

RISK AND PROTECTION

Youth and HIV/AIDS in Sub-Saharan Africa



EXECUTIVE SUMMARY

Sub-Saharan Africa has been more devastated by the HIV/AIDS epidemic than any other world region. The epidemic is taking an enormous toll on the region's youth: Nearly 10 million women and men aged 15–24—roughly one in 14 young adults—are living with HIV/AIDS, and half of new infections in 2003 occurred among this age-group.

Economic, social and cultural factors contribute to Sub-Saharan African youths' vulnerability to HIV/AIDS.

- Most countries in the region are among the poorest in the world; people living in poverty may place low priority on sexual and reproductive health and may engage in high-risk behaviors.
- Education can help adolescents avoid HIV/AIDS, but in many countries, fewer than 20% of women aged 15–19 and fewer than 30% of men this age have more than a primary school education.
- Traditional social values prescribe strict gender roles that may undermine women's ability to protect their sexual and reproductive health, and condone promiscuity among men.

Adolescents' knowledge, beliefs and behavior related to HIV/AIDS and other sexually transmitted infections (STIs) reveal areas where educational efforts may best be focused.

- About nine in 10 young people aged 15–19 in Sub-Saharan Africa have heard of HIV/AIDS, but most are not familiar with the ABCs of prevention: abstinence, being faithful (monogamy) and use of condoms.
- In the 10 countries with data, 1–9% of 15–19-year-olds who have heard of HIV have been tested for the virus; however, most untested women and men this age say they would like to be tested.
- The majority of young people who acquire an STI take some action to prevent transmission, but many do not tell their partners about the infection.
- Many adolescents, especially in rural areas, do not know where to obtain condoms; young men are more likely to know of a source than young women.

Patterns of marital and sexual behavior among Sub-Saharan African youth highlight key areas for interventions.

- In most countries, women usually get married in their teens to considerably older men, who are likely to have had more sexual partners; thus marriage may increase young women's risk of HIV/AIDS.
- In most countries, at least 80% of women have had sex by age 20; among men, the proportion ranges from 40% to more than 80%.
- Among sexually experienced 15–19-year-olds (both married and unmarried), larger proportions of men than of women have had two or more partners in the past year—more than 40% of men in some countries, compared with fewer than 10% of women in almost all countries.
- Condom use is rare among married 15–19-year-olds; it is much more common among unmarried sexually active adolescents, but in some countries, fewer than 20% of women and 40% of men used a condom the last time they had intercourse.

Young people are essential to the future of Sub-Saharan Africa, and investing in their health and well-being should be an urgent priority.

- Development and implementation of comprehensive national policies that address the provision of sexual and reproductive health information and services and promote gender equality are crucial first steps in the effort to protect young people.
- Programs to provide sex education to young people and public education campaigns to improve adolescents' protective behaviors can help to curb the HIV/AIDS epidemic.
- Improved access to condoms and high-quality, affordable and confidential sexual and reproductive health services, including diagnosis and treatment of HIV/AIDS and other STIs, is imperative.

RISK AND PROTECTION

Youth and HIV/AIDS in Sub-Saharan Africa

Akinrinola Bankole
Susheela Singh
Vanessa Woog
Deirdre Wulf


— THE ALAN
GUTTMACHER
— INSTITUTE
NEW YORK &
WASHINGTON —

ACKNOWLEDGMENTS

Risk and Protection: Youth and HIV/AIDS in Sub-Saharan Africa was written by Akinrinola Bankole, associate director for international research, Susheela Singh, vice president for research, and Vanessa Woog, research associate, all at The Alan Guttmacher Institute (AGI), and Deirdre Wulf, independent consultant.

The authors thank the following AGI colleagues for providing assistance throughout the various stages of the report: Suzette Audam, Ann E. Biddlecom, Melanie Croce-Galis, Jacqueline E. Darroch, Beth Fredrick, Rubina Hussain, Kathryn Kooistra, Jennifer Nadeau and Cory Richards.

Patricia Donovan, vice president for public education, coordinated the publication of this report; Susan London, independent consultant, edited it; Rose MacLean provided editorial support; and Kathleen Randall, Michael Greelish and Judith Rothman were responsible for layout and production.

The authors are grateful for the comments and advice provided on an earlier draft of the report by the following colleagues: Jacob Adetunji, U.S. Agency for International Development; Nicole Cheetham, Advocates for Youth; Ugo Daniels, United Nations Population Fund; Parfait Eloundou-Enyegue, Cornell University; Bamikale Feyistan, Packard Foundation; Paulina K. Makinwa-Adebusoye, Center for Development and Population Activities; Ruwaida Salem, Johns Hopkins University; Sara Seims, Hewlett Foundation; and Nancy Yinger, Population Reference Bureau.

The research for and preparation of this report were supported by The John D. and Catherine T. MacArthur Foundation.

TABLE OF CONTENTS

Chapter 1: Introduction	4
Chapter 2: Young People and HIV/AIDS: The Broader Context	7
Chapter 3: What Young People Know and Believe About HIV/AIDS	11
Chapter 4: Young People’s Sexual and Marital Behavior	14
Chapter 5: How Young People Protect Themselves from Sexually Transmitted Infections	18
Chapter 6: Conclusions and Implications	23
References	27
Appendix Tables	31

INTRODUCTION

Sub-Saharan Africa has been more devastated by the HIV/AIDS epidemic than any other region of the world. By the end of 2003, 2.3 million people in the region had died of AIDS-related illnesses, and almost 27 million were estimated to be living with HIV/AIDS.¹

The epidemic is taking an enormous toll on the region's youth: Nearly 10 million women and men aged 15–24—roughly one in 14 young adults—are living with HIV/AIDS.² Half of the 3.0–3.4 million new cases of HIV infection in this region in 2003 occurred among this age-group. In addition, youth have suffered indirectly from the epidemic: Millions of children and teenagers in Sub-Saharan Africa have lost at least one parent to AIDS.³

In 2001, the estimated prevalence of HIV/AIDS among young people in Sub-Saharan Africa varied widely, from 0.2% of men aged 15–24 in Senegal to 26–40% of women this age in Zimbabwe. It was generally higher in East and Southern Africa than in West Africa and Central Africa (Table 1.1).⁴ In all countries, prevalence among adolescent women was about twice that among men.

The estimated number of cases of HIV/AIDS, which reflects both prevalence and population size, also varied by country. South Africa, which has a high prevalence, has the largest number of cases of HIV/AIDS among adolescents—between 1.3 and 1.9 million. Nigeria, on the other hand, has relatively low prevalence, but the second high-

est number of cases among youth—838,000–1.3 million—because it has such a large population.⁵

In recognition of these grim statistics and in an effort to identify strategies for curtailing the epidemic, this report provides a regional overview of adolescents' knowledge of HIV/AIDS and behaviors that put them at risk for or protect them from infection. It also examines the social and economic context of adolescents' lives. All of these factors are fundamental to understanding the progression of the epidemic in Sub-Saharan Africa. In addition, knowing the risk and protective behaviors identified in this report, which are generally not monitored by surveillance systems that track HIV/AIDS levels and trends,⁶ is essential for guiding the efforts of policymakers and providers of health information and services to young people—at both the regional and the country levels.

Adolescents are at greater risk of acquiring HIV than adults

Behavioral, physiological and sociocultural factors make young people more vulnerable than adults to HIV infection. Adolescence is a time when young people naturally explore and take risks in many aspects of their lives, including sexual relationships. Those who have sex may change partners frequently, have more than one partner in the same time period or engage in unprotected sex. All of these behaviors increase young people's risk of contracting HIV. In addi-

TABLE 1.1 Estimated percentage and number of 15–24-year-old women and men in Sub-Saharan Africa living with HIV/AIDS, by country, 2001

Country	%		No. (in 000s)		Country	%		No. (in 000s)	
	Women	Men	Women	Men		Women	Men	Women	Men
West Africa					East and Southern Africa				
Benin	3.0–4.5	0.9–1.4	20–30	6–9	Ethiopia	5.7–10.0	3.2–5.6	354–622	199–348
Burkina Faso	7.8–11.7	3.2–4.8	98–148	39–59	Kenya	12.5–18.7	4.8–7.2	448–671	172–258
Côte d'Ivoire	6.7–10.0	2.3–3.5	119–177	41–62	Malawi	11.9–17.9	5.1–7.6	137–206	60–89
Ghana	2.1–3.9	0.3–0.7	44–82	6–15	Mozambique	10.6–18.8	4.4–7.8	196–348	81–144
Guinea	1.0–1.9	0.3–0.8	8–16	3–7	Rwanda	9.0–13.4	3.9–5.9	78–116	33–51
Mali	1.4–2.8	0.9–1.8	16–32	10–21	South Africa	20.5–30.8	8.5–12.8	925–1,390	382–575
Niger	1.3–1.7	0.8–1.1	14–18	9–12	Tanzania	6.4–9.7	2.8–4.3	239–362	104–160
Nigeria	4.7–7.0	2.4–3.6	549–817	289–433	Uganda	3.7–5.6	1.6–2.4	90–136	39–58
Senegal	0.4–0.7	0.15–0.22	4–7	1–2	Zambia	16.8–25.2	6.5–9.7	185–277	73–109
Togo	4.8–7.1	1.6–2.5	23–34	8–12	Zimbabwe	26.4–39.6	9.9–14.9	374–561	141–212
Central Africa					Source: references 4 and 5.				
Cameroon	10.1–15.3	4.3–6.6	159–241	68–105					
Central African Rep.	10.8–16.3	4.7–7.0	41–63	17–26					
Chad	2.8–5.8	1.6–3.2	22–45	12–25					
Gabon	4.0–5.4	1.5–3.1	4–6	2–3					

tion, young people who are HIV-positive probably became infected quite recently and are therefore likely to be highly infectious; as a result, they pose a very high risk to their sexual partners.⁷

Young women in Sub-Saharan Africa are at much greater risk of contracting HIV than young men. In part, this is because many adolescent women are married to men who are considerably older. Some of these older husbands have likely had several previous sexual partners and may have a sexually transmitted infection (STI), including HIV, which they may transmit to their young wives. Given these patterns, marriage in Sub-Saharan Africa may actually increase adolescent women's risk of contracting HIV.⁸ In addition, young women are physiologically more vulnerable to infection than older women because changes in the reproductive tract during puberty make the vagina and cervix of adolescents less resistant to infection.⁹

Compounding young people's greater vulnerability to HIV from behavioral and physiological factors is the fact that in Sub-Saharan Africa, as well as elsewhere in the developing world, young people's reproductive health needs receive little attention.¹⁰ And even where reproductive health care for adolescents is available, many young people do not know where to obtain it or are unable to pay for it. Thus, most young women and men have to overcome significant obstacles to obtain the information and care they need to have safe sexual relationships.

But adolescence is also a window of opportunity for changing the course of the epidemic

The more encouraging news is that many young people are not yet sexually experienced, and adolescence therefore presents a window of opportunity for introducing policies, educational programs and reproductive health services that could change the course of the HIV/AIDS epidemic in Sub-Saharan Africa. As the World Health Organization points out:

During early adolescence, HIV rates are the lowest of any period during the life cycle. The challenge is to keep them this way. Focusing on young people is likely to be the most effective approach to confronting the epidemic, particularly in high prevalence countries.¹¹

A focus on youth has even more far-reaching implications. Young people and their future contributions to society are crucial to the survival and well-being of the entire region. Therefore, curbing the HIV/AIDS epidemic by focusing on the needs of youth is an urgent priority.

Guide to the report

This report draws on data for 24 countries in Sub-Saharan Africa—a larger number than has been examined in earlier studies (see box, page 6). Chapter 2 describes some of the broad economic, cultural and social conditions that likely contribute to the special vulnera-

DATA SOURCES, COMPREHENSIVENESS, COVERAGE AND QUALITY

Most of the data presented in this report come from unpublished tabulations by The Alan Guttmacher Institute of Demographic and Health Surveys (DHS) carried out in the late 1990s and early 2000s in 24 Sub-Saharan African countries: Benin, Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Mali, Niger, Nigeria, Senegal and Togo in West Africa; Cameroon, Central African Republic, Chad and Gabon in Central Africa; and Ethiopia, Kenya, Malawi, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Zambia and Zimbabwe in East and Southern Africa.

Data sources

The DHS is an international data collection and analysis project coordinated by ORC Macro, in cooperation with national governments and organizations, and funded primarily by the U.S. Agency for International Development. The surveys are typically nationally representative household surveys of women aged 15–49 and men aged 15–59 with large samples (sample sizes for men are generally much smaller than those for women). They usually cover a wide range of indicators in the areas of reproductive behavior and health.

The bulk of the data presented in this report pertain to women and men, married and unmarried, aged 15–19. However, for outcomes that are relatively rare (reports of STIs or men's discussion of HIV/AIDS with their partner, for example), where a larger sample is necessary, the findings are based on a broader age-group, 15–24. In addition, some retrospective measures of sexual activity before the age of 20 are based on the experience of women and men aged 20–24. Median age at first marriage is calculated among women aged 25–29 and men aged 30–34.

In countries where the data are at least five years old, findings from newer surveys that are not yet available may yield different values for some measures, especially knowledge and behaviors in areas emphasized in public information campaigns being carried out by international, governmental and nongovernmental organizations in a number of countries.

Comprehensiveness

This report is not a synthesis of all research on HIV/AIDS risk and protective factors among youth in Sub-Saharan Africa. It presents descriptive information on the level of risk and differentials among specific subgroups, but it does not provide explanatory analyses. However, the report does cite in-depth explanatory studies where they are of particular relevance. In-depth studies exist for a number of countries in the region, although most deal with a circumscribed locality, area or risk group within a country.¹ Other published reports also provide overviews of global or regional issues surrounding HIV/AIDS risk in youth.²

Coverage

Some measures were not available for all 24 countries. DHS has not included any men in South Africa or men aged 15–19 in Senegal. In some countries, survey data on certain HIV/AIDS-related topics are not equally available for women and men.

There has been no DHS in some key countries in Sub-Saharan Africa. Nevertheless, the population of the countries covered by this report represents 77% of the region's female adolescent population and 70% of its male adolescent population.

Data limitations

Some young men overstate their sexual behavior (because of peer pressure or a desire to exaggerate), while some young women underreport their experiences (probably because of the stigma associated with nonmarital sex).³ These patterns often compromise gender comparisons of sexual behavior. In addition, some of the data for men are based on much smaller sample sizes than those for women, thus affecting the precision of those estimates. In some cases, the number of respondents for a particular indicator is less than 20; where this occurs, either the data are not presented or the unweighted sample size is presented along with the data.

bility to HIV/AIDS among the region's adolescents. Chapter 3 discusses adolescents' knowledge and beliefs about HIV/AIDS, while Chapter 4 examines patterns of sexual and marital behavior that expose them to the risk of infection. Chapter 5 focuses on the steps adolescents take to protect themselves and their partners from HIV and other STIs. Chapter 6 identifies the implications of the findings for policymakers, program planners and health professionals working to stem the spread of HIV/AIDS in this hard-hit region of the world.

The broad comparative approach taken here will allow countries to assess their own situation and compare it objectively with that of other countries and of the region as a whole. The data are organized by major subregions within Sub-Saharan Africa to facilitate such comparisons.

YOUNG PEOPLE AND HIV/AIDS: THE BROADER CONTEXT

Young people's, and particularly young women's, heightened vulnerability to HIV infection has roots not only in their sexual and marital behavior, but also in the broader social, cultural and economic conditions they face in their lives. HIV/AIDS in Sub-Saharan Africa has not spread in a social or cultural vacuum. According to a 2001 report, the virus "spreads fastest and furthest in conditions of poverty, powerlessness and lack of information—conditions in which many young people [in Sub-Saharan Africa] live."¹

Adolescents in many countries in the region face rural underdevelopment, widespread poverty, poor educational opportunities and limited access to radio, television and newspapers (possible sources of information about HIV/AIDS). In addition, they confront traditional social values that prescribe strict gender roles for males and females, and that condone men's sexual promiscuity while placing a high value on female fidelity. Furthermore, some political leaders, government officials and health professionals fail to recognize or acknowledge that unmarried adolescents have sex or choose not to address their sexual and reproductive health needs.

