basis of demographic classification in vital statistics. Figure 2.1 shows the distribution of the household population by five-year age groups, from data collected in the 2000 EDHS and 2005 EDHS. As is typical in high fertility countries, children under 15 years of age, account for a sizeable proportion (nearly half) of the total population. A comparison of the EDHS data over the last five years shows little change in the age structure of the population.

Figure 2.1
Percent Distribution of Household Population, by Age Group



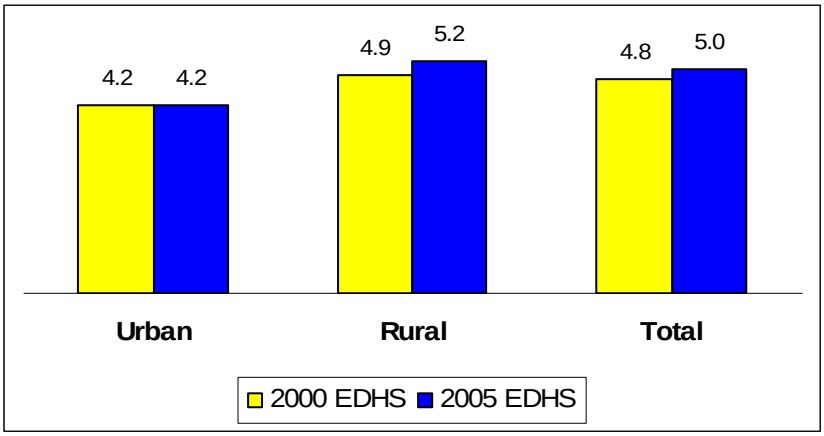
EDHS data indicate that currently one-fourth of households in Ethiopia are headed by women (Figure 2.2). Overall, there was a four percent (or one percentage point) decline in female-headed households between 2000 and 2005. Although the overall proportion of female-headed households has changed little in the last five years, the urban-rural difference has widened over the same period. In 2005, twice as many urban as rural households are headed by women compared with 2000 when urban households were one and a half times as likely to be female-headed as rural households.

Figure 2.2
Percentage of Female-headed Households, by Residence



Data also indicate that the average household size has increased slightly over the last five years from 4.8 persons per household in 2000 to 5.0 persons per household in 2005 (Figure 2.3). This increase occurred primarily in rural areas where the average household size increased from 4.9 to 5.2 persons per household.

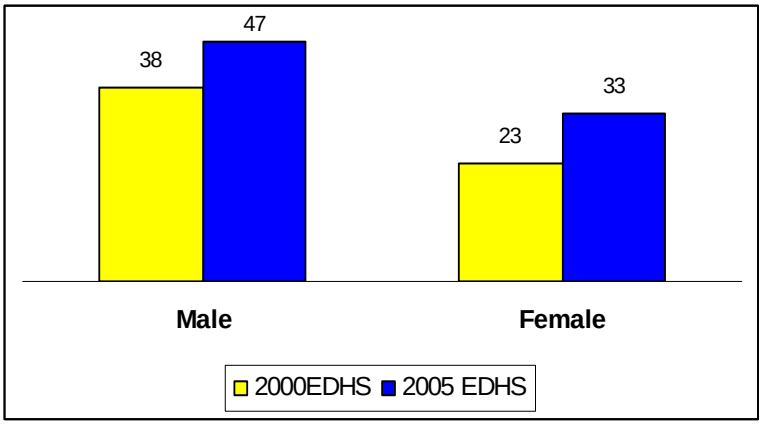
Figure 2.3
Average Household Size, by Residence



2.3 Educational Attainment

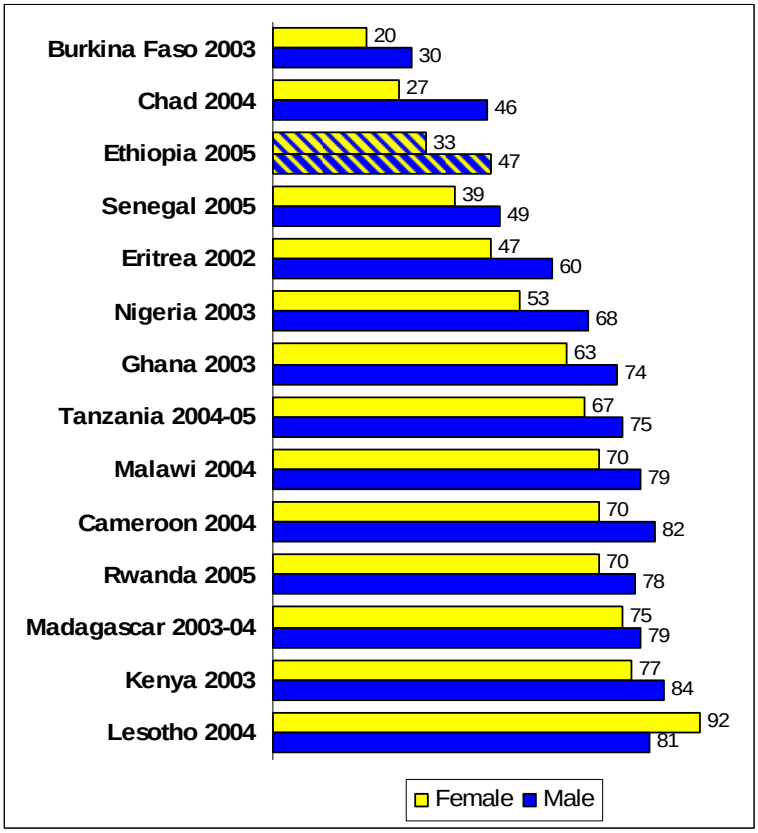
One of the most important indicators of socioeconomic development in a country is the educational level of its population. Moreover, education, especially for women, is closely linked with a number of demographic and health outcomes for which trends are examined in this report, including fertility, contraceptive use, and health and nutritional status of mothers and children. Figure 2.4 shows substantial improvement in household educational attainment in the past five years. In 2000, 38 percent of males and 23 percent of females age six years and over had attended school at some time in their lifetime and in 2005, the proportions increased to 47 percent for males and 33 percent for females. Nevertheless women continue to lag behind men in educational attainment.

Figure 2.4
Percentage of Male and Female Household Population Age 6 Years and above who have ever Attended School



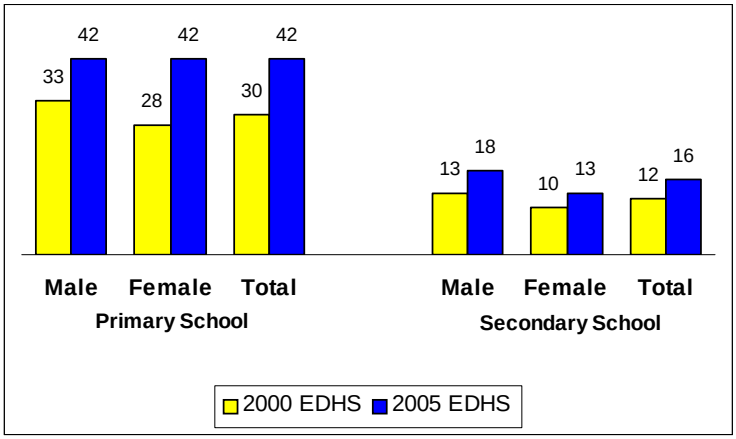
Despite the improvement over the past five years, Ethiopian females and males rank among the lowest with respect to education when compared with other sub-Saharan African countries. As Figure 2.5 shows, one-third of the female population and less than half of the male population age six years and over have ever attended school and this is noticeably lower than most other countries in the region for which recent and comparable DHS surveys have been conducted.

Figure 2.5
Percentage of Female and Male Population Age 6 Years and above who ever Attended School, Sub-Saharan Africa



School attendance is a good indication of future progress in educational attainment of a population as it shows whether school-age children are taking advantage of the opportunity to attend school. Figure 2.6 indicates the overall net attendance ratio at the primary level. The percentage of the primary school-age population (7-12 years) attending primary school increased from 30 percent in 2000 to 42 percent in 2005.

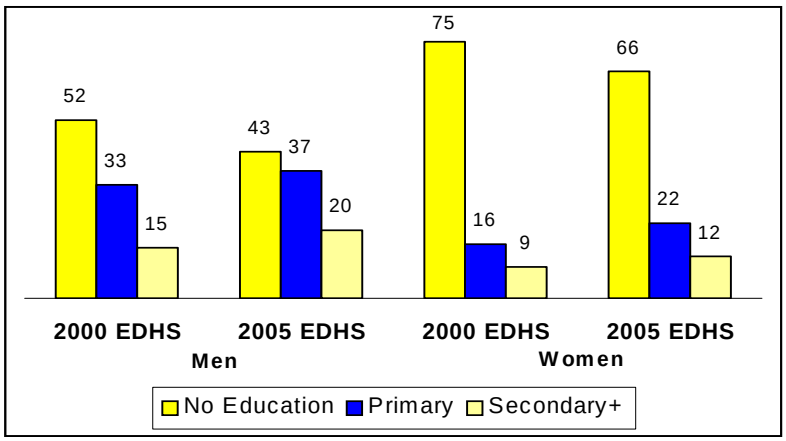
Figure 2.6
Net School Attendance Ratios at Primary and Secondary Level, by Sex of Children



Similarly, the overall net attendance ratio at the secondary level, that is the percentage of the secondary school age population (13-18 years) attending secondary school, also increased from 12 percent to 16 percent during the same five-year period (Figure 2.6). The results also indicate that the percentage increment in net attendance ratio for primary level was higher for girls than boys; however, it was higher for boys than girls at the secondary level. Despite such progress, more than half (58 percent) of the children eligible for primary level schooling and more than eight in ten (88 percent) children eligible for secondary level schooling were not attending school.

Data from the EDHS can be used to examine in greater detail the changes in educational attainment among women and men in the reproductive ages. As Figure 2.7 shows, the proportion of women age 15-49, with no education fell from 75 percent in 2000 to 66 percent in 2005. At the same time the proportion with primary level and secondary or higher level of schooling increased from 16 percent and 9 percent, respectively, to 22 percent and 12 percent.

Figure 2.7
Percentage of Men Age 15-59 and Women Age 15-49, by Level of Education



Similarly, the data also show an improvement in men's educational attainment. The proportion of men age 15-59 with no education decreased by 21 percent from 52 percent in 2000 to 43 percent in 2005. The proportion with secondary or higher level of education increased by 33 percent from 15 percent in 2000 to 20 percent in 2005.

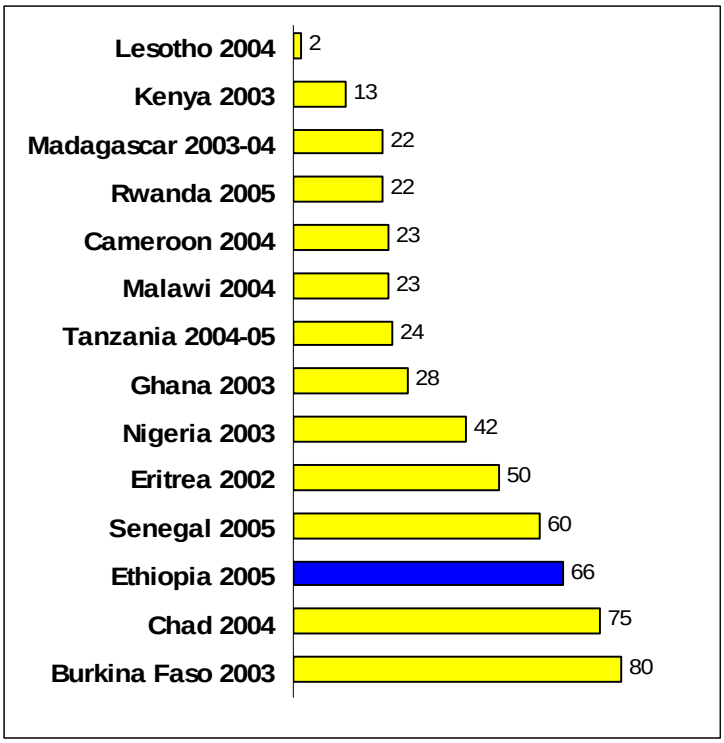
Table 2.2 shows changes over the last five years in the percentage of women and men with no education. The percentage of women and men with no education decreased in most regions with the largest decline for men seen in Harari (48 percent), and for women seen in Addis Ababa (28 percent). The percentage of women with no education increased markedly in the Somali Region.

Table 2.2
Percentage of Men Age 15-59 and Women Age 15-49 with No Education, by Region

Region	Men			Women		
	2000 EDHS	2005 EDHS	Percent Change	2000 EDHS	2005 EDHS	Percent Change
Tigray	54.5	46.9	-15	77.8	63.5	-18
Affar	72.1	71.4	-1	84.7	84.8	0
Amhara	76.9	60.5	-21	83.5	75.6	-10
Oromiya	48.4	36.7	-23	75.8	64.4	-16
Somali	68.7	81.9	19	88.5	90.6	2
Benishangul-Gumuz	46.6	49.9	6	76.4	73.2	-4
SNNP	37.0	32.6	-11	73.8	65.7	-11
Gambela	35.4	27.5	-20	60.2	59.5	0
Harari	39.9	20.5	-48	53.4	39.9	-25
Addis Ababa	8.0	7.2	-13	25.0	17.6	-28
Dire Dawa	25.7	22.8	-12	46.0	46.7	2
Total	52.1	42.9	-17	75.2	65.9	-12

Despite more recent improvements in the country's overall educational level, Ethiopian women of reproductive ages are among the least educated when compared with women in other sub-Saharan African countries (Figure 2.8).

Figure 2.8
Percentage of Women of Reproductive Ages with No Education, Sub-Saharan Africa



3. HOUSEHOLD CHARACTERISTICS

Household characteristics such as housing conditions and ownership of consumer durables serve as indirect indicators of a household's standard of living. Trends in these characteristics reflect a society's material progress, which has implications both for the economic well-being and overall health status of the population. This section examines changes in access to electricity, piped drinking water, toilet facilities, and exposure to the mass media over the last five years and discusses how Ethiopian households compare with households in other sub-Saharan African countries with respect to these amenities.

3.1 Housing Characteristics

Figure 3.1 presents trends in the proportion of households with electricity and households with piped drinking water, by urban-rural residence. Overall, between 2000 and 2005, there was a small increase in the percentage of households having access to electricity and a relatively larger increase in the percentage of households with access to piped drinking water. Despite the overall increase, there continues to be a marked disparity in access to these basic amenities by place of residence, with urban areas much more likely to have electricity and piped drinking water than rural households, and no noticeable narrowing of the urban-rural disparity over the last five years.

Figure 3.1
Percentage of Households with Electricity and Piped Drinking Water, by Residence

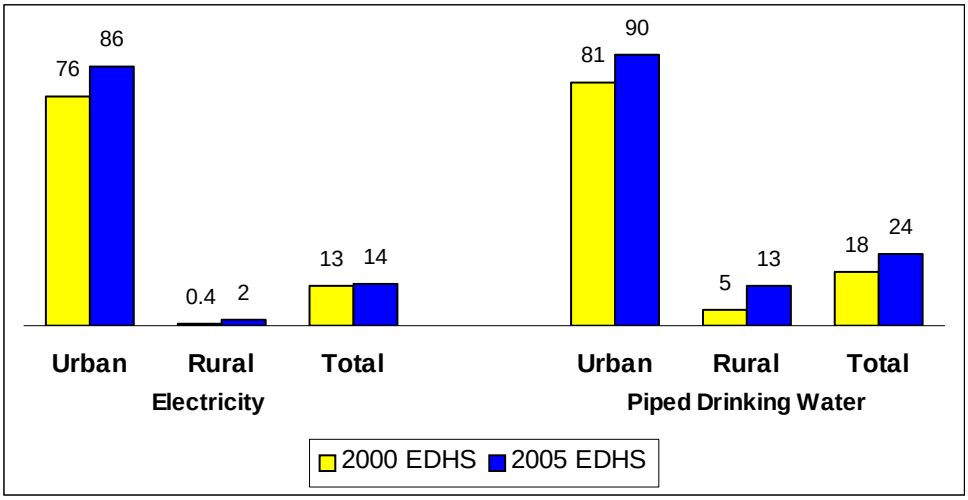
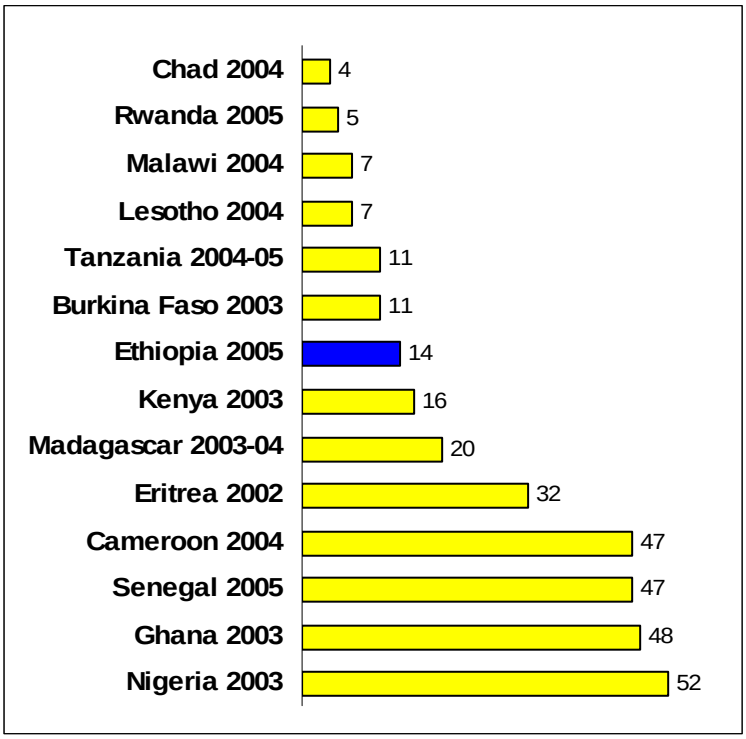


Figure 3.2 compares access to electricity in Ethiopia with access in other sub-Saharan African countries. Ethiopia (14 percent) ranks in the middle, with access to electricity among households being lowest in Chad (4 percent) and highest in Nigeria (52 percent).

