EXECUTIVE SUMMARY

Objective. To update previous Council analyses by reviewing published literature and sentinel reports that have appeared over the last 10 years on the effectiveness of both comprehensive and abstinence-only sexual education platforms.

Methods. English-language articles were identified by a Google Scholar and PubMed search for January 1999 to February 2009 using the key words “comprehensive sex education,” “abstinence education,” “abstinence only education,” and “abstinence plus education.” Articles were selected based on their evaluation of sexual education programs, with an emphasis on those that are federally funded. Additional articles were chosen to identify any gaps in knowledge, such as those addressing the evaluation of programmatic content. In addition, the Web sites of the Sexuality Information and Education Council of the United States (SIECUS), the Heritage Foundation, and Advocates for Youth were consulted for their specific content.

Results. Current estimates of reportable sexually transmitted disease (STD), teen pregnancy, and human immunodeficiency virus (HIV) transmission rates in the United States remain higher than those of other developed countries. Additionally, the teen birth rate has risen consistently for the past two years, a reversal from the previous 14-year decline. Measuring the comparative effectiveness of abstinence-only and comprehensive-based sexual education is difficult because of differences in the programs, the populations and ages of those served, and the various methods used for retrospective evaluation. Differing ideologies also lead to disparate views on what constitutes the most relevant outcome of interest. Although a few abstinence-only education programs have succeeded in temporarily altering teen attitudes toward abstinence, the overwhelming number of programs that have been reviewed fail to keep youth abstinent until marriage, or to significantly delay the onset of sexual activity. Funding for abstinence-only education programs has risen exponentially over the past 10 years, but there is scant evidence to support their effectiveness in changing adolescent behavior and permanently altering attitudes in regard to sexual activity. Such programs may have the minor effect of altering intent to engage in sexual activity, and do not adversely affect knowledge about contraceptives, condoms, and STDs.

Conclusions. The combination of the increases in STD, HIV transmission, and teen pregnancy rates underscores the need for sexual education methods for children, adolescents, and adults that result in behavior change; risk behavior reduction; or a measurable change in knowledge, attitudes, or beliefs. Although a few abstinence-only education programs have succeeded in changing and supporting teen attitudes toward abstinence, strong evidence is lacking that abstinence-based programs significantly delay the initiation of sex, keep youth abstinent until marriage, hasten return to abstinence, or reduce the number of sexual partners. Comprehensive-based sexuality education curricula that include accurate information about contraception and condom use, and that may also encourage abstinence (as the only fully effective way to prevent pregnancy and the transmission of disease), continue to be the most effective at increasing adolescents’ knowledge about pregnancy and disease prevention.
REPORT OF THE COUNCIL ON SCIENCE AND PUBLIC HEALTH

CSAPH Report 7–A-09

Subject: An Updated Review of Sex Education Programs in the United States
(Substitute Resolution 409, A-08)

Presented by: Carolyn B. Robinowitz, MD, Chair

Referred to: Reference Committee D
(James L. Milam, MD, Chair)

Substitute Resolution 409, “Abstinence-Only Education,” referred at the 2008 Annual Meeting, asks that our American Medical Association (AMA) urge the cessation of all federal- and state-mandated abstinence-only approaches, which are tied to funding of health and sex education programs (including human immunodeficiency virus [HIV] prevention both domestically and internationally) and the redirection of those funds to comprehensive sex education programs.


This report updates previous analyses by reviewing published literature and sentinel reports that have appeared over the last 10 years on the effectiveness of both comprehensive and abstinence-only educational platforms.

METHODS

English-language articles were identified by a Google Scholar and PubMed search for January 1999 to February 2009 using the key words “comprehensive sex education,” “abstinence education,” “abstinence only education,” and “abstinence plus education.” Articles were selected based on their evaluation of sex education programs, with an emphasis on those that are federally funded. Additional articles were chosen to identify any gaps in knowledge, such as those addressing the evaluation of programmatic content. In addition, the Web sites of the Sexuality Information and Education Council of the United States (SIECUS), the Heritage Foundation, and Advocates for Youth were consulted for their specific content.
BACKGROUND

As federal funding has increased for abstinence-only education programs (also called abstinence until marriage or abstinence-based programs) over the past decade, the debate over their efficacy has continued to grow. Funding for such programs began in 1996, and outcome data are available for analysis from several of them. The Mathematica Policy Research, Inc., report referred to in CSA Report 7 (A-00) has been completed, and its findings are included in this report. Additionally, Representative Henry A. Waxman (D-CA) requested development of a report on the content of federally funded abstinence-only programs. This report was completed in December 2004 by the House of Representatives Committee on Government Reform, Minority Staff Special Investigations Division.

