There are too few HIV/AIDS research, prevention, and treatment efforts for women, though 13 percent of U.S. AIDS cases involve women. There is also a paucity of knowledge about how AIDS affects women uniquely. HIV infection is currently moving to younger cohorts and from men to women. The four known transmission routes are blood products, intravenous drugs, perinatal transmission, and sexual intercourse. Because there is no vaccine or treatment for HIV/AIDS, researchers are focusing on behavior. The health belief model has been used to help understand behavior. Components of the health belief model that apply to prevention efforts include: (1) person factors (individual knowledge, attitudes, and beliefs); (2) perceived severity of the HIV/AIDS problem and the possibility of denial; (3) perceived susceptibility to HIV/AIDS; (4) perceived benefits of practicing safe behaviors; and (5) barriers to HIV/AIDS preventive action. The best methods for impacting preventive behavior, called "cues to action," include individualized communication, small group presentations, and educational drama. Planners need to know their audiences and understand the information audience members will believe and use. Educators should be very specific in explaining risk behaviors, offer options for intimate activity, build skills for practicing preventive behaviors, and enhance perceptions of risk by using appropriate media. (Contains 26 references). (SM)
Conference Proceedings
AIDS and Women-Changing Epidemic:
Staying on Top as a Health Educator

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AIDS and Women-Changing Epidemic: Staying on Top as a Health Educator

Introduction

I chose to focus on HIV/AIDS in women because I believe that too little has been done to include women in AIDS research, prevention, and treatment. I have learned much through my research about how the AIDS epidemic has affected women.

This paper addresses biological transmission pertinent to HIV/AIDS in women and the psychosocial factors that influence HIV/AIDS preventive behaviors. We know that HIV/AIDS is pandemic. Without belaboring the overwhelming statistics on HIV/AIDS, I would like to briefly review pertinent statistics about the enormity of the epidemic.

• There are 4.5 million AIDS cases worldwide.
• There are 18 million HIV infected people worldwide.
• There are 500,000 AIDS cases in the US.
• AIDS is the 4th leading cause of death in black women.
• 13% of AIDS cases are now in women in the US (CDC, 1996)

The AIDS epidemic has affected women through four primary ways and created special problems for women. First, women have often gone undiagnosed. Men with HIV have been three times more likely to be correctly diagnosed than women with HIV (Knowles, 1993). Second, women have more difficulty in obtaining quality care and have less access to medical care (Smeltzer, 1992). Third, there is a lack of knowledge about how the disease affects women differently than men (Mason, 1988). Finally, there are no appropriate prevention strategies for all women.

Routes of Transmission

I believe the epidemic is changing its course. Research indicates that the diffusion of infection is to younger cohorts and from men to women (Worth, 1989). Much of this has to do with successful prevention strategies among white males. Part of this change lies in the greater number of sex partners among the young, and the vulnerability of women biologically to transmission (Rodin & Ickovics, 1990).
We know a great deal at this point about HIV/AIDS. We have a good start at understanding biological transmission of the virus. The following are the four known routes of transmission.

**Blood products.** A small percentage of women are infected by a contaminated blood transfusion, blood products or tissue, (about five percent according to the CDC, 1996). Issues for women are the higher chance of a transfusion during labor and delivery (Gillespie, 1991). Another issue is for the female partner of a male who is hemophiliac. The more immunosuppressed the male carrier is or the higher the viral load, the more likely transmission is to occur to a partner (Curran, Jaffe, Hardy, Morgan, Selik, & Dondero, 1988).

**Intravenous drugs.** Sharing IV needles with an infected person is a substantial cause of HIV/AIDS in women. This accounts for about 47% of HIV cases (CDC, 1996). Sex and drugs are often intertwined. A woman may be infected herself and/or have a drug using partner (Wells & Jackson, 1992). In one study two thirds of IVDU reported never using condoms (Shilling, Schinke, Nichols, Botvin & Orlandi 1991). Female drug users are more likely to lead traditional lives with a home and several children (Wells & Jackson, 1992).