Most people in Sub-Saharan Africa are poor

In parts of the world where most people lack adequate housing, food and clothing, the everyday struggle to survive absorbs most of their energy and resources. Young people in such settings may consider other needs to be more pressing than protecting their sexual and reproductive health. With the exception of Gabon and South Africa, the countries of Sub-Saharan Africa are among the poorest

in the world; the per capita gross national product in the region ranges from about \$480 in Tanzania and \$560 in Cameroon to about \$1,300 in Senegal and \$1,700 in Ghana.*²

Many adolescents have little education

Education is closely linked to a young person's ability to avoid HIV/AIDS. Throughout the 1990s in Zambia, for example, the prevalence of HIV decreased among 15–19-year-old women with some education, but remained unchanged among those with no schooling.³ And in a number of Sub-Saharan African countries, higher proportions of unmarried adolescents who are not in school than of their in-school counterparts engage in unprotected intercourse.⁴ Such findings may have serious implications for the future of the HIV/AIDS epidemic in the region, given the levels of education there.

- In half of the countries included in this report, fewer than one in five women aged 15–19 have more than a primary school education. At least half of adolescent women have had seven or more years of schooling in only seven countries.⁵
- Most young women are no longer in school. In 12 countries, only 7–21% are still in school.⁶ Gabon and South Africa—where 70–80% of adolescent women attend school—are atypical in this respect.
- Educational status is only slightly better for young men. In countries in West Africa and Central Africa, the proportions of young

*These are calculated according to purchasing power parity with the rest of the world.

Sociocultural practices that encourage sexual relationships involving young people, such as child marriage..., are still common in Sub-Saharan Africa. Some of these practices increase young people's, especially young women's, risk of HIV infection.

men who have had seven or more years of schooling⁷ and who are still in school⁸ are roughly double those for young women, but the disparity is smaller in East and Southern Africa. However, in nine of 22 countries, fewer than 30% of young men have had at least seven years of schooling.⁹

Poverty and low educational attainment are closely related. Poor families often cannot afford to send their teenage children to school, and most teenagers with little schooling are likely to be poor for the rest of their lives.

Most young people grow up in rural areas

With the exception of Gabon,* most countries in Sub-Saharan Africa are still predominantly rural.¹⁰ In most of the region's most populous countries (Ethiopia, Kenya, Nigeria and Tanzania), about three-quarters of adolescent women live in rural areas. South Africa is the only large country in the region in which a majority (53%) of teenage women live in urban areas.¹¹

In general, underdevelopment in rural areas limits young people's access to the health information and services that could help them avoid the threat posed by HIV/AIDS. Secondary schools and health

services, including reproductive health care, are usually less common in rural areas than in urban areas, and the availability of reproductive health information through newspapers and magazines, radio and television—if these media exist at all—is also likely to be more limited in rural areas.

Adolescents' exposure to mass media is limited

Whether they live in an urban or a rural area, few adolescents in any country except Gabon and South Africa have regular exposure to all three types of mass media, each of which is a potentially valuable source of information about prevention of sexually transmitted infections (STIs), including HIV.

In most countries in the region, fewer than one in 10 women and men aged 15–19 listen to the radio, watch television and read a newspaper at least once a week. More typically, adolescents have regular access to only one or two types of media, and in many countries, large proportions have no weekly exposure to any mass media.¹²

Certain cultural and social conditions can increase young people's risk of HIV

Sociocultural practices that encourage sexual relationships involving young people, such as child marriage and rituals initiating boys and girls into adulthood, are still common in Sub-Saharan Africa. Some of these practices increase young people's, especially young women's, risk of HIV infection.

*The findings for Gabon are atypical for almost every measure, probably because of the country's very different social and structural features: It is a very small, relatively wealthy and almost totally urban country, with a much higher proportion of youth (particularly young women) still in school and with greater youth exposure to the mass media than in any other country in the region except South Africa (Appendix Table 1).

TABLE 2.1 Percentage distribution of couples, by age difference between spouses, according to country and survey year

Country	Wife is older or same age	Husband is 1–4 years older	Husband is 5–9 years older	Husband is ≥10 years older	Country	Wife is older or same age	Husband is 1–4 years older	Husband is 5–9 years older	Husband is ≥10 years older
West Africa					East and Southern Africa				
Benin, 2001	4	25	43	28	Ethiopia, 2000	1	23	49	27
Burkina Faso, 1999	2	15	32	50	Kenya, 1998	3	24	51	23
Côte d'Ivoire, 1998	5	15	35	45	Malawi, 2000	4	41	39	16
Ghana, 1998	4	30	35	31	Mozambique, 1997	10	32	31	27
Guinea, 1999	1	11	26	62	Rwanda, 2000	12	33	29	26
Mali, 2001	2	15	32	51	South Africa, 1998	u	u	u	u
Niger, 1998	2	15	38	45	Tanzania, 1999	4	34	39	23
Nigeria, 1999	3	9	40	48	Uganda, 2000	u	u	u	u
Senegal, 1997	0	7	30	62	Zambia, 2001	2	39	47	13
Togo, 1998	5	28	38	28	Zimbabwe, 1999	8	31	41	21
Central Africa									
Cameroon, 1998	6	21	32	41					
Central African Rep., 1994	9	34	33	25					
Chad, 1997	2	23	42	33					
Gabon, 2000	7	24	36	33					

Notes: Includes only couples in which the female partner is aged 20–29 and was younger than age 20 when she married. u=unavailable.

Source: reference 18.

Traditional gender stereotyping. Although gender roles are changing rapidly in Sub-Saharan Africa, traditional stereotypes remain prevalent in many societies. Men are expected to be strong providers, protectors and authority figures in the family, and women primarily to be wives and mothers, whose role is to grow and prepare food for the family. Sexual experimentation before marriage and having more than one sexual partner after marriage are still widely condoned for men, while women are expected to abstain from sex until marriage and to be faithful to their husband once married.¹³ A number of studies suggest that young men in the region typically experience strong social pressures to prove their manhood by having sex; engage in sexual intercourse with commercial sex workers; have sex with many partners; or have unprotected intercourse.¹⁴ All of these behaviors increase young men's risk for HIV and other STIs.

The sexual double standard can jeopardize women's sexual and reproductive health as well. For many poor and less educated women worldwide, gender inequality can lead to high rates of STIs, unwanted pregnancy, unsafe abortion, and maternal mortality and morbidity. This is particularly true for young women, who may submit to men's sexual demands because they fear being beaten or they are in a subordinate position and have no alternative. Women with little power may not be able to refuse sex or to ask their partners to use condoms, even when they know they risk getting pregnant or contracting an STI, including HIV.¹⁵ For example, in Uganda, one in four women and men believe that a married woman cannot refuse sex, even when she knows her partner has AIDS.¹⁶

Early marriage for women. A cultural and social expectation closely related to rigidly prescribed gender roles is that women should marry at a young age.¹⁷ Because married couples are likely to have intercourse more often than unmarried couples, young age at marriage, by itself, increases adolescent women's risk of contracting an STI, including HIV.

In addition, in most Sub-Saharan African countries, adolescent women marry considerably older men, often 10 or more years older (Table 2.1).¹⁸ This practice may increase their risk of contracting HIV or another STI in several ways. Their husbands, who are likely to have had multiple sexual partners before marriage, may have, and pass on, an STI. In addition, the age and educational differences that often characterize such couples probably undermine a young wife's ability to influence when sexual intercourse occurs and to negotiate condom use if she suspects that her husband has extramarital partners or has contracted HIV or another STI. Some men who are many years older than their adolescent wives probably feel even more entitled than the average married man to direct and control aspects of the relationship,¹⁹ such as how frequently to have sex, whether or not to use condoms or other contraceptives, and how many children to have.

The risks associated with early marriage are evident in a study of sexually active women aged 13–19 in rural Uganda. The study found that the HIV infection rate among married women was nearly triple that among single women (17% vs. 6%).²⁰

Sugar daddies. Numerous studies from Sub-Saharan Africa show that some adolescent women become involved in sexual relationships with so-called sugar daddies—older men who pay their school fees or give them gifts in return for sex.²¹ Parents may approve of these sexual relationships—even though they increase their daughter’s risk of contracting HIV—because such relationships can offer some relief from entrenched poverty, particularly in urban areas.²²

Many young people face barriers to obtaining reproductive health care

Young people in Sub-Saharan Africa face many obstacles in obtaining the reproductive health care they need, assuming they know where to go for it.²³ Adolescents may be unable to pay for services or may lack transportation to a clinic. Health clinics may not be open at hours that are convenient for young people, and services are often designed for married women rather than single women or adolescents.²⁴ In some countries, health workers display judgmental attitudes toward sexually active young clients.²⁵ Such attitudes may help explain why many young people prefer to seek treatment for STIs from traditional healers or drug vendors,²⁶ sources that may provide misinformation or inappropriate treatment.

Official policies may also present barriers to care.²⁷ In Zimbabwe, for example, the law prohibits adolescents younger than 18 from obtaining contraceptive services without the permission of their

parents.²⁸ Such policies are contrary to the spirit of the Programme of Action of the 1994 International Conference on Population and Development, in which signatory countries agreed to “remove legal, regulatory and social barriers to reproductive health care and information for adolescents.”²⁹

WHAT YOUNG PEOPLE KNOW AND BELIEVE ABOUT HIV/AIDS

Despite the international attention that the HIV/AIDS epidemic has received, knowledge of the disease is not universal among young people in Sub-Saharan Africa. And even among those who know about HIV/AIDS, perceptions of personal risk are sometimes at odds with reality.

- While at least 90% of women and men aged 15–19 in most countries in the region have heard of HIV/AIDS, substantial proportions in some countries have not: 43–46% of young women in Chad and Niger, 26% in Nigeria and 19–21% in Burkina Faso, Ethiopia and Mozambique.¹
- In the majority of countries with data, roughly half of adolescent women and men who have heard of HIV/AIDS think they are at some risk of becoming infected. But in Ghana, Niger, Nigeria and Tanzania, no more than three in 10 young women consider themselves at some risk; the same is true for young men in Ghana, Niger and Nigeria.²

Adolescents' perception of risk is not always consistent with HIV prevalence in their country. In Cameroon, Kenya and Zambia, for example, only about half of young women and men who have heard of HIV/AIDS think they are at risk, even though prevalence is high in all three countries. On the other hand, in Mozambique, another country with high prevalence, about seven in 10 adolescent women and men who have heard of HIV/AIDS believe they are at risk.^{*3}

*These discrepancies suggest that the factors that shape adolescents' perception of risk are complex and need more in-depth examination.

Awareness that a healthy-looking person can transmit the disease varies

Some young people think they can identify infected persons by their appearance. Men are typically more aware than women that it is possible to carry the virus and still look healthy.⁴

- In Burkina Faso, Chad, Ethiopia, Mali, Mozambique, Niger, Nigeria and Senegal, more than half of women aged 15–19 think it is not possible for a healthy-looking person to carry the AIDS virus. By contrast, except in Chad, Ethiopia, Niger and Nigeria, roughly 50–80% of adolescent men know that appearance does not necessarily reveal infection status.⁵
- Awareness that a person with HIV/AIDS can appear healthy is generally greater in countries with a higher HIV prevalence than in those with a lower prevalence. At least two-thirds of teenage women and men in Kenya, Malawi, Uganda, Zambia and Zimbabwe—all countries with high prevalence—know this to be so, compared with 17–27% of teenage women and men in Chad, where the prevalence is much lower.⁶

Level of education may also play a role in adolescents' awareness that healthy-looking people can be infected. Chad, for example, has one of the lowest levels of educational attainment in Sub-Saharan Africa. In Ghana and Gabon, where prevalence is relatively low, high levels of education may explain why large proportions of young women and men know a person can be infected and still look healthy.

Abstinence is mentioned spontaneously as a means of preventing infection by fewer than 40% of adolescent women [and men] in every country except Malawi, Rwanda, Uganda and Zambia...

Knowledge of mother-to-child transmission is fairly high

Many, but not all, adolescents know that an infected woman can transmit HIV to her fetus or newborn.

- More than seven in 10 women aged 15–19 in eight countries and six in 10 in four others know that HIV can be transmitted from mother to child during pregnancy or at delivery. However, in five countries (Burkina Faso, Chad, Mali, Niger and Nigeria), fewer than half of adolescent women know about mother-to-child transmission.⁷
- Adolescent men have a similar level of knowledge about this mode of transmission. In four countries—Burkina Faso, Chad, Niger and Nigeria—fewer than half of men aged 15–19 know that a mother can transmit the virus to her child. More than six in 10 in 14 countries know of this means of transmission.⁸

Familiarity with the ABCs of HIV prevention varies considerably

Since the late 1990s, program planners and policymakers around the world have increasingly emphasized the need for greater awareness and practice of a three-pronged strategy to prevent HIV infection. This strategy is known as the ABC approach—signifying abstinence, being faithful to a single partner (monogamy) and con-

dom use. Knowledge that infection can be avoided and awareness of the specific ABC behaviors varies widely among the region's adolescents.

- Among all women aged 15–19,* between 26% (in Mozambique) and 93% (in Rwanda) say they know that there are ways to avoid HIV infection. Among men this age, between 40% (in Mozambique) and 96% (in Malawi) know it is possible to avoid infection.⁹
- Abstinence is mentioned spontaneously as a means of preventing infection by fewer than 40% of adolescent women in every country except Malawi, Rwanda, Uganda and Zambia and by fewer than 10% in Benin, Burkina Faso, Mozambique and Niger. Adolescent men's awareness of this preventive strategy is not appreciably higher: Fewer than 40% in 18 countries and fewer than 20% in seven of these countries mention abstinence as a way to avoid infection. More than 50% of young men spontaneously report awareness of this approach to avoiding HIV/AIDS only in Malawi, Rwanda, Uganda and Zambia—the same four countries where awareness is highest among teenage women.¹⁰
- More than half (51–55%) of women aged 15–19 spontaneously mention having only one sexual partner as a means of avoiding HIV/AIDS in only three countries (Côte d'Ivoire, Guinea and Zimbabwe). Ethiopia is the only country in which more than half (52%) of men mention monogamy.¹¹
- Fewer than 60% of women aged 15–19 in all countries except Gabon and South Africa spontaneously state that HIV/AIDS can be avoided by using condoms; in eight countries, fewer than 25%

*This includes those who have not heard of HIV/AIDS and who are therefore considered to not know any preventive behavior.

TABLE 3.1 ABC preventive behaviors known by at least one-third of women and men aged 15–19, by country

NUMBER OF KNOWN BEHAVIORS	WOMEN		MEN	
	SPECIFIC BEHAVIORS KNOWN	COUNTRIES	SPECIFIC BEHAVIORS KNOWN	COUNTRIES
ALL THREE	ABC	Uganda	ABC	None
ONLY TWO	AB	Guinea	AB	None
	AC	Kenya, Malawi, Rwanda, Zambia	AC	Guinea, Kenya, Malawi, Rwanda, Uganda, Zambia
	BC	Côte d'Ivoire, Tanzania, Zimbabwe	BC	Benin, Central African Rep., Ethiopia, Ghana, Zimbabwe
ONLY ONE	A	None	A	None
	B	Central African Rep., Ethiopia, Ghana, Senegal	B	None
	C	Benin, Cameroon, Gabon, Mali, Togo	C	Burkina Faso, Cameroon, Côte d'Ivoire, Gabon, Mali, Tanzania, Togo
NONE		Burkina Faso, Chad, Mozambique, Niger, Nigeria	Chad, Mozambique, Niger, Nigeria	

Notes: A=abstinence; B=being faithful (monogamy); C=condom use. South Africa is omitted because data on abstinence and monogamy were not available for women. Source: reference 15.

mention condoms. Young men are better informed on this point: More than 60% in nine countries mention condoms, and the proportion is less than 25% in only one country (Chad).¹²

Shyness and reticence may prevent some young women from mentioning condoms spontaneously. To do so might suggest that they know more about sex than is considered appropriate for young women in their culture. Studies in some countries in the region reveal that young women who carry condoms in their purse are considered promiscuous.¹³

Knowledge that condoms can effectively prevent HIV/AIDS is strongly associated with use. Adolescents who do not know that condoms are a way of avoiding HIV infection are less likely than those who do know to have used this method the last time they had intercourse—for example, 8% vs. 42% among men aged 15–19 in Benin.¹⁴

The overall level of awareness about the ABC strategies for HIV/AIDS prevention among young people in Sub-Saharan Africa is poor (Table 3.1).¹⁵

- Uganda is the only country in which at least one-third of adolescent women are aware of all three ABC methods; in Burkina Faso, Chad, Mozambique, Niger and Nigeria, fewer than one-third are aware of any. In eight countries, at least one-third of adolescent women know about two of the ABC approaches, and in nine others, one-third or more know of one.

