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issue brief

Assessing The Efficacy Of Abstinence-Only Programs For HIV Prevention Among Young People

Nearly 40 million people around the world are living with HIV/AIDS.[1] At the end of 2005, 10 million young people aged 15–24 were living with HIV/AIDS, and this number continues to grow.[1] In 2005 alone, 5,172 new cases of HIV/AIDS in the United States were diagnosed in young people 13–24 years old.[2]

Growth in Programs

The United States government has been supporting abstinence-only programs to prevent teen pregnancy since 1981. Over the years, such programs have grown to include prevention of HIV/AIDS and other sexually transmitted infections (STIs). This trend expanded into the international arena with the implementation in 2003 of the President's Emergency Plan for AIDS Relief (PEPFAR), which specifically mandates that one-third of all prevention dollars allocated to 15 focus countries through the program must be earmarked for abstinence-until-marriage programs.[3]

In the domestic arena alone, funding for key federal and state abstinence-only programs has increased from $97.5 million in 2000 to $241.5 million in 2007. Congress has funneled more than $1 billion (through both federal and state matching funds) to abstinence-only-until-marriage programs since the federal entitlement program was created in 1996 (see Figure 1). Given that abstinence-only education has become the cornerstone of the U.S. government's HIV prevention strategy for young people, it is important to assess the scientific evidence of its efficacy in reducing the risk of HIV transmission, especially relative to other HIV prevention strategies, such as comprehensive sexuality education, for which there are currently no targeted federal programs or funding streams.[4]

Defining Abstinence

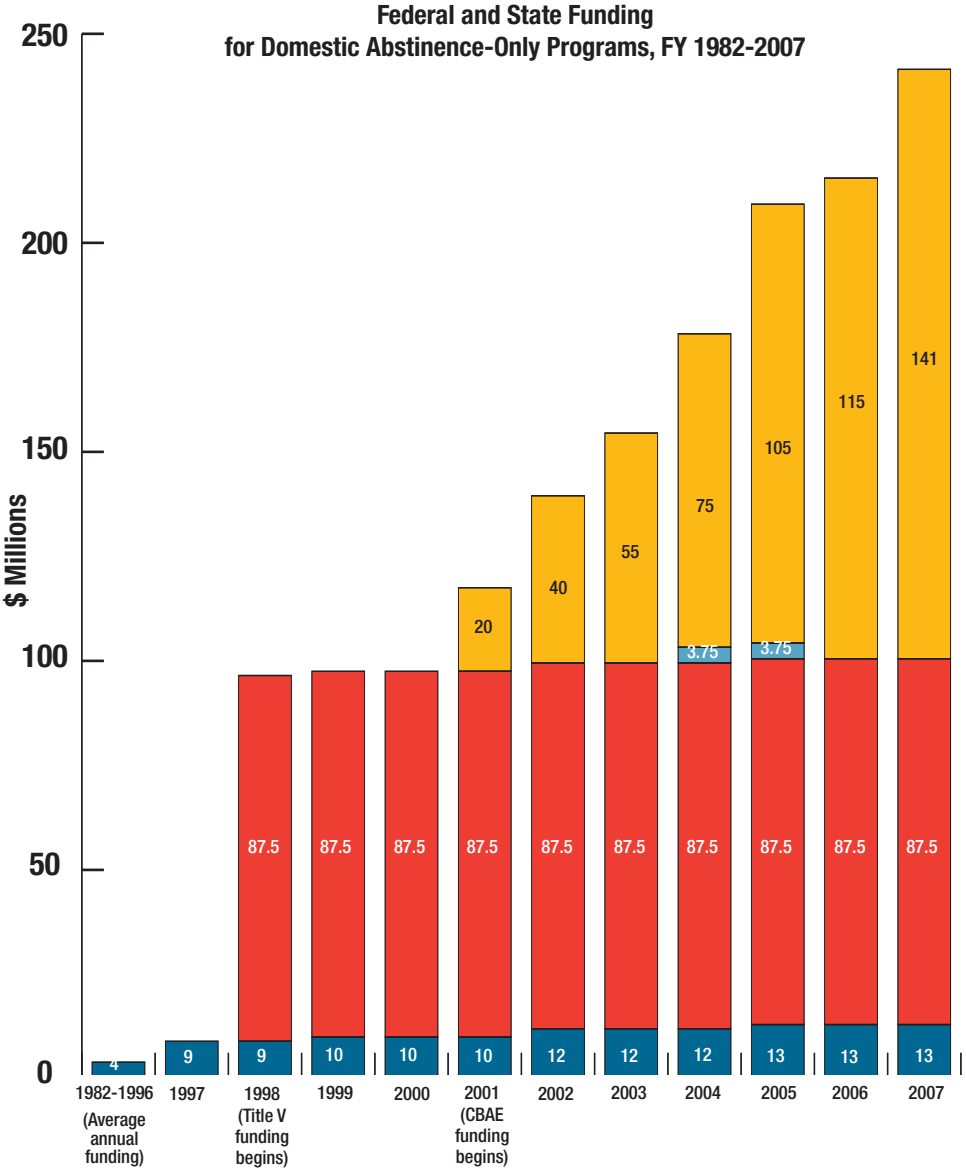
There are no uniform or consistent definitions of abstinence-only programs. Currently, two approaches predominate: "abstinence-only" (also called "abstinence-only-until-marriage") and "abstinence-plus" (also called "abstinence-based" or "comprehensive sexuality education").

