



5-3-1999

A Study of the Effectiveness of Sex Education Classes on the HIV/ AIDS-Related Attitudes and Behaviors of Adolescent Women

Imelda Reyes-Phetteplace
Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/honors_theses



Part of the Curriculum and Instruction Commons, and the Gender and Sexuality Commons

Recommended Citation

Reyes-Phetteplace, Imelda, "A Study of the Effectiveness of Sex Education Classes on the HIV/AIDS-Related Attitudes and Behaviors of Adolescent Women" (1999). *Honors Theses*. 602.

https://scholarworks.wmich.edu/honors_theses/602

This Honors Thesis-Open Access is brought to you for free and open access by the Lee Honors College at ScholarWorks at WMU. It has been accepted for inclusion in Honors Theses by an authorized administrator of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.





THE CARL AND WINIFRED LEE HONORS COLLEGE

CERTIFICATE OF ORAL EXAMINATION

Imelda Reyes-Phetteplace, having been admitted to the Carl and Winifred Lee Honors College in 1994, successfully presented the Lee Honors College Thesis on May 3, 1999.

The title of the paper is:

“A Study of the Effectiveness of Sex Education Classes on the HIV/AIDS-Related Attitudes and Behaviors of Adolescent Women”

A handwritten signature in blue ink that reads "Mary Lagerwey" written over a horizontal line.

Dr. Mary Lagerwey
Nursing

A handwritten signature in black ink that reads "Eileen Stryker" written over a horizontal line.

Dr. Eileen Stryker
Stryker and Endias

A Study of the Effectiveness of Sex Education Classes on the HIV/AIDS-Related Attitudes and Behaviors of Adolescent Women

Imelda Reyes-Phetteplace

Western Michigan University

Lee Honors College

May 3, 1999

ABSTRACT

Twenty adolescent women using services at the Kalamazoo County Family Planning Clinic were interviewed using a protocol developed by the student investigator. Their responses were analyzed for themes and patterns. The majority of the adolescents were aware of HIV/AIDS and were using condoms on a consistent basis. Using the Health Belief Model (HBM) as the theoretical framework, suggestions were made to help improve area school programs such as practicing role-play during class and offering more classes in greater detail. Many of the adolescents recommended having more classes offered in school that cover the topics of STDs and health education in greater detail.

Sexually transmitted diseases among adolescents continue to be a problem in the United States (DeCarlo & Padian, 1997). According to Warren et al. (1998), one in eight teenagers contracts an STD each year, and about one-fifth of all people diagnosed with AIDS are in their twenties. Given the HIV incubation period, people in their twenties were infected as adolescents. In 1995, AIDS was the leading cause of death for persons 15-24 (CDC, 1997). AIDS is a preventable disease that does not need to continue affecting our younger population. Along with the risk of AIDS, teenagers are also at risk for other sexually transmitted diseases. Santelli and Beilenson (1992) state that sexually experienced teenagers have the highest rate of sexually transmitted diseases (STD) of any age group. Kirby et al. (1994) adds that an STD infects one in four young people by the age of 21. Not only are teenagers contracting STDs, but also many do not know how to manage their infections (Bonny & Biro, 1997). The effects of contracting an STD extend further than physical complications. They also affects a teenager's self-esteem (Bonny & Biro, 1997). Keeping our young people healthy and free of disease should be a high priority on our nation's public health agenda. Unfortunately, our communities are unsure of how to approach a problem of this nature.

