Understanding 'Abstinence': Implications for Individuals, Programs and Policies

By Cynthia Dailard

The word "sex" is commonly acknowledged to mean different things to different people. The same can be said for "abstinence." The varied and potentially conflicting meanings of "abstinence" have significant public health implications now that its promotion has emerged as the Bush administration's primary answer to pregnancy and sexually transmitted disease (STD) prevention for all people who are not married.

For those willing to probe beneath the surface, critical questions abound. What is abstinence in the first place, and what does it mean to use abstinence as a method of pregnancy or disease prevention? What constitutes abstinence "failure," and can abstinence failure rates be measured comparably to failure rates for other contraceptive methods? What specific behaviors are to be abstained from? And what is known about the effectiveness and potential "side effects" of programs that promote abstinence? Answering questions about what abstinence means

CONTRACEPTIVE EFFECTIVENESS RATES FOR PREGNANCY PREVENTION*

CONTRACEPTIVE METHOD	PERFECT USE	TYPICAL USE
ABSTINENCE	100	555
FEMALE STERILIZATION	99.5	99.5
ORAL CONTRACEPTIVES	99.5-99.9**	92.5
MALE CONDOM	97	86.3
WITHDRAWAL	96	75.5

*Percentage of women who successfully avoid an unintended pregnancy during their first year of use. **Depending on formulation. Sources: Perfect use—Hatcher, RA, et al., Contraceptive Technology, 17th ed., 1998, page 216. Typical use—AGI, Fulfilling the Promise: Public Policy and U.S. Family Planning Clinics, 2000, page 44.

at the individual and programmatic levels, and clarifying all of this for policymakers, remains a key challenge. Meeting that challenge should be regarded as a prerequisite for the development of sound and effective programs designed to protect Americans from unintended pregnancy and STDs, including HIV.

Abstinence and Individuals

What does it mean to use abstinence? When used conversationally, most people probably understand abstinence to mean refraining from sexual activity-or, more specifically, vaginal intercourse—for moral or religious reasons. But when it is promoted as a public health strategy to avoid unintended pregnancy or STDs, it takes on a different connotation. Indeed, President Bush has described abstinence as "the surest way, and the only completely effective way, to prevent unwanted pregnancies and sexually transmitted disease." So from a scientific perspective, what does it mean to abstain from sex, and how should the "use" of abstinence as a method of pregnancy or disease prevention be measured?

Population and public health researchers commonly classify people as contraceptive users if they or their partner are consciously using at least one method to avoid unintended pregnancy or STDs. From a scientific standpoint, a person would be an "abstinence user" if he or she intentionally refrained from sexual activity. Thus, the subgroup of people consciously using abstinence as a method of pregnancy or disease pre-

vention is obviously much smaller than the group of people who are not having sex. The size of the population of abstinence users, however, has never been measured, as it has for other methods of contraception.

When does abstinence fail? The definition of an abstinence user also has implications for determining the effectiveness of abstinence as a method of contraception. The president, in his July 2002 remarks to South Carolina high school students, said "Let me just be perfectly plain. If you're worried about teenage pregnancy, or if you're worried about sexually transmitted disease, abstinence works every single time." In doing so, he suggested that abstinence is 100% effective. But scientifically, is this in fact correct?

Researchers have two different ways of measuring the effectiveness of contraceptive methods. "Perfect use" measures the effectiveness when a contraceptive is used exactly according to clinical guidelines. In contrast, "typical use" measures how effective a method is for the average person who does not always use the method correctly or consistently. For example, women who use oral contraceptives perfectly will experience almost complete protection against pregnancy. However, in the real world, many women find it difficult to take a pill every single day. and pregnancies can and do occur to women who miss one or more pills during a cycle. Thus, while oral contraceptives have a perfect-use effectiveness rate of over 99%, their typical-use effectiveness is closer to 92% (see chart). As a result, eight in 100 women who use oral contraceptives will become pregnant in the first vear of use.

Thus, when the president suggests that abstinence is 100% effective, he is implicitly citing its perfect-use rate—and indeed, abstinence *is* 100% effective if "used" with perfect

consistency. But common sense suggests that in the real world, abstinence as a contraceptive method can and does fail. People who intend to remain abstinent may "slip" and have sex unexpectedly. Research is beginning to suggest how difficult abstinence can be to use consistently over time. For example, a recent study presented at the 2003 annual meeting of the American Psychological Society (APS) found that over 60% of college students who had pledged virginity during their middle or high school years had broken their vow to remain abstinent until marriage. What is not known is how many of these broken vows represent people consciously choosing to abandon abstinence and initiate sexual activity, and how many are simply typical-use abstinence failures.

To promote abstinence, its proponents frequently cite the allegedly high failure rates of other contraceptive methods, particularly condoms. By contrasting the perfect use of abstinence with the typical use of other contraceptive methods, however, they are comparing apples to oranges. From a public health perspective, it is important both to subject abstinence to the same scientific standards that apply to other contraceptive methods and to make consistent comparisons across methods. However, researchers have never measured the typical-use effectiveness of abstinence. Therefore, it is not known how frequently abstinence fails in the real world or how effective it is compared with other contraceptive methods. This represents a serious knowledge gap. People deserve to have consistent and accurate information about the effectiveness of all contraceptive methods. For example, if they are told that abstinence is 100% effective, they should also be told that, if used correctly and consistently, condoms are 97% effective in preventing pregnancy. If they are told that condoms fail as much as 14% of the time, they should be given a comparable typical-use failure rate for abstinence.