- Levels of awareness are not much better among adolescent men. In no country do at least one-third of men aged 15–19 know about all three methods. In 11 countries, at least one-third of men this age are aware of two of the three ABC approaches, and in seven more, 33% or more are aware of one approach (in all cases, condom use). In four countries (Chad, Mozambique, Niger and Nigeria), fewer than one-third of young men know about any of the ABC approaches.

YOUNG PEOPLE'S SEXUAL AND MARITAL BEHAVIOR

The age at which teenagers become sexually active and the type and number of sexual partners they have are important determinants of their risk of contracting HIV. In all of the study countries, young women generally marry earlier than men, but the age at marriage varies across countries. In addition, attitudes and values surrounding adolescent sexuality may differ from one country to the next. Therefore, the proportion of adolescents who have had sex varies considerably, both by gender and by country (Figures 4.1 and 4.2, page 16).¹

Adolescent sexual activity occurs both within and outside of marriage

Patterns of marriage and sexual initiation among adolescents vary greatly by gender.

- The proportion of women aged 15–19 who are married, and therefore assumed to be sexually experienced, is 20–29% in nine countries and 30–60% in another nine. Among men this age, no more than 6% in any country are married.²
- Some adolescents are unmarried and sexually experienced; this behavior is more common among men than among women. In 12 countries, at least 40% of men aged 15–19 are unmarried and sexually experienced. Among young women, however, 40% or more are unmarried and sexually experienced in only four countries—Côte d'Ivoire, Gabon, South Africa and Togo.³

Even though marriage occurs at a young age for many women in Sub-Saharan Africa, sizable proportions of women have sex before

marriage during their adolescent years.

- In nine countries, at least half of young women aged 20–24 have intercourse before marriage and before they turn 20, and in 10 others, roughly 25–50% do so. Among young men, more than 70% in 12 countries have premarital intercourse before age 20.⁴ The higher proportions among men are consistent with their much later age at marriage.
- Because young women are much more likely than adolescent men to be married, they have a younger median age at first intercourse (which includes sex within marriage). In all but six countries, half of women aged 20–24 have sex by age 17.5; the median age is 16 or younger in Central African Republic, Chad, Guinea, Mali, Mozambique and Niger. It is 18 or older in Ethiopia, Rwanda, Senegal and Zimbabwe. Among men aged 20–24, the median age at first sex is 17.5 years or higher in 15 countries, and as high as 21.6 years in Ethiopia. The difference between women and men is most evident in Niger, where half of women have sex by age 15.6, while half of men are not sexually experienced until age 20.3.⁵

The time between first sex and marriage is longer for men than for women

Many adolescent women first experience sex within marriage, but most adolescent men first have sex before marriage. Therefore, given the difference in age at first marriage, a much shorter gap separates the two events for women than for men.

- The median age at first marriage among women aged 25–29 is younger than 18 in eight countries and 18–19 in nine countries.

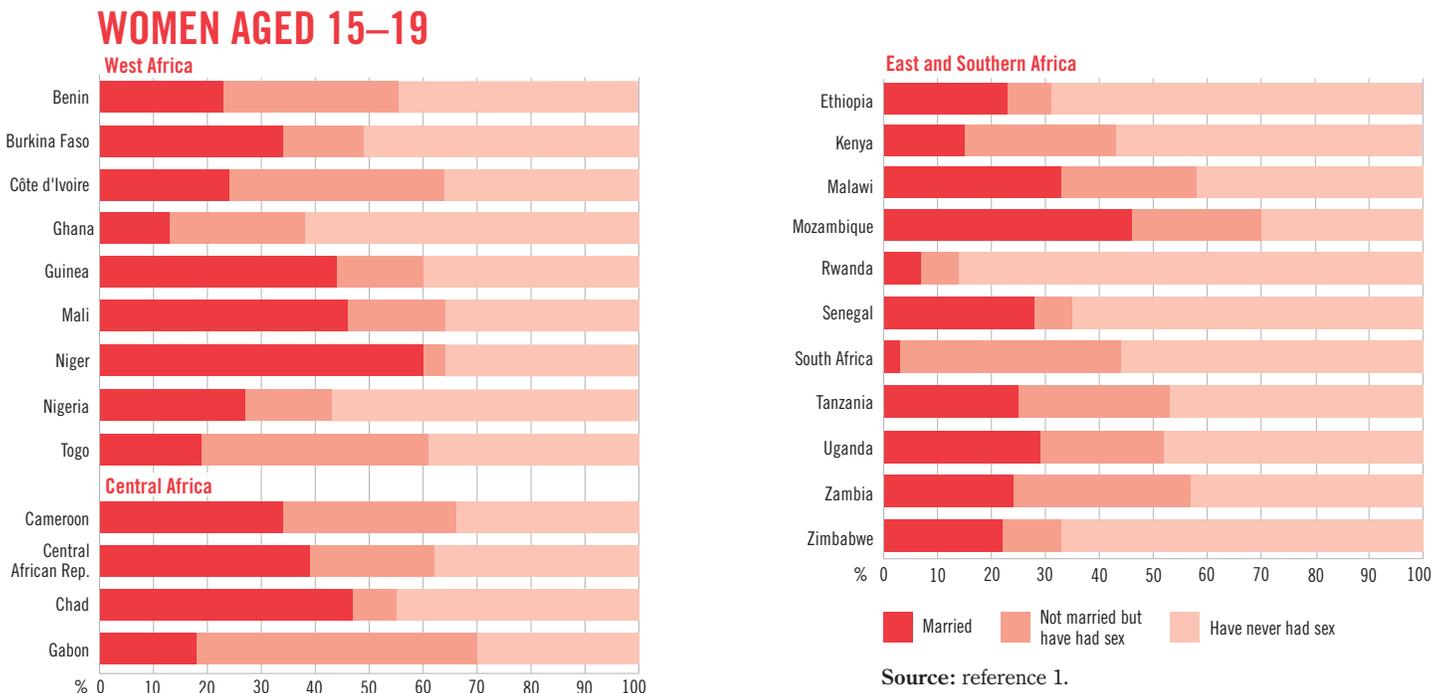


FIGURE 4.1 Adolescent women's marital status and sexual behavior differ widely by country.

It is exceptionally high—26.0 years—in South Africa. This means that in most countries, marriage among women generally occurs before age 20, and either before or within 1–2 years of first intercourse. Exceptions are Gabon, where women marry about four years after first intercourse, and South Africa, where the period between these events is more than eight years.⁶

- By contrast, in 20 countries, the median age at first marriage for men aged 30–34 is between ages 22 and 26, which, in most cases, is about 6–8 years later than men's age at first intercourse. The widest gap is in Kenya, where an average of nine years elapse between first intercourse and marriage.⁷ Thus, the period during which young men in Sub-Saharan Africa are likely to be single and sexually active is sometimes quite lengthy. Important exceptions to this pattern are Niger and Ethiopia, where the gap is only about two and a half years.

Many young women marry older men

Overall, 55–92% of women aged 20–29 who married before age 20 have husbands who are five or more years older than they are (Table 2.1, page 9).⁸ In most countries in West Africa and Central Africa, one-third or more have husbands who are 10 or more years older than they are. This means that the husbands of many young wives typically have been sexually active for several years and are likely to have had more previous sexual partners than their wives. Additionally, in countries where polygyny is common, some young women marry men who have other wives. In situations such as these, some young wives are likely to contract HIV or another sex-

ually transmitted infection (STI) from their older husbands. A study conducted in the mid-1990s in 56 communities in rural Rakai District in Uganda found that the risk of HIV infection doubles for adolescent women with male partners who are 10 or more years older than they are, compared with women whose partners are closer in age.⁹ A similar study in Zimbabwe estimates that the risk of HIV infection increases with every year of age difference between partners.¹⁰

Sexual experience increases with age

In most countries, the median age at first intercourse is in the mid-to-late teens. However, sexual activity starts earlier for some young women and men.

- The proportion of adolescent women who have had sex by age 15 ranges from less than 4% in Rwanda to 36% in Niger. Very early sexual initiation is more common in West Africa and Central Africa than in East and Southern Africa. In most countries, a smaller proportion of men than of women have had sex by age 15, but in a few—Benin, Gabon and Kenya—the proportion is substantially higher for men.¹¹
- Between ages 15 and 17, the rate of initiation of sexual activity increases rapidly. The proportion of women who have had intercourse by their 18th birthday is 60–80% in all but a few countries. The rate of sexual initiation also increases rapidly from age 15 onward among young men.¹²
- In every country except Ethiopia, Nigeria, Rwanda, Senegal and Zimbabwe, about eight in 10 or more women have had inter-

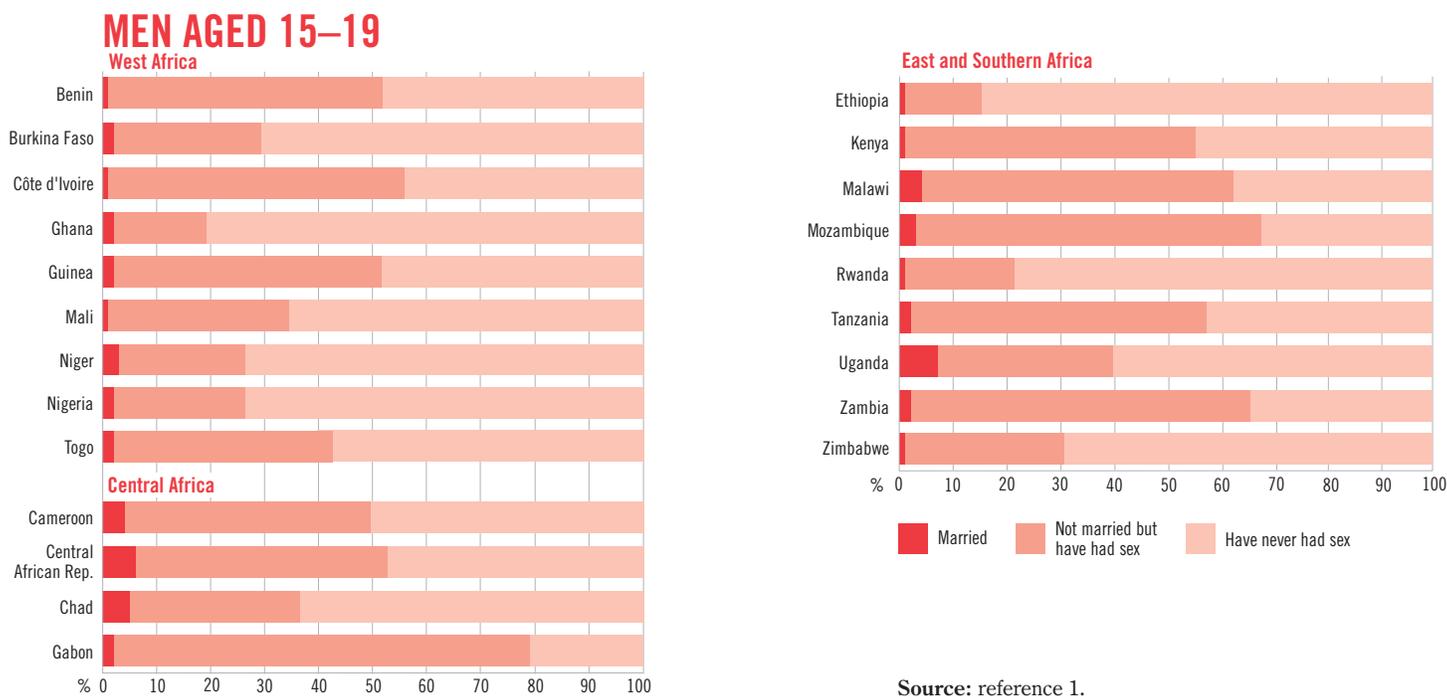


FIGURE 4.2 Adolescent men's marital status and sexual behavior differ widely by country.

course by the time they turn 20. Among men, who are much less likely than women to have married, the proportion ranges from about 40–50% in Burkina Faso, Ethiopia, Niger and Rwanda to 80% or more in nine countries.¹³

But not all adolescents have sexual intercourse

Although sexual initiation in adolescence is common, it is not universal. By their 20th birthday, some young women (6–50%) and men (6–60%) have not had sexual intercourse.

- The proportion of women who have not had sex by age 20 is 15% or less in 16 countries and more than 40% in Rwanda and Senegal.¹⁴
- Among men, the proportion is 15% or less in four countries, 16–30% in nine countries and more than 40% in Burkina Faso, Ethiopia, Ghana, Niger, Nigeria, Rwanda and Zimbabwe.¹⁵

Many unmarried adolescents are sexually experienced, but some have intercourse only sporadically

In some countries, a substantial proportion of unmarried adolescents—both women and men—have had sex.

- At least 50% of unmarried women aged 15–19 are sexually experienced in Côte d'Ivoire, Gabon and Togo, as are 26–49% in 13 other countries.¹⁶
- The proportion of unmarried adolescent men who have had sex is 26–49% in eight countries and 50% or more in nine countries. It is unusually low (14–25%) in Ethiopia, Ghana, Rwanda, Niger and Nigeria.¹⁷ The gender differences in premarital sexual experience

are not surprising given that men tend to marry later than women.

Some unmarried adolescents who are sexually experienced are not sexually active; that is, they have not had intercourse in the past three months. This is especially true for young women.

- In seven countries, fewer than half of unmarried sexually experienced women aged 15–19 have had sex in the past three months. In two of these—Ethiopia and Rwanda—only about one-quarter are sexually active.¹⁸
- In all but two countries, the majority of unmarried sexually experienced adolescent men are sexually active. In Ethiopia, 46% have had sex in the past three months, and in Rwanda, only 18% are sexually active.¹⁹

A larger proportion of young men than of young women have had multiple sexual partners

Young people who have a number of sexual partners are at increased risk of contracting STIs, including HIV. Having multiple partners, in and of itself, increases the chances of disease transmission. In addition, when unmarried adolescents have sporadic sexual relationships, they may not get to know their partners very well. This pattern makes discussion about STIs and negotiation of condom use particularly important.