The purpose of this study is to investigate how sex education classes influence the attitudes and behaviors towards the prevention of HIV/AIDS in young women using the Family Planning Clinic. The sexual practices of adolescents put them at risk for an increased number of infections and potentially life-threatening diseases. Unprotected sexual intercourse is the primary HIV transmission route for adolescents (CDC, 1994). The physical characteristics of teenagers also increase their risk of contracting a disease. According to Hiltabiddle (1996), the protective cervical mucous does not fully develop until two to three years after menarche which makes female teenagers more susceptible to STDs and their sequelae. Also, women in general

have greater exposed surface areas during sexual intercourse that greatly increase their possibility of becoming infected (Quirk & DeCarlo, 1998). Bentley and Herr (1996) found that heterosexual contact accounted for 3 to 4 percent of the AIDS cases in males while it accounted for 50 to 54 percent of the cases for females. Young people are initiating sex at earlier ages which has a variety of consequences. Santelli and Beilenson (1992) identified that the age of initiation and frequency of partner switching greatly affects the health of teenagers. The Youth Risk Behavior Survey of 1990-1995 (Warren et al., 1998) reported that the average age of initiation for a teenager was 16.5 years. "By the time they reach age 20, 77% of girls and 86% of boys have had sex" (Krieger, 1996, p. 1). We need to become aware and accept the fact that teenagers are going to engage in sexual intercourse. Young adolescent women are particularly at risk for endangering their health. "Current epidemiological data show trends that have signaled a need to focus on the unique needs of adolescent girls" (Bentley & Herr, 1996, p. 147).

Another aspect of the sexual behaviors of teenagers is that they often do not plan their sexual encounters and engage in sporadic behaviors (Hiltabiddle, 1996). "For the first sexual experiences, male methods, including condoms and withdrawal, predominate" (Santelli & Beilenson, 1992, p. 275). The behaviors coupled with the psychological development of teenagers make a dangerous combination. Teenagers have special needs that must be addressed in order to decrease their risk of engaging in risky sexual behavior. Teenagers lack direct experience with AIDS, which may reinforce a false sense of security (Levy et al., 1995). "Adolescent girls underestimate their own risk because they see AIDS as a male disease, giving them a false sense of invulnerability" (Brown et al, 1998, p. 566). Recognizing the risk of AIDS requires the ability to think in an abstract manner. There are no immediate consequences associated with contracting a sexually transmitted disease, unlike with pregnancy. Rational

decision-making skills may be hindered if an adolescent is preoccupied with immediate consequences (Hiltabiddle, 1996). “More than half of adolescents (58%) who are sexually experienced report not using contraception every time they have sex, and more than a third have never spoken with a sexual partner about preventing pregnancy or disease” (Contraceptive Technology, 1998).

Sexuality education classes in schools are being widely implemented, but there are many opportunities for schools to improve their current programs. Schools are currently the only institution utilized by children across the country, 95 percent of teenagers attend school on a regular basis (Kirby et al., 1994). “Moreover, virtually all youths attend school before they initiate sexual risk-taking behaviors, and a majority are enrolled in school when they initiate intercourse” (Kirby et al., 1994, p. 341). Unfortunately, many adolescents are missing bits and pieces of essential information, increasing their risk of infection. “As Sears (1992) points out, the current placement of sexuality education in the school curriculum does not parallel students’ needs and concerns” (Bentley & Herr, 1996, p. 155). Many of the programs being implemented have not been reviewed for their effectiveness. According to the Division of Adolescent and School Health at the CDC (1997), studies have not been done to comprehensively assess the HIV education policies and programs nationwide. Currently students are receiving a wide variety of classes and materials. They can range from one hour to semester long programs which cover topics like abstinence all the way to actually dispensing contraceptives (Kirby, 1992). Yarber and Parrillo (1992) identified the need for quality instructional materials for STD education. The need to identify an appropriate time to present the information is also essential. According to Santelli and Beilenson (1992), 40 percent to 50 percent of teenagers initiate sexual intercourse before ever receiving sex education. Of the programs offered, Jacobs and Wolf (1995) noted that

only 68 percent of sexuality education course recipients received information about how to prevent pregnancy. Prevention is an area of the nation's health care system that is currently receiving a great amount of attention and is essential in reducing the number of communicable diseases currently identified in the adolescent population.

Nationally there are controversies about what to include in reproductive health classes in local public schools.

“Although national and state polls consistently show that 80-90 percent of adults support sex education in schools-including instruction on contraception and disease prevention in addition to abstinence-many schools districts are under intense pressure to eliminate discussion of birth control methods and disease-prevention strategies from their sex education programs” (Donovan, 1998, p. 188).

