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Abstinence Education Reform:

For the Improvement of Adolescent Sexual Health

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Glossary of Terms

ACF	Administration for Children and Families
AE	Abstinence Education
AMFAR	American Foundation for AIDS Research
AOE	Abstinence Only Education (Opponents of AE refer it as such)
AHA	American Health Association
AWCSE	Abstinence Within Comprehensive Sex Education
CDC	Center for Disease Control
FRC	Family Research Council
HHS	US Department of Health and Human Services
NCPTUP	National Campaign to Prevent Teen Pregnancy and Unplanned Pregnancy

Abstract

Due to recent legislative action, Comprehensive Sexual Education (CSE) is replacing Abstinence Education (AE) for adolescents, as defined by Section 510 of the Social Security Act. However, new research is showing that certain types of AE are effective. As a result, a new type of AE is emerging—abstinence education within comprehensive sexual education (AWCSE). It is argued that effective AE should be taught independently of safer sex approaches, with equal or more time given to abstinence. This work thoroughly examines the strengths and weaknesses of CSE and AE, and offers suggestions for the improvement of AE programs. In light of the current adolescent sexual health crisis, multiple effective AE approaches must be expeditiously and thoughtfully developed and researched.

Introduction

In the United States, effective abstinence education is in danger of extinction. In recent years studies have emerged claiming that abstinence education is not effective. These studies have been widely accepted by the sexual health education community without much scrutiny. However, new research is showing that *certain types* of abstinence education are effective among teens. There are many abstinence programs in the United States, but what makes a quality and effective abstinence program for teenagers? A high-quality and effective abstinence education program should focus on primary prevention strategies that incorporate the participation of key individuals, such as children and parents, and should promote a wide variety of children's developmental assets.

This work is for sexual health educators and parents who are at least somewhat open to abstinence education—others who fundamentally disagree with the concept of teaching sexual abstinence will probably not find this paper compatible with their worldview. However, they may find this article helpful in understanding the abstinence educator's approach to sexual health education.

The first objective of this work is to give the reader an overview of the complexities of teen sexuality in the United States. This foundation supports the concept of abstinence education as a primary tool in sexual health prevention strategies.

Another objective of this work is to build a bridge between differing opinions of those in favor of abstinence education, and those who are not. Children and teenagers suffer serious consequences every day while pro-abstinence and anti-abstinence groups attempt to invalidate one another's perspectives. These worldviews do not have to agree on every level to

collaborate on this important issue. If either perspective is completely eliminated, needless suffering of youth will likely continue and even increase. Abstinence education programs must not be eliminated from sexual health education; doing so would be detrimental to the long-term health of teenagers. Further, because abstinence is still the only 100% effective way for teens to avoid the risks of premature sex, abstinence education must have a predominant place-- not a secondary place-- at the table of sexual health education.

The final objective of this work is to make specific recommendations for the reformation and improvement of abstinence education that can be useful to sexual health educators in the public and private sectors.

Many abstinence education programs and comprehensive sexual health curriculums must be reformed if they are going to be effective. Educators on both sides of the issue must evaluate the criticisms of those who oppose their work. They must also study the work of those who have been successful at abstinence education; in so doing they will maximize the effectiveness of their programs.

The Consequences of Teen Sex

The Center for Disease Control (CDC) reported that approximately forty-eight percent of all teenagers in the Unites States have had sex (Eaton et al., 2008). Encouragingly, the number of sexually experienced teenagers has decreased over the last couple of decades from 54% in 1991, to 48% in 2008 (Eaton et al. 2008). Still, the problems of teen sex are paramount.

Teen sex can have debilitating consequences that last a lifetime-- something most teens are not prepared for when they make the choice to become sexually active. If they are to avoid the risks of sex, teenagers in the United States are in need of increased and widespread intervention.

Early Sexual Debut

Perhaps the most significant contributor to the risks of teen sex is *early sexual debut*. The earlier a person becomes sexually active, the more sexual partners they are likely to have. The more sexual partners they have, the more risks they face. In a review of studies, Santa Maria and Thickstun (2008) showed:

> Females who begin sexual activity between the ages of 15-18 will have, on average, more than 7 voluntary sexual partners during their lives. In contrast, females who wait to have sex until they are 25 years old will have, on average, 2 sexual partners in their lifetime. (p. 176)

The data showed that the trend was similar for males. Figure 1 shows the average number of sex partners for each corresponding age group.