What behaviors should be abstained from? A recent nationally representative survey conducted by the Kaiser Family Foundation and seventeen magazine found that half of all 15–17-year-olds believed that a person who has oral sex is still a virgin. Even more striking, the APS study found that the majority (55%) of college students pledging virginity who said they had kept their vow reported having had oral sex. While the pledgers generally were somewhat less likely to have had vaginal sex than non-

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pledgers, they were equally likely to have had oral or anal sex. Because oral sex does not eliminate people's risk of HIV and other STDs, and because anal sex can heighten that risk, being technically abstinent may therefore still leave people vulnerable to disease. While the press is increasingly reporting that noncoital behaviors are on the rise among young people, no research data exists to confirm this.

Abstinence Education Programs

Defining and communicating what is meant by abstinence are not just academic exercises, but are crucial to public health efforts to reduce people's risk of pregnancy and STDs. For example, existing federal and state abstinence-promotion policies typically neglect to define those behaviors to be abstained from. The federal government will provide approximately \$140 million in FY 2004 to fund education programs

that exclusively promote "abstinence from sexual activity outside of marriage" ("Abstinence Promotion and Teen Family Planning: The Misguided Drive for Equal Funding," TGR, February 2002, page 1). The law, however, does not define "sexual activity." As a result, it may have the unintended effect of promoting noncoital behaviors that leave young people at risk. Currently, very little is known about the relationship between abstinence-promotion activities and the prevalence of noncoital activities. This hampers the ability of health professionals and policymakers to shape effective public health interventions designed to reduce people's risk.

There is no question, however, that increased abstinence—meaning delayed vaginal intercourse among young people—has played a role in reducing both teen pregnancy rates in the United States and HIV rates in at least one developing country. Research by The Alan Guttmacher Institute (AGI) indicates that 25% of the decrease in the U.S. teen pregnancy rate between 1988 and 1995 was due to a decline in the proportion of teenagers who had ever had sex (while 75% was due to improved contraceptive use among sexually active teens). A new AGI report also shows that declines in HIV-infection rates in Uganda were due to a combination of fewer Ugandans initiating sex at young ages, people having fewer sexual partners and increased condom use (see related story, page 1).

But abstinence proponents frequently cite both U.S. teen pregnancy declines and the Uganda example as "proof" that abstinence-only education programs, which exclude accurate and complete information about contraception, are effective; they argue that these programs should be expanded at home and exported overseas. Yet neither experience, in and of itself, says anything about the effectiveness of pro-

grammatic interventions. In fact, significant declines in U.S. teen pregnancy rates occurred prior to the implementation of government-funded programs supporting this particularly restrictive brand of abstinence-only education. Similarly, informed observers of the Ugandan experience indicate that abstinence-only education was not a significant

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program intervention during the years when Uganda's HIV prevalence rate was dropping. Thus, any assumptions about program effectiveness, and the effectiveness of abstinence-only education programs in particular, are misleading and potentially dangerous, but they are nonetheless shaping U.S. policy both here and abroad (see related story, page 13).

Accordingly, key questions arise about how to measure the success of abstinence-promotion programs. For example, the administration is defining program success for its abstinence-only education grants to community and faith-based organizations in terms of shaping young people's intentions and attitudes with regard to future sexual activity. In contrast,

most public health experts stress the importance of achieving desired behavioral outcomes such as delayed sexual activity.

To date, however, no education program in this country focusing exclusively on abstinence has shown success in delaying sexual activity. Perhaps some will in the future. In the meantime, considerable scientific evidence already demonstrates that certain types of programs that include information about both abstinence and contraception help teens delay sexual activity, have fewer sexual partners and increase contraceptive use when they begin having sex. It is not clear what it is about these programs that leads teens to delay—a question that researchers need to explore. What is clear, however, is that no program of any kind has ever shown success in convincing young people to postpone sex from age 17, when they typically first have intercourse, until marriage, which typically occurs at age 25 for women and 27 for men. Nor is there any evidence that the "wait until marriage" message has any impact on young people's decisions regarding sexual activity. This suggests that scarce public dollars could be better spent on programs that already have been proven to achieve delays in sexual activity of any duration, rather than on programs that stress abstinence until marriage.

Finally, there is the question of whether delays in sexual activity might come at an unacceptable price. This is raised by research indicating that while some teens promising to abstain from sex until marriage delayed sexual activity by an average of 18 months, they were more likely to have unprotected sex when they broke their pledge than those who never pledged virginity in the first place. Thus, might strategies to promote abstinence inadvertently heighten the risks for people when they eventually become sexually active?

Difficult as it may be, answering these key questions regarding abstinence eventually will be necessary for the development of sound and effective programs and policies. At a minimum, the existing lack of common understanding hampers the ability of the public and policymakers to fully assess whether abstinence and abstinence education are viable and realistic public health and public policy approaches to reducing unintended pregnancies and HIV/STDs. \oplus

This is the fourth in a series of articles examining emerging issues in sex education and related efforts to prevent unintended pregnancy and sexually transmitted diseases. The series is supported in part by a grant from the Program on Reproductive Health and Rights of the Open Society Institute. The conclusions and opinions expressed in these articles, however, are those of the author and The Alan Guttmacher Institute.