Figure 3.2
Percentage of Households with Access to Electricity, Sub-Saharan Africa



Access to toilet facilities is another important indicator of the well-being of a population. Figure 3.3 shows that even though the overall percentage of households with no toilet facilities declined by 24 percent in the last five years, a sizeable proportion of Ethiopian households continue to have no toilets, with little change in the urban-rural gap.

Figure 3.3
Percentage of Households with No Toilet, by Residence

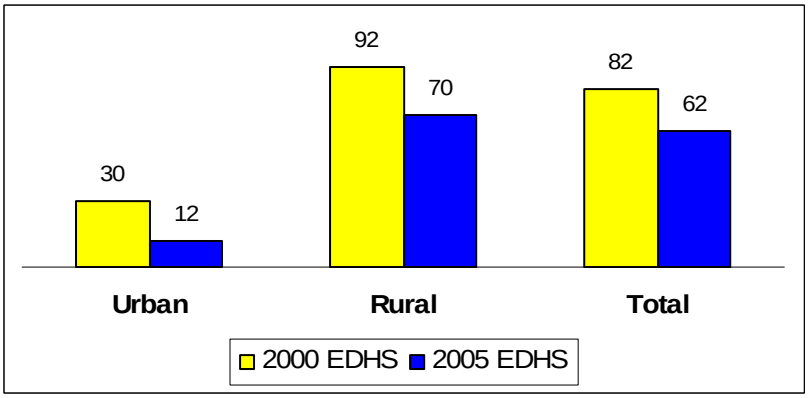
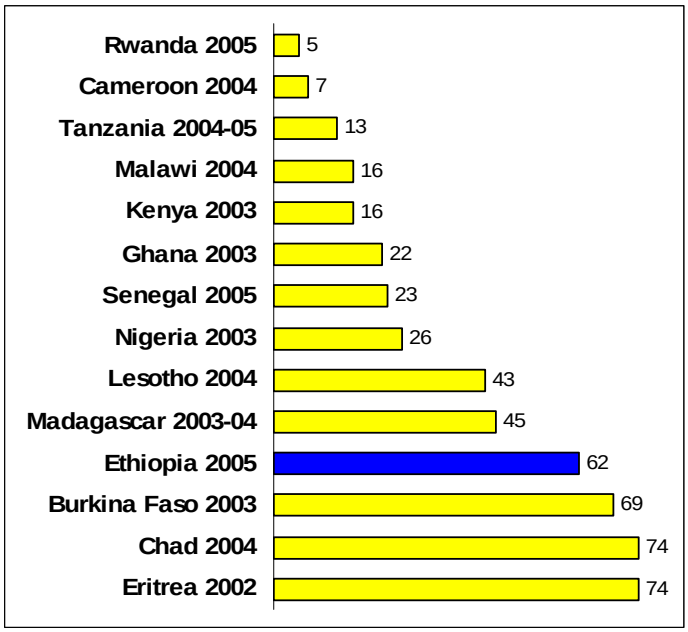


Figure 3.4 shows a huge disparity among countries of sub-Saharan Africa, with respect to access to toilet facilities. The proportion of households with no toilet is 12 times higher in Ethiopia than in Rwanda, nine times higher than in the Cameroon, five times higher than in Tanzania, and four times higher than in Malawi or Kenya.

Figure 3.4
Percentage of Households with No Toilet, Sub-Saharan Africa

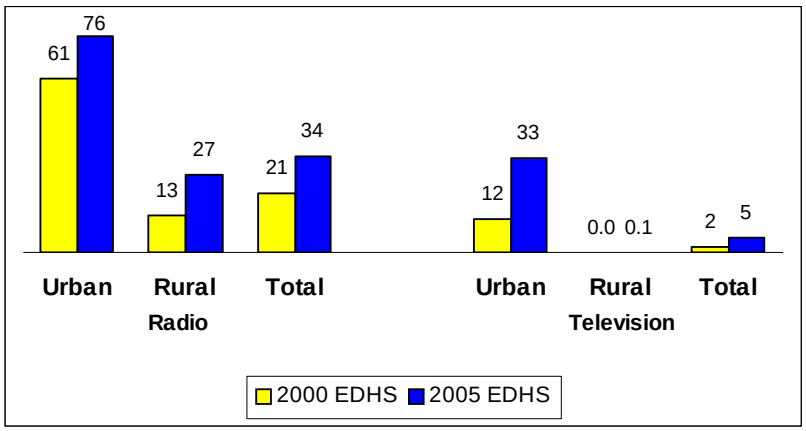


3.2 Exposure to Mass Media

Research has shown that listening to the radio and watching television can be powerful tools not only to create awareness about new technology but also to stimulate the desire for information and behavior change. Families who own a radio or television are more likely to have greater exposure to health education messages related to the management of common childhood diseases, infant feeding practices, and the importance of vaccinating young children.

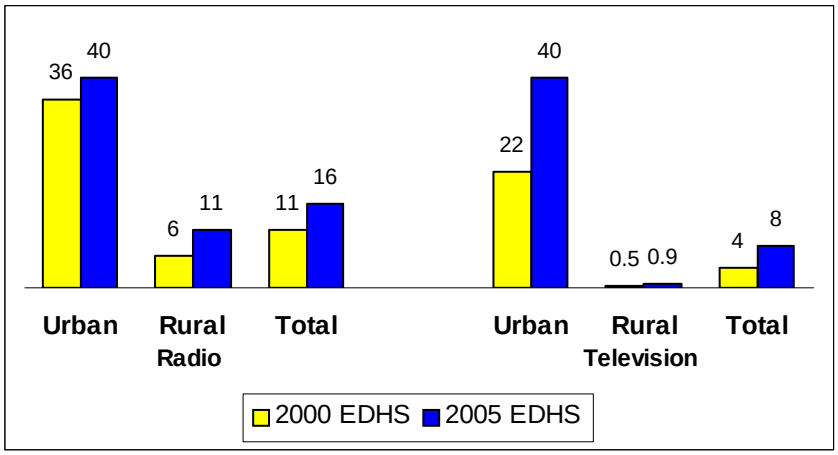
Data from the two EDHS surveys show that the percentage of households with a radio increased from 21 percent in 2000 to 34 percent in 2005 (Figure 3.5). Despite this positive trend, the data indicate a continued urban-rural disparity. In 2005, three-fourths of urban households in Ethiopia had a radio compared with about one-fourth of rural households. The data also show that although the proportion of urban households with a television nearly tripled in the last five years, there was no change in the proportion of rural households with a television.

Figure 3.5
Percentage of Households with a Radio and Television, by Residence



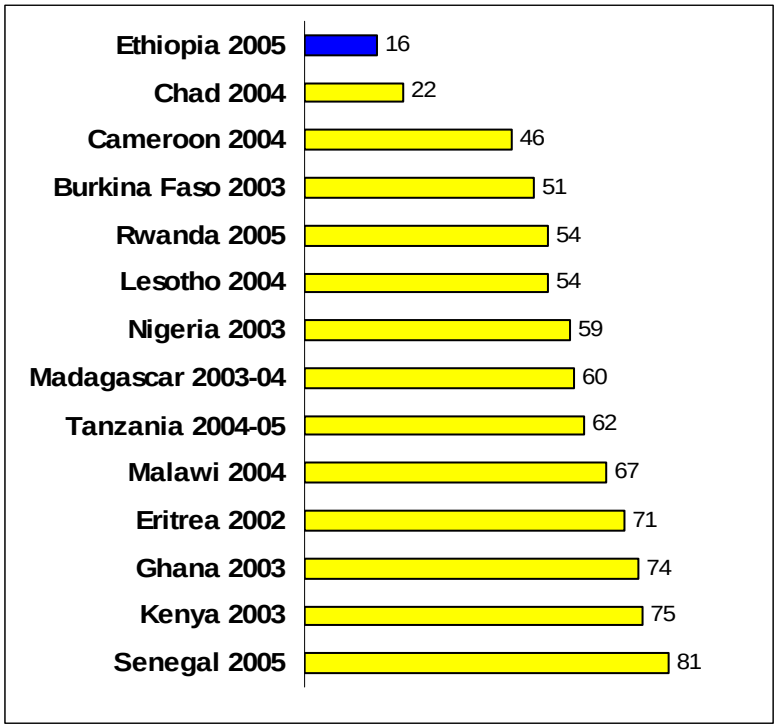
Women of reproductive age are a very important target population for health education messages, especially those related to maternal and child health, nutrition, and family planning. Figure 3.6 shows the trend in the proportion of women of reproductive age who listen to the radio and who watch television at least once a week. The data show an increase in women's exposure to both the radio and television between 2000 and 2005. Overall, 16 percent of women reported hearing a radio broadcast at least once a week in 2005 compared with 11 percent in 2000. During the same period, exposure to the television doubled (from 4 to 8 percent). Nevertheless, although exposure to the radio among rural women increased from 6 percent to 11 percent in the last five years, there was little difference in exposure to the television among these women during the same period. On the other hand, urban women's exposure to the television nearly doubled in the last five years, from 22 percent to 40 percent.

Figure 3.6
Percentage of Women Age 15-49 Who Listen to the Radio and Who Watch Television at Least Once a Week, by Residence



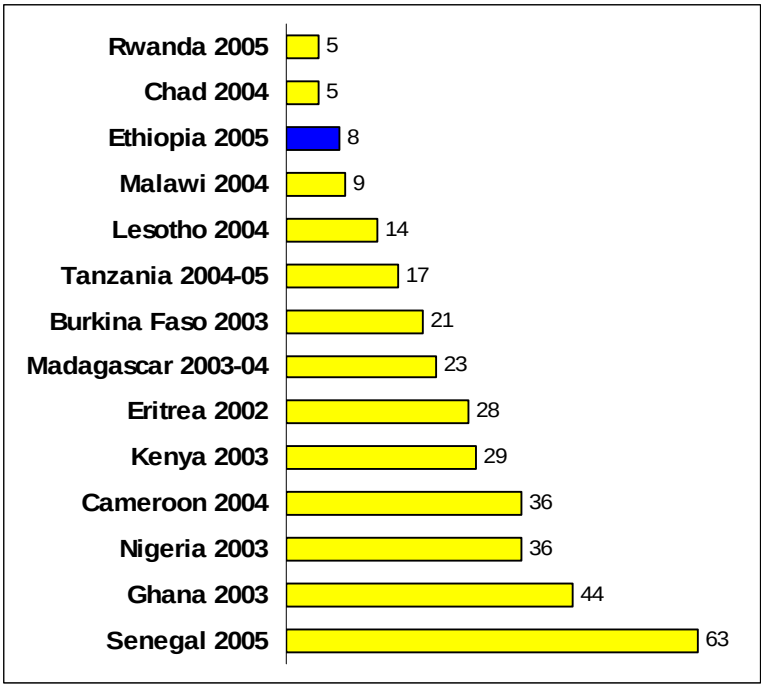
Ethiopia ranks lowest in women's exposure to the radio when compared with other sub-Saharan African countries. One in six Ethiopian women listen to the radio at least once a week compared with four in five women in Senegal and three in four women in Kenya and Ghana (Figure 3.7).

Figure 3.7
Percentage of Women Age 15-49 Who Listen to the Radio at Least Once a Week, Sub-Saharan Africa



Similarly, women's exposure to the television is relatively lower in Ethiopia than in most other sub-Saharan African countries (Figure 3.8). For example, eight times as many women in Senegal, six times as many women in Ghana, and four times as many women in Nigeria and Cameroon as in Ethiopia watch television at least once a week.

Figure 3.8
Percentage of Women Age 15-49 Who Watch Television at Least Once a Week, Sub-Saharan Africa



4. FERTILITY

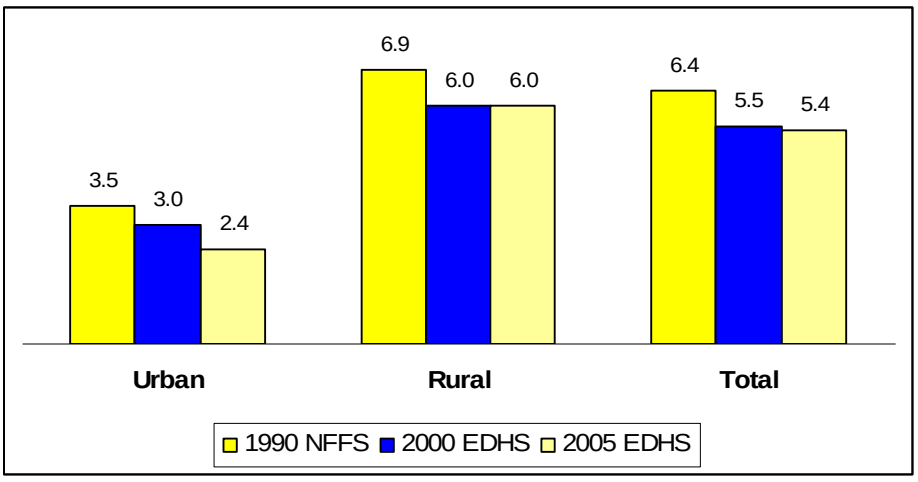
Fertility is one of the three principal determinants of the size and structure of the population of a country (the other two being mortality and migration). This section presents trends in fertility rates in Ethiopia based on data from the 1990 NFFS, the 2000 EDHS and the 2005 EDHS.

4.1 Fertility Rates

The most commonly used measures of current fertility are the total fertility rate (TFR) and its component age-specific fertility rates (ASFRs). The TFR is an estimate of the average number of births a woman would have at the end of her reproductive years if she bears children at the prevailing age-specific fertility rates throughout her childbearing years (age 15-49). The ASFRs are defined in terms of the number of live births among women in a particular age group divided by the number of woman-years in that age group during the specific period.

Figure 4.1 presents trends in TFRs in Ethiopia over the past 15 years, by urban-rural residence. The data show that the overall TFR declined by more than one child per woman in the 10-year period between 1990 and 2000, from 6.4 to 5.5, a reduction of 16 percent. However, the pace of decline dropped off subsequently. The TFR declined by only 2 percent during the last five years from 5.5 in 2000 to 5.4 in 2005, primarily because of little change in rural fertility. Urban fertility declined steadily throughout the 15-year period whereas rural fertility declined noticeably during the first 10 years but remained relatively unchanged thereafter, resulting in a wider gap between urban and rural fertility.

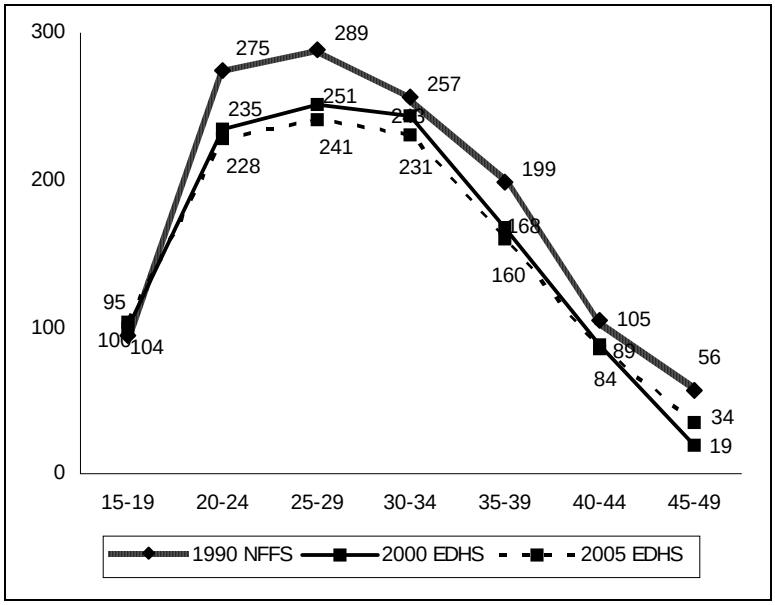
Figure 4.1
Total Fertility Rates, by Residence



Note: The rates for the 1990 NFFS are calculated based on the number of births that occurred in the 12 months preceding the survey while the rates for the 2000 EDHS and 2005 EDHS are based on the number of births that occurred in the 3 years preceding the survey.

The data also show that fertility decline was experienced by all women in the reproductive age groups except those in the youngest age group (15-19). The decline was more rapid among women in the prime reproductive ages (20-24, 25-29, and 30-34). However, the level and patterns in ASFRs have remained almost the same in the past five years (Figure 4.2).

