Youth in Sub-Saharan Africa:

A CHARTBOOK ON SEXUAL EXPERIENCE AND REPRODUCTIVE HEALTH

PRB Population Reference Bureau

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SUB-SAHARAN AFRICAN COUNTRIES COVERED IN THIS CHARTBOOK

Overview

SUB-SAHARAN AFRICA HAS ONE of the world's youngest populations. At the beginning of the 21st century, about one out of every four people in sub-Saharan Africa is 10 to 19 years old.[1] This is the largest group of young people ever in the region to enter adulthood.

Helping African youth make a healthy transition to adulthood is critical to the continent's development and the prosperity of its future population. What is a healthy transition to adulthood? Many population and health specialists suggest that continued school attendance as well as delayed sexual initiation, marriage, and childbearing are important components. Ideally, adolescence is a time when young people develop—physically, emotionally, and intellectually—before becoming parents or primary wage earners.[2]

To what extent are young people in the region prepared for adulthood? *Youth in Sub-Saharan Africa* examines factors that are important to a healthy transition, including education and exposure to information; sexual experience and marriage; HIV/AIDS; childbearing; contraception; and maternal health. This chartbook profiles adolescents in 11 sub-Saharan countries: Côte d'Ivoire, Ghana, Kenya, Madagascar, Mali, Mozambique, Senegal, Tanzania, Uganda, Zambia, and Zimbabwe.

The purpose of this chartbook is to provide decisionmakers with a better understanding of the experiences and needs of adolescents in the region. We focus primarily on adolescents between the ages of 15 and 19. Although the experiences of those younger than age 15 are important, few national surveys collect information on young adolescents and preteens. In some cases, limited information about younger age groups is available from household survey data. We have used data on household background characteristics, for example, to obtain school attendance estimates for those under the age of 15.

We use the terms "adolescents" and "teenagers" interchangeably, although the period of transition known as adolescence may differ from place to place and between boys and girls. Also, this chartbook strives to include survey results on young men as well as young women. In many cases, however, information on young men is not readily available. Women—more than men—have been the traditional focus of survey data collection efforts because of their reproductive role and unique health needs.

SOME OF THE KEY FINDINGS FROM THIS CHARTBOOK SHOW THAT:

- Education levels have risen dramatically in most countries surveyed. Still, less than half of adolescents between the ages of 16 and 20 attend school. Additionally, "gender gaps," or differences between boys and girls, persist in school enrollment and in access to the mass media.

- In nine out of 11 countries surveyed, at least one-third of young women married before age 18 and at least half had sex before age 18. The research also indi-

cates that the premarital period is lengthening: Young women spend a longer time single than their mothers did.

- In countries with data available, 13 percent to 38 percent of single teenage women and 8 percent to 39 percent of single teenage men have either received or given gifts or money in exchange for sex during a recent period. In relationships where payment is received for sex, adolescents may be unable to negotiate condom use or the fidelity of their partners, leaving them at greater risk of sexually transmitted infections and unintended pregnancy.
- In most of the countries surveyed, more than half of adolescents believe that they have little or no risk of getting AIDS. In many of these countries, however, HIV prevalence levels are high among young people.
- Young men are more likely to report condom use than young women. In a number of settings, however, teenage women are more vulnerable to AIDS: HIV infection levels are often higher among teenage women than teenage men. One of the reasons for higher infection levels among young women is that their partners are likely to be older, more sexually experienced men rather than men their own age.
- In eight out of 11 countries, teenage birth rates show some sign of decline. Levels of unintended pregnancies among teenagers, however, are high. More than one-fifth of recent births were reported by young women as unintended.
- Modern contraceptive use among adolescents is low. Less than 5 percent of married adolescent women report use of a modern method in seven out of the 11 countries surveyed. Single, sexually active adolescents are often more likely to rely on contraception than their married counterparts. Modern contraceptive use among single, sexually active women ranges from 5 percent in Mozambique to 23 percent in Ghana.
- In eight out of 11 countries, at least 10 percent of 16-year-olds have started childbearing. This is of concern since very young mothers tend to be at a much higher risk of pregnancy-related complications and infant death than women in their twenties or thirties.
- Although many adolescent mothers received antenatal care for recent births, access to professional delivery care remains limited. In 10 out of 11 countries, less than 55 percent of young women reported receiving professional delivery care.

KEY POINTS FOR POLICIES AND PROGRAMS

- *Gender-sensitive program approaches for reproductive health are necessary.*

The different contexts in which young women and men first have sexual intercourse reveal a need for gender-sensitive approaches in reproductive health care and services. In some countries, for example, young women's sexual activity tends to take place just before or within marriage. By contrast, most young men's sexual activity takes place outside marriage.

- *Special strategies are needed for providing information to adolescent women.*

In general, teenage women are disadvantaged relative to teenage men in terms of education and exposure to information through the mass media. Yet, important skills and information are imparted through school and the mass media. This relative disadvantage may adversely affect a young woman's social, economic, health, and survival prospects.

BOX 1

About the Data

Youth in Sub-Saharan Africa draws primarily on survey data collected through the global Demographic and Health Surveys (DHS) Program. Since the mid-1980s, DHS has collected information from nationally representative samples of women ages 15 to 49 in more than 60 countries worldwide. Survey data on men are available for some countries. In addition, DHS administers household questionnaires. In this chartbook, the household survey data were used to present school attendance estimates for young people under age 15. All DHS are conducted by trained local interviewers, usually in the respondent's native language. A list of implementing agencies is presented in Appendix Table 2 on page 44.

The primary objective of the DHS is to provide decisionmakers with accurate and timely information on population, health, and nutrition. The DHS Program is funded by the United States Agency for International Development (USAID). Technical assistance for the program is provided by ORC Macro. MEASURE *Communication*, a project implemented by the Population Reference Bureau and funded by USAID, provides assistance in disseminating DHS and other research findings to decisionmakers.

This chartbook presents findings from DHS conducted between 1987 and 1998 (see Appendix Tables 1 and 2 on pages 43 and 44 for more information). Typically, the figures show results from the most recently conducted survey for a given country. Earlier survey findings, however, are used to show trends over time.

- *AIDS education efforts need to emphasize risk factors for HIV infection.*

A number of young, sexually experienced youth believe themselves at little or no risk of AIDS because they “stick to one partner.” Adolescents may not be aware that their partners' sexual history may put them at risk or that their partners could have other partners.

- *Programs must address the social and cultural factors that hinder or prevent young women from protecting themselves from HIV/AIDS.*

Young women—as evidenced by higher HIV infection levels relative to men in the same age groups—have a unique vulnerability to AIDS. Many factors place young women at greater risk, including a lack of power within their sexual relationships and biological vulnerabilities. Policies and programs must develop strategies to equip young women to protect themselves from infection.

- *Reproductive health information needs to be provided to both married and single adolescents.*

Both single and married teenagers have high levels of unintended pregnancy and unmet need for contraception. Reaching teenagers early is especially important—information can be most effective when provided before the onset of sexual activity. Due to changing patterns of sexual initiation and marriage, many single, young women have a higher risk of premarital pregnancy and of acquiring a sexually transmitted infection (STI) than earlier generations of young women.

- *Reproductive health programs need to better serve single, sexually active women.*

Although modern contraceptive use among adolescents has risen in many countries, a number of single, sexually active women rely on traditional methods. Typically, they report using periodic abstinence. In practice, traditional methods, used without training from health professionals, do not afford the same levels of protection against pregnancy as modern methods, nor do they offer protection against STIs.

- *Measures are needed to increase the use of professional delivery care services among adolescent women.*

Women who become pregnant during their teenage years—especially in early adolescence—have a higher risk of obstetric complications than do women in their twenties or thirties. Additionally, the children of teenage mothers have a higher risk of health-related problems and death than do the children of older mothers. Although professional maternity care can help ensure a healthier delivery and infant, few young mothers receive delivery care from a doctor or nurse/midwife.

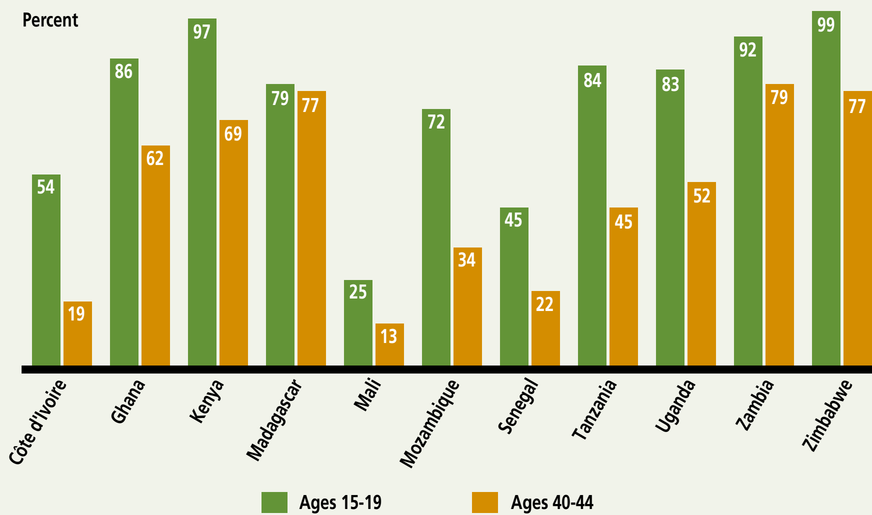
Education and Exposure to Information

WOMEN'S ACCESS TO FORMAL EDUCATION

Education plays an important role in imparting knowledge and skills to young people. Also, women who are more educated tend to marry and bear children later than their less educated peers. Figure 1 compares the percentage of women ages 15 to 19 with that of women ages 40 to 44 who have ever attended school.

FIGURE 1

Women Who Have Obtained Any Formal Education, by Age



Source: Demographic and Health Surveys, 1994-1998.

- In all countries, young women are more likely than women ages 40 to 44 to have obtained any formal education.
- The age-related differences in education are particularly dramatic in Tanzania, Mozambique, and Côte d'Ivoire. In Tanzania, for example, 84 percent of adolescents have gone to school, compared with 45 percent of women ages 40 to 44.
- In all countries but Senegal and Mali, more than half of women ages 15 to 19 have had some formal education.
- More than 90 percent of young women in Kenya, Zambia, and Zimbabwe have attended school.

SCHOOL ATTENDANCE AMONG ADOLESCENTS

How many young people attend school? As Figure 2 and Figure 3 show, the findings vary considerably by country and by age group.

- In eight out of 10 countries, at least half of young women and men ages 11 to 15 attend school.
- Young women's attendance ranges from 22 percent in Mali to 87 percent in Kenya.[3] Among young men, attendance ranges from 32 percent in Mali to 90 percent in Kenya.
- Young men's attendance tends to be slightly higher than young women's attendance.

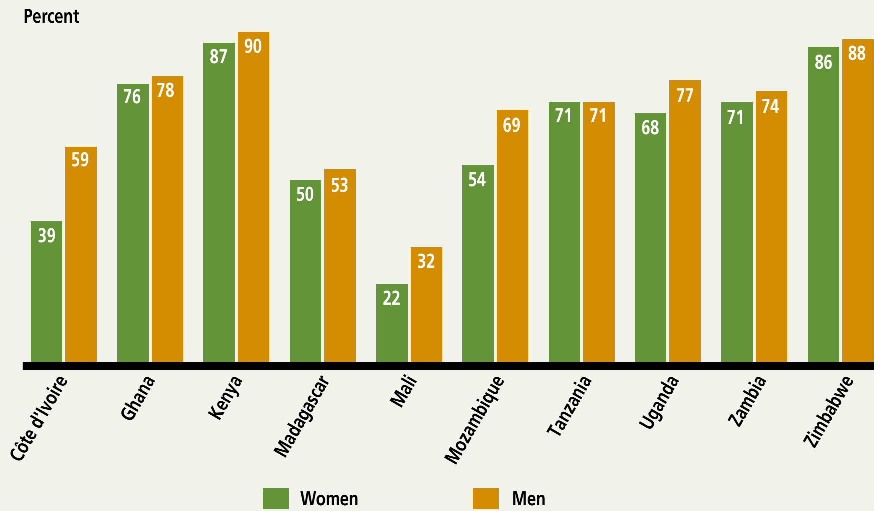
As shown in Figure 3, many adolescents leave school between the ages of 16 and 20.

- Less than half of adolescents between the ages of 16 and 20 attend school in all of the countries presented.
- Young men are much more likely to be in school than young women. Men's attendance levels are 20 or more percentage points higher than women's levels in Côte d'Ivoire, Mozambique, and Uganda.

