



The Accuracy of Condom Information in Three Selected Abstinence-Only Education Curricula

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Abstract: Based on a review of 3 purposively selected curricula used in federally funded programs, the authors identified the types of scientific errors about condoms present in abstinence-only education. These curricula explicitly and implicitly convey the message that condoms fail to provide protection against HIV and commonly use out-of-date references. In addition, the curricula often misrepresent cited research, such as by reporting only the highest condom failure rates from study findings. The curricula do not explain differences between typical-use and perfect-use contraceptive failure associated with condom use and often incorrectly compare HIV transmission risk with pregnancy risk. Finally, these curricula use faulty reasoning to explain risk and promote misinformation about condoms (such as condom permeability) that has been repudiated by scientific consensus. The information these curricula present about condoms does not represent complete, current, or accurate medical knowledge about the effectiveness of condoms in preventing sexually transmitted infections, including HIV.

Key words: sexuality education; abstinence education; adolescent health; medical accuracy; HIV; pregnancy

Condom promotion has been a central public health strategy for preventing HIV and other sexually transmitted infections (STIs). Research in the last decade has greatly advanced understanding of condom effectiveness in protecting against transmission of HIV and other STIs. In 2000, the U.S. Public Health Service convened a group of scientists and policymakers to review scientific evidence for condom efficacy. This review, hereafter referred to as the NIH Condom Report, found that when used correctly and consistently, condoms offer protection against HIV/AIDS, pregnancy, gonorrhea in men, and perhaps diseases caused by human papillomavirus (National Institute of Allergy and Infectious Diseases, 2001). The report also identified the paucity of data on the efficacy of condoms for many other STIs. Since that time, additional evidence (Casper & Wald, 2002; Holmes, Levine, & Weaver, 2004) has accumulated that suggests condoms provide protection against chlamydia, gonorrhea, syphilis,

and herpes simplex virus type 2. Recent research (Winer et al., 2006) also suggests that condoms may provide newly sexually active young women protection from human papillomavirus.

From 1998 on, the federal government has greatly expanded its support for abstinence-only education (AOE) programs. Federally supported programs must have as their exclusive purpose the promotion of abstinence from sexual intercourse outside of marriage and may not in any way advocate contraceptive use or discuss contraceptive methods or condoms. The only exception to this restriction on contraceptive information is a provision that allows AOE programs to discuss failure rates for condoms and contraception (Administration for Children and Families, 2007; Dailard, 2002; Haskins & Bevan, 1997).

In 2004, the Minority Staff Special Investigations Division of the United States House of Representatives

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Committee on Government Reform published *The Content of Federally Funded Abstinence-Only Education Programs*, often referenced as the Waxman Report. The first to identify inaccuracies in AOE curricula supported by the federal government, this study found that 11 of the 13 most commonly used AOE curricula contained misleading and incorrect scientific information about reproductive health, including misinformation about condoms and contraceptive efficacy, and presented stereotypical gender roles as fact (United States House of Representatives Committee on Government Reform, 2004).

In 2006, the U.S. Government Accountability Office issued two reports relating to scientific accuracy in federally funded AOE programs. The first report stated that the Department of Health and Human Services had not put into place a mechanism to review the medical accuracy of AOE programs (U.S. Government Accountability Office, 2006b). The second review suggested that AOE programs were legally required to provide accurate information about condoms under section 317P of the Public Health Service Act, enacted in 2000 (U.S. Government Accountability Office, 2006a). Although the federal government has neither required nor defined medical accuracy, more than 20 states have recently instituted requirements for medical accuracy in regard to sexuality and HIV/AIDS education (Santelli, in press). Among these, seven states have defined medical accuracy. Key elements of these state definitions include consideration of the weight of scientific evidence and the importance of scientific theory, peer review, and recognition by mainstream scientific and health organizations such as the American Academy of Pediatrics and the Centers for Disease Control and Prevention (Santelli).

A recent federally sponsored, longitudinal evaluation of four exemplary AOE programs (Trenholm et al., 2007) found no evidence of program efficacy in changing health behaviors. Trenholm et al. did find, however, that youth in AOE programs, compared with those receiving the usual sex education, had less confidence in the ability of condoms to protect users from STIs—although these youth showed no decline in actual condom use. This finding may reflect restrictions on condom information or inaccuracies about condoms within AOE curricula.

In light of continued federal funding of AOE programs and, given concerns about the scientific accuracy of the information disseminated in these curricula, we reviewed three federally funded AOE curricula previously identified as containing inaccurate information in order to explore the specifics of medical inaccuracies about condoms. Because our research involved analysis of

purposely selected curricula, our findings cannot be generalized to all AOE programs; rather, they should be considered illustrative of the types of inaccuracies that may be found in other AOE curricula.

Method

We reviewed three federally funded AOE curricula—*Me, My World, My Future*, which was published by Teen-Aid Inc. for use by middle school students (Roach & Benn, 1998); *Sexuality, Commitment & Family*, which was also published by Teen-Aid Inc., for use by high school students (Potter & Roach, 1998); and *Why kNOw*, which was published by AAA Women's Services for use by students from sixth grade through high school (Frainie, 2002)—for medical accuracy, with a focus on condom information. In this article, we refer to *Me, My World, My Future* and *Sexuality, Commitment & Family* collectively as the Teen-Aid curricula. For our study, we looked at Teen-Aid teacher's manuals that included student portions and notes to instructors. According to the Waxman Report (United States House of Representatives Committee on Government Reform, 2004), eight Community-Based Abstinence Education (CBAE) recipients were using the Teen-Aid curriculum *Me, My, World, My Future* and seven were using *Why kNOw*. These two programs were part of the 13 most popular CBAE-funded curricula in 2001, out of 69 different curricula that were funded that year (United States House of Representatives Committee on Government Reform).

We selected these three curricula because the American Civil Liberties Union asked us to review these curricula for medical inaccuracies. Findings from this original review were then presented as John S. Santelli's (2007) declaration to the Department of Health and Human Services. These curricula were chosen because *Why kNOw* and *Me, My, World, My Future* previously had been identified in the Waxman Report as containing medically inaccurate information and nonetheless continued to receive federal funding (United States House of Representatives Committee on Government Reform, 2004) and *Sexuality, Commitment, & Family* shared much of the same content as *Me, My, World, My Future*. The purpose of this article is to explore the nature of these inaccuracies, not to determine their prevalence in these curricula.

In reviewing the curricula, we looked at specific statements about condoms along with the scientific references the curricula cited. In addition, we conducted searches on Web of Science and Medline for peer-reviewed references on condom efficacy to identify both the current medical understanding on this topic and the understanding at the

time each specific curriculum was published. We placed each statement involving condoms into a matrix, assessed it for accuracy, and inductively developed a typology to describe the types of inaccuracies we found. Types of inaccuracies included information that was out of date, selectively reported, and not peer reviewed (Huberman & Miles, 2002); we categorized less common errors that were not classifiable into the first three types as *other*. The *out of date* category represented statements whose source of information was eclipsed by more exacting research and better understanding in the literature. *Selectively reported* included instances in which a single statistic or finding had been taken out of context and therefore was not representative of the researchers' overall conclusions. We identified statements based on non-peer-reviewed sources as *not peer reviewed*. The *other* category encompassed statements that were inaccurate for other reasons, such as because they made nonparallel comparisons of statistics or concepts.