TEEN PREGNANCY AND SEXUALLY TRANSMITTED DISEASE RATES IN THE UNITED STATES

The most recent data from the National Center for Health Statistics indicate that the 14-year trend in declining teen pregnancy rates has ended. Rates declined 34% from 1991 to 2005, but increased 5% from 2005 to 2007. The National Campaign to Prevent Teen Pregnancy suggests several explanations may apply. The first posits an overall population shift that has resulted in a greater number of older adolescents (aged 18 and 19 years), who traditionally comprise a greater proportion of pregnant teens. Additionally, the population of racial and ethnic minorities who also comprise a large proportion of pregnant teens has increased. However, because births to single unwed mothers of all ages have risen, it also could be argued that this trend is simply an extension of a new cultural norm. Conversely, several years of a declining birth rate could have caused a sense of complacency within the sex education community. Although experts have offered several additional theories about this recent rise in teen pregnancy rates, there is no definitive evidence that funding for abstinence-only or comprehensive sexual education programs is causal.

Approximately one-half of sexually transmitted disease (STD) cases occur in youth aged 15 to 24 years. Despite a decrease in STD rates between 1996 and 2001, the most recent report from the Centers for Disease Control and Prevention (CDC) indicates that the incidence of reportable STDs is increasing, rising 3% between 2005 and 2006. These rising rates signal an increased need for education about prevention. In 2007, Chlamydia-related infections continued to be the most commonly reported STD in the United States, accounting for more than one million new diagnoses and reflecting a 7.5% increase in the national rate. In contrast, the rates of gonococcal infection (the second most reported STD in the United States) have remained relatively constant (~119 cases per 100,000). The former may reflect increased screening rather than an actual increase in the burden of disease. For example, the reported rates of Chlamydia infection continue to be three times higher in women than men. Because of these differences, the overall burden of disease is believed to be much higher than evidenced by reported cases.

Syphilis rates (both primary and secondary) have also continued to rise, increasing more than 15% between 2006 and 2007. Specifically, syphilis infections have increased among certain populations, including men who have sex with men and black females, and the number of congenital cases has also grown. Racial and ethnic disparities persist among all reportable STDs. African Americans accounted for 70% of the gonorrhea cases and almost half of Chlamydia and syphilis cases, despite comprising only 12% of the overall U.S. population. Similar disparities occur in Hispanic populations in relation to Chlamydia rates, although not of the same magnitude.
ABSTINENCE-ONLY EDUCATION: CURRENT FEDERAL FUNDING

Some funding for abstinence-only education has been provided since the early 1980s, primarily through the Adolescent Family Life Act. Funding was substantially increased for these programs in 1996. The Temporary Assistance to Needy Families Act (TANF) included a provision creating an entitlement program in Section 510 Title V of the Social Security Act. The purpose of the new entitlement program, Section 510 (b), is to “enable the State to provide abstinence education, and at the option of the State, where appropriate, counseling, and adult supervision to promote abstinence from sexual activity, with a focus on those groups which are most likely to bear children out-of-wedlock.”

Funding ($50 million) was made available through Maternal and Child Health Bureau grants. States were required to match every four dollars granted with three dollars of their own. Thus, the potential funding level for abstinence-only education through this program was $87.5 million.

Although funding for these programs through Title V was substantial, funding for abstinence-only education was further increased in 2000 through the Community-Based Abstinence Education (CBAE) programs. These monies were funded directly from the federal government to the education programs themselves. In 2000, the CBAE was authorized to award up to 21 one-year planning grants ($50,000-$75,000 each) and up to 50 three-year implementation grants ($250,000-$1 million each).

Programs that are funded under Title V and through the CBAE initiative must adhere to strict guidelines and comply with the following eight criteria (often referred to as the A-H definition).

