

Protecting the Next Generation in Sub-Saharan Africa

**LEARNING FROM ADOLESCENTS
TO PREVENT HIV AND
UNINTENDED PREGNANCY**



Protecting the Next Generation In Sub-Saharan Africa: Learning from Adolescents to Prevent HIV and Unintended Pregnancy

Ann E. Biddlecom
Laura Hessburg
Susheela Singh
Akinrinola Bankole
Leila Darabi



Acknowledgments

Protecting the Next Generation in Sub-Saharan Africa: Learning from Adolescents to Prevent HIV and Unintended Pregnancy was written by Ann E. Biddlecom, Susheela Singh, Akinrinola Bankole and Leila Darabi, all of the Guttmacher Institute; and Laura Hessburg, independent consultant. The report was edited by Peter Doskoch and copyedited by Dore Hollander; Kathleen Randall supervised the layout and production.

The authors thank the following colleagues for their comments and help in developing this report: Humera Ahmed, Heather Boonstra, Sharon Camp, Melanie Croce-Galis, Jacqueline Darroch, Patricia Donovan, Ann Moore, Jennifer Nadeau, Kate Patterson, Cory Richards and Gustavo Suarez, all currently or formerly of the Guttmacher Institute; Kofi Awusabo-Asare, University of Cape Coast; Georges Guiella, l'Institut Supérieur des Sciences de la Population de l'Université de Ouagadougou; Paul Banoba, Panos Eastern Africa; and Victoria Ebin, independent consultant.

In addition, the authors are grateful for the suggestions and advice offered by the following colleagues, who participated in an expert advisory panel for the project, reviewed a draft of this report or both: Sohail Agha, Tulane University; Joseph Amon, Human Rights Watch; Jane Bertrand, The Johns Hopkins University; Ann Blanc, MacArthur Foundation; Virgile Capo-Chichi, Laboratoire d'Etudes Appliquées aux Dynamiques de Développement; Sarah Castle and John Cleland, both of the London School of Hygiene and Tropical Medicine; Ugo Daniels, United Nations Population Fund (UNFPA); Francis Doodoo, Pennsylvania State University; Parfait Eloundou-Enyegue, Cornell University; Audrey Elster, independent consultant; Cynthia Eyakuze-Di Domenico, Family Care International; Beth Fredrick, International Women's Health Coalition; Anastasia Gage, Tulane University; Cynthia Gomez, San Francisco State University; Denise Gray-Felder, Communication for Social Change Consortium; Fatima Juárez, El Colegio de México; Ivan

J. Juzang, MEE Productions; Musimbi Kanyoro, Packard Foundation; Evert Ketting, Netherlands School of Public & Occupational Health; Tom Legrand, University of Montreal; Cynthia Lloyd, Population Council; Mahesh Mahalingam, Joint United Nations Programme on HIV/AIDS; Mark Montgomery, Population Council; Jotham Musinguzi, Population Secretariat, Uganda; Laura Nyblade, International Center for Research on Women; Christine Panchaud, United Nations Educational, Scientific and Cultural Organization; Suzanne Prysor-Jones, Academy for Education Development; Serge Rabier, Equilibres et Populations; Sara Seims, Hewlett Foundation; Sharon Stash, National Peace Corps Association; Cindy Waszak Geary, Family Health International; and Dorinda Welle, Ford Foundation.

The authors also thank the following organizations for their essential roles in implementing the 2004 National Survey of Adolescents, one of the main sources of new data presented in this report: Macro International, United States; Institut National de la Statistique et de la Démographie, Burkina Faso; Institute of Statistical, Social and Economic Research, Ghana; National Statistical Office, Malawi; and Uganda Bureau of Statistics.

This report is part of a larger project, conducted in Burkina Faso, Ghana, Malawi and Uganda, entitled *Protecting the Next Generation: Understanding HIV Risk Among Youth*. The project was designed to contribute to the global fight against the growing HIV/AIDS epidemic among adolescents by documenting and analyzing young people's sexual and reproductive health needs; communicating the new research findings to a broad audience to raise awareness; and stimulating the development of improved youth-serving policies and programs. The report, and the research on which it is based, was made possible by funding from the Bill & Melinda Gates Foundation, The Rockefeller Foundation and the U.S. National Institute of Child Health and Human Development (grant 5 R24 HD043610).

Table of Contents

Executive Summary	4
Chapter 1: Protecting the Next Generation Should Be a High Priority	6
Chapter 2: Adolescents Have Important Sexual and Reproductive Health Needs	12
Chapter 3: Schools Can Help Adolescents Make Healthy Decisions	24
Chapter 4: Strengthening the Health Care System Will Benefit Adolescents	29
Chapter 5: The Mass Media, Family and Community Can Play Supportive Roles	35
Chapter 6: Where to Focus Efforts to Improve Adolescent Sexual and Reproductive Health	41
References	45
Appendix Tables	50

Executive Summary

Addressing the sexual and reproductive health needs of adolescents in Sub-Saharan Africa is vital, given the devastating impact of AIDS, the high rates of unintended pregnancy and the risk that those pregnancies may lead to unsafe abortions. Protecting the health of adolescents is clearly important for the adolescents themselves. In addition, it is a critical public health priority. Increased investment in adolescent sexual and reproductive health can contribute to wider development goals, because it enables adolescents to become healthy, productive adults. This report presents key findings from nationally representative surveys conducted in 2004 among 12–19-year-olds in four African countries—Burkina Faso, Ghana, Malawi and Uganda—with the goal of guiding programs, policies and investments aimed at improving adolescent sexual and reproductive health.

Many adolescents are sexually active and need help to prevent negative consequences

Adolescent females in Sub-Saharan Africa tend to have sex at an earlier age than their male counterparts, and thus are at particular risk for HIV, unwanted pregnancy and other adverse outcomes.

- Almost 60% of females have had sex by age 18, compared with about 40–45% of males. By age 20, more than 75% of females and more than 60% of males have had sex.
- In nearly all of Sub-Saharan Africa, the prevalence of HIV is higher among females than among males.
- Thirty-five percent of pregnancies among 15–19-year-olds are unwanted or mistimed; 22% end in birth and 13% in abortion. These abortions are often unsafe, because abortion is still highly restricted in most Sub-Saharan African countries.

- Among sexually active 15–19-year-olds, about one in five married females and close to half of unmarried females have an unmet need for contraception.

New findings document factors that threaten adolescents' sexual and reproductive health

New data from Burkina Faso, Ghana, Malawi and Uganda reveal that many adolescents do not use contraceptives, have experienced unwanted sex, have multiple or much older partners and lack adequate knowledge about avoiding sexually transmitted infections (STIs) and pregnancy.

- Among 15–19-year-olds who have had sex in the past year, only 29–47% of females and 42–55% of males used contraceptives the last time they had sex. The male condom is by far the most commonly used method. Preventing pregnancy, rather than preventing STIs, is the most widely cited reason for using condoms among females in all four countries and among males in Ghana and Uganda.
- Almost one in five females in Ghana, Malawi and Uganda report that their first sexual experience occurred through force or because their partner insisted.
- Among 15–19-year-olds who have had sex in the past year, 17–26% of males and 6–7% of females have had two or more partners. In three of the four countries, more than 40% of sexually active 15–19-year-old females have had partners in the past year who were five or more years older.
- More than 90% of 15–19-year-olds have heard of HIV, yet fewer than 40% of adolescents in this age-group can both correctly identify ways of preventing transmission of HIV and reject common misconceptions about HIV transmission. The proportion who know of STIs other than HIV

is low in Burkina Faso and Ghana (31–56%), but much higher in Malawi and Uganda (71–82%).

- No more than one in three 15–19-year-olds are aware of a woman’s fertile period, are able to reject several popular misconceptions about pregnancy and know at least one modern contraceptive method.

Comprehensive school-based sex education is an effective and efficient way to educate adolescents

Comprehensive sex education is effective in improving knowledge and reducing sexual risk behaviors, and it does not increase sexual activity. At best, only about half of 15–19-year-olds across the four countries have received any sex education at school. Although strengthening sex education programs can be difficult in places where resources and infrastructure are limited, key aspects of effective programs have been identified and can be applied across different settings. Important recommendations include:

- *Adopt curricula that provide comprehensive, accurate sexual and reproductive health information.* Programs should avoid using an exclusive “abstinence-until-marriage” approach, as recent evaluations show that this approach alone does not lead to protective behaviors.
- *Support teacher training.* To effectively expand coverage of sex education, it is vital that teachers receive adequate training in sex education topics and in participatory learning methods.
- *Target very young adolescents.* Many adolescents leave school before reaching the grade levels at which sex education begins. Programs that start before the end of primary school increase the opportunity to reach youth before they leave school and before they begin sexual activity.
- *Help adolescents stay in school.* Even if they do not receive sex education, young people who stay in school are less likely than their peers to have sex.

Strengthening the health care system may increase adolescents’ utilization of services

Although 35–65% of 15–19-year-olds who have ever had sex would prefer to receive contraceptives from health facilities, 24–44% do not know a relevant source. Moreover, 32–58% prefer to receive STI testing and treatment at health facilities, but many are too afraid, embarrassed or shy to seek such services. The lack of adequate health care infrastructure complicates efforts to increase adolescent utilization of services. Still, improving service delivery to adolescents is possible within the existing health care system, and the following would be useful steps:

- *Ensure the widespread availability of a range of contraceptive methods, especially the male condom.* Making condoms available to young people not just at clinics but also at shops, pharmacies and places where they work

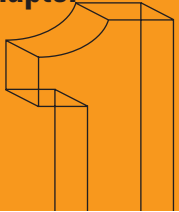
and socialize can increase access. Improved availability of female-controlled methods, such as the female condom and emergency contraceptives, is needed as well.

- *Conduct outreach.* Basic outreach is needed to inform young people about the services that are available and where to get them. Providers should use any contact with adolescents as an opportunity to address their sexual and reproductive health care needs.
- *Train mid-level providers to deliver health services.* Mid-level providers, such as midwives and nurses, can help address the need for more health care personnel. Training programs for health care providers should teach relevant skills for delivering information and services to adolescents without stigmatizing sexually active youth.

Evidence points to steps that can help meet adolescents’ sexual and reproductive health needs.

The new research findings suggest a number of important steps that policymakers and program managers can take to help adolescents avoid unwanted pregnancy, STIs and other undesirable outcomes.

- *Encourage the use of modern contraceptive methods and make male condoms widely available.* Because fear of pregnancy, more than fear of STIs, motivates many adolescents (especially young women) to use condoms, programs designed to promote condom use should emphasize pregnancy prevention as well as disease prevention.
- *Ensure that adolescents have the specific information and skills they need.* Although highly aware of sexual and reproductive health issues, adolescents lack the information and skills needed to protect themselves against HIV, unintended pregnancy and unwanted sex. They must be provided with comprehensive information and skills if they are to delay sexual debut, resist pressure to engage in unwanted sex and practice safer sex.
- *Start interventions early—before adolescents have sex.* Among 12–14-year-olds, 7–34% have experienced some form of intimate physical activity (kissing, fondling or intercourse) or have had a boyfriend or girlfriend, and 11–53% have at least one close friend who has had sex.
- *Engage community members and the media.* Community involvement can build local support for interventions and help programs more effectively address adolescents’ needs. The mass media (especially radio) is one of adolescents’ preferred and most commonly used sources for sexual and reproductive health information. Expanded use of radio and other media could help reach youth who have limited access to information and services.
- *Target interventions to meet the diverse needs of adolescents.* All adolescents need access to sexual and reproductive health information and services. However, some groups of adolescents, such as out-of-school youth and married females, have particular needs or face elevated risks, and these groups require targeted interventions.



Protecting the Next Generation Should Be A High Priority

Young people between the ages of 10 and 19 account for 18% of the world's population and 23% of Sub-Saharan Africa's population.¹ Tragically, the AIDS epidemic is taking an enormous toll on the region's youth. In all but a few Sub-Saharan African countries, AIDS is a generalized epidemic (i.e., the prevalence of HIV among adults in the general population exceeds 1%, and transmission is mostly by heterosexual intercourse); the prevalence of HIV among young people* (especially young women) is higher in this region than in any other area of the world.² The attention paid to HIV and AIDS in Sub-Saharan Africa has exposed a range of unmet sexual and reproductive health care needs among adolescents, exemplified by the high rates of unintended pregnancy and unsafe abortion in the region. Were it not for poor sexual and reproductive health, including the high prevalence of HIV, adolescents in Sub-Saharan Africa would be a much healthier group than they are today.^{3(p.122)}

Protecting the health of young people is an important priority—and not just for individual adolescents themselves. Given the sheer size of the region's adolescent population, increased and sustained investment in the sexual and reproductive health of adolescents is a sensible long-term public health priority as well. Because 40% of new HIV infections among adults worldwide occur in young people, preventing HIV transmission in this population could change the course of the AIDS epidemic.² Likewise, preventing HIV and unwanted pregnancy among adolescents can not only save lives and improve health, it can also help this and future generations escape poverty.³

Put another way, preventing ill health and promoting healthy sexual behavior give young people the chance to

*In this report, the terms “adolescents” and “young people” are used interchangeably.

have the healthy lives they deserve and the opportunity to grow into productive, contributing members of society. For this reason, improving adolescent sexual and reproductive health is gradually being recognized as an essential component of efforts to achieve national development goals. For example, several of the United Nations Millennium Development Goals⁴—reducing child mortality, improving maternal health and combating HIV/AIDS and other diseases—are directly related to reproductive health. Moreover, several other Millennium Development Goals, such as increasing educational attainment and reducing poverty, are inextricably linked to reproductive health. For example, planning families and avoiding disabling or life-threatening sexually transmitted infections (STIs) can enable men and women to acquire the education and skills they need to become economically productive.

The price of not “getting it right” is high: AIDS will continue to cut short the lives of young men and women and to devastate their societies. Unwanted pregnancy will continue to diminish the productivity of women and their countries by pushing young women into parenthood, which often results in their leaving school sooner than they had wanted, or into having an abortion, which can have serious health consequences in countries where restrictions on the procedure mean that safe care is seldom available. Adolescence is a critical period, and what happens during this time shapes adult lives. It is essential to take advantage of this brief window of time in which to help adolescents make a healthy transition into adulthood.

The purpose of this report

Although meeting the sexual and reproductive health care needs of adolescents has been recognized as a priority at the community, national and international levels, much more needs to be done. Governments have acknowledged

their obligations in this matter through various policies, agreements and calls to action, and innovative interventions have been implemented, but these steps alone are insufficient. Without ongoing financial support and a solid commitment to nationwide implementation from the highest levels of national governments, even successful programs and pilot projects are unsustainable and fail to meet existing needs.

In the past five years alone, several notable publications have provided detailed accounts of the many challenges faced by adolescents around the globe, including prevention of HIV and pregnancy. Among these publications are *Growing Up Global*, by the U.S. National Research Council and the Institute of Medicine;⁵ *World Development Report 2007*, by the World Bank;³ and “Preventing HIV/AIDS in Young People: A Systematic Review of the Evidence from Developing Countries,” by the World Health Organization.⁶ This report adds to this stellar body of work by providing a detailed look at how adolescents in Burkina Faso, Ghana, Malawi and Uganda view their sexual and reproductive health needs, and at what they say about potential solutions to those needs. Its goal is to guide national governments, regional and international organizations, and donors in designing programs, creating policies and targeting

investments aimed at improving adolescent sexual and reproductive health.

The new evidence, conducted as part of the Protecting the Next Generation project (see box), comprises new, in-depth data from nationally representative surveys of 12–19-year-olds in Burkina Faso, Ghana, Malawi and Uganda, as well as qualitative data that deepen our understanding of adolescent sexual behavior by providing context for the motivations underlying adolescents’ behaviors and attitudes. In the national surveys, almost 20,000 adolescents were questioned about their sexual behaviors and attitudes; their knowledge of HIV, other STIs and pregnancy prevention; their connections to family and school; and the barriers they face in preventing HIV, other STIs and pregnancy. The qualitative data for each country were collected through focus group discussions with 14–19-year-olds, in-depth interviews with 12–19-year-olds and additional interviews with key adults in adolescents’ lives (e.g., parents, teachers). Detailed descriptions of each data source can be found in the box on page 11 and in published *Occasional Reports*.^{7–10} The findings concerning very young adolescents (those who are 12–14 years old) are particularly noteworthy, as this is a group rarely targeted in sexual and reproductive health research.

About Protecting the Next Generation

This report is based on research conducted as part of a multiyear project, called Protecting the Next Generation: Understanding HIV Risk Among Youth, that is being carried out in Burkina Faso, Ghana, Malawi and Uganda. The project seeks to contribute to the global fight against the HIV epidemic among adolescents by documenting and raising awareness of young people’s sexual and reproductive health needs regarding HIV and AIDS, other STIs and unintended pregnancy. It also seeks to communicate new knowledge to a broad audience (including policymakers, health care providers and the media) in each country, as well as regionally and internationally, and to stimulate the development of improved policies and programs to serve young people.

The project is the result of a close collaboration among the Guttmacher Institute, research and communications colleagues at eight institutions in the four countries, and one regional organization:

BURKINA FASO

Banza Baya, Georges Guiella, Christine Ouedraogo, Oussimane Ouedraogo and Guédalia Sondo, l’Institut Supérieur des Sciences de la Population de l’Université de Ouagadougou; and Dieudonné Bassonon and Rigobert Sanon, Initiative Privée et Communautaire de Lutte Contre le VIH/SIDA au Burkina Faso.

MALAWI

Agnes Chimbiri, Sidon Konyani, Alister Munthali and Bernie Zakeyo, all currently or formerly of the Centre for Social Research, University of Malawi; and Felix Limbani and MacBain Mkandawire, Youth Net and Counseling.

GHANA

Albert Machistey Abane, Kofi Awusabo-Asare, Akwasi Kumi-Kyereme and Augustine Tanle, Department of Geography and Tourism, University of Cape Coast; and Joana O. Nerquaye-Tetteh, Abraham Nyako, Francis Yankey and Adjoa Nyanteng Yenyi, all currently or formerly of the Planned Parenthood Association of Ghana.

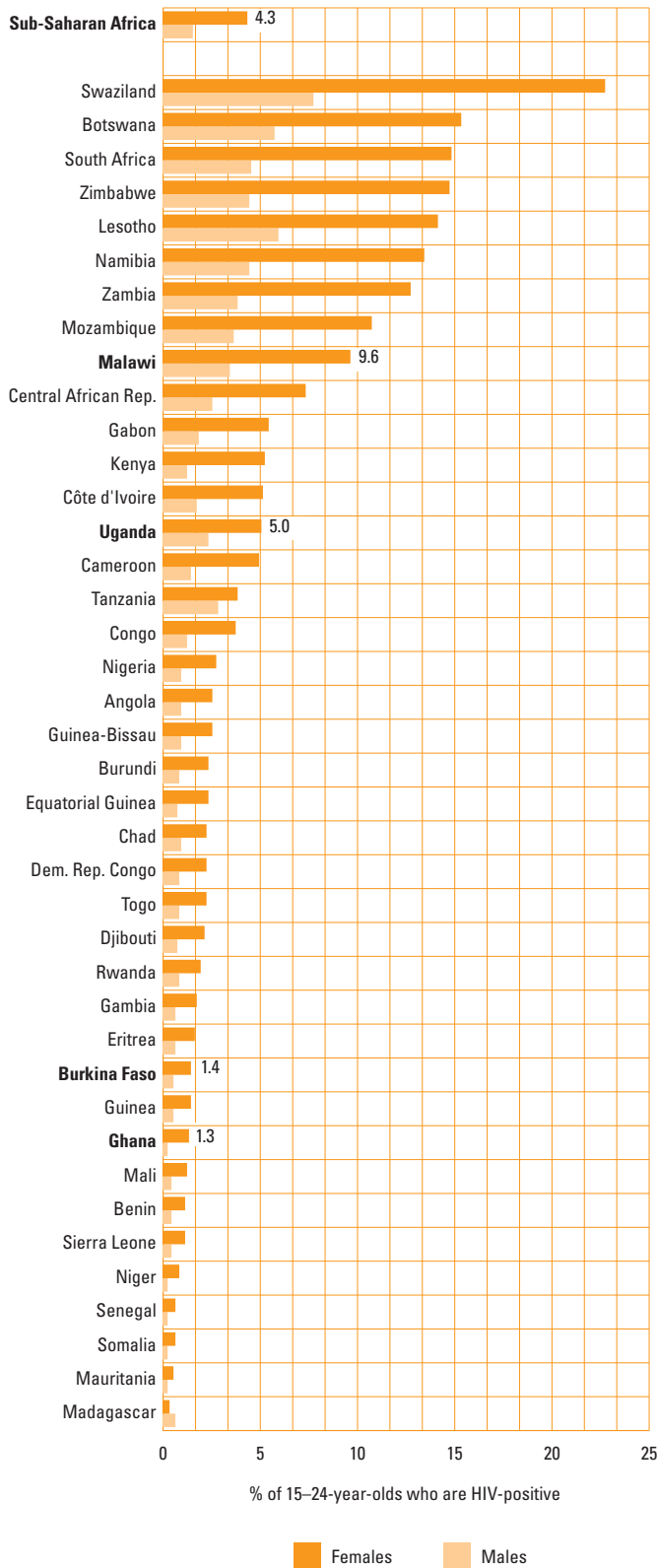
UGANDA

Richard Kibombo, Nakanyike Musisi and Stella Neema, Makerere Institute of Social Research, Makerere University; and Paul Banoba, Paul Kimumwe and Kalundi Robert Serumaga, all currently or formerly of Panos Eastern Africa.

Finally, the **African Population and Health Research Center** has provided technical assistance for the project’s research and communications activities. Current or former staff members directly involved in the project are Mary Amuyunzu-Nyamongo, Alex Ezeh, Nyovani Madise, Frederick Mugisha, Rose Oronje and Eliya Zulu.

FIGURE 1.1

Young women in Sub-Saharan Africa are much more likely than young men to be HIV-positive.



Source Reference 13.

Another important contribution of this report is that it combines this new evidence from adolescents with results of program evaluations and with analytic findings from other studies, an approach designed to identify promising, specific steps that those with the resources and power to effect change might take.

The four countries were selected to represent different subregions (East, West, Southern) of Sub-Saharan Africa and to include a francophone country (Burkina Faso). The countries also differ from each other in other ways, such as in the course that the AIDS epidemic has taken and in various contextual aspects of adolescents' lives.* This report highlights common needs across settings, and shows that these needs are likely relevant elsewhere in the region as well. To supplement the survey data, information from other sources is included to demonstrate the similarities and differences among the four focus countries and other Sub-Saharan nations.

The report identifies paths to improving adolescents' transition to adulthood, with a focus on the major societal institutions that already influence young people or from which adolescents say they want more support: schools, the health care system, the mass media, families and communities. The report also identifies several subsets of adolescents who are underserved or outside the reach of these major institutions. All young people need access to sexual and reproductive health information and services. However, some groups of adolescents (such as married young women or rural youth) face elevated levels of risk and need. The interventions used to address these needs must respond effectively to the diverse contexts of adolescents' lives.

Among the key similarities that the four countries share—and that interventions must take into account—is that poverty is a defining factor in the lives of many young people: Significant proportions of the general population live on less than US\$1 a day (e.g., 45% in Ghana, 42% in Malawi). In addition, most young people live in rural areas, and except in Burkina Faso, the majority of very young adolescents are in school.¹¹ Family and religion are important to the region's youth, and while most adolescents live with a biological parent, at least 19% of 12–14-year-olds do not.¹²

There is good cause to be concerned about the sexual and reproductive health of adolescents

Recent estimates indicate that the prevalence of HIV in Sub-Saharan Africa among 15–24-year-olds is high, and that females in this age-group are much more likely than their male counterparts to be HIV-positive—4% vs. 2% (Figure 1.1).¹³ The four countries featured in this report span the range of HIV prevalence in Sub-Saharan

*Individual reports with more detailed evidence from each country are available at <www.gutmacher.org/programs/PNG-Africa.php>.

Africa: Malawi is among the countries with the highest HIV prevalence in the region, Burkina Faso and Ghana are among those with a relatively low HIV prevalence, and Uganda falls near the middle. An estimated 10% of women aged 15–24 in Malawi are infected with HIV, compared with 5% in Uganda and 1% in Ghana and Burkina Faso.* Among young men in the same age-group, the estimated HIV prevalence rates are substantially lower: 3% in Malawi, 2% in Uganda and less than 1% in Burkina Faso and Ghana.¹¹

Because of the devastating impact that AIDS has had in Sub-Saharan Africa, HIV is commonly viewed as the region's overriding reproductive health issue, even in countries where the prevalence of the virus is low. For this reason, HIV can sometimes overshadow efforts to address other critical reproductive health issues. However, addressing the threat posed by HIV can be a useful starting point for addressing broader reproductive health matters. Given that the transmission of HIV in Sub-Saharan Africa occurs predominantly through heterosexual intercourse, HIV prevention programs should be integrated with efforts to address another important reproductive health challenge faced by the region's adolescents—unwanted pregnancy. Pregnancy-related complications are the leading cause of death worldwide among young women aged 15–19.^{14(p.11)}

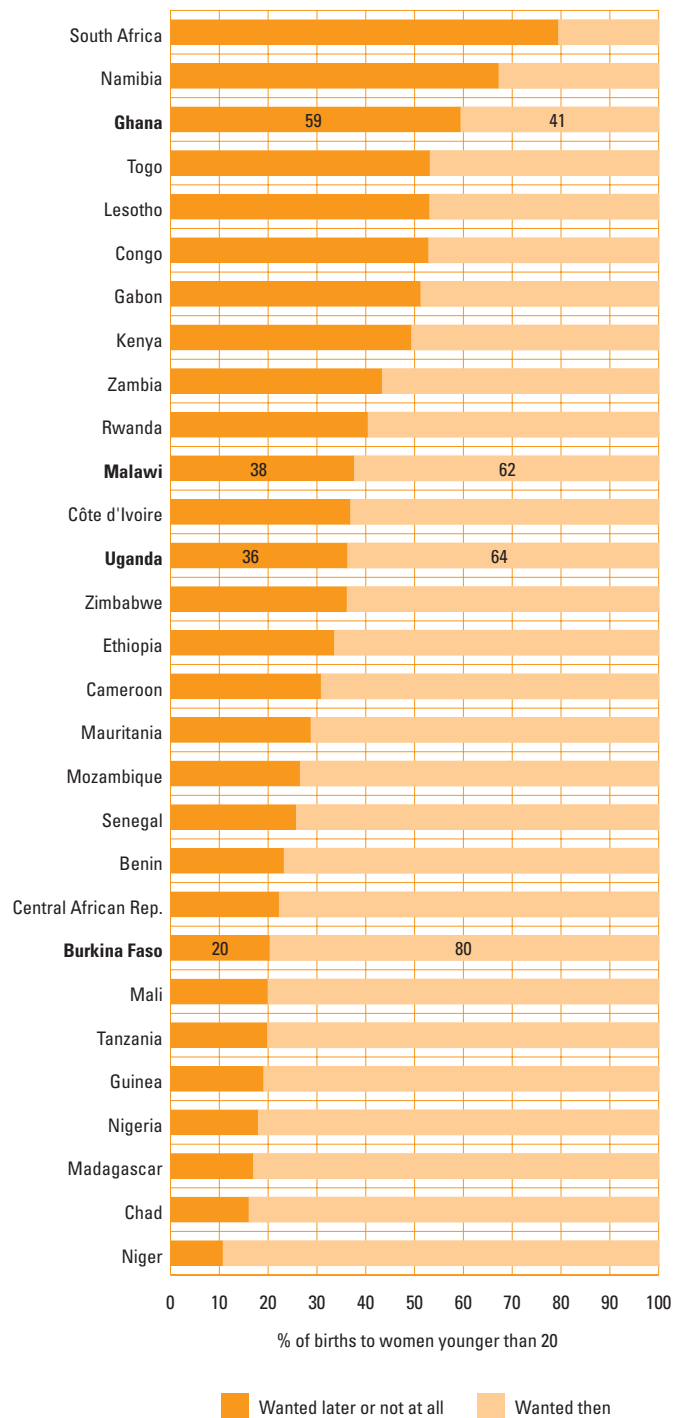
Women, obviously, bear most of the burden of the consequences of unwanted pregnancy and unwanted childbearing. The proportion of adolescent women's births that are unwanted in these four countries varies widely and, as with HIV prevalence, represents the range throughout the region. Demographic and Health Survey data for 29 African countries show that a substantial fraction of births to adolescent mothers in the region are unintended—either wanted later or not wanted at all (Figure 1.2).¹¹ For example, in Ghana, almost three in five births to adolescent mothers (59%) are unintended, and more than a third are unintended in Malawi (38%) and Uganda (36%). Even in Burkina Faso—where educational opportunities are much more limited and young women frequently marry at an early age—one in five births (20%) to adolescent mothers are wanted later or are not wanted at all.