Among all sexually experienced adolescents—married and unmarried—a substantially larger proportion of men than of women have had two or more partners in the last year (Figure 4.3).²⁰ The pro-

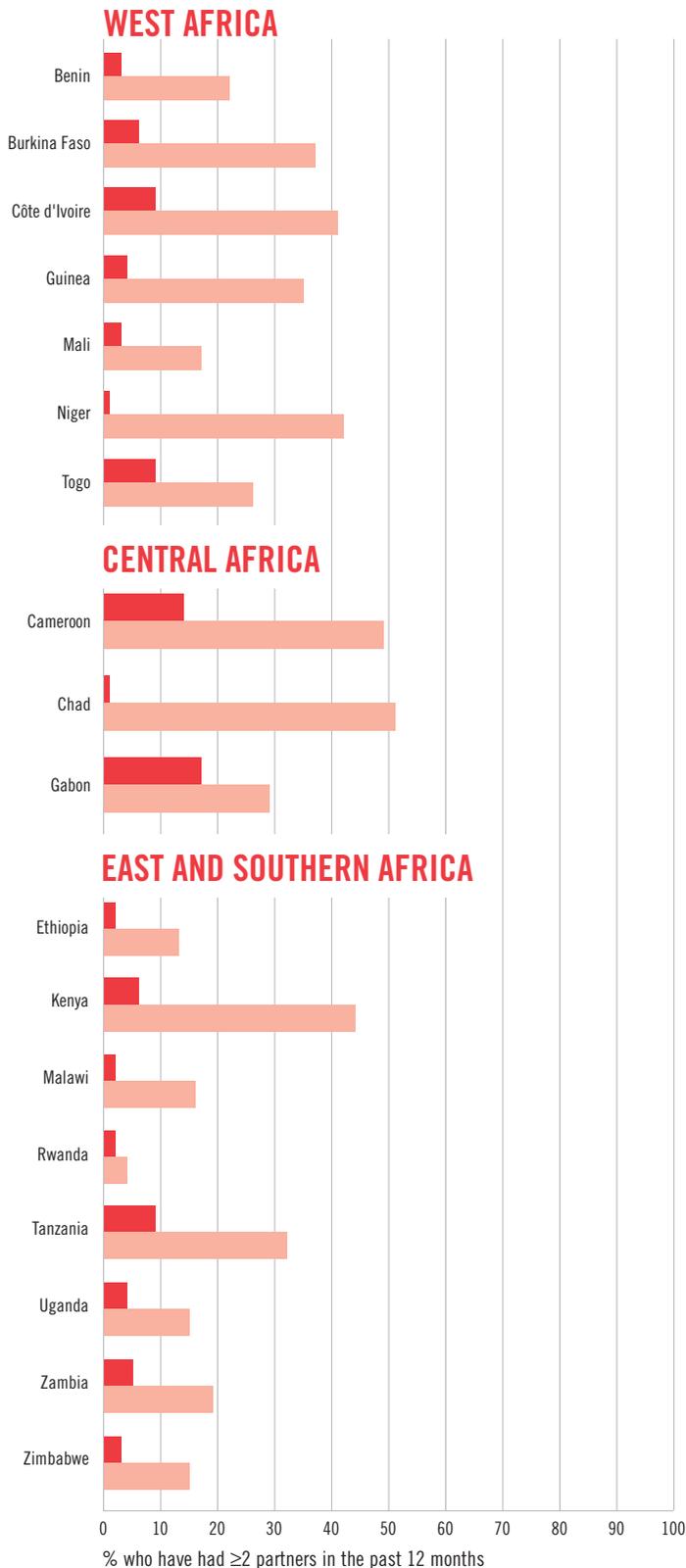


FIGURE 4.3 Larger proportions of sexually experienced men aged 15–19 than of sexually experienced women this age have had two or more partners in the past 12 months.

■ Women
■ Men

Note: Data are unavailable for both women and men in Central African Republic and Senegal; for women in Ghana, Mozambique and Nigeria; and for men in South Africa.

Source: reference 20.

portion is greater than 40% among young men in Cameroon, Chad, Côte d'Ivoire, Kenya, Mozambique and Niger, but it is less than 10% among young women in all countries except Cameroon (14%) and Gabon (17%). In part, this gender difference in number of partners reflects that adolescent women are more likely than adolescent men to be married. However, cultural pressure on men to prove their virility by having multiple partners cannot be discounted.

The proportion of adolescents reporting more than one sexual partner and the estimated prevalence of HIV are weakly related.* The relationship is particularly striking in Zimbabwe, where only 15% of sexually experienced men aged 15–19 had two or more partners in the past year, yet HIV prevalence among men aged 15–24 is estimated to be the highest in the region (Table 1.1, page 5). By comparison, in Cameroon and Chad, 49–51% of sexually experienced men aged 15–19 had multiple partners during the past year, yet the estimated HIV prevalence among men aged 15–24 in those countries is considerably lower than that for Zimbabwe.²¹ A number of factors may help explain the seemingly contradictory findings. These include the prevalence of other STIs (which increase the odds of HIV infection), the existence of high-risk sexual practices (e.g., anal sex or sex with commercial sex workers), incorrect reporting of multiple partners and differing levels of condom use (or of correct and consistent use) among men involved in multiple relationships.

*The fact that the first measure is for the age-group 15–19 and the second for the age-group 15–24 (estimates are not available for 15–19-year-olds) weakens the comparison.

HOW YOUNG PEOPLE PROTECT THEMSELVES FROM SEXUALLY TRANSMITTED INFECTIONS

Little is known about how adolescents respond when they find out they have a sexually transmitted infection (STI). Information is also scarce on adolescents' attitudes toward HIV testing and communication with sexual partners about HIV. Yet, national information on these and related issues, such as condom use, is crucial to any effort to contain the HIV/AIDS pandemic. Having an STI increases the risk of HIV infection, and lack of knowledge of or access to appropriate care also leads to higher rates of STI and HIV infection.

Few adolescents report having had an STI

Most sexually experienced adolescent women and men report that they have not had an STI.*

- Among women aged 15–24 who have had sex, the proportion who had an STI in the past year ranges from 1–4% in 13 countries and 5–11% in four others.^{†1}
- The proportion of sexually experienced men aged 15–24 who had an STI in the past 12 months is 1–4% in seven countries, 5–11% in seven and about 15–16% in two more.^{‡2}

It is important for health care providers who serve youth to know what adolescents do when they learn they have an STI, so that they can help these young people obtain the necessary treatment and avoid spreading the infection. In most Sub-Saharan African countries, the majority of young people who are infected take some action, such as abstaining from sex, using condoms or taking med-

ication, to avoid transmitting the infection to their partners.³ However, 4–30% of infected young women and 24–67% of infected young men do not tell their partner about their infection.⁴

- Fewer than half of infected women in all but two (Benin and Zambia) of the 16 countries with this information and fewer than half of infected men in 11 of 16 countries stopped having intercourse when they became infected.⁵
- Fewer than 30% of infected women in every country except Gabon and Rwanda started using condoms, as did fewer than 30% of infected men in every country except Malawi, Zambia and Zimbabwe (three countries with high HIV rates among young people) and Uganda (where rates were high in the early 1990s and then began to fall).⁶
- At least 50% of infected women in 10 countries and more than

*Responses based on respondents who say they had an STI in the past year are useful as an indicator of approximate levels and patterns of infection, but they are often based on very small sample sizes (see Appendix Table 4, column 2, for the size of the numerator) and are likely to be serious underestimates, especially for women. Self-reported levels of STIs may be lower than actual levels (for which no data exist) because adolescents may be reluctant to report STIs; an infection may be asymptomatic, especially among women, and therefore go unrecognized; or an adolescent may experience symptoms but not recognize that these indicate an STI. Where STI testing is uncommon, many young people may be infected but not aware of the fact.

[†]Data for adolescent women are lacking for Ethiopia, Ghana, Mozambique, South Africa and Tanzania.

[‡]Data for adolescent men are lacking for Ghana, Mozambique, Senegal, South Africa and Tanzania.

TABLE 5.1 Percentage of unmarried sexually active men aged 15–24 who reported currently using a condom, and annual percentage change between successive surveys, by country and survey year

Country and survey years	Earlier survey	Later survey	Annual change
West Africa			
Benin, 1996 and 2001	36	44	1.6
Ghana, 1993 and 1998	18	38	4.0
Mali, 1996 and 2001	36	33	–0.6
East and Southern Africa			
Kenya, 1993 and 1998	31	43	2.4
Tanzania, 1996 and 1999	17	27	3.3
Uganda, 1995 and 2000	31	59	5.6
Zambia, 1996 and 2001	31	38	1.4
Zimbabwe, 1994 and 1999	46	53	1.4

Note: Condom use refers to use as a contraceptive method only.
Source: reference 23.

50% of infected men in five countries used medication of some kind to treat their infections.⁷

Most young people who have not been tested for HIV want to be

Although about 10 million women and men aged 15–24 in Sub-Saharan Africa are HIV-positive,⁸ HIV/AIDS testing is rare among adolescents. However, their interest in being tested is high in the few countries that have information on this topic.

- Gabon, Kenya, Malawi and Zambia have the largest proportions of both young women and men who have heard of HIV/AIDS and have been tested (7–9% of women aged 15–19 and 6–9% of men this age). Elsewhere, the proportions are generally 1–5%.⁹
- In the small number of countries that have this information, most young people aged 15–19 who have heard of HIV and have not been tested say they would like to be: 48–81% of women in 10 countries and 61–86% of men in 11 countries.¹⁰

Not all married youth have discussed HIV prevention with their spouse

One might anticipate that in a region where HIV/AIDS is common, most young people who are married would talk with their spouse about the disease and ways to avoid it. This is often not the case.

- Some 21–27% of married women aged 15–24 in Benin and Mali

and 57–72% in the six other countries with this information say they have discussed HIV/AIDS prevention with their husband.¹¹

- Among married men this age, 33–43% in three countries and 63–86% in six others report having had a conversation with their wife about ways to avoid HIV/AIDS.¹²

While it is hard to generalize these findings from a handful of countries to the rest of Sub-Saharan Africa, the data suggest a lack of attention to or even denial of the risk of STI and HIV infection on the part of both individuals and health officials in some countries. Information from young people shows that a very small proportion have been tested for HIV; some adolescents who have an STI do not tell their partners or take steps to keep from infecting their partners; and some young married couples do not discuss how to avoid HIV infection. On the other hand, information on government policy and public-sector health services indicates that HIV counseling, testing and treatment facilities are woefully inadequate to meet the need.¹³ The fact that only a small proportion of young people have been tested, even though many say they want to be, is likely related to the accessibility of testing facilities. And the extremely limited availability of antiretroviral drugs to treat HIV/AIDS in Sub-Saharan Africa certainly influences the willingness of individuals, including teenagers, to be tested, and to return to testing centers to obtain the results of their test.

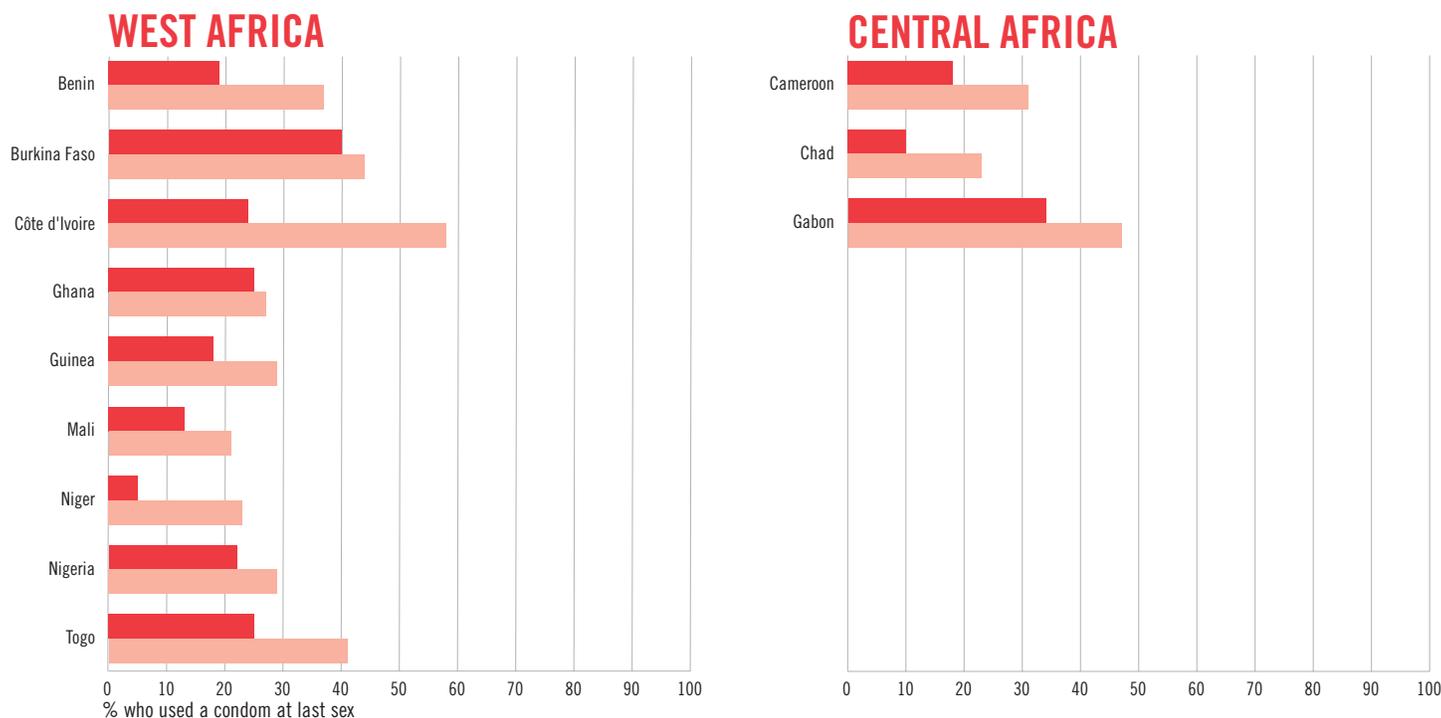


FIGURE 5.1 In most countries, larger proportions of unmarried sexually active men aged 15–19 than of their

Condom use among adolescents is generally quite low

Condom use is a key means of preventing HIV, and many programs are focusing on increasing the population's knowledge of and access to condoms. However, use among adolescents in Sub-Saharan Africa varies widely.

- In the majority of countries, 10–35% of sexually experienced adolescent women have ever used a condom. The proportion is higher in Central African Republic and Côte d'Ivoire (40–41%) and Gabon (62%). It is much lower—2–9%—in Chad, Ethiopia, Guinea, Mali, Mozambique, Niger and Rwanda.¹⁴
- A much higher proportion (21–80%) of sexually experienced men aged 15–19 have ever used a condom. The proportion is particularly high (about 60% or higher) in Cameroon, Central African Republic, Côte d'Ivoire, Gabon, Kenya, Togo and Zimbabwe; it is relatively low (21%) in Ethiopia and Mozambique.¹⁵

However, levels of *current* condom use are much lower than levels of ever-use.

- Condom use at last intercourse is uncommon if young people are married. Among married women aged 15–19, the proportion who used a condom the last time they had sex is 0–4% in 18 countries and is as high as 20% only in South Africa.¹⁶

*These totals are based on countries with an unweighted N of 20 or more and therefore exclude Ethiopia and Rwanda.

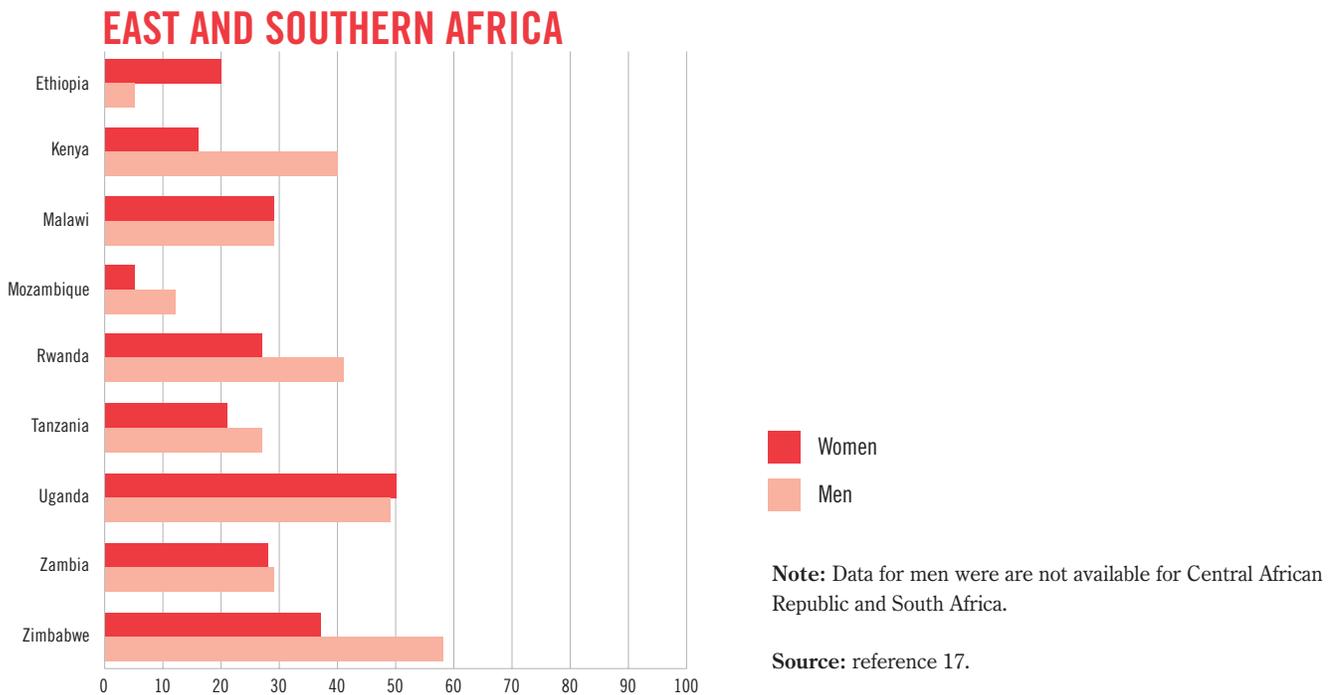
- Condom use is more common among unmarried sexually active teenagers; still, no more than 20% of such women in eight countries and no more than 40% of such men in most countries used a condom the last time they had intercourse (Figure 5.1).¹⁷ Rates of use are substantially higher for adolescent women in Burkina Faso, Gabon, Uganda and Zimbabwe, and for adolescent men in Côte d'Ivoire, Gabon, Uganda and Zimbabwe.

