

# Teaching Teens About Abstinence May Delay Sexual Activity, Reduce Risk Behaviors

*Researchers Evaluated Intervention Focusing on Preventive Health and Future Goal Attainment, Not Moral Choices*

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Teens who received a behavioral intervention centered on abstinence were more likely to delay first sexual contact than teens who received a control intervention focusing on general health promotion, according to an NIMH-funded study. Though differing from federally funded abstinence-only programs, the researchers describe how an abstinence-based intervention may help delay sexual activity among adolescents in the February 2010 issue of the *Archives of Pediatrics and Adolescent Medicine*.

## Background

Sexually active teens face a broad range of potentially negative outcomes related to HIV and other sexually transmitted infections (STIs) and unplanned pregnancies. In particular, African American teens experience these outcomes at much higher rates than their peers.<sup>1,2,3,4</sup>

Studies have shown that behavioral interventions can reduce behaviors related to HIV/STI risk. However, U.S. policymakers do not agree on which type of intervention is most appropriate or most effective for use with teens. Many states have adopted abstinence-only programs in their school systems, which not only lack adequate research showing their efficacy, but have been criticized for inclusion of inaccurate information, negative portrayal of sex, and a moralistic tone.

To address this issue, John B. Jemmott, III, Ph.D., of the University of Pennsylvania, and colleagues recruited 662 students in grades 6 and 7 (ages 10—15) from four, public middle schools serving low-income, African American, urban communities. They were randomly assigned to one of five behavioral interventions:

- **Abstinence—based**—designed to strengthen beliefs supporting abstinence (e.g., prevent pregnancy and STIs, foster attainment of future goals) and increase skills for resisting pressure to have sex. In addition, the intervention providers were expressly instructed not to discredit use of condoms and to correct false beliefs about the effectiveness of condoms in preventing STIs.
- **Safer sex**—designed to strengthen beliefs supporting condom use and increase skills to negotiate condom use and use condoms properly.
- **12-hour comprehensive**—combined the design and aims of the abstinence-based and safer sex interventions.

- 8-hour comprehensive—provided an abbreviated version of the 12-hour comprehensive intervention. This allowed the researchers to assess whether any benefits of the longer comprehensive intervention could be attributed to the students spending more time in the intervention.
- Health promotion—designed to increase knowledge and motivation regarding general healthful behaviors, such as following a balanced diet and discouraging cigarette smoking. This intervention served as the control condition.

All interventions were designed to increase knowledge about HIV and STIs except for the health promotion intervention. Four of the interventions were provided over two 4-hour weekend sessions (eight hours total). The 12-hour comprehensive intervention was provided over three 4-hour weekend sessions. Participants completed questionnaires at the start of the study, immediately after the last intervention session, and every three months afterwards for up to two years.

In addition, the researchers tested an intervention maintenance program. This program, which was tested in half of the participants, consisted of two 3-hour booster sessions given at six weeks and three months after completion of the initial intervention; six issues of a newsletter; and six brief, one-on-one counseling sessions with the original facilitator provided over a 21-month period.

## Results of the Study

At the study's outset, 23.4 percent of the teens reported that they were already sexually active.

At the two-year follow-up, students who received the abstinence-based intervention and had not been sexually active at the study's outset were significantly less likely to have initiated sexual activity (33 percent) or to have recently had sex (20 percent) compared to the those who received the health promotion intervention; among students in the control group with no prior sexual activity, 49 percent reported first sexual contact and 29 percent recently had sex. None of the other interventions had a significant effect on the initiation of sexual activity when compared to the control condition. The researchers did not compare the four HIV-prevention interventions with each other on any outcome measures.

Students who received either the 8-hour or 12-hour comprehensive intervention were significantly less likely to report having multiple partners (about 9 percent in each group) than those in the control group (14 percent).

The intervention maintenance program modestly enhanced the effectiveness of the abstinence-based and 12-hour comprehensive interventions at reducing multiple partners, but showed no other benefits.

None of the interventions significantly affected consistent condom use.

## Significance

According to the researchers, their study shows that a theory-based, abstinence-only intervention may be an effective method for delaying sexual initiation in middle school students who are not already sexually active. They also emphasized that the abstinence-based intervention used in this study was not designed to meet federal criteria for abstinence-only programs. Thus, it is not subject to the criticisms those programs face. Similarly, the results of the abstinence-based intervention cannot be generalized to all abstinence programs or to all populations.

Also of note, the study did not support a common concern about abstinence-only interventions—that they reduce the likelihood of condom use among teens. Similarly, the other behavioral interventions did not increase sexual activity when compared to the control group, a concern expressed by some regarding comprehensive sex education interventions.

The researchers further cautioned that their findings do not suggest that this or other abstinence-based interventions are the best approach for all adolescents. However, the use of evidence-based abstinence interventions may be an effective means of delaying sexual initiation in some communities for whom abstinence is the only acceptable approach to sex education.

## What's Next

Further work is needed to determine whether the interventions assessed in this study are effective for other teen populations and to determine when they affect biological outcomes such as STI or pregnancy rates. Different methods may be more effective in addressing the specific needs of older youth or teens in committed relationships, for example. The researchers also expressed the need for additional studies to identify ways of prolonging the effectiveness of HIV/STI interventions.

## Reference

Jemmott JB, Jemmott LS, Fong GT. [Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months: A Randomized Controlled Trial with Young Adolescents](#). *Arch Pediatr Adolesc Med*. 2010 Feb;164(2):152-9.

<sup>1</sup> Centers for Disease Control and Prevention. Sexually transmitted disease surveillance 2006. Atlanta, GA: Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, November 2007. Downloaded February 22, 2008 at <http://www.cdc.gov/std/>.

<sup>2</sup> Centers for Disease Control and Prevention. HIV/AIDS surveillance in adolescents and young adults (through 2005). Atlanta, GA: Division of HIV/AIDS, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, October 23, 2007.

<sup>3</sup> Miller WC, Ford CA, Morris M, Handcock MS, Schmitz, JL, Hobbs MM, Cohen MS, Harris KM, Udry JR. Prevalence of chlamydial and gonococcal infections among young adults in the United States. *JAMA*. 2004;291:2229-2236.

<sup>4</sup> Ventura SJ, Abma JC, Mosher WD, Henshaw SK. Recent trends in teenage pregnancy in the United States, 1990-2002. Health E-Stats. Hyattsville, MD: National Center for Health Statistics. Released December 2006. Downloaded June 6, 2007 at <http://www.csctulsa.org/images/Teen%20Pregnancy%20Trends%201990-2002.pdf>