In addition to childbearing that comes too soon or too often, many unintended pregnancies end in abortion—an even more stark indication of adolescents' need for pregnancy prevention. Among all pregnancies in Sub-Saharan Africa experienced by 15–19-year-olds, about a third are unintended (Figure 1.3, page 10), ending in either births

*These estimates are based in part on antenatal surveillance site data. Population-based HIV testing from surveys can provide nationally representative estimates of prevalence; however, for some countries, differential non-response rates or the exclusion of high-risk populations from household-based samples may bias estimates downward.

FIGURE 1.2

Many births to mothers younger than 20 are wanted either later or not at all.



Note Data are based on births in the three years preceding the most recent Demographic and Health Survey.
Source Reference 11.

(22%) or abortions (13%).* Given that the availability of safe and legal pregnancy termination is very limited in almost all of Sub-Saharan Africa,¹⁵ adolescents who want an abortion often must resort to unsafe procedures whose health consequences may linger well into adulthood and affect a young woman's ability to have children in the future. Moreover, an estimated 12% of all maternal deaths in Africa are due to unsafe abortion.¹⁶ Taken together, these statistics illustrate the urgent need to prevent unwanted pregnancy among adolescents and to provide safe means of addressing unwanted pregnancy when it does occur.

The potential for meeting adolescents' needs is great

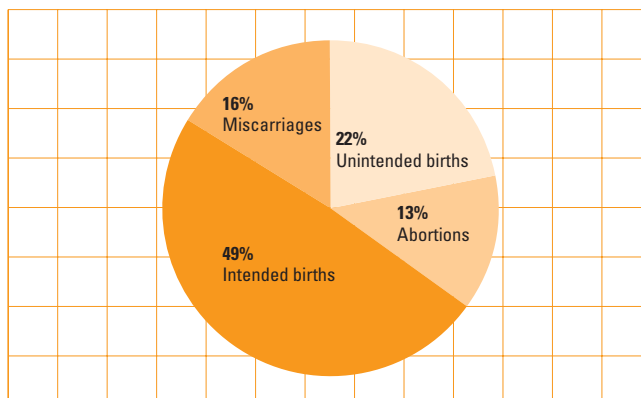
Despite the widespread need for increased efforts to prevent HIV transmission and unwanted pregnancy, many factors point to future success. As this report will show, adolescents understand the importance of having accurate information and services that meet their needs. In addition, they clearly express their preferences and the difficulties they face, most have some knowledge about ways to avoid HIV and unwanted pregnancy, and many have supportive connections to school, family and friends—all of which bode well for efforts to improve adolescents' sexual and reproductive health. Moreover, the arrival of antiretroviral therapy has improved the outlook for HIV prevention and AIDS management. (The persons who need these drugs, however, do not always have access to them[†]—a situation that will require increased efforts to remedy.) In addition, governments are increasingly

*To calculate the distribution of pregnancies, we first obtained an estimate of the number of 15–19-year-olds in Sub-Saharan Africa in 2007 (sources: references 106–107). We then calculated the number of births in this population, using the weighted, age-specific fertility rate for 15–19-year-olds, obtained from the 22 countries in which Demographic and Health Surveys were conducted in 1999–2005. The proportion of births in Sub-Saharan Africa that were unintended—either mistimed or unwanted—was estimated as the weighted average of the proportion of unplanned births in these 22 countries (reference 108); this proportion, in turn, was applied to the number of adolescent births in the region to obtain the number of unintended births. The number of abortions was calculated by applying the estimated abortion rate among adolescents in 2000 (source: reference 42) to the regional population of adolescents in 2007 (we assumed that the abortion rate was similar in both years). The number of unplanned births was combined with the number of abortions to obtain the total number of unintended pregnancies in 2007. The prevalence of spontaneous abortions (miscarriages) was estimated as 20% of live births plus 10% of induced abortions (source: reference 109). Information on the wantedness of pregnancies ending in spontaneous abortions is lacking; therefore, we show miscarriages as a separate category, not split by intention status. The total number of pregnancies is the sum of abortions, births and miscarriages.

[†]For example, it is estimated that in 2006, only 16% of people in Ghana who needed antiretroviral medications received them; the comparable figures for Burkina Faso, Uganda and Malawi, though higher, are only 39–43% (source: World Health Organization [WHO], Joint United Nations Programme on HIV/AIDS [UNAIDS] and United Nations Children's Fund [UNICEF], *Towards Universal Access: Scaling Up Priority HIV/AIDS Interventions in the Health Sector*, Geneva: WHO, UNAIDS and UNICEF, 2007).

FIGURE 1.3

About one in three adolescent pregnancies in Sub-Saharan Africa are unintended and end in either unintended births or abortions.



7.9 million pregnancies among 15–19-year-olds, 2007

Sources See footnote* below for methodology and sources.

recognizing that adolescents have particular needs and formulating appropriate policies. What is needed now is a concerted effort to implement these policies.

The rest of this report is organized as follows. Chapter 2 provides a detailed overview of adolescent sexual and reproductive health attitudes, behaviors and needs in the four countries. The next three chapters focus on the social institutions that have the potential to improve adolescents' sexual and reproductive health: Chapter 3 examines the school system and its role in providing information on sexual and reproductive health; Chapter 4 highlights the importance of the health care system for preventing HIV, other STIs and pregnancy in adolescents; and Chapter 5 assesses the roles of the mass media, family and community in adolescents' lives. Finally, implications and recommendations for programs and policies are discussed in Chapter 6.

Data Sources

NATIONAL SURVEYS

The 2004 National Surveys of Adolescents, conducted among 12–19-year-old females and males in Burkina Faso, Ghana, Malawi and Uganda, were designed to investigate a wide range of issues related to the sexual and reproductive health of adolescents, especially the prevention of HIV, unplanned pregnancy and early pregnancy. The surveys were conducted by the Guttmacher Institute in collaboration with Macro International and with in-country survey organizations: the Institut National de la Statistique et de la Démographie in Burkina Faso; the Institute of Statistical, Social and Economic Research, University of Ghana; Malawi's National Statistical Office; and the Uganda Bureau of Statistics.

The surveys used a two-stage design. First, enumeration areas were systematically selected in each country; next, households within those enumeration areas were systematically selected from a household listing. All 12–19-year-olds who were de facto residents of the sampled households (i.e., they had spent the night prior to the survey in the household) were eligible for inclusion in the survey. Consent from a parent or caregiver was obtained for adolescents 17 or younger before the eligible adolescent was approached to participate. Once the parent or caregiver gave consent, separate informed consent was sought from the underage adolescent. For adolescents aged 18–19, consent was obtained directly. The final sample sizes were 5,950 in Burkina Faso, 4,252 in Ghana, 4,012 in Malawi and 5,065 in Uganda. The overall response rates among adolescents were 95% in Burkina Faso, 89% in Ghana and Malawi, and 87% in Uganda.^{1–4} The data are available for public use for research purposes; details about the survey, as well as copies of the questionnaires, are available at <www.guttmacher.org/pubs/PNG-data.html>.

FOCUS GROUP DISCUSSIONS

Fifty-five focus group discussions (16 each in Burkina Faso and Ghana, 11 in Malawi and 12 in Uganda) with 14–19-year-olds were conducted in 2003 to explore how young people in the four countries view sexual and reproductive health issues, such as abstinence, condom use and STIs, and to examine what they think about sources of sexual and reproductive health information and services. Findings from the discussions were also used in revising the adolescent survey questionnaire (e.g., in developing detailed questions about sexual behaviors and partner characteristics, and country-specific questions about how pregnancy occurs). Participants were recruited from both urban and rural areas, and they included males and females as well as in-school and out-of-school adolescents. Each focus group discussion had 8–12 participants and lasted an average of 2–2.5 hours. The discussions were taped, transcribed and translated from local languages into English or, in the

case of Burkina Faso, French.^{5(p.13)} Analyses of the discussions from the four countries have been published.⁵ Transcripts may be requested for research purposes at <www.guttmacher.org/pubs/PNG-data.html>.

IN-DEPTH INTERVIEWS WITH ADOLESCENTS

In 2003, some 406 in-depth interviews (about 102 in each country) were conducted with young people aged 12–19 to examine the context of and motivations for adolescents' behaviors—issues that are difficult to capture in a survey. As with the focus groups, both urban and rural, male and female, and in-school and out-of-school adolescents were recruited. The interviews also included a subset of adolescents who were selected because they faced particularly difficult circumstances, such as youth who worked or who lived on the streets. Interviews were taped, transcribed and translated from local languages into English or, in the case of Burkina Faso, French. Analyses of the interviews in each country were published in separate *Occasional Reports* that also contain a more detailed explanation of the methodology in each country and the questions asked.^{6–9}

IN-DEPTH INTERVIEWS WITH ADULTS

In 2005, a total of 240 in-depth interviews (60 in each country) were conducted with key adults in adolescents' lives to provide a better understanding of how adults perceive their roles and responsibilities regarding adolescent sexual and reproductive health. The adults included parents, community leaders, teachers and health care providers; participants were selected from both urban and rural areas. Interviews were taped, transcribed and translated from local languages into English or, in the case of Burkina Faso, French. Findings from Burkina Faso have been published;¹⁰ results of the interviews from Ghana, Malawi and Uganda will be published in forthcoming reports.

OTHER SOURCES

Reviews of research on adolescent sexual and reproductive health in each country were published in 2004.^{11–14} Information from these reviews are included for context in the current report. In addition, data from other surveys, such as Demographic and Health Surveys, are presented so that the results from the four focus countries can be understood in the context of Sub-Saharan Africa as a whole. Finally, qualitative research findings from an annotated bibliography of studies in the region, published in 2003, have been integrated into the present text.¹⁵



Adolescents Have Important Sexual and Reproductive Health Needs

Adolescence is a time of intense transitions in many aspects of a young person's life, not the least of which are the onset of puberty and the initiation of sexual activity. Although the timing and circumstances vary widely, most individuals in Sub-Saharan Africa begin having sexual intercourse during adolescence, and for better or worse, the consequences can be both immediate and lasting. Understanding the context of adolescents' sexual activity can help identify their sexual and reproductive health needs and improve programs to address those needs.

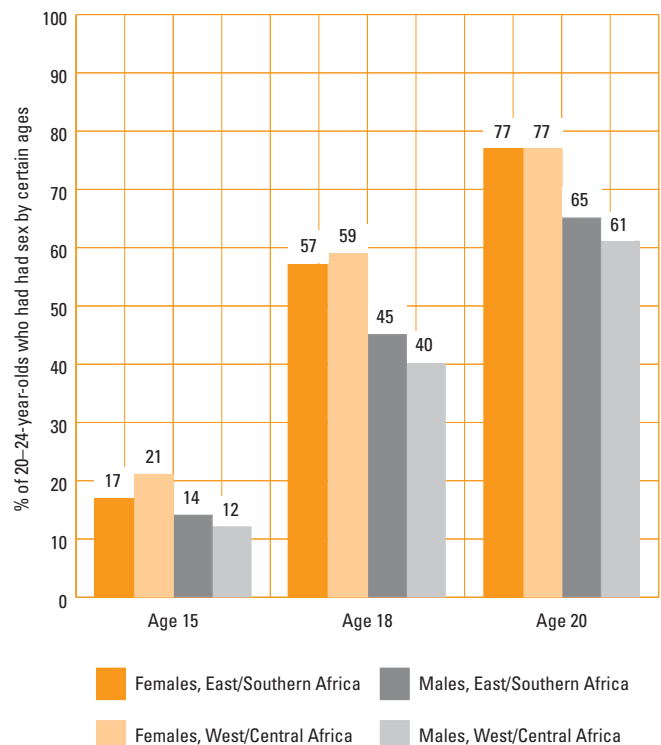
Most teenagers are sexually active, and many have older or multiple partners

The majority of young people in Sub-Saharan Africa have sexual intercourse for the first time before age 20. Young women generally have sex earlier than men do: Across subregions, 77% have had intercourse by their 20th birthday, compared with 61–65% of young men (Figure 2.1).⁵ The difference between females and males is evident earlier in adolescence as well: Some 57–59% of females have had sex by age 18, compared with 40–45% of males.

In most of Sub-Saharan Africa, the average age at first sex among adolescents has either remained stable over time or, in some instances, risen. Nonetheless, in many countries, adolescents' first sexual experiences are increasingly occurring before marriage.¹⁷ The reasons vary. In some countries, the age at which young people first have sex has not changed, but the age at which they marry has increased, so sexual debut now occurs before marriage. In other countries, the age at first marriage has not changed, but increasing proportions of adolescents are having sex before marriage.¹⁷

FIGURE 2.1

Women are more likely than men to have sex during adolescence.



Source Reference 5.

Although female adolescents are more likely than their male counterparts to have sex, males are more likely to have premarital sex, because they generally marry at a later age than females do. In the four countries that are the focus of this report, only a negligible proportion of males aged 15–19 are married or in a union (1–2%).¹² This is not to say, however, that premarital sex is uncommon for women. The proportion of young women who have had premarital sex rises considerably after age 14 (Figure 2.2).¹⁸ The 2004 national surveys reveal that at least one-third of 19-year-old females have had premarital sex: 34% in Burkina Faso, 35% in Malawi, 42% in Ghana and 52% in Uganda.

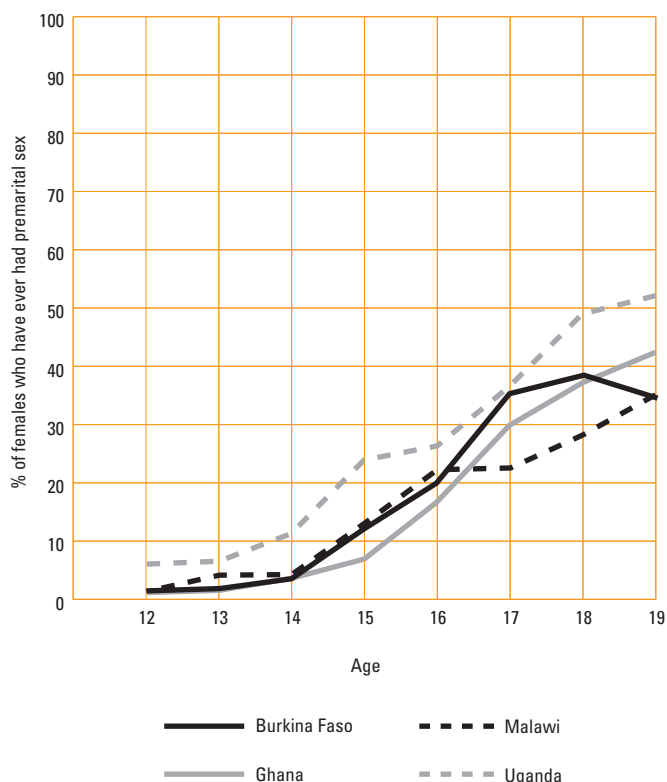
Several other aspects of adolescent sex also have important implications for sexual and reproductive health. The age difference between adolescents and their sexual partners, the number of sexual partners that adolescents have had and the context of their relationships—nonmarital or within a marriage or cohabiting union—all make a difference in the risks that adolescents face, and in how their needs should be addressed. For example, adolescents are at increased risk for HIV infection if they have multiple partners (because the greater the number of partners, the greater the odds that one of them has the virus) or substantially older partners (because older partners have had more time and opportunities to contract HIV).^{19,20}

In the four focus countries, between 10% (in Ghana) and 38% (in Malawi) of all males aged 15–19 have had sex in the past 12 months (Table 2.1, page 14).^{7–10,18,21} Of those, 17–26% have had two or more partners in the past year, and at least one in 10 have had a recent sex partner who was a casual acquaintance. However, most sexually active young men have had only one partner (usually a girlfriend) and have sex less than once a month. Young women report having fewer sex partners than young men do (e.g., only 6–7% of sexually active 15–19-year-old females have had two or more partners in the past 12 months²¹). But substantially higher proportions of females than of males have had older sexual partners—in three of the four focus countries, more than 40% say that their last partner was five or more years their senior, compared with fewer than 1% of males.²¹

In terms of the type of relationship, young men are generally more likely than young women to have recently had sex outside of marriage or a union. For example, in the four countries, 15–17% of females aged 15–19 have had sex in the past 12 months with a noncohabiting partner in a nonmarital relationship; this proportion is higher for males in Burkina Faso, Malawi and Uganda (25–36%), although lower in Ghana (10%). However, in Burkina Faso, Malawi and Uganda, 14–21% of women aged 15–19 have been sexually active in the past 12 months within marriage or a cohabiting union, compared with no more than 2% of men that age.²¹

FIGURE 2.2

The proportion of females who have had premarital sex increases considerably after age 14.



Source Reference 18.

Adolescents usually become sexually active by choice, but unwanted sex is not uncommon

Men and women have vastly different first sexual experiences. The most common reason that sexually experienced 15–19-year-olds spontaneously mention for having first had sex is that they felt like it (Figure 2.3, page 15).^{7–10}

For example, one young woman offered the following view:

When you enter into a relationship with a boy, I think it is not all the time you will say no to his request for sex. Once [in] a while, you should satisfy yourselves.

—Female focus group participant, Ghana²²

This reason, however, is cited substantially more often by males (72–89%) than by females (45–55%). Young women, on the other hand, are far more likely than young men to say that their first sexual experience occurred because they had married.

Yet not all sexual activity is wanted. Other reasons given by adolescents—the influence of friends, expectations of money or gifts, their partner’s insistence or force—

TABLE 2.1

Selected measures of sexual behavior among males aged 15–19

Measure	Burkina Faso	Ghana	Malawi	Uganda
HAD SEX IN THE PAST 12 MONTHS (%)	25	10	38	32
NO. OF PARTNERS IN THE PAST 12 MONTHS (%)*				
1	77	74	83	83
≥2	23	26	18	17
MOST RECENT PARTNER (%)*				
Girlfriend	84	71	82	82
Casual acquaintance	11	23	11	11
Other	5	7	7	7
HAD SEX IN PAST 3 MONTHS (%)*	81	71	68	66
NO. OF TIMES HAD SEX IN THE PAST 3 MONTHS (MEDIAN)†	3	2	2	2

Note Percentages may not total 100% because of rounding.
 *Among those who have had sex in the past 12 months.
 †Among those who have had sex in the past three months.

Sources References 7–10, 18, 21.

suggest a noteworthy level of unwanted sex and sexual coercion among young women. For example, almost one in five females aged 15–19 in Ghana, Malawi and Uganda who have ever had sex report that their first sexual experience occurred through force or at their partner's insistence. In interviews, young women mention four primary reasons why they have unwanted sex: They feel pressured because their partner has given them money or gifts; their partner flatters them, pesters them or threatens to have sex with other partners; they are forced into having sex; and they passively accept unwanted sex (e.g., by treating coercion as normal behavior).²³ One young woman described her experience in these words:

[After he forced me to have sex], he started sending my friend, a girl, [to talk to me], because he knew I was mad at him and did not want to see him again. My friend convinced me that such things happen to every girl, so I should get used [to it]. So I forgave the boy and went back.

—Female, aged 15, Uganda²³

Adolescents rarely mention sexual coercion within marriage or in boyfriend-girlfriend relationships. This is not to say that sexual coercion does not happen within such relationships; rather, there may be significant

barriers to perceiving and reporting the sex as unwanted. For example, young women who experience sexual coercion may lack the legal means to address the situation. Other barriers are cultural: Studies in Africa have found that the dynamics of adolescent sexual relationships are often characterized by gender and age inequality, such that older males make most of the decisions, and by poor communication between partners about sexual matters.²³ Traditional gender norms are often associated with behaviors that increase the risk of violence within relationships, transmission of HIV and, for young women, early, unwanted intercourse and pregnancy.^{24(p.7)}

Coercive sex is inherently risky because the coerced partner does not usually have the option of using contraceptives or of insisting on condom use. In addition, a study in Uganda has shown that young women who experience coercive sex are less likely than other women to subsequently use contraceptives.²⁵ Moreover, young men who coerce or force their partners into having sex have an elevated likelihood of engaging in risky sex behaviors.²⁶ Fostering more equal relationships between males and females is an important aspect of meeting the sexual and reproductive health care needs of adolescents; the inequity in heterosexual relationships often makes it difficult to improve sexual and reproductive health. Ideally, male sexual partners would respect a woman's right and desire to control the timing of sex, and both partners would take responsibility for practicing safer sex.

Interventions that promote communication between sexual partners can build mutual respect. Educating adolescents about the importance of human rights in sexual relationships can instill a higher standard of sexual responsibility in young men and support both partners in practicing safer sex. For example, the Youth Activist Organization in Zambia offers a weeklong Youth Football and Sexual Reproductive Health Camp for boys and their parents. The program, which uses peer educators, integrates sports with education on male responsibility in reproductive health, HIV prevention, family planning and child health.^{27(p.12)}

Helping young women acquire and use negotiation skills can enable them to refuse unwanted sex and to negotiate the use of contraceptives. In addition, services and counseling should be provided to victims of sexual coercion. Health care providers should be trained to identify potential victims and to provide them with counseling and needed services. A strong legal and advocacy environment can hold men accountable for their sexual behavior. For example, an African Youth Alliance program in Ghana partnered with the International Federation of Women Lawyers to conduct a paralegal training project that incorporated sexual and reproductive health and the rights of females into all aspects of the program. Their efforts led to some improvements in the treatment of pending cases and the incorporation of gender issues into national HIV and AIDS policy.²⁸

Poverty is associated with some risky sexual behaviors

Findings from several studies suggest that economic need is a key reason why young women become sexually active or engage in unprotected sexual intercourse.^{29–33} Evidence from the 2004 National Surveys of Adolescents suggests that youth from wealthier homes are less likely than those from poorer homes to engage in risky sexual behavior and more likely to use condoms when sexually active. For example, wealthier young women in Burkina Faso, Ghana and Malawi become sexually active later than their counterparts of lower socioeconomic status. Among males, the association between wealth and timing of first sex is weaker and is statistically significant only in Malawi.³⁴

Wealthier adolescents are also more likely to have used a condom the last time they had sex, but there is no consistent association between wealth and number of partners.³⁴ Another study based on these survey data has shown that sexually active unmarried female adolescents very often receive money or material items in exchange for

sex, yet poorer women are no more likely than wealthier women to do so.³⁵ A separate analysis of Demographic and Health Survey data for adults found that HIV risk behaviors are more common among the poor than among the rich, although in most countries, wealthier adults are at least as likely as poor adults to be infected with HIV, after various risk behaviors are taken into account.³⁶

Very early marriage can increase risks of negative reproductive health outcomes

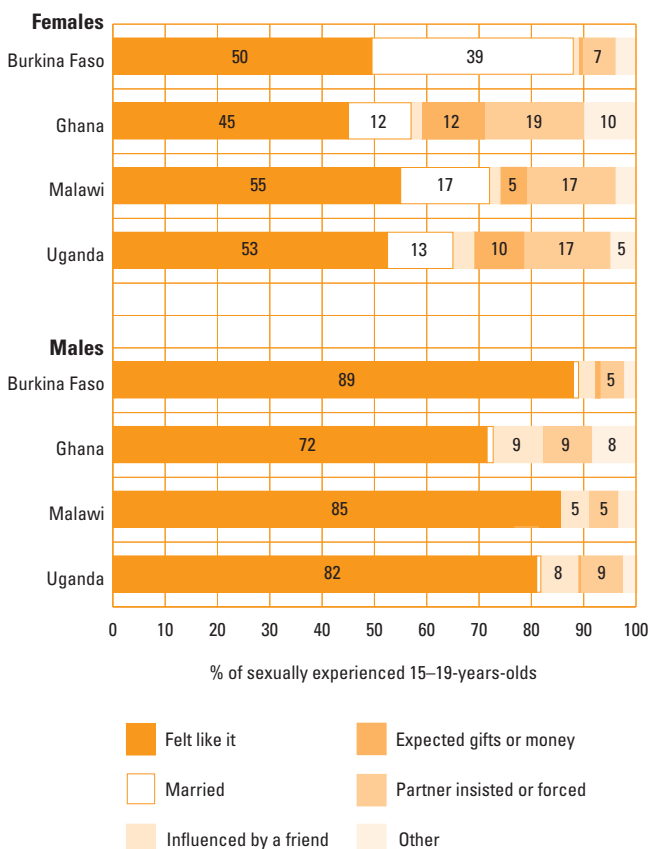
Marriage is generally a decisive transition to adulthood, but the perception that it is always a safe transition is at odds with the reality faced by some female adolescents in Sub-Saharan Africa. Early marriage is still common throughout the region: For example, 37% of females in East and Southern Africa, and 45% in West and Central Africa, marry before age 18.⁵ Women who marry very early may have greater risks for negative outcomes than their sexually active unmarried peers, largely because married women generally have intercourse more frequently than sexually active unmarried women do, and because married women often have unprotected sex because of the pressure to have children. The high proportion of births to young mothers that are wanted later or not at all suggests that young women's own preferences about childbearing are often different from the expectations of their partner, other family members and community.

Married adolescent women face not only high risks of pregnancy-related morbidity and mortality, but also the growing threat of HIV exposure. As noted previously, having multiple or older sexual partners can increase the risk for HIV infection. A study analyzing data from Kenya and Zambia, where married women have higher rates of HIV than their sexually active unmarried peers, suggested that partner characteristics (e.g., the older age of partners of married women), a higher frequency of sex and a limited ability to negotiate condom use may account for the higher risk of HIV among married women.³⁷

The widespread misconception that marriage affords protection against HIV and the cultural sensitivity about targeting HIV prevention interventions to married couples constitute major obstacles to reducing the risk of marital transmission of HIV. Findings from a recent, in-depth anthropological study conducted in Nigeria suggest an innovative approach for addressing the increased HIV risk within marriage in a culturally sensitive way: Design interventions that help reduce people's association between HIV risk and immoral sexual behavior. Thus, instead of focusing on marital infidelity, prevention efforts

FIGURE 2.3

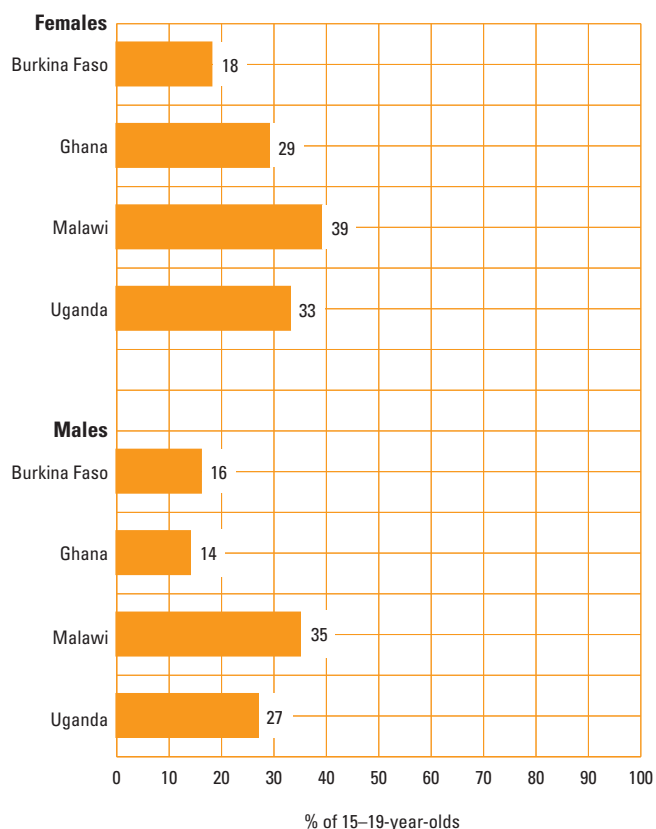
The main reason that most sexually experienced adolescents say they first had sex is that they felt like it, but coercion is not uncommon, especially among females.