Many adolescent men who have had more than one partner do not use condoms

Although having multiple sexual partners puts people at high risk for HIV/AIDS, in most countries with data, the majority of adolescent men who had two or more partners in the past year did not use a condom the last time they had sex. In 13 of 17 countries, fewer than half of all men aged 15–19 who had two or more sexual partners in the past year used a condom at last sex.* The proportion was particularly low in Mali (16%) and uncommonly high in Côte d'Ivoire (72%) and Uganda (62%).¹⁸

Condoms are not very popular, but use may be increasing in some countries

Many young people in Sub-Saharan Africa dislike condoms,¹⁹ because they reduce sexual pleasure²⁰ or are perceived to be ineffective or defective.²¹ Furthermore, some young people lack confidence in being able to use condoms correctly.²²



female counterparts used a condom the last time they had sex.

On the other hand, evidence from a handful of countries in the region suggests that condom use at last sex among men aged 15–24 is on the rise (Table 5.1, page 19).²³ In Ghana, 18% of unmarried sexually active men this age used a condom at last intercourse in 1993, but 38% did so in 1998. In Kenya, condom use among this age-group increased from 31% to 43% during that period. And in Uganda, it increased from 31% in 1995 to 59% in 2000. Smaller increases were observed in Benin, Tanzania, Zambia and Zimbabwe (a country in which condom use among this group was already quite high as early as 1994).

Knowledge of where to obtain condoms is low in some countries

Efforts to increase adolescents' knowledge that correct and consistent condom use is an effective means of preventing STIs, including HIV, are critical to prevention. So, too, are strategies to ensure that adolescents know where to get and have access to condoms. Currently, many adolescents in some countries, especially in rural areas, do not know where to obtain condoms.

- Among sexually experienced women aged 15–19, between 8% (in Chad and Niger) and 75% (in Malawi and Zambia) know of a place to obtain condoms. Among sexually experienced men this age, the proportion with knowledge of a source of condoms ranges from 35% (in Chad) to 97% (in Côte d'Ivoire).²⁴
- Larger proportions of sexually experienced adolescents living in urban areas than of those living in rural areas know where to

obtain condoms. The urban-rural difference is marked among men aged 15–19 in almost every country except Côte d'Ivoire, Uganda and Zimbabwe, and among women this age in every country except Kenya.²⁵

- Sexually experienced women and men aged 15–19 without any access to newspapers, radio and television are much less likely than those with frequent access to these mass media to know where condoms can be obtained (Figure 5.2, page 22).²⁶ However, other factors may explain this finding. For example, teenagers without access to television are likely to live in rural areas and to come from poor families, which also suggests that they will have had less education and may be less able to receive, seek out, read or understand information about condom availability.

In addition, knowing where to get condoms and being willing to report knowing is undoubtedly related to gender, with higher proportions of sexually experienced men than of sexually experienced women in every country having this knowledge.²⁷ But the gender difference may be smaller than indicated by the statistics because in some cultures, modesty and conservative cultural values may constrain young women from reporting that they know where to obtain condoms.

When sexually experienced women aged 15–19 are asked where condoms might be obtained, in the majority of countries, a larger proportion mention public health facilities than private ones. Very

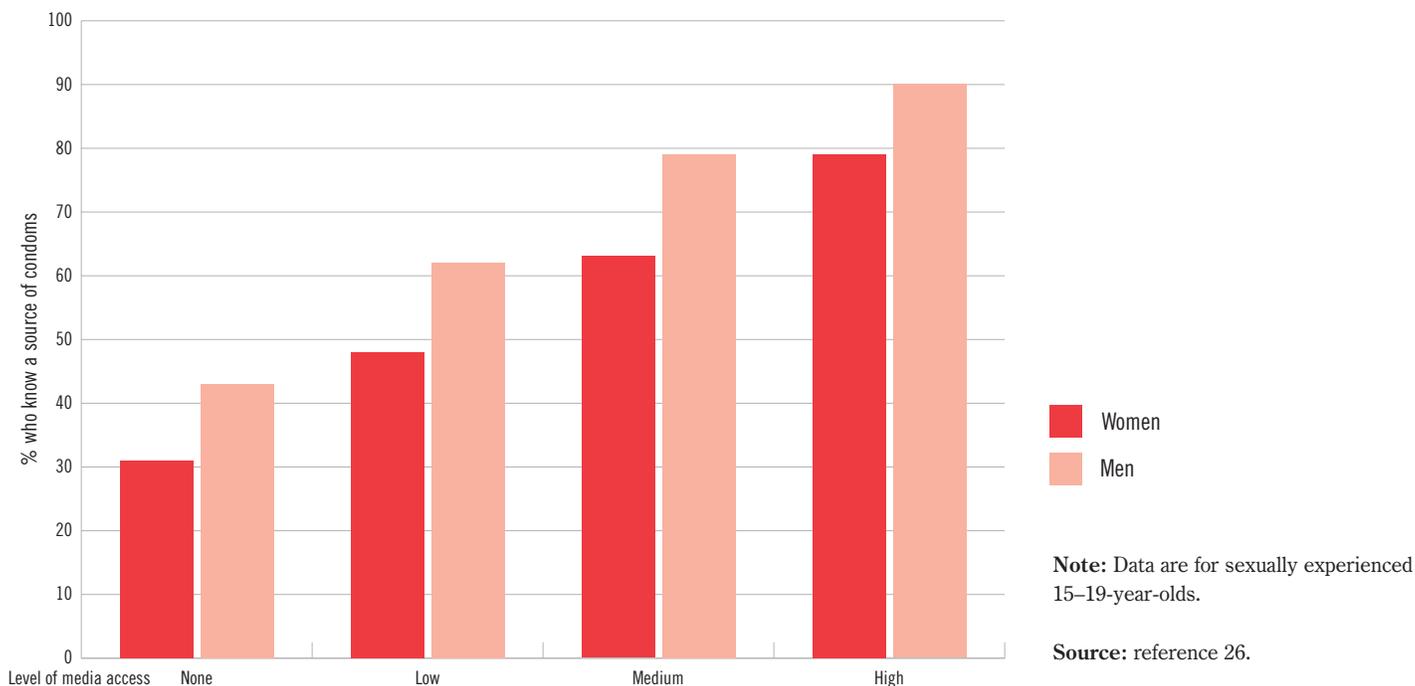


FIGURE 5.2 Across the region, the greater adolescents’ access to the media, the larger the proportion who know where condoms can be obtained.

few mention family or friends, whereas many cite “other” sources (e.g., pharmacies, drugstores and general stores, markets and street vendors). Compared with their female counterparts, larger proportions of sexually experienced adolescent men mention “other” sources.²⁸

Most young people who contract an STI seek advice or treatment

A large majority of both women and men aged 15–24 who had an STI in the past year sought advice or treatment—at least 70% of women in 13 of the 17 countries that have these data and more than 70% of men in 14 of 16 countries. Fifty percent or more of women and 65% or more of men in all of these countries sought help.²⁹

Young people with an infection turn to a variety of sources of advice or treatment, and some go to more than one source. The source consulted varies by country and gender.

- In Nigeria, where almost all men aged 15–24 who had an infection sought advice or treatment, 35% saw a health worker in a clinic or hospital, 19% went to a traditional healer, 57% visited a drugstore or pharmacy and 6% discussed their problem with a friend or relative. Among infected young women, 87% sought advice or treatment; 56% went to a health worker, 16% to a traditional healer, 15% to a drugstore or pharmacy, and 15% to a friend or relative.³⁰
- In sharp contrast, in Zimbabwe, where all men this age who had an infection also sought advice or treatment, 72% went to a

health worker, 8% went to a traditional healer and 9% went to a drugstore or pharmacy. (None reported that they consulted friends or relatives.) The pattern of care-seeking among young women reporting an STI—94% of whom sought advice or treatment—was similar to that for Zimbabwean men, except that none went to a traditional healer or to friends or relatives.³¹

- A larger proportion of women than of men who had an STI sought advice from a health worker in a clinic or hospital in nine of 14 countries that have this information for both adolescent women and men. There was little difference between women and men in two countries, and men were more likely than women to do so in three.³² This pattern may reflect that in Sub-Saharan Africa, women, unlike men, typically go to public or private health centers for prenatal, obstetric and family planning services. In addition, women may be more reluctant than men to go to a drugstore for advice or treatment for an STI. However, the pattern is reversed in three countries.

In-depth studies of the situation in countries with differing overall levels of clinic use and differing levels of use among adolescent women and men may help shed light on the conditions and types of programs that improve recourse to modern sources of medical care for both women and men. Differences in the types of sources adolescents consult for STI advice or treatment may well be linked to country-level differences in young people’s access to health care providers (in terms of affordability, availability and the likelihood of a welcoming reception), rather than to their personal preferences.

CONCLUSIONS AND IMPLICATIONS

As this report has shown, large proportions of adolescents in Sub-Saharan Africa have inadequate information on how to protect themselves against HIV, and substantial proportions are sexually active and engage in behaviors that place them at risk of becoming infected. Figure 6.1 (page 24)¹ summarizes some of the report's major findings.

Despite awareness of HIV/AIDS, knowledge about specific issues is generally quite low

- Most adolescents have heard of HIV/AIDS; the proportion is only slightly smaller among young women than among young men (87% vs. 92%).
- Without being prompted, 23% of adolescent women and 28% of adolescent men say they know that abstinence is a way of preventing HIV/AIDS.
- A somewhat larger (though still modest) proportion of adolescent women than of adolescent men (32% vs. 28%) spontaneously mention monogamy as a preventive strategy.
- A higher proportion of adolescent men than of adolescent women mention condom use as a way of avoiding HIV/AIDS (45% vs. 31%).
- Fewer than half of young people of either sex mention any of these three behaviors as a means of protection against infection.
- The proportion of sexually experienced adolescent men who know where to obtain condoms is almost double that of comparable women (71% vs. 42%).

Young people's behavior can both increase their risk of and protect them against HIV infection

Health care providers who want to help at-risk adolescents avoid infection need to be aware of the differing patterns of sexual initiation and activity among young women and men. In Sub-Saharan African countries, larger proportions of women than of men have had sex by age 18,² a pattern that reflects early marriage among young women in much of the region. But marriage can entail a risk of, rather than protection against, HIV and other sexually transmitted infections (STIs); therefore, health care providers and policy-makers need to be aware of the importance of expanding health services for married adolescent women beyond maternal health care to include counseling, testing and treatment for STIs, including HIV.

As Figure 6.1 indicates, sexual behavior among adolescents differs considerably by gender:

- A larger proportion of women aged 15–19 than of men that age have had sex (46% vs. 37%).
- A substantially larger proportion of adolescent men than of adolescent women have had more than one sexual partner in the past year (12% vs. 3%).
- Among teenagers aged 15–19, 10% of men and 4% of women used a condom at last intercourse.

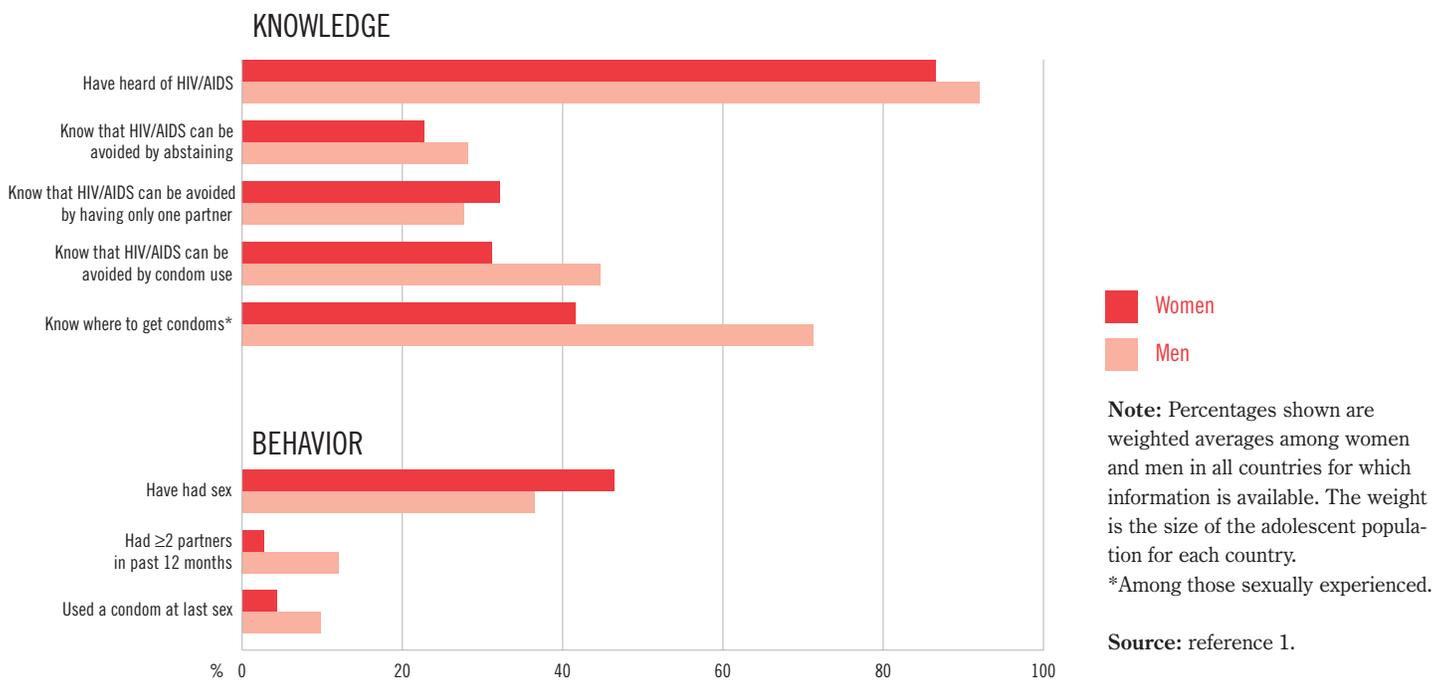


FIGURE 6.1 Women and men aged 15–19 in Sub-Saharan Africa sometimes differ in their knowledge of HIV/AIDS and in their sexual behavior.

Cultural and environmental factors contribute to adolescents' risk of HIV/AIDS

Many of the behaviors contributing to a high risk of HIV/AIDS and other STIs among adolescent women and men in Sub-Saharan Africa—sex at a very young age, sex with more than one partner and unprotected sex—are closely related to two powerful environmental influences: poverty and cultural beliefs about appropriate gender roles.

Poverty. Limited public resources, especially for health care and education, prevent governments from providing the schools, teachers, health clinics and trained medical staff needed to educate and meet the health needs of young people. In many countries in Sub-Saharan Africa, households are also under increasing financial pressure because of failing economies and the resultant lack of jobs.

Many adolescents are not in school, because of widespread poverty in the region and the prevalence of subsistence agriculture, which is often viewed as not requiring high levels of formal education. A lack of education prevents many young people from obtaining accurate information about the risks of unprotected sexual intercourse, where to obtain condoms, how to use them correctly and where to obtain needed health care. Moreover, young people who are out of school are more likely than their contemporaries in school to engage in risky sexual behavior.³ Ironically, a desire to advance their education may actually push some young women into

risky sexual relationships with older men who can support them financially.

Being poor also makes it difficult, and in some cases probably impossible, for adolescents to pay for STI-related treatment or even condoms.