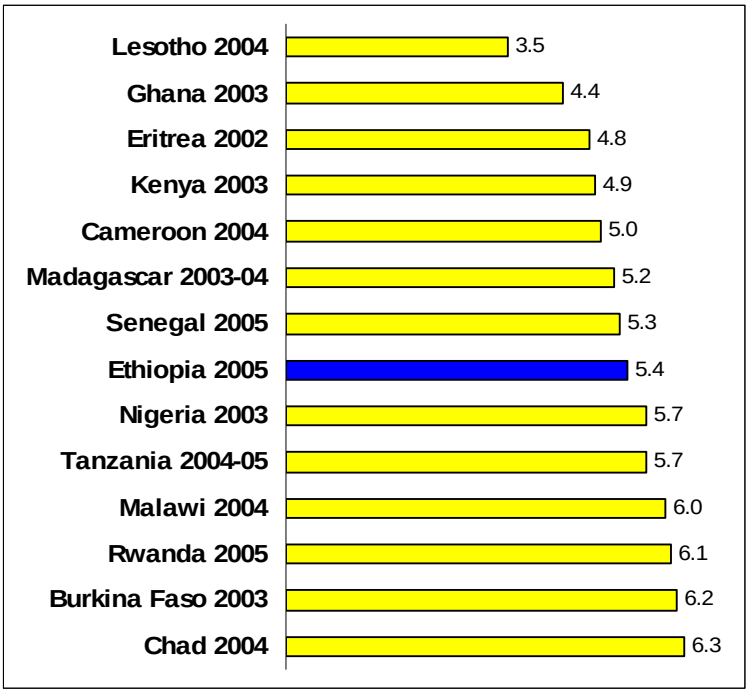
Figure 4.2
Trends in Age-specific Fertility Rates



Note: The rates for the 1990 NFFS are calculated based on the number of births that occurred in the 12 months preceding the survey while the rates for the 2000 EDHS and 2005 EDHS are based on the number of births that occurred in the 3 years preceding the survey.

Figure 4.3 compares TFR in Ethiopia with other sub-Saharan African countries. TFR is lowest in Lesotho (3.5) and highest in Chad (6.3) compared to 3.5 in Ethiopia.

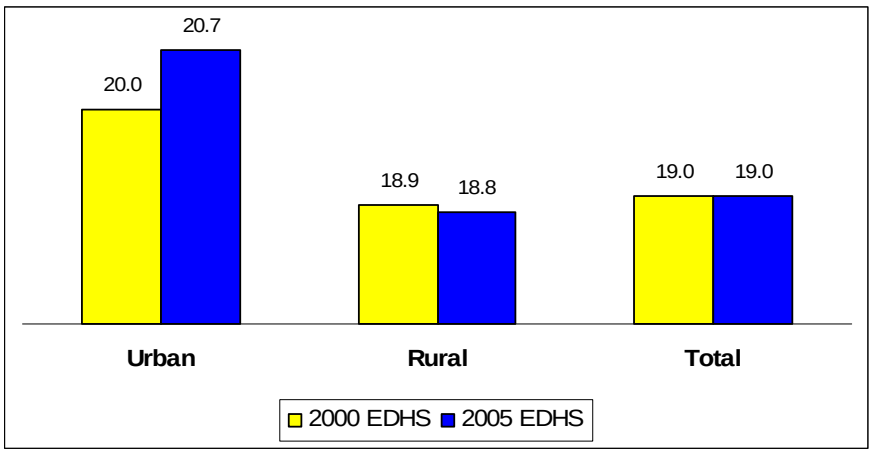
Figure 4.3
Total Fertility Rates, Sub-Saharan Africa



4.2 Median Age at First Birth

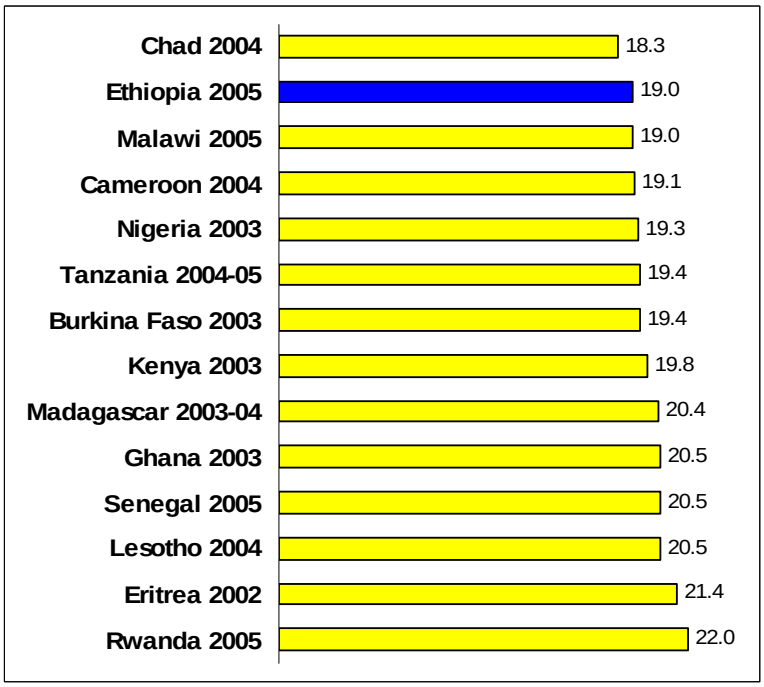
Early initiation of childbearing has a detrimental effect on the health of both mother and child. It also lengthens the reproductive period, thereby increasing the level of fertility. There was no change in women's overall age at first birth in Ethiopia over the last five years. Figure 4.4 shows trends in median age at first birth by urban-rural residence. The median age at first birth among rural Ethiopian women remained at 19 years while it increased by about one year among urban women, from 20.0 years in 2000 to 20.7 years in 2005.

Figure 4.4
Median Age at First Birth for Women Age 25-49, by Residence



With the exception of Chad (which has a lower median age at first birth) and Malawi (which has the same median age at first birth as in Ethiopia), all other countries being compared here have a higher median age at first birth among women age 25-49 than Ethiopia does (Figure 4.5).

Figure 4.5
Median Age at First Birth for Women Age 25-49, Sub-Saharan Africa



4.3 Adolescent Fertility

The issue of adolescent fertility is important for health, demographic and social reasons. Children born to very young mothers face an increased risk of illness and death. Adolescent mothers themselves are more likely than older women to suffer from severe complications during pregnancy and delivery because of physiological immaturity.

Figure 4.6 presents trends in the percentage of adolescent women age 15-19 years who have begun childbearing. The percentages of women who have begun childbearing at ages 15, 16 and 19 have increased over the last five years but decreased at ages 17 and 18. Despite the decline in the percentage of urban adolescents who have begun childbearing, the overall percentage of young women who have had a birth or are pregnant with the first birth has increased slightly over the last five years primarily because of an increase in the percentage of rural adolescents who have begun childbearing. There was a 38 percent increase in childbearing among adolescents with no education, and a 70 percent decrease among adolescents with secondary or higher level of education between 2000 and 2005, widening the gap in adolescent fertility between educated and uneducated women.

Figure 4.6
Percentage of Women 15-19 Who Are Mothers or Pregnant with First Child, by Residence, Education and Age

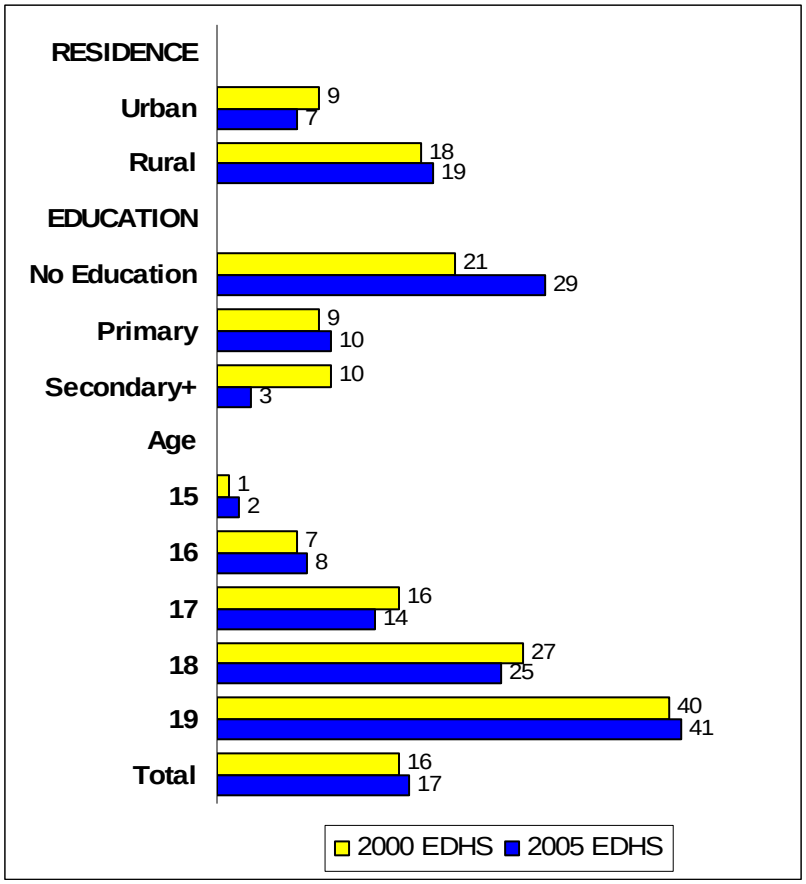
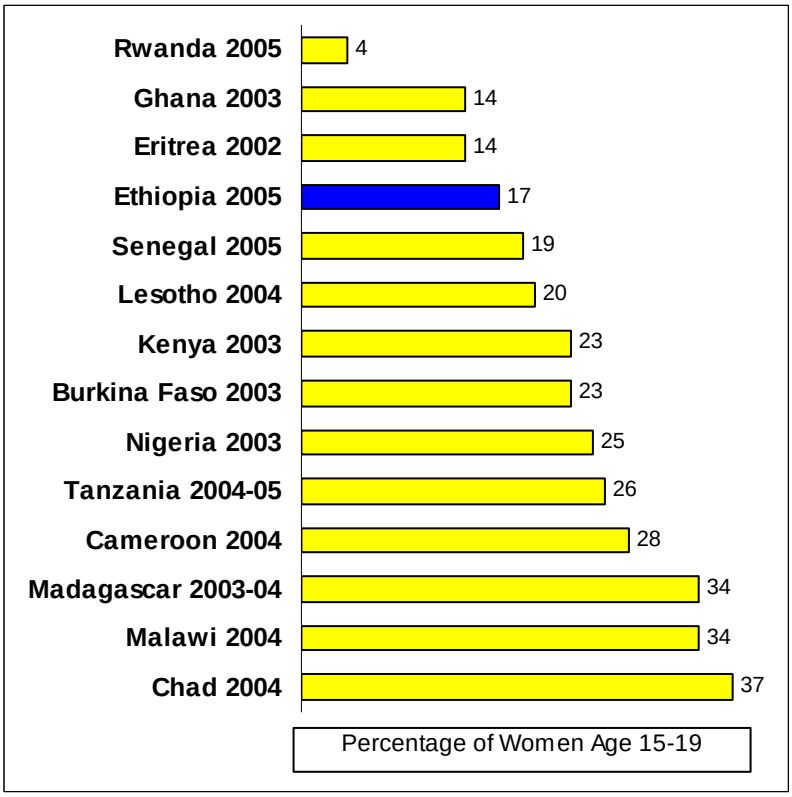


Figure 4.7 shows adolescent fertility among 14 sub-Saharan African countries. Childbearing at an early age is relatively lower in Ethiopia than in most other sub-Saharan African countries and ranges from a low of 4 percent in Rwanda to a high of 37 percent in Chad.

Figure 4.7
Adolescent Fertility, Sub-Saharan Africa



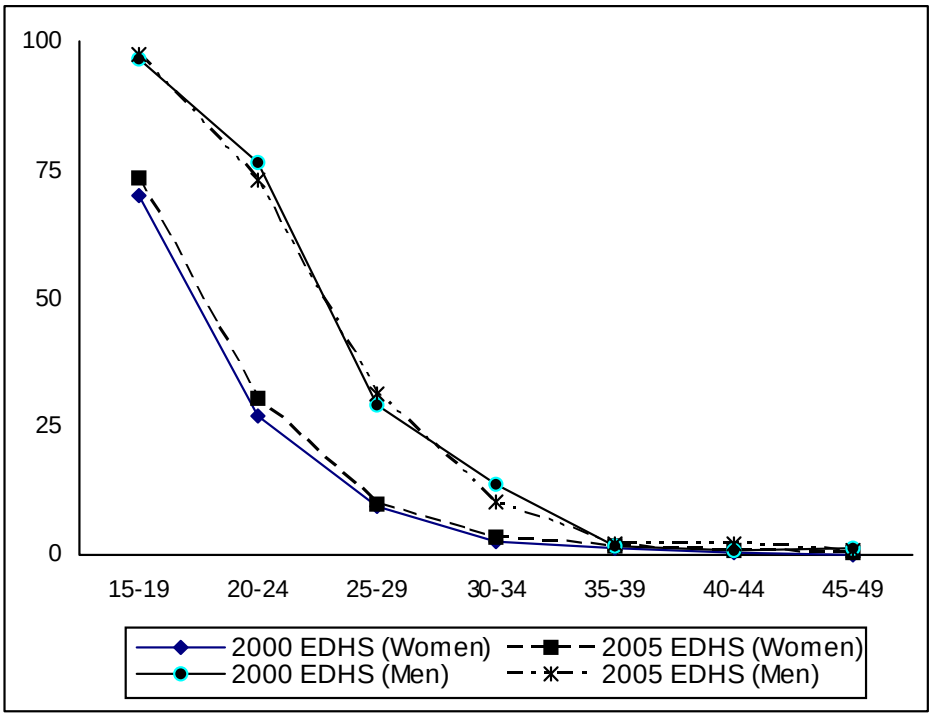
5. MARRIAGE PATTERNS

The age at which women marry has a strong influence on fertility levels in a society because it is a principal determinant of the length of time that women will be exposed to the risk of pregnancy during their reproductive years. Early marriage is directly associated with the early initiation of childbearing and high fertility which may have adverse effects on the health of mothers and newborns.

5.1 Never-married Women and Men

In the EDHS surveys, 'marriage' was defined as a stable cohabitation between a man and a woman irrespective of whether or not any validating legal, religious or customary ceremonies had been performed. Under this definition, the term 'never married' excludes both formal and informal unions. Figure 5.1 shows the percentage of women and men who have never married in 2000 and 2005 by five-year age cohorts. The data show a consistent decline in the proportions never-married as age increases. However, there was little change in Ethiopia over the last five years in the proportions of women and men never married in each age group.

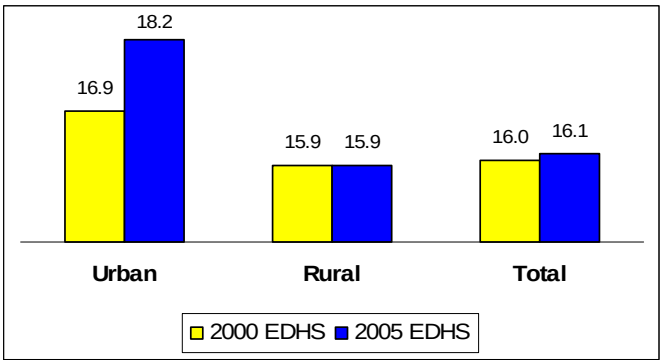
Figure 5.1
Percentage of Women and Men Never Married, by Age Group



5.2 Median Age at First Marriage

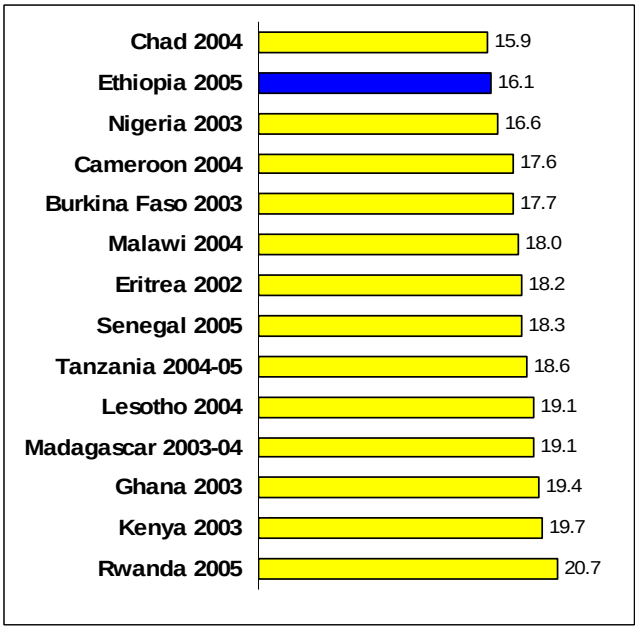
One indicator that is used to explore trends in the timing of marriage is the median age at first marriage, that is, the age by which 50 percent of women in a group are married for the first time. The overall median age at first marriage for Ethiopian women is only 16.1 years, and this has changed little during the last five years. However, the median age at first marriage among urban women rose by more than one year from 16.9 years in 2000 to 18.2 years in 2005 (Figure 5.2).

Figure 5.2
Median Age at First Marriage among Women Age 25-49, by Residence



With the exception of women in Chad, women in Ethiopia marry at a much younger age than women in most other sub-Saharan African countries (Figure 5.3). The median age at first marriage among women age 25-49 years in these two countries is about five years lower than the median age at first marriage among women in Rwanda, who have the highest median age at first marriage among the countries compared here.

Figure 5.3
Median Age at First Marriage among Women Age 25-49, Sub-Saharan Africa



Note: Median age at first marriage among women in Malawi is calculated for those age 20-49 years.

5.3 Prevalence of Polygyny

Polygyny, which is the practice of having more than one wife, has implications for the frequency of exposure to sexual activity and, therefore, fertility. Polygyny also contributes to a greater level of exposure to the risk of pregnancy, especially among women in the younger age groups, than might have prevailed in the absence of the practice.

