

GRAND ROUNDS

HIV Center for Clinical and Behavioral Studies

New York State Psychiatric Institute and Columbia University

“Behavior Change to Prevent HIV Transmission Among Teens”

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Dr. Laurie Bauman, Professor of Pediatrics, Albert Einstein College of Medicine and Director of the Preventive Intervention Research Center for Child Health, reviewed research on adolescent HIV risk behavior and behavior change.

One half of new HIV infections diagnosed in the U.S. each year are in people under 25, and most people over 25 acquired HIV when they were teens. People 13 to 19 account for 61% of HIV infections in women and 56% of those in African Americans. Youth, especially African American females, are at great risk for HIV because of early sexual debut, many partners, and irregular condom use (less than one third use condoms consistently).

The effects of prevention interventions to date have been small and short term. There is a need for intensive group interventions that are interactive, based on theory, and include both information and skills development as part of careful randomized controlled trials. Innovative research projects target the level of sexual experience, stages of change, gender norms, and couples and utilize concepts such as structural rebound.

Project Safe was a randomized controlled trial involving more than 600 Bronx adolescents 14 to 17 years old, designed to compare programs representing three research conditions (about 200 participants per program). Generation Safe, a peer counseling training program for sexually experienced youth, was a six month program of 15 sessions and interactive groups, providing HIV, drug, and alcohol information and skills development (anatomy, condom use, attitudes, communication, negotiation) and paid internships in community agencies. The Stay Cool program provided only the HIV, drug, and alcohol curriculum with no internships. The Teen program provided peer counseling training and internships but no curriculum. Participants trained as counselors could choose whether their internship (four to six hours per week for 10 weeks at CBOs in the Bronx) would consist of one on one counseling or community risk reduction (at community fairs and other events).

The intent was to determine whether risk behavior decreased among the counselors as well as the counseled. Social cognitive theory, based on reasoned action and planned behavior, postulates that HIV knowledge and skills are related to behavioral intentions, outcome expectations (condoms used correctly are protective), and efficacy expectations (confidence in one's ability to

use condoms effectively). Behavioral intentions are presumed to be related to outcomes such as abstinence, higher age at sexual debut, fewer partners, and fewer risk encounters. But gender norms are also a factor affecting cognition and behavior. Macho male roles assume an early sexual debut, many partners, and no romantic commitment. Traditional female roles assume that young women are powerless, not responsible for their own sexuality and protection, and will be involved only in monogamous romantic relationships.

The study found that HIV knowledge and cognition are related to intention but not strongly; there is a need to improve this. Gender norms are correlated with intentions but not outcomes. HIV knowledge in the Generation Safe group increased after the internship but not greatly, although it did persist. Boys in this group and the Stay Cool group showed a greater intention to use condoms and limit partners, but girls did not. No group was better at refusing sex without a condom. As for reported behavior, the Generation Safe group did decrease the number of unprotected sexual encounters, and although this safer behavior was decreasing at 18 month follow-up, it was still better than at baseline. Generation Safe boys decreased risk behavior earlier (at the second follow-up, versus the third for Stay Cool boys). Generation Safe girls dramatically decreased their risk behavior, and although this effect also deteriorated over time, it decreased more slowly than for boys. There was no effect on the risk behavior of girls in the other groups.

The question, then, is why unsafe behavior persists. Two qualitative studies have been undertaken: the role of relationships and the debriefing of Generation Safe graduates. The relationship study of 300 couples, including black and Hispanic boys and girls, consists of in depth interviews every 3 months for one year and focus groups. Topics include relationships, sex, trust, condom use, partners, couple dynamics, and decision making power. Participants describe three types of relationships: “messin’,” which is always secret; boyfriend/girlfriend, which is public and involves feelings for the partner; and “hubby/wifey,” which involves the word love and implies the intent to live together and have a family. Thus, behavioral and emotional dimensions of these relationships are degree of secrecy, future commitment, expectation of monogamy, love, and condom use. Since unsafe sex involves the decisions of two people, other factors affecting behavior, in addition to the type of relationship, are differences between partners about these dimensions. For example, condoms are used 85% of the time when love is not involved, only 57% when it is, and never with a “wifey”. But more girls (70%) reported being in love with their partners than boys (30%).