Surgeon General Koop called for sex education in schools as early as third grade claiming that “we need sex education in schools and that it [should] include information on heterosexual relationships. The lives of our young people depend on our fulfilling our responsibility.” (Donovan, 1998, p. 189).

Communities are afraid that providing too much information may actually induce risky behaviors in adolescents. In students who had participated in sexuality education and those who had not, Jacobs and Wolf (1995) found no significant difference in the number of students that participated in sexual intercourse. But there were fewer premarital pregnancies and a greater number of women using contraceptives among those receiving education. Educating our young people can reduce the likelihood of unfortunate consequences occurring at young ages. Teen pregnancy and early infection with diseases are detrimental to teen's physical and mental health. Bentley and Herr (1996) share that until programs are designed with the development of girls

and their social cultural context in mind, we can expect this tragic increase in infection to continue. Abstinence programs are wonderful to offer and to promote, but there comes a time when schools and administrators must come to the realization that students do engage in sex and that schools are in an excellent position to educate students on all issues. Health education should include a wide variety of materials to cover all aspects of sexuality education. According to Levy et al. (1995), few adolescents seriously consider becoming abstinent after initiating sexual intercourse. With this in mind, the following study assessed how reproductive classes in school affected the attitudes and behaviors of young women who used the Family Planning Clinic in Kalamazoo County.

The Health Belief Model

The Health Belief Model is the theoretical framework for this study. The HBM, first conceptualized in the 1950's by Rosenstock and others, is a cognitive view of health activities that attempts to explain or predict the likelihood that an individual will adopt a preventative health behavior. The Health Belief Model is a combination of five variables that predicts that individuals will be more likely to take preventative measures if they:

- 1) Feel personally susceptible to a disease, in this study, STDs and/or HIV/AIDS.
- 2) Believe the disease serious in its consequences, in this study, STDs and/or HIV/AIDS will eventually result in death or at least extreme discomfort.
- 3) Feel the action will be beneficial in preventing occurrence or lessening the risk, in this study, feeling that condoms will greatly reduce the risk of HIV/AIDS if used consistently and correctly.

- 4) Determine the barriers to act can be overcome, in this study, feeling uncomfortable or embarrassed about requesting condom use and overcoming those feelings with practice, role-play, and confidence.
- 5) Experience a “cue” or trigger that provides motivation for taking the recommended action, in this study, factors that will enable adolescents to use condoms, maybe making them part of foreplay. (Wohl & Kane, 1997)

The Health Belief Model (HBM) was first used to develop the questions in the interview and then to provide recommendations. The questions were designed to measure whether the classes taken in school had influenced the participants’ use of condoms and what communication skills the adolescent had developed.

Methods

To analyze the quality and detail of sex education classes, the study was conducted with a targeted convenience sample of young women using the Family Planning Clinic. A student investigator who is a senior nursing student conducted a thematic analysis of responses given by adolescents about their experiences with their sex education classes and their effects on their attitudes and behaviors towards HIV/AIDS. The proposal was approved by the Western Michigan University’s Human Subjects Institutional Review Board and the Kalamazoo County Human Services Department. The Family Planning Clinic is located within the Nazareth Complex at the Kalamazoo Human Services Department.

The Family Planning Clinic, a Title X clinic, offers services to Kalamazoo County and includes performing Pap smears, physical exams, dispensing of birth control, pregnancy testing and referrals. Women of all ages use the services and teens are able to obtain services without the consent of their parents. Two registered nurses, three part-time nurse practitioners, a family

planning technician, and two receptionists staff the clinic. Women schedule appointments for exams, and, in addition, the clinic holds walk-in hours for contraceptive pick-up and pregnancy testing. Education is done routinely on visits and patients are offered services on a sliding fee scale.