There was an overall decline in the level of polygyny during the past five years in Ethiopia, from 14 percent in 2000 to 12 percent in 2005. The data also show that though rural marriages are more likely to be polygynous than urban marriages, the proportion of women in a polygynous union declined in rural but changed little in urban areas during the same period (Figure 5.4).

Figure 5.4
Percentage of Currently Married Women 15-49 in a Polygynous Union, by Residence

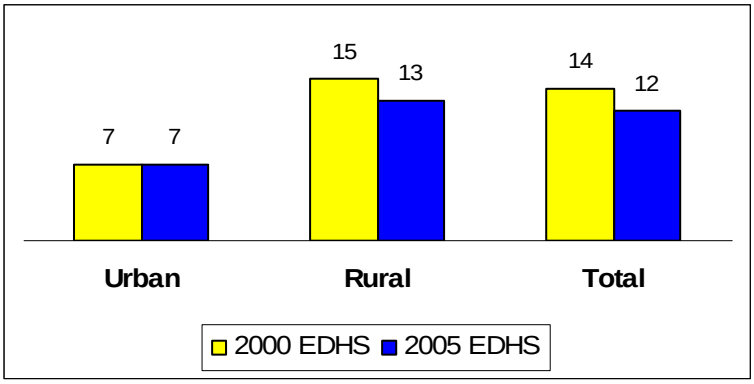


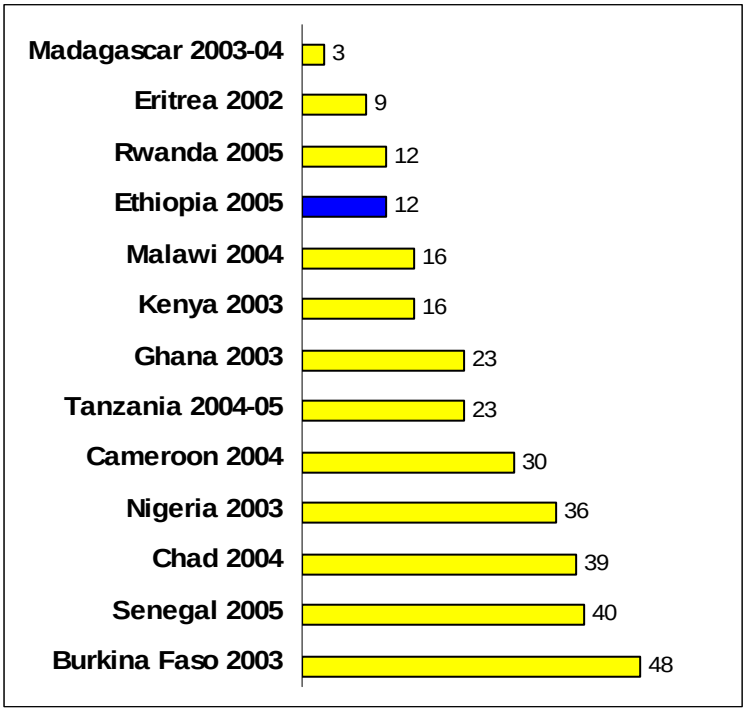
Table 5.1 shows the prevalence of polygyny by region in 2000 and 2005. The percentage of currently married women in a polygynous union increased in Addis Ababa, Amhara, Dire Dawa, Somali and Benishangul-Gumuz in the last five years, but declined in the other regions. The percentage increase was greatest in Addis Ababa (29 percent) while the percentage decline was greatest in SNNP (19 percent).

Table 5.1
Percentage of Currently Married Women 15-49 in a Polygynous Union, by Region

Region	2000 EDHS	2005 EDHS	Percent Change
Tigray	4.5	3.8	-16
Affar	24.4	21.0	-14
Amhara	2.1	2.6	24
Oromiya	18.1	15.8	-13
Somali	18.4	21.1	15
Benishangul-Gumuz	18.9	21.1	12
SNNP	21.9	17.8	-19
Gambela	28.9	27.3	-6
Harari	6.9	5.2	-25
Addis Ababa	2.4	3.1	29
Dire Dawa	7.1	8.6	21
Total	13.6	12.1	-11

Polygyny is relatively less frequent in Ethiopia than in most other sub-Saharan countries for which comparable information is available. Nearly one in two women in Burkina Faso, two in five women in Senegal and Chad and one in three women in Nigeria are in a polygynous union compared with one in eight women in Ethiopia (Figure 5.5).

Figure 5.5
Percentage of Currently Married Women in a Polygynous Union, Sub-Saharan Africa



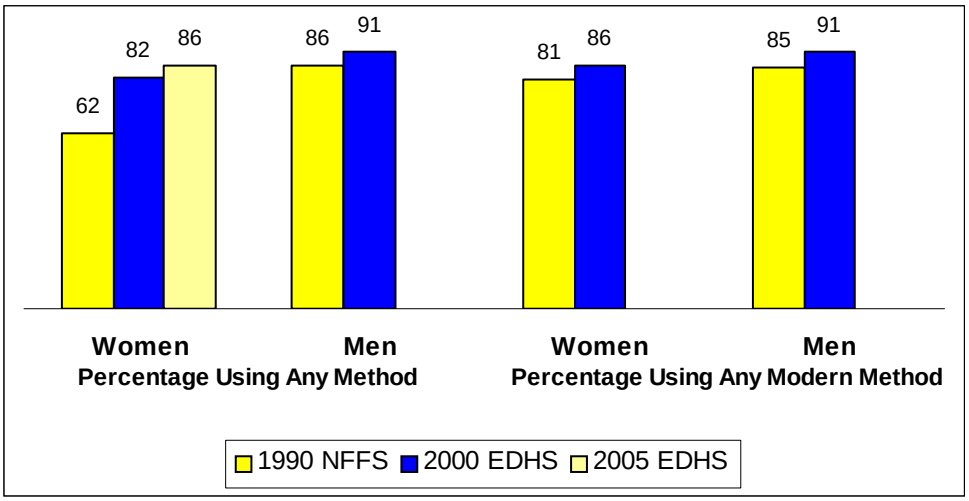
6. FAMILY PLANNING

Information on knowledge and practice of family planning is of particular interest to policymakers, program managers and researchers concerned with planning and evaluating population and family planning interventions.

6.1 Knowledge of Family Planning

Knowledge of at least one method of family planning is a precursor to the use of contraception. Figure 6.1 presents the percentage of all women age 15-49 years and men age 15-59 years, who have heard of at least one method of family planning. The data show that the proportion of women with knowledge of any contraceptive method increased by 39 percent during the last 15 years, from 62 percent in 1990 to 86 percent in 2005. Although the proportions of women and men having heard of at least a method of family planning increased in the past five years, the gender difference in contraceptive knowledge has remained the same with men more likely to have heard of a method than women.

Figure 6.1
Knowledge of Contraceptive Methods among Women Age 15-49 and Men Age 15-59



Note: Men were not interviewed in the 1990 NFFS. Knowledge of methods for women not broken down by modern and traditional method in the 1990 NFFS.

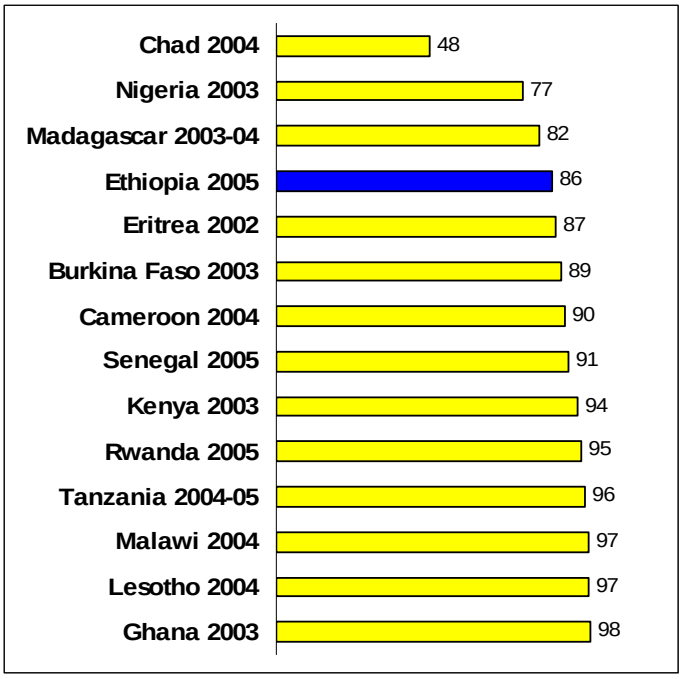
With the exception of female sterilization, knowledge of modern methods of family planning increased in the past five years (Table 6.1). The pill has remained the most heard of method among women in the last five years while men are most likely to have heard of the condom in 2005. In 2000, men were most likely to have heard of the pill. Knowledge of injectables and condom has increased substantially among both women and men over the last five years. Data also show that knowledge of any traditional method has declined for both women and men.

Table 6.1
Knowledge of Specific Contraceptive Methods among Women Age 15-49 and Men Age 15-59

Method	Percentage of Women		Percentage of Men	
	2000	2005	2000	2005
Any method	81.5	86.1	86.1	91.0
Any modern method	80.8	86.0	84.7	90.7
Female sterilization	23.1	18.4	32.6	26.4
Male sterilization	4.8	6.6	12.6	15.3
Pill	77.5	82.6	78.1	81.2
IUD	11.1	14.8	11.7	14.3
Injectables	65.3	80.9	62.2	79.0
Implants	13.6	22.4	13.9	23.0
Condom	33.0	46.1	64.7	84.2
Diaphragm/Foam/Jelly	4.4	5.9	7.5	8.8
Any traditional method	24.3	20.6	48.0	39.2

Despite the increase in contraceptive knowledge over the last five years, Ethiopian women are less knowledgeable of methods of family planning than women in most other sub-Saharan African countries (Figure 6.2).

Figure 6.2
Percentage of Women Age 15-49 Who Have Heard of at Least One Modern Contraceptive Method, Sub-Saharan Africa



6.2 Current Use of Family Planning

The current use of family planning measures actual contraceptive practice at the time of the survey regardless of whether the desire to use is for the purpose of spacing or limiting childbearing. Trends in current contraceptive use provide insight into one of the principal determinants of fertility and serve as a key measure for assessing the success of national family planning program efforts.

As Figure 6.3 shows current use of contraceptive methods among currently married women tripled in the 15 years between the 1990 NFFS and the 2005 EDHS from 5 percent to 15 percent. The increase is especially marked for modern methods. Current use of modern methods doubled during the first 10-year period (from 3 percent in 1990 to 6 percent in 2000), and more than doubled during the last five years from 6 percent in 2000 to 14 percent in 2005.

Figure 6.3
Percentage of Currently Married Women Age 15-49 Using a Contraceptive Method

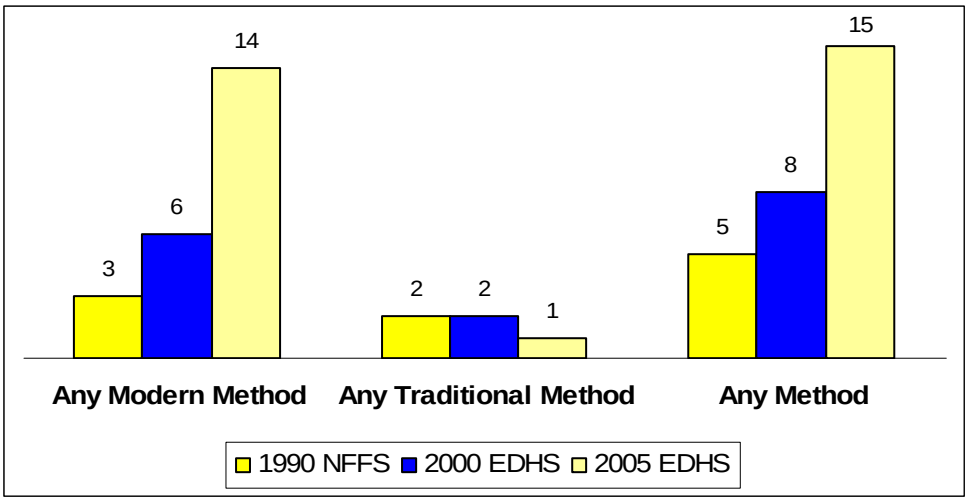


Figure 6.4 shows that the rate of increase in the percentage of currently married women age 15-49 years currently using a modern contraceptive method was more rapid in rural than in urban areas and among uneducated than educated women, resulting in a narrowing of the urban-rural and educational differences. Contraceptive use in rural areas increased fourfold from 3 percent in 2000 to 11 percent in 2005, while use in urban areas increased by 50 percent from 28 percent to 42 percent over the same period. Similarly, contraceptive use among women with no education increased by two and a half times compared with a 39 percent increase among women with secondary and higher level of education.

Figure 6.4
Percentage of Currently Married Women Age 15-49 Using a Modern Contraceptive Method, by Residence and Education

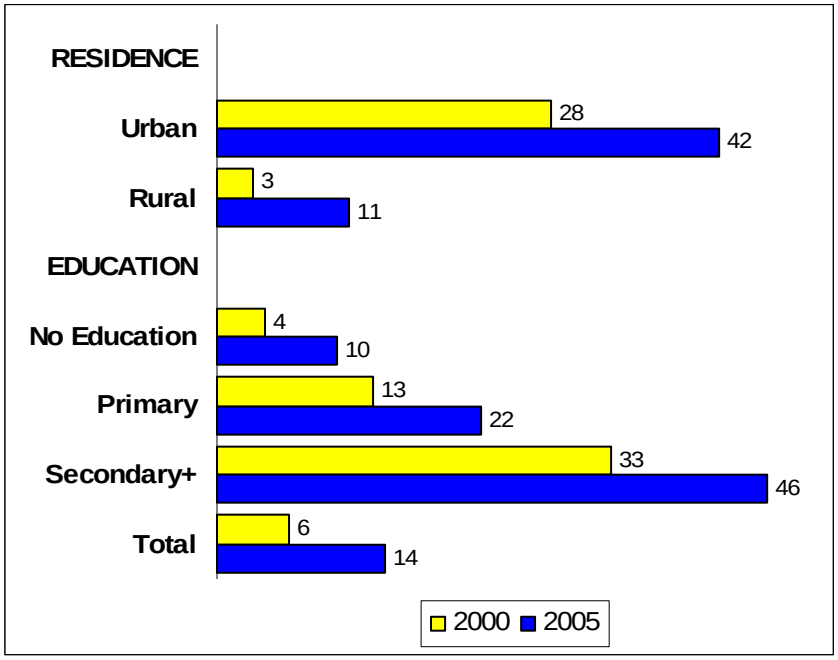


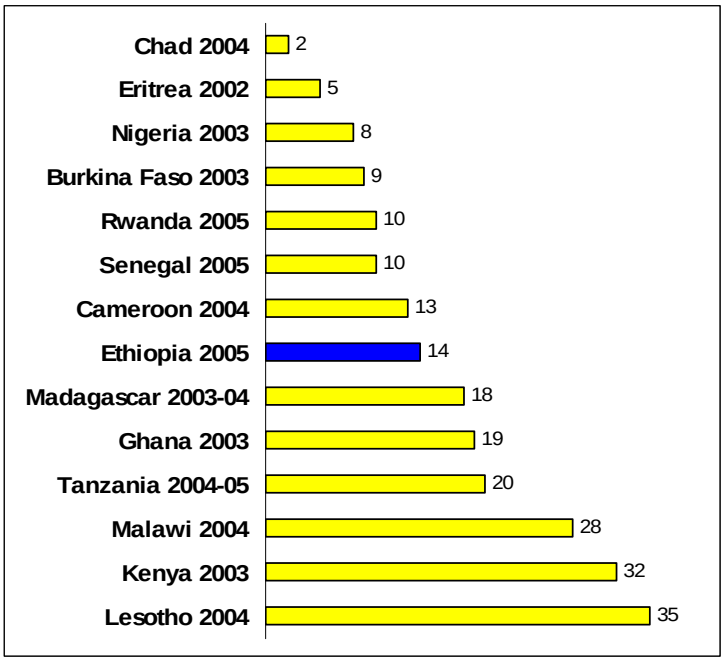
Table 6.2 shows an increase in current use of a modern contraceptive method among currently married women of reproductive age in all regions. The exception is Affar where contraceptive use declined by 19 percent in the past five years. The data also show a huge regional disparity in the increase in contraceptive use among the 10 regions, ranging from a 13 percent increase in the Somali Region to a 200 percent increase in Oromiya.

Table 6.2
Percentage of Currently Married Women Age 15-49 Using a Modern Contraceptive Method, by Region

Region	2000 EDHS	2005 EDHS	Percent Change
Tigray	9.3	16.2	74
Affar	7.4	6.0	-19
Amhara	6.6	15.7	138
Oromiya	4.3	12.9	200
Somali	2.4	2.7	13
Benishangul-Gumuz	8.5	10.4	22
SNNP	5.0	11.4	128
Gambela	12.3	15.8	28
Harari	19.0	29.1	53
Addis Ababa	34.3	45.2	32
Dire Dawa	23.5	31.5	34
Total	6.3	13.9	121

Use of modern contraceptive methods is somewhat lower in Ethiopia than in several other sub-Saharan African countries (Figure 6.5). Twice as many currently married women in Malawi as in Ethiopia, for example, use a modern method of contraception. At the same time, twice as many Ethiopian women are likely to use a modern method as women in Eritrea. Contraceptive use among the countries in the region ranges from a low of 2 percent in Chad to a high of 35 percent in Lesotho.