Sources: References 7–10.

FIGURE 2.4

Up to four in 10 adolescents report that they have close friends who have tried to end a pregnancy.



Sources References 7–10.

should build upon men’s existing sense of responsibility to their family as a way to motivate those who engage in risky sexual behavior to use protection.³⁸

Once adolescent women marry, they may become more socially isolated, because almost all leave school, and many have restricted mobility and have little access to modern media.^{24(p.23)} As a result, they face barriers to obtaining services and information that could address their needs.

Yet, married women account for the majority of sexually active adolescent females in some countries, so the need to ensure that this important group benefits from program interventions cannot be overstated. A community-based project in Kenya used radio, drama troupes and female mentors to provide support to young married women and to sensitize the community about the benefits of delaying marriage. The project trained community members to present messages about early marriage and to promote voluntary HIV counseling and testing among women who were soon to be married. In addition, prominent local women were trained as mentors to help provide groups of married young women with information and counseling on HIV and reproductive health.^{39(p.4)}

Adolescent childbearing can compromise health and reduce economic opportunities

In much of Sub-Saharan Africa, pregnancy and childbearing entail significant risks to a woman’s health and life. This is particularly true for younger women. Adolescent mothers are twice as likely to die in childbirth as mothers in their 20s; those younger than 15 are five times as likely to die.^{14(p.11)} Adolescent mothers, especially those who give birth before age 16, are also likely to have poorer maternal health care than older mothers with similar characteristics: They begin antenatal care later, make fewer antenatal care visits and are more likely to deliver outside of health facilities or with an unskilled birth attendant.⁴⁰

Comparing the birth histories of older women with those of younger women reveals that the prevalence of very early childbearing has declined in recent decades. In West and Central Africa, 21% of 40–44-year-old women had given birth by age 16, compared with 13% of 20–24-year-olds; in East and Southern Africa, the proportions are 16% and 9%, respectively.^{5(p.517)} Nevertheless, the majority of 20–24-year-old women in Sub-Saharan Africa had had a child by age 20, including 70% of those in East and Southern Africa and 64% of those in West and Central Africa.

These figures are notable because becoming a teenage mother can limit the educational and training opportunities that could enable a woman to have a dependable livelihood. In addition, teenage mothers—especially young, first-time mothers—need help in coping with their own physiological, emotional and economic needs, as well as those of their children and families. Targeted interventions that support young mothers and their partners (for example, with regard to infant feeding and birthspacing) could positively shape subsequent reproductive behaviors and health outcomes.⁵

Abortion is common—and risky—among adolescents in Sub-Saharan Africa

As observed in Chapter 1, a substantial proportion of births to mothers younger than 20 in Sub-Saharan Africa occur earlier than desired or are not wanted at all, and more than one in 10 pregnancies among 15–19-year-olds end in abortion. Moreover, young women are more likely than older women to obtain unsafe abortions and to experience negative health consequences.^{41(pp.32,34)} Of the estimated 4.2 million unsafe abortions in Africa in 2000, one-quarter occurred among 15–19-year-olds.⁴²

Accurate, self-reported data on abortion are notoriously difficult to obtain, given the illegality of the procedure and the social stigma associated with it. However, some evidence suggests that people may know and be willing to report about their close friends’ abortion experiences, because friends generally talk about their unintended pregnancies and seek help in finding an abortion provider.⁴³

The proportion of 15–19-year-olds who report that a close friend has tried to end a pregnancy is quite high (27–39%) among both sexes in Malawi and Uganda and among females in Ghana (Figure 2.4).^{7–10} Even in Burkina Faso, the proportion is 16–18%. Except in Ghana, the proportions are similar for females and males. Although adolescents may overreport the abortion experiences of their close friends, a study in Burkina Faso found that abortion data based on reports about close friends are remarkably close to hospital data on abortions levels.⁴³

Adolescents have a substantial unmet need for contraception

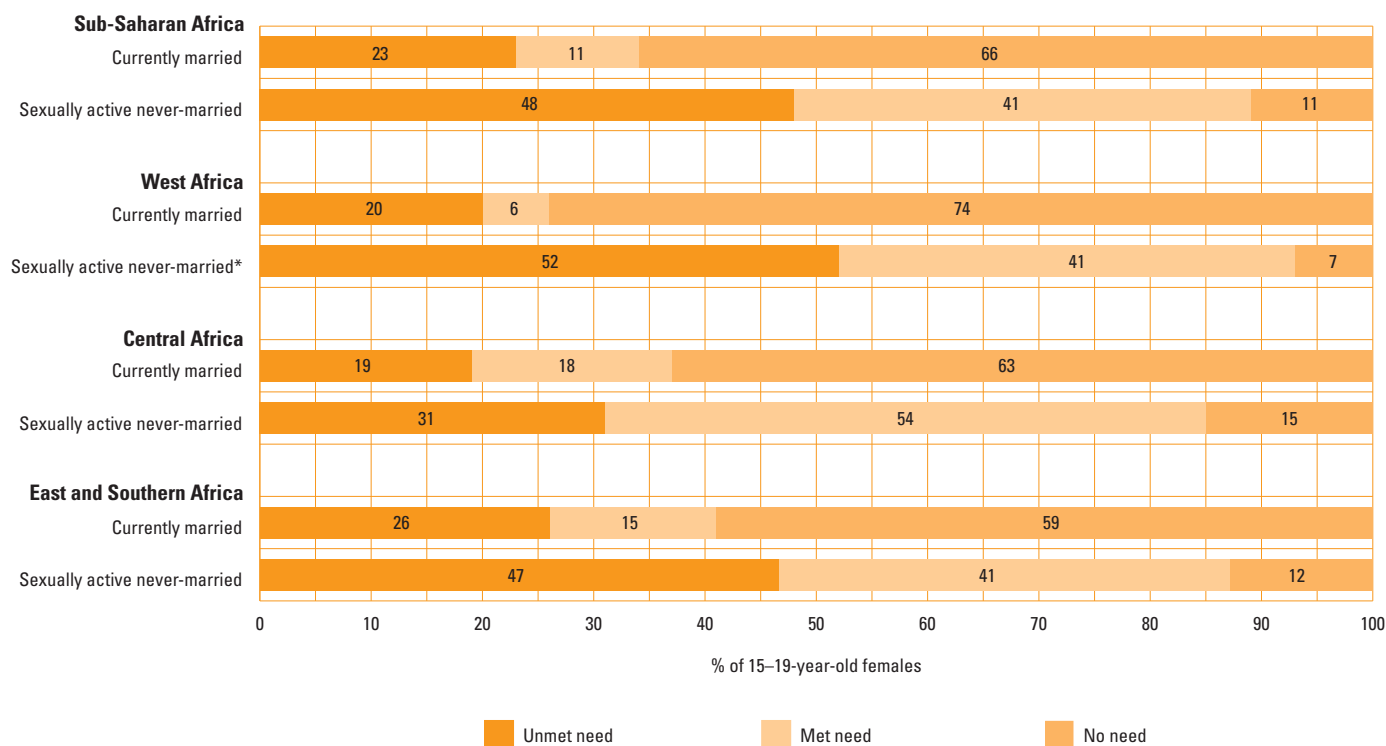
Among 15–19-year-old females in the four countries who have had sex in the past 12 months, reported levels of contraceptive use at last sex are low, ranging from only 29% (in Malawi) to 47% (in Ghana).²¹ Among males, levels are higher—ranging from 42% (in Malawi) to 55% (in Uganda)—perhaps because most males are not married at this age and thus are not trying to have a child.

However, the low levels of contraceptive use do not necessarily mean that adolescents want to have a child.

Substantial proportions of sexually active 15–19-year-old females in Sub-Saharan Africa have an unmet need for contraception—that is, they do not want to have any children within the next two years (or ever) but are not using any method of contraception (Figure 2.5).⁴⁴ Forty-eight percent of sexually active never-married females in Sub-Saharan Africa as a whole—and 31–52% in the various subregions—have an unmet need for contraception. Among married women in this age-group, nearly one in four (19–26% across subregions) have an unmet need for contraception. Addressing this need by motivating adolescents to use contraceptives when they become sexually active and improving access to contraceptive information and to contraceptives themselves can help reduce the number of unwanted pregnancies and abortions among adolescents. Especially for unmarried young women, the motivation to avoid pregnancy before marriage is strongly felt, because they shoulder much of the blame. One young woman stated:

FIGURE 2.5

Levels of unmet need for contraception are higher among sexually active never-married adolescent females than among those who are married.



Notes Women are considered to have an unmet need if they are not using any method of contraception and do not want a child within the next two years or do not want any more children. Sexually active is defined as having had sex in the past three months.

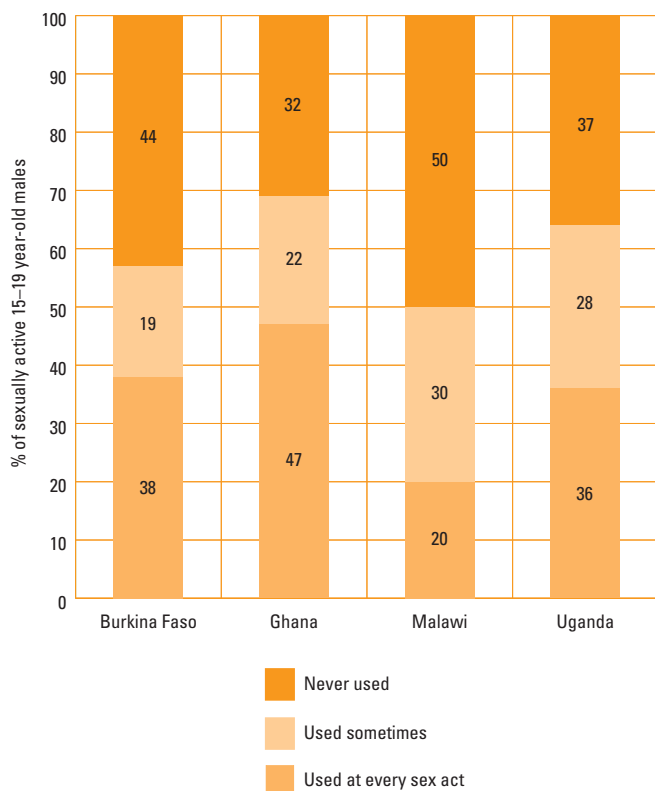
*Senegal and Niger are excluded because the number of cases is small; data from Mauritania are not available.

Source Reference 44.

Young people might be more responsive to condom promotion efforts that emphasize both pregnancy prevention and HIV prevention than to the latter approach alone.

FIGURE 2.6

Fewer than half of sexually active males aged 15–19 used condoms consistently during the past three months.



Note Individuals are considered sexually active if they have had sex at least twice in the past three months.

Source Reference 46.

For young boys, especially in the villages, they are not accused, but it is the girl who is at fault. Even if the boy says that he does not want the girl, no one in the village will treat him as worthless. He is always right, and he worries about nothing. But the girl who is pregnant will be insulted by her parents. The problem always falls on women. Your father and your brothers blame you.

—Female focus group participant, Burkina Faso²²

Fear of pregnancy, more than fear of HIV, motivates adolescents to use the male condom

The male condom merits special attention from program planners, educators and health care personnel because it offers dual protection (i.e., against both pregnancy and HIV). Moreover, the male condom is less expensive than other methods, and it is relatively easy to make widely available. In the four focus countries, about one-quarter or more of 15–19-year-old females who have ever had sex and at least four in 10 of their male counterparts report that they used a male condom the last time they had sex.²¹ Other contraceptive methods used by adolescents in this age-group include rhythm, withdrawal and the pill.^{7(p.73),8(p.74),9(p.78),10(p.73)} Preventing pregnancy (by itself or in conjunction with preventing HIV and other STIs) is the main reason that female adolescents in all four countries give for using condoms, as it is for males in Ghana and Uganda.^{7(p.76),8(p.77),9(p.81),10(p.76)} In focus group discussions, young men tend to consider it the woman’s responsibility to insist on condom use, because she is the one who can become pregnant.^{22(p.29)} One young man’s remarks illustrate this sentiment:

If the male has the desire for sex, he forgets all about [condoms]. It is the girls who have the courage to ask

for safe sex. . . . The girls know that they will be on the receiving end. They will get pregnant or contract a disease. Both the boy and the girl can contract an STI, but the boy cannot become pregnant.

—Male focus group participant, Ghana²²

A recent study of survey data from 13 countries in Sub-Saharan Africa found that the prevalence of condom use in nonmarital relationships has increased. Among sexually active unmarried 15–24-year-old women, the median proportion who used condoms the last time they had sex rose from 19% to 28% between 1993 and 2001; 59% of users were motivated, either wholly or in part, by the desire to prevent pregnancy.⁴⁵

To be effective, condoms must be used consistently and correctly. However, survey data show that fewer than half of 15–19-year-old males who have had sex at least twice in the past three months used condoms every time they had intercourse (Figure 2.6).⁴⁶ The proportion of consistent users ranges from 20% in Malawi to 47% in Ghana. The effectiveness of condoms can also be compromised by incorrect use. Across all four countries, about one in five male adolescents (16–22%) who have had sex in the past three months say that on at least one occasion, they did not put on a condom until after they had started to have sex.^{7(p.98),8(p.107),9(p.105),10(p.100)} Problems during use of condoms (e.g., a condom slipped off or broke during intercourse) are reported less often.

A very common reason for not using male condoms, cited by both sexually active female and male adolescents, is that young people feel safe with their partner.^{7(p.97),8(p.106),9(p.104),10(p.99)} This theme of feeling safe is echoed in a recent review of qualitative studies: Researchers have found that young people assess potential sexual partners as “clean” or “unclean,” and that they associate condom use with a lack of trust in one’s partner.⁴⁷ These reasons are also apparent from focus group discussions with adolescents in the four countries. In addition, one frequent view across all four countries, especially among male adolescents, is a preference for sexual intercourse without a condom:

They have a saying that you cannot buy a sweet and eat it in a wrapper. . . . If you want to show your girlfriend full love, you have to eat her live [have sex without a condom].

—Male focus group participant, Uganda²²

Moreover, at least one in four 15–19-year-old males who have had sex in the past 12 months cite not having condoms as their reason for not using the method the last time they had sex; the proportions range from 24% in Ghana to 37% in Malawi.^{7(p.97),8(p.106),9(p.104),10(p.99)}

Overcoming adolescents’ reluctance to use condoms is challenging. Nevertheless, evidence from the national surveys shows that the desire to avoid pregnancy motivates many adolescents to use condoms, and other research suggests that emphasizing pregnancy

prevention may increase condom use.⁴⁵ Young people might be more responsive to condom promotion efforts that emphasize both pregnancy prevention and HIV prevention than to the latter approach alone. Results from the national surveys also suggest that more detailed information could help adolescents use condoms correctly. In three of the four countries (Malawi is the exception), adolescents who have seen condom demonstrations and received sex education in school are more likely than their peers to know how to use the method correctly.⁴⁶

Ensuring widespread availability of male condoms and promoting their consistent and correct use should continue to be a top priority. However, the male condom is, of course, a male-controlled method, and young women are often unable to negotiate for or insist on its use. Therefore, increasing awareness of and access to female-controlled methods, such as the female condom, should also be an important priority. Like the male condom, this method is especially important because it offers dual protection against pregnancy and STIs. Emergency contraception is an effective method for preventing pregnancy after unprotected sex or contraceptive failure. However, awareness and availability of this method—and of the female condom—are low. Although emergency contraception cannot protect against STIs, improving awareness of, access to and use of this method could reduce rates of unintended pregnancy and abortion.

Fear of pregnancy and STIs is the main reason that adolescents practice abstinence

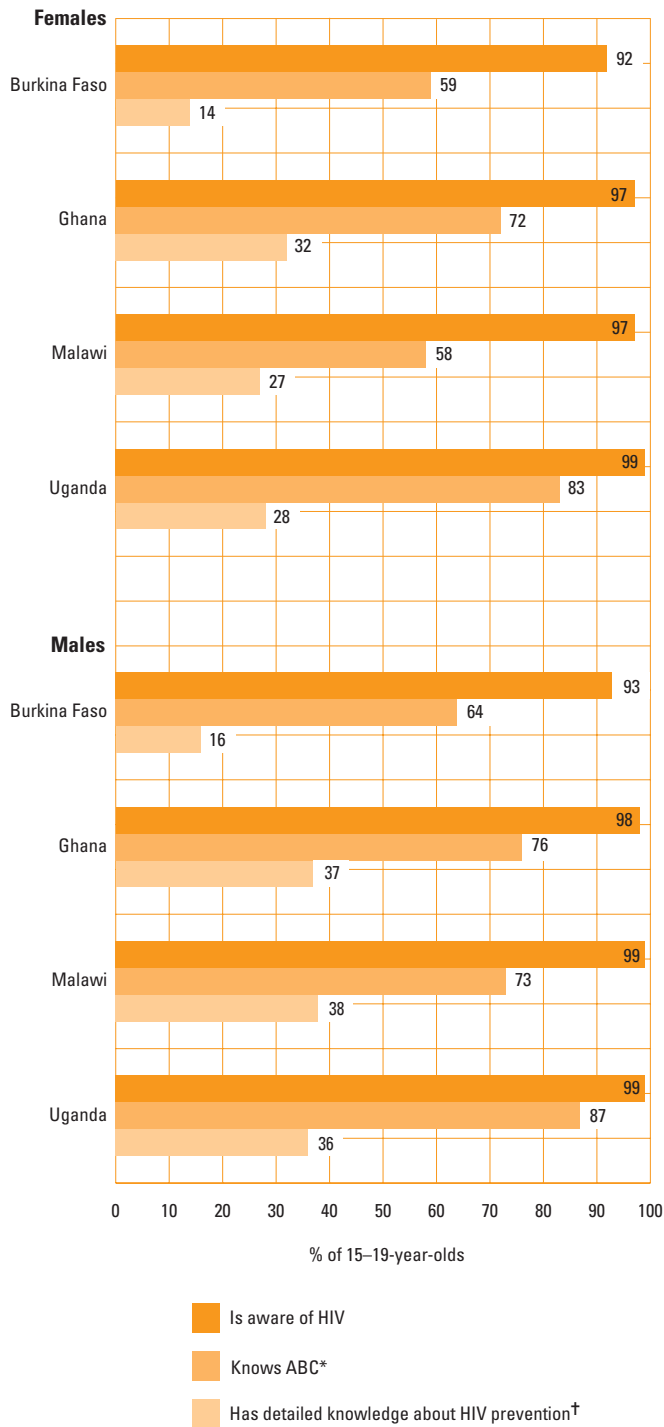
The majority of adolescents in the four countries say that being a virgin until marriage is something that members of both sexes “should do.” However, given the rising age at first marriage across Africa, the difficulty of remaining a virgin until marriage is likely to increase. In fact, in focus group discussions, adolescents contrast this societally prescribed ideal with the acknowledgment that the expectation of abstinence until marriage is often unrealistic. Adolescents tend to talk about abstinence—both the delaying of sexual debut and the avoidance of further sexual activity once they have had sex (so-called secondary abstinence)—in practical terms, as a way to avoid pregnancy and STIs:²²

If you are not following what the young men are telling you, that means you have preserved yourself. If the young men tell you to have sex with them and you refuse, you cannot have AIDS or contract any other STI.

—Female focus group participant, Malawi²²

FIGURE 2.7

Nearly all adolescents are aware of HIV, but most lack detailed knowledge about prevention.



Notes *ABC refers to three HIV prevention strategies: abstain from sex, be faithful to one monogamous partner and use a condom. The percentage shown indicates the proportion of respondents who know of all three strategies in response to direct questions. †Respondent knows that HIV transmission can be reduced by having sex with only one, faithful, uninfected partner and also by using condoms; that a healthy-looking person can have HIV; that a person cannot get HIV from mosquito bites and that a person cannot get HIV from sharing food with someone who is infected.

Sources References 7–10, 49.

For example, among 15–19-year-old males in Ghana who have never had sex, only 27% cite the ideal of waiting until marriage as their main reason for delaying sexual activity. In contrast, 38% say that their main reason is to avoid getting someone pregnant, and 34% say that they are motivated by the desire to avoid contracting HIV or other STIs (respondents could give more than one reason).^{7(p.56)}

Among adolescents in Burkina Faso and Ghana who have had sex, the most common reasons for secondary abstinence are, for females, the fear of getting pregnant and, for males, not having a partner.^{7(p.57),8(p.58)} In Malawi and Uganda, fear of HIV and other STIs is the main reason that both females and males who have ever had sex cite for not being sexually active, although almost two-thirds of female adolescents mention fear of pregnancy as well.^{9(p.61),10(p.58)}

Many adolescents are aware of, and some engage in, anal sex

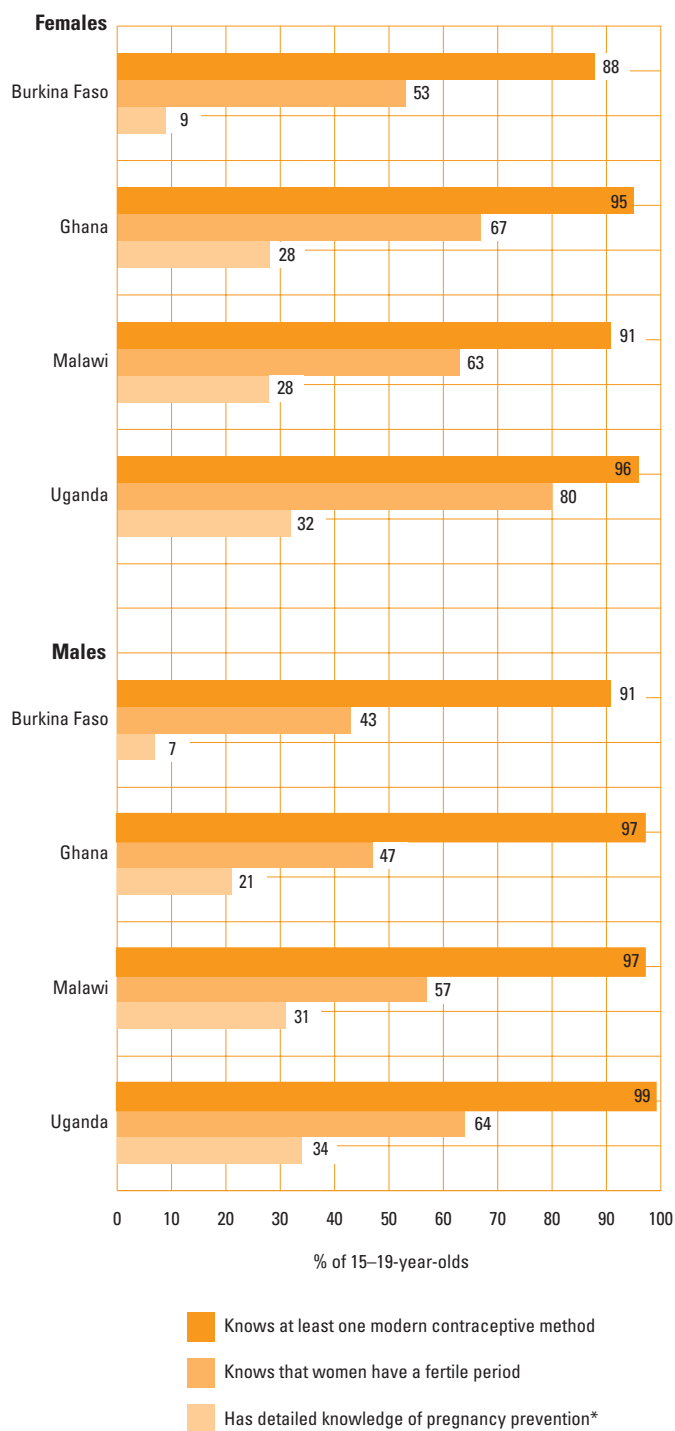
Adolescents may engage in anal sex specifically to avoid the risk of pregnancy.⁴⁸ Evidence from the national surveys shows that among 12–19-year-olds in Ghana, 55% of males and 34% of females have heard about anal sex, as have one in four 12–14-year-old females.^{7(p.52)} Awareness is lower in Uganda and Malawi, but at least one in five adolescents have heard of the practice.^{9(p.68),10(p.54)} In these three countries (data on anal sex were not obtained for Burkina Faso), 10–42% of adolescents who know about the practice say that they have close friends who have had anal sex.^{7,9–10} Thus, anal sex is not unheard of, and a nonnegligible proportion of adolescents likely engage in it, suggesting that the HIV and STI risks associated with it should be addressed in educational efforts.

Adolescent awareness of HIV, AIDS and pregnancy is high, but knowledge is superficial

More than 90% of 15–19-year-olds are aware of HIV and AIDS (Figure 2.7),^{7–10,49} and these high levels of awareness have persisted over time and across countries.⁵⁰ In addition, the majority of adolescents know the three main ways to prevent the sexual transmission of HIV, or the ABC of prevention: abstaining from sex, being in a mutually monogamous relationship with an HIV-negative partner and using condoms if sexually active. However, the proportions are somewhat lower for females (58–83%) than for males (64–87%). In contrast, levels of detailed knowledge, assessed using a composite measure recommended by the World Health Organization,⁵¹ are low: No more than 32% of 15–19-year-old females and 38% of their male counterparts can reject three common misconceptions about HIV (for example, that a person can get the virus from a mosquito bite) and know the three main ways to avoid sexual transmission.

FIGURE 2.8

Adolescents are very aware of modern contraceptives, but lack adequate knowledge about pregnancy prevention.



Note *Respondent knows both items mentioned above and knows that a female can get pregnant the very first time she has sex and that a female can get pregnant if she has sex standing up (in Burkina Faso, this item was replaced with the following: that a female can get pregnant even if she washes herself thoroughly immediately after having sex).

Sources References 7–10, 49.

Awareness of other STIs is lower than awareness of HIV, ranging from 31% of 15–19-year-old females in Burkina Faso to 82% of 15–19-year-old males in Malawi.⁴⁹ Evidence from focus group discussions suggests that adolescents rely primarily on visible signs that someone has an STI, such as an abnormal gait; they do not know that many people with STIs do not have obvious or visible symptoms. These findings are echoed in a study of young people in England, in which most participants expected to see symptoms of STIs.⁵² Given the negative health consequences that STIs other than HIV can have if not treated (e.g., increased susceptibility to HIV, infertility), prevention efforts must do a better job of informing adolescents about them.

Patterns of knowledge about pregnancy prevention are similar to those about HIV: There is widespread awareness of modern contraceptive methods (mainly the condom), less awareness that women have a fertile period and even less knowledge of the inaccuracy of common perceptions about pregnancy, such as the belief that a young woman cannot get pregnant the first time she has sex (Figure 2.8).^{7–10,49} For example, in Ghana, 95% of 15–19-year-old females know at least one modern contraceptive method, but only 67% are aware that a woman is more likely to get pregnant on certain days than on others, and just 28% know both pieces of information and can reject two common misconceptions (that a woman cannot get pregnant the first time she has sex or if she has sex standing up). Similar patterns can be observed among both males and females in all four countries.

