Adolescent Reproductive Health: Making a Difference

Adolescence brings growth, change, opportunity, and, all too frequently, risks to reproductive health. The need for improved health and social services aimed at adolescents, including reproductive health services, is being increasingly recognized throughout the world. Spurred on by recommendations from the 1994 International Conference on Population and Development (see box, page 2), organizations in many countries have created a range of programs to better meet the reproductive health needs of adolescents. While existing adolescent programs are too few and too limited to meet the global need, and have been inadequately evaluated, pilot projects and innovative efforts in many regions provide important lessons on what types of activities make a difference, and what do not.

Approximately one billion people—nearly one out of every six persons on the planet—are adolescents; 85 percent live in developing countries. Many adolescents are sexually active (although not always by choice) and, in some regions, as many as half are married. Sexual activity puts adolescents at risk of various reproductive health challenges. Each year about 15 million adolescents aged 15–19 years give birth, as many as 4 million obtain an abortion, and up to 100 million become infected with a curable sexually transmitted disease (STD). Globally, 40 percent of all new human immunodeficiency virus (HIV) infections occur among 15–24 year olds; recent estimates are that 7,000 are infected each day. These health risks are influenced by many interrelated factors, such as expectations concerning early marriage and sexual relationships, access to education and employment, gender inequities, sexual violence, and the influence of mass media and popular culture.

Adolescents often lack basic reproductive health information, skills in negotiating sexual relationships, and access to affordable, confidential reproductive health services. Concerns about privacy or the ability to pay, and real or perceived disapproval by service providers further limit access to services where they exist, as do legal barriers to information and services. Many adolescents lack strong stable relationships with parents or other adults whom they can talk to about their reproductive health concerns.

Editor’s Note: Adolescence is considered by WHO as the period between 10 and 19 years. Youth is defined by the United Nations as the period 15-24 years. The term “young people” often is used to describe both groups—those between ages 10 and 24.
Despite these challenges, programs that meet the information and service needs of adolescents can make a real difference. Successful programs help young people develop life planning skills, respect the needs and concerns of young people, involve communities in their efforts, and provide respectful and confidential clinical services. This article reviews the issues that affect adolescent reproductive health, discusses programs that have been implemented, and evaluates lessons learned from program experience.

**Reproductive Health Risks**

Adolescent reproductive health is affected by pregnancy, abortion, STDs, sexual violence, and by the systems that limit access to information and clinical services. Reproductive health also is affected by nutrition, psychological well-being, and economic and gender inequities that can make it difficult to avoid forced, coerced, or commercial sex.4

**Pregnancy.** In many parts of the world, women marry and begin childbearing during their adolescent years (see Table 1). Pregnancy and childbirth carry greater risks of morbidity and mortality for adolescents than for women in their 20s (see Outlook, Volume 16, Special Issue), especially where medical care is scarce. Girls younger than age 18 face two to five times the risk of maternal mortality as women aged 18–25 due to prolonged and obstructed labor, hemorrhage, and other factors. Potentially life-threatening pregnancy-related illnesses such as hypertension and anemia also are more common among adolescent mothers, especially where malnutrition is endemic.

**Unsafe abortion.** Adolescent unwanted pregnancies often end in abortion. Surveys in developing countries show that up to 60 percent of pregnancies to women below age 20 are mistimed or unwanted.6 In Canada, Great Britain, New Zealand, and the United States in the late 1980s, more than 50 percent of all abortions were obtained by women under 25.7 Pregnant students in many developing countries often seek abortions to avoid being expelled from school.8

Induced abortion often represents a greater risk for adolescents than for older women. Adolescents tend to wait longer to get help because they cannot access a provider, or because they may not realize that they are pregnant. This risk is compounded in countries where abortion is only available under unsafe conditions. In Nigeria, for example, 50–70 percent of women hospitalized for complications of induced abortion are younger than 20; a 13-year review found that complications from unsafe abortion were responsible for 72 percent of maternal deaths among women under age 19 at one university hospital.12

**STDs, including HIV.** STD infections can lead to life-long health problems, including infertility and chronic pain, and increase the risk of HIV transmission. Approximately 333 million cases of curable STDs occur each year; available data suggest that one-third of STD infections in developing countries occur among 13–20 year olds.13 In rural Kenya, for example, 41 percent of women aged 15–24 attending maternal and child health or family planning clinics had an STD, compared to about 16 percent of all women of reproductive age.9

| Table 1. Percentage of women age 20–24 who gave birth by age 20, selected regions and countries |
|-------------------------------------------------|---------------------|
| China                                           | 14%                 |
| Latin American/Caribbean                        | 27–50%              |
| North Africa/Middle East                        | 13–41%              |
| Sub-Saharan Africa                              | 25–75%              |
| South Asia                                      | 16–66%              |
| Southeast Asia††                                | 21–33%              |
| United States                                   | 22%                 |