The reasons for leaving school vary considerably by country and individual. Common reasons include an inability to pay school fees, poor school quality, the need to provide financial support for family members, pregnancy, and marriage. In some settings, gender bias among teachers and sexual harassment at school may lead to higher dropout levels among young women.[4]

FIGURE 2

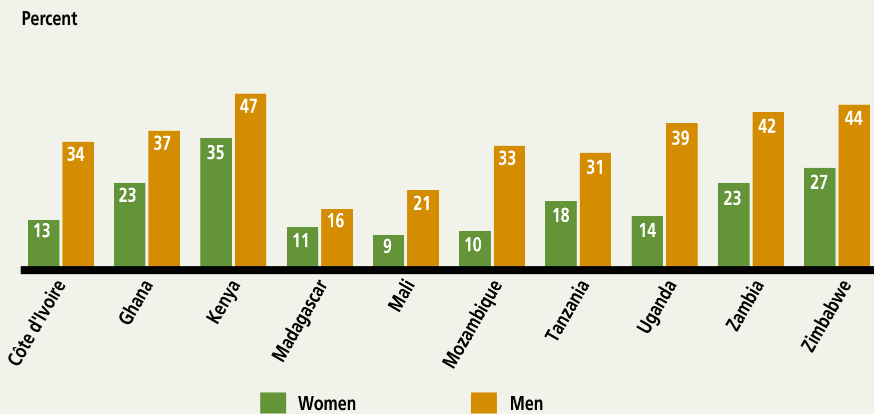
School Attendance Among Adolescent Women and Men, Ages 11–15



Source: Demographic and Health Surveys, 1994-1998. Data are not available for Senegal.

FIGURE 3

School Attendance Among Women and Men, Ages 16–20



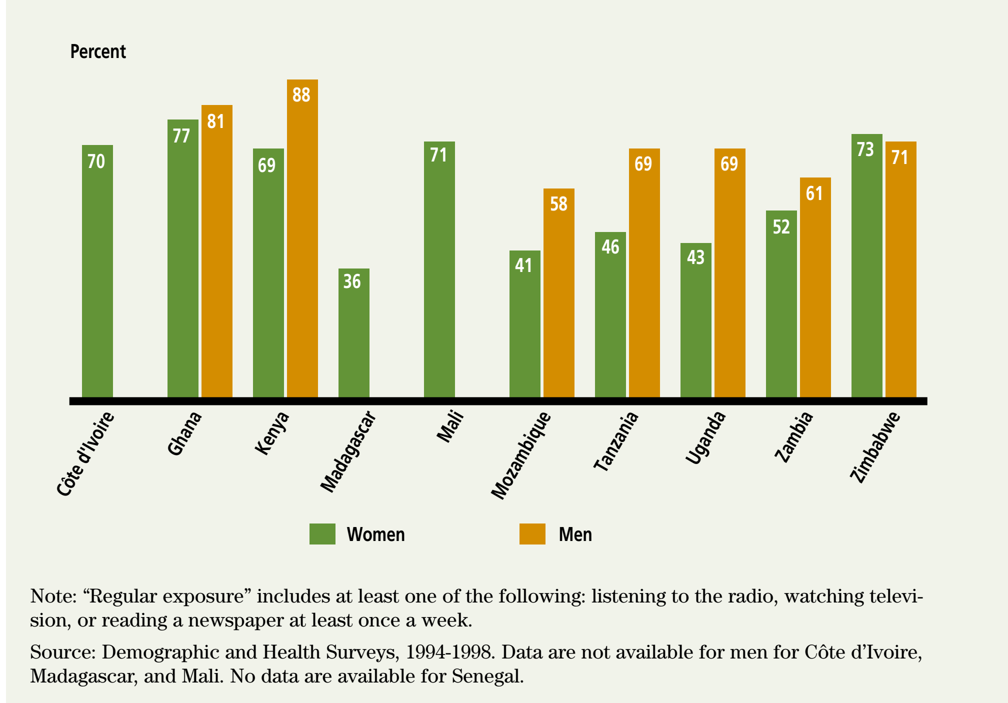
Source: Demographic and Health Surveys, 1994-1998. Data are not available for Senegal.

REGULAR EXPOSURE TO THE MASS MEDIA: RADIO, TELEVISION, AND THE NEWSPAPER

The mass media are an important source of information and ideas on health, family planning, and other topics. The mass media also expose audiences to different values and role models. As Figure 4 demonstrates, in many countries, survey findings document gender-based differences in access to the mass media among young audiences.

FIGURE 4

Adolescent Women and Men Ages 15–19 Who Have Had Any Regular Exposure to the Mass Media



Note: "Regular exposure" includes at least one of the following: listening to the radio, watching television, or reading a newspaper at least once a week.

Source: Demographic and Health Surveys, 1994-1998. Data are not available for men for Côte d'Ivoire, Madagascar, and Mali. No data are available for Senegal.

- Overall, many young women and men have regular access to some form of mass media, including radio, television, or newspaper. Among those surveyed, more than 40 percent have regular access in nine out of 10 countries.
- In nearly all of the countries with comparable data available, young men are more likely than young women to read newspapers, watch television, or listen to the radio regularly.
- Gender differences are particularly large in Uganda and Tanzania. In Uganda, 43 percent of women ages 15 to 19 report weekly exposure, compared with 69 percent of young men.

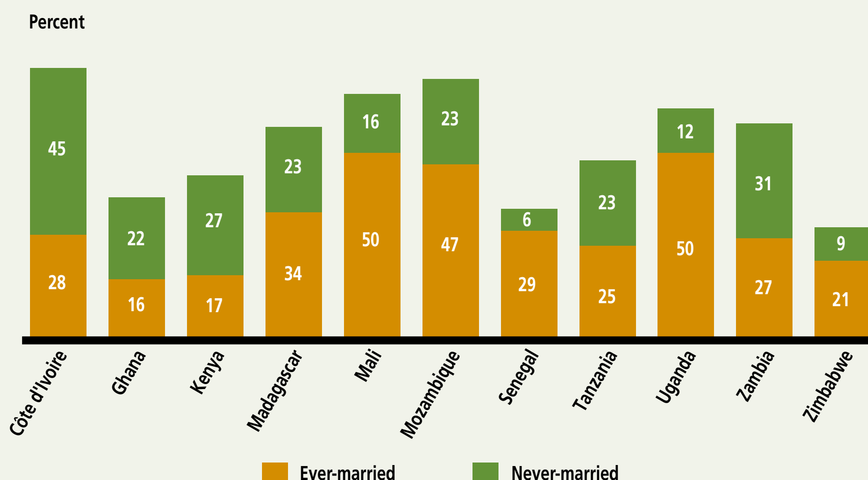
Sexual Experience and Marriage

SEXUAL EXPERIENCE AMONG ADOLESCENTS

Many adolescents in sub-Saharan Africa are sexually experienced, including single women and men. In Figure 5 below and Figure 6 on page 12, "sexual experience" is defined as ever having had sexual intercourse. More young women marry than young men. For young men, most sexual activity takes place outside of marriage.

FIGURE 5

Adolescent Women Ages 15–19 Who Have Had Sexual Intercourse



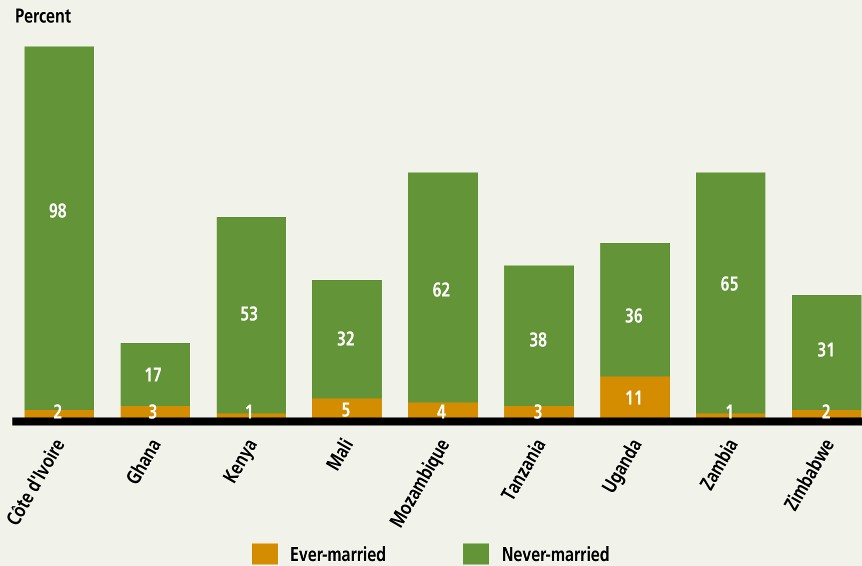
Note: "Ever-married" includes women who were married, widowed, divorced, or separated at the time of the survey.

Source: Demographic and Health Surveys, 1994-1998.

- At least 25 percent of young women ages 15 to 19 are or have been married in eight out of 11 countries. By contrast, less than 6 percent of young men in the same age group are or have been married in nearly all of the countries with data available.
- In Mali, Uganda, and Mozambique, about one out of two young women ages 15 to 19 have married. In Uganda, 11 percent of young men are or have been married.
- The extent to which single women report that they are sexually experienced varies across countries. Less than 10 percent of single women in Senegal and Zimbabwe have had sexual intercourse. By contrast, 45 percent of women in Côte d'Ivoire are sexually experienced but not yet married, followed by 31 percent in Zambia.

FIGURE 6

Adolescent Men Ages 15–19 Who Have Had Sexual Intercourse



Note: "Ever-married" includes men who were married, widowed, divorced, or separated at the time of the survey.

Source: Demographic and Health Surveys, 1994-1998. Data for men are not available for Madagascar and Senegal.

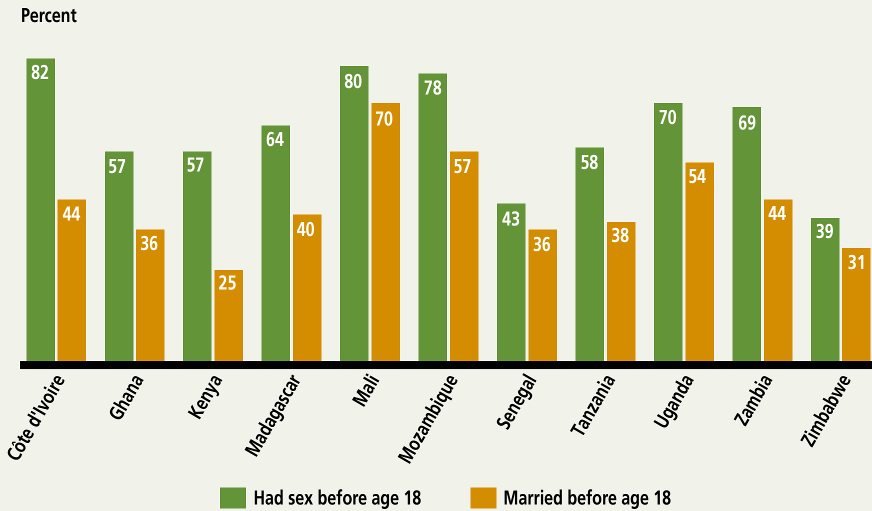
- As is the case with women, the extent to which single men are sexually experienced varies. Yet, in most countries, many single men are sexually experienced. More than 30 percent of young men ages 15 to 19 are single and sexually experienced in every country except Ghana.

WHEN ADOLESCENTS FIRST HAVE SEXUAL INTERCOURSE AND MARRY

Sexual initiation and marriage generally mark the entry into adulthood for young women in sub-Saharan Africa. Young brides often become mothers soon after marriage. Early marriage is also associated with a larger completed family size and, in some cases, higher school dropout rates and poorer economic prospects. As Figure 7 shows, in nearly every country surveyed, many young women first have sex and marry during their teenage years.

FIGURE 7

Women Ages 20–24 Who Had Sexual Intercourse and/or Who Married Before Age 18



Source: Demographic and Health Surveys, 1994-1998.

- In nine out of 11 countries, more than half of young women had sex before age 18 and more than one-third married by this age.
- In many cases, sexual experience precedes marriage. In all countries, a higher proportion of young women first had sex before age 18 than married before this age.
- Early marriage is particularly common in Mali, Mozambique, and Uganda. In Mali, 70 percent of young women first married before age 18. By contrast, early marriage is least common in Kenya, where 25 percent of young women first married before age 18.