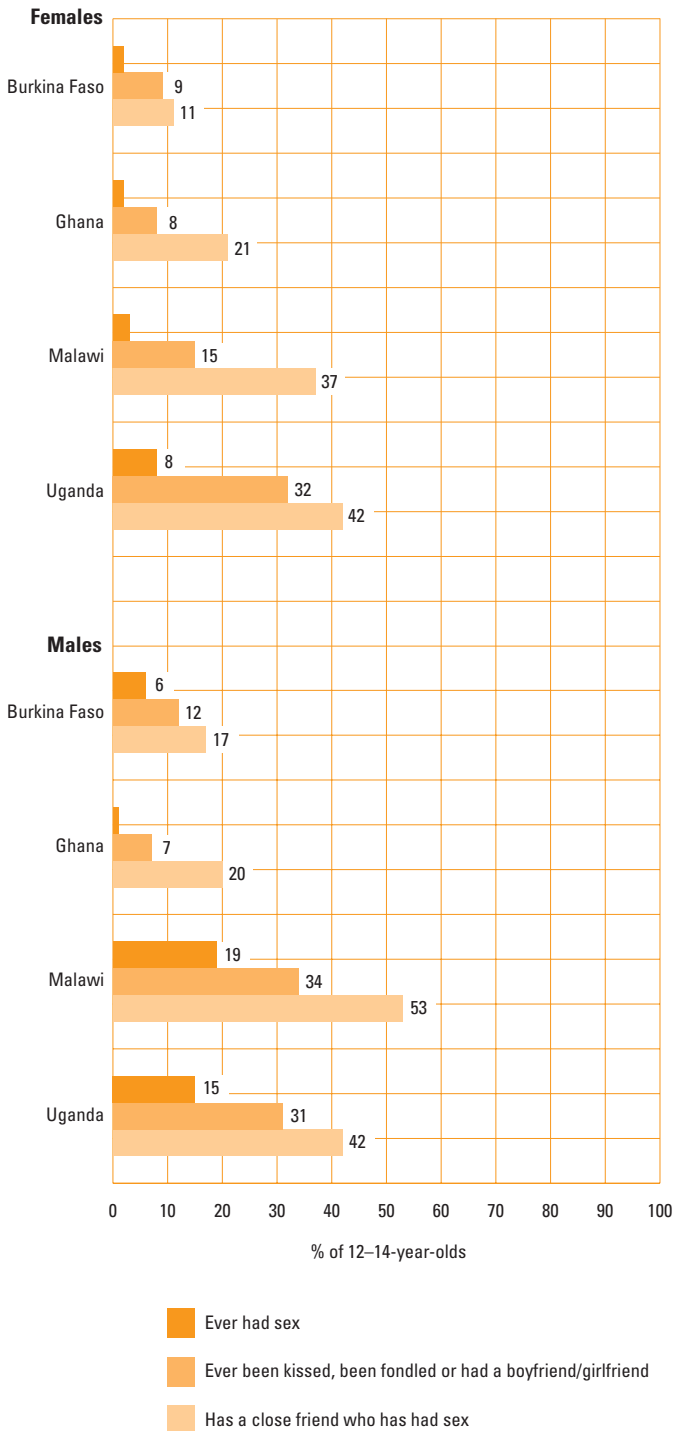
Most very young adolescents have not had sex, but they are not naive about sex

A group for whom sexual and reproductive health knowledge may be particularly important is very young adolescents (those aged 12–14). Worldwide, today’s adolescents enter puberty at an earlier age than previous generations did, presumably because of improvements in nutrition, health and socioeconomic conditions.⁵³ In the four focus countries, many young women aged 12–14 have already experienced their first menstruation, and 50% have done so by age 14.6 in Uganda, 14.8 in Ghana, 15.1 in Malawi and 15.3 in Burkina Faso.^{7(p.54),8(p.55),9(p.58),10(p.55)}

Early adolescence is a time when sexual curiosity and exploration begin. Some 12–14-year-olds in the four focus countries (8–32% of females and 7–34% of males) have already had some form of intimate physical contact (kissing or fondling) or have had a boyfriend or girlfriend (Figure 2.9, page 22).^{21,54} Moreover, although relatively few say they have had sex (no more than 8% of females

FIGURE 2.9

Most very young adolescents have not yet had intercourse, but many have begun sexual activity.



Sources References 21, 54.

and 19% of males), at least one in 10 say that they have a close friend who has had sexual intercourse—the proportions range from 11% of females and 17% of males in Burkina Faso to 42% of females in Uganda and 53% of males in Malawi. Adolescents’ perceptions that their friends are sexually active is one indicator of peer norms of sexual behavior, and is positively associated with adolescents’ own behaviors.⁵¹

Despite their awareness of, and experience with, sexual and reproductive issues, 12–14-year-olds report low levels of knowledge about preventing pregnancy and HIV (Figure 2.10).⁴⁹ Among 12–14-year-olds, levels of detailed pregnancy prevention knowledge range from 2% among males in Burkina Faso to 20% among females in Uganda. Detailed knowledge of HIV and AIDS range from 5% among females in Burkina Faso to 24% among males in Malawi. In general, males in this age-group have slightly more detailed knowledge of HIV and AIDS than females do; however, in three of the four countries (the exception is Burkina Faso), the proportion with detailed knowledge of pregnancy prevention is almost twice as high among females as among males.

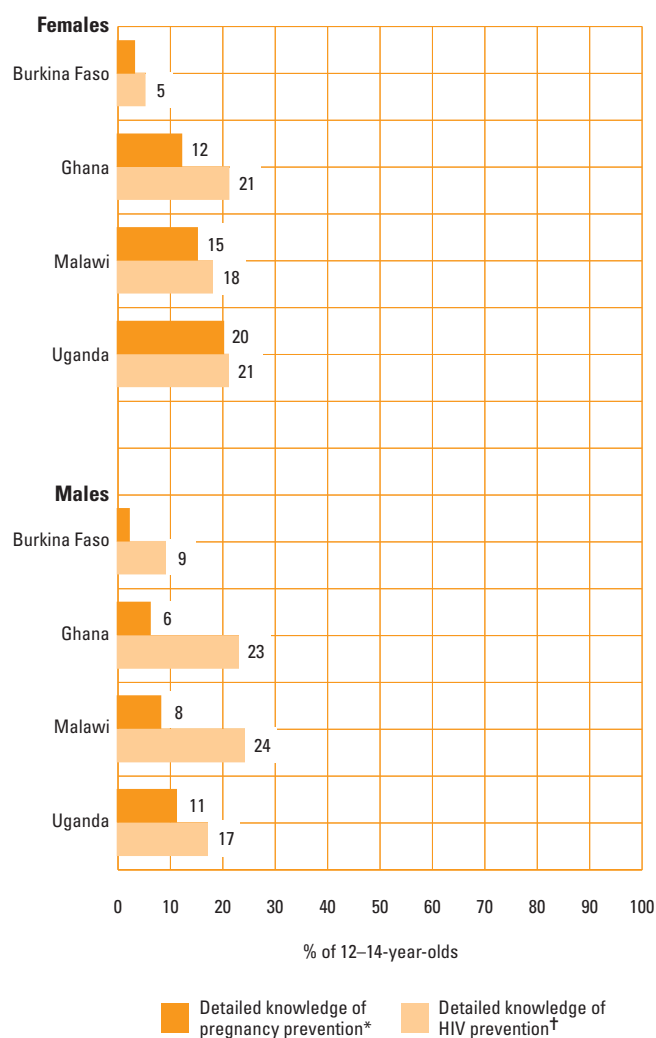
The importance of ensuring that young people have access to information that can protect their health is recognized in the United Nations’ *International Guidelines on HIV and AIDS and Human Rights*. Those guidelines call on countries to take positive steps to “ensure the access of children and adolescents to adequate health information and education, including information related to prevention and care, inside and outside school, which is tailored appropriately to age level and capacity and enables them to deal positively with their sexuality.”⁵⁵(para. 38(g))

Still, public sensitivity about providing sexual and reproductive health information and services to younger adolescents commonly results in the exclusion of this important group of adolescents from sexual and reproductive health programs. Because many are aware of sexual issues and some have already engaged in intimate physical activity, very young adolescents need HIV, STI and pregnancy prevention information that is specific and practical. Moreover, the fact that only small proportions of 12–14-year-olds have had sex is the very reason they are a critical target for interventions that will provide them with the knowledge they need. Promoting healthy sexual behavior in young people before they become sexually active presents fewer challenges than trying to change risky sexual behaviors after the fact. Denying information and services to very young adolescents does not protect them from harm; rather, it increases the likelihood that when sexual activity does occur, it will be unprotected.⁵⁶(p.5)



FIGURE 2.10

Very young adolescents have low levels of detailed knowledge about pregnancy and HIV prevention.



Notes *Respondent knows at least one modern method of contraception and also knows all of the following: that there are certain days when a female is more likely to get pregnant; that a female can get pregnant the very first time she has sex, and that a female can get pregnant if she has sex standing up (in Burkina Faso, this item was replaced by the following: that a female can get pregnant even if she washes herself thoroughly immediately after sex.) †Respondent knows that HIV transmission can be reduced by having sex with only one, faithful, uninfected partner and also by using condoms; that a healthy-looking person can have HIV; that a person cannot get HIV from mosquito bites; and that a person cannot get HIV from sharing food with someone who is infected.

Source Reference 49.

Challenges and opportunities

The fact that many adolescents are having sex and are not adequately protecting themselves from negative health outcomes is well documented in this and other research. Regardless of whether adolescents have had sex, what demands our attention is the certainty that most will do so during their teenage years. Ensuring that adolescents are well equipped to protect themselves against unintended pregnancy, HIV and other STIs when they have sex is an elusive goal, but must remain a top priority.

That most adolescents are aware of pregnancy and STIs (especially HIV) is not new. But the evidence presented in this chapter shows that adolescents lack detailed knowledge on sexual and reproductive health issues, and that high awareness levels should not be mistaken for detailed knowledge.

These findings have important implications for educational efforts. It is often difficult to change behavior, which is why programs geared to reach adolescents before they have sex are so important. However, ensuring that individuals who have already had sex have adequate information is also a critical component of efforts to improve health. There are many avenues—schools, the media, community organizations, parents and other family members—for educating adolescents about sexual and reproductive health issues and for providing them with the services and skills that they need. The potential role of schools will be discussed in the next chapter.



Schools Can Help Adolescents Make Healthy Decisions

Schools are an effective place to offer adolescents sexual and reproductive health-related information and skills. There are several reasons for this. School provides an excellent forum for reaching a large number of adolescents in a structured setting, particularly given that today's adolescents in the region receive more years of education than previous generations did. Moreover, the daily, ongoing format of classroom instruction provides an opportunity for adolescents to practice skills, raise questions and concerns, and obtain comprehensive education on sexual and reproductive health issues over an extended period of time. The evidence presented in this chapter will show that adolescents want sex education in school; furthermore, a review of other research reveals that comprehensive, school-based sex education is effective and does not lead to increased sexual activity among adolescents.^{6,57}

Although factors other than knowledge influence young people's decisions about sexual behavior, schools can at minimum play a leading role in offering comprehensive sexual and reproductive health education to adolescents. Furthermore, formal education in general appears to improve adolescents' ability to make healthy decisions, as it has a positive association with protective behaviors like contraceptive use.⁵

Developing national education policies, providing the relevant funding (for facilities, teacher training, curriculum development, materials and supplies) and implementing education programs are primarily the role of national governments. The degree of commitment at the national level to making school-based sexual and reproductive health education a priority sets the tone for district and local implementation of programs, and it largely determines the quality and access to such education nationwide. Many

countries have incorporated sex education (also known as family life education or life skills education) into school curricula. Of course, the official existence of a curriculum does not necessarily mean that it is implemented fully, that it is of good quality or that all students receive it.

This chapter presents new evidence on adolescents' exposure to sex education in schools, as reported by adolescents themselves. This perspective complements statistical and policy information that may be available from government agencies, such as ministries of education. Adolescents may misreport their experiences, because they do not remember specific details or do not want to discuss the topic. However, official data on the implementation of sex education in schools is largely unavailable, so the information from the national surveys in these four countries provides valuable insights into the teaching of sex education in schools.

Education is a key part of life for many, but not all, adolescents in Sub-Saharan Africa

Although school systems across countries vary, adolescents aged 12–19 in Sub-Saharan Africa are generally completing their final years of primary school or, less often, attending secondary school. In most countries, the majority of very young adolescents attend school. Gender gaps in primary school attainment have narrowed considerably over the past 20 years, and the four countries that are the focus of this report represent the range of experiences across Sub-Saharan Africa.¹¹ In East and Southern Africa, 71% of 10–14-year-old females and 74% of 10–14-year-old males currently attend school.^{5(p.73)} In West and Central Africa, 58% of females and 66% of males in this age-group attend school.^{*5(Table 3.1)}

In three of the focus countries, at least 88% of 12–14-year-olds are enrolled in school. The exception is Burkina Faso, where only 30% of females and 42% of males that age attend school.¹² In general, school attendance falls sharply after age 14. For example, among females in Uganda, 93% of 12–14-year-olds attend school, compared with only 51% of 15–19-year-olds.¹² Older adolescents stop their schooling for a variety of reasons, including the inability to pay school fees or purchase school supplies, marriage, pregnancy, the need to work and satisfaction with their completed level of schooling.^{7(p.33),8(p.37),9(p.37),10(p.35)} Primary school is free in Ghana, Malawi and Uganda, so the main challenge for older adolescents who want to stay in school may be the cost of moving beyond the primary level.[†] Regardless, the fact that so many older adolescents do not attend school underscores the critical need to reach adolescents with detailed sex education at the primary level.[‡]

Education itself may have a protective effect, especially for young women

Formal education itself is positively associated with adolescent sexual and reproductive health. For example, among sexually active 15–19-year-old females in East and Southern Africa, only 7% of those with 0–3 years of education use contraceptives, compared with 18% of those with 4–7 years of education and 29% of those with eight or more years.^{5(p.214)} Similarly, detailed analyses of data from the national surveys consistently find positive associations between being in school and protective behaviors such as delaying first sex, abstaining from sex and using condoms.^{34,46,58–60} Some of these associations appear to be much stronger for female adolescents than for males.

Another comparative study in Sub-Saharan Africa has found strong links between formal education and reproductive outcomes, particularly in females. For example, young women who have higher levels of education are less likely than their peers to have sex, have children or marry at an early age.^{61(p.35)} In contrast, in most of the countries

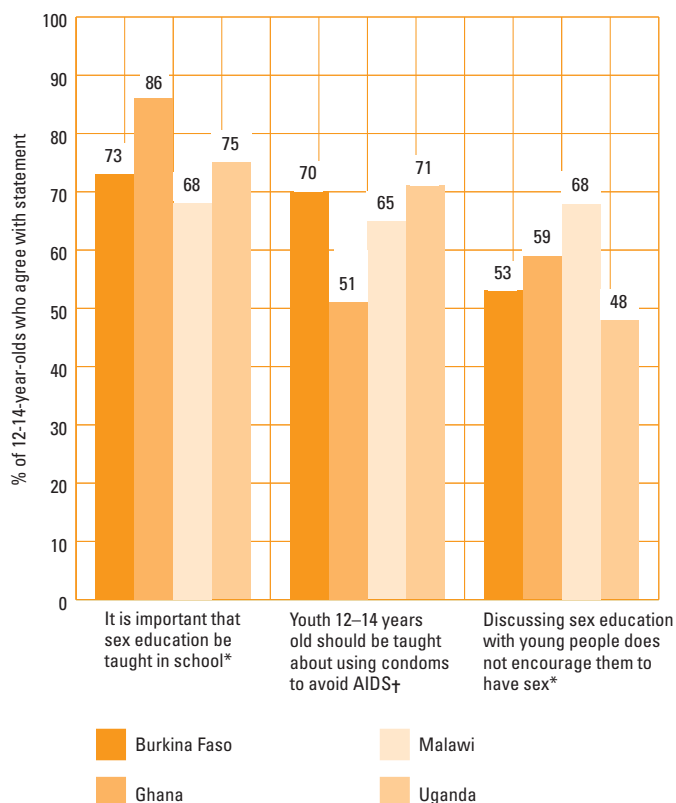
*A brief report on reaching out-of-school youth noted that evidence from the World Bank indicates that primary school enrollment is declining in some countries, and that a study in Zambia suggests that this trend could be partly due to the increasing number of AIDS orphans (source: reference 27).

[†]In Ghana, the challenge is moving beyond junior secondary school (JSS). Basic education consists of nine years of schooling: six years of primary school and three years of JSS. Primary school is designed for children aged 6–11, whereas JSS is for 12–14-year-olds. JSS, like primary school, is free, so the transition for which cost may be a barrier in Ghana is that from JSS to senior secondary school.

[‡]Schools are also potentially important sites for administering cervical cancer vaccines, which to be effective must be administered to preadolescent and adolescent females before they become sexually active. Currently, the Program for Appropriate Technology in Health (PATH), and several other organizations are testing this and other approaches to making the cervical cancer vaccine available (source: PATH, Introducing HPV vaccines in developing countries: overcoming the challenges, 2005, <http://www.path.org/files/RH_hpv_intro.pdf>, accessed Apr. 22, 2007).

FIGURE 3.1

More than two-thirds of very young adolescents support having sex education in school.



Notes *Among those who have ever attended school.
[†]Among those who have heard of AIDS and the male condom.
 Source Reference 18.

studied, males with more education have a reduced likelihood of early marriage but an elevated likelihood of early sex.

The *World Development Report 2007* suggests that the positive associations between formal education and various healthy lifestyle choices can be explained in part by the fact that education gives young people an opportunity to imagine a better future in a way that has some immediate personal value. Moreover, education enables young people to better understand health information.^{3(Box 5.2)}

Adolescents view pregnancy and STIs as barriers to achieving their educational goals

Adolescents care very much about achieving their educational aspirations and earning a living. In-depth interviews with 12–19-year-olds in all four countries highlight that adolescents' most important concerns and worries relate to their desires to complete their schooling and to be able to financially support themselves and their families.^{62–65} Comments such as these were common:

I would like to go back to school to earn the BEPC [Brevet d'Etudes du Premier Cycle, a middle school diploma]. Then I could look for work and take care of my mother; my

child and my sisters.

—Unmarried female with an infant, aged 19, Burkina Faso⁶³

Respondent: At the moment, I am not attending school, and that is my major problem.

Interviewer: Why is schooling your major problem?

Respondent: Because I also want to be somebody who can provide for her [mother and father]. . . . The people around here have been laughing at me because I don't go to school, and it makes me sad.

—Female, aged 13, Ghana⁶⁴

Adolescents also note that pregnancy and STIs could prevent them from achieving their educational goals. Concern over avoiding HIV and unwanted pregnancy is widespread among adolescents. For example, 42% of 15–19-year-old females in Malawi are very worried about getting pregnant, and 55% are very worried about becoming infected with HIV and suffering from AIDS.¹²

Adolescents want sex education in school and do not believe that it encourages promiscuity

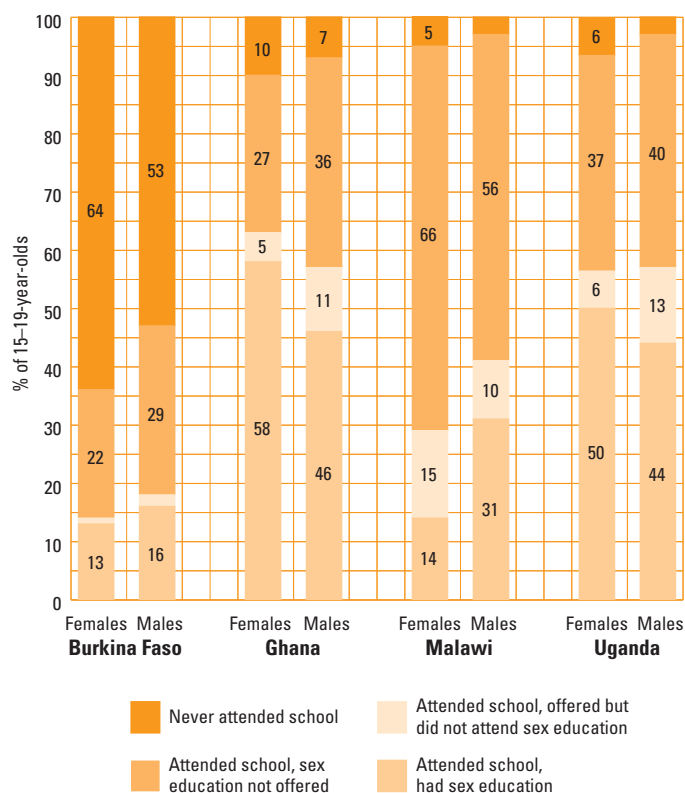
The attitudes of adolescents—even very young ones—toward sex education in school are overwhelmingly positive. Among 12–14-year-olds who have ever attended school, more than two-thirds (68–86%) think that it is important for sex education to be taught in schools; among very young adolescents who have heard about AIDS and male condoms, 51–71% think that 12–14-year-olds should be taught about using condoms to avoid AIDS (Figure 3.1, page 25).¹⁸ Importantly, some 48–68% of 12–14-year-olds who have ever been to school believe that discussing sex education with young people does not encourage them to have sex, a view that is even more pronounced among 15–19-year-olds.^{7(p.118),8(p.121),9(p.121),10(p.121)} Adults often fail to believe this point, even though reviews of school-based programs in both developed and developing countries show that sex education does not lead to increased sexual activity.^{6,57}

School-based sex education is effective

Strong program evidence suggests that comprehensive, school-based sex education has positive effects in both developing and developed countries. A 2006 World Health Organization review of 22 interventions in developing countries found that 16 were associated with increases in protective behaviors (delayed sex, reduced number of sex partners and increased use of contraceptives or condoms).⁶ The review recommended that curricula focus on clear health goals (e.g., prevention of STIs and pregnancy), and on specific behaviors that can help adolescents achieve those goals (e.g., abstinence and contraceptive use). Curricula should give clear messages about the relevant behaviors, discuss situations that might lead to undesirable outcomes and provide suggestions on how to avoid those situations. Programs should also cover risk

FIGURE 3.2

At best, only about half of adolescents receive any school-based sex education.



Sources References 7–10.

and protective factors that affect sexual behavior, incorporate multiple activities, use sound teaching methods that actively involve participants, and employ instructional methods and messages that are appropriate to adolescents' culture, age and sexual experience.⁵⁷

Adults—and not just those who do the teaching—play key roles in school-based sex education programs. Community members', parents' and guardians' acceptance and support are crucial to the success of these programs. Teachers, schools and even governments may be pressured by certain groups or organizations to not teach sex education or to limit the curriculum; in these situations, support from parents and from the broader community is essential. Several qualitative studies show that parents broadly support sex education in schools.^{66,67} However, they have concerns about some components of the teaching, such as condom demonstrations and the provision of condoms to students.⁶⁶

Even when policies are in place, many adolescents do not receive sex education at school

The 2004 Global HIV & AIDS Readiness Survey, which focused on the education sector, found that HIV and AIDS were part of the primary school curriculum in 19 of 20

African countries with a high prevalence of HIV, and that life skills programs had been established at the primary level in 17 of the 20 countries.^{68(pp.41,61)} However, implementation of such programs is slow, and many youth who attend school do not receive life skills education. For example, HIV/AIDS curricula were mandatory at the primary level in only 10 of the 18 Sub-Saharan African countries that were included in a detailed assessment conducted by the International Bureau of Education.^{69(p.37)} Even in places where teaching of the subject is mandatory, more information is needed about the implementation and quality of the programs, the proportion of young people who attend the courses, and whether teachers are adequately trained and equipped to cover the subject.

In the four focus countries, at best about half of 15–19-year-olds receive any school-based sex education (Figure 3.2).⁷⁻¹⁰ Even in Ghana and Uganda, where school attendance is generally high, only 50–58% of female adolescents and 44–46% of male adolescents have received school-based sex education. These adolescents are at an age where they should have had a sex education course in school, if one was offered. In Malawi, 66% of females and 56% of males aged 15–19 report that their current or most recent school (if they are no longer enrolled) does not offer sex education-related talks or classes. About one in three 15–19-year-olds in Ghana and Uganda report that such talks or classes are not offered at their schools. In Burkina Faso, the main challenge is that most 15–19-year-olds (64% of females and 53% of males) have never attended school.

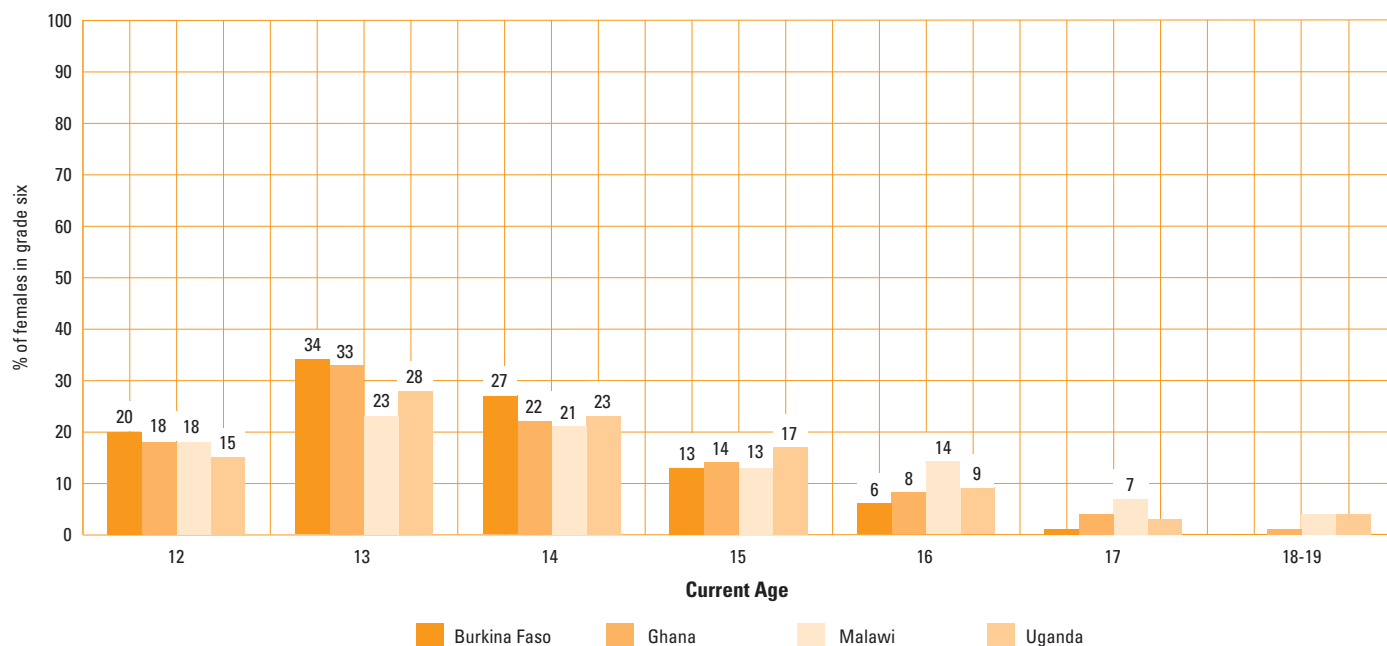
The timing of school-based sex education programs is of great importance. Even when a sex education program is offered at the end of primary school, the age range of participants can be quite wide, because some children start school at an older age than others, repeat grades or return to school after a disruption.

In the four focus countries, most females attending grade six in primary school (a proxy for those at or near the end of primary school) are 12–14 years old—an age at which many are becoming (or are already) sexually mature and would be expected to begin learning about pregnancy and HIV prevention (Figure 3.3).¹⁸ Moreover, at least one in five females are aged 15 or older—20% of those in Burkina Faso, 27% in Ghana, 33% in Uganda and 38% in Malawi. This suggests that it is advisable for school-based programs to start before the end of primary school, in order to increase the opportunity to reach youth before they enter puberty, begin sexual activity or leave school.

The good news is that the majority of adolescents who receive sex education in school do so before they become sexually active. For example, among adolescents in Uganda who have received sex education, 83% of females and 69% of males did so before they first had sex.^{10(p.120)} Among all adolescents in the four focus

FIGURE 3.3

Most young women in grade six are reaching the age of sexual maturity and thus are in need of sex education.