†Data from 1980s and 1990s.
††Data from Indonesia, Philippines, and Thailand.
Source AGI 1998.8

ICPD Recommendations for Adolescent Reproductive Health Services

The International Conference on Population and Development (ICPD) Programme of Action urged governments and nongovernmental organizations to establish programs to address adolescent sexual and reproductive health issues. Countries also were urged to remove legal, regulatory, and social barriers to reproductive health information and services for adolescents.10 Important resources for adolescents were outlined, including:

- family planning information and counseling;
- clinical services for sexually active adolescents;
- services for pregnant and parenting adolescents;
- counseling about gender relations, violence, responsible sexual behavior, and sexually transmitted disease; and
- preventing and treating sexual abuse and incest.

Much progress has been achieved since the ICPD. More countries are formulating adolescent reproductive health policies and programs, and more programs are moving toward an integrated approach to services that acknowledges social influences on behavior. Adolescents are participating more in developing and evaluating programs, and new emphasis is being placed on the importance of safe and supportive program environments.11

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Adolescents also are at increased risk of contracting HIV/AIDS. Recent estimates are that over 40 percent of HIV infections occur in young people age 15–24; 7,000 of
16,000 new infections each day. New infections among females outnumber males by a ratio of 2 to 1.\(^3\)

Young people tend to be at higher risk of contracting STDs, including HIV/AIDS, for several reasons. Intercourse often is unplanned or unwanted\(^{14,15}\) (see Sociocultural factors below). Even when sex is consensual, adolescents often do not plan ahead for condom or other contraceptive use, and inexperienced users are more likely to use methods incorrectly.\(^{16}\) Furthermore, adolescent girls are at greater risk of infection than older women because of the immaturity of their reproductive system.

**Female Genital Mutilation (FGM).** FGM, the partial or complete removal of external genitalia or other injury to the female genitalia, is a deeply rooted traditional practice that has severe reproductive health consequences for girls and women. Most women who have undergone FGM live in one of 28 African countries; approximately two million girls are subjected to the practice each year.\(^{17}\) In addition to the psychological trauma at the time of the cutting, FGM can lead to infection, hemorrhage, and shock. Uncontrolled bleeding or infection can lead to death within hours or days. Some forms of FGM can lead to chronic pain with intercourse, recurrent pelvic infection, and prolonged, obstructed labor. The ICPD Programme of Action calls FGM a basic human rights violation and urges governments to stop the practice. The next issue of Outlook will discuss FGM in more detail.

**Sociocultural factors.** Sexual abuse and coercion increase health risks for adolescents, as do cultural norms regarding gender and sexual relationships. For example,

- In some countries, such as India, arranged marriage of girls younger than 14 is still common.
- Sexual exposure is occurring at ages as young as 9–12 years as older men seek young girls as sexual partners to protect themselves from STD/HIV infection.\(^2\)
- In some cultures young men are expected to have their first sexual encounter with a prostitute.
- Adolescents, especially young girls, often experience forced sexual intercourse. In Uganda, for example, 40 percent of 400 randomly selected primary school students who were sexually active reported being forced to have intercourse.\(^{18}\)
- In sub-Saharan Africa, some girls’ first sexual experience is with a “sugar daddy” who provides clothing, school fees, and books in exchange for sex.
- Millions of children live and work on the streets in developing countries and many are involved in “survival sex” where they trade sex for food, money, protection, or drugs.\(^{19}\) For example, a survey in Guatemala City found that 40 percent of 143 street children surveyed had their first sexual encounter with someone they did not know; all had exchanged sex for money, all had been sexually abused, and 93 percent had been infected with an STD.\(^{20}\)
- In Thailand, an estimated 800,000 prostitutes are under age 20; of these, 200,000 are younger than 14. Some are sold into prostitution by parents to support other family members.\(^{15}\)

### The Challenge of Developing Effective Programs

Programs working to improve adolescent reproductive health face several challenges. They must provide appropriate information and clinical services while helping youth develop decision-making and other key skills. Programs must consider the underlying factors that influence adolescents’ choices (such as cultural norms, peer and mass media influence, and economic hardship) and develop program strategies responsive to youth’s needs. Programs also must build community and political support for youth-centered activities.