Domestic abstinence-only programs emphasize refraining from sexual intercourse until marriage as the safest choice to prevent unintended pregnancy and STIs. The primary objective of abstinence-only programs is to delay sexual debut (the onset of sexual intercourse) by providing information, changing attitudes about sex, and improving decision-making skills.[8-12]

Federally funded abstinence-only programs in the U.S. must have as their "exclusive purpose, teaching the social, psychological, and health gains to be realized by abstaining from sexual activity." Moreover, Title V mandated that all abstinence-only programs adhere to an eight-point definition of "abstinence education," which, among other things, teaches "that a mutually faithful monogamous relationship in the context of marriage is the expected standard of human sexual activity" and that "sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects."[13,14] These programs are prohibited from discussing contraception or STI prevention technologies, such as condoms, except in reference to their failure rates.[4, 15] Further causes for concern are the lack of scientific and medical accuracy found in some abstinence-only-until-marriage curricula[16, 17], and the fact that the Administration for Children and Families (which awards the largest portion of federal abstinence-only funding) neither reviews its grantees' curricula or materials for medical accuracy nor requires grantees to do so.[17]

Under PEPFAR requirements, international abstinence-until-marriage programs are expected to "encourage unmarried individuals to abstain from sexual activity as the best and only certain way to protect themselves from exposure to HIV" and

Figure 1
Federal and State Funding for Domestic Abstinence-Only Programs, FY 1982-2007



Adapted from the Sexuality Information and Education Council of the United States (SIECUS)
www.nonewmoney.org/historyChart.html

- **The Adolescent and Family Life Act (AFLA)**: Passed in 1981 as Title XX of the Public Health Service Act, AFLA provides for abstinence-only grants administered through the Office of Population Affairs in the U.S. Department of Health and Human Services. This program has grown from $4 million in FY 1982 to $13 million in FY 2007.
- **Title V: Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (known as Welfare Reform Act)**: Since FY 1998, this program has allocated $50 million per year to states for abstinence-only-until-marriage programs. For states accepting this funding, the law requires a match of $3 for every $4 of federal funding received, for a combined total of $87.5 million. Several states have rejected Title V funding. Title V expired in 2007 and is pending reauthorization.
- **Community-Based Abstinence Education/Special Programs of National and Regional Significance (CBAE/SPRANS)**: Created in 2001 and operated by the Administration for Children and Families (ACF) in the U.S. Department of Health and Human Services, CBAE provides abstinence-only-until-marriage grants directly to individual public and private entities. This program has grown from $20 million in FY 2001 to $141 million in FY 2007, a 600% increase. The intent of the CBAE/SPRANS program has been more specific: to create "authentic" abstinence-only programs targeted towards 12–18-year-olds and teaching the eight components of the federal definition of abstinence.[5]
- **Additional Earmarks**: In addition to AFLA, Title V and CBAE, at least $3.75 million was earmarked for abstinence-only-until-marriage programs in 2004 and 2005. This includes $3.15 million for 30 programs in Pennsylvania, $350,000 for two programs in Washington, D.C., and $250,000 for the Medical Institute for Sexual Health (MISH) in Austin, TX.