Recruitment

The targeted convenience sample included thirteen to nineteen year-old women seeking services at the Family Planning Clinic during routine visits. During the adolescent's visit, the staff approached the young women to see if they would be interested in participating in a study being conducted by a WMU Honor's College student. The study was conducted in March and April, 1999. All young women attending the clinic were eligible to participate. If the young woman agreed, consent was obtained, on tape, and she was interviewed. Twenty adolescent women participated in the study (n=20).

Instrument

The interview (see Appendix A) consisted of eighteen questions that were developed by the student investigator. The questions examined how the adolescents' school experience compared to national recommendations on sexuality education and how they affected the adolescent's sexual behavior and decisions. The questions addressed when classes were presented in school, the number of classes taken, their feelings towards the classes, whether HIV/AIDS was covered during class time or if role-play was practiced, to whom they felt comfortable talking to about these issues, their use of condoms, and any suggestions they might have for schools. The responses were analyzed for themes and patterns.

Results

Demographics

The age range of the sample was 14-19 years (with a mean of 17 years). Eighty percent (N=16) of the sample was White, fifteen percent (N=3) was Hispanic and five percent (N=1) was Native American.

First Exposure and Class Description

The grades in which the adolescents were first exposed to reproductive health or sexually transmitted diseases ranged from 3rd grade to 9th grade with the majority falling in between 5th and 7th grades. The classes were required for eighty percent of the students with parents having the option of excluding their child. The teachers for these classes ranged from science teachers to health education teachers to other teachers. One participant remembered having the school nurse teach the class. The number of classes after this initial exposure varied, with some students taking up to six classes and some students who were never exposed again. Every adolescent answered that they were comfortable with the information that was covered during class time. Seventy-five percent (N=15) of the adolescents felt that STDs were given special attention during class time and ninety-five percent (N=19) said that HIV/AIDS was specifically mentioned during class. The topics of the classes varied from abstinence to a detailed description of barrier and hormonal contraception. Many of the young women had also used other sources of information such as TV, the Family Planning Clinic, friends, family, and magazines. Twenty-five percent (N=5) specifically mentioned the Family Planning Clinic.

Condom Use and Communication

All young women in this sample were sexually active. Sixty-five percent (N=13) of the adolescents said that they used condoms consistently. The other thirty-five percent (N=7) who did not use them mentioned that they were getting married, trying to get pregnant, did not like

using condoms, or simply did not have them. One young woman said that she and her partner were “clean” and so they did not need them. By “clean” she meant that they had been tested and weren’t infected with a STD. Seventy-five percent (N=15) of the young women said that their school had covered condoms and sixty-five percent (N=13) said the technique of using condoms was covered. All of the young women reported feeling comfortable speaking about condoms with their boyfriends or significant others. Twenty-five percent (N=5) of the women said that role-play was covered and practiced during class time. When asked who they could talk to about these issues, seventy-five percent (N=15) mentioned their mothers, ten percent (N=2) mentioned the clinic, ten percent (N=2) mentioned friends or boyfriends and ten percent (N=2) said they had no one.

Discussion

Results of this study suggest that young women attending school in Southwestern Michigan are receiving exposure to information on HIV/AIDS. Currently the State of Michigan mandates that public schools must provide instruction on HIV/AIDS and other serious communicable diseases at least once in each of the levels; elementary, middle/junior and senior high school. The curriculum must be approved by the local board of education after holding two public meetings. Parents have the option of withholding their child for religious beliefs. Michigan is one of fifteen states that receive money from the Centers for Disease Control and Prevention (CDC) for the coordination of school health programs (Donovan, 1998). Under this framework, the schools themselves decide which curriculum best meets their students’ needs. Schools are not required to implement programs on reproductive health or sex education. In 1997, Michigan released the results of the national Youth Risk Behavior Study (CDC, 1997). Of 3,933 Michigan high school students, fifty-one percent reported abstaining from sex, eighty-eight

percent had received AIDS education and sixty percent had talked with a parent about AIDS. The current study revealed the need to provide further instruction on condom usage. The women were all comfortable speaking about the issue, but still thirty-five percent (N=7) were still not using condoms consistently.