In addition, we sorted the statements about condoms into five themes related to various aspects of condom use: condom slippage and breakage, contraceptive efficacy of condoms, condoms and HIV transmission risk, youth as condom users, and condom availability and distribution programs. The section on condom slippage and breakage included statements based on information from a variety of clinical trials and population-based studies. As for efficacy, we categorized statements about condoms and pregnancy in the contraceptive efficacy section, and statements relating to the efficacy of condoms in reducing HIV transmission in the section on condoms and HIV transmission risk. Statements regarding adolescents' facility with condoms and the usefulness of condom distribution programs were put, respectively, in the sections about youth as condom users and about condom availability and distribution programs. Using these themes, we review examples of statements about condoms in AOE curricula, summarize the main medical inaccuracies relating to condoms, and critique these inaccurate statements. Finally, we provide two in-depth examples that illustrate multiple inaccuracies.

Findings

Condom Breakage and Slippage

All three curricula address condom breakage and slippage. The scientific literature reports a range of rates for condom slippage and breakage. For example, the NIH Condom Report stated the following:

Estimates of condom breakage from these [prospective] studies range from 0.4–2.3%. Slippage rates

from these three studies ranged from 0.6% to 1.3%. Slippage rates include both slippage during intercourse and slippage during withdrawal. The combined method failure (slippage plus breakage) is estimated at 1.6%–3.6%. (National Institute of Allergy and Infectious Diseases, 2001, p. 9)

More recent publications, such as the textbook *Contraceptive Technology* (Hatch et al., 2004), present similar rates.

These rates are much lower and in a narrower range than those found in the Teen-Aid curricula, where the rates ranged from 0.6% to 44.5% (Roach & Benn, 1998). The curricula qualify the 0.6% rate as specific to female prostitutes and describe rates of 1.3% and 15.1% as applying to experienced adults in mutually exclusive relationships. Yet, the curricula do not qualify the rate of 44.5% and this rate was selectively reported; it is the highest in the article (Jones & Forrest, 1989; Roach & Benn). By listing this wide range of slippage and breakage rates, the curricula seem to imply that condoms are not reliable.

Contraceptive Efficacy of Condoms

As reported across multiple studies (National Institute of Allergy and Infectious Diseases, 2001; Trussell, 2004), when used consistently and correctly, condoms are an effective method of contraception with a *perfect-use* failure rate of 2% and a *typical-use* failure rate of 15%. Contraceptive failure rates represent the number of women out of 100 who get pregnant within 1 year of use. Perfect-use rates represent failure when a method is used consistently and correctly; typical-use failure rates reflect the fact that some users do not use a method consistently and correctly. Typical-use rates generally are calculated for the first year of use among new users and among those who are new to the method or are restarting a method. In general, failure rates are lower in subsequent years and among experienced users. It is important to note that typical-use failures include pregnancies occurring after a user forgot to take the pill as prescribed or when a couple intends to use condoms but fails to do so consistently. Clarifying the difference between perfect-use failure rates and typical-use failure rates is important when providing information about contraceptives.

The two Teen-Aid curricula often report the highest condom failure rates from cited studies or confuse efficacy in preventing HIV transmission with efficacy in preventing pregnancy. For instance, the teacher's manual for Teen-Aid states, "Contracting HIV is easier than getting pregnant because you can only get pregnant

several days a month” (Roach & Benn, 1998, p. 254). We note that efficacy in HIV transmission and efficacy in pregnancy prevention are not comparably calculated. In another place, Teen-Aid reports an average rate but also the two highest rates of contraceptive failure from a study: “Condoms fail 15.7 percent of the time over the course of a year. This is a standardized failure rate—among some groups of women it has gone as high as 36.3 percent and 44.5 percent” (Roach & Benn, p. 257).

The *Why kNOw* curriculum does not differentiate typical-use from perfect-use condom failure rates and selectively reports higher failure rates: “The condom has a 22.5% failure rate in preventing pregnancy in unmarried women under the age of 20 during the first 12 months of use. (Fu, Darroch et al. 1999)” (Frainie, 2002, p. 96). This selectively reported rate corresponds to this group of women whose income was below 200% of poverty. The user failure rate for women in the same age range and time period whose income was above 200% of poverty was 13.3% (Fu, Darroch, Haas, & Ranjit, 1999). The curriculum does not report this lower rate.

These three curricula do not report perfect-use failure rates, nor do they explain the difference between perfect use and typical use. Most important, they do not explain that correct and consistent use of condoms will result in much lower rates of contraceptive failure.

Condoms and HIV Transmission Risk

As the NIH Condom Report (National Institute of Allergy and Infectious Diseases, 2001) described, evaluation of condom efficacy in preventing STIs is often methodologically difficult. The best studies for calculating condom efficacy use HIV infection as an outcome. Estimates from a meta-analysis of longitudinal studies (Davis & Weller, 1999; Weller, 1993; Weller & Davis, 2002) of HIV *serodiscordant* couples (i.e., one member of a couple is infected with HIV and the other is not) suggest that correct and consistent use of condoms substantially reduces the risk of HIV infection.

Weller and Davis have reviewed these studies systematically in three published meta-analyses (Davis & Weller, 1999; Weller, 1993; Weller & Davis, 2002). The 1993 meta-analysis found that consistent use of condoms helps increase prevention of HIV transmission by 69% (Weller). The two more recent meta-analyses found that condoms afford even greater protection than that found by the 1993 analysis. The 1999 analysis (Davis & Weller) found that condoms can reduce the rate of HIV infection by 87% (0.9 per 100 person-years with a confidence interval of 0.4–1.8 for always-users and 6.8% per 100 person-years with a confidence interval of 4.4–10.1 for

male-to-female transmission for never-users) and the 2002 analysis (Weller & Davis) found an 80% reduction rate (1.14 per 100 person-years with a confidence interval of 0.56–2.04 for always-users and 5.75% per 100 person-years with a confidence interval of 3.16–9.66 for never-users). The 2001 NIH Condom Report relied on the second of these meta-analyses (Davis & Weller). Weller and Davis’s 2002 review for The Cochrane Collaboration is an update of the 1999 analysis that used stricter guidelines for study inclusion.