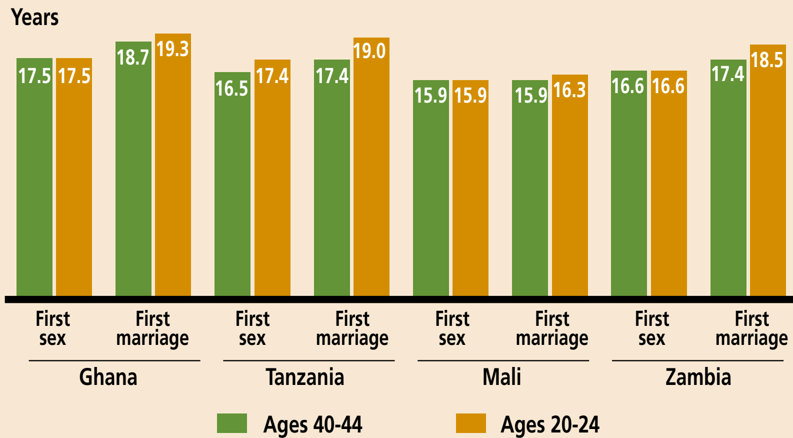
BOX 2

How Has the Timing of Sex and Marriage Changed?

The figure below shows the median ages at first sexual intercourse and first marriage among women in their 20s and 40s (data are not shown for all countries). These data indicate that the gap between first sex and first marriage has increased over different generations of women. In three out of the four countries shown, the age at first sex has remained essentially the same while the age at first marriage has increased. Young women are spending a longer time unmarried and exposed to the risk of pregnancy and sexually transmitted infection than their mothers did.

The changing patterns of sexual initiation and marriage indicate a need to provide reproductive health information and services to unmarried as well as married adolescents. Program experiences suggest that information can be most effective when provided before the onset of sexual activity.

Median Age at First Marriage and First Sexual Intercourse Among Women Ages 20–24 and Ages 40–44, Selected Countries



Note: "Median age" indicates that half the women surveyed first had sex or married before this age and half after this age.

Source: Demographic and Health Surveys, 1995-1998.

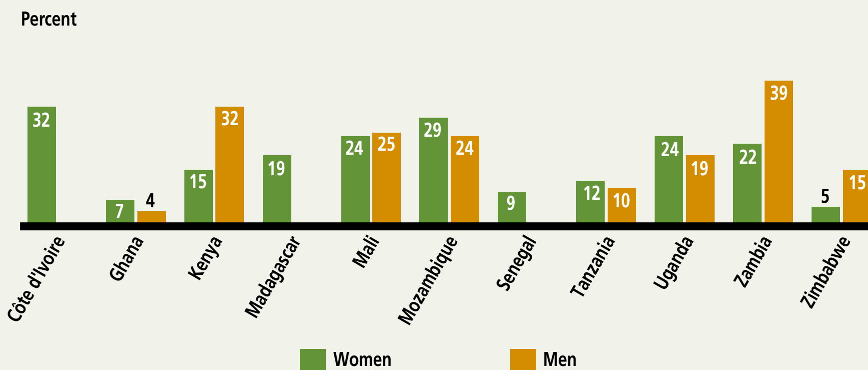
EARLY AGE AT SEXUAL INITIATION

Early sexual activity poses health risks for young women and men. Most adolescents, when entering into sexual relations for the first time, do not use any form of contraception. This leaves them vulnerable to unplanned parenthood and STIs. Adolescent women who have sex at a very early age are more biologically susceptible to a number of STIs, including HIV/AIDS, than adult women. In some cases, they may also be more socially susceptible, encountering difficulties in negotiating safer sex from their partners.

Figure 8 shows the percentage of adolescent women and men who had first sexual intercourse before age 15. The findings do not, however, indicate how often or how regularly young people have sex. Some research suggests that early sexual activity—particularly among unmarried adolescents—may be intermittent or rare.[5]

FIGURE 8

Adolescent Women and Men Ages 15–19 Who Had First Sexual Intercourse Before Age 15



Source: Demographic and Health Surveys, 1994-1998. Data are not available for men for Côte d'Ivoire, Senegal, and Madagascar.

- In six out of 11 countries, nearly one-fifth of young women first had sexual intercourse before age 15. The percentage of young women that first engaged in sex before age 15 ranges from 5 percent in Zimbabwe to 32 percent in Côte d'Ivoire.
- The percentage of young men who first engaged in sex before age 15 ranges from 4 percent in Ghana to 39 percent in Zambia.
- In some settings, young women and men differ in terms of early sexual experience. In Kenya and Zambia, for example, boys are much more likely than girls to report having had sex before age 15.

In some of the countries presented, women's early sexual activity tends to take place within or just before marriage. Half of women ages 15 to 19 in Mali, for example, are or have been married. Since men usually marry later than women, most young men's sexual activity probably takes place

outside of marriage. The different contexts in which young women and men have sex reveal a need for gender-specific program approaches.

Young women who initiated sex at very young ages may also have experienced some sort of pressure—either physical or verbal—to have sex against their will. Globally, research suggests that women age 15 and younger are particularly vulnerable to unwanted sexual encounters. A number of factors—social, educational, and economic—may make very young women an "easy target" for coerced sex with their boyfriends, teachers, or other men in authority.[6] Program efforts need to recognize the vulnerability of girls and young women to unwanted sexual encounters.

BOX 3

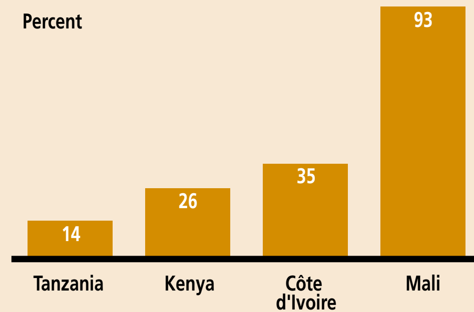
Female Genital Cutting

As the accompanying figure shows, many young women in sub-Saharan Africa have undergone genital cutting. In the four countries with data available, the prevalence of genital cutting among adolescent women ages 15 to 19 ranges from 14 percent in Tanzania to 93 percent in Mali. Since some young women may undergo genital cutting in their twenties, these prevalence levels may underestimate the extent of these practices among the adult population.

The reasons for performing genital cutting vary by community. Often, these practices are perceived to instill more feminine traits in girls, improve health, prepare girls for adulthood and marriage, and curb premarital or extramarital sexual behavior. In some communities, girls who do not undergo cutting face poorer social, marital, and economic prospects than those who do undergo these procedures.

Medical professionals and others have documented many potential health complications associated with genital cutting, including risk of hemorrhage, infection, obstetric problems, and infertility. The degree of health risk, however, is a function of many factors: the practitioner's expertise and tools, hygienic conditions, severity of cutting, and access to adequate postoperative and other health care.

Adolescent Women Ages 15–19 Who Have Undergone Genital Cutting, Selected Countries



Source: Demographic and Health Surveys, 1994-1998.

Policymakers increasingly consider female genital cutting a health as well as a human rights issue. Numerous leaders in Africa have spoken out against the practice, citing health and human rights concerns. United Nations agencies have also encouraged the abandonment of genital cutting. A joint statement on female genital cutting prepared by the World Health Organization, UNICEF, and UNFPA, declares "…The arguments against this practice are based upon universally recognized human rights standards, including the right to the highest attainable level of physical and mental health…."*

* World Health Organization (WHO), *Female Genital Mutilation: A Joint WHO/UNICEF/UNFPA Statement* (Geneva: WHO, 1996).

SEXUAL EXCHANGE

As Table 1 demonstrates, a number of unmarried adolescents have recently given or received money or gifts in exchange for sex.[7]

Sexual relationships involving exchange of money or gifts may place adolescents at greater risk of unintended pregnancies and STIs. For young women receiving payment, the power imbalance in the relationship may make it difficult to refuse sex, or negotiate condom or contraceptive use. Young women involved in exchange relationships with older men may be especially vulnerable: They are disadvantaged in terms of gender, age, and economic status. Additionally, in some settings, men seek out young partners, subscribing to the myth that sexual relations with a virgin will cure AIDS. For young men, sexual exchange encounters may also increase the risk of STIs, especially if the relationship is not monogamous.

TABLE 1

Sexual Exchange Relationships

Country	Time frame	Unmarried adolescents who have received or given money or gifts in exchange for sex (%)	
		Women	**Men**
Kenya	Within the past 12 months	21	17
Mali	Within the past 12 months	26	19
Uganda	Last sexual encounter	31	26
Zambia	Within the past 12 months	38	39
Zimbabwe	Within the past 4 weeks	13	8

Source: Demographic and Health Surveys, 1994-1998.

- In Kenya, Mali, Uganda, Zambia, and Zimbabwe, 13 percent to 38 percent of women and 8 percent to 39 percent of men report that they had recently received or given some form of payment for sex.
- In most of the countries shown, young unmarried women are slightly more likely than young unmarried men to report having had a recent sexual relationship involving exchange.
- More than one-fifth of young unmarried women in four out of the five countries shown have engaged in a sexual relationship involving some form of exchange.

HIV/AIDS

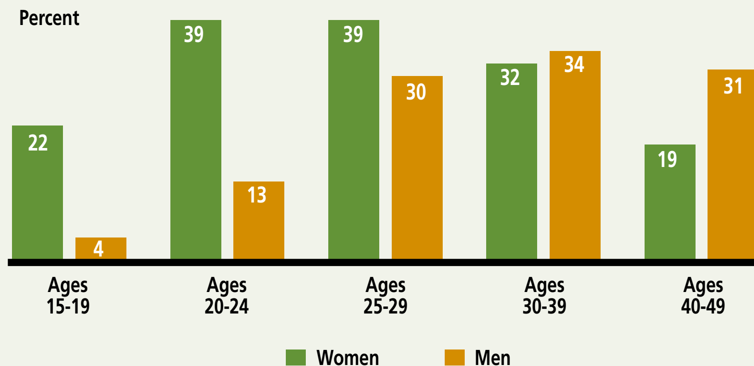
AIDS POSES ONE OF THE MOST SERIOUS THREATS TO THE HEALTH and well-being of young people in sub-Saharan Africa. Globally, more than half of new HIV cases occur among young women and men ages 15 to 24. In Africa, an estimated 1.7 million young people ages 10 to 24 are infected annually.[8]

HIV PREVALENCE LEVELS

In a number of communities, researchers have found that young women are more likely to be HIV-infected than young men.[9] Given these patterns, many young women may be infected by older men rather than by men their own age. As Figure 9 shows, in Kisumu, Kenya, for example, 22 percent of women ages 15 to 19 tested positive for HIV, compared with 4 percent of males in the same age group.[10] By age 30, however, male prevalence levels exceed those found among women.

FIGURE 9

HIV Prevalence Among Women and Men in Kisumu, Kenya, 1997, by Age



Source: National AIDS/STDs Control Programme (NASCOP), Kenya Ministry of Health.

A number of factors—social, cultural, and biological—contribute to the greater vulnerability of girls to HIV. Young women may be at a disadvantage in negotiating condom use or the fidelity of their partners because of age differences, economic disparities, and gender norms. In general, very young women are often more prone to STIs than adult women because of the immaturity of their reproductive organs. In some studies, HIV transmission is more efficient from men to women, indicating that women may be more biologically susceptible to HIV than men.[11]

As Table 2 shows, estimated HIV prevalence rates among young women ages 15 to 24 range from a low of .12 percent in Madagascar to a high of 25.76 percent in Zimbabwe. These findings suggest that HIV is widespread among young women in different settings. In seven out of 11 countries, for instance, estimates suggest that more than 6 percent of young women are HIV-positive. Levels of HIV infection are also of concern among young men, with prevalence estimates ranging from .02 percent to 12.85 percent.

TABLE 2

HIV Prevalence Rates Among Women and Men Ages 15-24, End of 1999

	Estimated Range of Prevalence Rates	
Country	**Women (%)**	**Men (%)**
Côte d'Ivoire	6.68 - 12.33	2.10 - 5.47
Ghana	2.40 - 4.44	.76 - 1.97
Kenya	11.07 - 14.98	4.26 - 8.52
Madagascar	.12 - .14	.02 - .06
Mali	1.74 - 2.40	1.04 - 1.58
Mozambique	13.36 - 16.11	4.49 - 8.97
Senegal	1.12 - 2.07	.39 - 1.02
Tanzania	6.85 - 9.27	2.64 - 5.28
Uganda	6.65 - 8.99	2.56 - 5.12
Zambia	16.86 - 18.68	7.08 - 9.32
Zimbabwe	23.25 - 25.76	9.77 - 12.85

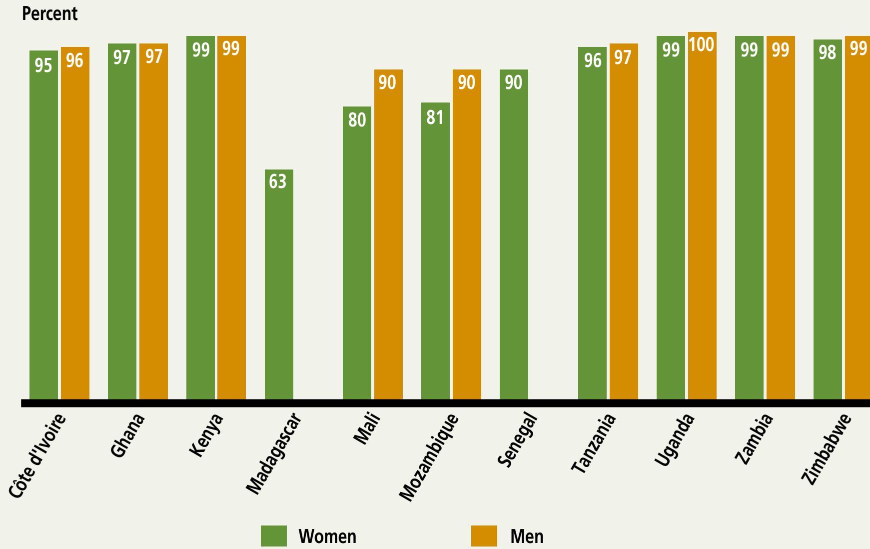
Source: UNAIDS, *Report on the Global AIDS Epidemic June 2000.*

AWARENESS OF HIV/AIDS AMONG ADOLESCENTS

As Figure 10 shows, the vast majority of adolescents are aware of AIDS.

