# Advancing Sexuality Education in Developing Countries: Evidence and Implications

By Heather D. Boonstra

he world in which young people grow up today is very different from that of their parents or grandparents. This may be especially true in developing countries.

Compared with the youth of past generations, young people today have more opportunities and challenges. They are likely to have more independence from their parents and spend more time in school. They are likely to have widespread access to the radio and television and, increasingly, to the Internet and mobile phones. They are also entering adolescence earlier and healthier, postponing marriage and child-bearing until later, and are more likely to have sex before marriage.

In response to these major societal changes, educators, researchers, policymakers and parents alike have become increasingly interested in the potential for sexuality education to help meet the needs of young people. The quality and quantity of evaluation research in this field has improved dramatically over the last decade, and there is now clear evidence that sexuality education programs can help young people to delay sexual activity and improve their contraceptive use when they begin to have sex. Moreover, studies to date provide an evidence base for programs that go beyond just reducing the risks of sexual activity—namely, unintended pregnancy and sexually transmitted infections (STIs)—to instead address young people's sexual health and well-being more holistically.

Yet, the fact remains that, too often, young people do not get even the most basic sexuality education and that misinformation about sex and

its consequences remains common. Indeed, implementing comprehensive sexuality education programs remains a challenge in many parts of the world. To address these challenges, experts say that stronger responses are needed to engage governments, communities, families and young people themselves in sexuality education policies and programs. Specifically, they assert that sexuality education policies and programs must be based in human rights and respond to the interests, needs and experiences of young people themselves.

### **A Changing World**

Developing countries are now confronting what industrialized countries have faced over the last century: the emergence of "adolescence" and the social changes around sexuality that came with it.¹ In the past, young men and women tended to move directly from childhood into adult roles. In many ways, marriage marked the turning point, especially for young women. The transition into marriage and the assumption of other adult responsibilities, such as establishing one's own household and having children, commonly took place soon thereafter.

Today, however, the transition from childhood to adulthood takes longer—and as a result, adolescence as a stage in life has gained in significance. Compared even with 20 years ago, young people are completing their education and beginning full-time employment later, and as schooling and work has become more a part of women's lives, marriage and parenthood have tended to occur at older ages, especially for women.

Most young people today begin to have sex at about the same age as in the past: in their middle to late teens. By their 18th birthday, more than 40% of women in Latin America and the Caribbean report having had sex, as do close to 60% in Sub-Saharan Africa. (The age at which young women in the United States typically initiate sex is similar: By age 18, about 52% of U.S. women have had sex.²) For the majority of young men, sex occurs prior to marriage; however, premarital sex has also become more common among females, at least in part because of delays in the age of marriage.

Parents and other family members, of course, have always played a critical role in the physical, emotional and sexual development of young people. At the same time, there is increasing acceptance of the notion that, in today's world, these sources of education are insufficient and that more organized, formal approaches are called for There is also a growing advocacy movement-including at the global level within the United Nations—for the recognition of comprehensive sexuality information and education as a basic human right.3 Still, sexuality education of any kind is not available in many regions of the world, adolescents' knowledge of sexual and reproductive health is not detailed, and myths are common. For example, many adolescents think that a young woman cannot get pregnant the first time she has sexual intercourse or if she has sex standing up.4 Some adolescents still report a belief that HIV can be transmitted through a mosquito bite or that a man who is HIV-positive can be cured by having sex with a virgin.

In regions and communities throughout the developing world, therefore, policymakers and youth-serving professionals are grappling with how best to address the wide-ranging needs of young people. They are weighing what is possible, considering both the political realities and context, and are taking a close look at the evidence for different approaches.

#### A Look at the Evidence

The last few decades have seen a proliferation of curriculum-based interventions, both in and out of school. For a long time, these curricula empha-

sized the medical aspects of sex and reproduction, human anatomy and development. Today, although having a basic understanding of human biology and the reproductive system is still considered crucial, programs have evolved to include a broader range of topics. Two basic approaches have emerged, each supported by different perspectives on what is best for children and young people. The abstinence-only approach focuses primarily, if not exclusively, on promoting abstinence outside of marriage, on moral as well as public health grounds. The comprehensive approach, on the other hand, supports young people's ability to decide whether and when to have sex, but also recognizes that sexual debut in adolescence is normative behavior and thus seeks to prepare youth with the knowledge and skills they need for healthy sexual lives.