Despite Weller and Davis’s (2002) more recent estimates of condom efficacy, *Why kNOw* still references Weller’s 1993 meta-analysis. The Teen-Aid curricula (published in 1998) also cite the 1993 meta-analysis; it is unclear why Teen-Aid has not revised its curricula given the scientific advances in understanding HIV and other STIs. In addition, Teen-Aid curricula cite a study by Fischl et al. (1987):

In one study of heterosexual couples where one partner is HIV infected, over an average of two years of sexual exposure if latex condoms were relied upon there was still a 10 to 23% risk of transmission of [HIV] infection even with training and proper use. (Potter & Roach, 1998, p. 19; Roach & Benn, 1998, p. 256)

In the cited study (Fischl et al., 1987), only 1 out of 10 couples who were using barrier protection seroconverted within the 2-year study period. Furthermore, it is important to note that the estimate of HIV transmission in the Fischl study was much higher than the 1.14 per 100 person-years estimate from Weller and Davis’s (2002) most recent meta-analysis.

Finally, none of these curricula address the likelihood of HIV transmission when the HIV status of a partner is unknown. Even more ominous than this confusion about condom efficacy in preventing HIV infection, both Teen-Aid curricula and *Why kNOw* subtly suggest that condoms allow the transmission of HIV. We will address both of these issues further in the *Teaching Examples* section.

Youth as Condom Users

Our review of contraceptive efficacy suggests that method-specific contraceptive failure rates for teenagers are similar to those for women in their 20s. For example, Ranjit, Bankole, Darroch, and Singh (2001) reported that condom failure rates over the first 2 years of use, based on data from the 1988 and 1995 National Surveys for Family Growth, were 25.8% for those under 18 years, 27.5% for 18- to 19-year-olds, 28.2% for 20- to 24-year-olds, 21.8% for 25- to 29-year-olds, and 13.6% for 30- to 44-year-olds. (The reduced failure rates for women over age 30 may

relate to reduced fertility.) Teens may be effective condom users; research (Kirby et al., 2007) has shown that sex education classes may facilitate teens' effectiveness by teaching and demonstrating correct condom use.

Despite these facts, many of the statements in the Teen-Aid curricula contain statistics suggesting that teens are less able than adults to use condoms to prevent pregnancy. Other statements and figures in these curricula cite rates of condom failure dependent on experience or cohabitation. In one figure, Teen-Aid presents the following statistics without any elaboration: "Pregnancy Rates during the first year of contraceptive use. Condom: method failure 4%, married adult 14.1%, unmarried adolescent 18.4%" (Roach & Benn, 1998, p. 215). As noted previously, method failure (i.e., perfect-use) rates cannot be compared with the typical-use failure rates reported for married adults and unmarried youth. Yet Teen-Aid presents them in sequence and thereby implies that unmarried teens are not effective condom users. Many factors influence an individual's success with condoms; age does not preclude correct and consistent condom use.

Condom Availability and Distribution Programs

Leading organizations of health professionals—such as the American College of Obstetricians and Gynecologists, the American Academy of Pediatrics, and the American Medical Association—support the provision of condoms to youth through comprehensive school health programs (American Academy of Pediatrics, 2001; American Medical Association, 2004; Bethards, 2003). Evaluation of school-based condom availability programs have shown mixed results in increasing teens' condom use but have not reported negative impact on other sexual behaviors (Blake et al., 2003; Furstenberg, Getz, Teitler, & Weiss, 1997; Kirby et al., 1999). Likewise, leading STI researchers have supported condom availability: "Condom promotion represents an important element in approaches to and programs about comprehensive HIV-prevention and STI-prevention strategies" (Holmes et al., 2004, p. 459).

These three AOE curricula do not support these ideas about making condoms available to teens. In fact, the Teen-Aid curricula take a contrary view, citing the following opinion: "Condoms don't hack it. Passing them out is futile"—Robert Noble, M.D." (Potter & Roach, 1998, p. 20; Roach & Benn, 1998, p. 215).

Teaching Examples

The *Why kNOw* and Teen-Aid curricula use a variety of illustrative examples to impart an understanding of condoms and risk for HIV, STIs, and pregnancy. The next

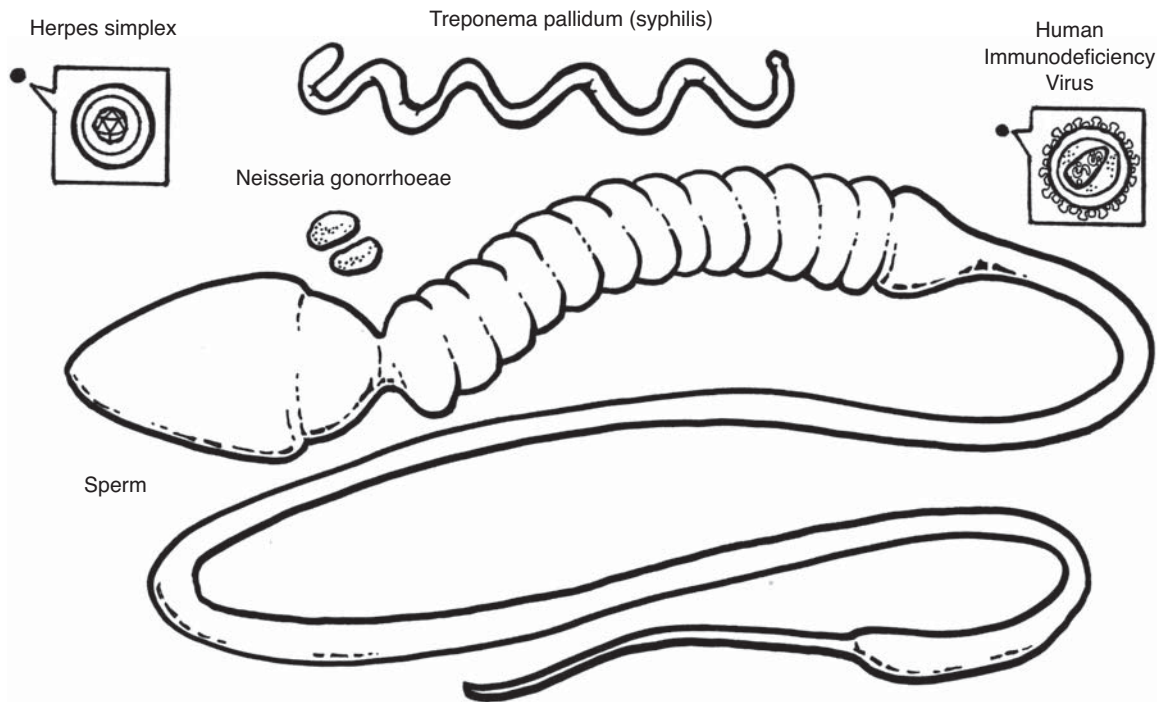
two sections illustrate this use of such examples. In each case, we identify informational problems.