Condoms are an effective method for preventing both pregnancy and STDs, if used correctly. There are several factors that inhibit or decrease a woman's use of condoms. Weisman et al. (1991) found that only 16 percent of adolescent women on an oral contraceptive used condoms consistently over a six month period. In another study (Riehman et al., 1998), 20 percent of women used dual methods of birth control. But when adolescents were asked about their last sexual encounter, only 40 percent of adolescents had used a condom (Hiltabiddle, 1996). Adolescents are aware of the dangers of not using a barrier method. Even though 74 percent of females know that condoms protect against STDs, Hiltabiddle (1996) reports that only 20 percent of the women used condoms for that reason. According to Cindy Pearson, in *Contraceptive Technology Update* (1996), clinicians should focus on barrier methods for STD protection and then deal with additional birth control issues. But according to Newcomer and Balwin (1992), the use of condoms decreases with age while hormonal contraception increases. At the age of 15, 42 percent of women used condoms as opposed to 22 percent of the 19-year-olds because many of these women switch to hormonal birth control methods. Another factor that diminishes the use of condoms by adolescent women is their lack of confidence in using them. Even though three-quarters of the sex education curriculums in the nation mention condoms, only about 9 percent actually include information about how to use them (Krieger, 1996). Another study mentioned by Hiltabiddle (1996) revealed that only 10 percent of adolescent women had ever purchased a condom. Along with having confidence in using and

buying condoms, women also need the communication skills to use them. “For women to protect themselves from HIV infection, they must not only rely on their own skills, attitudes, and behaviors regarding condom use, but also on their ability to convince their partners to use condoms. Gender, culture and power may be barriers to maintaining safer sex practices with a primary partner” (Quirk & DeCarlo, 1998, p. 2).

The literature supports that there are common elements that effective programs all share. Programs (Highsmith, 1997) should focus on presenting comprehensive information, developing strong negotiation skills, and involving family members in the process to ensure a strong network. Seventy percent (N=14) of the adolescents in this study felt that they could talk to their mothers. Families can become involved by completing interactive homework assignments with their children (Levy et al., 1995). The programs should also focus on the psychological needs of adolescents. Winter and Breckenmaker (1991) suggest that information should be presented in a concrete manner in pictures or posters. Psychologically many teenagers are unable to project themselves into the future (Bentley & Herr, 1996), so they must feel that contracting an infection has immediate ramifications.

Based on the literature, programs aimed at younger students (Kirby, 1992) should focus on abstinence, but programs aimed at older students should cover topics like contraception and condoms. Programs should start as early as possible, even as early as elementary school (Kreiger, 1996). Full semester programs combined with clinics (Jabobs & Wolf, 1995) or at least confidential health services (Majer et al., 1992) seem to fulfill students needs better than one-hour lectures once a year. School nurses must feel comfortable asking youth about their sexual behaviors to ensure open lines of communication.

With regard to condoms, students' fears and apprehensions of using condoms should be addressed with simple solutions such as skill building (Quirk & DeCarlo, 1998). Emphasizing the benefits that condoms offer, such as being easy, clean, and available at the spur of the moment (Hiltabiddle, 1996) may overcome negative issues surrounding condoms, such as decreased sensitivity. Students should have an opportunity to practice their technical skills during class time (DeCarlo, 1996). As one student suggested, condoms should be made available at school. More students may be apt to use them if they are free and always available. The message during class should be, **Don't have sex, but if you do, do it safely!** (Krieger, 1996).

Limitations

Some of the limitations of this study are that only young women who use the clinic were interviewed; therefore it is not a representative sample of area adolescents. The sample had limited cultural diversity. The conclusions cannot be generalized to the entire community. Also, some the questions asked were not specific enough. More details and questions may have provided more specific conclusions and results. School information was also not collected making it harder to report on any specific school district.