Figure 6.5
Percentage of Currently Married Women Age 15-49 Using a Modern Contraceptive Method, Sub-Saharan Africa



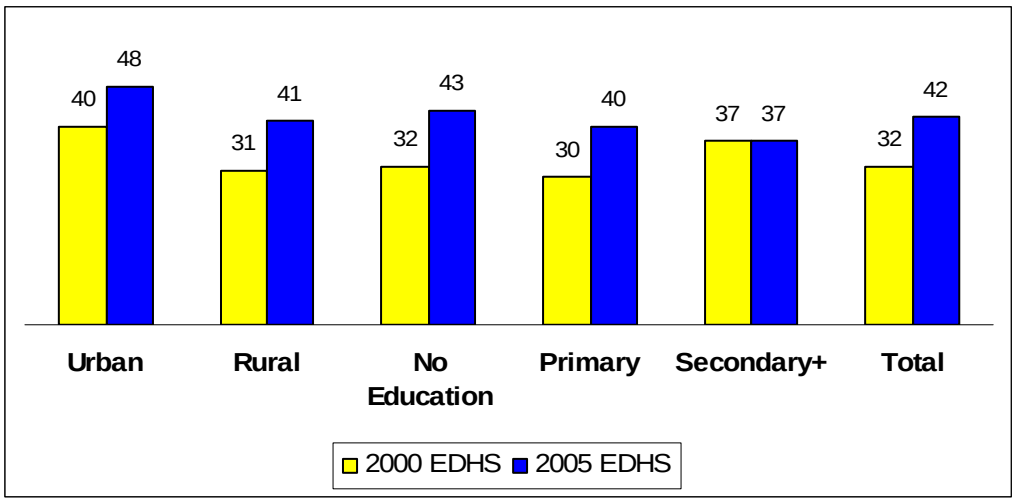
7. FERTILITY PREFERENCES

Information on fertility preference provides insight into a couple's attitude towards future childbearing, desired completed family size and prevailing unmet need for contraception.

7.1 Desire for Children

An important indicator of the potential demand for family planning is the percentage of women who want no more children. Figure 7.1 presents trends in the percentage of currently married women age 15-49 years who want no more children. Overall, the percentage of currently married women wanting no more children increased from 32 percent in 2000 to 42 percent in 2005, an increase of more than 30 percent, with the proportionate increase in rural areas higher than in urban areas (32 percent vs. 20 percent).

Figure 7.1
Percentage of Currently Married Women Age 15-49 Who Want No More Children, by Residence and Education

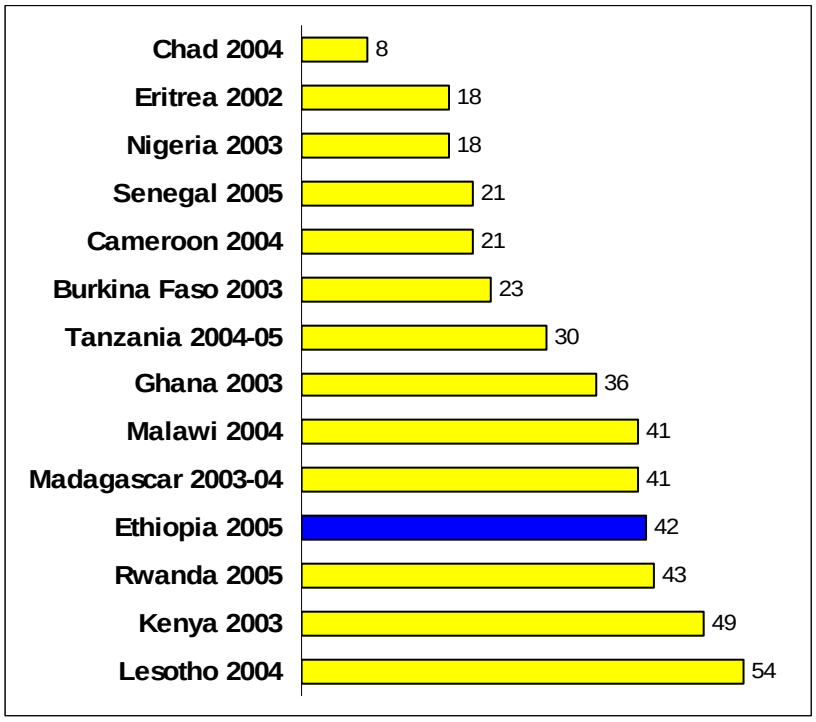


Note: Women who have been steralized are considered to want no more children.

However, the overall increase in the percentage of currently married women wanting no more children was not reflected among all educational subgroups. The increase was mostly attributed to an increase in the percentage of currently married women with no education wanting no more children but not to women with at least secondary education. In 2000, highly educated women were much more likely to not want any more children than women with little or no education. However, in 2005, this pattern was reversed. The percentage of women who want no more children is 16 percent higher among women with no education and 8 percent higher among women with primary education than among women with at least secondary education.

Figure 7.2 compares Ethiopia with other sub-Saharan African countries with respect to the percentage of currently married women who want no more children. The desire to limit childbearing is relatively high in Ethiopia (Figure 7.2) compared to several other countries in the region. For example, about one in two currently married women in Lesotho and Kenya want no more children compared to about two in five women in Ethiopia and about one in ten in Chad.

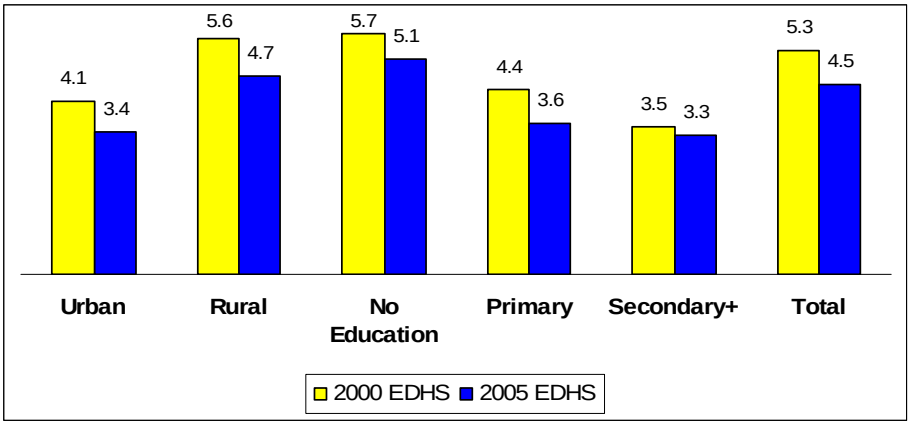
Figure 7.2
Percentage of Currently Married Women Age 15-49 Who Want No more Children, Sub-Saharan Africa



7.2 Ideal Family Size

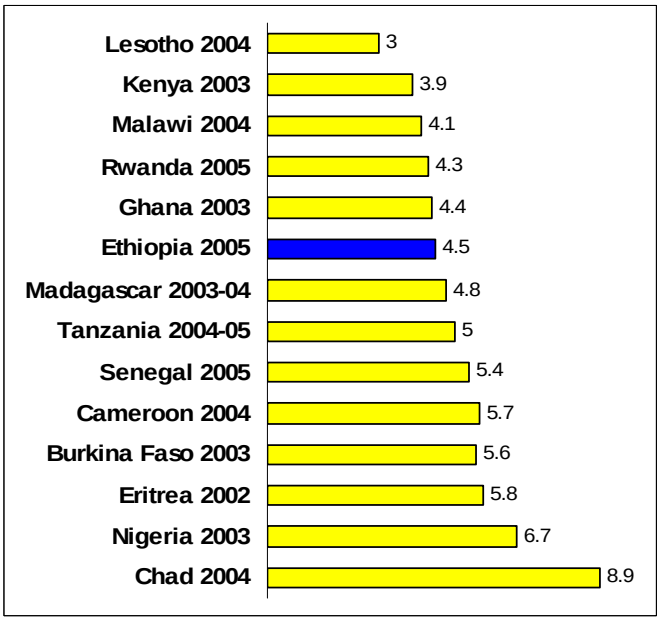
Another indicator of fertility preference is the ideal number of children preferred by women and men. There was a noticeable decline in the average family size reported by Ethiopian women as ideal in the past five years. Overall, the average ideal family size declined by nearly one child per woman, from 5.3 in 2000 to 4.5 in 2005. The data also show that the pace of decline in ideal family size was nearly the same among urban and rural women; however, it was somewhat higher among women with no education and primary education as compared with women with secondary or higher level of education (Figure 7.3).

Figure 7.3
Mean Ideal Number of Children for All Women Age 15-49, by Residence and Education



When compared with women in other countries in the region, Ethiopian women have a relatively small ideal family size (Figure 7.4). The ideal family size among women in Chad is twice as large as among women in Ethiopia. Ideal family size ranges from a low of about three children in Lesotho to a high of about 9 children in Chad.

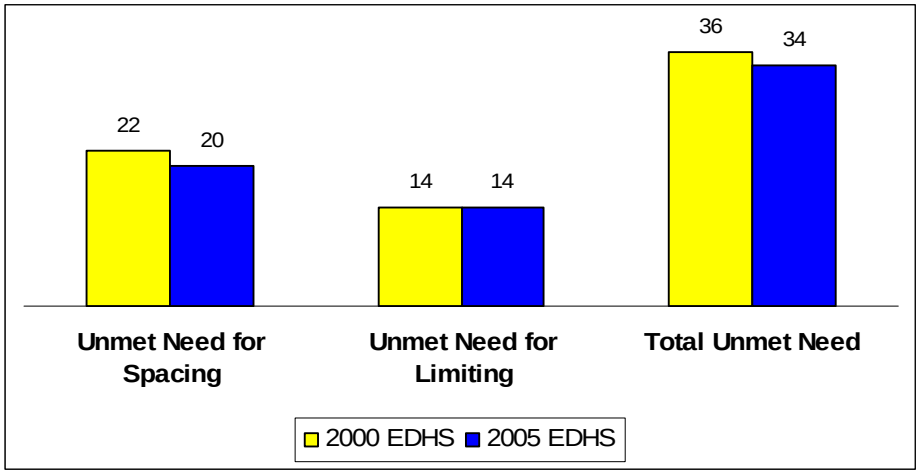
Figure 7.4
Mean Ideal Number of Children for Women Age 15-49, Sub-Saharan Africa



7.3 Unmet Need for Family Planning

Figure 7.5 shows unmet need for family planning among currently married women in the reproductive ages. The data show that there has been little change in unmet need for family planning over the past five years, with unmet need in 2005 only slightly lower than it was in 2000 (34 percent vs. 36 percent). There was about a 10 percent increase in the proportion of women with unmet need for spacing while the proportion of women with an unmet need for limiting has remained unchanged during the same period.

Figure 7.5
Percentage of Currently Married Women Age 15-49 with Unmet Need for Family Planning



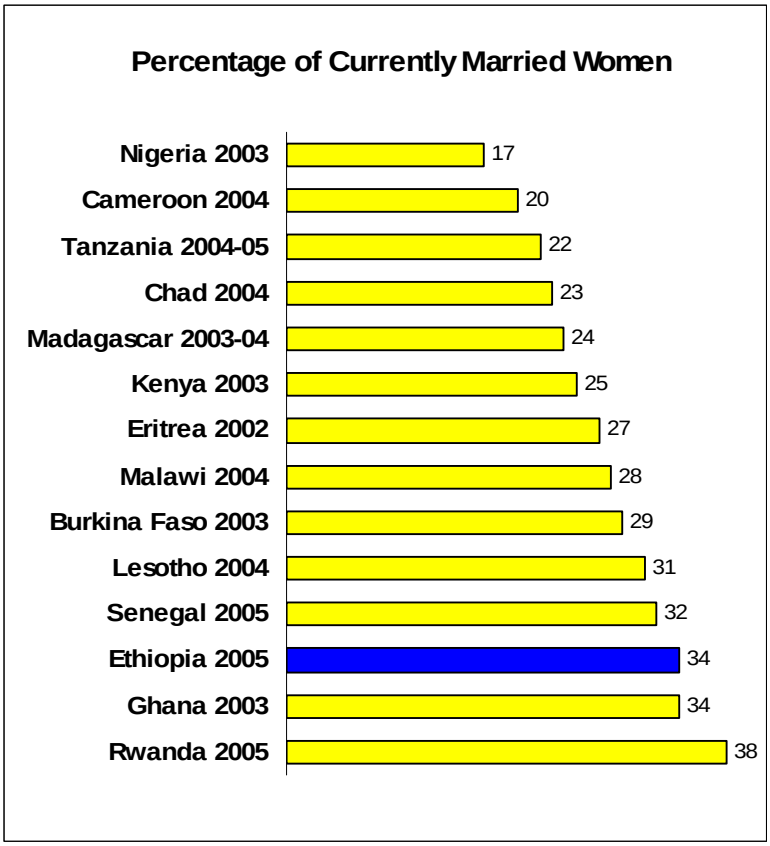
The overall decline in unmet need over the last five years was more obvious in urban (32 percent) than in rural areas (4 percent). The data also show that the unmet need for family planning declined in all regions except in Affar, Oromiya and SNNP, where in fact unmet need increased slightly between 2000 and 2005 (Table 7.1).

Table 7.1
Percentage of Currently Married Women Age 15-49 with Unmet Need for Family Planning, by Residence and Region

	2000 EDHS	2005 EDHS	Percent Change
Residence			
Urban	25.0	17.0	-32
Rural	37.3	35.8	-4
Region			
Tigray	28.0	24.1	-14
Affar	12.3	13.4	9
Amhara	40.9	29.7	-27
Oromiya	36.4	41.4	14
Somali	14.3	11.6	-19
Benishangul-Gumuz	31.9	29.7	-7
SNNP	35.5	37.4	5
Gambela	34.4	23.5	-32
Harari	30.1	22.4	-26
Addis Ababa	19.2	10.3	-46
Dire Dawa	24.5	14.8	-40
Total	35.8	33.8	-6

Unmet need is relatively higher in Ethiopia than in most sub-Saharan African countries (Figure 7.6). The proportion of currently married women with unmet need for family planning ranges from a low of 4 percent in Lesotho to a high of 38 percent in Rwanda.

Figure 7.6
Unmet Need for Family Planning among Currently Married Women Age 15-49, Sub-Saharan Africa



8. CHILD HEALTH INDICATORS

Childhood mortality in general and infant mortality in particular is often used as broad indicators of social development or as specific indicators of health status. Trends in childhood mortality therefore contribute to a better understanding of a country's changing socioeconomic situation and quality of life. Because the Ethiopian government is undertaking a number of interventions aimed at reducing childhood diseases and mortality, trend analyses provide an opportunity to evaluate the performance of these programs.

8.1 Early Childhood Mortality

Infant, child and under-five mortality rates obtained for the five years preceding the EDHS surveys confirm a declining trend in childhood mortality. Infant mortality declined from 97 deaths to 77 deaths per 1000 live births between the 2000 EDHS and the 2005 EDHS, while under-five mortality declined from 166 deaths to 123 deaths per 1000 live births over the same period, a drop of 21 percent and 26 percent, respectively. The data also show that child mortality rate declined by 35 percent during the same period, a more rapid decline than the decline in the other two childhood mortality rates (Figure 8.1).

Figure 8.1
Early Childhood Mortality Rates for the Five Years Preceding the Survey

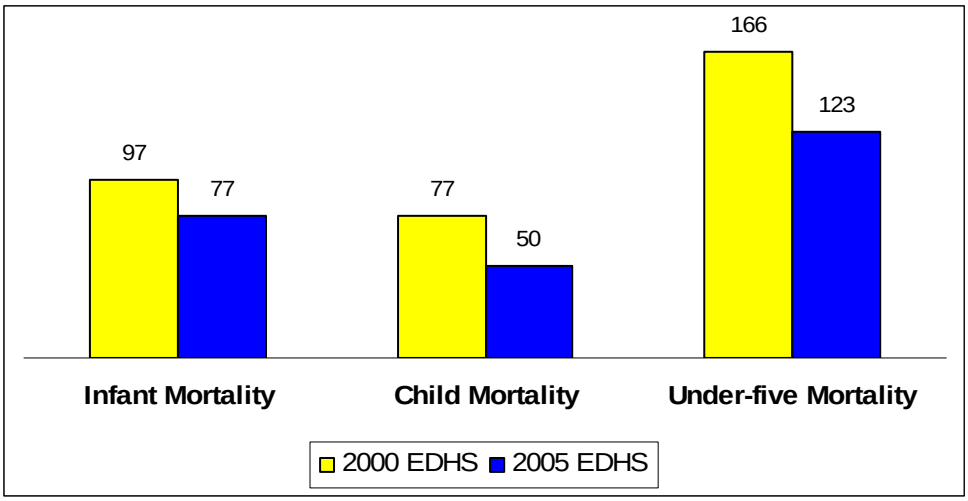
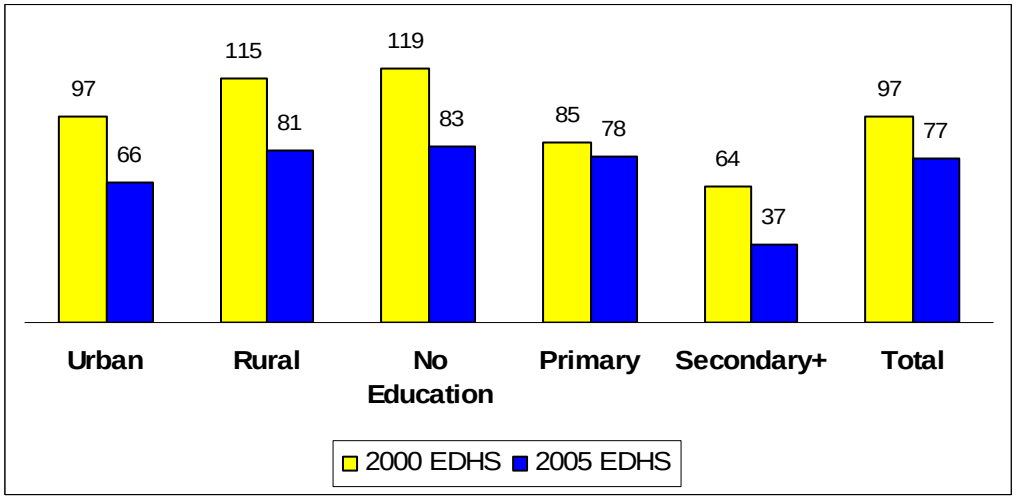


Figure 8.2 shows trends in infant mortality rates for the 10-year period preceding the surveys. The data show that there was an overall decline in infant mortality between the two surveys. This decline in infant mortality was most marked among women with secondary or higher level of education.