Accordingly, abstinence education is defined as a motivational or educational program that:

(A) Has as its exclusive purpose, teaching the social, psychological, and health gains to be realized by abstaining from sexual activity;

(B) Teaches abstinence from sexual activity outside marriage as the expected standard for all school children;

(C) Teaches that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, STDs, and other associated health problems;

(D) Teaches that a mutually faithful monogamous relationship in the context of marriage is the expected standard of human sexual activity;

(E) Teaches that sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects;

(F) Teaches that bearing children out of wedlock is likely to have harmful consequences for the child, the child’s parents, and society;

(G) Teaches young people how to reject sexual advances and how alcohol and drug use increase vulnerability to sexual advances; and

(H) Teaches the importance of attaining self-sufficiency before engaging in sexual activity.
In fiscal year 2007, the funding for CBAE programs was $113 million. Combined with $50 million in Title V funding and the still existing Adolescent Family Life Act funding, the total government expenditure for these programs approached $176 million. Correspondingly, more teens are receiving abstinence-only education as their source of sexuality education. In 2002, the National Survey of Family Growth estimated 23% of teens received abstinence-only education, compared with 9% of teens in 1995.

EFFECTIVENESS OF COMPREHENSIVE-BASED SEX, STD AND HIV EDUCATION PROGRAMS

Several meta-analyses and reports in the peer-reviewed literature have documented the effectiveness of comprehensive-based sex education programs in changing behavior, attitudes, and beliefs. A 2007 report from the National Campaign to Prevent Teen and Unplanned Pregnancy, “Emerging Answers,” studied the effects of different types of sex education programs on teen sexual activity and knowledge. This comprehensive analysis, first published in 2001 and updated in 2007, analyzed 115 peer-reviewed studies that met specific inclusion criteria. Of these, 56 measured “the impact of curriculum based sex and STD/HIV education programs.” Specific criteria were set for inclusion in this analysis, which focused on sample size, type of study design, population targeted, analytic methods, and date of completion or publication. Despite the extent of funding for abstinence-based programs over the previous decade, only eight abstinence-only studies met the inclusion criteria, compared with 48 comprehensive-based programs.

The remaining 59 studies reviewed programs that did not specifically fit into the category above. Examples of these program types include those directed at both parents and teens, reviews of clinic protocols, provision of emergency contraception, school-based condom availability, and the impact of welfare reform. The diversity of the types of programs makes a unified analysis difficult; consequently, one chapter of Emerging Answers is devoted to small group descriptive analyses of each program type or each program, where applicable. This report focuses on the 56 studies that measured the impact of curriculum-based sex and STD/HIV education programs.

Emerging Answers concluded that two thirds of the comprehensive-based programs had a significant positive impact on the behavior of the whole group studied or on important subgroups of the sample. This included positive effects on delaying the initiation of sex, reducing the frequency of sexual activity, reducing the number of partners, increasing condom and contraceptive use, and reducing risky sexual behavior. This study found little or no evidence that abstinence-only-until-marriage programs have a significant impact on teen sexual behavior (see Table 1).

TABLE 1. COMPARISON OF ABSTINENCE AND COMPREHENSIVE PROGRAMS ON SELECT MEASURES

<table>
<thead>
<tr>
<th>Outcome Measured</th>
<th>Abstinence Programs (N=8)</th>
<th>Comprehensive Programs (N=48)</th>
<th>All Programs (N=56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed sex</td>
<td>N=8</td>
<td>N=32</td>
<td>N=40</td>
</tr>
<tr>
<td>Delayed initiation</td>
<td>1</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Hastened initiation</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reduced Frequency</td>
<td>N=6</td>
<td>N=21</td>
<td>N=27</td>
</tr>
<tr>
<td>Reduced frequency</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Increased frequency</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reduced Partners</td>
<td>N=5</td>
<td>N=24</td>
<td>N=29</td>
</tr>
<tr>
<td>Reduced partners</td>
<td>1</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Increased partners</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Another meta-analysis showed similar results. In a review of 39 abstinence plus-HIV prevention programs, 23 were found to have a protective effect on at least one sexual behavior, including use of condoms, unprotected sex, and abstinence. Furthermore, abstinence plus-HIV prevention programs were also effective in increasing knowledge about HIV and AIDS.14

Efficacy of Abstinence-Only and Abstinence Until Marriage Sex Education

Over the last decade, researchers have studied the effectiveness of abstinence-only programs by evaluating their content or outcomes, such as changes in behavior or knowledge. Others have relied on corresponding national rates of teen sexual activity, reportable STDs, and teen pregnancy rates. Concern has emerged that abstinence-only education is not only ineffective in reducing sexual activity and pregnancy, but that such programs carry a risk of increasing unprotected sexual activity, because youth are not taught how to protect themselves if they do choose to initiate sexual intercourse. Generally, discussion of contraceptives is not allowed in these programs except to mention failure rates. This lack of knowledge may or may not be associated with an increase in teen pregnancy or STD rates.