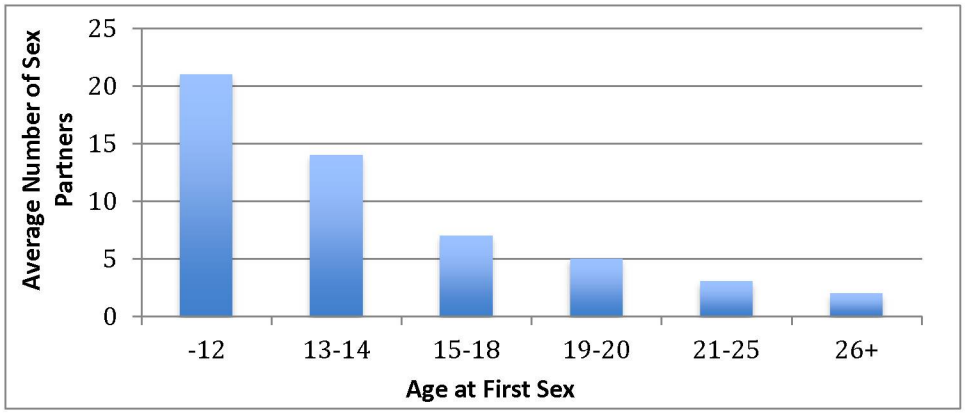

Figure 1. How Many Sex Partners Will They Have?

From Building Family Connections Training Guide (p.165), by D. Santa Maria and P. Thickstun, 2008, Austin, TX: Medical Institute of Sexual Health. Copyright 2008 by Medical Institute of Sexual Health. Reprinted with Permission.

There are many risks associated with early sexual debut. Warren et al. (1997) found that teenagers who have sex earlier have more health problems, less ability to economically produce later in life, and less educational achievement. The most significant risks that are posed when teenagers become sexually active include: sexually transmitted infections, teen pregnancy, and negative psychological factors of teen sex. This work will briefly summarize each of these risks in order to help readers understand their magnitude and the reality that teenagers unwittingly face when they have sex.

Sexually Transmitted Infections

One of the greatest risks of sexual activity is the potential transmission of *sexually transmitted infections* (STIs), sometimes referred to as *sexually transmitted diseases* (STDs). According to the American Social Health Association (2010), the terms are sometimes used interchangeably. However, they are not exactly the same. STI is a broader term, used to describe an infection that may or may not have symptoms and that is transmissible through

sexual contact. The term *STD* implies a transmissible infection that is symptomatic. This work uses both terms interchangeably, as do most of its sources.

There are more than 25 infections that are spread through sexual activity (Golden, 2003). The Center for Disease Control (2007a) reported that there are 19 million new cases of STDs that occur every year. Almost half of those cases are among youth, ages 15-24.

The rampant spread of STIs among teenagers is due, in part, to the fact that many infected teens are not aware that they have an STI. This is one reason why it is so important for sexually active teens to get tested for STIs that may be treatable, even if they do not have noticeable symptoms. Though rates of STI transmission are similar for males and females, females are clearly more affected by them. The CDC (2009) reported: "while adolescent males have a similar prevalence of STDs, biological differences place females at greater risk for STDs than males" (p. 1). In fact, director of the CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Kevin Fenton, M.D., stated:

> When you take into account the severe health consequences of STDs and the millions of Americans affected every year, it is clear that much more work needs to be done to prevent unintended long-term health issues. We know adolescent girls and minorities are most impacted by STDs. So it is up to us as a nation, to reach out to them and ensure we are providing the necessary prevention…. (CDC, 2009, pp. 1-2)

There are two main types of STIs, viral and bacterial. Viral infections such as HPV, Genital Herpes, and HIV can be treated, but cannot be cured. Bacterial infections such as Gonorrhea, Syphilis, and Chlamydia can be cured with antibiotics, but may cause permanent damage, such as infertility, before diagnosis and treatment.

According to the CDC (2008c) more than 50% of sexually active men and women acquire genital HPV at some point in their lives. There are over 40 types of HPV that can affect the genital areas of men and women (CDC, 2008c). Like a cold, HPV often resolves on its own, but presents the risk of cancer for some men and women.

Genital Herpes can cause reoccurring breakouts of painful genital blisters for life (CDC, 2008a). However, most people who are infected with Genital Herpes do not know they have it, which contributes to widespread infection.

In 2006, it was estimated that there were 1.1 million people living with HIV in the US alone (CDC, 2008b). Additionally, the Office of National AIDS Policy (2000) reported that half of all new HIV infections occur in young people less than 25 years of age. They also reported that "because the average duration from HIV infection to the development of AIDS is 10 years, most adults with AIDS were likely infected as adolescents or young adults" (2000, p. 1).