**Making clinical services available.** Adolescent clinical health services are best staffed by providers trained to deal with specific adolescent health concerns and to counsel adolescents about sensitive reproductive health issues and contraceptive use (see box, page 4). In all interventions, providers must consider adolescents’ marital status, overall health, and how much power they have in sexual relationships. Adolescents often name the following characteristics as important to meeting their health needs:

- Confidentiality; convenient location and hours; youth friendly environment; open to men and women; strong counseling component; specially trained providers; and comprehensive clinical services.\(^{21}\)

**Providing information.** Providing appropriate and relevant information about reproductive health is essential to any program. Clinic-based education and counseling are important to this effort, as are school-based programs (see box, page 5). Obviously, parents are a key source of information, although they may feel ill-informed or embarrassed to discuss these topics with their children, or simply may disapprove of young people expressing an interest in sexuality. Youth-friendly approaches such as radio call-in shows, drop-in centers, magazines, and hotlines also can be effective strategies for reaching adolescents. (see box, page 6).

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*“Restricting access to sexual health education aimed at postponing first sexual intercourse and practicing safer sex is a violation of children’s rights. Girls and boys need to understand how to help take charge of their own lives—to protect themselves and others from HIV.”*  
Peter Piot  
UNAIDS
Developing skills. Adolescents need to develop practical skills for improving their health. One approach to this challenge is the “Choose a Future” program being implemented in five countries in sub-Saharan Africa. The program uses exercises, role plays, community visits, and other means to teach health skills, including how to avoid STDs, set goals, and improve communication with family and friends. The curriculum also addresses gender inequities that affect health and promotes shared male-female responsibility for health. Another example of this approach is a life planning skills curriculum being implemented in selected secondary schools in Kenya. In addition to providing information about STDs, pregnancy, and contraception, the program trains peer educators to provide school-based AIDS education.

Considering the contexts of young lives. The perspectives of young people around the world are molded by the situations in which they live. Girls with little, if any, education may view early marriage and childbearing as their only path in life (see box, page 5). Children living in poverty may feel no reason to plan for the future and protect their health. Other factors that influence adolescent health and behavior include:

- Poverty, including malnutrition;
- Political strife, including displaced populations;
- Peer pressure and media influence; and
- Gender inequities and sexual exploitation (see page 3);
- Cultural expectations about childbearing.

A recent article has proposed a program-planning strategy based on differences in young people’s sexual experiences (see box, page 7).

Ensuring programs’ relevance to youth. Program planners must first identify clearly what group of adolescents a new program will serve, and then involve them in a meaningful way in the development of the program. Some organizations, like the International Planned Parenthood Federation, have done this by creating youth advisory pan-

Contraception for Sexually Active Adolescents

Adolescents requesting contraceptive counseling want confidential, accurate, nonjudgmental counseling in a welcoming, comfortable environment. Any client requesting contraceptive counseling has the right to clear and accurate information about contraceptive methods, including correct use, side effects, and how to reach a health care provider with concerns. In general, adolescents are healthy and can consider several contraceptive choices.

Condoms are a clear first choice for sexually active adolescents who are not married and/or in a monogamous relationship. Condoms provide good protection against STD and HIV infection when used correctly and consistently, have few side effects, and can be made available in a variety of ways. Abstinence also should be discussed as an option, both for those who have not yet initiated sexual activity and for those who have. Adolescents who choose a hormonal or other method of contraception should be advised to use a condom in addition to their primary method whenever they have intercourse with someone who they cannot be sure is free of any sexually transmitted infection. Other method choices include:

- Female barrier methods, including female condoms, diaphragms, and spermicides can be appropriate choices for some adolescents, and provide some protection against STDs. Acceptability and correct use can present problems.
- Emergency contraception pills do not protect against STDs, but are important method to have available for adolescents, as they can be taken within 72 hours of unprotected intercourse. Adolescents are especially likely to not plan ahead for sex, or to have difficulty using condoms or other methods.
- Oral contraceptives do not protect against STDs, but are a popular choice among adolescent girls in many regions. Correct and consistent use can be difficult for some girls, however, especially when they experience common hormonal side effects such as breast tenderness and weight gain. Counseling is key to effective use.
- Traditional methods such as withdrawal and natural family planning do not protect against STDs, but should not be ignored as a contraceptive choice for adolescents. For example, withdrawal may be the only method available in some circumstances and boys and girls should understand how it works best.