Because funding was supplied to abstinence-only programs via Title V, Congress called for a critical evaluation of their effectiveness, in part because some believed the eight-point definition that Title V recipients must adhere to was arbitrarily defined. In August 1998, the U.S. Office of the Assistant Secretary for Planning and Evaluation awarded a Section 510(b) contract to Mathematica Policy Research, Inc., to evaluate the effectiveness of abstinence-only based programs.16 Mathematica’s final report, published in April 2007, did not evaluate any CBAE programs.

This study closely examined four programs funded through the Title V mechanisms and considered by state officials and abstinence education experts to be especially promising, and that contained the necessary range of demographics (mixed income, percentage of minorities, one or two parents, age), geographic location (urban vs. rural), attendance (mandatory vs. not), and setting (school-based or not). These programs were: (1) “My Choice My Future!” in Powhatan, VA; (2) “ReCapturing the Vision” in Miami, FL; (3) “Families United to Prevent Teen Pregnancy (FUPTP)” in Milwaukee, WI; and (4) “Teens in Control” in Clarksdale, MS. Program participants were surveyed in four “waves,” the last of which was completed in 2005. This survey was administered to participants and a control population 42 to 78 months after enrollment in the program. The survey attempted to capture behavior measures (abstinent or not, age of initial sexual

<table>
<thead>
<tr>
<th>Increased Condom Use</th>
<th>N=5</th>
<th>N=32</th>
<th>N=37</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased condom use</td>
<td>0</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Increased Contraceptive Use</th>
<th>(N=4)</th>
<th>(N=9)</th>
<th>(N=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased use</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Reduced use</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reduced Sexual Risk-Taking</th>
<th>(N=3)</th>
<th>(N=24)</th>
<th>(N=27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced risk</td>
<td>0</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Increased risk</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
activity, and number of partners) as well as changes in knowledge and beliefs about pregnancy and
STDs.\textsuperscript{17}

Results showed that none of the programs were effective at maintaining abstinent behavior.
Participants in the four evaluated programs were no more likely to have abstained from sex when
compared with a control group. Furthermore, those surveyed in both the program and control
group who did initiate sexual activity did so at similar ages and reported similar numbers of sexual
partners. The program also had little impact on knowledge about risks associated with sex, the
health risks of STDs, or the effectiveness of condom use. Program participants scored similarly to
the control group on almost all of the measures, and were two percentage points higher than their
peers on overall STD identification. Table 2 summarizes these results.

TABLE 2. SUMMARY OF BEHAVIOR AND KNOWLEDGE RESPONSES FOR SELECT
ABSTINENCE-BASED PROGRAMS AND CONTROLS\textsuperscript{17}

<table>
<thead>
<tr>
<th>Measure</th>
<th>Program</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior (all last 12 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remained abstinent</td>
<td>56%</td>
<td>55%</td>
</tr>
<tr>
<td>Had sex, always used condom</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>Had sex, sometimes used condom</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>Had sex, never used condom</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condoms usually prevent pregnancy *</td>
<td>51%</td>
<td>52%</td>
</tr>
<tr>
<td>Condoms sometimes prevent pregnancy</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>Condoms never prevent pregnancy **</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Condoms usually prevent HIV</td>
<td>34%</td>
<td>38%</td>
</tr>
<tr>
<td>Condoms sometimes prevent HIV</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Condoms never prevent HIV</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>Condoms usually prevent Chlamydia and gonorrhea**</td>
<td>30%</td>
<td>35%</td>
</tr>
<tr>
<td>Condoms sometimes prevent Chlamydia and gonorrhea</td>
<td>27%</td>
<td>25%</td>
</tr>
<tr>
<td>Condoms never prevent Chlamydia and gonorrhea***</td>
<td>20%</td>
<td>14%</td>
</tr>
<tr>
<td>Condoms usually prevent herpes or HPV**†</td>
<td>26%</td>
<td>31%</td>
</tr>
<tr>
<td>Condoms sometimes prevent herpes or HPV</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>Condoms never prevent herpes or HPV***</td>
<td>23%</td>
<td>15%</td>
</tr>
</tbody>
</table>