Suggestions given by the Adolescents

The participants in the study were asked if they had any suggestions for schools in the area of sexuality education. The following responses are examples of suggestions given by some of the adolescents. One participant said that what they learned in school was "not real... they didn't give us a lot of information." Another participant shared her concerns about the changes being proposed to her school board. Her school offers a comprehensive program that covers all of the aspects of sexuality education and some community people want to change the curriculum

to cover only abstinence education. When asked if this was a good idea, she said, “No, cause they [students] are going to do ‘it’ anyway so they might as well know the consequences and what’s involved before they get involved in doing ‘it’.” Another participant offered, “I think they should be, like, more realistic about it. They give you information but it seems like they are kind of, like, not really thinking that anyone is going to be sexually active. And they don’t tell you anything about places or services like things you might need. I just don’t think they are very down to earth about it.” Many of the participants expressed an interest in having more classes on the subject.

Conclusions and Recommendations

The adolescent women are aware of HIV/AIDS and sixty-five percent (N=13) use condoms on a consistent basis. But schools are not currently using all of the suggestions offered through the literature. Only twenty percent (N=4) of the young women had practiced role-play during class time and it is the one effective technique mentioned in various sources (Highsmith, C.S., 1997; Ford, K. & Norris, A.E., 1995; and DeCarlo, P., 1996). Politics should be set aside to provide the highest and most comprehensive sexuality education available.

“Too frequently, perspectives on teen sexual activity are not based on reason or research, and too often there are political demands that prevent good public health practice.

Because of political and ideological polarization, there are conflicting claims about program efficacy and in some communities school and community leaders have been paralyzed and unable to implement effective programs” (Santelli & Kirby, 1992, p. 262).

Protecting adolescent women from a life-threatening disease by providing information using the Health Belief Model as the theoretical framework may help increase young women’s use of condoms. Also, a set of national standards is needed to reduce the variability of programs

nationwide. Some schools in Southwestern Michigan were providing an excellent program while some students reported that they felt a greater need for improvement within their school. As one participant offered earlier, her school provided a good program that was in danger of being changed to an abstinence-only program. As a community, we must support schools that are providing a comprehensive sex education program. Many of the participants felt that they needed more detailed information in school. As one participant mentioned, "They always say use condoms, use condoms and that's it. They say things but they never go into detail. I guess they warn you but they don't do a very good job." Another participant offered, "Don't be so close-minded about everything. They know the student do "it" but yet they want to deny that students do it. A lot of schools have a high pregnancy rate and maybe we can get that down by making people more aware." All (N=20) of the participants felt comfortable with the information covered during class time. Schools, as an institution used by so many adolescents, should seize the opportunity to provide preventative teaching as early as possible.

Twenty-five percent (N=5) of the young women mentioned that the clinic was a resource for STD information. The nurses at the Family Planning Clinic are in a position to reinforce the importance of using condoms consistently. Having current literature and pamphlets available will help ensure that the quality of services being offered through the clinic continues.

HIV/AIDS is a preventable disease that can only be conquered through education and preventative behaviors. As a community, we need to ensure that the health of our adolescents is secure by providing them with a solid comprehensive knowledge base of STD's and their dangers, and giving them the skills and tools they need to act on that knowledge.

Appendix A

Interview Questions:

1. How old are you?
2. What is your ethnicity?
3. What is the last grade that you completed?
4. In what grade did someone first cover reproductive health or sexually transmitted diseases?
5. Who taught the class, was it a community nurse, your health education teacher, a science teacher or someone else?
6. Was the class a required class or an elective class?
7. How many classes have you taken that have covered the topic of STD prevention?
8. What issues were covered?
9. Did you feel comfortable with the information being covered?
10. Were sexually transmitted diseases given special attention?
11. Did someone discuss HIV/AIDS during your reproductive health class?
12. Who, in school or outside of school, do you feel like you could talk to about these issues?
13. Were condoms and the technique of using them covered during class time?
14. Do you feel comfortable speaking about this issue with your boyfriend, or significant other?
15. If you are currently sexually active, do you use condoms consistently? If not, why not?
16. Did you practice role-play in your reproductive health class?
17. Where else do you feel that you have learned about these issues?
18. Is there anything else that you feel is important that I did not cover?