Condom use and Russian roulette. The Teen-Aid curricula draw an analogy between condom use and playing Russian roulette:

If condoms and condom usage are not reliable, wouldn't relying on them be like playing the insane "game" of Russian roulette? A cartridge is loaded into one of the six chambers of a revolver. The first "player" spins the cylinder, points the gun to his/her head, and pulls the trigger. He/she has only one in six chances of being killed. But if one continues to perform this act, the chamber with the bullet will ultimately fall into position under the hammer, and the game ends as one of the players dies. Condoms are like Russian roulette. Condoms do not prevent pregnancy, STDs or AIDS; they only delay them. Theoretically, the longer one relies on them, they will fail and the "game" is over. (Roach & Benn, 1998, p. 215)

This analogy, which can be found in "Are Condoms Effective and Reliable?" a section of the Teen-Aid curriculum that discusses condoms and HIV risk, is problematic on several levels. First, it implies that HIV transmission is synonymous with a serious bullet wound and therefore causes imminent death. Second, the analogy implies a 1 in 6 chance of death, a rate much higher than HIV transmission rates either per coital act or per annum among serodiscordant couples who do not use condoms (Weller & Davis, 2002). Third, the example ignores the fact that most sexual partners among teenagers are not HIV infected. The prevalence of HIV in the U.S. teenage population is relatively low; based on data from the National Longitudinal Study of Adolescent Health, the HIV prevalence rate is estimated at 1.0 per 1,000 (Morris et al., 2006). Fourth, this analogy assumes that condoms do not reduce HIV transmission risk.

Condom permeability and the Speedy the Sperm activity. The *Why kNOw* Speedy the Sperm lesson attempts to explain HIV and pregnancy risk by focusing on the relative sizes of the virus and human sperm and implying that viral particles may be able to pass through a condom. First, the lesson states that "the condom has a 14% failure rate in preventing pregnancy (1998 Contraceptive Technology, p 216) i.e. keeping sperm from entering the woman's body" (Frainie, 2002, p. 96). This statement implies that pregnancy risk is the same each time sperm enter a woman's body and ignores other factors relating to fertility.



The Speedy the Sperm lesson (see above) depicts cartoon versions of a human sperm, HIV, *Treponema pallidum*, *Neisseria gonorrhoeae*, and herpes simplex to illustrate size differentials and suggest transmission risk:

This chart shows the difference between various STD's [sic] and the human sperm. HIV is about 0.1 microns in diameter. By, [sic] comparison, the diameter of the head of a human sperm is about 3 microns. In total the HIV virus is approximately 450 times smaller than the human sperm. (Frainie, 2002, Transparency 5)

This explanation is problematic for a number of reasons. First, the source of information about this size comparison is a 1992 letter to the editor in the *Washington Post*. Second, by emphasizing this biological size difference, the curriculum implicitly builds on myths that condoms have holes in them or may be porous. The 2001 NIH Condom Report explicitly stated that latex condoms are impermeable to sperm and viruses, such as HIV, regardless of biological size (National Institute of Allergy and Infectious Diseases, 2001).

The Speedy the Sperm lesson also compares pregnancy and HIV infection risk: "Since the HIV virus is smaller than a sperm and can infect you any day of the month, the failure rate of the condom to prevent AIDS is logically much worse than its failure rate to prevent pregnancy" (Frainie,

2002, p. 96). This statement is confusing because condom failure rates for pregnancy and HIV transmission are not calculated in the same ways. The risk of acquiring HIV is dependent on the prevalence of HIV in a population and the consistency and correctness of condom use. The risk of pregnancy is dependent on both partners' fertility during intercourse and contraceptive use, which includes condom use. Thus, statistics for condom failure leading to pregnancy or HIV infection are not comparable.

Finally, the curriculum asks the instructor to further explain condom failure rates and the size differential between sperm and HIV:

If the condom has a failure rate of 14% in preventing "Speedy" from getting through to create a new life, what happens if this guy (the penny) [which is used to represent HIV] gets through? You have a death: your own. (Frainie, 2002, p. 96)

As elaborated previously in the section on the Russian roulette analogy, HIV transmission is dependent on a multitude of factors, such as having sexual intercourse with an HIV-infected partner. Even with an infected partner, the risk of HIV transmission per coital act is low.

In 2006, after we had completed our initial review, *Why kNOw* released an updated curriculum that corrected and removed some of the content from its 2002 edition (Frainie & Ritterbush, 2006). In the 2006 curriculum, it

appeared that the pages of the teacher notebook that included the Speedy the Sperm lesson had been redacted after publication. A 2007 letter concerning Santelli's (2007) declaration to the Department of Health and Human Services from Lesley Scarce, executive director of *Why kNOw*, to Harry Wilson, associate commissioner of the Administration for Children, Youth, and Families, stated, "Why Know is in the process of removing this activity from our curriculum. All users of our curriculum will be notified of its removal."

Discussion and Implications

We found evidence of misinformation about condoms and their ability to prevent HIV and pregnancy in three AOE curricula that are commonly used in federally supported programs. These three curricula explicitly and implicitly convey the message that condoms fail to provide protection against HIV, STIs, and pregnancy. References that these curricula cited to support such assertions often were out of date or from non-peer-reviewed sources. Furthermore, the curricula often misrepresented research results by citing only the highest condom failure rates reported within a study. In other instances, the curricula drew conclusions that went beyond the findings from cited research. The curricula did not explain differences between typical-use and perfect-use contraceptive failure rates associated with condom use. In addition, these AOE curricula often compared statistics for HIV transmission risk with those for pregnancy risk, even though these risks are not calculated in the same way. Finally, these curricula use faulty reasoning in explaining risk and promote misinformation about condoms (such as condom permeability) that have been repudiated by scientific consensus. The information about condoms in these curricula does not represent complete, current, or accurate medical knowledge about the effectiveness of condoms in preventing STIs, including HIV.

Our findings are consistent with previous reviews, such as the Waxman report, that assessed a broader range of AOE curricula and documented scientific inaccuracies within them. The Waxman report examined a larger group of curricula and identified errors in the content across a range of topics (United States House of Representatives Committee on Government Reform, 2004).

Our study aimed to illuminate the specific reasons that particular statements in these AOE curricula are incorrect. The inaccuracies identified here presumably reflect legislative restrictions that prohibit AOE programs from teaching about the efficacy of contraceptives in preventing pregnancy, HIV, and other STIs except to describe their failure rates (Administration for Children

and Families, 2007). Our findings suggest a strong hostility to condoms in all three curricula. Perhaps the authors of these curricula believe that undermining confidence in condom efficacy will induce students to remain abstinent or stop being sexually active; however, we are not aware of scientific evidence showing that such misinformation strategies are effective in promoting abstinence. Rather, such strategies may ultimately cause students to reject condom use and put their health at risk.

Limitations

The findings from this analysis of three AOE programs may not be representative of all AOE curricula and do not detail the experiences of youth who were taught using these curricula. In this study, we chose to elucidate the types of errors in these curricula rather than their frequency, offering in-depth analysis of selected medical inaccuracies and explanations of how they are inaccurate.