Sixty minute interviews with Generation Safe graduates revealed strong intentions to use condoms, but exceptions for a “wifey” relationship and situations in which partners wanted to express trust in each other, create a committed relationship, or have a child. Drugs and alcohol, assumed to be typical barriers to condom use, played minor roles. Since boys were expected to take responsibility for the quality of the sexual experience, if they thought condoms would interfere, they did not use them. Partners who decided to have unsafe sex did not feel guilty, but they did understand the increased risk and compensated by ineffectively seeking HIV tests (incorrectly assuming that a blood test in a doctor’s office or an STD test includes a test for HIV).

A new study, Stay Safe, of 600 sexually inexperienced 13 to 16 year olds, is a three-arm

randomized controlled trial to address gender, gender roles, beliefs, and HIV risk. One group will receive HIV/STD prevention information in eight paid sessions and then be engaged as paid research collaborators (4 hours per week for 6 weeks). Participants will help to develop the study and conduct observations and data analysis. One control group will receive HIV and gender role education but no research experience, and another will receive HIV education without the gender content or research.

Another study, It Takes Two (IT2), includes 400 adolescents of color at high risk for HIV and STDs. It has two research groups: one participates in 13 paid sessions providing knowledge and skills training on gender roles, relationships, and HIV risk and then completes a paid seven week internship (4-6 hours/week) in which they design and produce a video on unsafe behavior for other teens. Member of the control group are enrolled in the Teen program and do not receive information about substance use or sexual risk.

Additional new directions concern theory. The cognitive model has proven to be short sighted, not taking into account the enormous cultural and emotional variables that influence behavior, such as fear of being alone, depression, mental illness, risk taking norms, and chaotic home environments. All of these are related to intention, which is then modulated by factors in the dyad agreement (couple dynamics and disparate expectations) and ultimately to behavior.

Discussion:

Different strategies are needed for boys and girls. Cognitive models do not well work for girls and work only somewhat for boys. It will be necessary to do a lot of teaching about gender norms, as well as other social factors, all of which substantially affect behavior. For example, what does it mean for a girl to carry a condom? Girls assume they are supposed to be in love with a partner to have sex and so do not want to use condoms. Love and trust are counter influences to condom use. How do HIV prevention messages convey that you can't always trust your loved partner? No one wants to remove the capacity for intimacy, but it's essential to challenge girls who imagine that every boyfriend is the one she will be with for life. And boys can't imagine that "wifey" or any other girlfriend would cheat on them. Just like adults, both boys and girls assume that you don't use condoms with your main partner (the one you love the most), but you do with the others. It is very difficult to change these attitudes to the idea that the one you love is the one you should be most careful to protect. On the positive side, young people are very interested in information and discussion about gender norms.

Many people think it's easier to change behavior in the next relationship than in an ongoing one. This really involves changing what young people think it means to be in love or in love forever.

HIV prevention campaigns have taken condoms off the contraceptive shelf and put them onto the STD shelf. In fact, condoms are one of the most effective non-hormonal pregnancy prevention methods. That is a benefit that could be reemphasized, and boys especially appreciate this. The message is that condoms should be used even if the girl is using some other pregnancy prevention method. But the contraceptive value of condoms is also an argument against their use for young people who for any number of reasons think they want a pregnancy.

It would be useful to do a study to help young people identify appropriate partners. Teens have

an inaccurate and romantic idea of how sex is initiated, and most regret their first sexual experience.

As young people became more involved in the internship program, making the HIV prevention video and making decisions about the research agenda, they became more and more committed to decreasing health disparities in their communities. They formed a coalition with 40 Bronx CBOs that serve youth and are very engaged.

The idea of trust between partners is very complex. Even sex workers will use condoms with everyone except their own partners. There is not much receptivity to the idea of female condoms. Girls do not want to use them. The use of microbicides will also involve trust, even if used secretly, because women do not want to be deceptive.

In schools, teachers are not very good at discussing any of these topics, and young people do not want to ask questions in front of people they know. There is a great deal of research and intervention work to be done.

RELATED PUBLICATIONS:

Bauman, LJ, Berman, R. "Adolescent relationships and condom use: Love, trust and commitment," *AIDS and Behavior*, 9:211-222, 2005.

Silver, EJ, Bauman, LJ. "The association of sexual experience with attitudes, beliefs, and risk behaviors of inner-city adolescents," *Journal of Research on Adolescence*, 16:29-45, 2006.

See also:

http://www.aecom.yu.edu/home/cfar/laurie_bauman.htm

<http://www.hivcenternyc.org/research/children/adolrelationships.htm>

<http://www.hivcenternyc.org/research/children/ittakestwo.htm>

<http://www.hivcenternyc.org/research/children/staysafe.htm>

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SHORT TITLE: Behavior Change to Prevent HIV Among Teens