IUDs and voluntary surgical sterilization generally are not appropriate choices for adolescents. Progestin-only methods (pills, implants, and injectables) are appropriate for clients age 16 and older, primarily because of theoretical concerns about affects on bone development in younger girls.


“To perceive young people as sexual beings seems to be one of the hardest things to accept in most societies”

Dr. Pramilla Senanayake, IPPF
Helping youth to remain in school—with a particular focus on girls—is important to any effort to improve adolescent reproductive health. Schooling helps young people develop skills and acquire information to help them survive in the job market, and gives them better skills to care for their health and the health of their families. Schooling also helps girls delay marriage and childbearing. In Colombia, for example, 46 percent of girls with less than a basic education (seven years) give birth by age 20, but only 19 percent of girls with seven or more years of schooling have had a child by that age. In Mexico, women without a basic education are about three times more likely to give birth by age 20, and in Egypt they are over five times more likely.25

In many countries, sexuality education is presented as part of a school curriculum for older students. Research on the impact of adolescent sex education programs in several developed countries found that effective programs:

• Focus on reducing behaviors that lead to STD/HIV infection and unintended pregnancy.
• Provide basic, accurate information about the risks of unprotected sex.
• Teach young people how to delay sex and how to use contraceptives.
• Address social and media influences on sexual behavior.
• Build communication skills.
• Model ways to refuse unwanted sex and encourage responsible sexual behavior.
• Help youth understand community and other influences.

A review of 35 studies conducted in developed and developing countries concluded that school-based sexuality education does not lead to earlier or increased sexual activity in young people. In fact, in half of the programs studied, sex education was associated with a delay in the start of sexual activity, a decrease in overall sexual activity, or an increase in the adoption of contraception and STD protection among sexually active youth.26 Programs that encourage postponing sexual activity while providing information about safer sex and contraception are more effective than those that promote abstinence only. Programs are most effective when introduced to younger adolescents who are not yet sexually active.27, 28
Straight Talk: A Forum for Adolescent Questions about Sexual Health

Since 1993, the Straight Talk Foundation of Uganda has produced a magazine to address adolescent concerns about sexual and reproductive health. Straight Talk is published monthly and distributed in schools nationwide where Straight Talk clubs discuss magazine topics. In 1998, the Straight Talk Foundation launched Young Talk, aimed at children aged 10–12. Young Talk prepares children for issues that they will face in the coming years, such as body changes and peer pressure. Stressing children’s rights, including the right to health care, education, and safety, the magazine teaches children about waiting to initiate sex, avoiding risky situations, and predatory adults.

Straight Talk readers share their feelings and ask important questions. “It scares me to see that we still have youths today who have unprotected sex,” writes a student from Kampala. Others question rumors: “I have heard that pills cause cancer or a deformed baby.” Doctors and counselors answer these questions, stressing self-respect, respect for others, and protecting one’s health. One issue discussed sexual violence, including date rape and coerced sex, and offered advice to victims of sexual violence. Both magazines encourage abstinence as the safest behavior for adolescents, and encourage other activities, such as sports, as a healthy way to spend time with other adolescents. For sexually active adolescents, they stress condom use and STD/HIV testing.

Straight Talk engages young people in discussions about health, and acknowledges the pressure they often feel to engage in risky behavior. A school-visiting program allows students to ask questions directly to counselors and clinicians. Local language versions of Straight Talk are available and are distributed to out-of-school youth, and an associated radio program is broadcast in three languages. A Web site publishes electronic versions of the magazines and encourages program planners to use their materials to create similar programs in other regions.

Straight Talk and other STD/HIV protection programs are encouraged in Uganda, and recent studies indicate that young people in Uganda are adopting safer sex practices and waiting longer to initiate sexual activity than they did a decade ago, and that new HIV infections are decreasing, especially among adolescents.

Youth-oriented clinic services are quite common in the United States, Western Europe, and Latin America. These clinics provide a wide range of clinical and social services, such as pregnancy and STD prevention counseling and testing. For example, in 1990 the Maria Auxiliadora hospital began offering services to the one million adolescents in areas around Lima, Peru. The hospital established 10 adolescent clinics to provide outreach services and prevention counseling. The connection between STD and other reproductive health services appears to make the clinics more useful to adolescents.

School-based clinics are available in some developed and developing countries. The services provided vary considerably, but at a minimum include basic health monitoring and referral services. In developed countries, some school-based clinics provide condoms and counseling about pregnancy and STD prevention, as well as referral for other contraceptive and reproductive health services. These services often are controversial, however. In developing countries, school-based services often are limited by restrictive policies, personnel shortages, lack of private areas for counseling, and poor links to resources outside the school.