Policy Implications

These findings, as well as findings from other research (Kantor, Santelli, Teitler, & Balmer, 2008; Kirby, 2008; Miller & Schleifer, 2008), raise serious questions about the efficacy and ethics of AOE promotion. One third of ninth graders and two thirds of high school students are sexually active (Eaton et al., 2006) and virtually all Americans initiate sexual intercourse outside of marriage (Finer, 2007). Thus, students need access to medically accurate information on condoms and other ways to prevent HIV and other STIs. Research (Kirby; Kirby, Laris, & Roller, 2007; Smoak, Scott-Sheldon, Johnson, & Carey, 2006) has shown that comprehensive sexuality education programs that include information about condoms do not increase sexual activity among youth and, in fact, can both increase condom use and help teens delay initiation of sexual intercourse. AOE curricula do not equip youth with the information or the skills they need to use condoms to protect themselves from HIV, other STIs, or unintended pregnancies. Rather, these curricula teach that condoms are not reliable protection against HIV and pregnancy and that teens often fail at using condoms. Such messages may undermine adolescents' correct and consistent use of condoms.

Programs that promote abstinence should provide medically accurate information about condoms and other aspects of human sexuality. Federal requirements that restrict information on contraception and condoms in sexuality education should be repealed and oversight of AOE curricula for scientific accuracy should be ubiquitous. The recent movement among states to require medical accuracy in sex education is a healthy policy development

(Santelli, in press); however, the federal government should also require that all federally supported sexuality education programs be medically accurate.

Ultimately, the policy debate about abstinence education comes down to two questions: How can we best prepare youth for a healthy lifetime? and How can we best promote sexual and reproductive health in U.S. society? At a minimum, all youth must be offered the information they need to protect their health and their lives.

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References

- Administration for Children and Families, U. S. Department of Health and Human Services. (2007, March 12). *Grants notice: Community-based abstinence education program, funding opportunity number: HHS-2007-ACF-ACYF-AE-0099*. Retrieved May 21, 2007, from <http://www.acf.hhs.gov/grants/open/HHS-2007-ACF-ACYF-AE-0099.html>
- American Academy of Pediatrics, Committee on Psychosocial Aspects of Child and Family Health and Committee on Adolescence. (2001). Sexuality education for children and adolescents. *Pediatrics*, *108*, 498–502.
- American Medical Association. (2004). H-170.968 Sexuality education, abstinence, and distribution of condoms in schools. Retrieved July 11, 2007, from http://www.ama-assn.org/apps/pf_new/pf_online?n=browse&doc=policyfiles/HnE/H-170.968.HTM
- Aral, S., & Holmes, K. (1999). Social and behavioral determinants of the epidemiology of STDs: Industrialized and developing countries. In K. Holmes, P. F. Sparling, P.-A. Mardh, S. M. Lemon, W. E. Stamm, P. Piot, et al., *Sexually transmitted diseases* (pp. 39–76). New York: McGraw-Hill.
- Bethards, B. (2003). Condom availability for adolescents. In American College of Obstetricians and Gynecologists (Ed.), *Health care for adolescents* (pp. 53–57). Atlanta, GA: Author.
- Blake, S. M., Ledsky, R., Goodenow, C., Sawyer, R., Lohrmann, D., & Windsor, R. (2003). Condom availability programs in Massachusetts high schools: Relationships with condom use and sexual behavior. *American Journal of Public Health*, *93*, 955–962.
- Casper, C., & Wald, A. (2002). Condom use and the prevention of genital herpes acquisition. *Herpes*, *9*, 10–14.
- Dailard, C. (2002). Abstinence promotion and teen family planning: The misguided drive for equal funding. *The Guttmacher Report on Public Policy*, *5*(1), 1–3.
- Davis, K. R., & Weller, S. C. (1999). The effectiveness of condoms in reducing heterosexual transmission of HIV. *Family Planning Perspectives*, *31*, 272–279.
- Eaton, D. K., Kann, L., Kinchen, S., Ross, J., Hawkins, J., Harris, W. A., et al. (2006). Youth risk behavior surveillance—United States, 2005. *MMWR Surveillance Summaries*, *55*(5), 1–108.
- Finer, L. (2007). Trends in premarital sex in the United States, 1954–2003. *Public Health Reports*, *122*, 73–78.
- Fischl, M. A., Dickinson, G. M., Scott, G. B., Klimas, M. A., & Parks, W. (1987). Evaluation of heterosexual partners, children, and household contacts of adults with AIDS. *Journal of the American Medical Association*, *257*, 640–644.
- Frainie, K. (2002). *Why kNOw Abstinence Education programs: Curriculum for sixth grade through high school, teacher's manual*. Chattanooga, TN: AAA Women's Services.
- Frainie, K., & Ritterbush, D. (2006). *Why kNOw Abstinence Education programs: Curriculum for sixth grade through high school, teacher's manual*. Chattanooga, TN: Why Know Abstinence Education.
- Fu, H. S., Darroch, J. E., Haas, T., & Ranjit, N. (1999). Contraceptive failure rates: New estimates from the 1995 National Survey of Family Growth. *Family Planning Perspectives*, *31*, 56–63.
- Furstenberg F. F., Jr., Getz, L. M., Teitler, J. O., & Weiss, C. C. (1997). Does condom availability make a difference? An evaluation of Philadelphia's health resource centers. *Family Planning Perspectives*, *29*, 123–127.
- Haskins, R., & Bevan, C. S. (1997). Abstinence education under welfare reform. *Children and Youth Services Review*, *19*, 465–484.
- Hatcher, R. A., Trussell, J., Stewart, F., Nelson, A. L., Cates, W., Jr., Guest, F., et al. (2004). *Contraceptive technology*. New York: Ardent Media.
- Holmes, K., Levine, R., & Weaver, M. (2004). Effectiveness of condoms in preventing sexually transmitted infections. *Bulletin of the World Health Organization*, *82*, 454–461.
- Huberman, A. M., & Miles, M. (2002). *The qualitative researcher's companion*. Thousand Oaks, CA: Sage.
- Jones E. F., & Forrest, J. D. (1989). Contraceptive failure in the United States: Revised estimates from the 1982 National Survey of Family Growth. *Family Planning Perspectives*, *21*, 103–109.