#### Abstinence-only Approaches

Over the last three decades, especially in the United States but also in parts of the developing world, much of the focus of sexuality education—at least among politicians, if not program planners—has been on trying to convince young people to delay the initiation of sex, generally until after marriage. This approach is based on the premises that sex before marriage itself is a problem because it is morally wrong and that young people can be convinced to wait, even well into their 20s. These "abstinence-only-untilmarriage" programs focus primarily or exclusively on the putative benefits of abstaining from sex. They may also distort and actively denigrate the effectiveness of contraceptives and safer-sex behaviors.

This kind of education has become increasingly marginalized, as several well-designed studies conducted over the last 15 years have shown just how futile the focus on stopping young people from having sex is. For example, in 2007, investigators at the Centre for Evidence-Based Intervention at the University of Oxford conducted an international literature search for randomized or quasirandomized trials of abstinence-only programs in high-income countries.<sup>5</sup> (The researchers assumed that high-income settings may present optimal conditions for showing the effectiveness of abstinence-only programs.)

Despite its international focus, the search found only 13 studies that met the standards for inclusion—all conducted in the United States, and with a total sample of nearly 16,000 youth. The researchers concluded that programs that exclusively encourage abstinence are ineffective, saying "when compared with a variety of control groups, the participants in these 13 abstinence-only program trials did not report differences in risk behaviors or biological outcomes."

These findings are similar to those of another comprehensive review of sex and HIV education programs published in 2008.6 The analysis, conducted by Douglas Kirby, reviewed 56 studies with a strong experimental or quasiexperimental design, including eight studies of abstinence programs based in the United States. (Notable among these was an evaluation—conducted by Mathematica Policy Research at a cost of nearly \$8 million—of four model abstinence-only programs that were carefully selected as having the most promise.) Study results indicate that abstinence-only programs are not effective at stopping or even delaying sex. "Taken as a whole, this evidence certainly does not justify the widespread replication of abstinence sexuality education programs," says Kirby. "[N]o abstinence programs evaluated with rigorous experimental designs show evidence that they delayed adolescents' initiation of sex."

Moreover, research suggests that strategies that promote abstinence while withholding information about contraceptives can actually place young people at increased risk of pregnancy and STIs. For example, young people who take "virginity pledges" are just as likely as those who do not to have sex, but they are less likely to use condoms or other forms of contraception when they become sexually active. These virginity pledges, which are a centerpiece of many abstinence-only programs, originated in the United States in the early 1990s, but have since been implemented in developing countries as well. For example, leaders of True Love Waits, probably the best known of these programs, report that nearly one million young people across Africa have signed their pledge.8

#### More Comprehensive Approaches

Further promotion of abstinence-only approaches would not only run counter to the evidence, but also to the desires of many educators, parents and adolescents.9 But there is a diversity of opinions about the primary purpose of this education. Some adults, parents and politicians—who may be conservative but pragmatic-believe that although sex among adolescents is troubling, it is inevitable and unavoidable, and society must accept this reality and concentrate on helping adolescents avoid the negative consequences of sex. Others go further and assert that the formation and testing of romantic attachments and the physical expression of sexual feelings are a natural and developmentally appropriate part of the transition to adulthood. Therefore, they say, young people should be approached with respect and equipped with the knowledge and skills they need to feel comfortable and confident about their sexuality.

These different motivations for comprehensive sexuality education have gradually made their way into policies and programs, which vary between countries. For example, in the United States, the focus on keeping young people safe has been translated into prevention-oriented programs. Although these programs may cover a wide range of topics—from fertility and reproduction to STIs, from relationships and communication to gender norms, culture and society they are primarily aimed at helping adolescents minimize their risk of adverse outcomes. Northern European countries such as Sweden and the Netherlands, by contrast, embrace a more positive attitude toward adolescent sexuality, based on the premise that young people are "rights-holders," and therefore are entitled to information and education, as well as the right to express and enjoy their sexuality. These rightsbased or "holistic" programs are concerned, of course, with equipping young people to avoid unintended pregnancy and STIs, but they are focused less on behavior and outcomes per se, and more on reflection and choice. The underlying assumption is that empowering young people to make considered, informed decisions about their own lives and helping them to

develop the critical thinking skills and sense of self necessary to do so will result in better sexual and reproductive health in the broadest sense including pleasure, love and sexual well-being.