FIGURE 10

Adolescent Women and Men Ages 15–19 Who Have Heard of AIDS



Source: Demographic and Health Surveys, 1994-1998. Data for men are not available for Madagascar and Senegal.

- In eight out of 11 countries, at least 90 percent of women ages 15 to 19 have heard of AIDS. Awareness is lower—63 percent—in Madagascar.
- Some gender-related differences are notable in Mali and Mozambique, where young women are less likely than young men to have heard of this disease.

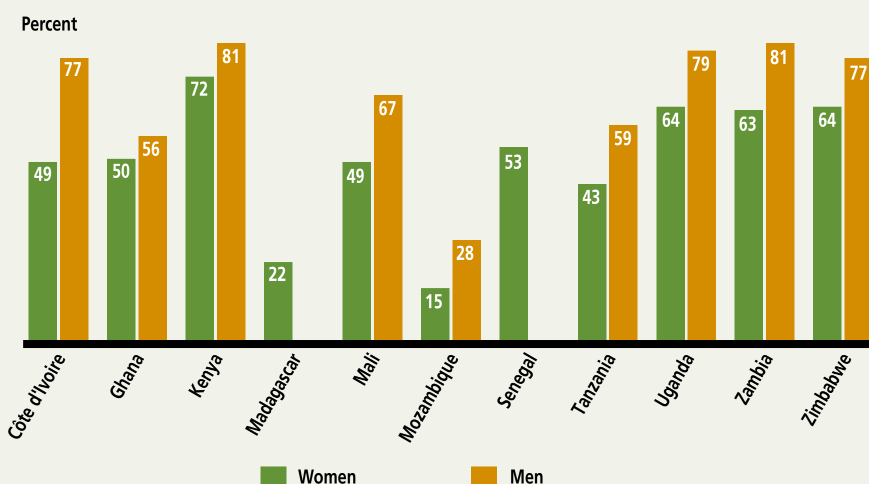
Awareness of AIDS, however, is only a superficial measure of knowledge. An important question is whether adolescents know how to prevent the disease.

ADOLESCENTS WHO KNOW HOW TO PREVENT SEXUAL TRANSMISSION OF HIV/AIDS

Although many adolescents have heard of HIV/AIDS, fewer know of at least one way to prevent sexual transmission of HIV. Figure 11 shows the percentage of adolescents who spontaneously mention at least one of the following preventive measures when asked how to avoid getting HIV or AIDS: condom use, avoiding multiple partners, being faithful to one partner, and abstaining from sex.

FIGURE 11

Adolescent Women and Men Ages 15–19 Who Know of One or More Ways to Prevent Sexual Transmission of HIV/AIDS



Note: Prevention methods include condom use, avoiding multiple partners, being faithful to one partner, and abstaining from sex.

Source: Demographic and Health Surveys, 1994-1998. Data for men are not available for Madagascar and Senegal.

- More young men know how to prevent HIV/AIDS than young women. Increasing knowledge levels among young women is critical: In many settings, HIV prevalence levels are higher among teenage women than among teenage men.

- Among young women, knowledge of at least one preventive measure ranges from 15 percent in Mozambique to 72 percent in Kenya. Among men, knowledge ranges from 28 percent in Mozambique to 81 percent in Kenya and Zambia.

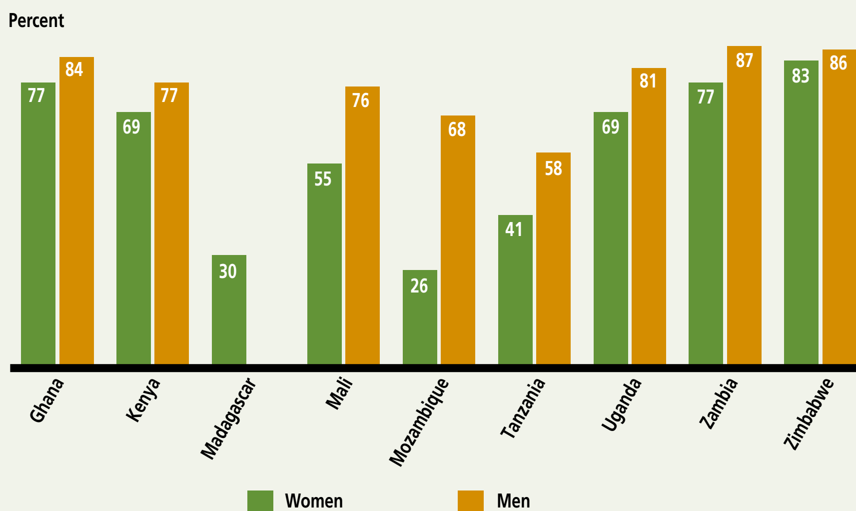
- In Côte d'Ivoire, Ghana, Madagascar, Mali, Mozambique, Senegal, and Tanzania, less than 55 percent of young women can name at least one of the four preventive measures.

SEXUALLY EXPERIENCED ADOLESCENTS WHO BELIEVE THAT THEY HAVE LITTLE OR NO RISK OF GETTING AIDS

Among adolescents who have had sex, substantial proportions of both women and men believe themselves to be at little or no risk of getting AIDS. Figure 12 includes both married and single, sexually experienced adolescents.[12]

FIGURE 12

Sexually Experienced Adolescent Women and Men Ages 15–19 Who Believe They Have Little or No Risk of Getting AIDS



Note: "Sexual experience" is defined as ever having had sexual intercourse.

Source: Demographic and Health Surveys, 1994-1998. Married and single adolescents are included. Roughly half of young women in Mozambique say they "don't know" their risk. Data for men are not available for Madagascar. No data are available for Senegal.

- In most of the countries presented, more than half of sexually experienced adolescents believe that they have little or no risk of getting AIDS.
- Young men are more likely than young women to believe themselves at low or no risk of getting HIV/AIDS.
- Among young men, the perception of low or no risk ranges from 58 percent in Tanzania to 87 percent in Zambia. Among young women, the range is from 26 percent in Mozambique to 83 percent in Zimbabwe.
- More than 75 percent of young men in six out of eight countries with data available believe themselves at low or no risk.
- More than 75 percent of young women in Ghana, Zambia, and Zimbabwe believe themselves at low or no risk for the disease.

BOX 4

Major Reasons Given for Belief of Little or No Risk of AIDS

Why do so many sexually experienced young people believe that they are safe from AIDS? According to DHS conducted from 1995 to 1998, the reasons given by adolescents vary. For unmarried women who believe themselves at little or no risk, the most common explanation given is that they have only one partner. In addition, many unmarried women say that they abstain from sex. In Kenya, Zambia, Zimbabwe, and Uganda, 25 percent to 37 percent of unmarried women say that they have little or no risk because they abstain. Among married women who believe themselves to be low risk, the vast majority say that they have only one partner.

A number of married and unmarried young women and men say that they are low or no risk because they have only one partner, a practice that might reduce risk, but that does not negate the risk of getting AIDS. Adolescents may not be aware that their partners' sexual history may put them at risk or that their partners might have other partners.

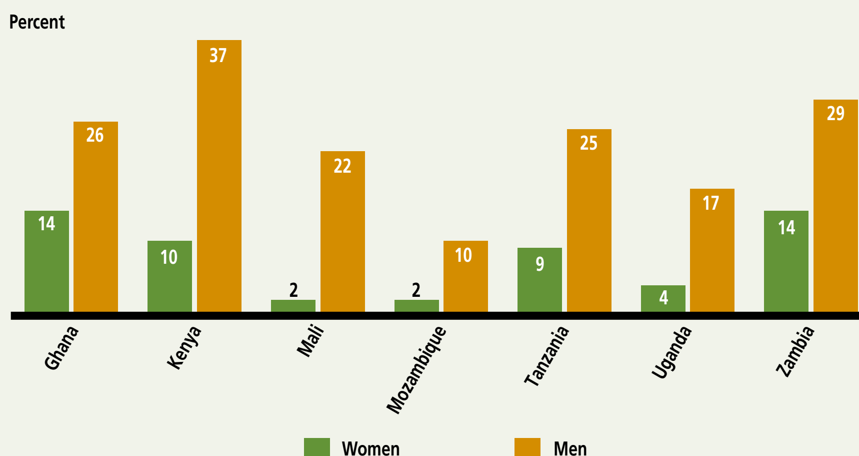
Unmarried men are much more likely than unmarried women to say that they are low risk because they use condoms. The percent of unmarried men who perceive themselves at low risk because of condom use ranges from 17 percent in Uganda to 47 percent in Zimbabwe. In contrast, condom use as a reason given by single women for low self-perceived risk ranges from 6 percent in Madagascar to 18 percent in Tanzania. Although condoms reduce risk, they do not necessarily make sex "risk-free." DHS findings do not provide information about whether these adolescents use the condom properly or consistently in their sexual encounters. As is the case with unmarried women, a number of unmarried men in some countries say that they are low risk because they abstain: 52 percent in Uganda, 37 percent in Mali, and 36 percent in Zambia.

CONDOM USE IN SEXUAL ENCOUNTERS

Since many adolescents are sexually active, condom use is an important way to prevent the spread of HIV/AIDS. Figure 13 shows the percentage of youth who used a condom during their most recent sexual encounter with any partner. Only those adolescents who had sex in the 12 months before the survey are included.

FIGURE 13

Adolescent Women and Men Ages 15–19 Who Used a Condom in Their Last Sexual Encounter*, Selected Countries



*Among those who had intercourse in the 12 months before the survey and who used a condom during the last sexual encounter.

Source: Demographic and Health Surveys, 1994-1998.

- In five countries, 22 percent to 37 percent of adolescent men report condom use during their last sexual encounter.
- Among young men, condom use is highest in Kenya and lowest in Mozambique.
- Among young women, condom use ranges from 2 percent in Mali and Mozambique to 14 percent in Ghana and Zambia.

In general, young women are less likely to report using condoms than men. Research has documented a number of barriers to greater condom use among young women, including a lack of control over the decision to use a condom during sex; the association of condoms with prostitutes, infidelity, or STIs; lower knowledge levels; and gender norms emphasizing sexual submissiveness, which make young women reluctant or ashamed to discuss condoms with their partners. The female condom, however, might offer women more options in protecting themselves from infection and pregnancy.

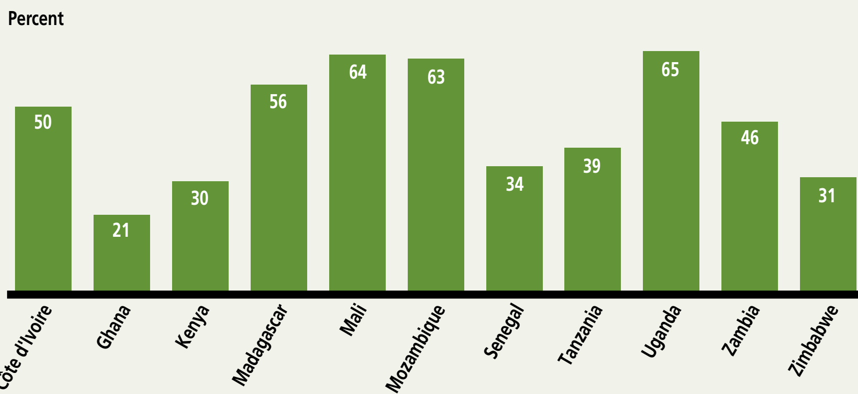
Childbearing

CHILDBEARING AMONG ADOLESCENTS

Teenage childbearing is common in sub-Saharan Africa. Many young women, however, may not be biologically, economically, or socially prepared for bearing and rearing children. Figure 14A shows the percentage of 18-year-olds who are mothers or who are pregnant with their first child.