- Kantor, L. M., Santelli, J. S., Teitler, J., & Balmer, R. (2008). Abstinence-only policies and programs: An overview. *Sexuality Research & Social Policy*, 5(3), 6–17.
- Kirby, D. B. (2008). The impact of abstinence and comprehensive sex and STD/HIV education programs on adolescent sexual behavior. *Sexuality Research & Social Policy*, 5(3), 18–27.
- Kirby, D., Brener, N. D., Brown, N. L., Peterfreund, N., Hillard, P., & Harest, R. (1999). The impact of condom distribution in Seattle schools on sexual behavior and condom use. *American Journal of Public Health*, 89, 182–187.
- Kirby, D., Laris, B., & Roller, L. A. (2007). Sex and HIV education programs: Their impact on sexual behaviors of young people throughout the world. *Journal of Adolescent Health*, 40, 206–217.
- Miller, A. M., & Schleifer, R. A. (2008). Through the looking glass: Abstinence-only-until-marriage programs and their impact on adolescent human rights. *Sexuality Research & Social Policy*, 5(3), 28–43.
- Morris, M., Handcock, M. S., Miller, W. C., Ford, C. A., Schmitz, J. L., Hobbs, M. M., et al. (2006). Prevalence of HIV infection among young adults in the United States: Results from the Add Health Study. *American Journal of Public Health*, 96, 1091–1097.
- National Institute of Allergy and Infectious Diseases. (2001). *Workshop summary: Scientific evidence on condom effectiveness for sexually transmitted disease (STD) prevention*. Bethesda, MD: National Institutes of Health, Department of Health and Human Services.
- Potter, S., & Roach, N. (1998). *Sexuality, commitment & family: Teacher's manual*. Spokane, WA: Teen-Aid.
- Ranjit, N., Bankole, A., Darroch, J. E., & Singh, S. (2001). Contraceptive failure in the first two years of use: Differences across socioeconomic subgroups. *Family Planning Perspectives*, 33, 19–27.
- Roach, N., & Benn, L. (1998). *Me, my world, my future: Teacher's manual*. Spokane, WA: Teen-Aid.
- Santelli, J. S. (2007). *Declaration of John S. Santelli, M.D., M.P.H.* Retrieved July 11, 2007, from <http://www.aclu.org/reproductiverights/sexed/294861gl20070426.html>
- Santelli, J. S. (in press). Medical accuracy in sexuality education: Ideology and the scientific process. *American Journal of Public Health*.
- Smoak, N. D., Scott-Sheldon, L. A., Johnson, B. T., & Carey, M. P. (2006). Sexual risk reduction interventions do not inadvertently increase the overall frequency of sexual behavior: A meta-analysis of 174 studies with 116,735 participants. *Journal of Acquired Immune Deficiency Syndromes*, 41, 374–384.
- Trenholm, C., Devaney, B., Fortson, K., Quay, L., Wheeler, J., & Clark, M. (2007). *Impacts of four Title V, Section 510 abstinence education programs: Final report*. Trenton, NJ: Mathematica Policy Research.
- Trussell, J. (2004). Contraceptive efficacy. In R. A. Hatcher, J. Trussell, F. Stewart, A. L. Nelson, W. Cates, Jr., F. Guest, et al., *Contraceptive technology* (pp. 773–846). New York: Ardent Media.
- United States House of Representatives Committee on Government Reform—Minority Staff Special Investigations Division. (2004, December). *The content of federally funded abstinence-only education programs*. Retrieved July 11, 2007, from <http://oversight.house.gov/documents/20041201102153-50247.pdf>
- U.S. Government Accountability Office. (2006a). *Abstinence education: Applicability of section 317P of the Public Health Service Act*. Washington, DC: Author.
- U.S. Government Accountability Office. (2006b). *Abstinence education: Efforts to assess the accuracy and effectiveness of federally funded programs*. Washington, DC: Author.
- Weller, S. C. (1993). A meta-analysis of condom effectiveness in reducing sexually-transmitted HIV. *Social Science and Medicine*, 36, 1635–1644.
- Weller, S., & Davis, K. (2002). Condom effectiveness in reducing heterosexual HIV transmission. *The Cochrane Library*, 2003(4). Chichester, UK: John Wiley & Sons.
- Winer, R. L., Hughes, J. P., Feng, Q., O'Reilly, S., Kiviat, N., Holmes, K. K., et al. (2006). Condom use and the risk of genital human papillomavirus infection in young women. *New England Journal of Medicine*, 354, 2645–2654.

Appendix: Quotations From Selected Curricula Concerning Condoms

Specific quotations, by theme, from *Me, My World, My Future (MMWMF)*; *Sexuality, Commitment and Family (SCF)*; and *Why kNOW (WK)*^a

THEME: CONDOM SLIPPAGE AND BREAKAGE

The failure rates for condoms (breakage or slippage rate) is higher than most people think. During vaginal intercourse condoms have been reported to break or slip off 14.6 % of the time, and a large family planning clinic found that 52% of respondents had experienced condoms bursting or slipping off in the previous three months. Between male homosexuals, condoms have been shown to fail 7.3%, 8% and 25.5% of the time. (*MMWMF*, p. 214; *SCF*, p. 19)

Condoms fail to protect when they break or slip off. Failure most often occurs when used by couples who are young, less experienced, or in those who are not cohabitating.

- Reported failure rates with female prostitutes are 0.6% to 5%.
- Failure rates for adults who are experienced and/or mutually monogamous are 1.3%, 1.9%, 6.7%, 7.4%, 8%, 10.1%, 11.7%, 12.9% and 15.1%.
- When one partner had limited experience, condoms failed 6.9% and 14.8% of the time.
- At the time of publication, only one study was found in non-cohabitating couples ages 13 to 17. Condoms failed 11.5% of the time.

(*MMWMF*, p. 257)

The condom has a 14% failure rate in preventing pregnancy (1998 *Contraceptive Technology*, page 216) i.e. keeping sperm from entering the woman's body. (*WK*, p. 96)

THEME: CONTRACEPTIVE EFFICACY OF CONDOMS

Basically two factors influence the overall effectiveness of a birth control method; (1) method failures and (2) patient failures. Mature married couples experience low failure rates, while single adolescents consistently prove to have higher failure rates, even after extensive training and follow-up (see below). Perhaps there is fundamental difference between post marital family planning and pre-marital [*sic*] birth control. (*MMWMF*, p. 215; *SCF*, p. 20)

Do condoms ever break or slip?

Condoms fail 15.7 percent of the time over the course of a year. This is a standardized failure rate—among some groups of women it has gone as high as 36.3 percent and 44.5 percent.

This means that at the least, the chances of getting pregnant with a condom are 1 out of 6. (Contracting HIV is easier than getting pregnant because you can only get pregnant several days a month). (*MMWMF*, p. 257; *SCF*, p. 37)

The condom has a 22.5% failure rate in preventing pregnancy in unmarried women under the age of 20 during the first 12 months of use. (*Family Planning Perspectives*, March/April 1999). (*WK*, p. 90)

The typical failure rate for the male condom is 14% in preventing pregnancy (1998 *Contraceptive Technology* p 216). (*WK*, p. 90)

In view of these “comforting” statistics, consider these additional facts:

- The human sperm is 450 times larger than the HIV virus
- A woman can become pregnant approximately 6 days each cycle (The ovum actually lasts less than one day, but sperm has been known to survive up to five days inside the female genital tract.)
- You can acquire an STD any day of the month.