*P value < .10 (two tailed)  
**P value < .05  
***P value < .01  
†HPV = human papilloma virus

Mathematica’s evaluation noted that concerns of some policymakers that abstinence-only
education exacerbates poor knowledge about STDs may be unfounded based on the similarities
between program participants and the control group. The report also noted that “given the lack of
program impacts on behavior, policymakers should consider...effective ways to reduce the high
rate of teen sexual activity and its negative consequences.” Two ways it suggests are by targeting
children at an even younger age and by improving peer support networks as teens grow older.\textsuperscript{16}

Other analyses have shown similar results. An analysis by the National Survey for Family Growth
identified survey respondents who received abstinence-only education and concluded these
individuals did not delay initiation of sexual activity or reduce their risk for teen pregnancy and
STDs compared with survey respondents who received comprehensive sex education. Unlike the
Mathematica analysis, however, this study found a significant correlation between comprehensive
sex education and a reduced risk of teen pregnancy.12

Supporters of abstinence-only sex education have theorized that teaching youth about
contraceptives, condoms, and “safer” sex methods increases sexual activity among teens. This also
appears unfounded. One review of 11 programs that included teaching the use of contraceptives
showed that 10 did not increase sexual activity among participants.15 Similarly, reviews of
programs that support and instruct youth on correct condom use and educate participants about
HIV and AIDS do not lead to increased sexual activity.18,19

There are few published data to support the effectiveness of abstinence-only education, although
some supportive statements can be found in independent publications or “think tank” analyses. For
example, Congressional testimony offered on behalf of the Institute for Research and Evaluation
claimed that teens in one abstinence-only based program (“Heritage Keepers”) were half as likely
as non-program participants to initiate sexual intercourse (unpublished data), and that another
(“Reasons of the Heart”) encouraged adolescent virgins to refrain from sexual activity.20 A closer
examination of the latter study, however, reveals it was not actual behaviors (i.e., sexual activity or
not) that were measured, but rather intent (i.e., willingness or inclination to have sex).21

A review posted by the Heritage Foundation evaluated 21 abstinence-only programs and concluded
that 16 were effective on some level.22 How effective the programs were, and what they were
effective at doing varied widely. Some were considered effective because they almost achieved
statistical significance (p < .10 vs. p > .05), or because they showed no differences between
condom use and no condom use, or because they showed that participants did abstain from sex
longer than non-program participants.22-24 The latter is, of course, the goal of abstinence-only
education. However, one of the studies cited as positive actually shows that “abstinence
intervention participants were less likely to report having sexual intercourse in the 3 months after
intervention than were control group participants (12.5% vs. 21.5%, P=.02), but not at 6- or 12-
month follow-up.”25

Recent unpublished data indicate that at least one abstinence-based program affects behavior. At a
national conference in 2006, Jemmott presented the results of a 24-month follow-up study that
compared the effectiveness of an 8-hour abstinence-only program (“Making A Difference!”), a
safer-sex program, shorter versions of both abstinence-only programs and the safer sex program,
and a control group. At the two-year follow-up, self report data from program participants
indicated that only slightly more than 30% of participants in the abstinence-only program had
initiated sex, compared to just over 50% of participants in the safer sex group. While this
difference was not significant (p=.06) it was significant when compared to that of the control
group (p=.05).26 In contrast, a July 2007 report examined the results of 13 abstinence-only trials
including almost 16,000 students and found that these programs were ineffective in changing any
of the behaviors that were examined, including the rate of vaginal sex, number of sexual partners,
and condom use.27

Current Trends in State Funding

State use of funds has decreased as more evidence has emerged that abstinence-only programs are
not effective. Because Title V requires states to match funding, many have decided to forgo the
grants for these programs. In 1998, all 50 states applied for Title V grants, although two states
eventually declined them. In 2005, only three states had rejected the funding. However, in 2007,
25 states were no longer accepting these block grants. States have offered differing rationales as to
why they have rejected the funding; however, many cite the restrictiveness of the A-H
requirements and the belief these programs are largely ineffective. In some cases, states facing
budget deficits may be more reluctant to provide the necessary matching funds.