Gender expectations. The findings of this report suggest a widespread double standard for sexual behavior and a sense of sexual entitlement on the part of some young men. Presumably, a belief in male sexual privilege has strong social and cultural support. Differences between men and women in age at marriage may account for the likelihood of young men having more sexual partners than young women.

Cultural expectations of modesty in girls and adolescent women may contribute to the particularly low levels of knowledge about where condoms can be obtained among young women in some countries. Overcoming this stereotype may not be any easier in Sub-Saharan Africa than in other developing regions where similar attitudes about what constitutes appropriate female behavior exist.

The widespread social expectation that young women will start having children soon after marriage is certainly one of the factors responsible for low levels of condom use among newly married couples. Furthermore, condom use among married couples is often viewed as evidence of infidelity or promiscuity, which inhibits a

Knowledge among adolescents that pregnant women can pass HIV to their fetuses and newborns, though common, is far from universal in a region in which childbearing starts so early. This finding points to a need for better and more widespread public education on this issue...

spouse from suggesting use in marriage. Another likely explanation for the low level of condom use among married adolescents is the fact that many young women have much older husbands with whom they are powerless to negotiate or insist on condom use.

Some key areas require further attention

Young people's reproductive health needs may change somewhat depending on whether an adolescent has one sexual partner or several, and whether they have intercourse frequently or sporadically. However, all young people need information and services that will help them avoid contracting HIV and other STIs and enable them to get proper treatment for such infections.

It is encouraging that many young people with an STI seek advice or treatment. This behavior is consistent with another key finding: The large majority of young people want to be tested for HIV. It is less encouraging, however, that many adolescents seek STI information or treatment of questionable appropriateness or effectiveness. Identifying the reasons for this pattern and providing young people with high-quality, affordable and confidential diagnosis and treatment services should be a high priority in the region.

Knowledge among adolescents that pregnant women can pass HIV to their fetuses and newborns, though common, is far from universal in a region in which childbearing starts so early. This finding points to a need for better and more widespread public education on

this issue, in schools and through other means, as well as for maternal and child health providers to better inform young women of the risks to their infants if they are infected with HIV (or another STI) and become pregnant.

Adolescents' needs must be addressed on a variety of fronts

The challenges for policymakers and program planners seeking to slow the HIV/AIDS epidemic in Sub-Saharan Africa are clearly enormous. Critical first steps include development of comprehensive national policies that address the provision of sexual and reproductive health information and services to young people and promote gender equality, and implementation of these policies by governments, the private sector and nongovernmental organizations.

They also require public education campaigns to change adolescents' sexual behavior (by promoting the ABC strategy, for example), as well as programs, in and out of school, to provide sex education directly to young people. To be most effective, sex education should be offered before adolescents initiate sex, perhaps beginning as early as age 10, and should use developmentally appropriate instructional approaches and information. Public education campaigns should rely on forms of mass communication that are attractive to young people, particularly television, radio, films and music, as well as magazines and comic books in areas with high literacy rates.

The fight against HIV/AIDS also will require change in certain sociocultural norms, values and practices that promote gender stereotypes and a power imbalance between men and women....Change will not occur without strong support from and role modeling by community and national leaders.

Any effort to curb the epidemic will also require increased supplies of condoms and wider availability of health services to diagnose and treat HIV/AIDS and other STIs, educational and job training programs for young people who are not in school and training programs for health care providers aimed at changing judgmental attitudes about adolescent sexual behavior. Educational approaches should focus on helping adolescents develop the self-efficacy and skills needed to abstain from intercourse if they are unmarried or to adopt protective behaviors, such as monogamy or condom use, if they are sexually active, and to talk openly with their families and sexual partners about HIV/AIDS.

The fight against HIV/AIDS also will require change in certain sociocultural norms, values and practices that promote gender stereotypes and a power imbalance between men and women. Addressing these attitudes and practices will require openness, sensitivity and patience; change will not occur without strong support from and role modeling by community and national leaders. Support can be expressed through policy statements and program actions; leaders and other high-profile personalities who communicate to the public about their personal experiences with HIV/AIDS can also be highly effective in reducing stigma and mobilizing people.

Activities on these many fronts pose enormous, though not insurmountable, challenges for the region, requiring broad and resolute involvement by many parties—families, communities, nongovern-

mental organizations, government institutions and international donors. The long-term aims must be both to support young people in having healthy sexual relationships and to convince policymakers, health care providers and others that by addressing the needs of young people, it may be possible to slow down and ultimately conquer the HIV/AIDS epidemic.

REFERENCES

Chapter 1: Introduction

1. Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO), *AIDS Epidemic Update*, Dec. 2003, <http://www.unaids.org/wad/2003/Epiupdate2003_en/EpiUpdate2003_en.pdf>, accessed Jan. 2, 2004.
2. United Nations Children's Fund (UNICEF), *Africa's Orphaned Generations*, New York: UNICEF, 2003; and The Alan Guttmacher Institute (AGI), unpublished calculations based on United Nations (UN), *World Population Prospects: The 2002 Revision*, Vol. II, New York: UN, 2003.
3. UNICEF, 2003, op. cit. (see reference 2).
4. UNAIDS, *Report on the Global HIV/AIDS Epidemic July 2002*, Geneva: UNAIDS, 2002; and UNAIDS, *Report on the Global HIV/AIDS Epidemic 2000*, Geneva: UNAIDS, 2000.
5. AGI, unpublished calculations based on UN, *World Population Prospects: The 2000 Revision*, New York: UN, 2001, annex tables.
6. Panchaud C et al., Issues in measuring HIV prevalence: the case of Nigeria, *African Journal of Reproductive Health*, 2002, 6(3):11–29.
7. Anderson RM, The transmission dynamics of sexually transmitted diseases: the behavioral components, in: Wasserheit JN, Aral SO and Holmes KK, eds., *Research Issues in Human Behavior and Sexually Transmitted Diseases in the AIDS Era*, Washington, DC: American Society for Microbiology, 1991, p. 41.
8. United Nations Population Fund, HIV/AIDS and adolescents, in: *State of World Population 2003—Making 1 Billion Count: Investing*

in Adolescents' Health and Rights, <<http://www.unfpa.org/swp/2003/english/ch3/>>, accessed Nov. 23, 2003.

9. Bolan G, Ehrhardt AA and Wasserheit J, Gender perspectives and STDs, in: Holmes KK et al., eds., *Sexually Transmitted Diseases*, third ed., New York: McGraw-Hill, 1999, pp. 117–127.
10. Kiragu K, Youth and HIV/AIDS: can we avoid catastrophe? *Population Reports*, 2001, Series L, No. 12, p. 7.
11. WHO, Young people—a window of hope in the HIV/AIDS pandemic, <http://www.who.int/child-adolescent-health/HIV/HIV_adolescents.htm>, accessed Dec. 18, 2003.

Box: Data Sources, Comprehensiveness, Coverage and Quality

1. Woog V, Annotated Bibliography on HIV/AIDS and Youth in Sub-Saharan Africa, *Occasional Report*, New York: The Alan Guttmacher Institute, 2003, No. 10.
2. World Health Organization, Young people—a window of hope in the HIV/AIDS pandemic, <http://www.who.int/child-adolescent-health/HIV/HIV_adolescents.htm>, accessed Dec. 18, 2003; Kiragu K, Youth and HIV/AIDS: can we avoid catastrophe? *Population Reports*, 2001, Series L, No. 12, p. 7; Mahy M and Gupta N, Trends and differentials in adolescent reproductive behavior in Sub-Saharan Africa, *Demographic and Health Survey Analytical Studies*, Calverton, MD, USA: ORC Macro, 2002, No. 3; Luke N and Kurz K, *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; Varga CA, The forgotten fifty percent: a review of sexual and reproductive health research and programs focused on boys and young men in Sub-Saharan Africa, *African Journal of Reproductive Health*, 2001, 5(3):175–195; Population Reference Bureau (PRB), *Youth in Sub-Saharan Africa: A Chartbook on Sexual Experience and Reproductive Health*, Washington, DC: PRB and ORC Macro, 2001; and McCauley AP and Salter S, Meeting the needs of young people, *Population Reports*, 1995, Series J, No. 41.

3. Smith TW, A methodological analysis of the sexual behavior questions on the General Social Survey, *Journal of Official Statistics*, 1992, 8(2):309–325; and Catonia JA et al., Response bias in surveys of AIDS-related sexual behavior, in: Ostrow DG and Kessler RC, eds., *Methodological Issues in AIDS Mental Health Research*, New York: Plenum Press, 1993, pp. 133–162.

Chapter 2: Young People and HIV/AIDS: The Broader Context

1. Kiragu K, Youth and HIV/AIDS: can we avoid catastrophe? *Population Reports*, 2001, Series L, No. 12, p. 7.
2. World Bank Group, GNP per capita, <<http://www.worldbank.org/depweb/english/modules/economic/gnp/data.html>>, accessed Nov. 1, 2003.
3. Vandemoortele J and Delamonica E, The “education vaccine” against HIV/AIDS, *Current Issues in Comparative Education*, 2000, <<http://www.tc.columbia.edu/cice/articles/jved131.htm>>, accessed Feb. 25, 2004.
4. Bankole A and Singh S, Condom use and need for protection against STIs/HIV among young men in Sub-Saharan Africa, paper presented at the annual meeting of the Population Association of America, Minneapolis, MN, USA, May 1–3, 2003, Table 4.
5. Appendix Table 1, col. 2.
6. Appendix Table 1, col. 3.
7. Appendix Table 1, col. 2.
8. Appendix Table 1, col. 3.
9. Appendix Table 1, col. 2.
10. Appendix Table 1, col. 4.
11. Ibid.
12. Appendix Table 1, cols. 5–8.
13. Negussie T et al., HIV prevalence and socio-cultural contexts of sexuality among youth in Addis Ababa, Ethiopia, *Ethiopia Journal of Health Development*, 2002, 6(2):139–145.
14. Awusabo-Asare K et al., ‘All die be die’: obstacles to change in the face of HIV infection in Ghana, in: Caldwell JC et al., eds., *Resistance to Behavioural Change to Reduce HIV/AIDS Infection in Predominantly Heterosexual Epidemics in Third World Countries*, Canberra, Australia: Australian National University, National Centre for Epidemiology and Population Health, Health Transition Centre, 1999, pp. 125–132; Hulton LA, Cullen R and Wamala

Khalokho S, Perceptions of the risks of sexual activity and their consequences among Ugandan adolescents, *Studies in Family Planning*, 2000, 31(1):35–46; Nzioka C, Dealing with the risks of unwanted pregnancy and sexually transmitted infections among adolescents: some experiences from Kenya, *African Journal of Reproductive Health*, 2001, 5(3):132–149; Nzioka C, Perspectives of adolescent boys on the risks of unwanted pregnancy and sexually transmitted infections: Kenya, *Reproductive Health Matters*, 2001, 9(17):108–117; Temin MJ et al., Perceptions of sexual behavior and knowledge about sexually transmitted diseases among adolescents in Benin City, Nigeria, *International Family Planning Perspectives*, 1999, 25(4):186–190 & 195; Varga CA, The forgotten fifty percent: a review of sexual and reproductive health research and programs focused on boys and young men in Sub-Saharan Africa, *African Journal of Reproductive Health*, 2001, 5(3):175–195; and Varga CA, South African young people’s sexual dynamics: implications for behavioural responses to HIV/AIDS, in: Caldwell JC et al., eds., *Resistance to Behavioural Change to Reduce HIV/AIDS Infection in Predominantly Heterosexual Epidemics in Third World Countries*, Canberra, Australia: Australian National University, National Centre for Epidemiology and Population Health, Health Transition Centre, 1999, pp. 13–34.

15. Van der Straten A et al., Couple communication, sexual coercion, and HIV risk reduction in Kigali, Rwanda, *AIDS*, 1995, 9(8):935–944; and Mason KO, HIV transmission and the balance of power between women and men: a global view, *Health Transition Review*, 1994, 4(Suppl.):217–240.

16. Blanc A et al., *Negotiating Reproductive Outcomes in Uganda*, Calverton, MD, USA: Macro International, 1996.

17. United Nations Population Fund, Gender inequality and reproductive health, in: *State of World Population 2003—Making 1 Billion Count: Investing in Adolescents’ Health and Rights*, <<http://www.unfpa.org/swp/2003/english/ch2/>>, accessed Nov. 29, 2003; and Oppong C and Wéry R, *Women’s Roles and Demographic Change in Sub-Saharan Africa*, 1994, International Union for the Scientific Study of Population, Policy and Research Paper No. 5, <http://www.iussp.org/Publications_on_site/PRP/prp5.php>, accessed Nov. 29, 2003.

18. The Alan Guttmacher Institute, unpublished tabulations of Demographic and Health Surveys (DHS).

19. Makinwa-Adebusoye P, Factors affecting fertility in Sub-Saharan Africa, paper presented at the United Nations Workshop on Prospects for Fertility Decline in High Fertility Countries, <<http://www.un.org/esa/population/publications/prospectsdecline/prospectsdecline.htm>>, accessed Nov. 20, 2003.

20. Konde-Lule JK, Sewankambo N and Morris M, Adolescent sexual networking and HIV transmission in rural Uganda, *Health Transition Review*, 1997, 7(Suppl.):89–100.

21. Bohmer L and Kirumira EK, Socio-economic context and the sexual behavior of Ugandan out of school youth, *Culture, Health and Sexuality*, 2000, 2(3):269–285; Luke N and Kurz K, *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; and Gregson S et al., Sexual mixing patterns and sex-differentials in teenage exposure to HIV infection in rural Zimbabwe, *Lancet*, 2002, 259(9321):1896–1903.

22. Luke N and Kurz K, 2002, op. cit. (see reference 21); and Meekers D and Calves AE, “Main” girlfriends, girlfriends, marriage, and money: the social context of HIV risk behaviour in Sub-Saharan Africa, *Health Transition Review*, 1997, 7(Suppl.):361–375.

23. Family Health International, Barriers to good reproductive health care, in: *Meeting the Needs of Young Clients: A Guide to Providing Reproductive Health Services to Adolescents*, <<http://www.fhi.org/en/RH/Pubs/servdelivery/adolguide/Chapter2.htm>>, accessed Dec. 15, 2003.

24. Center for Reproductive Law and Policy (CRLP) and Child and Law Foundation, *State of Denial: Adolescent Reproductive Rights in Zimbabwe*, New York: CRLP, 2002, p. 11.

25. Olowu F, Quality and costs of family planning as elicited by an adolescent mystery client trial in Nigeria, *African Journal of Reproductive Health*, 1998, 2(1):49–60.

26. Appendix Table 5, cols. 10 and 11.

27. Creel LC and Perry RJ, Improving the quality of reproductive health care for young people, *New Perspectives on Quality of Care*, 2003, No. 4, <<http://www.popcouncil.org/pdfs/frontiers/QOC/QOC-Youth.pdf>>, accessed Dec. 17, 2003.

28. CRLP and Child and Law Foundation, 2002, op. cit. (see reference 24), p. 9.

29. United Nations (UN), Programme of Action at the International Conference on Population and Development, September 5–13, 1994, New York: UN, 1995, paragraph 7.45, p. 53.

Chapter 3: What Young People Know and Believe About HIV/AIDS

1. Appendix Table 2, col. 1.

2. Appendix Table 2, col. 2.

3. Ibid.; and Joint United Nations Program on HIV/AIDS (UNAIDS), *Report on the Global HIV/AIDS Epidemic July 2002*, Geneva: UNAIDS, 2002.

4. Appendix Table 2, col. 3.

5. Ibid.

6. Ibid.; and UNAIDS, op. cit., 2002 (see reference 3).

7. Appendix Table 2, col. 4.

8. Ibid.

9. Appendix Table 2, col. 5.

10. Appendix Table 2, col. 6.

11. Appendix Table 2, col. 7.

12. Appendix Table 2, col. 8.

13. Awusabo-Asare K et al., ‘All die be die’: obstacles to change in the face of HIV infection in Ghana, in: Caldwell JC et al., eds., *Resistance to Behavioural Change to Reduce HIV/AIDS Infection in Predominantly Heterosexual Epidemics in Third World Countries*, Canberra, Australia: Australian National University, National Centre for Epidemiology and Population Health, Health Transition Centre, 1999, pp. 125–132; MacPhail C and Campbell C, ‘I think condoms are good but, aai, I hate those things’: condom use among adolescents and young people in a southern African township, *Social Science and Medicine*, 2001, 52(11):1613–1627; and Nzioka C, Perspectives of adolescent boys on the risks of unwanted pregnancy and sexually transmitted infections: Kenya, *Reproductive Health Matters*, 2001, 9(17):108–117.