Another factor that contributes to STI transmission is that many adolescents participate in oral sex because they think it is safer than vaginal intercourse. While oral sex may protect teens from pregnancy, alarming numbers of youth are developing STDs in their mouths and throats.

Adolescent STIs are of epidemic proportion. All dimensions of prevention education, especially abstinence education, must be improved upon and strengthened if the United States is to see lasting change. Targeted preventative approaches must be developed as soon as possible if teenage sexual health is to be improved.

Teen Pregnancy

The Guttmacher Institute (2006) reported that U.S. teen pregnancy rates are the highest in the industrialized world—with more than 750,000 teen pregnancies per year. Of those, about 420,000 teens give birth, and 85% of those births are to unmarried teens (CDC, 2007). Some young women choose to parent their baby; others have an abortion or a miscarriage, and fewer place their child for adoption. Regardless of their choice, the lives of *both* parents can be affected by those choices.

Those who choose to parent are faced with complex challenges, and some navigate those challenges better than others. The Federal Interagency Forum on Child and Family Statistics (2005) reported that teens who become parents are more likely to face the challenges of poverty including: having fewer educational opportunities, earning lower wages, having fewer job prospects and using the welfare system.

Young women who terminate their pregnancy, and those who place their baby for adoption also face challenges. There are physical and psychological risks associated with both abortion and childbirth. Though many of the risks are highly debated, they remain a reality for many young women and men.

It should be the goal of all programs and organizations to help young women and men avoid, not simply manage, these difficult decisions and life-changing scenarios. This is another reason why quality abstinence education must have a spacious place at the table of sexual health education.

Psychological Effects of Teenage Sexuality

Physical risks aside, adolescents are also psychologically affected by early sexual debut. Some researchers and educators deny the link between negative emotional effects and early sexual debut. However, there is a growing body of research that suggests otherwise.

Regret is a common emotion among sexually experienced adolescents. According to the U.S. Department of Health and Human Services (2007), 66% of sexually experienced teens wish they had waited longer to have first intercourse. The same source noted that an even higher percentage of younger teens experience regret. This finding is significant because teen sex is often portrayed as a healthy activity with minimal risks-- if it is *protected.* Clearly, many sexually active teens are navigating the risks unsuccessfully, and they regret it.

According to Rosenthal et al. and Hallfors et al. (as cited in Santa Maria and Thickstun, 2008), sexually active teens are also more likely to experience depression and attempted suicide than their non-sexually active peers. Understandably, pregnancy or the contraction of an STI increases depression in teenagers. These issues, and many other risky behaviors and outcomes, are often linked—which means multiple intensive and varied approaches are necessary to impact at-risk youth.

In western culture it is believed that adolescence is a time for young people to learn and dream about and explore life, as they become healthy and productive citizens. This is more difficult when youth are caught in a trap of navigating untimely pregnancies, STDs, and related psychological factors.

Teen Sex Is Unhealthy

There is little debate that *unprotected* sex is unhealthy for teenagers; yet many sexual health curriculums portray condoms as a catchall solution for STDs and teen pregnancy. The claim is that sex is safest when condoms are used correctly and consistently every time a teen has sex. What teens may miss, is that condoms do not offer 100% protection against all STDs, even when they are used consistently and correctly every time (see Table 1). Santa Maria and Thickstun (2008) also emphasized that there has not been much research about the effectiveness of condom use with anal or oral sex.

Additionally, research on teen brain development has shown that many adolescents are not developmentally prepared to use condoms correctly and consistently every time they have intercourse (Weed, 2008). Weinberger, Elvevag & Giedd (2005) noted that the pre-frontal cortex-- the section of the brain responsible for making sound judgments, impulse control, and effective planning-- is not fully developed until around age 25. This research is problematic for supporters of safe sex campaigns, and it is one of the primary arguments in favor of abstinence education. Abstinence education, if done well, can help teenagers think through their decisions in advance and equip them to avoid sexual situations that they are not ready for.

Table 1

When Condoms are Used Consistently and Correctly for Vaginal Sex,

It Reduces The Chance of Getting an STI By:

STI	Approximate Risk Reduction
HIV	85%
Chlamydia	50%
Gonorrhea	50%
Syphilis	50%
Herpes	50%
HPV	<50%

Note. From Building Family Connections Training Guide (p.116), by D. Santa Maria and P. Thickstun, 2008, Austin, TX: Medical Institute of Sexual Health.