Source Reference 18.

countries who have received sex education, at least half have received information on each of four key topics: how a woman becomes pregnant; contraception, or how to prevent pregnancy; abstinence or saying no to sex; and STIs.* However, 66–92% say that sex education was delivered in a lecture format; far smaller proportions report that their sex education classes included interactive formats (such as small group discussions or role-play),^{7(p.117),8(p.119),9(p.120),10(p.120)} which are considered more effective instructional methods.⁵⁷

Additionally, the lack of detailed knowledge about sexual and reproductive health demonstrated by adolescents (see Chapter 2) suggests that programs need to provide more comprehensive sexual and reproductive health information. In Burkina Faso, the relatively low proportion of young people enrolled in primary school is a clear reason why detailed knowledge about HIV and pregnancy prevention is low.

Interventions are also needed for adolescents who are not in school

Even if fully implemented, school-based sex education programs would fail to reach the substantial number of youth (the majority of them female) who are not in school. Many adolescents never attend school, as is the case in Burkina Faso, and significant numbers leave school after age 14. Adolescents who are not in school fail to benefit from the apparent protective effects of education and the school environment, and the sexual and reproductive health risks for many of them become more pronounced. Out-of-school adolescents have the same need for sexual and reproductive health information and services as other youth, but they also have additional and specific needs defined by their circumstances.

Because out-of-school youth are generally not in structured settings and frequently live in rural areas or are geographically scattered, it is often difficult to provide them with comprehensive sexual and reproductive health information and services. The task is especially challenging because addressing sexual and reproductive health issues is complex; doing so requires sensitivity, focus and regular contact, and this is difficult to achieve in informal settings.^{27(p.9)}

*As a basis for comparison, in 2002, about 90% of 15–19-year-olds (both female and male) in the United States reported having received formal instruction in either birth control or abstinence. However, between 1995 and 2002, the proportion of 15–19-year-olds who had received information about birth control methods declined substantially, from 81% to 66% among males and from 87% to 70% among females (source: Lindberg LD, Santelli JS and Singh S, Changes in formal sex education: 1995–2002, *Perspectives on Sexual and Reproductive Health*, 2006, 38(4):182–189.

†Incidents of teachers' raping schoolgirls have been highlighted in some countries, such as South Africa (source: Jewkes R et al., Rape of girls in South Africa, *Lancet*, 2002, 359(9303):319–320). However, in the four focus countries, fewer than 2% of female adolescents who have ever been coerced into sexual intercourse say that a teacher was the perpetrator (sources: references 7–10).

Adolescents who are not in school constitute a group as diverse as the reasons they do not attend school. As in many developing regions of the world, youth in rural areas of Sub-Saharan Africa generally have less access to schooling than those in urban areas. Young women who marry or become pregnant often leave school and may become socially isolated from other adolescents in their peer group. Street youth, orphans and refugees frequently lack the basic necessities and community support that might enable them to go to school.^{27(p.5)}

A variety of strategies are needed to reach these diverse groups of adolescents. One approach is to use school facilities for after-school life skills programs that include both in-school and out-of-school adolescents, for adult education classes that cover sexual and reproductive health topics, and as dissemination points for sexual and reproductive health information and referrals.^{24(p.34)} For example, in a rural area of Egypt, the Ishraq program was implemented to broaden the opportunities available to females aged 13–15 who were not in school. Using school facilities and youth centers, the young women met four times per week, three hours a day, for a program that fostered language skills, physical activity and life skills. They learned to read and write, learned about their rights and began to envision new roles for themselves in Egyptian society.⁷⁰

Targeted community outreach is the key to effectively reaching the various groups of adolescents who are not in school. Programs must be flexible and must either be designed to allow for short periods of contact or utilize strategies that encourage young people to come back for continued contact. Such approaches include using innovative curriculum design and delivery systems, using approaches that appeal to youth and bringing health information to the places where young people work and spend free time.^{27(p.9)} Specific examples of these strategies are highlighted in Chapters 4 and 5.

Challenges and opportunities

Implementing effective, comprehensive, school-based sex education can be an uphill challenge even in the developed world. Yet in many developing countries, the infrastructure needs of the education sector present additional challenges that must be addressed. Funding for facilities, teacher training, curriculum development and materials often falls far short of need. Even in countries that have invested in school buildings or developed sex education curricula, implementation is problematic if teachers are untrained and classrooms are overcrowded. In addition, for some adolescents, particularly females, the school experience can be traumatic because of sexual violence.[†] Still, the potential for reaching a sizable number of young people with a proven prevention strategy (and one that is supported by both young people and parents) suggests that implementing comprehensive sex education programs is likely to be worth the effort.



Strengthening the Health Care System Will Benefit Adolescents

Strengthening the health care system to better serve adolescents has great potential to increase adolescent utilization of health care services. Adolescents already interact with health care providers, albeit typically for issues other than HIV or pregnancy prevention,* and generally trust them. Moreover, clinics and medical facilities are logical places to integrate HIV, other STI and pregnancy prevention services for adolescents. Unfortunately, the stigma attached to being seen at places that provide sexual and reproductive health care services (because of the implication that one is sexually active) remains a significant barrier to utilization of services, especially for unmarried youth. Still, adolescents say they want sexual and reproductive health information and services from trained health professionals.

Yet in this instance, what adolescents tell us does not capture the magnitude of the challenge of addressing their unmet sexual and reproductive health care needs. Adolescents who need sexual and reproductive health service face many barriers in addition to social stigma, including the cost of services, the need for transportation to service sites and a reliance upon adults for help with both. Compounding these problems, most developing countries have critical infrastructure needs (e.g., inadequate availability of providers and facilities).

National governments generally provide the structure and financing for their country's public health care system

*For example, in all four countries, at least one in five females aged 12–14 and one in three males in that age-group report having received an injection in the past 12 months, and doctors and nurses were the predominant sources for recent injections (source: Biddlecom A, Bankole A and Patterson K, Vaccine for cervical cancer: reaching adolescents in sub-Saharan Africa, *Lancet*, 2006, 367(9519):1299–1300).

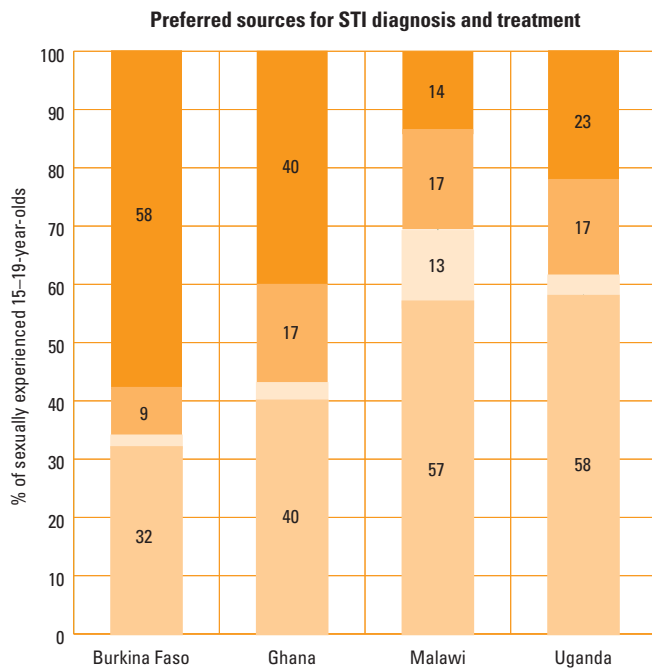
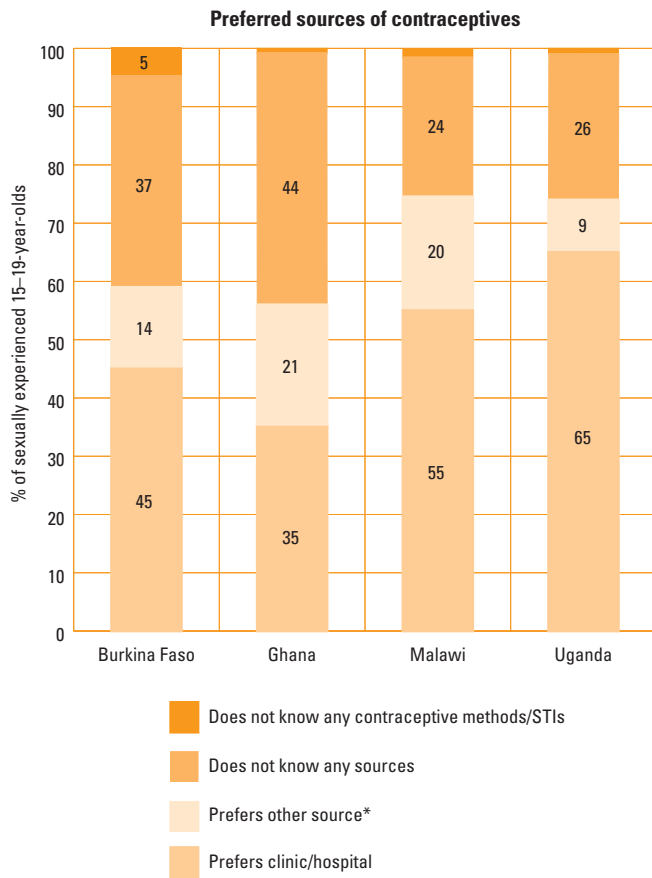
and set policies on sexual and reproductive health care. However, nongovernmental and private health care organizations are essential components of the health care infrastructure and important partners in health care delivery. Levels of commitment and funding from national governments largely determine how resources and supplies are allocated and the pace at which improvements are implemented.

Adolescents trust health care providers as sources for sexual and reproductive health services

Adolescents hold the formal health care system (health centers, clinics and hospitals) in relatively high regard. In all four focus countries, adolescents say that they prefer to receive health care from public clinics and hospitals rather than from other sources, and the majority have positive opinions about key aspects of clinics and hospitals. For example, among sexually active 12–19-year-olds who know of a public clinic or hospital that provides contraceptives or STI treatment, 60% or more view the formal health system positively in terms of confidentiality, physical accessibility, cost and level of respect with which patients are treated.⁷¹ Of course, an expressed preference for public facilities does not necessarily mean that adolescents actually go to public facilities for services. In-depth interviews with adolescents in Ghana, for example, reveal that adolescents with sexual and reproductive health problems (e.g., STI-related symptoms) tend to use a variety of sources, including not only public clinics and hospitals but also drug shops and traditional healers.⁶⁴ Obviously, many factors influence decisions about health care-seeking behavior. Yet considering the trust that young people place in the health care system, efforts to increase adolescent utilization of health care services have a receptive audience.

FIGURE 4.1

Clinics and hospitals are adolescents' preferred sources for contraceptives and STI treatment.



Note *Such as drug shops and traditional healers.
Source Reference 18.

Most adolescents who know a source for contraceptives prefer public facilities

Consistent with adolescents' positive views of clinics and hospitals, these facilities are the preferred source for contraceptives among 15–19-year-olds who have ever had sex—a group for whom these services are most relevant. Specifically, clinics and hospitals are the preferred source for contraceptives among 35% of those in Ghana, 45% in Burkina Faso, 55% in Malawi and 65% in Uganda (Figure 4.1).¹⁸ Most adolescents, especially females, favor public health facilities over private ones.⁷¹ However, some adolescents (9–21% of respondents) report preferences for other sources, such as drug shops. Males are more likely than females to prefer alternate sources,⁷¹ perhaps because male condoms are available at many of these sites, although other factors may also come into play:

Moderator: Why do young people use some of these services [for contraceptives]?

Participant 1: Some prefer quack doctors. This is because they feel shy to go [to the] hospital. Some also feel that hospital officials will reveal their secrets to others.

Participant 2: Those services are also cheaper than the services provided at the hospital.

Participant 3: Some prefer to go to the hospital because that is safe.

—Female focus group participants, Ghana²²

The example of male condoms—the most commonly used contraceptive method among adolescents—illustrates that young people's preferences for obtaining contraceptives at health clinics and hospitals often do not match the reality of where young people actually go. The main sources for male condoms mentioned by 15–19-year-olds who use them are shops and pharmacies; very small proportions of users in this age-group (e.g., 4% of females and 8% of males in Uganda) obtain condoms from a public health clinic or hospital.⁷²

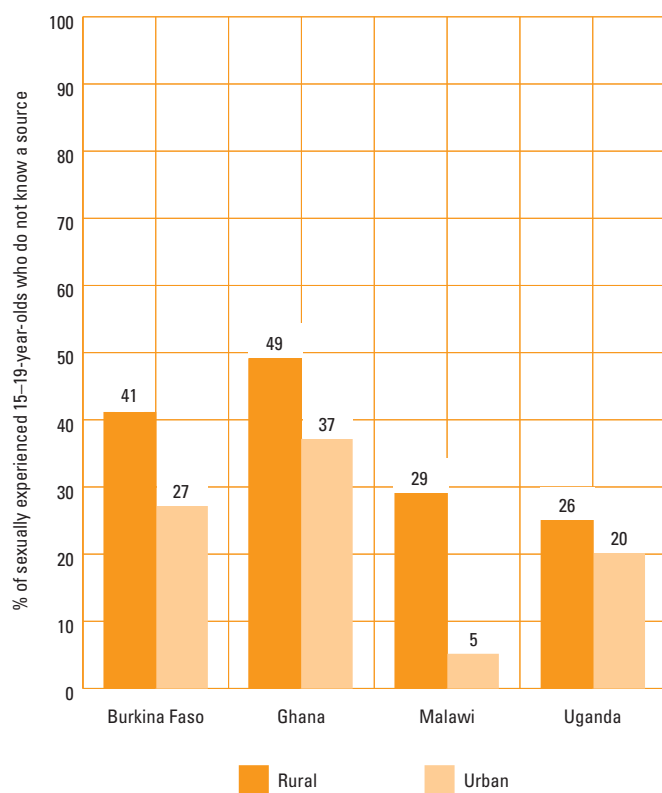
One cause for concern is that at least one in four sexually experienced 15–19-year-olds (the proportion ranges between 24% in Malawi and 44% in Ghana) do not know any source for obtaining contraceptives.¹⁸ This is especially true for rural adolescents: Across the four countries, and particularly in Malawi, rural 15–19-year-olds who have ever had sex are more likely than their urban peers to not know a source for contraceptives (Figure 4.2).¹⁸ The difference can be attributed to the lack of facilities and supply sources in rural areas, as well as to accessibility problems for rural residents (e.g., longer distances to supply sources).

Adolescents' lack of knowledge about STIs is a barrier to obtaining services

Some studies suggest that adolescents prefer to obtain STI treatment from the traditional health system (e.g., traditional healers or herbalists), but findings from the

FIGURE 4.2

Adolescents in rural areas are more likely than their urban peers to not know a source for contraceptives.



Source Reference 18.

2004 surveys show that this is not the case. As they do for contraceptives, adolescents say that clinics and hospitals are their preferred source for STI services; the proportions of sexually experienced 15–19-year-olds citing these facilities range from 32% in Burkina Faso to 58% in Uganda (Figure 4.1).¹⁸

Among sexually active adolescents who acquire an STI or develop at least one of two common STI symptoms (abnormal discharge, genital sores or ulcers), the degree to which they seek treatment varies across countries.⁷¹ When treatment is sought, clinics, hospitals and doctors are the most common source contacted, rather than traditional healers or other types of providers. For example, in Uganda, 9% of sexually active 12–19-year-olds have had an STI or STI symptom and have sought care from a doctor, clinic or hospital; an identical proportion have had an STI or STI symptom but have not sought treatment, and only 2% have sought care from another source, such as a drug shop or traditional healer.⁷¹ Other evidence suggests that adolescents may delay treatment for STIs because they do not perceive the symptoms to be serious or because they first try to self-medicate.^{73(pp.19,22)}

In focus group discussions, some adolescents said they believe that traditional healers and herbalists can successfully treat STIs because the treatment provides fast relief, the services are cheap and the fee can be paid in installments. However, some adolescents perceive traditional healers to be less effective than medical doctors.^{22(pp.36–37)}

As noted in Chapter 2, one of the biggest needs among sexually active adolescents is for basic information about STIs. This need is most evident in Burkina Faso and Ghana, where 58% and 40% of sexually experienced 15–19-year-olds, respectively, do not know of any STIs apart from HIV. Across all four countries, 14–58% have not heard of any STIs other than HIV, and an additional 9–17% do not know where to go for STI-related services even though they have heard of STIs.

Small proportions of adolescents utilize HIV testing services

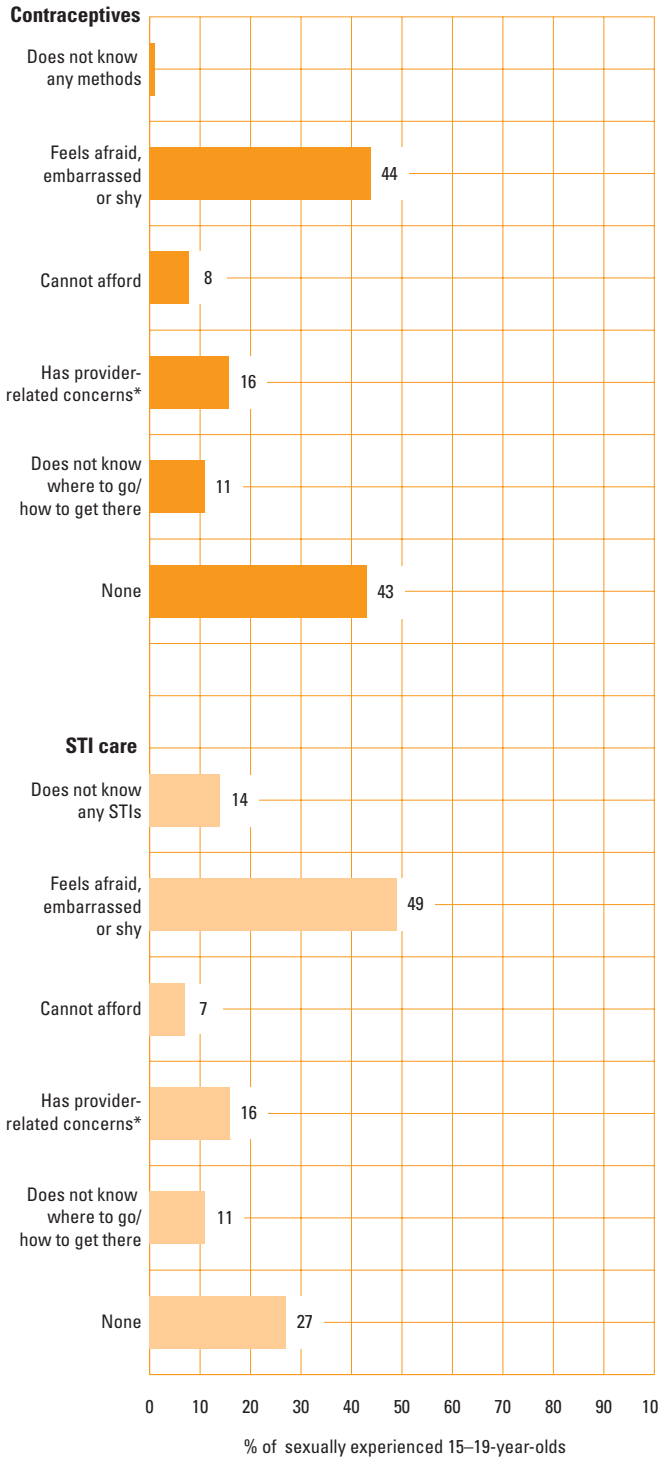
Among adolescents who have ever had sex, the proportion who have been tested for HIV is relatively small. For example, the proportion of sexually experienced 15–19-year-old females who have been tested ranges from 4% in Ghana to 15% in Uganda; among 15–19-year-old males, the proportion ranges from 5% in Burkina Faso to 7% in Uganda.⁴⁹ Another analysis shows that the majority of sexually active adolescents who get tested do so at public clinics or hospitals, rather than at other sources, such as mobile clinics or stand-alone testing centers.⁷¹ Expanded voluntary HIV counseling and testing holds the promise of fostering HIV prevention behavior, but not enough is known about whether and how individuals change their behavior when they know their HIV status.⁷⁴

Social stigma is a significant barrier to adolescent utilization of health care services

In all four countries, the most common barriers that adolescents say they face in obtaining contraceptives or STI services are social stigma (e.g., fear or embarrassment) and, to a significant but lesser degree, cost, provider-related factors and lack of knowledge about sources for services.^{7–10,71} In Malawi, close to half of 15–19-year-olds who have ever had sex mention feeling too afraid, embarrassed or shy to seek such services (Figure 4.3, page 32),¹⁸ a barrier rooted in the social context surrounding adolescent sexuality; results are similar for the other three focus countries. Sixteen percent cite provider-related barriers (e.g., providers lack respect for client privacy or do not treat clients nicely), 11% do not know where to go for services and 7–8% report that

FIGURE 4.3

Almost half of sexually experienced adolescents in Malawi say that feeling afraid, embarrassed or shy is a barrier to obtaining contraceptives or STI care.



Note *Includes “privacy not respected” and “not treated nicely.”
Source Reference 18.

cost is a barrier (respondents could name more than one barrier). However, some adolescents say that they either do not have or do not know of any barriers to obtaining contraceptive services (43%) or STI services (27%).

In Malawi and Uganda, females are more likely than males to report feeling afraid, embarrassed or shy about obtaining either contraceptive services or STI treatment. However, the reverse pattern is true in Burkina Faso, partly because a larger proportion of females than males in that country do not know about STIs.⁷¹

The stigma associated with seeking health care for a problem or need linked to sexual activity (especially outside of marriage) partly explains why young people’s needs for reproductive health services are not being optimally met. The attitudes and behavior of providers and facility staff sometimes contribute to this stigma, according to some youth:

Participant 1: [Adolescents] even go to private clinics, because at hospitals, [the staff] just shout “Those having STIs should go there!” So the person feels embarrassed.

Participant 2: [After] you stay for a while, [the] consult medical officer [says], “Eh! Those having gonorrhoea whatever, there!” So you stand amongst many people, so you feel embarrassed.

—Female focus group participants, Malawi²²

Stigmatizing attitudes are also evident among adults in the community, including parents. In-depth interviews with adults in Burkina Faso show that although they are very supportive of adolescents’ receiving sexual and reproductive health information, they are less accepting of adolescents’ receiving reproductive health services.⁷⁵

Stigma not only discourages adolescents from seeking services but also affects their ability to pay for them. The cost of obtaining contraceptive and STI services is the aspect of public clinics that young people are least likely to view favorably.⁷¹ Many unmarried adolescents depend on adults to help them obtain health care, and they may not be able to ask a parent or other adult to help them get access to health care or pay for medication. As one young man noted:

The only problem here is money. If you have the money, you can go to the hospital without the knowledge of your house people.

—Male, aged 14, Ghana⁶⁴

The existing health care system has potential to improve service delivery to adolescents

Enabling health care providers and facilities to better serve adolescents is possible within the existing health care system. One study suggests that adolescents consider general service improvements (providing client confidentiality, reducing waiting times, lowering cost and fostering better staff-client interactions) at facilities

even more important than implementing youth-specific approaches (e.g., providing youth-only services, having a young staff).⁷⁶ Still, no matter how capable staff are or how well facilities are equipped, outreach targeted to youth is critical if adolescent utilization of health care services is to be increased. The finding that many adolescents do not know where to go to obtain contraceptive services suggests that outreach efforts as basic as informing young people where to go and what services are available could have a meaningful impact.

One way for providers to reach out to adolescents is to create new avenues for contact about sexual and reproductive health issues. For example, providers might raise questions about adolescents' sexual and reproductive health needs when young people are at a health clinic for other reasons (e.g., fever), thus reaching adolescents who would not go to a clinic specifically for sexual and reproductive health care. This strategy can be particularly effective for reaching adolescents who already receive reproductive health services for one reason (e.g., antenatal or postabortion care) and who may be amenable to

Male Circumcision and HIV: A New Reason to Strengthen the Health Care System

Three randomized, controlled trials, conducted in Kenya, Uganda and South Africa, have found that male circumcision leads to a 51–60% reduction in a man's risk of acquiring HIV.^{1–3} Moreover, a simulation using data from four African cities indicated that male circumcision may have played an indirect role (by reducing susceptibility to HIV, syphilis and chancroid) in explaining the differences in the severity of the HIV epidemics in the four cities.⁴ These findings suggest that circumcision programs have the potential to significantly reduce the prevalence of HIV. In a 2007 report, the World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) suggested that in countries where the prevalence of HIV is high, such as Malawi, the “greatest public health impact will result from prioritizing expansion of male circumcision services for younger males (for example, between the ages of 12–30 years), among whom HIV prevalence may still be relatively low but incidence could be high now, or in subsequent years.”^{5(p.7)}

Male circumcision is very common in West Africa. For example, 78% of 12–19-year-old males in Burkina Faso and 92% of those in Ghana have been circumcised.^{6–7} In contrast, only 18% of 12–19-year-old males in Malawi^{8(p.55)} and 20% of those in Uganda^{9(p.58)} report being circumcised; in Malawi, more than half of those who are circumcised underwent the procedure between the ages of six and 11. Although male circumcision is uncommon in Malawi, findings from a recent qualitative study suggest that the procedure's acceptability is higher among younger people than among previous generations—and that young men would use circumcision services, and parents would obtain such services for their sons, if they were safe, affordable and confidential.¹⁰ WHO and UNAIDS recommend that existing health systems be strengthened to increase access to safe male circumcision.^{5(p.8)}

receiving information and needed services for reasons that they may not know about or consider themselves in need of (e.g., HIV testing).^{77–79} For example, when women (especially those who are young or are pregnant for the first time) receive antenatal care, counseling them about contraception and about means of preventing HIV and other STIs could help them plan their future births and protect their health. A study in Tanzania of 15–24-year-olds seeking HIV testing, STI treatment or contraceptive methods found that both male and female clients had unrealistically low perceptions of their HIV risk and thus could benefit from counseling.^{80(pp.17–18)}

More targeted outreach is necessary for young people who are hard to reach in conventional ways. For example, in Uganda, local health clinics, health organizations and the Ministry of Health work in partnership to provide regular health services to specific groups of adolescents, including street youth and adolescents involved in commercial sex work.^{27(p.13)}

Ensuring widespread availability of male condoms is a very specific and achievable intervention that can increase access to contraception. As noted earlier, not having a condom is a primary reason why adolescent males say they did not use one the last time they had sex. Social marketing campaigns can be successful in making condoms available where young people work or gather socially. Drug shops and pharmacies are appropriate supplementary suppliers and have the advantage of being more prevalent than health care facilities in some communities. Making these locations more inviting to young people can make it easier for adolescents to obtain contraceptives and STI services.

Finally, providing circumcision services to young men who have not undergone the procedure may be a valuable strategy for reducing transmission of HIV (see box).