PEPFAR (not displayed in Figure 1): International abstinence-only-until-marriage funding is provided primarily through the President's Emergency Plan for AIDS Relief (PEPFAR). The PEPFAR strategy for prevention of sexual transmission of HIV requires that 33% of funds allocated for prevention in the 15 PEPFAR focus countries be spent on abstinence-only-until-marriage activities. Many of these programs combine "Abstinence" and "Be Faithful" components, and are referred to as "AB" programs.[6] Of the $411.1 million provided for the prevention of sexual transmission of HIV during FY 2007, $145.3 million was allocated to AB programs.[7]

other STIs.[18] Abstinence programs under PEPFAR are referred to by the Office of the Global AIDS Coordinator (OGAC) as abstinence-until-marriage programs rather than abstinence-only programs. This distinction has been made because, while the main focus of these PEPFAR programs is on abstinence, some also emphasize faithfulness within the context of marriage. A major criticism of this policy is that abstinence-until-marriage programs fail to address the fact that, given gender inequities and varying cultural norms about acceptable male and female sexual behavior, marriage and faithfulness do not necessarily protect women and girls from HIV.[1, 19]

In contrast, abstinence-plus programs strongly encourage abstinence among young people but also provide information about contraception and HIV/STI prevention. In addition to endorsing delay of sexual debut, abstinence-plus programs aim to increase knowledge, behavioral intentions to remain abstinent, and use of contraception and disease prevention methods among those who do become sexually active.[8-11] Some also discuss variation in human sexuality. Comprehensive sexuality education has been endorsed by a variety of professional scientific and medical organizations, including the American Academy of Pediatrics, the American Academy of Family Physicians, and the Institute of Medicine.

Abstinence and Sexual Behavior Among Youth

Abstinence-only programs are taught in approximately one-third of U.S. schools, reaching about 8 million students.[20] However, rates of sexual activity increase rapidly during the adolescent years and many teens engage in sexual behavior that places them at risk for unintended pregnancy and STIs, including HIV. In 2005, 46.8% of high school students reported that they had had sexual intercourse, with 14.3% reporting intercourse with four or more sexual partners.[21] Moreover, 37.2% of sexually active high school students had not used a condom when they last had

sexual intercourse,[21] leaving them vulnerable to STIs such as Chlamydia, for which prevalence peaks in adolescence and young adulthood.[21]

Measuring Abstinence

Both abstinence-only and abstinence-plus programs measure a range of knowledge, attitudinal, and behavioral outcomes, including knowledge about HIV/AIDS and other STIs, ability to discuss sexual and relationship matters, perceptions of peer activity and norms, age at first intercourse, number of partners, frequency of sexual activity, and condom use.[8-12] However, most abstinence-only and abstinence-plus programs have not been implemented with an experimental design that would allow for rigorous evaluation of their efficacy. Evaluations of the effectiveness of abstinence-only-until-marriage programs must meet the criteria of scientifically valid assessments, including a random assignment of participants, a sufficiently long follow-up period, and a large sample size.[17]

Summary of the Evidence

There have been various systematic reviews of sexuality education programs (in which the data and outcomes from several studies are analyzed together to obtain an overall finding). Across these reviews, programs were considered generally effective if they reduced one or more behaviors that lead to unintended pregnancy or STI/HIV infection; gave clear messages about sexual activity and contraceptive/condom use; provided medically accurate basic information about the risks of teen sexual activity; provided activities to address social pressures that influence sexual behavior; modeled and practiced communication, negotiation, and refusal skills; set behavioral goals that were age, culture, and experience specific; and lasted a sufficient length of time.[8-11] Results from these reviews are mixed.