FIGURE 14A

18-Year-Olds Who Are Mothers or Who Are Pregnant With Their First Child

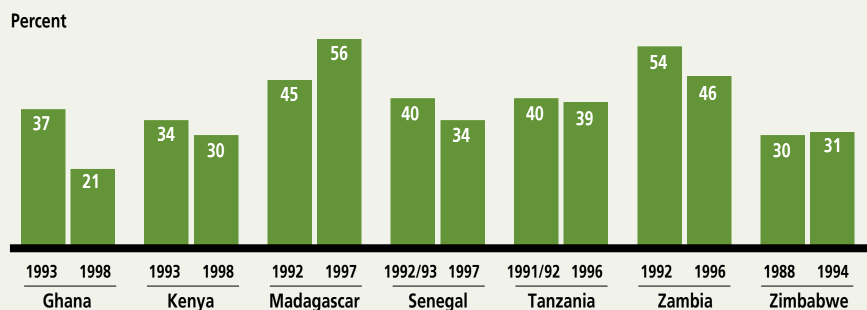


Source: Demographic and Health Surveys, 1994-1998.

- In all but one of the countries, at least 30 percent of 18-year-old women are already mothers or are pregnant with their first child.
- The proportion of 18-year-olds who are or soon will be mothers ranges from 21 percent in Ghana to 65 percent in Uganda.
- Teenage motherhood is especially common in Côte d'Ivoire, Madagascar, Mali, Mozambique, and Uganda. In these countries, at least half of 18-year-olds have had or will soon have children.

FIGURE 14B

18-Year-Olds Who Are Mothers or Who Are Pregnant With Their First Child, Late 1980s to 1998, Selected Countries



Source: Demographic and Health Surveys, 1988-1998.

Is teenage motherhood becoming less common? Figure 14B compares the levels of motherhood found in surveys conducted approximately five years apart. In the countries presented, one survey was conducted in the late 1980s or the early 1990s and the next survey was in the mid- to late-1990s.

While there is some evidence of a decline in teenage motherhood in about half the countries, the decline is not dramatic. The largest decreases appear to have occurred in Ghana and Zambia. In Madagascar, the level of motherhood among 18-year-olds appears to have increased since the early 1990s.

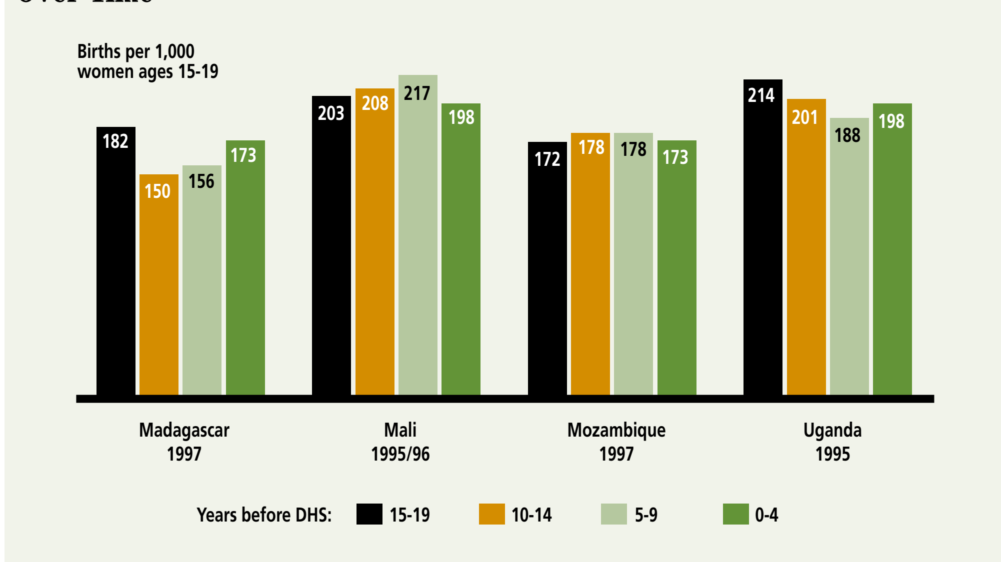
BIRTH RATES AMONG ADOLESCENTS[13]

Is teenage fertility declining? It depends. The countries with the highest teenage birth rates—Uganda, Mali, Madagascar, and Mozambique—demonstrate little or no decline in the past 20 years. In contrast, some signs of fertility decline among teenagers are evident in countries with somewhat lower birth rates, including Ghana, Kenya, Senegal, Tanzania, Zambia, and Zimbabwe.

In general, a majority of teenagers in the countries presented will have a birth by age 20. A birth rate of 100 suggests that half of adolescent women, on average, will have a child before age 20.

FIGURE 15

Countries with Little or No Evidence of Decline in Teen Birth Rates Over Time



- Figure 15 shows adolescent birth rates over time. The birth rates in Madagascar, Mali, Mozambique, and Uganda suggest little change over the past 20 years.
- In Mali, a slight decline in the birth rate has been observed in recent years. The most recent birth rate, however, is still close to the rate recorded 15 to 19 years before the survey.

FIGURE 16

Countries with Declining Birth Rates Over Time

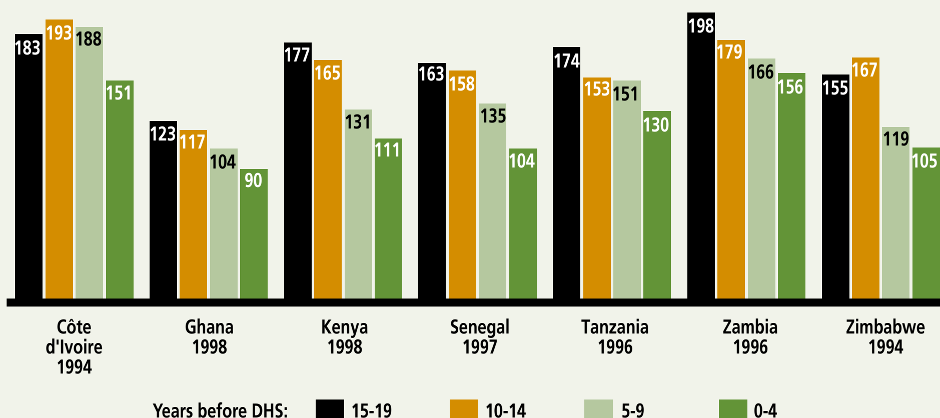


Figure 16 shows a consistent downward trend in teenage birth rates in Ghana, Kenya, Senegal, Tanzania, and Zambia. In Côte d'Ivoire and Zimbabwe, the birth rates appear to be declining in recent years. In Côte d'Ivoire, birth rates appear to have declined in the past five years, while in Zimbabwe rates have been declining for about 10 years.

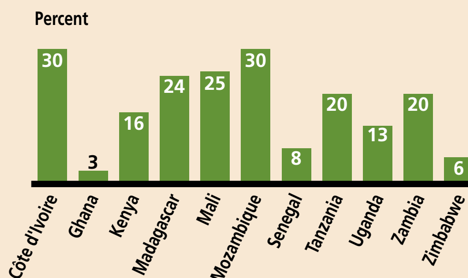
BOX 5

Single Motherhood

Single motherhood is not uncommon in Sub-Saharan Africa. In most of the countries examined, at least 10 percent of unmarried 18-year-olds are pregnant with their first child or are already mothers. As the accompanying figure shows, the proportion of unmarried women who are mothers or who are about to have a child ranges from 3 percent in Ghana to 30 percent in Côte d'Ivoire and Mozambique.

Unmarried mothers may confront greater challenges than married mothers: They may receive less support and approval from their families and communities, and they may have fewer resources for rearing and schooling children. In other settings, single motherhood may improve a young woman's status within her family and community.[1] Additionally, premarital births may be a requirement for marriage. In some countries, a number of single pregnant women marry by the time their children are born.[2]

Unmarried 18-Year-Old Women Who Are Mothers or Who are Pregnant With Their First Child



Source: Demographic and Health Surveys, 1994-1998.

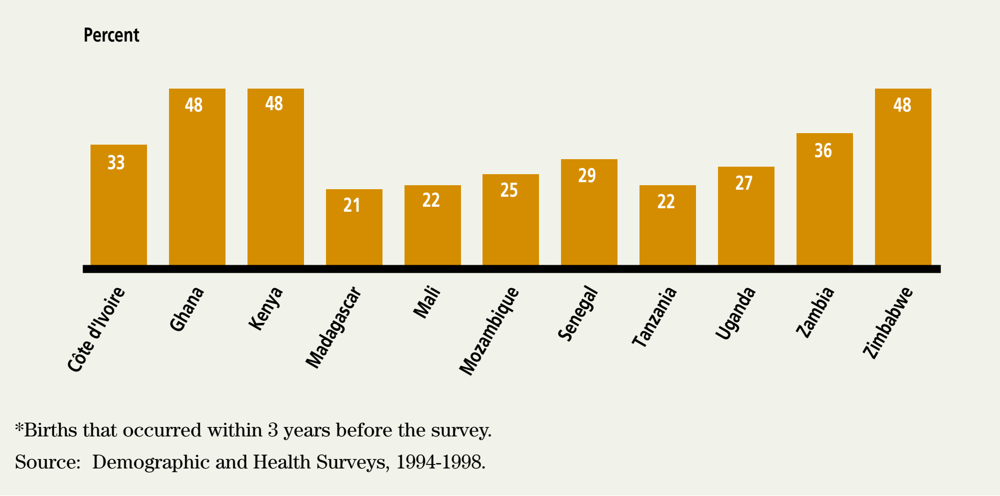
Notes:
1. B. Barnett and J. Stein, *Women's Voices, Women's Lives: The Impact of Family Planning* (Research Triangle Park, NC: Family Health International, 1998).
2. *Adolescent Women in Sub-Saharan Africa: A Chartbook on Marriage and Childbearing* (Washington, DC: Demographic and Health Surveys, Macro International, and Population Reference Bureau, 1992).

UNINTENDED PREGNANCIES AMONG ADOLESCENTS

Adolescents are vulnerable to unintended pregnancy. Many initiate sex early, do not use contraception, and have little access to reproductive health information and services.

FIGURE 17

Births Reported as Unintended Among Adolescent Women Ages 15–19*



*Births that occurred within 3 years before the survey.

Source: Demographic and Health Surveys, 1994-1998.

- As Figure 17 shows, in all of the countries surveyed, more than one-fifth of recent births were reported by young women as unintended.
- Unintended pregnancies are most common among adolescents in Ghana, Kenya, and Zimbabwe: Nearly one-half of young women had unintended births in these countries.

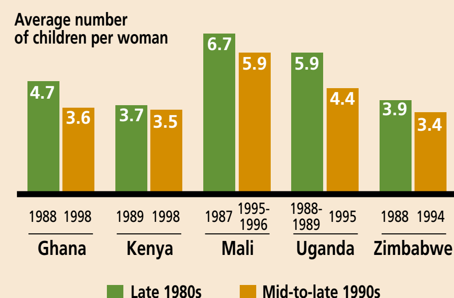
The vast majority of unintended births among adolescents are wanted, but mistimed. This suggests a need for contraceptive methods that enable young women to space or postpone their pregnancies.

BOX 6

Ideal Family Size

The DHS questionnaire asks all women about their ideal family size. In the countries shown in the accompanying figure, teenage women tend to want fewer children now than adolescents did in the late 1980s. Even in Uganda—where the teenage birth rate has not declined—the average ideal family size reported by adolescent women has decreased from nearly 6 children in 1988-1989, to 4.4 children in 1995.

Ideal Family Size Among Adolescent Women Ages 15–19, Late 1980s to Late 1990s, Selected Countries



BOX 7

Abortion

Complications from unsafe abortion can have a devastating impact on a young woman's health and well-being. Studies conducted in the 1980s and 1990s in a number of African countries have found that 38 percent to 68 percent of women seeking hospital care for abortion-related complications were adolescents.[1] One country study conducted in Nigeria found that 60 percent of abortion-related deaths occurred among those under the age of 20.[2]

Complications resulting from abortions are a major cause of death among young women in sub-Saharan Africa, where abortion is illegal or highly restricted. Although abortion is common in many parts of sub-Saharan Africa, an estimated 99 percent of the abortions that take place in the region are illegal. Africa has the highest abortion death rate in the world, with an estimated 680 deaths per 100,000 abortions. In contrast, the rate in South and Southeast Asia is 283 deaths and the rate in the more developed world is about one death per 100,000 abortions.[3]

In many settings, adolescents with an unplanned pregnancy are more likely than women in their twenties or thirties to seek out abortion. Typical reasons that young women give for choosing abortion include mistimed pregnancy, fear of being expelled from school, anxiety about having a child out of wedlock, financial problems, and uncertainties regarding their partner.[4]

Notes:

1. C. Howson, P. Harrison, D. Hotra, and M. Law, eds., *In Her Lifetime: Female Morbidity and Mortality in Sub-Saharan Africa* (Washington, DC: Institute of Medicine, National Academy Press, 1996): 82-83. Studies cited were reviewed in A. Tinker, P. Daly, C. Green, H. Saxenian, R. Lakshminarayanan, and K. Gill, *Women's Health and Nutrition: Making a Difference* (Washington, DC: The World Bank,1994).
2. Studies described in S. Kinoti, L. Gaffikin, J.Benson, and L.A. Nicholson, *Monograph on Complications of Unsafe Abortion in Africa* (Baltimore, MD: Commonwealth Regional Health Community Secretariat for East, Central and Southern Africa, with The Johns Hopkins Program for International Education in Reproductive Health (JHPIEGO) and IPAS, 1995): A1-3, A1-5, A1-10, A1-19, A1-27, A1-28.
3. The Alan Guttmacher Institute, *Sharing Responsibility: Women, Society, and Abortion Worldwide* (New York: AGI, 1999): 35.
4. S. Kinoti, L. Gaffikin, J. Benson, and L.A. Nicholson, *Monograph on Complications of Unsafe Abortion in Africa*: 19.