It has long been recognized that those countries that have a more open and positive attitude toward sexuality have better sexual health outcomes. Cross-national comparisons show that, despite similar levels of sexual activity, adolescent pregnancy rates are consistently lower in many Western European countries than in other regions of the world. 10,11 Experts say this is because, in Western Europe, sex among adolescents is generally accepted, with little to no societal pressure to remain abstinent. 2 But with that acceptance comes strong cultural norms that

emphasize that young people who are having sex should take actions to protect themselves and their partners from pregnancy and STIs. In keeping with this view, government-supported schools in many Western European countries provide—and even require—comprehensive sexuality education and offer easy access to reproductive health services.

In fact, the evidence for a positive impact on behavior from evaluations of comprehensive sexuality education programs throughout the world is strong. According to a rigorous 2008 review of the evidence of comprehensive sexuality education's impact on sexual behavior, effective programs can not only reduce misinformation, but also increase young people's skills to

## **Planning for Implementation**

Advocates of sexuality education are not only focused on building the case for sound programs, but also on how to make these programs work on the ground. In recent years, several initiatives at the regional and global levels have given greater attention to the delivery of sexuality education. Notable among these are the International Technical Guidance on Sexuality Education, developed by UNESCO13 and the Standards for Sexuality Education in Europe, developed by the World Health Organization regional office for Europe and the Federal Centre for Health Education (BZgA).16 In addition, It's All One Curriculum—coordinated by the Population Council in collaboration with CREA, Girls Power Initiative, the International Planned Parenthood Federation (IPPF), IPPF/Western Hemisphere Region, International Women's Health Coalition and Mexfam—tried to take a different perspective, with rights and gender as the main entry

points.<sup>17</sup> In different ways, each of these resources also provides the basis for curricula and practical help for implementation, including guidance on what topics should be introduced to specific age-groups. Taken together, these resources identify four basic implementation issues.

#### Political and social leadership.

First, because sexuality education is guided by policies at multiple levels—from national laws to local school district guidelines—political and social leadership is needed at each level to support implementation. In many societies, sexual activity among young people prior to marriage remains stigmatized, and even talking about sex is taboo. It is important, therefore, to involve key stakeholders and champions early in the process and to continue to do so going forward. Ministries of education, for one, could play a critical role in building support for schoolbased programs by bringing together program planners, school

principals, teachers, parents and others to discuss the rationale for sexuality education and the evidence base for programs. Parents and families also play a primary role in adolescents' lives, and these stakeholders need to be informed about the benefits of sexuality education and have the opportunity to express their thoughts and ideas.

Context and resources. Second, program planners must consider what resources are available in a particular setting—and how to adapt programs to address the specific needs of the community. They should take a close look, for example, at the household incomes of the youth they serve (are young people living in poverty and struggling to survive?); geographic conditions (do young people live within the reach of programs?); young people's access to the media (how many regularly listen to the radio?); gender norms that may affect young women's participation in programs

make informed decisions about their health.<sup>13</sup> Commissioned by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as part of the development of the International Technical Guidance on Sexuality Education, the review included 87 studies from around the world with experimental or quasiexperimental designs: 29 from developing countries, 47 from the United States and 11 from other developed countries. Nearly all of the programs increased knowledge, and two-thirds had a positive impact on behavior: Many delayed sexual debut, reduced the frequency of sex and number of sexual partners, increased condom or contraceptive use, or reduced sexual risk-taking. More than one-quarter of programs improved two or more of these behaviors. And most

tended to lower risky sexual behavior by, very roughly, one-fourth to one-third.

In addition, at least one study has demonstrated that comprehensive sexuality education programs are potentially cost-effective as well. In 2010, UNESCO commissioned a study of the health impact and cost-effectiveness of school-based sexuality education in Estonia. <sup>14</sup> Sexuality education in that country is included as a component of compulsory human studies courses for grades 5–7 and, importantly, is strongly linked to youth-friendly sexual health services in the community. According to the study, between 2001 and 2009, after the introduction of sexuality education in Estonia, there were significant improvements in adolescent sexual and reproductive

(can young women move about freely in their communities?); and the levels of violence and sexual coercion (is sexual coercion common and do young women fear violence?).

One aspect of the context for delivering programs is the educational system. Young people are spending more of their adolescence in school, but many—especially girls—never make it beyond primary school. To keep young people in school, policymakers and educators need to ensure that schools are safe places for young people, especially young women. Moreover, sexuality education may need to start in early primary grades. Topics in sexuality education, for example, could be integrated into other subjects including biology, health, philosophy or religion—in an age-appropriate manner over different grade levels. This has the added advantage of reinforcing important concepts over

several years and may lead to better outcomes overall.