14. The Alan Guttmacher Institute, unpublished tabulations of Demographic and Health Survey (DHS) for Benin.

15. Appendix Table 2, cols. 6–8.

Chapter 4: Young People's Sexual and Marital Behavior

1. Appendix Table 3, cols. 1 and 2.

2. Appendix Table 3, col. 1.

3. Appendix Table 3, col. 2.

4. Appendix Table 3, col. 5.

5. Appendix Table 3, col. 3.

6. Appendix Table 3, cols. 3 and 4.

7. Ibid.

8. The Alan Guttmacher Institute, unpublished tabulations of Demographic and Health Surveys (DHS).

9. Kelly RJ and Gray RH, Age differences in sexual partners and risk of HIV-1 infection in rural Uganda, *Journal of Acquired Immune Deficiency Syndrome*, 2003, 32(4):446–451.

10. Gregson S et al., Sexual mixing patterns and sex-differentials in teenage exposure to HIV infection in rural Zimbabwe, *Lancet*, 2002, 259(9321):1896–1903.

11. Appendix Table 3, col. 6.

12. Appendix Table 3, col. 7.

13. Appendix Table 3, col. 8.

14. Appendix Table 3, 100% minus the data in col. 8.

15. Ibid.

16. Appendix Table 3, col. 9.

17. Ibid.

18. Appendix Table 3, col. 10.

19. Ibid.

20. Appendix Table 3, col. 11.

21. Ibid.; and Joint United Nations Programme on HIV/AIDS (UNAIDS), *Report on the Global HIV/AIDS Epidemic July 2002*, Geneva: UNAIDS, 2002.

Chapter 5: How Young People Protect Themselves from Sexually Transmitted Infections

1. Appendix Table 4, col. 1.
2. Ibid.
3. Appendix Table 4, cols. 4–7.
4. Appendix Table 4, col. 3.
5. Appendix Table 4, col. 5.
6. Appendix Table 4, col. 6.
7. Appendix Table 4, col. 7.
8. United Nations Children’s Fund (UNICEF), *Africa’s Orphaned Children*, New York: UNICEF, 2003.
9. Appendix Table 4, col. 8.
10. Appendix Table 4, col. 9.
11. Appendix Table 4, col. 10.
12. Ibid.
13. Global HIV Prevention Working Group, *Global Mobilization for HIV Prevention: A Blueprint for Action*, Global HIV Prevention Working Group, 2002, <<http://www.kff.org/hiv/aids/hivghpwgpackage.cfm>>, accessed Feb. 25, 2004.
14. The Alan Guttmacher Institute (AGI), unpublished tabulations of Demographic and Health Surveys (DHS) for all countries covered in this report except Senegal.
15. AGI, unpublished tabulations of DHS for 22 countries.
16. AGI, unpublished tabulations of DHS for 19 countries.
17. Appendix Table 4, col. 11.
18. Appendix Table 4, col. 12.
19. Konde-Lule JK, Sewankambo N and Morris M, Adolescent sexual networking and HIV transmission in rural Uganda, *Health Transition Review*, 1997, 7(Suppl.):89–100; and Gardner R, Blackburn RD and Upadhyay UD, Closing the condom gap, *Population Reports*, 1999, Series H, No. 9.
20. Fawole OI, Asuzu MC and Oduntan SO, Survey of knowledge, attitudes and sexual practices relating to HIV infection/AIDS among Nigerian secondary school students, *African Journal of Reproductive Health*, 1999, 3(2):15–24; and Government of Botswana et al., *Baseline Study on Knowledge, Attitudes, Behaviors and Practices of Adolescents and Youth on Sexual and Reproductive Health*, Gaborone, Botswana: African Youth Alliance, 2002.
21. Feldman DA et al., HIV prevention among Zambian adolescents: developing a value utilization/norm change model, *Social Science and Medicine*, 1997, 44(4):455–468; and Hulton LA, Cullen R and Wamala Khalokho S, Perceptions of the risks of sexual activity and their consequences among Ugandan adolescents, *Studies in Family Planning*, 2000, 31(1):35–46.
22. Tweedie I and Witte K, *Ghana Youth Reproductive Health Survey Report*, Accra: Ghana Social Marketing Foundation, 2000.
23. AGI, unpublished tabulations of DHS in two successive survey

years for these countries.

24. Appendix Table 5, col. 1.
25. Appendix Table 5, cols. 2 and 3.
26. Appendix Table 1, cols. 9–12.
27. Appendix Table 5, col. 1.
28. Appendix Table 5, cols. 4–7.
29. Appendix Table 5, col. 8.
30. Appendix Table 5, cols. 9–12.
31. Ibid.
32. Appendix Table 5, col. 9.

Chapter 6: Conclusions and Implications

1. The Alan Guttmacher Institute, unpublished tabulations of Demographic and Health Surveys (DHS).
2. Appendix Table 3, col. 7.
3. Vandemoortele J and Delamonica E, The “education vaccine” against HIV/AIDS, *Current Issues in Comparative Education*, 2000, <<http://www.tc.columbia.edu/cice/articles/jved131.htm>>, accessed Feb. 25, 2004.

APPENDIX TABLES

APPENDIX TABLE 1. Selected demographic and social characteristics of 15–19-year-old women and men in Sub-Saharan Africa, by country and survey year

APPENDIX TABLE 2. Knowledge of and attitudes about HIV/AIDS among 15–19-year-old women and men in Sub-Saharan Africa, by country and survey year

APPENDIX TABLE 3. Marital status and sexual experience among young women and men in Sub-Saharan Africa, by country and survey year

APPENDIX TABLE 4. Sexually transmitted infections and protective behaviors among adolescent women and men in Sub-Saharan Africa, by country and survey year

APPENDIX TABLE 5. Knowledge and use of STI-related services by adolescent women and men in Sub-Saharan Africa, by country and survey year

APPENDIX TABLE 1. Selected demographic and social characteristics of 15–19-year-old women and men in Sub-Saharan Africa, by country and survey year

Country and survey year	No. (in 000s), 2002	% with ≥7 years of schooling	% in school	% urban	% by level of exposure to media ¹				% sexually experienced who know where to get a condom, by level of exposure to media ¹			
					None	Low	Medium	High	None	Low	Medium	High
	1	2	3	4	5	6	7	8	9	10	11	12
WOMEN												
West Africa												
Benin, 2001	383	22	15 ²	47	34	40	21	5	25	33	62	62
Burkina Faso, 1999	713	9	9	21	70	22	7	1	19	41	80	100
Côte d'Ivoire, 1998	1,003	17	17	45	24	44	23	8	46	76	78	98
Ghana, 1998	1,161	64	38	37	23	28	33	17	53	63	84	97
Guinea, 1999	446	10	19	41	52	30	14	4	14	28	44	67
Mali, 2001	637	12	13 ²	41	27	35	32	6	7	18	40	77
Niger, 1998	609	7	7	22	40	31	24	6	5	8	14	36
Nigeria, 1999	6,561	51	50	30	39	21	22	18	12	24	38	56
Senegal, 1997	536	14	11 ²	46	33	67	u	u	16	43	u	u
Togo, 1998	262	17	40	44	37	39	20	4	30	52	75	90
Central Africa												
Cameroon, 1998	880	49	35	39	49	29	17	5	38	67	82	90
Central African Rep., 1994	212	9	20	49	30	44	19	7	23	38	68	73
Chad, 1997	440	4	12	23	75	17	6	2	3	18	27	43
Gabon, 2000	61	50	70	83	12	23	38	28	54	63	79	86
East and Southern Africa												
Ethiopia, 2000	3,510	13	u	22	81	14	4	1	10	45	67	100
Kenya, 1998	2,005	61	50	22	31	33	22	14	38	43	56	56
Malawi, 2000	648	33	32 ²	17	44	43	11	3	68	79	89	84
Mozambique, 1997	1,020	9	16	28	59	23	11	8	13	27	56	77
Rwanda, 2000	475	9	15 ²	21	57	33	8	2	21	43	71	89
South Africa, 1998	2,368	89	80	53	14	26	30	30	80	86	89	95
Tanzania, 1999	2,088	44	26	24	72	24	4	0	41	60	71	100
Uganda, 2000	1,369	35	21 ²	19	42	35	16	8	44	72	89	96
Zambia, 2001	610	51	33 ²	42	50	25	18	7	68	81	85	88
Zimbabwe, 1999	798	85	39 ²	35	38	24	20	19	53	70	78	81
MEN												
West Africa												
Benin, 2001	381	41	u	46	12	46	34	8	68	75	89	96
Burkina Faso, 1999	713	18	17	23	58	28	11	3	81	87	100	100
Côte d'Ivoire, 1998	1,005	35	36	42	7	43	39	12	0	100	96	100
Ghana, 1998	1,169	70	49	31	19	23	36	22	80	94	82	94
Guinea, 1999	460	27	47	40	48	30	15	7	43	77	82	96
Mali, 2001	641	24	27 ²	37	22	35	32	12	25	48	66	94
Niger, 1998	632	20	15	27	22	33	29	15	39	30	54	80
Nigeria, 1999	6,776	63	63	33	18	25	29	28	7	39	78	90
Togo, 1998	263	31	67	35	35	43	20	3	55	76	89	93
Central Africa												
Cameroon, 1998	887	51	55	46	29	30	27	14	64	86	97	100
Central African Rep., 1994	205	16	44	51	17	45	22	16	u	u	u	u
Chad, 1997	438	15	55	32	62	21	11	6	22	31	67	61
Gabon, 2000	61	57	84	82	7	19	43	31	81	74	92	97
East and Southern Africa												
Ethiopia, 2000	3,513	14	u	16	69	21	7	3	u	u	u	u
Kenya, 1998	2,007	60	62	16	12	32	30	27	72	63	77	88
Malawi, 2000	661	34	u	18	25	52	19	4	84	90	93	100
Mozambique, 1997	1,016	15	51	39	42	22	22	14	21	34	52	89
Rwanda, 2000	469	8	u	19	40	46	10	4	55	78	92	100
Tanzania, 1999	2,095	46	32	26	58	32	7	2	64	79	87	100
Uganda, 2000	1,368	39	49 ²	18	22	54	17	8	44	62	48	47
Zambia, 2001	622	50	54 ²	36	39	29	21	11	67	82	84	97
Zimbabwe, 1999	797	82	56 ²	29	27	34	19	20	81	90	83	93

1. Low=exposure to one of the following at least once a week: radio, newspaper or television. Medium=exposure to two of these media at least once a week. High=exposure to all three media at least once a week. For Guinea and Uganda, exposure was within the last four weeks; for Senegal, respondents were also asked only about exposure to radio at least once a week; for these countries, the two measures were combined. In most countries, surveys asked if the respondent listened to the radio daily. In Benin (men only), Gabon, Malawi, Rwanda, Tanzania, Uganda and Zimbabwe, surveys also asked if the respondent listened to the radio at least once a week; for these countries, the two measures were combined. 2. Data from an earlier survey for Benin (1996), Malawi (1992), Mali (1996), Rwanda (1992), Senegal (1992), Uganda (1995), Zambia (1996) and Zimbabwe (1994). NOTES: u=unavailable. Data were not available for 15–19-year-old men in Senegal and South Africa.

SOURCES: Column 1: United Nations (UN), *World Population Prospects: The 2000 Revision*, New York: UN, 2001, annex tables. Columns 2–12: The Alan Guttmacher Institute, unpublished tabulations of Demographic and Health Surveys (DHS).

APPENDIX TABLE 2. Knowledge of and attitudes about HIV/AIDS among 15–19-year-old women and men in Sub-Saharan Africa, by country and survey year

Country and survey year	% who have heard of HIV/AIDS	Of those who have heard of HIV/AIDS, % who believe they could be infected	% who know a healthy-looking person can have HIV/AIDS	% who know that HIV can be transmitted from mother to child	% who know that there are ways to avoid HIV/AIDS	% who spontaneously identified specific ways to avoid HIV/AIDS ¹		
						Abstain	Have only one partner ²	Use condoms
	1	2	3	4	5	6	7	8
WOMEN								
West Africa								
Benin, 2001	95	u	53	68	54	5	31	37
Burkina Faso, 1999	80	54	37	39	53	9	28	22
Côte d'Ivoire, 1998	97	56	61	72	92	18	54	52
Ghana, 1998	97	29	65	74	75	14	46	22
Guinea, 1999	96	58	60	59	77	34	55	27
Mali, 2001	89	u	45	45	54	14	20	35
Niger, 1998	54	23	19	23	35	8	18	10
Nigeria, 1999	74	30	41	37	53	19	27	8
Senegal, 1997	90	u	41	u	65	22	44	23
Togo, 1998	95	49	63	69	68	10	28	39
Central Africa								
Cameroon, 1998	90	52	55	63	70	14	27	37
Central African Rep., 1994	91	54	53	63	62	12	38	28
Chad, 1997	57	53	17	32	35	11	21	7
Gabon, 2000	98	u	69	84	82	14	20	67
East and Southern Africa								
Ethiopia, 2000	79	u	39	55	67	11	45	21
Kenya, 1998	99	54	67	79	74	33	18	33
Malawi, 2000	98	u	82	61	92	65	19	55
Mozambique, 1997	81	72	34	u	26	1	19	14
Rwanda, 2000	99	u	58	71	93	78	10	34
South Africa, 1998	95	u	52	u	91	u	u	79
Tanzania, 1998	95	30	60	68	74	32	34	41
Uganda, 2000	100	u	72	81	85	53	37	56
Zambia, 2001	98	51	69	76	80	47	29	46
Zimbabwe, 1999	94	u	69	81	80	24	51	59
MEN								
West Africa								
Benin, 2001	96	u	68	70	75	9	33	63
Burkina Faso, 1999	91	64	58	49	67	13	27	51
Côte d'Ivoire, 1998	99	48	67	62	97	19	28	72
Ghana, 1998	97	24	71	u	77	12	41	35
Guinea, 1999	91	31	51	54	79	37	20	51
Mali, 2001	96	u	56	53	71	22	17	54
Niger, 1998	81	18	36	37	58	22	10	27
Nigeria, 1999	85	28	44	36	64	27	21	25
Togo, 1998	97	48	67	78	84	22	21	61
Central Africa								
Cameroon, 1998	96	51	56	63	84	20	19	57
Central African Rep., 1994	98	40	66	74	79	10	38	46
Chad, 1997	80	61	27	43	55	25	19	20
Gabon, 2000	100	u	78	87	92	18	16	81
East and Southern Africa								
Ethiopia, 2000	88	u	49	65	80	20	52	39
Kenya, 1998	99	60	74	78	84	35	13	52
Malawi, 2000	99	u	87	65	96	69	11	73
Mozambique, 1997	90	70	54	u	40	1	15	28
Rwanda, 2000	99	u	62	77	95	81	3	63
Tanzania, 1998	97	39	63	65	76	29	28	58
Uganda, 2000	100	u	80	80	93	67	29	74
Zambia, 2001	95	53	66	68	87	53	14	61
Zimbabwe, 1999	99	u	81	84	88	25	50	73

1. Other behaviors mentioned but not shown here were: avoid sex with prostitutes, avoid sex with homosexuals, avoid blood transfusions, avoid infections, avoid kissing, avoid mosquito bites, seek protection from traditional healer and any country-specific categories. 2. Includes those who mentioned "have only one partner," "be faithful" or both behaviors.

NOTES: u=unavailable. Data were not available for men aged 15–19 for Senegal and South Africa.

SOURCE: The Alan Guttmacher Institute, unpublished tabulations of Demographic and Health Surveys (DHS).