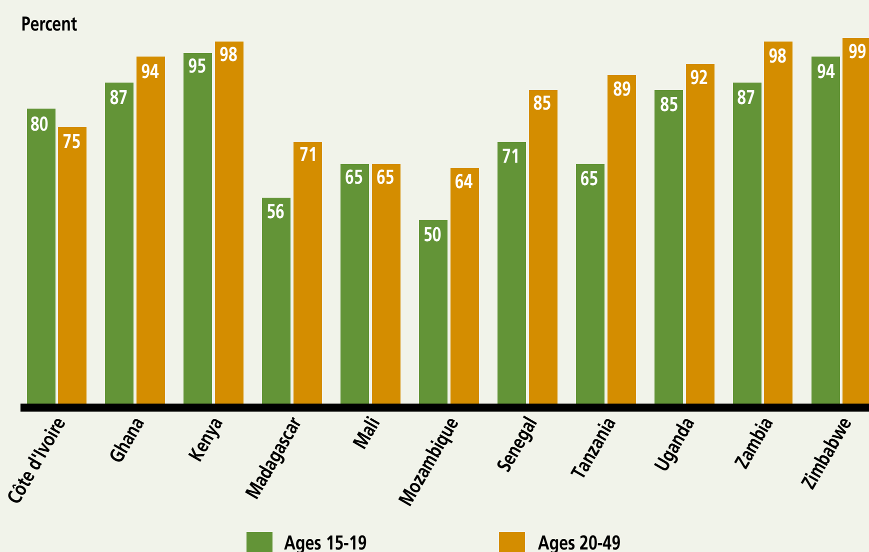
Contraception

KNOWLEDGE OF ANY MODERN METHOD OF CONTRACEPTION

Figure 18 shows basic awareness of contraceptive methods among adolescent women ages 15 to 19 and women ages 20 to 49. In nearly all the countries presented, a majority of adolescents and older women can name at least one modern contraceptive method. Older women tend to demonstrate a higher awareness than younger women. This may be due in part to less interest in and access to contraceptive information and services among younger women.

FIGURE 18

Women Who Know of Any Modern Contraceptive Method, by Age



Note: Modern methods include the pill, IUD, injectables, the diaphragm, foam, jelly, the condom, sterilization, and implants.

Source: Demographic and Health Surveys, 1994-1998.

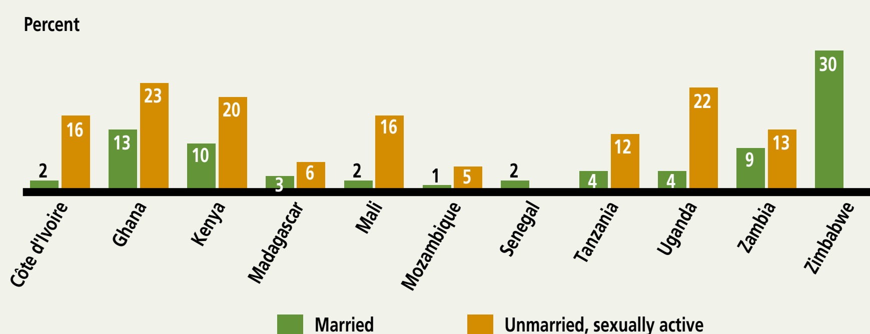
- In nine out of 11 countries, older women are more likely to know a modern method than adolescents. The knowledge gap between adolescents and older women is most striking in Tanzania, followed by Madagascar, Mozambique, and Senegal.
- More than 90 percent of women ages 20 to 49 can name a modern method in Ghana, Kenya, Uganda, Zambia, and Zimbabwe.
- Awareness of contraceptive methods is relatively low in Madagascar and Mozambique: Only one out of two adolescents can name a modern method of contraception. This may, in part, explain why Madagascar and Mozambique have some of the highest teenage birth rates among the countries shown.

USE OF MODERN CONTRACEPTIVE METHODS

Using contraception helps couples to avoid unintended pregnancies. Yet, as Figure 19 shows, most sexually active adolescents do not use modern contraception.

FIGURE 19

Adolescent Women Ages 15–19 Who Use Modern Contraceptive Methods, by Marital Status



Note: "Sexually active" women have had sex in the month prior to the survey. Modern methods include the pill, IUD, injectables, the diaphragm, foam, jelly, the condom, sterilization, and implants.

Source: Demographic and Health Surveys, 1994-1998. Data for unmarried, sexually active women are not available for Zimbabwe and Senegal—there were fewer than 50 respondents for each of these countries.

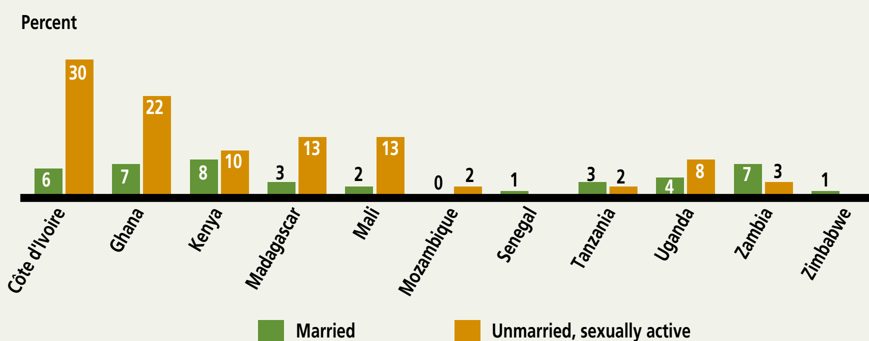
- In seven out of 11 countries, less than 5 percent of married adolescents are using modern contraception. Low contraceptive use among married adolescents may be partly due to the premium placed on childbearing among newly married couples. Additionally, married adolescents are more likely to desire children than single adolescents.
- Single, sexually active adolescents are more likely to rely on modern contraception than their married counterparts. Modern contraceptive use among single, sexually active women ranges from 5 percent in Mozambique to 23 percent in Ghana. Women who are "sexually active" had sex in the month before the survey.
- Overall, Zimbabwe has the highest levels of contraceptive use among young, married women. Among the countries studied, Zimbabwe also has among the lowest teenage birth rates.
- At least 15 percent of single, sexually active teenagers are using modern contraception in Côte d'Ivoire, Ghana, Kenya, Mali, and Uganda.

USE OF TRADITIONAL CONTRACEPTIVE METHODS

As Figure 20 demonstrates, a number of adolescents rely on traditional contraceptive methods to prevent pregnancy. Traditional methods include periodic abstinence, withdrawal, and folk methods, such as herbs. In general, adolescents who rely on traditional methods use periodic abstinence. This may mean, however, that they have sex infrequently rather than that they follow a deliberate pattern of abstinence to prevent pregnancy.

FIGURE 20

Adolescent Women Ages 15–19 Who Use Traditional Contraceptive Methods, by Marital Status



Note: "Sexually active" women have had sex in the month prior to the survey. Traditional methods include periodic abstinence, withdrawal, and folk methods, including herbs.

Source: Demographic and Health Surveys, 1994-1998. Data for unmarried, sexually active women are not available for Zimbabwe and Senegal—there were fewer than 50 respondents for each of these countries.

- The use of traditional contraceptive methods among married and unmarried adolescents ranges from 1 percent to 30 percent.
- In seven out of nine countries with data available, single, sexually active adolescents are more likely to use traditional contraceptive methods than married adolescents. The differences, however, are slight in some settings.
- At least 10 percent of single, sexually active adolescents use traditional contraceptive methods in Côte d'Ivoire, Ghana, Kenya, Madagascar, and Mali. Less than 10 percent of married teenagers use traditional methods across all of the countries.

If used correctly, different forms of periodic abstinence can be effective in preventing pregnancy.[14] These methods may be attractive to adolescents who are concerned about contraceptive side effects, who desire to follow religious or cultural norms in preventing pregnancy, or who have poor access to modern contraceptives. To prevent pregnancy, however, periodic abstinence requires the participation of both partners in a couple and requires that women avoid intercourse during their fertile phase or the middle of their menstrual cycle.

At present, most young women have insufficient knowledge of their bodies to use these methods effectively. DHS data indicate that in Côte d'Ivoire, Kenya, Madagascar, Mozambique, Senegal, Tanzania, and Zambia, less than 20 percent of young women know when they are most likely to get pregnant.

CONTRACEPTIVE METHODS USED BY WOMEN

Figure 21, Figure 22, and Figure 23 show the contraceptive methods used by married and single, sexually active adolescents. In these figures, "sexually active" means the respondent had sex in the four weeks before the survey. The contraceptive methods are shown in three categories: the pill/injectables/IUD/implant, the condom, and traditional methods. Traditional methods include periodic abstinence, withdrawal, and folk methods, such as herbs.

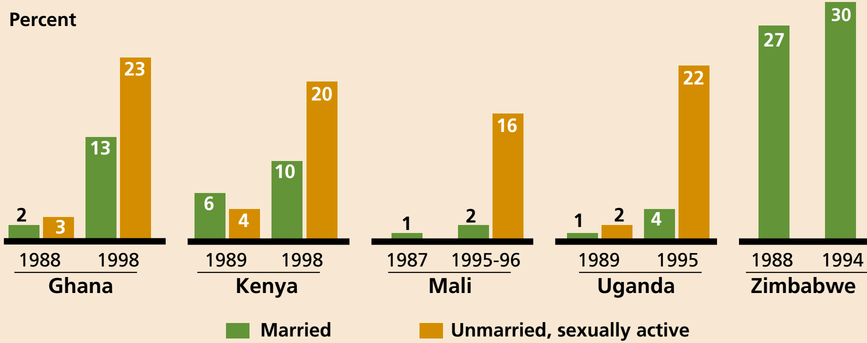
The types of methods used by married and single adolescents vary across the countries presented. Overall, condom use tends to be higher among single, sexually active teenagers than among married adolescents. Condom use may reflect a greater need to prevent pregnancy and disease among single, sexually active adolescents. The condom might also be the best method for adolescents who have sex infrequently. Overall, higher levels of con-

BOX 8

Use of Modern Contraception, 1980s-1990s

Adolescents are more likely to use modern contraception now than they were five or 10 years ago. The figure below illustrates the percentage of women ages 15 to 19 who reported ever using a modern method of contraception at the time of the survey. Modern methods include the pill, IUD, injectables, the diaphragm, foam/jelly, the condom, sterilization, and implants.*

Trends in Modern Contraceptive Use Among Adolescent Women, by Marital Status



Source: Demographic and Health Surveys, 1987-1989, 1994-1998. Data are not available for unmarried, sexually active women for Mali (1987) and Zimbabwe—there were fewer than 50 respondents in these countries.

- Adolescents are increasingly relying on modern contraception: In the past five or 10 years, use has increased by a range of one to 20 percentage points.
- In general, use of modern methods has increased among both married and unmarried adolescents.
- The increases in modern method use are particularly dramatic among single, sexually active young women. In Ghana, for example, 3 percent reported use of modern methods in 1988, compared with 23 percent in 1998.
- Zimbabwe has the highest contraceptive use levels among married adolescent women, with 30 percent relying on modern methods. Although contraceptive use is relatively high in Zimbabwe, the rise in prevalence since 1989 has been a modest 3 percentage points.