**Perinatal transmission.** The majority (90%) of pediatric AIDS occurs during pregnancy or delivery. The virus is found in amniotic fluid, breast milk and blood (Tinkle, 1991). Though it is not known how the virus is passed, the time of transmission is estimated between 13 weeks to 34 weeks of pregnancy (McDonald, Ginzburg, & Bolan, 1991). The majority of infants are born seropositive because maternal antibodies cross the placenta. Only 13-30 percent of those infants are infected with HIV (Newell, 1992). Effects of HIV on the woman during the pregnancy are not clear and vary widely. Some women experience preterm labor, spontaneous abortion, and IUGR (Porcher, 1992). It may interfere with medication during delivery, fluid management, decision making during delivery, or tolerance of labor (McDonald, et al., 1991).

The issue of perinatal transmission without a doubt brings about some of the most painful questions in the AIDS epidemic for women. What happens to the family when a woman with HIV cannot care for her children or herself? Five to ten million children will be AIDS related orphans by the year 2000 (Gillespie, 1991).
Sexual intercourse. How easy is it to get HIV from sexual intercourse? It depends on the sex of the carrier. HIV transmission from female to male is low. Thirty seven percent of women with HIV contracted it from a male partner (CDC 1995). Female to female transmission is also low. Reported cases are thought to be from artificial insemination of infected semen (Chu, Buehler & Berkleman, 1990). We don't know how it passes on during intercourse. It may pass through vaginal mucosa or penile or anal tissue. Where there is a lack of lubrication, in post menopausal women or in cases of rape, there would be an increased risk of a tear and transmission (Rodin & Ickovics, 1992). Likewise STD's that have left lesions in the vagina leave a woman more vulnerable to transmission (Rodin & Ickovics, 1992).

Because there is no vaccine or treatment at this point in the HIV/AIDS epidemic, researchers have intensified their study of behavior. One theory that has been used to try and understand behavior has been the health belief model. Components of this model are used in presenting prevention efforts in this paper. The components of the models are person factors, severity, perceived susceptibility, perceived benefits, and barriers. Each of these is examined below.

Prevention Efforts
Research indicates that we target our prevention efforts for greater effectiveness. The target audience must always be considered. Factors that need to be considered include age, race, sex, religion and location or culture. In the health belief model these are known as person factors.

Person factors that have been looked at primarily are knowledge, attitudes, and beliefs. Knowledge, attitudes, and beliefs have been studied extensively. Many groups including children, adolescents, students in elementary, secondary, and college, teachers, administrators, police, social workers, substance abuse clinic directors, counselors, psychiatric staff, medical technologists, nurses, doctors, interns, business and corporate executives, blood donors, Hispanics, blacks, latino groups, native Americans, Asians, and southern Baptist church leaders have all been surveyed. National surveys indicate the public is fairly informed about HIV/AIDS and transmission.
The question is, how has preventive behavior changed in response to knowledge?

**Severity**

Most individuals view AIDS as very serious, sometimes so much that denial is a factor for educators to contend with. Just as individuals may deny the risk of cancer, most individuals look upon HIV/AIDS with equal or greater fear, and thus may deny the risk of ever contracting it.

**Perceived Susceptibility**

This means that women will not ward off or try to prevent a disease if they do not think they can get it. Todd Siegler, Minnesota AIDS coordinator said in his presentation, "Until we own this disease, we won't see any change in behavior. If women don't believe they are likely to get AIDS they won't protect themselves" (1993). A question that is less threatening to an audience about susceptibility might be "Why would your best friend not be likely to get AIDS"?

Reasons people give for not being susceptible to HIV are sometimes accurate perceptions of non risk, but others are based on stereotypes and misperceptions. College students asserted the following beliefs; AIDS is only in the city; my partner is safe, tested, faithful, monogamous; I'm not promiscuous; I know my partner; I trust my partner; I know who my partner sleeps with; there's a low rate of carriers out there etc. (Gray & Sarcino, 1989, Woodcock, Stener & Ingham, 1992).