Challenges and opportunities

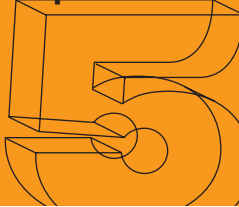
The substantial need for expanded and improved health care infrastructure (personnel, facilities and supplies) in Sub-Saharan Africa clearly complicates efforts to increase adolescent utilization of sexual and reproductive health care services. A comprehensive assessment of maternal and neonatal health services in 50 developing countries (including the four focus countries), conducted in 2005, offers a useful overview of infrastructure needs. Experts rated maternal and neonatal services on a scale from 0 to 100, with 100 being the highest rating. The mean overall score across all 50 countries was 56, and the scores in Uganda (49), Malawi (60), Burkina Faso (61) and Ghana (65) were close to this mean. However, scores were

substantially lower in all four countries for women's access to services in rural areas. For example, scores for rural women's access to trained professional birth attendants ranged from 25 in Uganda to 47 in Ghana; scores for rural women's access to treatment for abortion complications ranged from 18 in Uganda to 41 in Ghana.⁸¹

Still, the need for adolescent sexual and reproductive health services and the potential benefits of meeting that need are great. Outreach to adolescents can help offset the negative impact of limited health infrastructure. For example, training more midlevel providers to deliver sexual and reproductive health care services is a low-cost strategy that can increase the supply of health care personnel in places where there are physician shortages and in rural areas where there is limited access to services.⁸² (Midlevel providers are nonphysician clinicians—including midwives, nurses, clinical officers, physician assistants and family welfare visitors—who are trained to provide basic clinical services.) Pilot projects that have trained midlevel providers in postabortion care have been successful in expanding the provision of health care in underserved areas.^{83–85}

Social and cultural factors can also challenge efforts to improve health care delivery. Yet here, too, the payoff for addressing this challenge head-on can result in sustained support. For example, the Christian Health Association of Ghana (CHAG) provides 30% of the country's health care services. Initially, CHAG was not willing to partner with the African Youth Alliance (AYA) on a project to improve the delivery of sexual and reproductive health care services to adolescents, because condom distribution—a fundamental aspect of AYA's program—clashes with the religious beliefs of some CHAG members. However, after careful negotiation and compromise, an agreement was reached. CHAG allowed facilities to decide independently whether to implement an adolescent sexual and reproductive health agenda, and many did so with enthusiasm.^{86(p.33)}

Finally, support and encouragement within families and communities can greatly enhance efforts to increase adolescents' utilization of health care services. The role of communities in meeting the sexual and reproductive health care needs of adolescents is discussed in the next chapter.



The Mass Media, Family And Community Can Play Supportive Roles

Improving adolescent sexual and reproductive health is a responsibility not only of public institutions, but also of other sectors of society. Community involvement—through mass media, family, community organizations, and religious and cultural leaders—can create and sustain a supportive environment for providing adolescents with health information and services, including those related to sexual and reproductive health. Community members can also perform critically needed outreach to young people to increase their participation in health interventions, and they are ideally placed to help with targeted outreach to adolescents who are underserved or not reached at all by schools and health care systems.

The mass media are a major source for sexual and reproductive health information

The mass media (radio, television and newspapers) are among adolescents' most preferred and commonly used sources for sexual and reproductive health information. In focus group discussions in the four countries, adolescents cited numerous reasons why radio, in particular, is one of their preferred sources of information. For example, they noted that radio is a reliable source (Uganda), it reaches a wide audience (Ghana), it gets information to young people quickly (Malawi), listeners do not need to go somewhere for the information (Burkina Faso), and parents can listen to it and teach their children what they learn (Malawi).^{22(p.32)}

Adolescents who live in urban areas are more likely than those who live in rural areas to report that they use and prefer the mass media as a source of sexual and reproductive health information (Figure 5.1, page 36).¹⁸ Among 12–19-year-old urban adolescents in the

four focus countries, between 78% (Burkina Faso) and 89% (Malawi) say that they have obtained information on contraceptives, HIV or other STIs from some form of mass media, compared with 52–77% of rural adolescents. The proportion of adolescents who prefer using the mass media as a source for information is smaller than the proportion who actually use it, but adolescents' preferences for mass media are nonetheless generally high in both rural and urban areas. Rural adolescents in Malawi are the exception: Only one in four prefer receiving information about contraceptives, HIV or other STIs through the mass media.

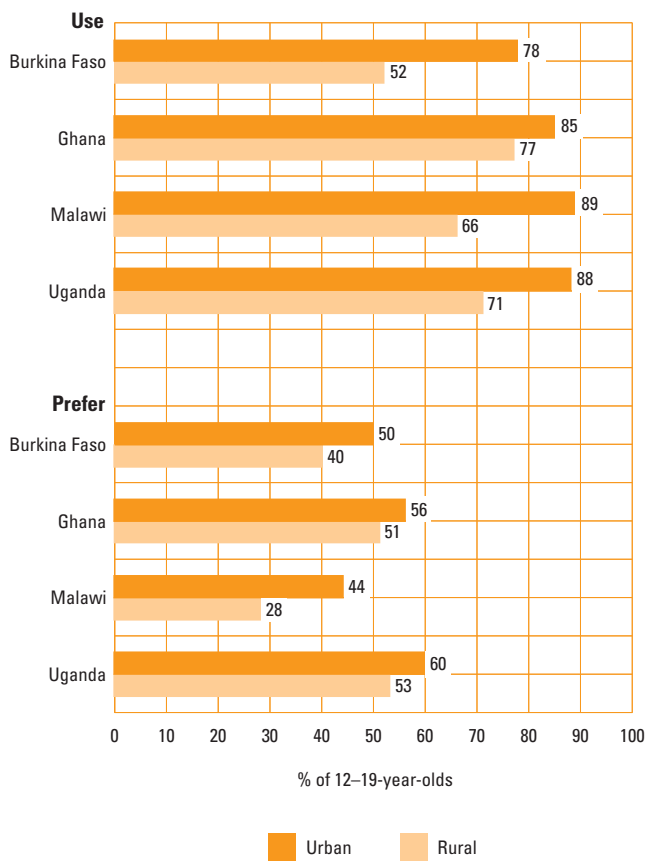
A recent systematic assessment of 15 studies of mass media interventions (11 from Africa) concluded that approaches involving radio in combination with other media (television or print materials) should be widely implemented, given their effectiveness in imparting knowledge, influencing social norms and bringing about behavior change.^{6(pp.236–237,239)} Using the mass media as a means of conveying information has the advantage of reaching a large number of people simultaneously, but does not provide the opportunity for interaction and questioning; for this reason, it is critically important that the information that is conveyed be clear and accurate.

Examples of media interventions designed to provide adolescents with sexual and reproductive health information are numerous. In South Africa, a popular television and radio show developed two programs targeted at youth. One included specific story lines, aimed at 12–18-year-olds, that promoted healthy sexual behavior;^{87(p.13)} the other program was designed to reach 8–12-year-olds with information about puberty, sexual intercourse, HIV/AIDS and violence.^{88(pp.9–10)} In Uganda, the daily government newspaper contains a supplement called “Straight Talk,”

Targeted mass media interventions, especially those using radio, could be an effective way of reaching rural adolescents.

FIGURE 5.1

Urban adolescents are more likely than their rural peers to use and prefer the mass media as a source for sexual and reproductive health information.



Note Sexual and reproductive health information includes information about contraceptive methods, HIV and other STIs.

Source Reference 18.

which provides sexual and reproductive health information to adolescents, including material on such topics as self-esteem and the rights of children to avoid exploitive relationships.^{89(p.2)} Young people in Zambia write and edit their own newspaper, which is distributed at schools and retail outlets throughout the country and provides sexual and reproductive health information to youth.⁹⁰

Adolescents note that receiving information through the mass media has drawbacks, including the lack of opportunity to interact with experts or ask questions about the material. A young man in Malawi emphasized this point:

It is good to hear things from the radio, but the problem we have concerning this source is that when something is not clear and you want to ask a question, that opportunity is not there. When we discuss issues the way we are discussing here, an opportunity is there for us to ask where we do not understand, and this is not the same with the radio.

—Male focus group participant, Malawi²²

Another drawback to the media as a source of information is that not everyone has access to or uses the mass media. In the four focus countries, as many as one in four adolescents have no access to the mass media.^{7–10} Female adolescents are less likely than males to report that they used any media sources in the past four weeks.^{7–10} Similarly, adolescents in rural areas are less likely than urban youth to listen to the radio frequently (Figure 5.2).¹⁸ Among 12–19-year-olds, 65–84% of those in urban areas, but only 44–72% of those in rural areas, listen to the radio at least once a week. Still, in three of the four countries, more than 60% of youth even in rural areas listen to the radio at least weekly; thus, targeted mass media interventions, especially those using radio, could be an effective way of reaching rural adolescents.

New technologies are promising, but still reach relatively few adolescents

The Internet is a promising future source of sexual and reproductive health information in Sub-Saharan Africa. A recent study of 12–18-year-old secondary school students in Uganda found that the desired and actual use of the Internet for information about HIV/AIDS and other sexual health topics is high.⁹¹ However, as of the 2004 national surveys, very small proportions of adolescents in the four countries had ever used the Internet, and the majority had never heard of it, although this will clearly change over time.

Mobile phone service is also a relatively new and promising development for some Sub-Saharan African adolescents, and it can be used in innovative ways to provide sexual and reproductive health information. For example, young people can use text-messaging or a hotline system to ask questions about sensitive issues anonymously and receive answers.⁹² Mobile phone service covers a small but growing fraction of the population; as of 2003, the number of mobile phone subscribers per 1,000 people was 18 in Malawi, 31 in Burkina Faso, 42 in Uganda and 78 in Ghana.^{93,94}

Parents are an important influence on adolescent sexual and reproductive health

Parents play an important role in shaping the sexual and reproductive health behavior of their adolescent children by keeping abreast of where the adolescents are and what they are doing, advising them, providing them with money for health care and talking with them about sex-related matters. A number of studies in Sub-Saharan Africa have found that adolescents who live with a parent or talk with a parent about sex-related matters have a lower likelihood of being sexually active (because they delay first sex or practice abstinence) than other adolescents.^{58,59,95,96}

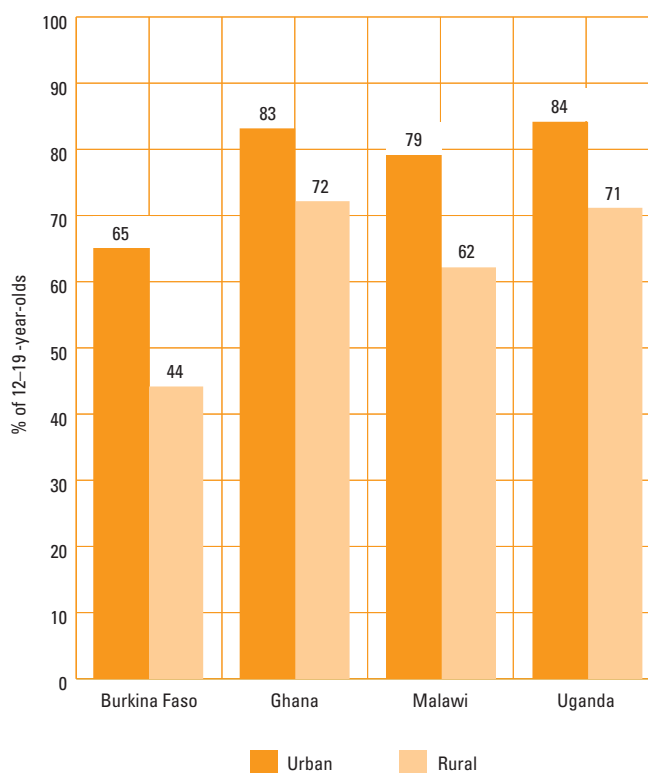
Most unmarried 15–19-year-olds in the four focus countries—even those who live in countries with a relatively high prevalence of HIV—live with a parent, guardian or parent figure.¹⁸ (A parent figure is someone whom the adolescent considers a mother or father figure; below, we use the term “parent” to refer both to parents and to guardians or parent figures.) However, at least one in four do not live with a parent—26% of those in Burkina Faso, 28% in Ghana, 31% in Malawi and 30% in Uganda (Figure 5.3, page 38).¹⁸ Adolescents (especially very young adolescents) who live without a parent lack the protective benefits of adult guidance at home and may need special interventions. Even though living with parents is only one measure of adult involvement in an adolescent’s life, it is probably one of the most meaningful, given the close interaction among members of the same household and the high degree of responsibility that parents generally have for their children’s well-being.

Parent-child communication about sex-related matters—especially communication between children and fathers—has traditionally not been a common practice in Sub-Saharan Africa and is often fraught with discomfort.^{22,97,98} Relatively few unmarried 15–19-year-olds report that their parents or other family members have talked with them about sex-related matters (Figure 5.4, page 39).¹⁸ In Ghana, Malawi and Uganda, about one-third of 15–19-year-old females and one in five males in that age-group say their parents have ever spoken with them about sex-related matters. The proportions are smaller still in Burkina Faso, where only 14% of females and 8% of males say their parents have talked to them about sex-related matters, and similar proportions say they have had such discussions with other family members.

In focus group discussions, some adolescents say they consider parents a good source of information because parents are experienced, convenient to talk to and good

FIGURE 5.2

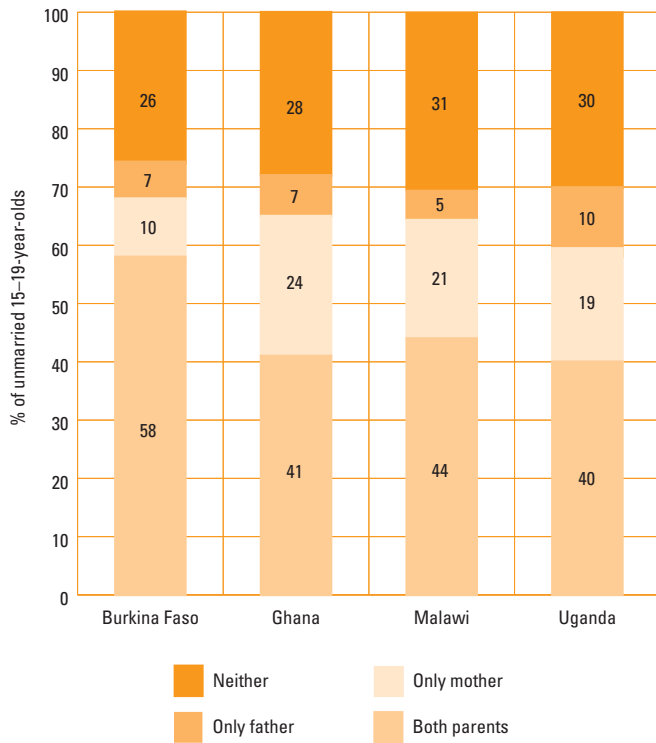
Two-thirds or more of urban adolescents listen to the radio at least once per week, but smaller proportions of rural adolescents do so.



Source Reference 18.

FIGURE 5.3

At least one in four unmarried 15–19-year-olds do not live with a parent.



Note “Parent,” “mother” and “father” refer both to a biological parent and to a parental figure, defined as “someone who is like a mother/father” to the respondent.

Source Reference 18.

at passing on general information.^{22(p.34)} The primary negative aspects of talking with parents, according to adolescents, are that parents are judgmental and that it can be uncomfortable sharing sex-related information with them, as the following examples illustrate:

Participant 1: Like for me, I cannot talk with my father. . . . [I cannot] make him sit down and say, “You know what daddy, [I] am pregnant.” I cannot even dare utter a word, because when he comes back home he asks, “So what necessities are missing?” So you do not converse, you only answer: “There is no salt, no food and no soap.”

Participant 2: Even when you have a problem, you go to your mother first, [and] then she tells your father. Yeah, fathers are harsh.

—Female focus group participants, Uganda²²

I think some people ask their peers [about sex], because when they ask their parents, they might think they want to indulge in such things. They will think they are naughty, so they turn to their peers.

—Male focus group participant, Ghana²²

Parents, too, report that parent-child discussions of sex-related matters can be uncomfortable:

The children are afraid to talk to me about these topics. I’m the one who often informs them, “I want this or that, I wouldn’t act like this or that.”

—Mother, Burkina Faso⁷⁵

Yet parents are a major influence in their children’s lives, and adolescents are more likely to engage in programs that are supported by their families than in ones that are not. One of parents’ important responsibilities is monitoring where, and with whom, their children spend time. The majority of unmarried female adolescents report that their parents always know where they are at night and who their friends are (Figure 5.5).¹⁸ However, parental monitoring is much lower for unmarried males. For example, in Uganda, 71% of unmarried 15–19-year-old females say their parents always know where they go at night, compared with only 45% of unmarried males. This gendered pattern is similar to that observed for family communication about sex-related matters; in both instances, the findings suggest that adolescent females benefit more than males from the protective aspects of their relationships with parents.

Community members can build support for adolescent sexual and reproductive health care

Traditionally, grandparents, other family members (such as *sengas*, or paternal aunts, in Uganda), community leaders and other adults have played a role in talking about sex-related matters with the younger generation. For most adolescents, this is no longer the case. However, these adults can still help address the sexual and reproductive health needs of adolescents—for example, by promoting community support for relevant programs. In addition, traditional leaders can contribute to meeting the needs of adolescents who are not reached by major institutions (e.g., youth living in rural areas with limited access to information and services).

Examples of such family and community contributions can be found in many countries. In Malawi, for example, initiation ceremonies are still significant rites of passage in some communities and provide an important opportunity for promoting, in a culturally acceptable form, strategies that prevent pregnancy and HIV transmission.⁹⁹ Reliance on *sengas* is, for many ethnic groups in Uganda, another formal and culturally legitimate platform through which to reach adolescents and provide opportunities for interaction about sex-related matters, especially for adolescent mothers and for young women who are out of school;⁹⁷ one recent program trained *sengas* to provide HIV-related counseling to young women.¹⁰⁰ In some districts of Ghana, queenmothers (traditional female leaders) are collaborating with the Ghana Health Service to provide sexual and reproductive health information, including HIV and AIDS education, as part of the traditional puberty rites for girls.¹⁰¹

Adolescents say that religion is an important part of their everyday lives

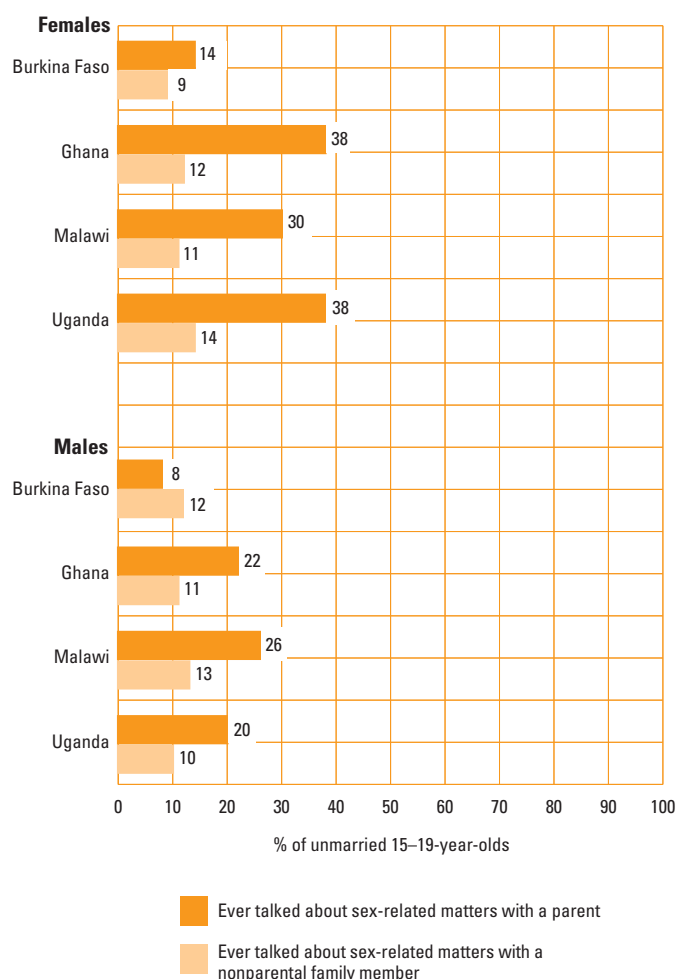
Religion is a pervasive part of adolescents' lives; as such, it has the potential to play a role in efforts to improve their sexual and reproductive health. In Ghana, Malawi and Uganda, more than 80% of 12–19-year-olds consider religion very important in their lives, and similarly high proportions attend religious services at least once a week (Figure 5.6, page 40).¹⁸ In Burkina Faso, too, religion plays an important role in adolescents' lives, but not to the degree reported in the other countries; 64% of adolescents in Burkina Faso consider religion very important, and 55% attend services once a week or more.

Faith-based organizations are an important part of the social structure in all four countries, providing social support to the community and to adolescents as well.

However, it is not clear whether and how faith-based organizations can directly contribute to the specific goals of helping adolescents avoid pregnancy and HIV infection. Studies of the impact of religion and religiosity on protective behaviors have shown mixed results.¹⁰² Evidence from the 2004 surveys indicate that only a small proportion of adolescents mention religious groups or leaders as sources of sexual and reproductive health information.^{7–10} Moreover, in in-depth interviews, adolescents report that the religious groups to which they belong primarily emphasize the message of abstaining from sex until marriage.^{62,64}

FIGURE 5.4

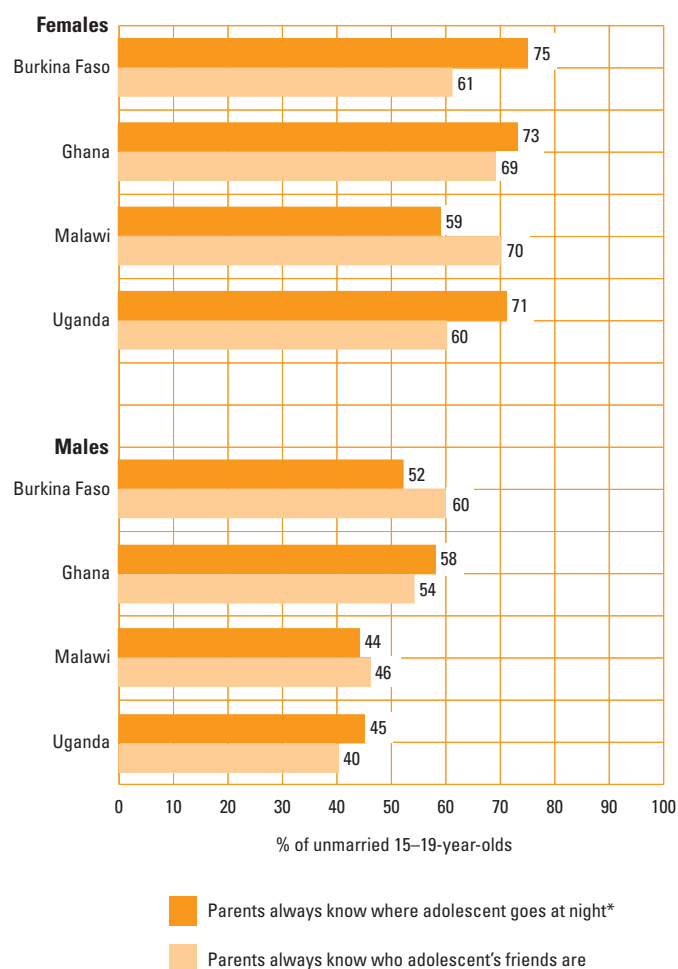
Relatively few adolescents, especially males, say their parents and other family members have talked to them about sex-related matters.



Source Reference 18.

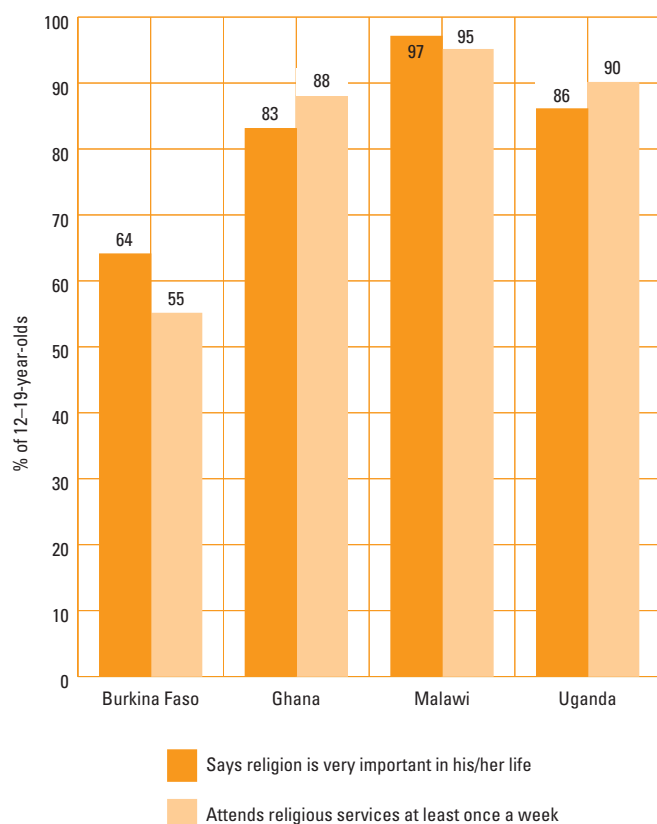
FIGURE 5.5

Large proportions of unmarried adolescents, especially young women, say that their parents monitor them closely.



Note *In Burkina Faso, this category includes adolescents who say they do not go out at night.

Source Reference 18.

FIGURE 5.6**Religion is very important to the majority of adolescents.**

Source Reference 18.

Documentation abounds on the good work that faith-based organizations have done to reduce the stigma associated with AIDS, to increase care for people living with the disease and, to a lesser degree, to contribute to HIV prevention efforts.^{79,102,103} The impact that faith-based initiatives, in all the different forms and sizes they assume, have on preventing HIV and pregnancy has not been adequately evaluated. However, the generally recognized advantages of faith-based organizations—their roots in communities and the respect and trust that communities place in them—suggest that these organizations have the potential to contribute more directly to sexual and reproductive health programs.^{104(p.11)}

Community-based interventions can mobilize multiple sectors

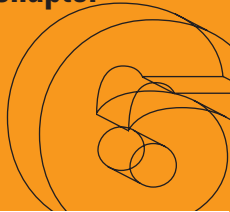
Community involvement can be essential in bringing a variety of stakeholders together to support comprehensive interventions that rely on multiple sectors to address several related unmet needs. For example, the African Youth Alliance (AYA), a collaboration among the United Nations Population Fund, the Program for Appropriate

Technology in Health and Pathfinder International that was supported by the Bill & Melinda Gates Foundation, operated in four countries (Botswana, Ghana, Tanzania and Uganda) with the goal of improving adolescent sexual and reproductive health. AYA was designed to foster a comprehensive range of interventions involving multiple sectors; the program worked in partnership with national governments, nongovernmental organizations, community-based organizations and key stakeholders (youth, parents, religious leaders, the media and policy-makers). A preliminary evaluation of AYA's impact revealed positive effects on sexual knowledge, attitudes and behaviors, especially among females. Specifically, AYA's efforts have led to increases in consistent condom use and the use of modern contraceptives. The results of the preliminary evaluation suggest that a comprehensive, multicomponent model such as AYA can be effective in working toward some key sexual and reproductive health goals.¹⁰⁵

Challenges and opportunities

Community involvement is important because it builds local support and commitment for sustained interventions. In addition, community actors—parents, other adults, media providers, faith-based organizations and the broad cross section of community-based groups—are a critical part of outreach to young people and can improve the success of program efforts based in other institutions (e.g., schools). A systematic review of interventions to improve health care utilization showed that there is sufficient evidence of effectiveness to recommend the widespread implementation of interventions that combine multiple approaches, such as training clinic staff, improving facilities and providing community-based activities to inform and mobilize the general population (e.g., peer educators conducting classes in the community).^{6(p.151)}

In addition, community stakeholders are well placed to accurately assess the specific needs of adolescents in their communities and to help programs more effectively target interventions to address the needs of certain groups of adolescents. Several examples of community-based interventions have been integrated throughout this report. Furthermore, the involvement of young people themselves is a critical component of community-based interventions. Whether as peer educators, mentors, writers or actors, young people are effective advocates for improving their own access to sexual and reproductive health information and services.



Where to Focus Efforts to Improve Adolescent Sexual And Reproductive Health

The certainty that the majority of young people will become sexually active during adolescence or shortly thereafter is reason enough to ensure that they are adequately prepared to protect their sexual and reproductive health. In the face of the devastating impact of AIDS, high rates of unintended pregnancy and widespread unsafe abortion—all outcomes that disproportionately affect young people in Sub-Saharan Africa—addressing adolescents' health needs is also a critical public health priority for the region. An estimated 4.5 million young people in Sub-Saharan Africa aged 15–24 were HIV-positive in 2005, and an estimated 2.8 million unintended pregnancies will occur among young women aged 15–19 in Sub-Saharan Africa in 2007.^{11,42,106–109}

Despite the adoption of international declarations and national policies focusing on adolescents' sexual and reproductive health, efforts have thus far fallen short of what is needed. The financial, human and infrastructural resources currently in place in developing nations clearly are insufficient to meet adolescents' enormous (and growing) unmet needs for sexual and reproductive health information and services. The inadequacy of existing resources is a severe constraint on the implementation of new prevention programs. As a result, the potential for expanding information and services for young people—including provision of contraceptives and pregnancy-related care, as well as testing, diagnosis and treatment for HIV and other STIs—remains largely unrealized.