A report written at the request of Representative Henry A. Waxman in 2004 reviews the content of
more than 100 CBAE programs. Evaluation of the content and messaging of these programs is
important because of the substantial monies they receive. The authors reviewed the curricula
summaries of recipient organizations, which were obtained from the Health Resources and Services
Administration. Because curricula overlap for multiple organizations, the authors reviewed only
those curricula that were listed by five or more recipients. Thirteen curricula met this requirement
and were reviewed for scientific accuracy.

Eleven of the 13 (84.6%) were found to misrepresent current scientific data, or were altered in a
way that renders the information inaccurate. Inconsistencies were found in describing HIV
transmission rates with condom use, prevention of STDs, pregnancy prevention, and the risks of
abortion. Condom efficacy is particularly distorted in some of the programs. Reputable studies of
condom use have found high rates of protection from HIV transmission when condoms are used
appropriately, including one published in the New England Journal of Medicine showing no viral
transmission between HIV-positive and -negative partners in more than 15,000 acts of
intercourse. Additionally, some curricula state that HIV and other disease-causing agents are able
to “pass through” condoms, or that the relationship between HIV transmission and condom use is
“not definitively known.” Similarly, other curricula state that no data exist to support an
association between condom use and STD transmission, despite the existence of data to the
contrary. Lastly, tears and sweat are mentioned in some programs as possible HIV transmission
modes.

Some curricula also promote stereotypical gender roles in a factual manner. Such statements are
included at the beginning of the curricula to demonstrate the differences between men and women.
Similarly, several statements about conception tend more toward personal belief than fact. The
inclusion of these statements is not scientifically based, which can call into question the validity of
program content.

CONCLUSION

Current estimates of reportable STDs, teen pregnancy, and HIV transmission rates in the United
States remain higher than those of other developed countries. Additionally, the teen birth rate has
risen consistently for the past two years, a reversal from the previous 14-year decline. The
combination of the increases in STD, HIV transmission, and teen pregnancy rates underscore the
need for sex education methods for children and adolescents that result in behavior change; risk
behavior reduction; or a measurable change in knowledge, attitudes, or beliefs.

Measuring the comparative effectiveness of abstinence-only and comprehensive-based sexual
education is difficult because of differences in the programs, the populations and ages of those
served, and the various methods used for retrospective evaluation. Differing ideologies also lead to
disparate views on what constitutes the most relevant outcome of interest. In some cases, the
beliefs and attitudes of a teen may be paramount, while in others a more definitive action such as
age of onset of sexual activity may be more important. Thus, differences exist in the scientific
questions asked when programs are evaluated.

Funding for abstinence-only education programs has risen exponentially over the past 10 years and
although some abstinence-only education programs have succeeded in changing and supporting
teen attitudes toward abstinence, strong evidence is lacking that abstinence-based programs significantly delay the initiation of sexual activity, keep youth abstinent until marriage, hasten return to abstinence, or reduce the number of sexual partners. A few programs have the minor effect of altering intent to engage in sexual activity, but it has not been shown that this intent translates into an actual delay of the onset of sexual activity. Many funded abstinence-only curricula contain misleading or subjective statements that are either scientifically or medically inaccurate or inappropriate given the goals of the program. Some programs have avoided harmful consequences despite these shortcomings and inherent lack of information on contraceptives, condoms, and STDs. Given the substantial funding that abstinence based programs have received over the last decade and the scarcity of evaluated programs in the peer-reviewed literature, continued widespread investment of public funds in these programs should not be supported.

Comprehensive-based sexuality education curricula that include accurate information about contraception and condom use, and that may also encourage abstinence (as the only fully effective way to prevent pregnancy and the transmission of disease), continue to be the most effective at increasing adolescents’ knowledge about pregnancy and disease prevention.