Figure 8.2
Infant Mortality Rates for the Ten Years Preceding the Survey, by Residence and Mother's Education



Note: Total reflects rates for the five years preceding the survey.

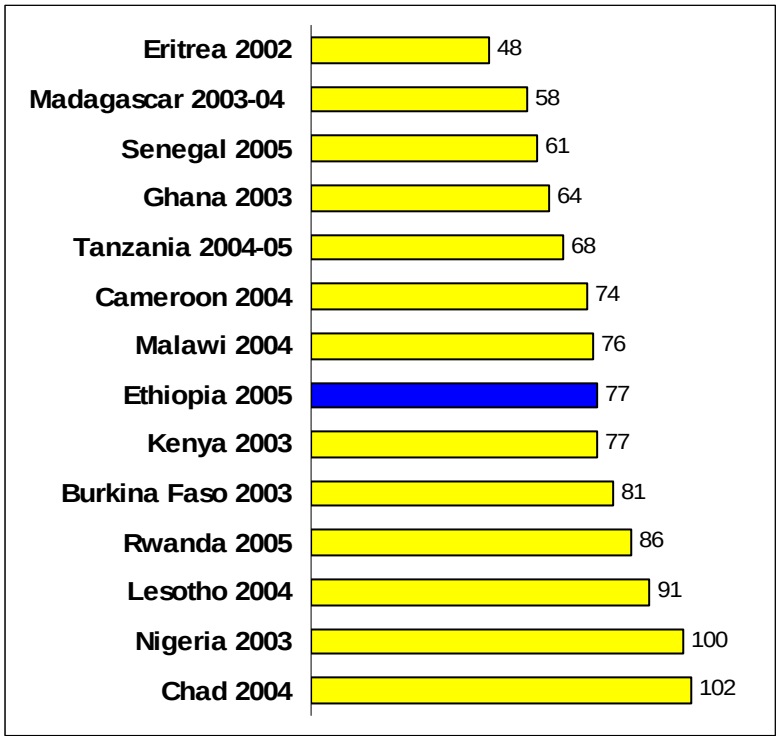
Table 8.1 shows that infant mortality declined in all 11 regions in the past five years, with the decline most noticeable in Affar (53 percent) and least noticeable in Benishangul-Gumuz (14 percent).

Table 8.1
Infant Mortality Rate for the Ten Years Preceding the Survey, by Region

Region	2000 EDHS	2005 EDHS	Percent Change
Tigray	104	67	-36
Affar	129	61	-53
Amhara	112	94	-16
Oromiya	116	76	-34
Somali	99	57	-42
Benishangul-Gumuz	98	84	-14
SNNP	113	85	-25
Gambela	123	92	-25
Harari	118	66	-44
Addis Ababa	81	45	-44
Dire Dawa	106	71	-33
Total	113	80	-29

When compared with other countries in the region, Ethiopia falls in the middle with reference to childhood mortality (Figure 8.3). Infant mortality in Ethiopia is 60 percent higher than in Eritrea and 25 percent lower than in Chad.

Figure 8.3
Infant Mortality Rates, Sub-Saharan Africa

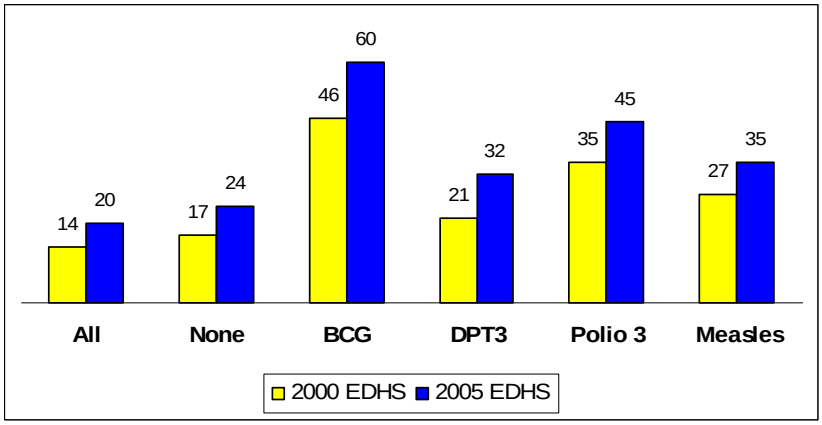


8.2 Child Immunization

Universal immunization of children from six vaccine-preventable diseases (tuberculosis, diphtheria, whooping cough, tetanus, polio, and measles) is crucial in reducing childhood mortality. Information on trends in vaccination coverage among children may give some indication of the success of child immunization programs.

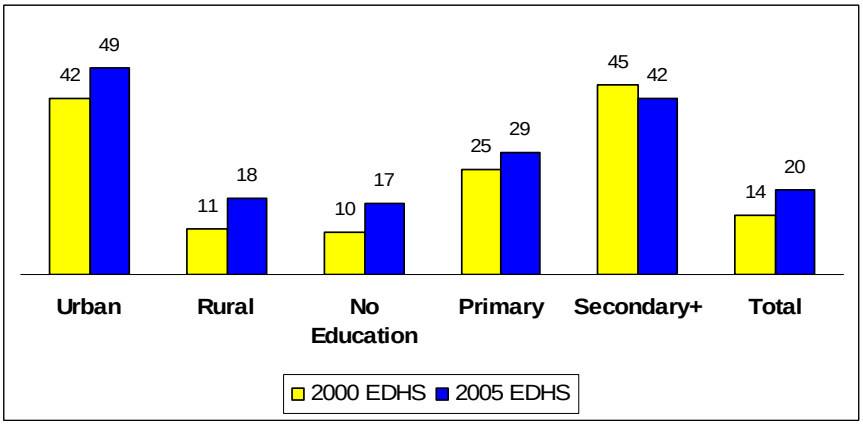
Figure 8.4 shows trends in the percentage of children 12-23 months who have received specific vaccines by the time of the survey. The proportion of children who have received all vaccinations, that is, one dose of BCG, three doses each of DPT and polio and one dose of measles vaccination, increased by 43 percent, from 14 percent in 2000 to 20 percent in 2005. However, the proportion of children who have received no vaccines also increased by 41 percent during the same period.

Figure 8.4
Percentage of Children 12-23 Months Who Received Specific Vaccines at Any Time Before the Survey



The percentage of children receiving all vaccines increased among both rural and urban areas; however, the increase was higher in rural than in urban areas (64 percent vs.17 percent). Similarly, the increase in the proportion of children receiving all vaccines was highest among children of mothers with no education (70 percent) when compared with children of mothers with primary education (16 percent). The data also show that, contrary to expectations, the percentage of children of mothers with at least secondary education receiving all vaccinations decreased from 45 percent in 2000 to 42 percent in 2005 (Figure 8.5).

Figure 8.5
Percentage of Children 12-23 Months Who Received All Vaccines, by Residence and Mother's Education



Despite the overall increase in vaccination coverage among children, the proportion of children age 12-23 months fully immunized by the time of the survey decreased in four out of 11 regions, between the 2000 EDHS and 2005 EDHS. The decline was highest in the Somali Region (87 percent) followed by Tigray (24 percent), Addis Ababa (5 percent) and Harari (3 percent). However, the data also show that vaccination coverage doubled in Oromiya and SNNP, and increased by about 50 percent in Benishangul-Gumuz and Gambela during the same period (Table 8.2)

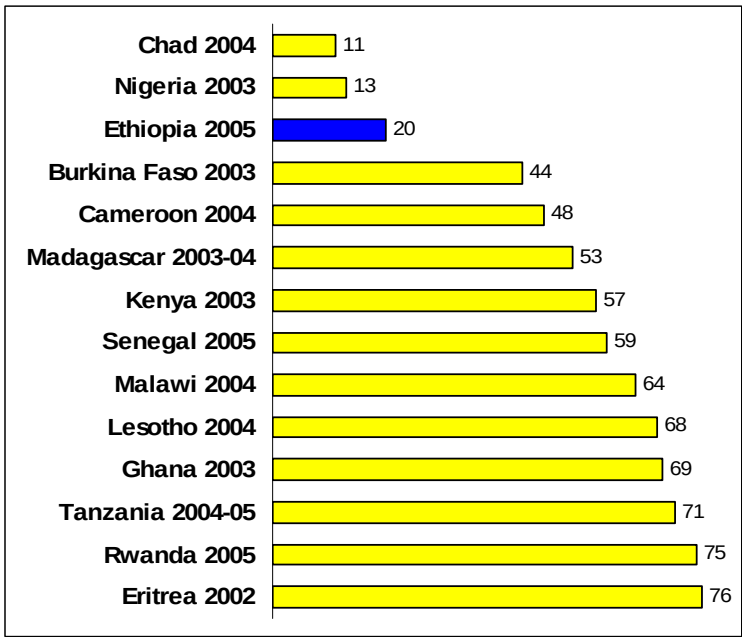
Table 8.2
Percentage of Children Age 12-23 Months Who Received All Vaccines, by Region

Region	2000 EDHS	2005 EDHS	Percent Change
Tigray	43.5	32.9	-24
Affar	0.0	0.6	--
Amhara	14.4	17.1	19
Oromiya	9.8	20.2	106
Somali	22.2	2.8	-87
Benishangul-Gumuz	12.2	18.5	52
SNNP	10.5	20.3	93
Gambela	10.8	15.9	47
Harari	35.9	34.9	-3
Addis Ababa	73.8	69.9	-5
Dire Dawa	35.3	43.4	23
Total	14.3	20.4	43

Note: In the Affar region, the percent of children fully immunized in the year 2000 was negligible.

Despite the noticeable increase in vaccination coverage among children in the past five years, Ethiopian children rank low when compared with children in other sub-Saharan African countries. With the exception of Chad and Nigeria, where only about one in ten children are fully immunized, vaccination coverage among children in all other sub-Saharan African countries is higher than in Ethiopia (Figure 8.6).

Figure 8.6
Percentage of Children Age 12-23 Months Fully Immunized, Sub-Saharan Africa

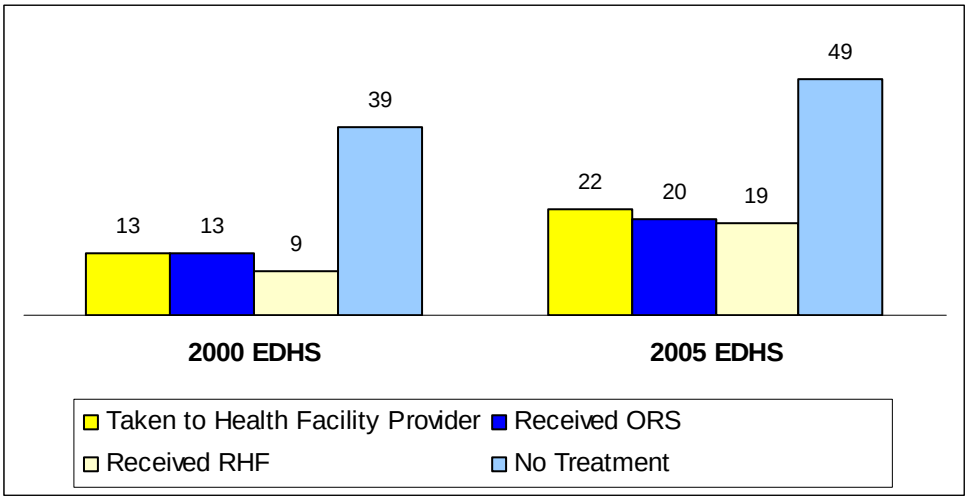


8.3 Treatment of Childhood Diseases

Prompt treatment of childhood diseases is an important element in improving the survival chances of young children. Dehydration associated with severe diarrhea is recognized as a major cause of morbidity and mortality among young children. A simple and effective response to dehydration is a prompt increase in the child's fluid intake through some form of oral rehydration therapy (ORT). ORT may include the use of a solution prepared from prepackaged oral rehydration salts (ORS) or the use of recommended home fluids (RHF) made at home from salt, sugar and water.

Figure 8.7 shows that among children below five years of age who had diarrhea in the two weeks preceding the survey, there was a noticeable increase in the percentage of children who were taken to a health provider and/or treated with ORS or RHF over the last five years. At the same time there was also an increase in the percentage of children who did not receive any treatment.

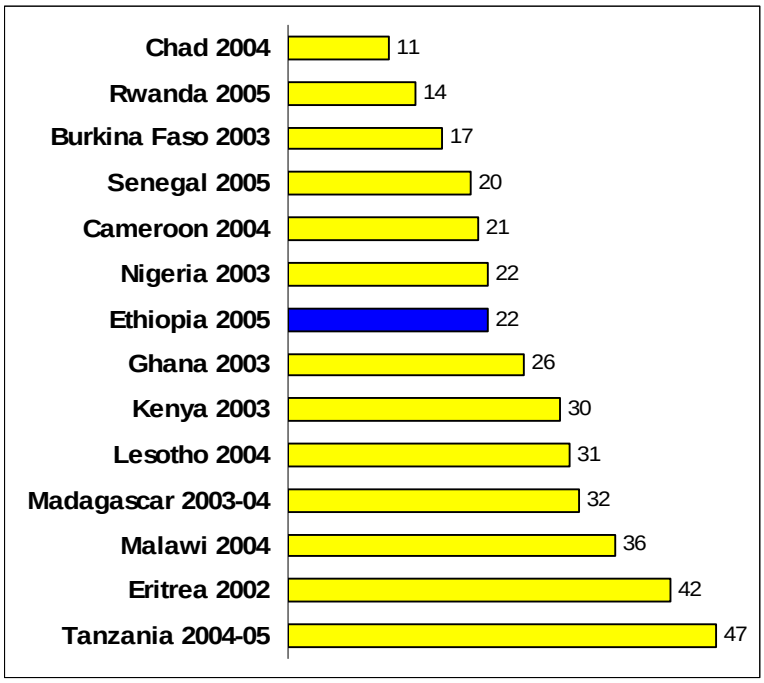
Figure 8.7
Percentage of Children under Age Five with Diarrhea, by Type of Treatments



Note: Health provider excludes pharmacy, shop and traditional practitioner.
ORS = Oral rehydration salts RHF = Recommended home fluids

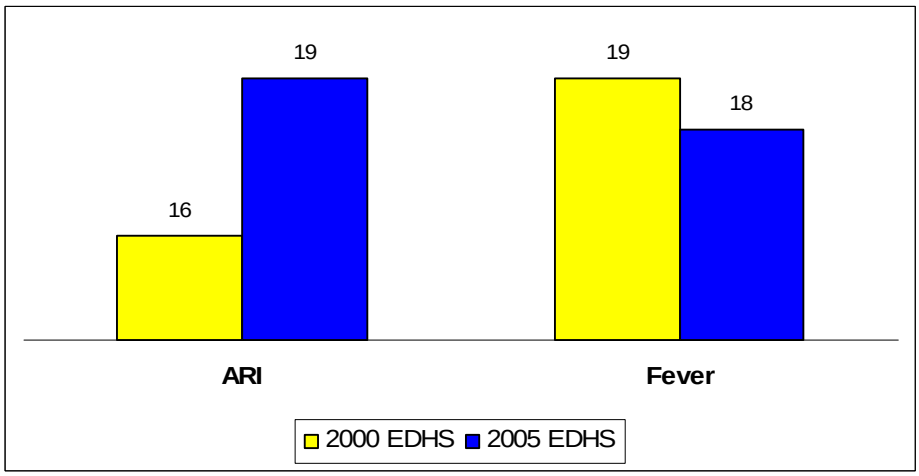
Figure 8.8 compares Ethiopia with other sub-Saharan African countries with respect to the percentage of children under age five with diarrhea in the two weeks preceding the survey and taken for treatment to a health provider. The data show that children living in Tanzania and Eritrea are twice as likely to be taken to a health provider for treatment as Ethiopian children. However, Ethiopian children fare much better than children living in Chad, Rwanda and Burkina Faso.

Figure 8.8
Percentage of Children under Age Five with Diarrhea Taken to a Health Provider for Treatment, Sub-Saharan Africa



The practice of seeking medical advice or treatment for children who showed symptoms of acute respiratory infections (ARI) or had fever is very low in Ethiopia. Fewer than one in five children who had symptoms of ARI or fever was taken for treatment to a health provider. Data from the EDHS surveys show little change in the last five years in the percentage of children with symptoms of ARI or fever taken to a health provider (Figure 8.9).