- A rigorous published review of 28 sexuality education programs in the United States and Canada aimed at reducing teen pregnancy and STIs (including HIV) found that none of the three abstinence-only programs that met the inclusion criteria for review demonstrated efficacy for delaying sexual debut. Furthermore, these three programs did not reduce the frequency of sex or the number of partners among those students who had ever had sex. This same review found that nine abstinence-plus programs showed efficacy in delaying sexual debut, as well as reducing the frequency of intercourse and increasing condom use once sex had been initiated.[9]

- A systematic review of the efficacy of AIDS risk reduction interventions for adolescents in the U.S. found that two out of six studies meeting inclusion criteria showed efficacy in postponing sexual debut among virgins and an increase in "secondary" abstinence (return to abstinence) among those who had been sexually active.[11]

- A systematic review of 13 published trials of abstinence-only programs conducted among 15,940 American youth found that abstinence-only programs did not affect the risk of HIV transmission or the incidence of unprotected vaginal sex, number of partners, condom use, or age of sexual debut.[22]

- A systematic review of 83 studies that measured the impact of curriculum-based sex and HIV education among youth around the world found that two-thirds of the programs had a significant positive impact on sexual behavior, such as delaying or reducing sexual activity or increasing condom or contraceptive use, or both. Most programs also increased psychosocial mediating factors that are known to be related to sexual behaviors, such as relevant knowledge, awareness of risk, values and attitudes, self-efficacy and intentions.[23]

- A review of sex education and HIV education interventions in developing countries found that, of the 22 interventions that met the inclusion criteria, 16 significantly delayed sexual activity, reduced the frequency of sex, decreased the number of sexual partners, increased the use of condoms and contraceptives, or reduced the incidence of unprotected sex.[24]

- A systematic review of the efficacy of adolescent reproductive health interventions in developing countries found that, of the 15 abstinence-plus programs that measured sexual debut, five showed efficacy in delaying sexual debut.[8]

- A review of 11 school-based HIV prevention programs for youth in Africa found that, of three studies that targeted sexual behaviors, only one program was effective in delaying sexual debut and decreasing the number of sexual partners.[10]

Evaluation studies of abstinence-only programs show more conclusive results:

A federally-supported, 10-year evaluation of abstinence-only-until-marriage programs found that these programs had no impact on youth remaining abstinent, age at first intercourse, number of sexual partners, or condom use. In fact, these programs appeared to have negative effects on knowledge: abstinence-only program participants were less likely to know that condoms can lower the risk of STIs, and more likely to report that condoms never protect against HIV.[25]

- This was the first evaluation study to have a solid experimental design, a large sample size, long-term follow-up, and measurement of sexual behaviors instead of just behavioral intentions.

Other relevant evidence comes from the National Longitudinal Study of Adolescent Health, a U.S. government-supported survey of more than 20,000 American youth. Researchers examined the differences between young people who took a pledge to remain a virgin until marriage–perhaps the most explicit statement of behavioral intentions–and those who did not. The data from this study showed that most virginity pledgers (88%) reported having sex before marriage. Despite the fact that pledgers tended to postpone sexual debut, have less cumulative exposure to HIV and STDs, and have fewer sex partners (especially non-monogamous partners), there was no significant difference in STI rates between virginity pledgers and non-pledgers.[18] Moreover, pledgers were less likely to use contraception once they initiated sexual activity and were less likely to seek STI screenings.[18]

Conclusion

In summary, the scientific evidence neither supports the U.S. government's current policy of making abstinence-only-until-marriage programs the cornerstone of its domestic and international HIV prevention strategy for young people, nor does it support the rapid scale-up of resources to promote abstinence-only-until-marriage programs in the U.S. and globally. Rather, the scientific evidence to date suggests that investing in comprehensive sexuality education that includes support for abstinence but also provides risk-reduction information would be a more effective HIV prevention strategy for young people both in the United States and globally.

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