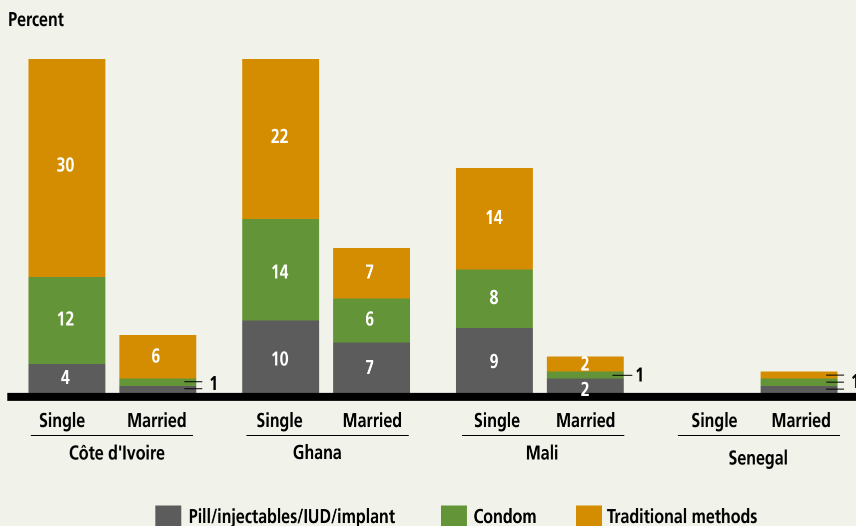
* The 1998 DHS for Ghana includes the lactational amenorrhoea method (LAM) in modern methods—3.7 percent of married adolescents in Ghana were using LAM at the time of the survey.

dom use suggest that some programs have successfully broadened access to condoms among those at higher risk for unintended pregnancy and STIs.

Although single adolescents may be more likely to engage in sexual behaviors that put them at higher-risk for AIDS and other STIs, research indicates that married adolescents are not risk-free. For example, various studies indicate that a number of pregnant adolescents—many of whom are married—test positive for HIV. Even young married women may be at risk for STIs, because many young women, for instance, marry older, more sexually experienced men.

FIGURE 21

Contraceptive Methods Used by Single and Married Adolescent Women, Ages 15–19, Selected West African Countries



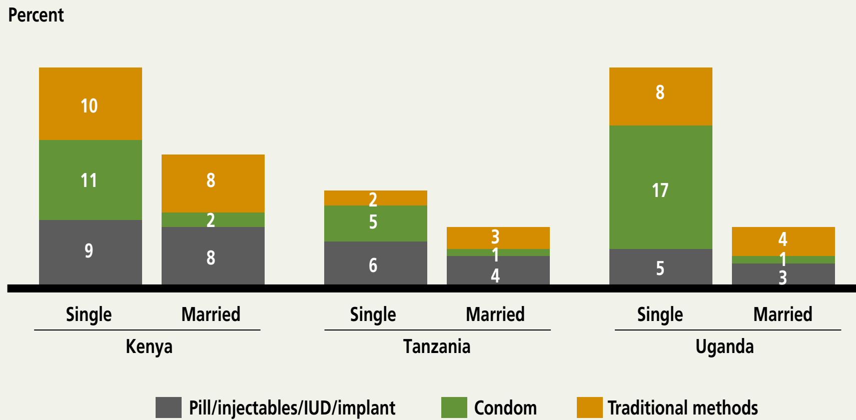
Note: Percentages have been rounded. The pill/injectables/IUD/implant category includes the diaphragm, foam, and jelly. Traditional methods include periodic abstinence, withdrawal, and folk methods, including herbs.

Source: Demographic and Health Surveys, 1994-1998. Data for unmarried, sexually active women are not available for Senegal—there were fewer than 50 respondents for this country.

- In the West African countries presented in Figure 21, single, sexually active women are more likely to use contraception—especially condoms or traditional methods—than married adolescents.
- Among single teenagers, condom use ranges from 8 percent in Mali to 14 percent in Ghana. Among married adolescents, 1 percent use condoms in three out of four countries presented.
- Relatively few young women use modern methods such as the pill, injectables, IUD or implant. Use of these methods is highest among single, sexually active adolescents in Ghana and Mali.
- A substantial number of single, sexually active adolescents rely on traditional contraceptive methods in Côte d'Ivoire and Ghana. Nearly one-third of single adolescents in Côte d'Ivoire rely on traditional methods.

FIGURE 22

Contraceptive Methods Used by Single and Married Adolescent Women, Ages 15–19, Selected East African Countries



Note: Percentages have been rounded. The pill/injectables/IUD/implant category includes the diaphragm, foam, and jelly. Traditional methods include periodic abstinence, withdrawal, and folk methods, including herbs.

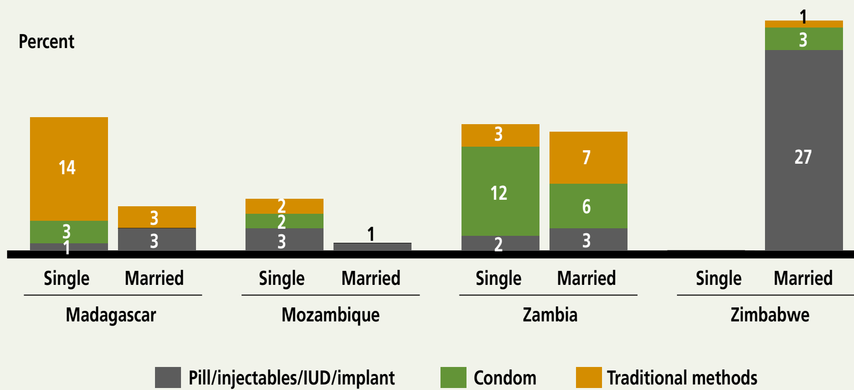
Source: Demographic and Health Surveys, 1994-1998.

- In the East African countries presented in Figure 22, use of almost all contraceptive methods is higher among single, sexually active women than among married adolescents.

- Higher levels of condom use account for much of the difference in family planning use among married and single adolescents. In Kenya and Uganda, substantially higher proportions of single women than married women rely on the condom. For example, 17 percent of single, sexually active adolescents use the condom in Uganda, compared with 1 percent of married women.

FIGURE 23

Contraceptive Methods Used by Single and Married Adolescent Women, Ages 15–19, Selected Southern and Central African Countries



Note: Percentages have been rounded. The pill/injectables/IUD/implant category includes the diaphragm, foam, and jelly. Traditional methods include periodic abstinence, withdrawal, and folk methods, including herbs.

Source: Demographic and Health Surveys, 1994-1998. Data for unmarried, sexually active women are not available for Zimbabwe—there were fewer than 50 respondents for this country.

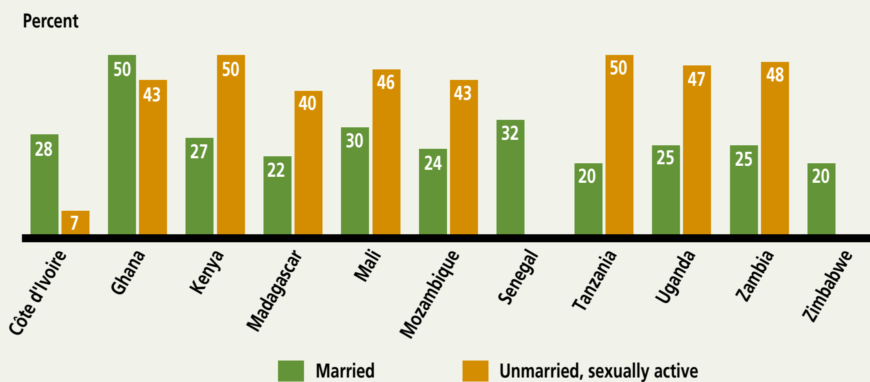
- As shown in Figure 23, except in Zimbabwe, less than 5 percent of adolescents use modern methods other than the condom.
- In Zambia, 12 percent of single, sexually active adolescent women use condoms. In contrast, less than 5 percent of married or single adolescents use condoms in Madagascar and Mozambique.
- The use of traditional contraceptive methods is relatively high among single, sexually active women in Madagascar and among married women in Zambia.

UNMET NEED FOR CONTRACEPTION

As Figure 24 shows, a substantial number of adolescents have "unmet need" for contraception. Women with unmet need say they would prefer to postpone their first or next birth by at least two years or to limit their births, but are not using contraception. Although the definition of unmet need includes women who want to limit their births, very few adolescents want to stop having children. Nearly all unmet need among teenage women is for birth spacing.

FIGURE 24

Unmet Need for Contraception Among Adolescent Women Ages 15–19, by Marital Status



Note: Women with "unmet need" would prefer to postpone their first or next birth, but are not using contraception.

Source: Demographic and Health Surveys, 1994-1998. Data for unmarried, sexually active women are not available for Zimbabwe and Senegal—there were fewer than 50 respondents for these countries.

- In most countries, at least 40 percent of single, sexually active women ages 15 to 19 have unmet need for contraception. Overall, unmet need among this group ranges from 7 percent in Côte d'Ivoire to 50 percent in Kenya and Tanzania. Women who are "sexually active" have had sex in the month preceding the survey.
- At least 20 percent of married teenagers have unmet need for contraception in all countries shown. Among married women, the levels range from 20 percent in Zimbabwe to 50 percent in Ghana.
- Unmet need tends to be higher among single, sexually active adolescents. This may be due to a number of factors, including a stronger motivation to postpone pregnancy among the unmarried as well as a scarcity of reproductive health services for single adolescents.

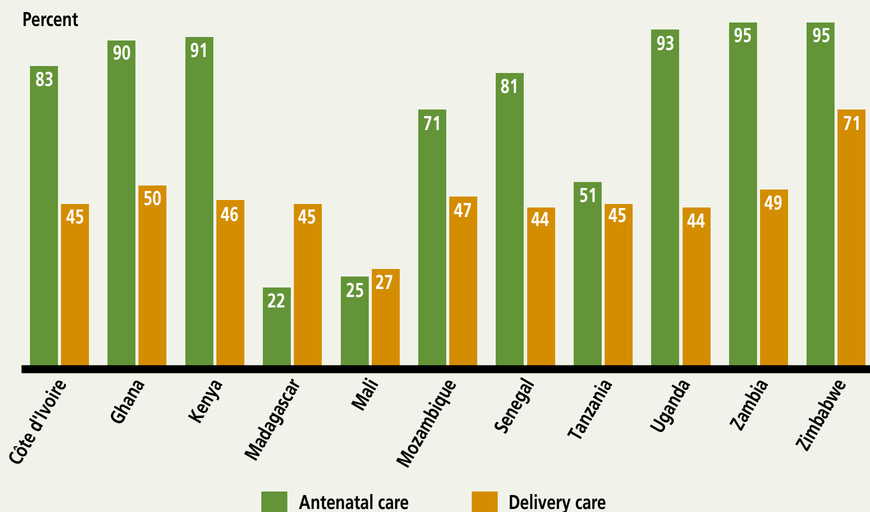
Maternal Health

USE OF PROFESSIONAL MATERNITY CARE SERVICES

Maternity care from a skilled nurse/midwife or doctor can help ensure a healthier pregnancy and delivery for both mother and child. Although antenatal care coverage is relatively high in some of the countries surveyed, as Figure 25 shows, access to trained delivery assistance tends to be limited. One of the most important ways of preventing maternal deaths, however, is to ensure that women give birth with the help of a health professional. Most life-threatening complications cannot be predicted during pregnancy.

FIGURE 25

Adolescent Women Ages 15–19 Receiving Maternity Care from a Doctor or Nurse/Midwife for Recent Births



Source: Demographic and Health Surveys, 1994-1998.

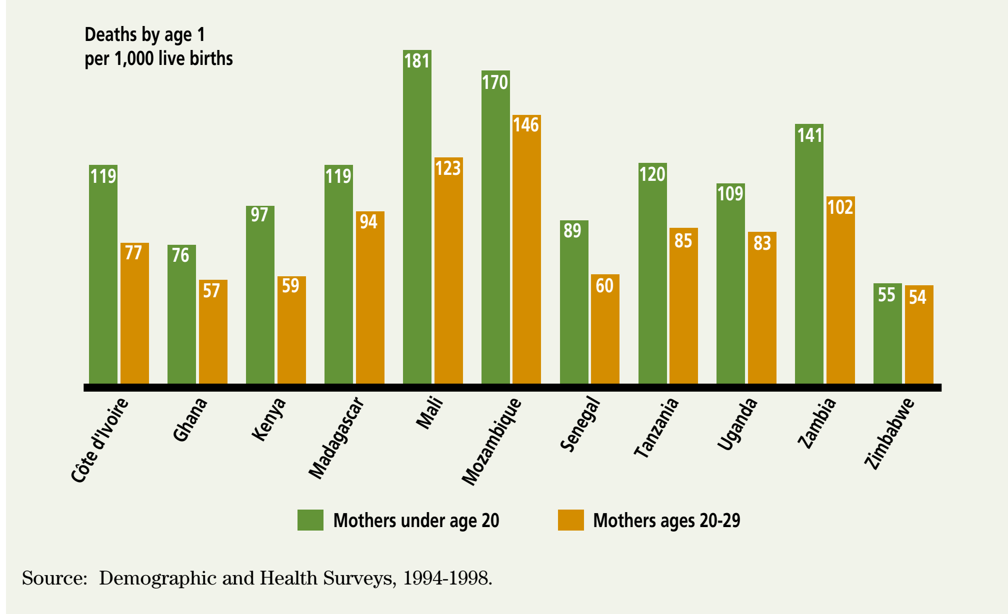
- Antenatal care coverage ranges from 22 percent in Madagascar to 95 percent in Zambia and Zimbabwe. In seven out of 11 countries, more than 80 percent of adolescent women reported that they received antenatal care during a recent pregnancy.
- The percentage of women who received professional delivery assistance ranges from 27 percent to 71 percent. In nine out of 11 countries, less than half of young women reported receiving professional delivery care.