(*WK*, p. 90)

THEME: CONDOMS AND HIV TRANSMISSION RISK

In one study of heterosexual couples where one partner is HIV infected, over an average of two years of sexual exposure if latex condoms were relied upon there was still a 10 to 23% risk of transmission of HIV infection even with training and proper use. (*MMWMF*, p. 214, p. 256; *SCF*, p. 19, p. 36)

A meticulous review of condom effectiveness was reported by Dr. Susan Weller in 1993. She found that condoms were even less likely to protect people from HIV infections. Condoms appear to reduce the risk of heterosexual HIV infection by only 69%. (*MMWMF*, p. 214; *SCF*, p. 19, pp. 36–37)

**Specific quotations, by theme, from *Me, My World, My Future (MMWMF)*;
Sexuality, Commitment and Family (SCF); and *Why kNOW (WK)*^a**

The CDC has highly touted a study from Europe by Dr. de Vincenzi. This was a study of 256 heterosexual relationships where one partner was **known** to be HIV positive, and continued to have vaginal and anal intercourse. These adults were carefully instructed to use condoms correctly and consistently. Over an average time of 20 months, none became infected in the consistent condom users, while 4.8% of the inconsistent users seroconverted annually. This study has been criticized by three different university groups as being seriously flawed in at least six areas, and therefore the results are questionable and not statistically significant. (*MMWMF*, p. 257)

In the CDC's highly touted study Dr. de Vincenzi, 256 heterosexual couples were followed when one partner was known to be HIV positive. Each partner was counseled about HIV infection and about "safe sex." Only 48% of the adult couples used condoms consistently. (*MMWMF*, p. 258)

Do HIV positive men and women tell their sexual partners of their infection? In one study, 40% of HIV infected people did not. Of those who did not disclose, 57% did not use condoms consistently. Only 42% of individuals with multiple partners were honest about their HIV status. Surprisingly, 21% people did not tell their one and only sexual partner. (*MMWMF*, p. 257)

In a study performed in Canada, freshman college students knew more about HIV/AIDS than other STD's [*sic*]. In spite of this knowledge, only 25% of the men and 16% of the women always used a condom during sexual intercourse. Incredibly, among **those students with ten or more sexual partners**, regular condom use was reported by only 21% of the men and 7.5% of all the women! (*MMWMF*, p. 216, p. 258; *SCF*, p. 38)

The use of latex condoms has been promoted, by some, as a means to reduce the risk of sexual transmission of HIV. Experts from the Centers for Disease Control recommend abstinence and faithful monogamy as the only totally effective prevention strategies for sexually transmitted diseases. They also note that proper use of condoms for each sexual exposure can reduce, **but not eliminate**, the risk of infection. (*MMWMF*, p. 259; *SCF*, p. 36)

In mid-1988, the National Institute [*sic*] of Health canceled a two-year research project on condom effectiveness in Los Angeles. Officials felt that the study had too much risk and was therefore "unethical." The project was designed to determine how effective condoms are while people are involved in "high-risk" sex. They estimated that 40% of the control group would have become infected with HIV, and if condoms even reduced the risk ten-fold, four percent of condom users would become infected. (*SCF*; p. 38)

XVI. About Condoms

A. The use of condoms does not necessarily prevent infection, but could just _____ it. (*SCF*, p. 44).

HIV Crossword Puzzle

Down

16 Best protection- abstinence and mutually faithful monogamy; less than best protection - _____. [condoms is correct crossword answer]. (*SCF*, p. 45)

In heterosexual sex, condoms fail to prevent HIV approximately 31% of the time (Dr. Susan Weller, "A meta-analysis of Condom effectiveness in Reducing sexually transmitted HIV," *Social Science and Medicine*, June 1993). (*WK*, p. 90)

THEME: YOUTH AS CONDOM USERS

Pregnancy rates during the first year of contraceptive use.

Studies show that unmarried adolescents consistently experience higher contraceptive failure rates for pregnancy.

Condom: method failure 4%, married adult 14.1%, unmarried adolescent 18.4% (*MMWMF*, p. 215; *SCF*, p. 20)

Cohabiting women under the age of 20 had condom failure rate of 53.4 percent in preventing pregnancy during the first 12 months of use. (*Family Planning Perspectives*, March/April 1999). (*WK*, p. 90)

Studies have been done on sexually active adolescents and condom usage. One was completed in October 1986 in San Francisco. The authors noted:

In San Francisco, information about AIDS prevention (including use of condoms) via television, newspapers, billboards, and on buses, some aimed specifically at teenagers, has increased in past years. The San Francisco Unified School District (SFUSD) began teaching a one-class segment on AIDS in the middle and high schools in academic year 1985-86 with teachers free to discuss AIDS in the lesson plans as they chose.

**Specific quotations, by theme, from *Me, My World, My Future (MMWMF)*;
Sexuality, Commitment and Family (SCF); and *Why kNOw (WK)*^a**

After one year of intensive promotion, they noted that only 2.1% of teen girls and 8.2% of teen boys reported that they used condoms every time they had intercourse during the year. Also, paradoxically they learned that, in spite of the knowledge that condoms, “prevent” AIDS and other STD’s [sic], the boys had **less intention** to use them one year later! (MMWMF, p. 215; SCF, p. 20)

Is the goal of “correct and consistent” condom use attainable for the majority of teens, or even for the majority of adults? (MMWMF, p. 259)

THEME: CONDOM AVAILABILITY AND DISTRIBUTION PROGRAMS

“Condoms don’t hack it. Passing them out is futile.” – Robert Noble, M.D. (MMWMF, p. 215; SCF, p. 20)

TEACHING EXAMPLES

(Themes: Condom Slippage and Breakage, Contraceptive Efficacy of Condoms, Condoms and HIV Transmission Risk, Condom Permeability in Speedy the Sperm lesson)

Condom use and Russian roulette

If condoms and condom usage are not reliable, wouldn’t relying on them be like playing the insane “game” of Russian roulette? A cartridge is loaded into one of the six chambers of a revolver. The first “player” spins the cylinder, points the gun to his/her head, and pulls the trigger. He/she has only one in six chances of being killed. But if one continues to perform this act, the chamber with the bullet will ultimately fall into position under the hammer, and the game ends as one of the players dies. (MMWMF, p. 215, p. 258; SCF, p. 19)

Condoms are like Russian roulette. Condoms do not prevent pregnancy, STDs, or AIDS; they only delay them. Theoretically, the longer one relies on them, they will fail and the “game” is over. (MMWMF, p. 215; SCF, p. 19)

Relying on condoms is like playing Russian roulette. Condoms do not prevent pregnancy, STDs, or AIDS. The longer one relies on them, the greater the chance of failure. Even if the method had a 90% chance of success the first time, repeated acts compound the failure rate and a person’s risk. The longer one relies on them, the probability increases that a condom will fail and that the “game” is over. (MMWMF, p. 258)

Speedy the Sperm

The purpose of this illustration is to show the dangers of trusting your life to a piece of latex (condom). The condom has a 14% failure rate in preventing pregnancy, (1998 Contraceptive Technology, page 216) i.e. keeping sperm from entering the woman’s body. Studies show that the HIV virus is 450 times smaller than a human sperm. (Michael Roland of the Rubber Chemistry and Technology Company, (1992), Letter to the Editor—*The Washington Post*.) Recent research shows that the actual fertile time for women can last for about 6 days each cycle. Sperm has been known to live up to 5 days inside the female genital tract; the egg lives less than 1 day. Since the HIV virus is smaller than a sperm and can infect you any day of the month, the failure rate of the condom to prevent AIDS is logically much worse than its failure rate to prevent pregnancy.