Multi-service youth centers offer contraceptive services as part of comprehensive programs for youth, including education, recreation, and employment preparation. One successful program is the Women’s Center for Pregnant Adolescents in Jamaica. Since 1978 this program has enabled teenage girls to continue their schooling during pregnancy, to return to school after the birth of their child, and to avoid another pregnancy during adolescence. While in the program, girls continue their academic studies, receive family planning information and services, learn skills to care for their children, and receive other life-planning services. A recent evaluation of the program found that only 1.4 percent of girls reached by the program had a second pregnancy before graduating or starting work.

Community-based outreach programs are especially important to groups such as out-of-school youth, “street” youth, and girls who have limited freedom to leave their community. These community-based projects use a variety of formats to reach youth where they congregate for work or play. For example, in Mexico, gang members are trained to reach other out-of-school adolescents in a partnership with the Mexican Social Security Institute (IMMS) and the Mexican Family Planning Association (MEXFAM). After attending educational sessions, interested members are invited to join a theater group to perform in public spaces and schools to provide information to their peers.

Youth groups such as scouting and sports programs have been useful in providing reproductive health information as part of programs that focus on the general well-being of the participants. For example, the Mathare Youth Sports Association (MYSA) in Kenya began in 1987 as a self-help project to involve boys and girls in community...
development activities while providing sports opportunities. Today nearly 3,000 girls aged 10–18 years are involved in the community-wide soccer program. MYSA has extended its programs to incorporate HIV-awareness training and has started a gender-equality project. Research in the United States has found that girls who participate in organized sports programs are mentally and physically healthier, and have lower school drop-out rates, improved self-esteem, and lower stress and depression rates, all factors which help them make healthier decisions.32

**Workplace health programs** can be important resources to young women and men. For example, a program in Thailand provides reproductive health information to young women living in workplace dormitories. Trained peer leaders provide education using a variety of popular media including a comic book, a romance novel, and peer discussion groups. Discussions allow participants to learn and practice skills such as negotiating, planning, and sexual health, like using a condom.33

**Implications and Conclusions**

Young people face many risks to their reproductive health—early and unwanted pregnancy, unsafe abortion, STD/HIV infection, and sexual violence. Programs to improve adolescent reproductive health must understand these risks and consider the many influences on adolescents’ lives. Such factors as whether adolescents have initiated sexual activity, are married, are in school, or are working are important. The impact of poverty, gender inequities, legal restrictions, and various cultural expectations also must be addressed.

Successful programs provide necessary counseling and clinical services and aim to help young people develop skills to make healthy life choices. These programs respect the needs, concerns, and insights of young people by including them in the design and implementation of activities. Successful programs also work with parents, community groups, and religious leaders to secure their approval and participation. With the need for adolescent health services growing fast, it is important that new and expanded programs build upon successful experience. Wherever possible, programs should be monitored, evaluated, and documented to ensure that their challenges are understood and their successes are replicated.

**A Planning Tool to Improve the Fit between Needs and Programs**

Existing studies indicate that there is a poor fit between current programs and the health needs of young people in developing countries. A recent article suggests that, in addition to considering key differences among young people such as gender, age, and marital status, program planners begin by recognizing that young people differ in terms of sexual experience.24 Young people can be grouped into three categories for planning: those you are not yet sexually active; those who are sexually active and have not experienced any unhealthy consequence (such as an unplanned pregnancy or an STD); and those are sexually active and have experienced an unhealthy consequence.

These experience-based groupings can help planners to make efficient use of existing community and clinical resources, including community organizations, recreation sites, health clinics, and others. Many adolescents tend to visit clinical settings only as a last resort, but will take advantage of community based programs that offer help in acquiring general life skills, health information, counseling, and access to condoms. Adolescent-friendly clinical services can be reserved for the smaller number of adolescents in need of pregnancy care, STD management, and other reproductive health services.


EDITOR’S NOTE: The June 1998 issue of Studies in Family Planning provided an important background information for this article. The entire issue is devoted to issues affecting adolescents and explores the social, economic, biological, and demographic effects that affect adolescent health in developing countries. The WHO document Programming for Adolescent Health and Development, and the AGI report into a New World: Young Women’s Sexual and Reproductive Lives also provided valuable background information. Focus on the education of briefs about adolescent reproductive health issues, is available in print and in three languages on the FOCUS on Young Adults Web site (http://www.pathfind.org/FOCUSpublicat.htm).

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