References

American Psychological Association. (1997). *Publication Manual of the American Psychological Association*. (4th ed.). Washington, DC: American Psychological Association.

Bonny, A.E. & Biro, F.M. (1997). Recognizing and treating STDs in the adolescent. *Contemporary OB/GYN*, 42 (11), 37-57.

Brown, L.K., Lourie, K.J., Flanagan, P. & High, P. (1998) HIV-related attitudes and risk behavior of young adolescent mothers. *AIDS Education and Prevention*, 10 (6), 563-573.

Burns, N. & Grove, S.K. (1995). *Understanding Nursing Research*. Philadelphia, PE: W.B. Saunders Company.

Caetano, R. & Hines, A.M. (1995). Alcohol, sexual practices, and RISK of AIDS among Blacks, Hispanics, and Whites. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology*, 10 (5), 554-561.

Can't get patients to use condoms? (1997). *Contraceptive Technology Update*, January.

Center for Disease Control and Prevention. (1994). HIV/AIDS Surveillance Report.

Center for Disease Control and Prevention. (1997). HIV/AIDS Surveillance Report.

Contraception Counts: Michigan Information. Available: http://www.agi-usa.org/state_facts/michigan.html. Publisher: Alan Guttmacher Institute.

Cushman, L.F., Romero, D., Kalmuss, D., Davidson, A.R., Heartwell, S. & Rulin, M. (1998). Condom use among women choosing long-term hormonal contraception. *Family Planning Perspectives*, 30 (5), 240-243.

DeCarlo, P. (1996). Does sex education work? *Center for AIDS Prevention Studies at University of California San Francisco* [On-Line]. Available: <http://www.caps.ucsf.edu/sexedtext.html>.

DeCarlo, P., & Padian, N. (1997). How do HIV, STD, and unintended pregnancy prevention work together? *Center for AIDS Prevention Studies at University of California San Francisco* [On-Line]. Available: <http://www.caps.ucsf.edu/STD-HIV.html>.

Donovan, P. (1998). School-based sexuality education: the issues and challenges. *Family Planning Perspectives*, 30 (4), 188-193.

Ford, K. & Norris, A.E. (1995). Factors related to condom use with casual partners among urban African-American and Hispanic males. *AIDS Education and Prevention*, 7 (6), 494-503.

Gaskins, S.W. (1997). Heterosexual transmission of HIV in women. (1997). Journal of the Association of Nurses in AIDS Care, 8 (6), 84-87.

Help teens stay safe: Identify barriers to prevent pregnancy, STD infection. (1998). Contraceptive Technology Update, 19 (6), 69-71.

Highsmith, C.S. (1997). HIV and women: using empowerment as a prevention tool. N & HC: Perspectives on Community, 18, (1), 6-9.

Hiltabiddle, S.J. (1996). Adolescent condom use, the Health Belief Model, and the prevention of sexually transmitted disease. JOGNN, 25 (1), 61-66.

Jacobs, C.D. & Wolf, E.M. (1995). School Sexuality Education and Adolescent Risk Taking Behavior. Journal of School Health, 65 (3), 91-95.

Kirby, D. (1992). School-based programs to reduce sexual risk-taking behaviors. Journal of School Health, 62 (7), 280-287.

Kirby, D., Short, L., Collins, J., Rugg, D., Kolbe, L., Howard, M., Miller, B., Sonenstein, F. & Zabin, L.S. (1994). School-based programs to reduce sexual risk behaviors: A review of effectiveness. Public Health Reports, 109 (3), 339-360.

Krieger, L. (1996). What are adolescents' HIV prevention needs? Center for AIDS Prevention Studies at University of California San Francisco [On-Line]. Available: <http://caps.ucsf.edu/adoltext.html>.

Levy, S.R., Perhats, C., Weeks, K., Handler, A.S., Zhu, C. & Flay, B.R. (1995). Impact of school-based AIDS prevention program on risk and protective behavior for newly sexually active students. Journal of School Health, 65, (4), 145-151.