Explain to students the condom failure rate (see page 90) and the size difference between the HIV virus and the human sperm. The HIV virus is so small that it is impossible to see with the naked eye. In fact, you would have to magnify it greatly just to see it under a microscope! So for the sake of illustration, you are going to magnify it to the size of the penny, which is much easier to see. Now the sperm has to be magnified 450x the size of the penny.

Hold up the penny and ask them how large we would have to make the sperm if we make the HIV virus the size of the penny. Using their brains, paper, and pencils, or calculators tell them to multiply $450 \times .5$ (size of penny’s diameter) = 225 inches. Since there are 12 inches in a foot, divide by 12 = 18.75 ft. That’s a big sperm!

Tell them you just happen to have a sperm of that size with you and ask for two volunteers. Introduce “Speedy” and have students stretch him out to his full length. You stand in the middle and hold the penny up for them to see. If the condom has a failure rate of 14% in preventing “Speedy” from getting through to create new life, what happens if this guy (the penny) gets through? You have a death: your own.

(WK, p. 96)

**Specific quotations, by theme, from *Me, My World, My Future (MMWMF)*;
Sexuality, Commitment and Family (SCF); and *Why kNOW (WK)*^a**

This chart shows the size differences between various STD's [*sic*] and the human sperm. HIV is about 0.1 microns in diameter. By, [*sic*] comparison, the diameter of the head of a human sperm is about 3 microns. In total the HIV virus is approximately 450 times smaller than the human sperm. (*WK*, Transparency 5)

Safer Than Nothing (activity supplement Sexually Transmitted Diseases)

After a discussion about the failure rate of the condom ask the class, "Since the condom is not 100% safe, it cannot be called 'safe sex'; so what could we call it?" After the class has had a few moments to answer, you suggest that "safer than nothing" may be a better name. Ask them if they want to be 100% safe, or just "safer than nothing." Since there are some people who are satisfied with being "just safer," we have a little scenario that will help us understand exactly what they are settling for when they settle for "just safer." Invite a student to come to the front of the class to play the part of "Teen." You plan the part of "Narrator" and "Tempter."

From the plane we are watching this happening. We can't jump because we are not married and don't have a parachute. If we jump without being married, we are going to go "splat," so all we can do is watch and learn. We watch those who are doing it right and making their marriage work.

Ask the students what will happen when they jump [the unmarried couple who is using a baby blanket as a parachute]. They will say that they are going to crash. Yes, they are going to crash, because, although they are doing the same thing that married people are doing, they are not married. A blanket cannot take the place of a parachute, and condom cannot take the place of the protection of a faithful, loving, monogamous relationship.

(*WK*, pp. 98–99)

THEME: OTHER

How effective is Teen Contraceptive Use?

Encouraging the use of condoms and other contraceptives may even be harmful if it gives a **false sense of security**. [emphasis added by Teen-Aid] (*MMWMF*, p. 214)

Are Condoms Effective and Reliable?

Would you trust a condom, when condoms have been shown to be ineffective in preventing pregnancy or disease, to break, and even with proper usage to allow the transmission of HIV? (*MMWMF*, p. 214)

A Rutgers University study found that barrier contraceptives apparently do not afford adequate protection against chlamydia. Infection rates were similar regardless of the contraceptive used. User infection rates were diaphragm-44%, condom-36%, oral contraceptives-37% and no contraception-44%. (*MMWMF*, p. 214; *SCF*, p. 19)

Prevention

He [former U.S. Surgeon General Dr. C. Everett Koop] advocates condoms only for those who would not be abstinent or monogamous. (*MMWMF*, p. 256)

In spite of high level of AIDS-specific knowledge among sexually active young people (mean age 16.3 years), more than 66% engaged in sex without correct condom usage, with partners whose sexual history was unknown. These authorities concluded that AIDS knowledge alone is unlikely to reduce sex risk behavior in adolescents. (*MMWMF*, p. 257)

A questionnaire of 108 men found that 49% reported removing condoms after beginning intercourse. (*MMWMF*, p. 258; *SCF*, p. 19)

About Condoms

What if condoms were 100% effective in preventing HIV infection, if used "correctly and consistently"? Should we then abandon moral values and advocate that all our children be indoctrinated that they **must** use condoms with every sex act, and **be taught how** to correctly use them? If so, at what age do we begin instruction? (*MMWMF*, p. 258)

Should physical safety from HIV, other STDs, or pregnancy be our paramount concern? Or are there other very important long-term considerations? What effect does condom instruction have on young people spiritually, emotionally, and socially? Does condom instruction result in positive or negative effects on future family stability and economic success? Could it not actually be harmful to young people, or to the rest of us, to follow this course? (*MMWMF*, p. 259)

If you knew that someone was infected with the AIDS virus (HIV) would you have sex with that person? Would you recommend that your son or your daughter or your students place their trust in condoms? Would you trust a condom when condoms have been shown to be ineffective in preventing pregnancy or disease, to break, and even with proper usage, to allow the transmission of HIV? (*MMWMF*, p. 259; *SCF*, p. 19, p. 36)

**Specific quotations, by theme, from *Me, My World, My Future (MMWMF)*;
Sexuality, Commitment and Family (SCF); and *Why kNOw (WK)*^a**

Risky Behavior

If abstinence is 100% effective and there is virtually no risk in a mutually faithful, monogamous (marriage) relationship, what level of risk are you willing to take? Condoms use has a risk factor. Are you worth the best? What is the best choice with the least risk? What choice can you live (die) with? (*MMWMF*, p. 260; *SCF*, p. 39)

Teens Can Abstain

[sic]

Medical authorities see a continuing toll of sickness and death by HIV/AIDS, and they are calling for changes in sexual behavior. A popular "solution" one frequently hears is the cry that people must be given more condoms, and condom/AIDS education, an effort that has proven to fall short of expectations. (*SCF*, p. 22)

It appears that a condom should reduce one's risk of infection in a single sex act. The more often that the act is repeated, the more opportunity there is for condom failure. The longer people engage in risky behavior and rely on condoms for protection, the greater the risk of becoming infected. (Those married couples who are mutually faithful and don't do IV drugs have no risk of HIV infection, with or without a condom.) (*SCF*, p. 38)

Think about the following statistics and consider: "Could condoms be just another stupid idea?" (*WK*, p. 90)

Currently there is not a condom made that can protect a person's emotions. (*WK*, p. 90)

^aRoach, N., & Benn, L. (1998). *Me, my world, my future: Teacher's manual*. Spokane, WA: Teen-Aid; Potter, S., & Roach, N. (1998). *Sexuality, commitment & family: Teacher's manual*. Spokane, WA: Teen-Aid; Frainie, K., & Ritterbush, D. (2006). *Why kNOw Abstinence Education programs: Curriculum for sixth grade through high school, teacher's manual*. Chattanooga, TN: Why Know Abstinence Education.