RECOMMENDATIONS

The Council on Science and Public Health recommends that the following statements be adopted in lieu of Substitute Resolution 409 (A-08), and the remainder of the report be filed:

1. That our American Medical Association (AMA) recognize that increasing sexually transmitted disease (STD) and human immunodeficiency virus (HIV) transmission rates among youth, as well as a recent increase in the national teen pregnancy rate, indicate a gap in public health education and should be addressed; and that comprehensive-based sex education is currently the most effective strategy to address these public health problems. (New HOD Policy)

2. That our AMA support the redirection of federal resources toward the development and dissemination of more comprehensive health and sex education programs that are shown to be efficacious by rigorous scientific methodology. This includes programs that include scientifically accurate education on abstinence, in addition to contraception and condom use, transmission of STDs and HIV, and teen pregnancy. (New HOD Policy)


Fiscal Note: < $500
REFERENCES


APPENDIX. RELEVANT AMA POLICY

**H-170.977 Comprehensive Health Education**

(1) Educational testing to confirm understanding of health education information should be encouraged. (2) The AMA accepts the CDC guidelines on comprehensive health education. The CDC defines its concept of comprehensive school health education as follows: (a) a documented, planned, and sequential program of health education for students in grades kindergarten through 12; (b) a curriculum that addresses and integrates education about a range of categorical health problems and issues (e.g., human immunodeficiency virus (HIV) infection, drug abuse, drinking and driving, emotional health, environmental pollution) at developmentally appropriate ages; (c) activities to help young people develop the skills they will need to avoid: (i) behaviors that result in unintentional and intentional injuries; (ii) drug and alcohol abuse; (iii) tobacco use; (iv) sexual behaviors that result in HIV infection, other sexually transmitted diseases, and unintended pregnancies; (v) imprudent dietary patterns; and (vi) inadequate physical activity; (d) instruction provided for a prescribed amount of time at each grade level; (e) management and coordination in each school by an education professional trained to implement the program; (f) instruction from teachers who have been trained to teach the subject; (g) involvement of parents, health professionals, and other concerned community members; and (h) periodic evaluations, updating, and improvement. (BOT Rep. X, A-92; Modified: CME Rep. 2, A-03; Reaffirmation A-04)

**H-170.968 Sexuality Education, Abstinence, and Distribution of Condoms in Schools**

Our AMA:

(1) Recognizes that the primary responsibility for family life education is in the home, and additionally supports the concept of a complementary family life and sexuality education program in the schools at all levels, at local option and direction;

(2) Urges schools to implement comprehensive, developmentally appropriate sexuality education programs that: (a) are based on rigorous, peer reviewed science; (b) show promise for delaying the onset of sexual activity and a reduction in sexual behavior that puts adolescents at risk for contracting human immunodeficiency virus (HIV) and other sexually transmitted diseases and for becoming pregnant; (c) include an integrated strategy for making condoms available to students and for providing both factual information and skill-building related to reproductive biology, sexual abstinence, sexual responsibility, contraceptives including condoms, alternatives in birth control, and other issues aimed at prevention of pregnancy and sexual transmission of diseases; (d) utilize classroom teachers and other professionals who have shown an aptitude for working with young people and who have received special training that includes addressing the needs of gay, lesbian, and bisexual youth; (e) include ample involvement of parents, health professionals, and other concerned members of the community in the development of the program; and (f) are part of an overall health education program;

(3) Continues to monitor future research findings related to emerging initiatives that include abstinence-only, school-based sexuality education, and school-based condom availability programs that address sexually transmitted diseases and pregnancy prevention for young people and report back to the House of Delegates as appropriate;

(4) Will work with the United States Surgeon General to design programs that address communities of color and youth in high risk situations within the context of a comprehensive school health education program;

(5) Opposes the sole use of abstinence-only education, as defined by the 1996 Temporary Assistance to Needy Families Act (P.L. 104-193), within school systems;

(6) Endorses comprehensive family life education in lieu of abstinence-only education, unless research shows
abstinence-only education to be superior in preventing negative health outcomes;

(7) Supports federal funding of comprehensive sex education programs that stress the importance of abstinence in preventing unwanted teenage pregnancy and sexually transmitted infections, and also teach about contraceptive choices and safer sex, and opposes federal funding of community-based programs that do not show evidence-based benefits; and

(8) Extends its support of comprehensive family-life education to community-based programs promoting abstinence as the best method to prevent teenage pregnancy and sexually-transmitted diseases while also discussing the roles of condoms and birth control, as endorsed for school systems in this policy. (CSA Rep. 7 and Reaffirmation I-99; Reaffirmed: Res. 403, A-01; Modified Res. 441, A-03; Appended: Res. 834, I-04)