INFANT MORTALITY RATES

The children of teenage mothers have poorer survival prospects than children whose mothers are in their twenties or thirties. Some of the differences in infant mortality among adolescent and adult mothers might be due to the higher level of first pregnancies among adolescents. First pregnancies are associated with a higher risk of complications than later births. Even after the first month of life, however, DHS data indicate that children born to adolescent mothers tend to have poorer survival prospects than those born to mothers ages 20 to 29 (not shown).

FIGURE 26

Infant Mortality Rates by Age of Mother at Time of Birth



Source: Demographic and Health Surveys, 1994-1998.

- As Figure 26 shows, in every country mortality rates are higher for infants of mothers under age 20. The difference is slight, however, in Zimbabwe.
- In seven out of 11 countries, the mortality rate for infants of mothers under age 20 exceeds 100 deaths per 1,000 live births. This means that at least one in 10 children born to women under age 20 dies before reaching his or her first birthday.
- Children born to young mothers face especially poor survival prospects in Mali and Mozambique. In Mali, for example, nearly one in five children born to adolescent mothers dies before age 1.

In addition to poorer survival prospects, the offspring of very young mothers also face a higher chance of serious illness and disability. Adolescent pregnancies, for example, are associated with low infant birth weight. Low-weight infants are approximately three times more likely than normal birth weight infants to experience lifelong disabilities such as mental retardation, cerebral palsy, and autism.[15]

BOX 9

Very Early Childbearing

Adolescent childbearing is associated with a range of health problems. Maternity-related complications are major causes of death among young women.* Because adolescent women have not completed their growth, especially height and pelvic size, they are at greater risk of obstructed labor, which results when the baby cannot pass through the birth canal. Obstructed labor can lead to serious injury or death for both the mother and the infant. Typically, the younger the mother, the higher the level of risk for both the mother and the child.

Despite the health risks involved, very early childbearing is common in some sub-Saharan countries. DHS conducted from 1994 to 1998 show that among 16-year-olds, for example, at least 10 percent are already mothers or are pregnant with their first child in Côte d'Ivoire, Madagascar, Mali, Mozambique, Tanzania, Uganda, Zambia, and Zimbabwe. The levels are highest in Côte d'Ivoire, Mali, Mozambique, and Uganda, where at least 20 percent of 16-year-olds have started bearing children.

* United Nations Children's Fund (UNICEF), *Progress of Nations 1998* (New York: UNICEF, 1998): 21.

1. Population Division, Department of Economic and Social Affairs of the United Nations Secretariat, *Sex and Age Distribution of the World Population: The 1998 Revision* (New York, NY: United Nations, 1999): 31. Based on medium variant estimates for the year 2000.
2. C. Lloyd and B. Mensch, "Implications of Formal Schooling for Girls' Transitions to Adulthood in Developing Countries" in *Critical Perspectives on Schooling and Fertility in the Developing World*, eds. C. Bledsoe, J. Casterline, J. Johnson-Kuhn, and J. Haaga (Washington, DC: National Academy Press. 1999): 81-104.
3. Kenya has a relatively long—eight years—duration of primary school. Thus, Kenyans ages 11 to 15 might be more likely to be in school than in another country where primary school is six years.
4. "Implications of Formal Schooling for Girls' Transitions to Adulthood in Developing Countries" in *Critical Perspectives on Schooling and Fertility in the Developing World:* 81-104.
5. A. Blanc and A. Way, "Contraceptive Knowledge and Use and Sexual Behavior: A Comparative Study of Adolescents in Developing Countries," A paper prepared for the Workshop on Adolescent Reproduction in Developing Countries, Committee on Population (Washington, DC: National Research Council, 1997).
6. L. Heise, M. Ellsberg, and M. Gottemoeller, "Ending Violence Against Women," *Population Reports*, Series L, No. 11 (Baltimore, MD: Johns Hopkins University School of Public Health, Population Information Program, December 1999).
7. The survey questionnaire does not differentiate whether money or gifts were given or received. The assumption in this chartbook is that young women are generally the recipients of money or gifts in exchange for sex and that young men are generally the givers of money or gifts in exchange for sex.
8. Joint United Nations Programme on HIV/AIDS, *Youth and HIV/AIDS: Force for Change* (New York: UNICEF, 1998).
9. Ibid. "The Greater Vulnerability of Girls." The study was conducted in Uganda.
10. National AIDS/STDs Control Programme (NASCOP), Ministry of Health. 1999. *AIDS in Kenya: Background Projections, Impact, Interventions, and Policy* (NASCOP: Nairobi, Kenya, 1999). Study findings are based on research by M. Kahindo, J. Nyang, J. Chege, "Multicentre Study on Factors Determining the Differential Spread of HIV in Africa—Preliminary Results of the Kisumu Study Site," presented at the 2nd National HIV/AIDS/STDs Conference, October 28-30, 1998, Nairobi, Kenya.
11. Institute of Medicine. *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*, eds. T. Eng and W. Butle (Washington, DC: National Academy Press, 1997): 35.
12. Figure 12 includes all adolescents who have ever had sex, including those who may be using condoms or taking other preventive measures against HIV. Since there is no way of determining whether the preventive measures some adolescents report taking are adequate, all sexually experienced young people are included.
13. The birth rate reflects the annual number of births per 1,000 women ages 15 to 19. Data are based on women who were 15 to 19 years of age when their babies were born, not necessarily when they were interviewed. In this data, the accuracy of birth date reporting is important. Some of the "trends" observed in the figures may be due to poor reporting or may not be statistically significant.
14. The World Health Organization and others have found that natural family planning methods—if taught and used correctly—can have pregnancy rates as low as 3 percent. Statistic cited in *Natural Family Planning: Expanding Options* (Washington, DC: Institute for Reproductive Health, Georgetown University Medical Center, 1997). Available on the Web: www.irh.org.
15. R. Newcomer and A.E. Benjamin, *Indicators of Chronic Health Conditions: Monitoring Community-Level Delivery Systems* (Baltimore, MD: The Johns Hopkins University Press, 1997): 106.

APPENDIX TABLE 1

Background Characteristics of Adolescents Surveyed, 1994-1998

				Highest level of education attended					
		Sample size		No education (%)		Primary (%)		Secondary (%)	
Country	**Year of survey**	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**
Côte d'Ivoire	1994	1,961	543	47	25	35	34	19	41
Ghana	1998	910	330	15	9	19	21	66	70
Kenya	1998	1,851	811	3	2	74	71	23	27
Madagascar*	1997	1,553	na	21	na	54	na	25	na
Mali	1995-96	1,883	441	75	60	15	20	10	20
Mozambique	1997	1,836	382	28	10	67	82	5	8
Senegal**	1997	1,937	na	55	na	31	na	14	na
Tanzania	1996	1,732	488	16	9	78	85	6	6
Uganda	1995	1,606	387	17	4	67	68	16	28
Zambia	1996	2,003	460	8	7	62	63	30	31
Zimbabwe	1994	1,472	604	1	2	40	37	59	62

*In Madagascar, men were not surveyed.
**In Senegal, men ages 20 and older were surveyed.

APPENDIX TABLE 2

Implementing Agencies for Demographic and Health Surveys

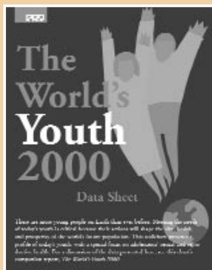
Country	Year of survey(s)	Implementing agency
Côte d'Ivoire	1994	Institut National de la Statistique, Ministère Délégué Auprès du Premier Ministre Chargé de l'Economie, des Finances et du Plan
Ghana	1998, 1993, 1988	Ghana Statistical Service
Kenya	1998, 1993	National Council for Population and Development, Central Bureau of Statistics, Office of the Vice President and Ministry of Planning and National Development
Kenya	1989	National Council for Population and Development, Ministry of Home Affairs and National Heritage
Madagascar	1997	Direction de la Démographie et des Statistiques Sociales, Institut National de la Statistique
Madagascar	1992	Centre National de Recherches sur l'Environnement, Ministère de la Recherche Appliquée au Développement
Mali	1995-96	Cellule de Planification et de Statistique, Ministère de la Santé, de la Solidarité et des Personnes Âgées, Direction Nationale de la Statistique et de l'Informatique
Mali	1987	Centre d'Etudes et de Recherches sur la Population pour le Développement, Institut du Sahel
Mozambique	1997	Instituto Nacional de Estatística
Senegal	1997, 1992-93	Ministère de l'Économie, des Finances et du Plan, Direction de la Prévision et de la Statistique, Division des Statistiques Démographiques
Tanzania	1996, 1991-92	Bureau of Statistics, Planning Commission
Uganda	1995	Statistics Department, Ministry of Finance and Economic Planning
Uganda	1988-89	Ministry of Health
Zambia	1996	Central Statistical Office, Ministry of Health
Zambia	1992	University of Zambia, Central Statistical Office
Zimbabwe	1994, 1988	Central Statistical Office

Related PRB Publications

For more information on reproductive health and adolescents, here are several other PRB publications (also on PRB's website: www.prb.org):

THE WORLD'S YOUTH 2000

by Anne Boyd, Carl Haub, and Diana Cornelius, 2000
(Available in English, French, and Spanish)



This 24-page report and its accompanying data sheet give a profile of today's youth, providing data on population, education, and health, with a special focus on sexual and reproductive health. Topics include: education, sexual and reproductive lives of young people, use of contraception, sexual violence against young women, HIV/AIDS, and policy and program approaches. (The report includes all the data in the data sheet, but the data sheet does not contain all the text and charts in the report.) Sold separately or as a set:
Report (I00WYBK) $5.00
Data Sheet (I00WYDS) $4.50
Both Report and Data Sheet $8.50

SOCIAL MARKETING FOR ADOLESCENT SEXUAL HEALTH

by Lori Ashford, Karen Bulsara, and Josselyn Neukom, 2000
(Available in English and French)

AIDS, other sexually transmitted infections, and unintended pregnancies have reached critical levels in sub-Saharan Africa, creating a need for innovative prevention programs for vulnerable groups. This report describes operations research projects in Botswana, Cameroon, Guinea, and South Africa that attempted to determine whether social marketing interventions improved adolescent understanding of sexual health issues and access to reproductive health products and services. (SMASH) $5.00

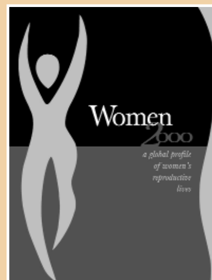
ATTAINING GLOBAL HEALTH: CHALLENGES AND OPPORTUNITIES

by Scott C. Ratzan, Gary L. Filerman, and John W. LeSar, 2000

This *Population Bulletin* looks at trends in health over the past century, and identifies the ways that we can pursue the goal of better global health. The authors explore the multiple factors that determine health and stress the need for action from the individual to the international level to improve health. (BUL55.1) $7.00

WOMEN 2000: A GLOBAL PROFILE OF WOMEN'S REPRODUCTIVE LIVES

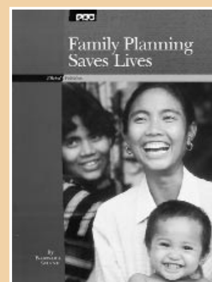
by PRB staff, 2000
(Available in English, French, and Spanish)



On the occasion of the fifth anniversary of the 1995 Fourth World Conference on Women, these four briefs review research findings and policy options regarding young women's reproductive and sexual health needs, the connections between education and childbearing, ways to make pregnancy and childbirth safer, and how family planning influences women's lives. (IWOKIT00) $5.00

FAMILY PLANNING SAVES LIVES

by Barbara Shane, 3d ed., 1997
(Available in English, French, and Spanish)



A 24-page booklet that describes the health benefits of family planning, this edition presents data from research on maternal and child health and on the linkages between family planning and reproductive health, adolescents, and abortion. (IFPSL3) $5.00

Also available: A colorful poster that highlights the health implications of family planning is also available in five different versions: Arabic for the Middle East region; English adapted with a photo for Africa; English adapted for Asia; French for Francophone Africa; and Spanish for Latin America. Included is a fact sheet describing the health benefits of family planning for women and children. (IFPSLPOST) $5.00

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