Recommendations for program planning start with the need for a better understanding of how perceived susceptibility relates to HIV/AIDS preventive behavior. The challenge to those of us who are educators is to get the critical message across that women are the most vulnerable target in tomorrow's AIDS epidemic and what they can do about it.

The goals are to build motivation and skills to practice abstinence, negotiate and use condoms, not use IV drugs or share needles, and practice lifelong monogamy. We need to emphasize the perceived benefits of preventive behavior.

**Perceived Benefits**

Many education programs promote the positive benefits of practicing safe behaviors such as abstinence, monogamy and not using IV drugs. This area has been included in many high school
curriculums and community programs.

In designing programs we need to look at the barriers faced by the target audience. Good program planning should address these barriers for women. Another component of the health belief model are barriers to changing behavior.

**Barriers**

There are many barriers to HIV/AIDS preventive action for women. Let's look first at abstinence. Abstinence requires that a woman have personal power and control of her life and/or control of whether to be sexually active in a relationship or not (Carvano, 1991). The second option for sexually active women is using condoms. This presents tremendous challenges for women. Condom use has to be renegotiated, perhaps over and over. Also asking a partner to use a condom may carry a message of distrust or lack of commitment (Worth, 1989). It prevents pregnancy when a woman may desire to conceive. Religious beliefs may forbid contraceptive use. Attitudes towards condoms vary. Women especially may be more susceptible to embarrassment in procuring condoms or fear a partner's reaction to condoms (Vail-Smith, Durham, & Howard, 1992; Campbell, Peplau, & Debro, 1992). The third option for sexually active women in a relationship is monogamy. While this practice is endorsed, it is recognized that monogamy takes the commitment of both persons, and thus may be outside the control of a woman.

Suggestions from research for overcoming these barriers include empowering women for economic and personal power in decision making and supporting abstinence as an acceptable decision for women. Others were empowering women to make sexual decisions and increasing motivation to use condoms to protect the family. Promoting condoms as sexually pleasurable and building on peer endorsement of condoms was also mentioned. Finally, encouraging AIDS testing before sexual intercourse in a relationship and supporting monogamy were given as suggestions (Carvano, 1991).

**Cues to Action**

The final section of this paper deals with the best methods for impacting preventive behavior. In the health belief model these are called cues to action. Among the methods for delivering prevention information, the highest potential for change is by one-on-one communication, then small group, then educational drama. Written
material was the lowest in leading to behavior change (Leviton, Hegedus, & Kubrin, 1990).

Wilson & Nashman (1990) reported that careful targeting to an audience is important for behavior change. Planners need to know the audience and understand the information that the target audience finds believable and is likely to use. The following steps were recommended by the authors for greater program impact:

- Listen to the concerns of the target audience.
- Design a message and the most effective delivery route to the audience.
- Use focus groups to determine if this is the right message for this group.
- Evaluate the extent of audience reached and what message was retained.

**Conclusion**

The following recommendations are provided for educators:

1. Be as specific as possible in explaining risk behaviors. Children, for example, are concrete thinkers and so we must be very careful with how we explain transmission. When we use words like dirty needles or intimate contact, they are likely to draw wrong conclusions.

2. Give options for intimate activity, and stress which are safe, safer, and risky. (Reducing the Risk, a curriculum for reducing the risk of teen pregnancy and HIV/AIDS, has excellent activities for adolescents).

3. Build skills to practice preventive behaviors, either abstinence or safer sex.

4. Enhance perceptions of risk by providing drama, guest speakers, or films which are salient to the audience—both culturally and age appropriately.

   The difficult choices that a woman faces and the action she takes today in terms of prevention are the seeds of tomorrow's health and well-being.
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