Figure 8.9
Percentage of Children Under Age Five with Symptoms of ARI and Fever Taken to a Health Provider for Treatment

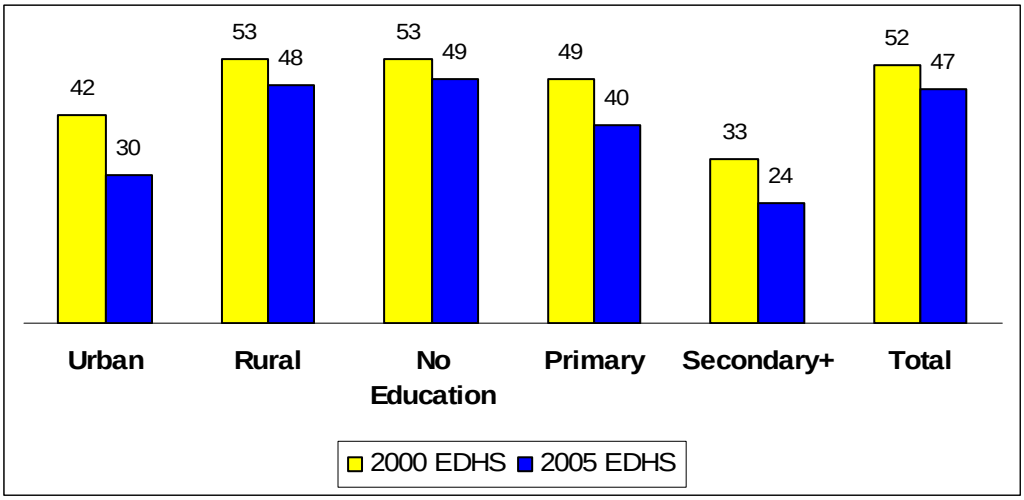


8.4 Nutritional Status of Children

Nutritional status is an important indicator of children's overall health and well-being. Childhood undernutrition results from prolonged and improper treatment of illness and inadequate food intake, and undernourished children are at a greater risk of dying than well-nourished children. Children's nutritional status in the EDHS surveys was assessed from measurements of their height and weight. From these measurements, three indices of nutritional status were calculated: height-for-age or stunting measures chronic malnourishment; weight-for-height or wasting measures acute malnourishment; and weight-for-age, a composite index of acute and chronic malnourishment, measures the percentage of children who are underweight.

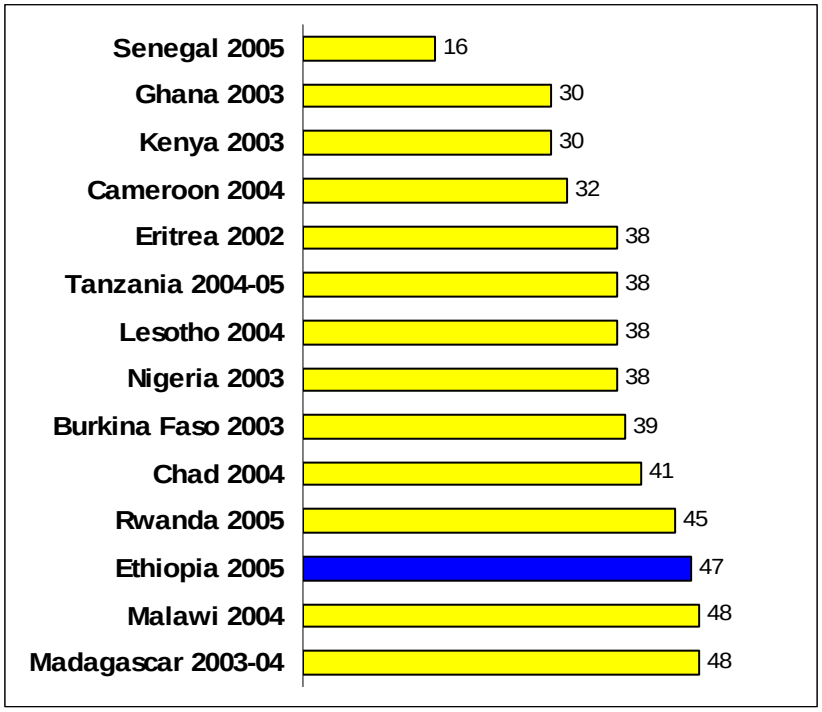
Figure 8.10 shows a small improvement in the nutritional status of children as measured by the percentage of children under five years who are stunted, that is, whose height-for-age is below minus two standard deviations from the median of the reference population. The percentage of children stunted decreased from 52 percent in 2000 to 47 percent in 2005, and this decrease was seen among both urban and rural children and among all children regardless of the level of their mother's education.

Figure 8.10
Percentage of Children under Age Five Stunted, by Residence and Mother's Education



Despite the decrease over the last five years in the percentage of children stunted, Ethiopian children are more likely than children in most other sub-Saharan African countries to be stunted (Figure 8.11). Only Malawi and Madagascar (48 percent each) have higher rates of stunted children under age five when compared with Ethiopia (47 percent).

Figure 8.11
Percentage of Children under Age Five Stunted, Sub-Saharan Countries



There was virtually no decline in the overall percentage of children wasted during the past five years (Figure 8.12). However, the percentage of children underweight decreased in the last five years and this was observed in both urban and rural areas and among all children regardless of the level of mother's education (Figure 8.13).

Figure 8.12
Percentage of Children under Age Five Wasted, by Residence and Mother's Education

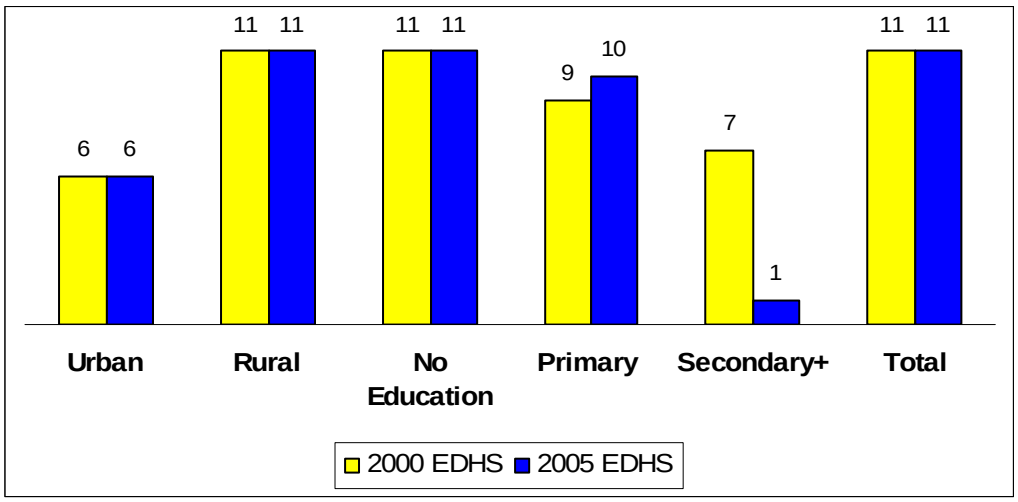


Figure 8.13
Percentage of Children under Age Five Underweight, by Residence and Mother's Education

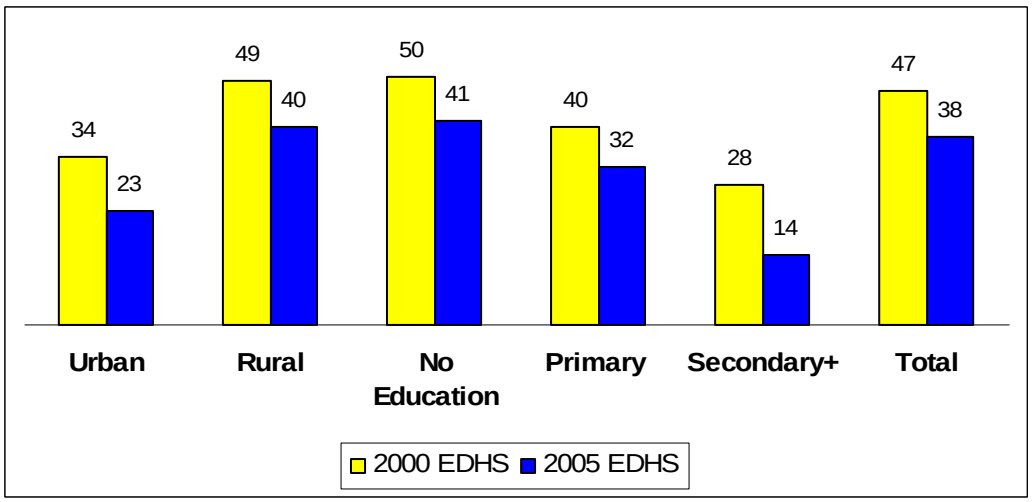


Figure 8.14 and Figure 8.15 compares Ethiopia with other countries in the sub-Saharan African region with respect to the proportion of children under age five who are wasted and underweight. Data show that the proportions of Ethiopian children wasted or underweight are high when compared with children in several sub-Saharan African countries. The proportion of children wasted in Ethiopia is four times higher than in Tanzania which has the lowest proportion of children wasted among the 14 countries being compared here. Similarly, the proportion of Ethiopian children who are underweight is more than double the proportion of children underweight in Senegal, which has the lowest proportion of children underweight.

Figure 8.14
Percentage of Children under Age Five Wasted, Sub-Saharan Africa

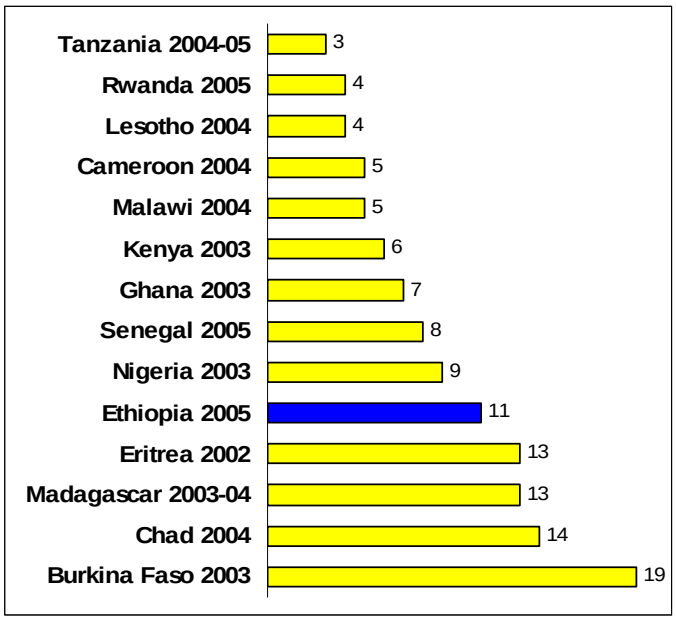
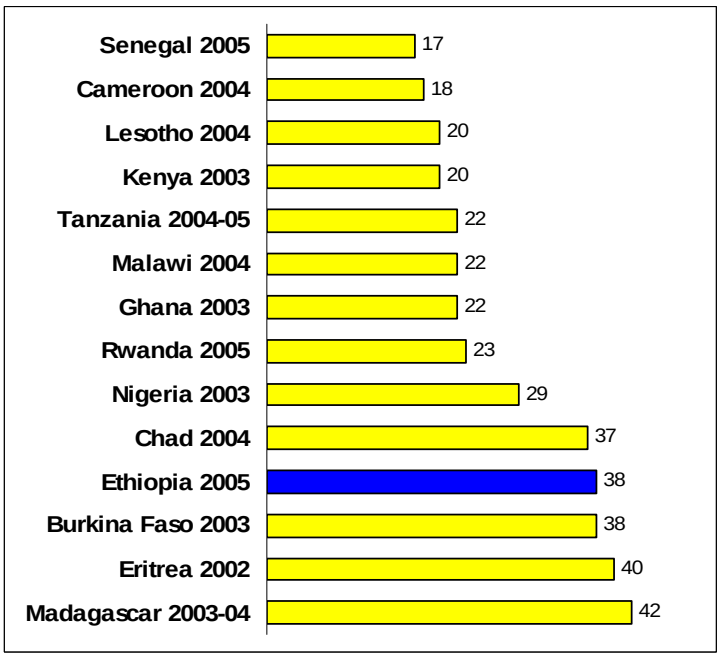


Figure 8.15
Percentage of Children under Age Five Underweight, Sub-Saharan Africa



9. MATERNAL CARE

Child survival is directly linked to access to professional maternity care. In addition, there is overwhelming evidence to support the benefits of utilizing professional care for mothers.

9.1 Antenatal Care and TT Coverage

Regular antenatal checkups from trained health providers are necessary to monitor the progress of a pregnancy and identify early on if a woman shows signs of complications. It is commonly recommended that a woman see a trained health provider at least four times during her pregnancy.

Figure 9.1 shows a slight improvement in the utilization of antenatal care services by pregnant women in the five years between the 2000 and 2005 surveys. The data show that there was little change in the percentage of women who did not go for an ANC visit. The percentage of women who made four or more ANC visits increased from 10 percent to 12 percent during the same period. In addition, there was a marked improvement in the percentage of women who had two or more doses of tetanus toxoid injections and a significant decline in the percentage of women who were not protected against neonatal tetanus.

Figure 9.1
Percentage of Women Who Had a Live Birth in the Five Years Preceding the Survey, by ANC Indicators for the Most Recent Pregnancy

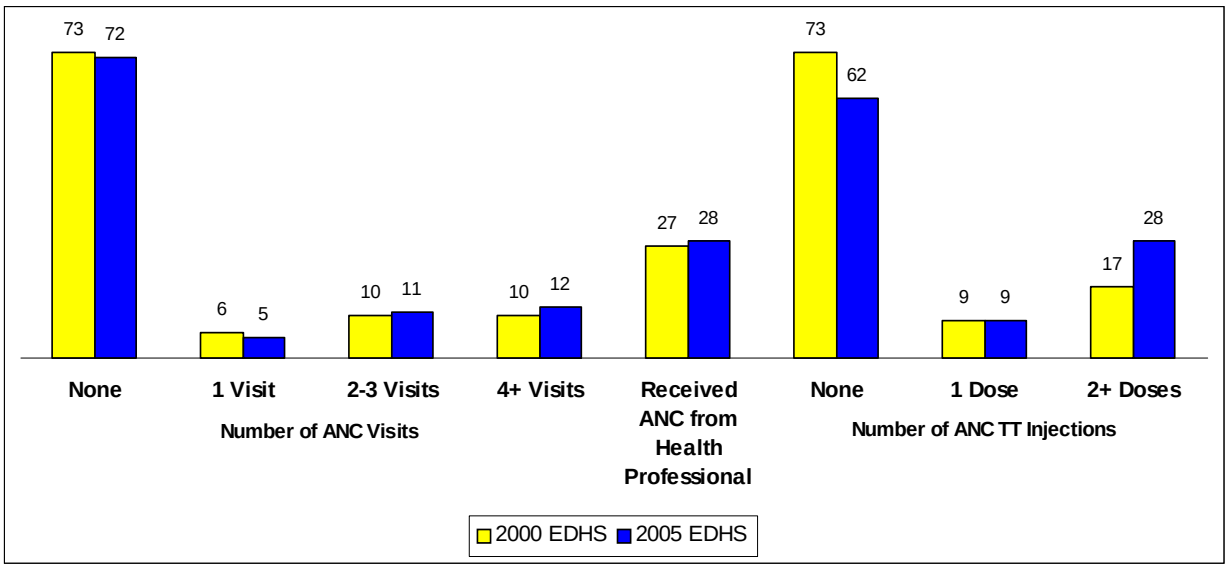


Table 9.1 shows noticeable changes by region in ANC coverage during the last five years. The proportion of mothers who received ANC from a health professional declined in eight of the 11 regions, and the percentage decline is highest in Somali (53 percent). However, ANC coverage increased in Amhara, SNNP and Addis Ababa with the increase highest in Amhara (42 percent).

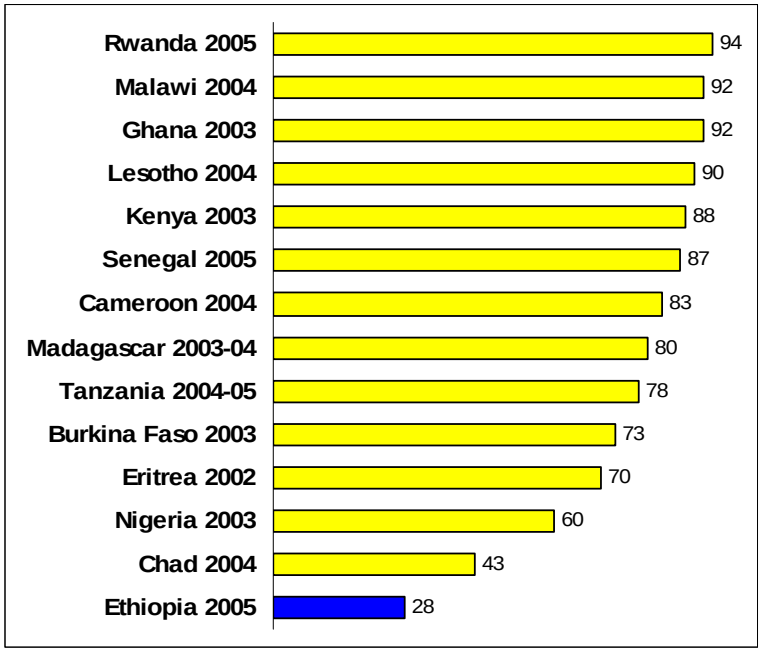
Table 9.1
Percentage of Women with a Live Birth in the Five Years Preceding the Survey Who Received ANC from a Health Professional for the Last Pregnancy, by Region

Region	2000 EDHS	2005 EDHS	Percent Change
Tigray	36.4	35.3	-3
Affar	26.1	15.0	-42
Amhara	18.9	26.5	42
Oromiya	27.0	24.8	-7
Somali	14.6	7.4	-53
Benishangul-Gumuz	25.7	24.5	-4
SNNP	28.4	30.3	7
Gambela	49.8	36.6	-26
Harari	50.2	40.7	-18
Addis Ababa	83.1	88.3	6
Dire Dawa	57.6	52.9	-9
Total	26.7	27.6	4

Note: For women with two or more live births in the five years preceding the survey, data refer to the most recent birth.