APPENDIX TABLE 3. Marital status and sexual experience among young women and men in Sub-Saharan Africa, by country and survey year

Country and survey year	Of those 15–19, % married	Of those 15–19, % unmarried and sexually experienced	Of those 20–24						Among unmarried 15–19-year-olds, % sexually experienced	Among unmarried sexually experienced 15–19-year-olds, % who had sex in last 3 months	Among sexually experienced 15–19-year-olds, % with ≥2 partners in last 12 months
			Median age at 1st sex	Median age at 1st marriage ¹	% who had premarital sex before age 20	% who had sex by age					
						15	18	20			
	1	2	3	4	5	6	7	8	9	10	11
WOMEN											
West Africa											
Benin, 2001	23	32	17.2	19.0	52	14	63	86	42	65	3
Burkina Faso, 1999	34	15	17.2	17.7	31	11	73	92	23	79	6
Côte d'Ivoire, 1998	24	40	16.2	19.7	66	25	75	93	53	71	9
Ghana, 1998	13	25	17.4	19.6	51	11	58	83	29	56	u
Guinea, 1999	44	16	15.8	16.5	29	34	77	90	28	66	4
Mali, 2001	46	18	15.8	16.8	30	31	79	92	33	63	3
Niger, 1998	60	4	15.6	15.3	6	36	79	88	9	41	1
Nigeria, 1999	27	16	17.7	18.6	31	22	52	71	22	63	u
Senegal, 1997	28	7	18.8	18.7	14	13	43	57	10	47	u
Togo, 1998	19	42	17.2	18.8	66	18	64	88	51	70	9
Central Africa											
Cameroon, 1998	34	32	16.2	18.0	56	27	78	93	48	74	14
Central African Rep., 1994	39	23	16.0	17.4	48	28	80	94	38	73	u
Chad, 1997	47	8	16.0	15.9	18	33	77	91	15	75	1
Gabon, 2000	18	52	16.1	20.4	72	25	80	94	63	67	17
East and Southern Africa											
Ethiopia, 2000	23	8	18.0	17.2	9	20	50	67	10	26	2
Kenya, 1998	15	28	17.2	20.2	63	18	59	81	33	54	6
Malawi, 2000	33	25	17.0	18.1	38	18	64	85	37	48	2
Mozambique, 1997	45	24	15.9	17.3	45	33	79	93	44	68	u
Rwanda, 2000	7	7	20.0	21.0	16	4	27	50	7	22	2
South Africa, 1998	3	41	17.7	26.0	74	8	54	79	43	67	6
Tanzania, 1999	25	28	16.9	18.8	53	17	67	87	37	73	9
Uganda, 2000	29	23	16.6	18.0	44	21	71	90	33	52	4
Zambia, 2001	24	33	16.8	18.4	49	19	65	85	44	49	5
Zimbabwe, 1999	22	11	18.8	19.8	28	6	37	67	14	42	3
MEN											
West Africa											
Benin, 2001	1	50	17.3	24.3	76	22	59	80	50	66	22
Burkina Faso, 1999	1	27	19.7	25.2	51	8	32	52	27	74	37
Côte d'Ivoire, 1998	1	54	17.5	26.3	79	18	54	83	55	82	41
Ghana, 1998	3	17	19.5	24.8	49	8	30	56	18	73	17
Guinea, 1999	2	49	17.5	26.1	71	21	56	77	50	80	35
Mali, 2001	1	33	18.6	25.4	55	11	42	63	34	62	17
Niger, 1998	3	23	20.3	22.8	32	4	26	47	23	61	42
Nigeria, 1999	2	24	19.5	25.6	48	11	37	54	25	65	37
Togo, 1998	2	40	18.0	24.6	73	12	50	76	41	64	26
Central Africa											
Cameroon, 1998	4	45	17.0	25.1	78	16	63	85	47	79	49
Central African Rep., 1994	6	46	17.0	23.2	77	16	65	88	49	87	u
Chad, 1997	5	31	18.4	22.5	50	7	45	67	32	81	51
Gabon, 2000	2	76	15.7	24.2	89	36	85	94	77	77	29
East and Southern Africa											
Ethiopia, 2000	1	14	21.6	24.3	30	3	22	40	14	46	13
Kenya, 1998	1	53	15.9	25.0	83	35	70	83	53	72	44
Malawi, 2000	4	57	17.7	22.9	72	20	53	77	59	61	16
Mozambique, 1997	3	63	17.2	22.4	74	13	61	87	65	78	61
Rwanda, 2000	1	20	19.9	25.3	45	7	30	51	20	18	4
Tanzania, 1999	2	54	17.5	23.8	78	14	57	82	56	78	32
Uganda, 2000	6	32	18.4	22.3	67	9	43	71	34	51	15
Zambia, 2001	2	62	17.0	23.0	76	24	59	82	63	57	19
Zimbabwe, 1999	1	29	19.5	24.3	54	8	31	57	29	57	15

1. Age-group is 25–29 for women and 30–34 for men.

NOTES: u=unavailable. Married includes those cohabiting or in a consensual union.

SOURCE: The Alan Guttmacher Institute, unpublished tabulations of Demographic and Health Surveys (DHS).

APPENDIX TABLE 4. Sexually transmitted infections and protective behaviors among young women and men in Sub-Saharan Africa, by country and survey year

Country and survey year	Of those 15–24 and sexually experienced, % who had STI in last 12 months	Of those 15–24 who had an STI in last 12 months ¹						Of those 15–19 who have heard of HIV, % ever tested	Of those 15–19 who have heard of HIV and never been tested, % want to be tested	Of married 15–24-year-olds who have heard of HIV, % who have talked to partner about prevention ³	Of those 15–19, un-married and sexually active, % who used a condom at last sex ⁴	Of those 15–19 with ≥2 partners in the last 12 months, % who used a condom at last sex ⁵
		Un-weighted N	% who informed partners	% who acted to avoid transmitting an STI ²								
				Total	Stopped having sex	Started using condoms	Used medication					
	1	2	3	4	5	6	7	8	9	10	11	12
WOMEN												
West Africa												
Benin, 2001	1	17	81	82	54	29	74	3	68	27	19	15 ⁶
Burkina Faso, 1999	1	12	73	26	7	7	20	u	u	u	40	47
Côte d'Ivoire, 1998	2	17	96	64	22	3	53	u	u	u	24	30
Guinea, 1999	11	158	77	66	16	4	53	u	u	u	18	16
Mali, 2001	6	232	70	64	40	8	58	3	59	21	13	13
Niger, 1998	†	†	†	†	†	†	†	u	u	u	5	0 ⁶
Nigeria, 1999	1	15	79	67	0	26	49	u	u	u	22	u
Senegal, 1997	2	14	u	u	u	u	u	u	u	u	u	u
Togo, 1998	1	15	75	39	16	4	19	u	u	u	25	28
Central Africa												
Cameroon, 1998	3	53	75	81	22	6	65	u	u	u	18	20
Central African Rep., 1994	10	178	80	58	25	7	46	u	u	u	13	u
Chad, 1997	†	†	†	†	†	†	†	u	u	u	10	15 ⁶
Gabon, 2000	3	66	75	79	49	37	69	8	64	69	34	27
East and Southern Africa												
Kenya, 1998	2	41	86	78	21	11	50	9	66	u	16	15
Malawi, 2000	1	56	78	50	38	20	26	7	81	72	29	26
Rwanda, 2000	1	18	86	77	12	69	58	2	48	67	27	66 ⁶
Tanzania, 1999	u	u	u	u	u	u	u	4	65	u	21	30
Uganda, 2000	8	202	89	68	42	15	61	6	67	57	50	39
Zambia, 2001	3	67	89	77	60	16	69	7	78	59	28	30
Zimbabwe, 1999	4	44	91	80	23	9	48	7	70	58	37	39 ⁶
MEN												
West Africa												
Benin, 2001	3	15	33	67	55	29	48	4	69	43	37	38
Burkina Faso, 1999	†	†	†	†	†	†	†	u	u	u	44	49
Côte d'Ivoire, 1998	4	10	73	77	57	10	44	u	u	u	58	72
Guinea, 1999	6	25	60	79	38	19	46	u	u	u	29	32
Mali, 2001	5	20	43	52	44	17	39	4	71	33	21	16
Niger, 1998	3	14	35	45	33	10	32	u	u	u	23	20
Nigeria, 1999	11	33	61	56	39	4	30	u	u	u	29	28
Togo, 1998	3	20	63	71	44	0	42	u	u	u	41	48
Central Africa												
Cameroon, 1998	15	106	65	86	45	10	42	u	u	u	31	34
Central African Rep., 1994	16	68	69	82	63	7	57	u	u	u	u	u
Chad, 1997	5	24	69	77	34	12	54	u	u	u	23	22
Gabon, 2000	10	64	74	86	78	23	84	9	70	72	47	55
East and Southern Africa												
Ethiopia, 2000	†	†	†	†	†	†	†	1	66	38	5	49 ⁶
Kenya, 1998	6	58	75	90	50	14	38	7	63	u	40	37
Malawi, 2000	2	21	68	87	39	35	77	7	86	86	29	23
Rwanda, 2000	†	†	†	†	†	†	†	2	61	63	41	69 ⁶
Tanzania, 1999	u	u	u	u	u	u	u	4	66	u	27	29
Uganda, 2000	3	19	50	69	41	40	51	3	72	80	49	62
Zambia, 2001	5	30	58	64	46	30	46	6	76	77	29	37
Zimbabwe, 1999	4	20	76	100	26	37	42	3	63	76	58	51

1. Data are shown to indicate a pattern, although for some countries the unweighted N is 10–19; data not shown for countries with an unweighted N of nine or fewer. 2. There are other categories (country-specific categories and others), but these are not included here. The total includes mention of any category; a respondent could give multiple responses. 3. Married includes those cohabiting or in a consensual union. 4. Data are available for women in Ethiopia, Ghana, Mozambique and South Africa; the respective proportions are 20, 25, 5 and 23. Data are also available for men in Ghana and Mozambique; the respective proportions are 27 and 12. 5. Data are available for women in Ethiopia and South Africa; the respective proportions are 8 and 21. Data are also available for men in Ghana, although the unweighted N is less than 20; the proportion is 45. 6. Unweighted N is less than 20.

NOTES: u=unavailable. †=unweighted N is nine or fewer. Data are not available for men aged 15–19 for Senegal and South Africa; for women aged 15–19 for Ethiopia; for women and men for Ghana, Mozambique and South Africa; and for women and men aged 15–24 for Tanzania.

SOURCE: The Alan Guttmacher Institute, unpublished tabulations of Demographic and Health Surveys (DHS).

APPENDIX TABLE 5. Knowledge and use of STI-related services by young women and men in Sub-Saharan Africa, by country and survey year

Country and survey year	% of sexually experienced 15–19-year-olds who know							Of 15–24-year-olds who had an STI in last 12 months, % who sought advice/treatment, by source				
	Where to get a condom			Specific source for condoms ^{1,2}				Any	Clinic/Hospital	Traditional healer	Drugstore/pharmacy	Friends/relatives
	Total	Urban	Rural	Public health facilities	Private health facilities	Friends/relatives	Other distribution centers					
1	2	3	4	5	6	7	8	9	10	11	12	
WOMEN												
West Africa												
Benin, 2001	38	50	27	11	14	2	31	90	77	19	6	25
Burkina Faso, 1999	29	72	20	u	u	u	u	53	41	u	0	12
Côte d'Ivoire, 1998	71	80	64	1	21	1	47	90	55	35	3	7
Ghana, 1998	71	81	67	26	45	0	0	u	u	u	u	u
Guinea, 1999	22	40	13	6	6	1	9	83	55	33	2	8
Mali, 2001	23	46	11	5	12	0	13	84	55	41	44	39
Niger, 1998	8	25	6	6	1	0	1	†	†	†	†	†
Nigeria, 1999	24	39	20	6	16	0	1	87	56	16	15	15
Senegal, 1997	34	61	23	15	14	0	4	50	40	17	0	0
Togo, 1998	49	63	40	11	7	1	31	66	31	5	4	9
Central Africa												
Cameroon, 1998	57	73	47	15	32	1	43	91	69	8	6	1
Central African Rep., 1994	43	65	20	14	16	1	30	67	54	u	3	9
Chad, 1997	8	16	6	2	1	0	5	†	†	†	†	†
Gabon, 2000	74	78	58	26	56	7	37	85	70	12	64	25
East and Southern Africa												
Ethiopia, 2000	15	49	11	8	1	0	7	u	u	u	u	u
Kenya, 1998	46	49	45	19	8	0	19	97	66	20	0	12
Malawi, 2000	75	94	71	34	7	0	34	89	47	51	43	40
Mozambique, 1997	24	47	15	19	3	u	2	u	u	u	u	u
Rwanda, 2000	35	61	25	14	13	0	20	88	58	16	23	23
South Africa, 1998	88	91	84	84	3	0	1	u	u	u	u	u
Tanzania, 1999	47	72	39	19	14	1	14	u	u	u	u	u
Uganda, 2000	64	88	57	28	33	0	48	81	77	20	8	20
Zambia, 2001	75	85	69	55	15	0	34	97	79	20	26	17
Zimbabwe, 1999	65	77	60	47	7	0	11	94	66	0	6	0
MEN												
West Africa												
Benin, 2001	81	91	74	16	31	2	70	80	59	60	40	40
Burkina Faso, 1999	88	100	83	u	u	u	u	†	†	u	†	†
Côte d'Ivoire, 1998	97	98	96	0	21	0	76	82	75	0	7	0
Ghana, 1998	88	94	85	17	14	0	0	u	u	u	u	u
Guinea, 1999	68	89	49	9	28	1	31	100	50	4	23	20
Mali, 2001	61	77	43	10	34	2	42	65	35	23	44	13
Niger, 1998	48	81	35	20	7	14	7	100	21	63	12	27
Nigeria, 1999	67	91	56	5	60	1	2	97	35	19	57	6
Togo, 1998	74	92	65	15	15	6	39	100	26	30	7	20
Central Africa												
Cameroon, 1998	88	96	80	24	59	2	77	100	63	11	21	12
Central African Rep., 1994	u	u	u	u	u	u	u	65	50	u	3	11
Chad, 1997	35	58	22	4	5	2	24	100	20	10	49	20
Gabon, 2000	90	92	81	19	75	8	65	98	79	16	74	77
East and Southern Africa												
Kenya, 1998	77	83	75	17	9	6	44	96	90	10	7	5
Malawi, 2000	89	100	88	38	8	0	43	95	78	36	28	48
Mozambique, 1997	45	69	24	22	16	u	7	u	u	u	u	u
Rwanda, 2000	74	93	68	22	27	0	52	†	†	†	†	†
Tanzania, 1999	72	92	63	13	30	0	29	u	u	u	u	u
Uganda, 2000	54	55	53	20	22	2	42	93	76	35	15	17
Zambia, 2001	79	86	74	46	24	2	42	77	65	55	21	41
Zimbabwe, 1999	87	87	87	39	19	2	28	100	72	8	9	0

1. Categories are not mutually exclusive and can therefore add up to more than 100%. 2. Public health facilities mainly include government hospitals, government health centers, family planning clinics, public mobile clinics, public field workers and other public facilities; private health facilities mainly include private hospitals, private clinics, private doctors, private mobile clinics, private field workers and mission facilities; other distribution centers mainly include shops, markets, kiosks, gas stations, bars/nightclubs, churches/mosques/temples and community-based distributors.

NOTES: u=unavailable. †=unweighted N is nine or fewer. Data were not available for men aged 15–19 for Senegal and South Africa; data for men in Ethiopia are not included because they were unavailable for the condom questions and the Ns were less than 10 for the STI questions.

SOURCE: The Alan Guttmacher Institute, unpublished tabulations of Demographic and Health Surveys (DHS).

©2004 The Alan Guttmacher Institute, A Not-for-Profit Corporation for Sexual and Reproductive Health 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: 0-939253-67-4

Suggested citation: Bankole A et al., *Risk and Protection: Youth and HIV/AIDS in Sub-Saharan Africa*, New York: The Alan Guttmacher Institute, 2004.

The Alan Guttmacher Institute
120 Wall Street
New York, NY 10005 USA
Telephone: 212-248-1111
Fax: 212-248-1951
E-mail: info@guttmacher.org

1301 Connecticut Avenue NW, Suite 700
Washington, DC 20036 USA

www.guttmacher.org