Donor organizations, private foundations, nongovernmental organizations and international agencies such as the United Nations are helping to close the gap by supporting national governments in promoting policies and implementing programs to protect adolescents' sexual and reproductive health. In spite of this, more financial

resources are needed—as evidenced by a recent estimate of the large gap between the funds that are needed to implement the Cairo agenda (Programme of Action of the International Conference on Population and Development) and what national and international sources have contributed to the cause.¹¹⁰ Yet national governments are ultimately responsible for setting goals and implementing interventions to achieve them. Financial support from development partners is essential but must be met with sufficient societal, political and financial commitment within countries to put in place the policies and programs that adolescents need.

The findings presented in this report point to a variety of recommendations that can guide efforts to improve adolescents' access to sexual and reproductive health information.

Some approaches are relevant to interventions in all sectors

Many valuable approaches are broadly applicable to all intervention efforts, whether by national governments, nongovernmental organizations or the private sector. These steps include the following:

- *Motivate young people to use modern contraceptives, make condoms widely available and affordable, and promote their use for dual protection.* Despite the high prevalence of HIV, unintended pregnancy and unsafe abortion, many sexually active adolescents do not practice safer sex. Motivating young people to use modern contraceptives when they have sex can prevent negative reproductive health outcomes. Specifically, male condoms should be promoted intensively because of their effectiveness in preventing both pregnancy and STIs

Financial support from development partners is essential but must be met with sufficient commitment within countries to put in place the policies and programs that adolescents need.

(including HIV). Fear of pregnancy motivates many young people, especially young women, to use condoms. Males report that not having a condom is a major reason for their not using one, underscoring the potential impact of improving access to this method.

- *Ensure that adolescents have the specific information they need to protect themselves against HIV and unintended pregnancy.* Although highly aware of sexual and reproductive health issues, adolescents lack the comprehensive knowledge they need to make informed decisions. Educating adolescents about sexual and reproductive health issues does not encourage them to have sex.⁵⁷ In fact, unbiased and timely information must be provided, and specific skills must be taught, if adolescents are to delay sexual debut, resist pressure to engage in unwanted sex and protect themselves against unwanted pregnancy and STIs when they do have sex.
- *Ensure that interventions take into account the diverse context of adolescents' lives.* All adolescents need access to sexual and reproductive health information and services. However, adolescents transition into sexual activity at different paces and for different reasons. For example, the sexual activity patterns of male adolescents differ in important ways from those of females: Young women generally begin to have sex earlier than young men do, but young men are more likely than young women to have multiple sexual partners and to have sex in nonmarital relationships. As a result, the needs of males and females differ. Similarly, other groups of adolescents (e.g., those who are out of school and those in school) face different magnitudes of need, and some may be harder to reach than others. To be most effective, interventions should be targeted and appropriately adapted so that those with the greatest unmet needs will benefit.

- *Address sexual coercion in the context of service delivery and in sexual and reproductive health education programs.* It is not uncommon for adolescents, especially females, to be coerced into having sex. Resources must be allocated to provide counseling and other support services to victims of unwanted sex. Equally vital is laying the foundation for preventing sexual coercion and violence. Important steps to take include establishing programs to educate young people about the importance of rights in sexual relationships and to promote communication between sexual partners; counteracting societal norms about masculinity that perpetuate violence against women, so as to instill a higher standard of sexual responsibility in young men; and helping young women acquire and use negotiation skills that can enable them to refuse unwanted sexual advances and use contraceptives within relationships.

- *Promote supportive policies.* Formal policies mandating that family planning and STI services be available to all people, without restrictions by marital status and without requiring parental or spousal consent, are to be encouraged. Examples of such policies can be found in Malawi, which does not restrict services by marital status or parity,¹¹¹ and in Uganda, which has no parental or spousal consent requirements.¹¹²

Schools can help adolescents make healthy decisions

Effective, earlier and more widespread implementation of school-based programs is needed. Challenges that must be recognized and overcome include inadequate teacher training in sex education, the need for appropriate materials and lack of adequate facilities. On the positive side, well-tested, effective curricula are available, and extensive



guidance on implementation has been developed and can be adapted for application across different settings, even in those in which infrastructure is constrained. A number of strategies may be useful:

- *Target young adolescents and make sex education programs mandatory.* Adolescents aged 12–14 should be prime targets for school-based education, because most of them are in school and have not yet had sex. Ideally, sex education should begin in the early primary grades and intensify at the upper primary and early secondary school levels.^{113(p.340)} Including HIV and pregnancy prevention education as a component of academic subjects that are mandatory (e.g., health sciences) will help improve coverage of school-based programs.
- *Implement, and adapt as needed, sound sex education curricula that provide comprehensive and accurate sexual and reproductive health information.* Programs should avoid adopting an exclusive “abstinence-until-marriage” approach, as this approach alone does not lead to protective behaviors (e.g., it does not delay sexual activity, increase secondary abstinence, reduce the number of sex partners or increase condom use).^{114,115} Existing and new sex education programs need to be systematically monitored and assessed.
- *Support teacher training.* To effectively expand nationwide coverage of sex education, additional teacher training in sex education topics is greatly needed. Increasing teachers’ skills in using participatory learning methods is also important, because much sex education is delivered via the less effective lecture format. Participatory methods should be used to the extent possible, given available resources and class size limitations.
- *Help adolescents stay in school.* In addition to being important for individual and national development goals, formal education is positively associated with healthy sexual behavior. For example, individuals with more education are less likely to engage in behaviors that put them at risk for HIV. However, many adolescents never attend school, and many others leave school early for a variety of reasons. These youth thus fail to benefit from the possible protective impact of education and the school environment. Expansion of infrastructure, coupled with interventions to help adolescents stay in school longer, should continue to be developed and implemented.
- *Increase outreach to out-of-school youth.* Targeted interventions are needed to reach the large and diverse group of adolescents who are not in school.

Strengthening the health care system can improve adolescent health

The lack of adequate health care infrastructure complicates efforts to increase adolescent utilization of health care services. Ongoing efforts to improve health care

infrastructure obviously will benefit adolescent sexual and reproductive health and should be pursued. Still, improving service delivery to adolescents is possible within the existing health care system. The following steps should prove useful:

- *Ensure the widespread availability of a range of contraceptive methods, with particular attention to the male condom.* The male condom is the method most commonly used by sexually active adolescents. Young people report a strong preference for health clinics as their source for condoms and other contraceptive supplies, but some mention drug shops and pharmacies, which are good supplementary sources and may be more accessible to young people in some communities. Making condoms available where young people work and socialize can also increase access. Improving access to and availability of female-controlled methods, such as the female condom, should be a priority as well. Like the male condom, the female condom offers dual protection against pregnancy and STIs, and emergency contraceptives can reduce rates of unintended pregnancy and unsafe abortion.
- *Take advantage of all opportunities to provide sexual and reproductive health services for adolescents.* Health care providers should utilize every contact they have with adolescents as an opportunity to address their sexual and reproductive health care needs, even if the adolescents have come for other reasons. In particular, women who make antenatal visits and young women who seek postabortion care should receive counseling on contraception, on the risks of acquiring HIV and other STIs, and on means of preventing these infections. They also should receive contraceptive supplies or a referral.
- *Conduct outreach to adolescents.* Basic outreach to communities is needed (through mass media, schools, markets, churches, etc.) to inform young people about the services that are available and where to get them. More targeted outreach, including the delivery of services at places where young people work and socialize, is needed to reach those adolescents who may not be able or willing to visit facilities on their own but who need services.
- *Train midlevel providers to deliver adolescent sexual and reproductive health services, and address social stigma in provider training programs.* With better training, mid-level providers can help fill the need for more health care personnel, including in rural areas where access to services is limited. Training programs for all health care personnel should teach relevant skills for delivering information and services to adolescents without stigmatizing youth who are sexually active.

Communities are influential in building support for sustained interventions

Community involvement is vital for building local support for sustained interventions to improve adolescent health. Communities are also a critical part of outreach efforts that can improve the success of programs based in other institutions (e.g., schools). When multiple sectors are involved, communities can be helpful in building the coalitions necessary to achieve a common goal. Importantly, community involvement can help programs effectively target interventions to address the specific needs of certain groups of adolescents.

- *Engage community stakeholders to build support for, and improve the effectiveness and reach of, interventions in the community.* Community stakeholders are well placed to assess the needs of adolescents in their communities, and can help in guiding interventions to those who most need them. Engaging respected community leaders is essential if attitudes toward adolescents are to change and sexual relationships between unmarried young people are to be accepted. Community leaders can also be an important link between adolescents and program interventions. A systematic review of interventions to improve health care utilization showed that interventions that combined multiple approaches to inform and mobilize the general population—including training clinic staff, improving facilities and initiating community-based activities—are effective and should be widely implemented.^{6(p.151)}
- *Involve families.* Adolescents' family members are not a highly used or preferred source for sex-related information, as adolescents and adult family members feel conflicted about communicating with each other on these issues. However, involving and educating families can create a supportive environment for improving adolescent health. Parents and guardians are a major influence in the lives of adolescents, and young people are more likely to respond to programs that are supported by their families than to ones that are not.
- *Engage traditional and religious leaders to improve adolescents' access to information and services.* Traditional and religious leaders have been helpful in some communities in improving young people's access to information and services and in building support for programs and policies. Given that religion is an important part of adolescents' lives in Sub-Saharan Africa, faith-based community organizations and leaders hold great potential to do more to facilitate adolescents' access to needed information and services.
- *Continue support for mass media programs and expand the reach of these programs into rural areas.* Large proportions of adolescents prefer and use mass media sources to receive sexual and reproductive health information. The radio and other media are effective in improving adolescents' knowledge and protective

behavior.^{6(pp.236–237,239)} Expanded use of media, especially radio, could be especially helpful in reaching adolescents who have limited access to information and services, such as those in rural areas and those who are not in school.

Moving forward

Worldwide, national governments look to the United Nations Millennium Development Goals as an overarching framework for guiding development goals. In this regard, adolescent sexual and reproductive health is well placed as an important priority. Attainment of four of these eight goals—achieving universal primary education; promoting gender equality and empowering women; improving maternal health; and combating HIV—is closely linked to meeting adolescents' education and health needs. In general, the international community—governments, international agencies, foundations, nongovernmental organizations and professional bodies—recognizes that addressing adolescents' needs in Sub-Saharan Africa is critical to the progress of the region. However, at all levels—international, national and local—commitment and support are inconsistent and sometimes weak. As a result, despite some gains, steady and significant progress in addressing the unmet sexual and reproductive health needs of adolescents in Sub-Saharan Africa has proven elusive.

Nonetheless, there is hope. The strong desire of all adolescents, including those who are already sexually active, to obtain information and services needed to protect their sexual and reproductive health is very encouraging. And many sexually active adolescents are indeed making efforts to protect their health, including using condoms. These facts suggest that increasing preventive behaviors among adolescents who are already sexually active is achievable.

Moreover, there is opportunity for high impact. It bears repeating that given the high incidence of new HIV infections among young people and the often adverse consequences of teenage pregnancy and unsafe abortion on women and their families, addressing the sexual and reproductive health needs of adolescents presents an opportunity to change the course of the AIDS epidemic and the course of poverty in the region. The fact that many adolescents, especially those younger than 14, have not yet had sex makes the goal of teaching behaviors that lead to avoiding HIV infection and unintended pregnancy more attainable.

For young people in Sub-Saharan Africa, providing sexual and reproductive health information and services that reflect the reality of their lives is not merely the best means of ensuring their successful transition to adulthood and lifelong health—it is also a sure step toward achieving social progress and economic development for their countries.

References

1. United Nations Department of Economic and Social Affairs, Population Division, World population prospects: the 2006 revision population database, <<http://esa.un.org/unpp>>, accessed July 31, 2007.
2. Joint United Nations Programme on HIV/AIDS (UNAIDS), *AIDS Epidemic Update*, Geneva: UNAIDS, 2006.
3. World Bank, *World Development Report 2007: Development and the Next Generation*, Washington, DC: World Bank, 2006.
4. United Nations, UN Millennium Development Goals, <<http://www.un.org/millenniumgoals>>, accessed Sept. 17, 2007.
5. National Research Council and Institute of Medicine, *Growing Up Global: The Changing Transition to Adulthood in Developing Countries*, Lloyd CB, ed., Washington, DC: National Academies Press, 2005.
6. Ross DA, Dick B and Ferguson J, eds., Preventing HIV/AIDS in young people: a systematic review of the evidence from developing countries, *WHO Technical Report Series*, Geneva: World Health Organization (WHO), 2006, No. 938.
7. Awusabo-Asare K et al., Adolescent sexual and reproductive health in Ghana: results from the 2004 National Survey of Adolescents, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 22.
8. Guiella G and Woog V, Santé sexuelle et reproductive des adolescents au Burkina Faso: résultats d'une enquête nationale en 2004, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 21.
9. Munthali AC et al., Adolescent sexual and reproductive health in Malawi: results from the 2004 National Survey of Adolescents, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 24.
10. Neema S et al., Adolescent sexual and reproductive health in Uganda: results from the 2004 National Survey of Adolescents, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 25.
11. Appendix Table 4.
12. Appendix Table 1.
13. UNAIDS, *Report on the Global AIDS Epidemic 2006*, Geneva: UNAIDS, 2006.
14. United Nations Population Fund (UNFPA) and University of Aberdeen, *Maternal Mortality Update 2004: Delivering into Good Hands*, Geneva: UNFPA, 2004.
15. United Nations Department of Economic and Social Affairs, Population Division, World abortion policies 2007 (wall chart), New York: United Nations, 2007.
16. WHO, *Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2000*, fourth ed., Geneva: WHO, 2004.
17. Mensch BS, Grant MJ and Blanc AK, The changing context of sexual initiation in Sub-Saharan Africa, *Population and Development Review*, 2006, 32(4):699–727.
18. Unpublished tabulations of data from the 2004 National Surveys of Adolescents in Burkina Faso, Ghana, Malawi and Uganda.
19. Kelly RJ et al., Age differences in sexual partners and risk of HIV-1 infection in rural Uganda, *Journal of Acquired Immune Deficiency Syndromes*, 2003, 32(4):446–451.
20. Gregson S et al., Sexual mixing patterns and sex-differentials in teenage exposure to HIV infection in rural Zimbabwe, *Lancet*, 2002, 359(9321):1896–1903.
21. Appendix Table 2.
22. Amuyunzu-Nyamongo M et al., Qualitative evidence on adolescents' views of sexual and reproductive health in Sub-Saharan Africa, *Occasional Report*, New York: The Alan Guttmacher Institute (AGI), 2005, No. 16.
23. Moore AM et al., Coerced first sex among adolescent girls in Sub-Saharan Africa: prevalence and context, *African Journal of Reproductive Health*, 2007 (forthcoming).
24. Bruce J and Chong E, *The Diverse Universe of Adolescents, and the Girls and Boys Left Behind: A Note on Research, Program and Policy Priorities*, United Nations Millennium Project, 2006, <http://www.unmillenniumproject.org/documents/Bruce_and_Chong-final.pdf>, accessed Aug. 31, 2007.
25. Koenig MA et al., Coerced first intercourse and reproductive health among adolescent women in Rakai, Uganda, *International Family Planning Perspectives*, 2004, 30(4):156–163.
26. Dunkle KL et al., Perpetration of partner violence and HIV risk behaviour among young men in the rural Eastern Cape, South Africa, *AIDS*, 2006, 20(16):2107–2114.
27. Burns AA et al., Reaching out-of-school youth with reproductive health and HIV/AIDS information and services, *Youth Issues Paper*, Arlington, VA, USA: Family Health International (FHI), 2004, No. 4.
28. African Youth Alliance and UNFPA, *Evaluation Report of the African Youth Alliance in Ghana: Policy and Advocacy, Coordination and Dissemination*, Accra, Ghana: UNFPA, 2006.
29. Ankomah A, Condom use in sexual exchange relationships among young single adults in Ghana, *AIDS Education and Prevention*, 1998, 10(4):303–316.

30. Hulton LA, Cullen R and Khalokho SW, Perceptions of the risks of sexual activity and their consequences among Ugandan adolescents, *Studies in Family Planning*, 2000, 31(1):35–46.
31. Gueye M, Castle S and Konaté MK, Timing of first intercourse among Malian adolescents: implications for contraceptive use, *International Family Planning Perspectives*, 2001, 27(2):56–62.
32. Luke N and Kurz KM, *Cross-Generational and Transactional Sexual Relations in Sub-Saharan Africa: Prevalence of Behavior and Implications for Negotiating Safer Sexual Practices*, Washington, DC: International Center for Research on Women and Population Services International, 2002.
33. Zulu EM, Dodoo FN and Ezeh A, Urbanization, poverty and sex: roots of risky sexual behaviors in slum settlements in Nairobi, Kenya, in: Kalipeni E et al., eds., *HIV/AIDS in Africa: Beyond Technology*, Malden, MA, USA: Blackwell Publishers, 2003, pp. 167–174.
34. Madise NJ, Zulu EM and Ciera J, Is poverty a driver for risky sexual behaviour? evidence from national surveys in four African countries, *African Journal of Reproductive Health*, 2007 (forthcoming).
35. Moore AM, Biddlecom AE and Zulu EM, Prevalence and meanings of exchange of money or gifts for sex in unmarried adolescent sexual relationships in Sub-Saharan Africa, *African Journal of Reproductive Health*, 2007 (forthcoming).
36. Mishra V et al., A study of the association of HIV infection with wealth in Sub-Saharan Africa, *DHS Working Papers*, Calverton, MD, USA: ORC Macro, 2007, No. 31.
37. Clark S, Early marriage and HIV risks in Sub-Saharan Africa, *Studies in Family Planning*, 2004, 35(3):149–160.
38. Smith DJ, Modern marriage, men's extramarital sex, and HIV risk in southeastern Nigeria, *American Journal of Public Health*, 2007, 97(6):997–1005.
39. Erulkar A and Ayuka F, Addressing early marriage in areas of high HIV prevalence: a program to delay marriage and support married girls in rural Nyanza, Kenya, *Transitions to Adulthood*, New York: Population Council, 2007, No. 19.
40. Magadi MA, Agwanda AO and Obare FO, A comparative analysis of the use of maternal health services between teenagers and older mothers in Sub-Saharan Africa: evidence from Demographic and Health Surveys (DHS), *Social Science & Medicine*, 2007, 64(6):1311–1325.
41. AGI, *Into a New World: Young Women's Sexual and Reproductive Lives*, New York: AGI, 1998.
42. Shah I and Ahman E, Age patterns of unsafe abortion in developing country regions, *Reproductive Health Matters*, 2004, 12(24 Suppl.):9–17.
43. Rossier C et al., Estimating clandestine abortion with the confidants method—results from Ouagadougou, Burkina Faso, *Social Science & Medicine*, 2006, 62(1):254–266.
44. Unpublished tabulations of data from Demographic and Health Surveys.
45. Cleland J and Ali MM, Sexual abstinence, contraception, and condom use by young African women: a secondary analysis of survey data, *Lancet*, 2006, 368(9549):1788–1793.
46. Bankole A et al., Knowledge of correct condom use and consistency of use among adolescents in Sub-Saharan Africa, *African Journal of Reproductive Health*, 2007 (forthcoming).
47. Marston C and King E, Factors that shape young people's sexual behaviour: a systematic review, *Lancet*, 2006, 368(9547):1581–1586.
48. Lane T et al., Heterosexual anal intercourse increases risk of HIV infection among young South African men, *AIDS*, 2006, 20(1):123–125.
49. Appendix Table 3.
50. Bankole A et al., *Risk and Protection: Youth and HIV/AIDS in Sub-Saharan Africa*, New York: AGI, 2004.
51. WHO, *National AIDS Programmes: A Guide to Indicators for Monitoring and Evaluating National HIV/AIDS Prevention Programmes for Young People*, Geneva: WHO, 2004.
52. Connell P, McKevitt C and Low N, Investigating ethnic differences in sexual health: focus groups with young people, *Sexually Transmitted Infections*, 2004, 80(4): 300–305.
53. Parent AS et al., The timing of normal puberty and the age limits of sexual precocity: variations around the world, secular trends, and changes after migration, *Endocrine Reviews*, 2003, 24(5):668–693.
54. Bankole A et al., Sexual behavior, knowledge and information sources of very young adolescents in four Sub-Saharan African countries, *African Journal of Reproductive Health*, 2007 (forthcoming).
55. Office of the United Nations High Commissioner for Human Rights and UNAIDS, *International Guidelines on HIV/AIDS and Human Rights*, Geneva: United Nations, 1998.
56. International Women's Health Coalition, *Overlooked and Uninformed: Young Adolescents' Sexual and Reproductive Health and Rights*, New York: International Women's Health Coalition, 2007.
57. Kirby D, Laris BA and Rolleri L, Sex and HIV education programs: their impact on sexual behaviors of young people throughout the world, *Journal of Adolescent Health*, 2007, 40(3):206–217.

58. Kabiru CW and Ezeh A, Factors associated with sexual abstinence among adolescents in four Sub-Saharan African countries, *African Journal of Reproductive Health*, 2007 (forthcoming).
59. Kumi-Kyerme A et al., Influence of social connectedness, communication and monitoring on adolescent sexual activity in Ghana, *African Journal of Reproductive Health*, 2007 (forthcoming).
60. Guiella G and Madise NJ, HIV/AIDS and sexual risk behaviors among adolescents: factors influencing the use of condoms in Burkina Faso, *African Journal of Reproductive Health*, 2007 (forthcoming).
61. Mahy M and Gupta N, Trends and differentials in adolescent reproductive behavior in Sub-Saharan Africa, *DHS Analytical Studies*, Calverton, MD, USA: ORC Macro, 2002, No. 3.
62. Munthali AC et al., Qualitative evidence of adolescents' sexual and reproductive health experiences in selected districts of Malawi, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 23.
63. Ouedraogo C, Woog V and Sondo G, Expériences d'adolescents en santé sexuelle et reproductive au Burkina Faso, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 20.
64. Kumi-Kyerme A, Biddlecom AE and Awusabo-Asare K, Adolescents' sexual and reproductive health: qualitative evidence from Ghana, *Occasional Report*, New York: Guttmacher Institute, 2007, No. 30.
65. Neema S, Moore AM and Kibombo R, Qualitative evidence of adolescents' sexual and reproductive health experiences in Uganda, *Occasional Report*, New York: Guttmacher Institute, 2007, No. 31.
66. Adamchak SE, *Ghanaian Parents' Views of HIV/AIDS Education in Schools: Report of Focus Group Discussions*, Boston, MA, USA: World Education, 2005.
67. Mturi AJ and Hennink MM, Perceptions of sex education for young people in Lesotho, *Culture, Health & Sexuality*, 2005, 7(2):129-144.
68. UNAIDS Inter-Agency Task Team on Education, *Education Sector Global HIV & AIDS Readiness Survey 2004: Policy Implications for Education & Development*, Paris: United Nations Educational, Scientific and Cultural Organization (UNESCO), 2006.
69. International Bureau of Education, *Assessment of Curriculum Response in 35 Countries for the EFA Monitoring Report 2005: "The Quality Imperative,"* Geneva: International Bureau of Education and UNESCO, 2004.
70. Brady M et al., *Providing New Opportunities to Adolescent Girls in Socially Conservative Settings: The Ishraq Program in Rural Upper Egypt*, New York: Population Council, 2007.
71. Biddlecom AE et al., Adolescents' views of and preferences for sexual and reproductive health services in Burkina Faso, Ghana, Malawi and Uganda, *African Journal of Reproductive Health*, 2007 (forthcoming).
72. Unpublished tabulations of the most recent available Demographic and Health Survey data from Burkina Faso (2003), Ghana (2003), Malawi (2004) and Uganda (2000-2001).
73. Dehne KL and Riedner G, *Sexually Transmitted Infections Among Adolescents: The Need for Adequate Health Services*, Geneva: WHO, 2005.
74. Glick P, Scaling up HIV voluntary counseling and testing in Africa: what can evaluation studies tell us about potential prevention impacts? *Evaluation Review*, 2004, 29(4):331-357.
75. Ouedraogo C, Woog V and Ouedraogo O, Les adultes faces aux comportements des adolescentes difficultés et enjeux, *Occasional Report*, New York: Guttmacher Institute, 2007, No. 32.
76. Erulkar AS, Onoka CJ and Phiri A, What is youth-friendly? adolescents' preferences for reproductive health services in Kenya and Zimbabwe, *African Journal of Reproductive Health*, 2005, 9(3):51-58.
77. Askew I and Berer M, The contribution of sexual and reproductive health services to the fight against HIV/AIDS: a review, *Reproductive Health Matters*, 2003, 11(22):51-73.
78. Boonstra H, The role of reproductive health providers in preventing HIV, *Issues in Brief*, New York: AGI, 2004, No. 5.
79. FHI/YouthNet, *End of Program Report. Taking Action: Recommendations and Resources*, Arlington, VA, USA: FHI/YouthNet, 2006.
80. FHI, Youth need HIV counseling when seeking reproductive health services, *YouthNet Briefs*, Arlington, VA, USA: FHI, 2005, No. 3.
81. POLICY Project, Maternal and neonatal program effort index, POLICY Project, < <http://www.policyproject.com/pubs/mnpi.cfm>>, accessed July 27, 2007.
82. Hord CE et al., Unsafe abortion in Africa: an overview and recommendations for action, in: Warriner IK and Shah IH, eds., *Preventing Unsafe Abortion and Its Consequences: Priorities for Research and Action*, New York: Guttmacher Institute, 2006, pp. 115-150.
83. PRIME, *Postabortion Care: Midwives Expand Service Availability in Sub-Saharan Africa*, Chapel Hill, NC, USA: PRIME, 1999.
84. Billings DL et al., Midwives and comprehensive postabortion care in Ghana, in: Huntington D and Piet-Pelon N, eds., *Postabortion Care: Lessons Learned from Operations Research*, New York: Population Council, 1999.