Lollis, C.M., Johnson, E.H., & Antoni, M.H. (1997). The efficacy of the Health Belief Model for predicting condom usage and risky sexual practices in university students. AIDS Education and Prevention, 9 (6), 551-563.

Majer, L.S., Santelli, J.S. & Coyle, K. (1992). Adolescent reproductive health: Roles for school personnel in prevention and early intervention. Journal of School Health, 62 (7), 294-297.

Moore, J., Harrison, J.S., Kay, K.L., Deren, S., & Doll, L.S. (1995). Factors associated with Hispanic women's HIV-related communication and condom use with male partners. AIDS Care, 7 (4), 415-427.

Moore, M.K & Frost, M.L. (1996). AIDS Education: Reaching Diverse Population. Westport, CT: Praeger Publishers.

Newcomer, S. & Baldwin, W. (1992). Demographics of adolescent sexual behavior, contraception, pregnancy, and STDs. Journal of School Health, 62 (7), 265-270.

Office of Minority Health Resource Center. (1998). Minority Health Update. (DHHS Publication). Washington, DC: U.S. Government Printing Office.

Quirk, K. & Decarlo, P. (1998). What are women's HIV prevention needs? Center for AIDS Prevention Studies at University of California San Francisco [On-Line]. Available: <http://www.caps.ucsf.edu/womenrev.html>.

Researchers study effectiveness of AIDS Prevention Program. Trends to watch, Medical Industry Today. Available: http://web.lexis-nexis.com/universe/docum...5a3&_md5=44eeac01b3b1af116f8d7b0897d227bc.

Riehman, K.S., Sly, D.F., Soler, H., Eberstein, I.W., Quadagno, D. & Harrison, D.F. (1998). Dual-method use among an ethnically diverse group of women at risk of HIV infection. Family Planning Perspective, 30 (5), 212-217.

Rotheram-Borus, M.J., Mahler, K.A. & Rosario, M. (1995). AIDS prevention with adolescents. AIDS Education and Prevention, 7 (3), 320-336.

Roye, C.F. (1997). Condom use by hispanic and african american teens and young adults who use hormonal contraception: Implications for HIV prevention. Journal of Health Education, 28 (6), 61-66.

Santelli, J.S. & Beilenson, P. (1992). Risk factors for adolescent sexual behavior, fertility, and sexually transmitted diseases. Journal of School Health, 62, (7), 271-278.

Santelli, J.S. & Kirby, D. (1992). Adolescent Sexuality: Pregnancy, Sexually Transmitted Diseases, and Prevention. Journal of School Health, 62 (7), 262-264.

School-Based HIV-Prevention Education-United States, 1994. Division of Adolescent and School Health, CDC. (1997). Journal of School Health, 67 (3), 103-107.

U.S. Public Health Service's Office of Women's Health Information Sheet. (Date Obtained: October 1998). The Health of Minority Women. (DHHS Publication). Washington, DC: U.S. Government Printing Office.

Warrem, C.W., Santelli, J.S., Everett, S.A., Kann, L., Collins, J.L., Cassell, C., Morris, L. & Kolbe, L.J. (1998). Sexual behavior among U.S. high school students 1990-1995. Family Planning Perspectives, 30 (4), 170-172.

Weisman, C.S., Plichta, S., Nathanson, C.A., Ensminger, M. & Robinson, J.C. (1991). Consistency of condom use for disease prevention among adolescent users of oral contraceptives. Family Planning Perspectives, 23 (2), 71-74.

Winter, L. & Breckenmaker, L.C. (1991). Tailoring family planning services to the special needs of adolescents. Family Planning Perspectives, 23 (1), 24-30.

Wohl, R.E. & Kane, W.M. (1997). Teachers Beliefs Concerning Teaching about Testicular Cancer and Testicular Self-Examination. Journal of School Health, 67, (3), 106-111.

Yarber, W.L. & Parrillo, A.V. (1992). Adolescents and Sexually Transmitted Diseases. Journal of School Health, 62 (7), 331-337.