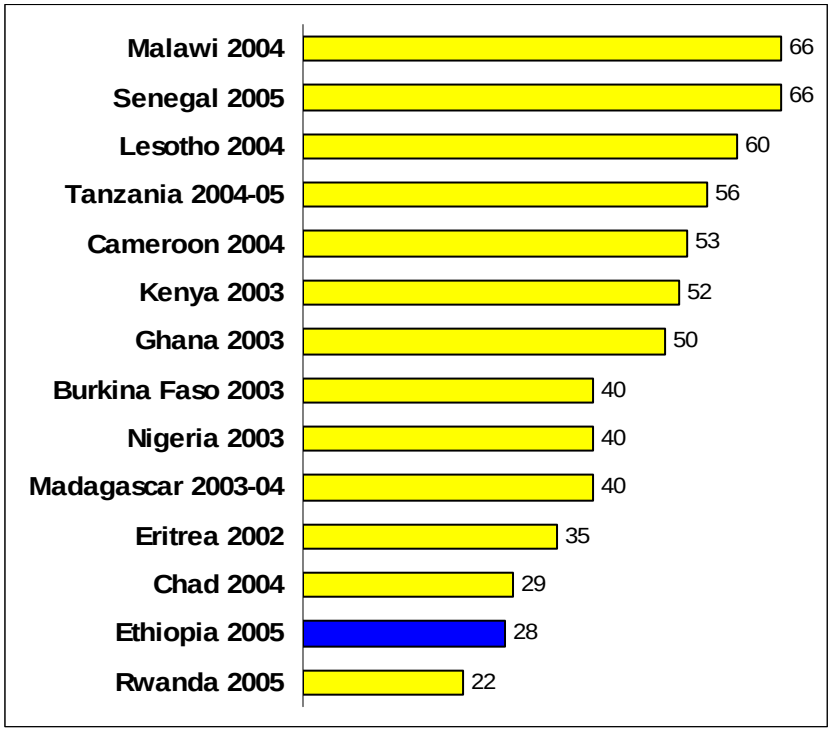
Figure 9.2 shows that Ethiopia ranks lowest in ANC coverage when compared with other sub-Saharan African countries. About nine in ten women received ANC service from a health professional in Rwanda, Malawi, Ghana, Lesotho, Kenya and Senegal compared with less than three in ten Ethiopian women.

Figure 9.2
Percentage of Women Receiving ANC Service from Health Professional, Sub-Saharan Africa



Similarly, the proportion of women who received at least two doses of tetanus toxoid (TT) injection during their most recent pregnancy is relatively lower in Ethiopia. The percentage of women receiving two or more doses of TT injection during their most recent pregnancy is more than twice as high in Malawi, Senegal, Lesotho and Tanzania than in Ethiopia (Figure 9.3).

Figure 9.3
Percentage of Women Receiving Two or More Doses of TT Injection During Pregnancy, Sub-Saharan Africa



9.2 Place of Delivery and Attendance during Childbirth

An important contributor to lowering the health risks to mothers and children associated with a pregnancy is increasing the proportion of babies delivered in a health facility and under the supervision of health professionals. Figure 9.4 presents trends in the percentage of live births in the five years preceding the survey by place of delivery and by type of person providing assistance.

An overwhelming majority of births in Ethiopia continue to take place at home and without the assistance of a trained health professional, that is, a doctor, nurse or midwife. The data show that the percentage of births delivered under the supervision of a trained health professional has remained at around 6 percent in the last five years, while the percentage of births delivered with the assistance of a traditional birth attendant (TBA) decreased by 10 percent from 31 percent in 2000 to 28 percent in 2005 (Figure 9.4).

Figure 9.4
Percentage of Live Births in the Five Years Preceding the Survey, by Place of Delivery and Person Assisting at Delivery

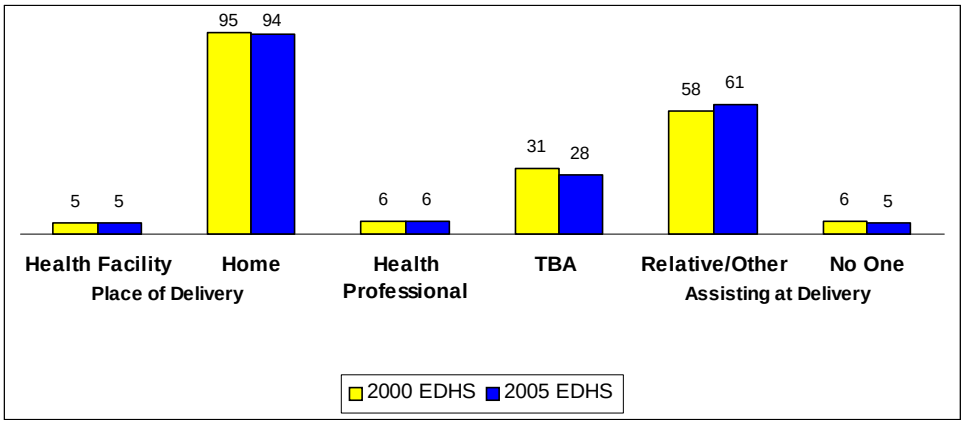


Figure 9.5 and Figure 9.6 show that among 14 sub-Saharan countries, Ethiopia ranks lowest in terms of delivery assistance from a health professional and delivery in a health facility. The percentage of births delivered by a health professional is 10 times higher in the Cameroon (62 percent) than in Ethiopia (6 percent). Similarly, the proportion of births delivered in a health facility is more than 10 times higher in Senegal (62 percent), Malawi (57 percent) and Lesotho (52 percent), than in Ethiopia (5 percent).

Figure 9.5
Percentage of Births in the Five Years Preceding the Survey, Delivered by a Health Professional, Sub-Saharan Africa

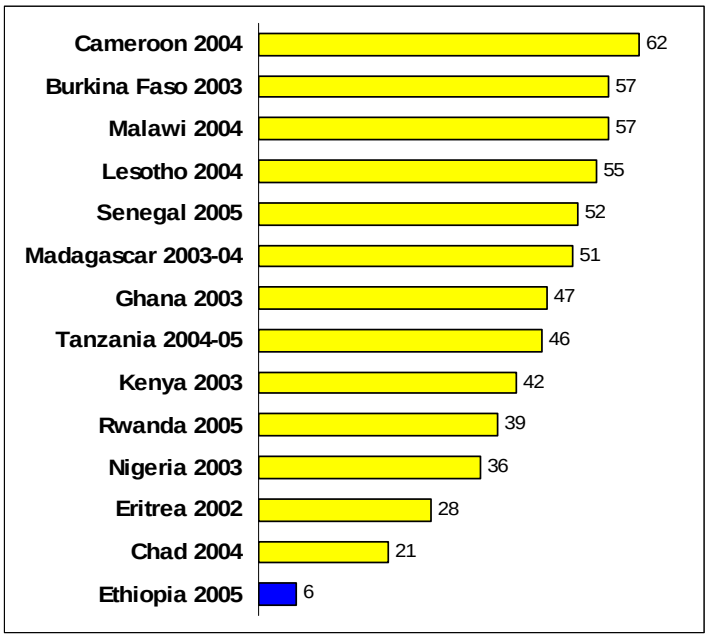
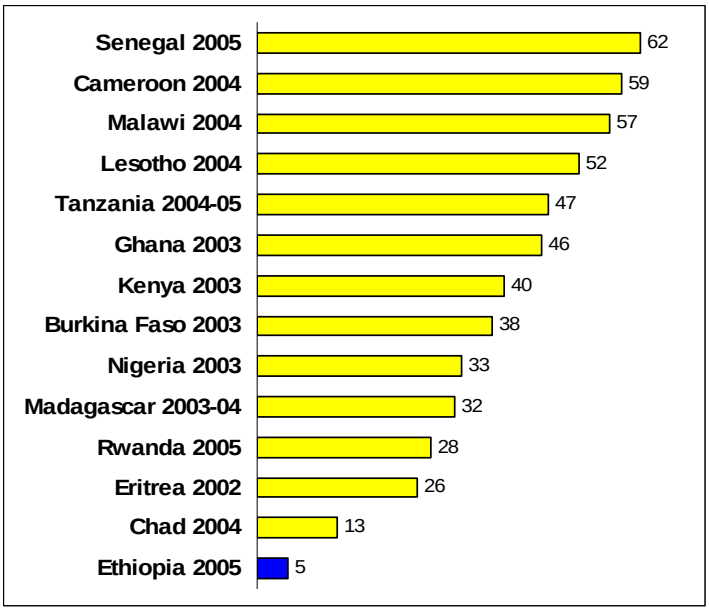


Figure 9.6
Percentage of Births in the Five Years Preceding the Survey, Delivered in a Health Facility, Sub-Saharan Africa

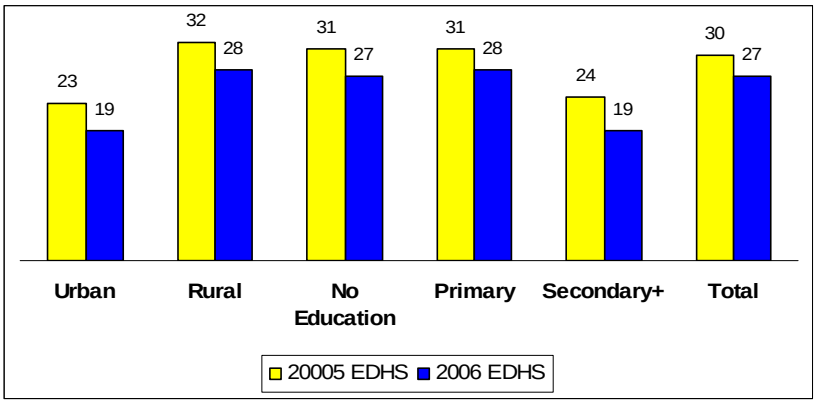


9.3 Nutritional Status

Maternal nutritional status has important implications for the health of both mothers and children. Women in poor nutritional health face a greater risk of an adverse pregnancy and are more likely to give birth to children who are not healthy. The body mass index (BMI) is an important indicator of adult nutritional status, and is defined as the weight in kilograms divided by the height squared in metres (kg/m^2). A cut-off point of 18.5 is used to define thinness or acute undernutrition and a BMI of 25 or above usually indicates overweight or obesity.

Although the proportion of women age 15-49 years who are malnourished declined by 10 percent during the past five years, almost three in ten women have a BMI below the cutoff of 18.5. The decline in the percentage of women with chronic energy deficiency was somewhat higher in urban than rural areas and among women with secondary and higher level of education than women with little or no education (Figure 9.7).

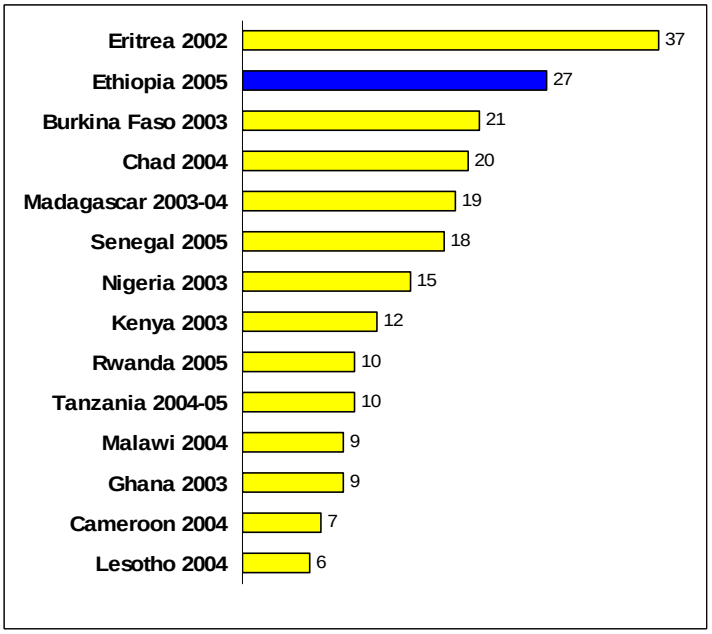
Figure 9.7
Percentage of Women Age 15-49 with a Low Body Mass Index (BMI <18.5 Kg/M^2), by Residence and Education



Note: Excludes pregnant women and those who had a birth in the two months before the survey.

Figure 9.8 compares Ethiopia with other sub-Saharan countries with respect to the proportion of nonpregnant women in the reproductive age group who are malnourished. The data show that acute undernutrition among Ethiopian women is second highest when compared with women in 13 other sub-Saharan African countries. The data also shows a wide variation in the proportion of women malnourished among the countries in the region, ranging from 6 percent in Lesotho to 37 percent in Eritrea.

Figure 9.8
Percentage of Nonpregnant Women Age 15-49 with a Low Body Mass Index (BMI<18.5 Kg/M^2), Sub-Saharan Africa



Note: Excludes pregnant women and those who had a birth in the two months before the survey.

REFERENCES

Central Bureau of Statistics (CBS) [Kenya], Ministry of Health (MOH) [Kenya], and ORC Macro. 2004. Kenya Demographic and Health Survey 2003. Calverton, Maryland: CBS, MOH, and ORC Macro.

Central Statistical Agency [Ethiopia] and ORC Macro. 2006. Ethiopia Demographic and Health Survey 2005. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ORC Macro.

Central Statistical Authority (CSA) [Ethiopia]. 1991a. The 1984 Population and Housing Census of Ethiopia. Analytical Report at National Level. Addis Ababa, Ethiopia: Central Statistical Authority.

Central Statistical Authority (CSA) [Ethiopia]. 1991b. The 1990 Family and Fertility Survey-Preliminary Report. Addis Ababa, Ethiopia: Central Statistical Authority.

Central Statistical Authority (CSA) [Ethiopia]. 1998. The 1994 Population and Housing Census of Ethiopia. Results at Country Level. Vol. 1. Statistical Report. Addis Ababa, Ethiopia: Central Statistical Authority.

Central Statistical Authority (CSA) [Ethiopia]. 1999. Report on the 1998 Health and Nutrition Survey. Addis Ababa, Ethiopia: Central Statistical Authority.

Central Statistical Authority [Ethiopia] and ORC Macro. 2001. Ethiopia Demographic and Health Survey 2000. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Authority and ORC Macro.

Ghana Statistical Service (GSS), Noguchi Memorial Institute for Medical Research (NMIMR), and ORC Macro. 2004. Ghana Demographic and Health Survey 2003. Calverton, Maryland: GSS, NMIMR, and ORC Macro.

Institut National de la Statistique (INS) et ORC Macro. 2004. Enquête Démographique et de Santé du Cameroun 2004. Calverton, Maryland, USA: INS et ORC Macro.

Institut National de la Statistique (INSTAT) et ORC Macro. 2005. Enquête Démographique et de Santé de Madagascar 2003-2004. Calverton, Maryland, USA: INSTAT et ORC Macro.

Institut National de la Statistique du Rwanda (INSR) and ORC Macro. 2006. Rwanda Demographic and Health Survey 2005. Calverton, Maryland, U.S.A.: INSR and ORC Macro.

Institut National de la Statistique et de la Démographie (INSD) et ORC Macro. 2004. Enquête Démographique et de Santé du Burkina Faso 2003. Calverton, Maryland, USA: INSD et ORC Macro.

Library of Congress. 2005. A Country Study: Ethiopia. Library of Congress Country Studies. USA: Federal Research Division, Library of Congress.

Ministry of Health and Social Welfare (MOHSW) [Lesotho], Bureau of Statistics (BOS) [Lesotho], and ORC Macro. 2005. Lesotho Demographic and Health Survey 2004. Calverton, Maryland: MOH, BOS, and ORC Macro.

National Bureau of Statistics (NBS) [Tanzania] and ORC Macro. 2005. Tanzania Demographic and Health Survey 2004-05. Dar es Salaam, Tanzania: National Bureau of Statistics and ORC Macro.

National Population Commission (NPC) [Nigeria] and ORC Macro. 2004. Nigeria Demographic and Health Survey 2003. Calverton, Maryland: National Population Commission and ORC Macro.

National Statistical Office (NSO) [Malawi], and ORC Macro. 2005. Malawi Demographic and Health Survey 2004. Calverton, Maryland: NSO and ORC Macro.

National Statistics and Evaluation Office (NSEO) [Eritrea] and ORC Macro. 2003. Eritrea Demographic and Health Survey 2002. Calverton, Maryland, USA: National Statistics and Evaluation Office and ORC Macro.

Ndiaye, Salif, et Mohamed Ayad. 2006. Enquête Démographique et de Santé au Sénégal 2005. Calverton, Maryland, USA: Centre de Recherche pour le Développement Humain [Sénégal] et ORC Macro.

Ouagadjio, Bandoumal, Kostelngar Nodjimadji, Tchobkréo Bagamla, Riradjim Madnodji, Joël Sibaye Tokindang, Ningam Ngakoutou, Joël Nodjimbatem Ngoniri, Caman Bédaou, Donato Koyalta, Bernard Barrère, Monique Barrère. 2004. Enquête Démographique et de Santé Tchad 2004. Calverton, Maryland, U.S.A.: INSEED et ORC Macro.

Transitional Government of Ethiopia (TGE). 1993. National Population Policy of Ethiopia. Addis Ababa, Ethiopia: Transitional Government of Ethiopia.