Policymakers and program planners also need to be cognizant of the large numbers of needy youth not in school and seek opportunities for sexuality education outside of school—in youth clubs or hair salons, or through community drama events or radio programs. These out-of-school programs can also be used to pilot and test the introduction of new topics and methodologies. Moreover, sexuality education programs need to be accompanied by quality sexual and reproductive health services, where youth can access contraceptives and condoms.

Teacher preparation. Third, teachers who will cover sexuality education need to be adequately trained in the subject and prepared to take on interactive approaches. School districts may also want to consider bringing in health and sexuality education experts to teach specific

topics and supplement in-school programs. Having competent educators—those who not only give the facts, but also approach adolescents with respect and help them develop communication, negotiation and decision-making skills—is at the heart of effective programs.

Meaningful involvement of young people. And finally, program planners need to take into account the perspectives of young people themselves. Clearly, young people can play an important role in organizing and delivering sexuality education—and those programs that are in line with young people's interests, needs and concerns may not only be more realistic than those that are not, they may also be more effective.

health: Nearly 4,300 unintended pregnancies, 7,200 STIs and 2,000 HIV infections among adolescents aged 15–19 were averted. If even 4% of the reduction in HIV infections were attributed to sexuality education, the researchers estimate that the program would result in a net savings.

Finally, no study of comprehensive programs to date has found evidence that providing young people with sexual and reproductive health information and education results in increased sexual risk-taking. 1.6,13,15 These studies also demonstrate that it is possible, within the same programs, to delay sexual intercourse and to increase the use of condoms or other forms of contraception. According to UNESCO, "[A] dual emphasis on abstinence together with use of protection for those who are sexually active is not confusing to young people. Rather, it can be both realistic and effective." 13

These findings can be extremely useful in gauging the impact of various comprehensive programs on those sexual behaviors that directly affect pregnancy and sexual transmission of HIV and other STIs. But because they are so focused on behaviors, they provide little insight into how well these strategies work to achieve other desired outcomes—such as greater gender equality, critical thinking skills, a sense of confidence and belief in the future, and sexual pleasure. Measureable indictors of these kinds of outcomes have yet to be developed. This is understandable, as much of the focus of programs to date has been on pregnancy and disease prevention. But rigorous evaluations of new approaches with a broader range of outcome measures are needed to understand how programs can be most effectively taught in different settings. Sexuality education—like other aspects of education—should expose future citizens to material that not only reduces their risk of unplanned pregnancy and disease, but also enlightens and empowers them.

## **Getting from Here to There**

Notwithstanding the wealth of evidence in support of comprehensive sexuality education, implementing programs that actually provide young people the sexuality education they need is easier said than done. Each country and region is different, and there is wide variation in policies, government structures, traditions, resources and limitations. But even as implementers strive to be context-specific, certain themes and considerations emerge (see box, page 20).

Meanwhile, concerted actions must be taken to build and sustain political will for these programs. In many communities worldwide, government officials, school principals, teachers and parents may not all be convinced of the need for sexuality education, or else may be reluctant to provide it because they do not want to be perceived as promoting sexual activity. Vocal groups that oppose sexuality education may be in the minority, but they can be extremely effective at pressuring policymakers and school districts to not allow sexuality education. One starting point for building and sustaining more widespread support for sexuality education is to demonstrate what the evidence has to say about the benefits of these programs. Scientific evidence can keep public attention focused on the rights and needs of young people, help frame the public policy debate and help mobilize public support—all of which can make a difference in policies, programs and practice. www.guttmacher.org