85. Kiggundu C, Decentralising integrated postabortion care in Uganda: a pilot training and support initiative for improving the quality and availability of integrated reproductive health service, Kampala, Uganda: Ministry of Health, PRIME, Ipas and DISH, 1999.
86. Senderowitz J, *Partnering with African Youth: Pathfinder International and the African Youth Alliance Experience*, Watertown, MA, USA: Pathfinder International, 2004.
87. Senderowitz J and Stevens C, *Leveraging the For-Profit Sector in Support of Adolescent and Young Adult Reproductive Health Programming*, Washington, DC: Futures Institute for Sustainable Development, 2001.
88. Goldstein S et al., The treatment of AIDS in "Soul Buddyz": a multimedia campaign for children's health in South Africa, in: Singhal A and Howard WS, eds., *The Children of Africa Confront AIDS: From Vulnerability to Possibility*, Athens, OH, USA: Ohio University Press, 2003.
89. Greene ME et al., *In This Generation: Sexual and Reproductive Health Policies for a Youthful World*, Washington, DC: Population Action International, 2002.
90. Phiri M, Trendsetters, Zambia: teens produce newspaper to encourage healthy behaviors, FHI, < <http://www.fhi.org/en/Youth/YouthNet/Publications/FOCUS/ProjectHighlights/trendsetterszambia.htm>>, accessed July 27, 2007.
91. Ybarra ML et al., Internet use among Ugandan adolescents: implications for HIV intervention, *PLoS Medicine*, 2006, 3(11):e433.
92. Blanc A, John D. and Catherine T. MacArthur Foundation, Chicago, IL, USA, personal communication, June 26, 2007.
93. World Bank, *World Development Indicators 2006*, Washington, DC: World Bank, 2006.
94. World Bank, Aggregates calculated for the Human Development Report Office, 2007.
95. Babalola S, Tambashe BO and Vondrasek C, Parental factors and sexual risk-taking among young people in Côte d'Ivoire, *African Journal of Reproductive Health*, 2005, 9(1):49-65.
96. Ngom P, Magadi MA and Owuor T, Parental presence and adolescent reproductive health among the Nairobi urban poor, *Journal of Adolescent Health*, 2003, 33(5): 369-377.
97. Muyinda H et al., Traditional sex counselling and STI/HIV prevention among young women in rural Uganda, *Culture, Health & Sexuality*, 2001, 3(3):353-361.
98. Ampofo AA, "When men speak women listen": gender socialisation and young adolescents' attitudes to sexual and reproductive issues, *African Journal of Reproductive Health*, 2001, 5(3):196-212.
99. Munthali AC and Zulu EM, The timing and role of initiation rites in preparing young people for adolescence and responsible sexual and reproductive behavior in Malawi, *African Journal of Reproductive Health*, 2007 (forthcoming).
100. Muyinda H et al., Community sex education among adolescents in rural Uganda: utilizing indigenous institutions, *AIDS Care*, 2004, 16(1):69-79.
101. Hessburg L et al., *Protecting the Next Generation in Ghana: New Evidence on Adolescent Sexual and Reproductive Health Needs*, New York: Guttmacher Institute, 2007.
102. Olivier J, Cochrane JR and Schmid B, *ARHAP Literature Review: Working in a Bounded Field of Unknowing*, Cape Town, South Africa: African Religious Health Assets Programme (ARHAP), 2006.
103. ARHAP, *Appreciating Assets: The Contribution of Religion to Universal Access in Africa*, Cape Town, South Africa: ARHAP, 2006.
104. Woldehanna S et al., *Faith in Action: Examining the Role of Faith-Based Organizations in Addressing HIV/AIDS*, Washington, DC: Global Health Council, 2005.
105. African Youth Alliance, *Improving Health, Improving Lives: The End of Programme Report of the African Youth Alliance*, New York: African Youth Alliance, 2007.
106. United Nations Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2004 Revision*, Vol. II, New York: United Nations, 2005.
107. United Nations Department of Economic and Social Affairs, Population Division, *World population prospects: the 2005 revision database*, < <http://esa.un.org/unpp>>, accessed July 19, 2007.
108. Unpublished tabulations of data from the most recent Demographic and Health Surveys for 22 countries (range of survey years: 1999-2005).
109. Bongaarts J and Potter R, *Fertility, Biology, and Behavior*, New York: Academic Press, 1983.
110. Singh S et al., *Adding It Up: The Benefits of Investing in Sexual and Reproductive Health Care*, New York: AGI, 2004.
111. Ministry of Health and Population, *National Reproductive Health Policy*, Lilongwe, Malawi: Ministry of Health and Population, 2002.
112. Ministry of Health, Reproductive Health Division, Community Health Department, *The National Policy Guidelines and Service Standards for Reproductive Health Services*, Kampala, Uganda: Ministry of Health, 2001.
113. Rogow D and Haberland N, Sexuality and relationships education: toward a social studies approach, *Sex Education*, 2005, 5(4):333-344.
114. Trenholm C et al., *Impacts of Four Title V, Section 510 Abstinence Education Programs: Final Report*, 2007.

Washington, DC: U.S. Department of Health and Human Services, 2007.

115. Underhill K, Montgomery P and Operario D, Sexual abstinence only programmes to prevent HIV infection in high income countries: systematic review, *BMJ*, 2007, 335(7613):248–252.

Box: Data Sources

1. Guiella G and Woog V, Santé sexuelle et reproductive des adolescents au Burkina Faso: résultats d'une enquête nationale en 2004, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 21.

2. Awusabo-Asare K et al., Adolescent sexual and reproductive health in Ghana: results from the 2004 National Survey of Adolescents, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 22.

3. Munthali AC et al., Adolescent sexual and reproductive health in Malawi: results from the 2004 National Survey of Adolescents, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 24.

4. Neema S et al., Adolescent sexual and reproductive health in Uganda: results from the 2004 National Survey of Adolescents, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 25.

5. Amuyunzu-Nyamongo M et al., Qualitative evidence on adolescents' views of sexual and reproductive health in Sub-Saharan Africa, *Occasional Report*, New York: AGI, 2005, No. 16.

6. Munthali AC et al., Qualitative evidence of adolescents' sexual and reproductive health experiences in selected districts of Malawi, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 23.

7. Ouedraogo C, Woog V and Sondo G, Expériences d'adolescents en santé sexuelle et reproductive au Burkina Faso, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 20.

8. Kumi-Kyerme A, Biddlecom AE and Awusabo-Asare K, Adolescents' sexual and reproductive health: qualitative evidence from Ghana, *Occasional Report*, New York: Guttmacher Institute, 2007, No. 30.

9. Neema S, Moore AM and Kibombo R, Qualitative evidence of adolescents' sexual and reproductive health experiences in Uganda, *Occasional Report*, New York: Guttmacher Institute, 2007, No. 31.

10. Ouedraogo C, Woog V and Ouedraogo O, Les adultes faces aux comportements des adolescentes difficultés et enjeux, *Occasional Report*, New York: Guttmacher Institute, 2007, No. 32.

11. Awusabo-Asare K, Abane AM and Kumi-Kyerme A, Adolescent sexual and reproductive health in Ghana: a synthesis of research evidence, *Occasional Report*, New York: AGI, 2004, No. 13.

12. Guiella G, Santé sexuelle et de la reproduction des jeunes au Burkina Faso: un état des lieux, *Occasional Report*, New York: AGI, 2004, No. 12.

13. Munthali AC, Chimbiri A and Zulu E, Adolescent sexual and reproductive health in Malawi: a synthesis of research evidence, *Occasional Report*, New York: AGI, 2004, No. 15.

14. Neema S, Musisi N and Kibombo R, Adolescent sexual and reproductive health in Uganda: a synthesis of research evidence, *Occasional Report*, New York: AGI, 2004, No. 14.

15. Woog V, Annotated bibliography on HIV/AIDS and youth in Sub-Saharan Africa, *Occasional Report*, New York: AGI, 2003, No. 10.

Box: Male Circumcision and HIV

1. Bailey RC et al., Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial, *Lancet*, 2007, 369(9562):643–656.

2. Gray RH et al., Male circumcision for HIV prevention in men in Rakai, Uganda: a randomised trial, *Lancet*, 2007, 369(9562):657–666.

3. Auvert B et al., Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: the ANRS 1265 Trial, *PLoS Medicine*, 2005, 2(11):e298.

4. Orroth KK et al., Understanding the differences between contrasting HIV epidemics in East and West Africa: results from a simulation model of the Four Cities Study, *Sexually Transmitted Infections*, 2007, 83(Suppl. 1):i5–i16.

5. WHO and UNAIDS, *Male Circumcision and HIV Prevention: Research Implications for Policy and Programming*, Montreux, Switzerland: WHO and UNAIDS, 2007.

6. Awusabo-Asare K et al., Adolescent sexual and reproductive health in Ghana: results from the 2004 National Survey of Adolescents, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 22.

7. Guiella G and Woog V, Santé sexuelle et reproductive des adolescents au Burkina Faso: résultats d'une enquête nationale en 2004, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 21.

8. Munthali AC et al., Adolescent sexual and reproductive health in Malawi: results from the 2004 National Survey of Adolescents, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 24.

9. Neema S et al., Adolescent sexual and reproductive health in Uganda: results from the 2004 National Survey of Adolescents, *Occasional Report*, New York: Guttmacher Institute, 2006, No. 25.

10. Ngalande RC et al., Acceptability of male circumcision for prevention of HIV infection in Malawi, *AIDS and Behavior*, 2006, 10(4):377–385.

APPENDIX TABLE 1		Selected social and demographic characteristics of 12–19-year-olds, by age-group, gender and country, 2004						
Characteristic	Unweighted N	% married or in a union	% distribution by residence with biological parents				% whose parents/guardians always know where they are at night*	% who attend religious services at least weekly
			Both	Mother	Father	Neither		
12–19-YEAR-OLDS								
FEMALES								
Burkina Faso	2,939	14.1	51.5	6.9	4.3	37.3	81.2	51.3
Ghana	2,201	3.9	40.4	23.8	4.5	31.2	74.0	90.4
Malawi	1,979	7.1	41.5	18.7	3.9	35.9	57.6	95.1
Uganda	2,602	9.5	39.8	15.1	7.5	37.7	75.3	91.7
MALES								
Burkina Faso	3,016	0.5	63.5	8.2	7.5	20.8	59.0	58.0
Ghana	2,229	0.3	44.8	21.8	8.9	24.5	61.2	85.0
Malawi	2,052	0.8	47.6	17.7	4.2	30.6	50.6	95.6
Uganda	2,510	0.8	43.9	17.9	10.1	28.1	57.2	88.0
12–14-YEAR-OLDS								
FEMALES								
Burkina Faso	1,272	0.3	63.6	7.0	4.7	24.7	87.9	45.6
Ghana	936	0.0	42.4	23.9	5.3	28.5	77.7	89.9
Malawi	944	0.2	45.4	19.6	3.9	31.1	57.9	93.6
Uganda	1,282	0.0	46.9	15.9	7.6	29.6	82.6	92.2
MALES								
Burkina Faso	1,333	0.0	68.4	6.4	6.8	18.5	67.7	50.8
Ghana	967	0.0	48.6	20.6	9.2	21.7	65.4	85.7
Malawi	905	0.0	50.9	17.4	3.9	27.9	58.4	95.1
Uganda	1,198	0.0	47.4	18.0	10.4	24.2	70.4	88.7
15–19-YEAR-OLDS								
FEMALES								
Burkina Faso	1,667	24.0	42.7	6.9	4.0	46.4	76.3	55.4
Ghana	1,265	7.0	38.9	23.8	4.0	33.4	71.2	90.9
Malawi	1,035	13.3	38.1	17.9	3.8	40.3	57.3	96.4
Uganda	1,320	18.8	32.8	14.3	7.3	45.6	68.3	91.3
MALES								
Burkina Faso	1,683	0.9	59.6	9.6	8.1	22.7	52.1	63.6
Ghana	1,262	0.6	41.8	22.8	8.6	26.7	57.9	84.5
Malawi	1,147	1.5	44.9	17.9	4.4	32.8	44.2	95.9
Uganda	1,312	1.6	40.6	17.8	9.9	31.7	44.9	87.4

*For married adolescents, the question refers to parental knowledge before respondent got married.

Sources 2004 National Surveys of Adolescents in Burkina Faso, Ghana, Malawi and Uganda.

% distribution by school and work status				% who have worked or done something for money in past 12 months	% worried about becoming/getting someone pregnant	% worried about getting HIV/AIDS
In school		Not in school				
Working	Not working	Working	Not working			
2.3	19.7	25.6	52.4	38.0	23.9	35.7
31.7	39.6	16.4	12.3	26.6	34.8	43.6
14.3	59.5	7.8	18.4	20.3	37.9	51.0
23.8	47.8	14.6	13.8	32.4	52.7	68.6
6.0	24.5	44.7	24.7	34.6	11.0	25.1
37.8	39.5	16.3	6.3	35.8	28.9	40.4
27.4	53.2	12.8	6.7	45.1	31.0	44.3
45.8	35.2	15.2	3.8	52.9	35.1	51.4
3.1	27.0	19.7	50.3	27.5	17.9	29.0
41.8	46.3	7.5	4.3	22.3	30.0	37.4
17.1	74.3	1.4	7.2	15.6	33.8	46.6
30.4	62.7	2.2	4.7	25.1	51.3	65.2
8.6	33.2	34.6	23.7	23.5	8.4	21.0
42.7	47.3	7.6	2.4	22.1	22.6	36.3
27.5	65.2	4.0	3.3	34.8	22.1	32.6
51.0	44.7	2.7	1.5	43.1	31.3	47.1
1.8	14.4	29.9	53.9	45.7	28.2	40.5
23.8	34.4	23.2	18.5	30.0	38.4	48.3
11.7	46.3	13.5	28.4	24.5	41.5	55.0
17.3	33.2	26.8	22.7	39.5	54.0	71.9
4.0	17.7	52.7	25.5	43.3	13.0	28.4
34.0	33.4	23.2	9.4	46.5	33.8	43.6
27.3	43.5	19.8	9.3	53.4	38.1	53.7
41.0	26.2	26.8	6.0	62.1	38.6	55.3

APPENDIX TABLE 2		Sexual activity and risk and protective behaviors among 12–19-year-olds, by age-group, gender and country, 2004						
Characteristic	Unweighted N	% distribution by sexual activity				% who have ever been touched, kissed, grabbed or fondled in an unwanted sexual way*	% who have ever been physically forced or threatened into having sexual intercourse*	% who have ever been/made someone pregnant†
		Has never had sex	Has had sex but not in past 12 months	Has had sex in past 12 months with spouse/cohabiting partner	Has had sex in past 12 months with noncohabiting partner			
12–19-YEAR-OLDS								
FEMALES								
Burkina Faso	2,939	73.2	3.7	12.5	10.6	13.5	6.3	43.8
Ghana	2,201	83.2	5.0	2.8	9.0	24.0	11.9	41.5
Malawi	1,979	79.4	4.7	7.3	8.6	17.7	7.2	52.9
Uganda	2,602	72.1	7.3	10.1	10.5	33.8	17.4	48.6
MALES								
Burkina Faso	3,016	78.4	5.6	0.4	15.7	6.2	3.3	1.3
Ghana	2,229	90.7	3.2	0.4	5.6	18.6	5.1	5.9
Malawi	2,052	58.5	14.8	1.1	25.6	17.5	3.2	2.9
Uganda	2,510	67.8	12.3	1.0	18.9	15.3	6.7	4.2
12–14-YEAR-OLDS								
FEMALES								
Burkina Faso	1,272	98.0	0.2	0.3	1.4	8.1	3.6	[3.8]
Ghana	936	98.3	0.8	0.0	0.8	13.0	6.2	–
Malawi	944	96.9	0.7	0.2	2.1	12.1	4.1	[6.9]
Uganda	1,282	92.4	3.9	0.2	3.5	18.9	9.3	6.2
MALES								
Burkina Faso	1,333	94.2	1.6	0.0	4.1	5.0	2.8	0.0
Ghana	967	98.7	0.6	0.0	0.7	10.7	2.5	–
Malawi	905	80.8	5.8	0.0	13.4	15.5	2.4	0.0
Uganda	1,198	85.2	7.3	0.1	7.4	10.1	4.2	0.0
15–19-YEAR-OLDS								
FEMALES								
Burkina Faso	1,667	55.2	6.3	21.3	17.2	17.7	8.4	45.1
Ghana	1,265	71.2	8.3	5.0	15.5	32.4	16.3	42.3
Malawi	1,035	63.5	8.2	13.8	14.5	22.5	9.8	56.5
Uganda	1,320	52.0	10.7	19.9	17.4	48.7	25.5	55.1
MALES								
Burkina Faso	1,683	65.9	8.7	0.7	24.7	7.3	3.7	1.4
Ghana	1,262	84.5	5.3	0.7	9.5	24.7	7.1	6.3
Malawi	1,147	40.3	22.0	2.0	35.7	19.3	4.0	3.6
Uganda	1,312	51.4	17.1	1.8	29.7	19.9	8.9	5.4

*Questions asked of only one eligible adolescent per household and only if no one older than three was present or within hearing range.

†Among respondents who have ever had sex.

‡Respondent answered yes to a direct question about ever having had an STI or answered yes to having had a specific symptom.

§Among respondents who had had sex in the past 12 months.

**Question not asked if most recent partner was a spouse or cohabiting partner, or if respondent had had sex only one time.

Notes No value is given when denominator ≤ 24; values are bracketed when denominator is 25–49.

Sources 2004 National Surveys of Adolescents in Burkina Faso, Ghana, Malawi and Uganda.

	% who have ever had an STI,†	% who used a contraceptive at last sex‡	% distribution by number of recent sex partners and use of male condom in past 12 months§				% whose last sex partner was five or more years older¶	% who have had sex in exchange for money or gifts,>**
			One partner		Two or more partners			
			Used	Did not use	Used	Did not use		
3.1	30.1	24.5	70.0	2.1	3.3	53.8	35.2	
11.1	45.4	31.7	60.1	5.2	3.0	41.9	73.1	
6.4	29.2	21.2	71.2	2.2	5.4	16.3	80.3	
18.5	34.1	22.6	71.4	4.5	1.5	38.6	75.6	
1.1	47.0	35.5	41.3	12.5	10.8	0.6	4.8	
3.4	50.4	32.1	43.3	17.2	7.5	2.9	33.0	
9.6	36.6	28.3	56.9	7.0	7.9	0.7	8.9	
4.2	46.9	36.1	46.7	9.4	7.8	0.2	34.3	
[0.0]	–	–	–	–	–	–	–	
–	–	–	–	–	–	–	–	
[3.4]	[27.3]	[13.6]	[68.2]	[4.5]	[13.6]	[14.3]	[80.0]	
12.4	26.1	21.3	72.3	2.1	4.3	10.4	66.7	
1.4	24.1	22.6	54.7	0.0	22.6	5.7	2.1	
–	–	–	–	–	–	–	–	
1.7	19.7	16.4	77.9	1.6	4.1	3.3	8.2	
1.7	12.2	8.7	72.8	4.3	14.1	1.1	33.3	
3.2	30.2	24.4	70.1	2.1	3.4	54.2	33.0	
11.3	46.6	32.4	60.3	4.6	2.7	42.9	73.2	
6.6	29.4	21.8	71.4	2.0	4.8	16.4	80.3	
19.5	34.8	22.8	71.3	4.7	1.2	41.3	77.0	
1.1	50.0	37.1	39.6	14.1	9.2	0.0	5.2	
3.1	53.1	33.9	40.2	18.1	7.9	0.8	34.3	
11.7	41.5	31.7	50.8	8.5	9.0	0.0	9.1	
4.9	54.5	42.3	40.8	10.6	6.4	0.0	34.4	

APPENDIX TABLE 3		Knowledge and use of sexual and reproductive health information and services among 12–19-year-olds, by age-group, gender and country, 2004						
Characteristic	Unweighted N	% who know there are certain days when a woman is more likely to get pregnant	% with detailed knowledge of pregnancy prevention*	% who know three main ways to avoid HIV†	% with detailed knowledge of HIV/AIDS‡	% who know someone who has HIV or has died from AIDS	% who know of any STI other than HIV	% who have ever talked with a family member about sex-related matters
12–19-YEAR-OLDS								
FEMALES								
Burkina Faso	2,939	38.9	6.9	51.1	10.5	45.5	24.1	18.7
Ghana	2,201	52.3	20.9	66.8	27.2	38.6	38.6	45.5
Malawi	1,979	47.5	21.8	51.2	22.7	66.3	63.3	31.9
Uganda	2,602	62.1	25.7	76.7	24.3	89.0	54.4	45.6
MALES								
Burkina Faso	3,016	31.3	5.3	55.0	12.9	46.6	29.2	14.3
Ghana	2,229	34.8	14.2	72.5	30.8	41.2	43.4	28.2
Malawi	2,052	41.5	20.5	64.9	31.8	71.7	67.8	31.9
Uganda	2,510	47.5	23.2	81.1	27.0	87.4	56.0	28.0
12–14-YEAR-OLDS								
FEMALES								
Burkina Faso	1,272	20.0	3.4	40.2	5.1	38.0	15.0	11.7
Ghana	936	33.7	11.7	60.2	20.9	35.5	25.5	39.8
Malawi	944	30.8	14.6	44.0	18.2	59.0	48.3	23.3
Uganda	1,282	43.4	19.7	70.0	20.8	85.7	37.5	39.2
MALES								
Burkina Faso	1,333	16.8	2.4	44.3	9.1	39.9	19.1	7.7
Ghana	967	18.4	5.7	67.3	23.4	37.2	27.5	21.8
Malawi	905	22.1	7.7	54.6	24.1	59.5	49.9	23.8
Uganda	1,198	29.4	11.3	74.8	16.8	82.6	37.7	25.2
15–19-YEAR-OLDS								
FEMALES								
Burkina Faso	1,667	52.6	9.3	59.0	14.4	50.9	30.7	23.8
Ghana	1,265	66.6	28.0	72.0	32.0	41.0	48.7	49.9
Malawi	1,035	62.6	28.2	57.6	26.7	72.9	76.7	39.5
Uganda	1,320	80.4	31.6	83.3	27.8	92.2	71.0	52.0
MALES								
Burkina Faso	1,683	42.7	7.5	63.5	15.8	51.9	37.1	19.5
Ghana	1,262	47.5	20.7	76.4	36.5	44.3	55.7	33.1
Malawi	1,147	57.2	30.8	73.3	38.0	81.6	82.2	38.4
Uganda	1,312	64.2	34.3	86.9	36.5	91.8	73.0	30.6

*Knew at least one modern method of contraception and also knew all of the following: that there are certain days when a woman is more likely to get pregnant; that a woman can get pregnant the very first time she has sex; and that a woman can get pregnant if she has sex standing up (in Burkina Faso, the last item was replaced by the following: that a female can get pregnant even if she washes herself thoroughly immediately after sex).

†Abstain, be faithful and use a condom.

‡Knew that HIV transmission can be reduced by having sex with only one, faithful, uninfected partner and also by using condoms; that a healthy-looking person can have HIV; that a person cannot get HIV from mosquito bites; and that a person cannot get HIV by sharing food with someone who is infected.

§Among respondents who have ever had sex.

Notes No value is given when denominator ≤ 24 ; values are bracketed when denominator is 25–49.

Sources 2004 National Surveys of Adolescents in Burkina Faso, Ghana, Malawi and Uganda.

% who have attended sex education classes or talks in school	% who know a source for contraceptives	% who say cost is a barrier to obtaining contraceptives	% who say that feelings of fear, shyness or embarrassment are a barrier to obtaining contraceptives	% who know a place to get an HIV test	% who have ever been tested for HIVs
11.9	36.5	6.2	36.9	33.2	4.8
50.6	33.5	2.4	55.7	60.3	3.7
13.5	50.2	5.8	36.8	71.9	11.0
42.0	43.9	23.2	38.0	58.5	13.7
15.1	36.2	6.2	34.3	40.6	4.6
37.9	35.4	2.8	46.2	63.1	3.7
25.6	57.8	5.4	29.3	75.5	5.1
33.4	51.4	15.5	37.8	64.2	5.8
9.6	22.1	4.1	28.2	21.9	[0.0]
41.0	22.5	1.0	48.0	53.8	–
12.7	35.5	3.7	27.7	62.2	[6.9]
33.7	29.9	18.8	32.9	47.6	4.1
14.0	25.1	4.8	27.5	30.2	0.0
27.7	23.1	2.1	37.7	52.5	–
18.6	42.8	3.0	19.0	62.8	1.1
22.0	39.1	12.3	30.9	53.6	0.6
13.5	46.9	7.7	43.2	41.3	4.9
58.0	42.1	3.4	61.6	65.3	3.6
14.1	63.2	7.7	45.0	80.6	11.3
50.0	57.6	27.5	43.0	69.0	15.2
16.0	45.0	7.3	39.7	48.9	5.2
45.8	45.0	3.3	52.7	71.3	5.7
31.3	70.0	7.3	37.6	85.7	6.1
44.1	62.7	18.4	44.2	74.1	7.3

APPENDIX TABLE 4

HIV prevalence, unintended fertility and socioeconomic indicators for selected Sub-Saharan African countries

Country	% of females aged 15–24 who are HIV-positive, 2005	% of males aged 15–24 who are HIV-positive, 2005	% of births* to women 19 or younger that were wanted later or not at all, 1998–2006†	% of 12–14-year-olds attending school, 1993–2003†	% of students completing last year of primary school, 2004	Gender parity ratio‡ in primary and secondary school, 2004	% of population living on less than US\$1 a day, 1989–2003†	% of population living in urban areas, 2005	% of births attended by skilled health staff, 2000–2004†
Angola	2.5	0.9	u	55	35§	u	u	53	45
Benin	1.1	0.4	23	65	49	71	31	40	66
Burkina Faso	1.4	0.5	20	21	29	76	27	18	38
Burundi	2.3	0.8	u	52	33	82	55	10	25
Cameroon	4.9	1.4	31	83	63	81	17	55	62
Central African Republic	7.3	2.5	22	u	27§	60§	67	38	44
Chad	2.2	0.9	16	u	29	58	u	25	14
Congo	3.7	1.2	53	u	66	90	u	60	u
Côte d'Ivoire	5.1	1.7	37	61	43**	68**	15	45	68
Democratic Republic of Congo	2.2	0.8	u	u	46§	u	u	32	61
Eritrea	1.6	0.6	u	u	43	71	u	19	28
Ghana	1.3	0.2	59	85	72	91	45	48	47
Guinea	1.4	0.5	19	36	49	72	u	33	56
Kenya	5.2	1.0	49	92	91	94	23	21	42
Lesotho	14.1	5.9	53	86	u	u	36	19	u
Madagascar	0.3	0.6	17	u	45	98§	61	27	51
Malawi	9.6	3.4	37	90	59	99	42	17	61
Mali	1.2	0.4	20	u	44	74	72	31	41
Mauritania	0.5	0.2	29	53	43	96	26	40	57
Mozambique	10.7	3.6	26	58	30	82	38	35	48
Namibia	13.4	4.4	67	94	81**	104**	35	35	76
Niger	0.8	0.2	11	69	25	71	61	17	16
Nigeria	2.7	0.9	18	64	75	84	71	48	35
Rwanda	1.9	0.8	40	77	37	100	52	19	31
Senegal	0.6	0.2	26	68	45	90	22	42	58
Sierra Leone	1.1	0.4	u	77	u	74	57	41	42
South Africa	14.8	4.5	79	96	96**	101	11	59	u
Togo	2.2	0.8	53	u	66	73	u	40	61
Uganda	5.0	2.3	36	92	57	97	u	13	39
United Republic of Tanzania	3.8	2.8	20	78	54	97§	58	24	46
Zambia	12.7	3.8	43	84	66	93	76	35	43
Zimbabwe	14.7	4.4	36	u	80**	96	56	36	u

*During the three years preceding the survey.

†Data are from the most recent survey in this time span.

‡Defined as the ratio of female gross enrollment rate to the male gross enrollment rate.

§Data are from 1991.

**Data are from a year other than 2004; the source (reference 2) did not indicate the specific year.

Note u=unavailable.

Sources References 1, 2, 12, 44 and United Nations Department of Economic and Social Affairs, Population Division, World urbanization prospects: the 2005 revision population database, <<http://esa.un.org/unup>>, accessed July 31, 2007.

Protecting the Next Generation in Sub-Saharan Africa: Learning from Adolescents to Prevent HIV and Unintended Pregnancy may be purchased for \$20 in the United States and other developed countries and \$10 in developing countries; postage and handling are additional. Volume discounts are available upon request. To purchase online, visit www.guttmacher.org.

©2007 Guttmacher Institute, a not-for-profit corporation advancing sexual and reproductive health worldwide through research, policy analysis and public education. All rights, including translation into other languages, reserved under the Universal Copyright Convention, the Berne Convention for the Protection of Literary and Artistic Works and the Inter- and Pan American Copyright Conventions (Mexico City and Buenos Aires). Rights to translate information contained in this report may be waived.

ISBN: 0-939253-97-6

Suggested citation: Biddlecom AE et al., *Protecting the Next Generation in Sub-Saharan Africa: Learning from Adolescents to Prevent HIV and Unintended Pregnancy*, New York: Guttmacher Institute, 2007.

Guttmacher Institute
125 Maiden Lane, 7th Floor
New York, NY 10038
Telephone: 212-248-1111
Fax: 212-248-1951
Email: info@guttmacher.org

1301 Connecticut Avenue N.W., Suite 700
Washington, D.C. 20036

www.guttmacher.org