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#### **REFERENCES**

- 1. Lloyd CB, ed., *Growing Up Global: The Changing Transitions to Adulthood in Developing Countries*, Washington, DC: National Academies Press, 2005.
- **2.** Guttmacher Institute, special tabulations of data from the 2006–2008 National Survey of Family Growth.
- 3. United Nations, Report of the United Nations Special Rapporteur on the right to education, July 23, 2010, <a href="http://www.right-to-education.org/sites/r2e.gn.apc.org/files/SR%20Education%20">http://www.right-to-education.org/sites/r2e.gn.apc.org/files/SR%20Education%20</a> Report-Human%20Right%20to%20Sexual%20Education.pdf>, accessed Aug. 4, 2011.
- **4.** Biddlecom AE et al., Protecting the Next Generation in Sub-Saharan Africa: Learning from Adolescents to Prevent HIV and Unintended Pregnancy, New York: Guttmacher Institute, 2007, <a href="http://www.guttmacher.org/pubs/2007/12/12/PNG\_monograph.pdf">http://www.guttmacher.org/pubs/2007/12/12/PNG\_monograph.pdf</a>, accessed Aug. 4, 2011.
- **5.** Underhill K, Montgomery P and Operario D, Sexual abstinence only programmes to prevent HIV infection in high income countries: systematic review, *BMJ*, 2007, 335(7613):248–252.

- **6.** Kirby D, The impact of abstinence and comprehensive sex and STD/HIV education programs on adolescent sexual behavior, *Sexuality Research & Social Policy*, 2008, 5(3):18–27.
- 7. Rosenbaum J, Patient teenagers? A comparison of the sexual behavior of virginity pledgers and matched nonpledgers, *Pediatrics*, 2009, 123(1):e110–e120.
- **8.** True Love Waits International grows worldwide, *Florida Baptist Witness*, Feb. 10, 2011, <a href="http://www.gofbw.com/news.asp?ID=12600">http://www.gofbw.com/news.asp?ID=12600</a>, accessed July 31, 2011.
- **9.** Dailard C, Sex education: politicians, parents, teachers and teens, *The Guttmacher Report on Public Policy*, 2001, 4(1):9–12, <a href="http://www.guttmacher.org/pubs/tgr/04/1/gr040109.pdf">http://www.guttmacher.org/pubs/tgr/04/1/gr040109.pdf</a>, accessed Aug. 4, 2011
- **10.** Santelli J, Sandfort T and Orr M, Transnational comparisons of adolescent contraceptive use: What can we learn from these comparisons? *Archives of Pediatrics & Adolescent Medicine*, 2008, 162(1): 92–94.
- **11.** Singh S and Darroch JE, Adolescent pregnancy and childbearing: levels and trends in developed countries, *Family Planning Perspectives*, 2000, 32(1):14–23, <a href="http://www.guttmacher.org/pubs/journals/3201400.pdf">http://www.guttmacher.org/pubs/journals/3201400.pdf</a>, accessed Aug. 4, 2011.
- 12. The Alan Guttmacher Institute (AGI), Can more progress be made? Teenage sexual and reproductive behavior in developed countries, *Executive Summary*, New York: AGI, 2001, <a href="http://www.guttmacher.org/pubs/summaries/euroteens\_summ.pdf">http://www.guttmacher.org/pubs/summaries/euroteens\_summ.pdf</a>, accessed July 31, 2011.
- 13. United Nations Educational, Scientific and Cultural Organization (UNESCO), International Technical Guidance on Sexuality Education: An Evidence-Informed Approach for Schools, Teachers and Health Educators, 2009, <a href="https://unesdoc.unesco.org/images/0018/001832/183281e.pdf">http://unesdoc.unesco.org/images/0018/001832/183281e.pdf</a>, accessed Aug. 4, 2011.
- **14.** UNESCO, School-Based Sexuality Education Programmes: A Cost and Cost Effectiveness Analysis in Six Countries, 2011, <a href="http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/CostingStudy.pdf">http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/CostingStudy.pdf</a>, accessed Aug. 4, 2011.
- **15.** Speizer IS, Magnani RJ and Colvin CE, The effectiveness of adolescent reproductive health interventions in developing countries: a review of the evidence, *Journal of Adolescent Health*, 2003, 33(5):324–348.
- **16.** World Health Organization and Federal Centre for Health Education (BZgA), *Standards for Sexuality Education in Europe: A Framework for Policy Makers, Educational and Health Authorities and Specialists*, Cologne, Germany: BZgA, 2010, <a href="https://www.bzga-whocc.de/pdf.php?id=061a863a0fdf28218e4fe9e1b3f463b3">https://www.bzga-whocc.de/pdf.php?id=061a863a0fdf28218e4fe9e1b3f463b3</a>, accessed Aug. 10, 2011.
- 17. Haberland N and Rogow D, eds., It's All One Curriculum: Guidelines and Activities for a Unified Approach to Sexuality, Gender, HIV, and Human Rights Education, New York: Population Council, 2009.