Abstinence Education v. Comprehensive Sexual Education: Understanding the Debate

Types of Sexual Health Education

Safe Sex Approaches. Some educators think that abstinence education is unrealistic. They believe teens are going to have sex-- no matter what they are taught. Educators of this persuasion believe teens should be instructed on how to do it as safely as possible. Those following this ideology tend to be focused on campaigns for *safe sex* or *safer sex,* while minimizing and sometimes denigrating abstinence education.

Abstinence-Centered Approaches. Other educators prefer to address the problems of teen sexuality by focusing on the prevention of teen sex, with an emphasis on sexual abstinence until a later time in life—or until marriage. They do this by teaching the risks of teen sex and teaching life skills that help teens delay sexual debut or cease sexual activity. Proponents refer to this type of education as *abstinence education (AE),* an umbrella term for all types of abstinence-centered programs. Opponents typically refer to it as *abstinence-only (AOE), or abstinence-only-until-marriage education.* Opponents have made this distinction because *only* abstinence until marriage is taught—without safe sex education. This is per the guidelines for federally funded abstinence programs. However, not all AE programs are federally funded, some are privately funded by supporting organizations.

Comprehensive Sexual Health Approaches. In addition to safer sex and abstinence-only education, there are a variety of middle ground approaches that typically fall on one side of the spectrum or the other. On one end of the spectrum are programs that promote abstinence and offer some information on condoms and contraceptive use. On the other end of the spectrum are programs that promote safer sex strategies while encouraging exploration of sexuality;

these often give minimal attention to abstinence training. All of these approaches are referred to as *comprehensive sexual education* (CSE) because they include at least an element of both safer sex and abstinence education. However, according to a review of highly recommended CSE programs-- conducted for the U.S. Department of Health and Human Services (2007)-- the most widely used CSE curricula tend to err on the side of a safe-sex approach with significantly less attention to abstinence.

A Brief History of Sexual Health Education in The U.S.

In 1981 Congress passed the Adolescent Family Life Act (AFLA). This Act funded new programs that promoted self-discipline in adolescent sex education and was sometimes referred to as *chastity education*. Planned Parenthood (2007) noted that much of the funding went to church and private organizations to create the early forms of abstinence-only education programs. The American Civil Liberties Union (ACLU) opposed the Act. The ACLU claimed that the AFLA was "a Trojan horse smuggling the values of the Christian right – particularly its opposition to abortion—to public-school children at public expense" (Planned Parenthood, 2009, p. 2). In the early 1990s, the U.S. Supreme Court ruled that abstinence education programs must omit all religious references from their programs, in keeping with separation of church and state rulings (Planned Parenthood, 2009).

With increased funding over the last thirty years, abstinence educators have created and distributed abstinence programs throughout the United States. In 1996, the Welfare Reform Act initiated the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, known as Title V. Beginning in 1998, Title V funding was granted to abstinence-only education programs. Additionally, the act mandated state budgets to match three-quarters of

the federal funding (American Foundation for Aids Research, 2005). Further, Community-Based Abstinence Education (CBAE) and Special Programs of National and Regional Significance (SPRANS) grants were created in 2001. Operated by the Administration for Children and Families, these programs were created for public and private entities to offer abstinence-only programs.

While funding for abstinence education has increased over the last thirty years, so has opposition to abstinence education has also increased. In 2004, Representative Henry Waxman presented a report before the U.S. House of Representatives called *The Content of Federally Funded Abstinence-Only Education Programs*. This report is known as *The Waxman Report*, and was used to showcase criticisms of AOE. The Waxman report further fueled the movement in opposition to AOE programs.

A couple of years later, The National Campaign to Prevent Teen and Unplanned Pregnancy (NCPTUP) released an expansive report by Kirby (2007) that reviewed a large body of studies on sexual health education, including abstinence-only and comprehensive programs. Kirby concluded that the reviewed AE programs showed little or no success in delaying sexual initiation. He acknowledged that not many studies had yet been conducted on abstinence programs. Kirby recommended that "efforts should be directed toward carefully developing and evaluating these [abstinence] programs" (p.15). However, for many educators and politicians this review further deemed abstinence-only education ineffective. Proponents for AE have argued that the studies used by Kirby were conducted on early abstinence programs that have evolved significantly over the last couple of decades (Weed, 2008b). As a result of these

criticisms, in early 2010 the Obama administration decided to redirect AOE funds toward comprehensive and pregnancy prevention approaches.

The battle between abstinence education and comprehensive education has been volatile, with both sides attempting to denigrate the other approach. The following sections review arguments for and against comprehensive and abstinence education approaches, gleaned from an in-depth review of pertinent literature.

The Case for Comprehensive

Comprehensive sex education strives to include accurate information about contraceptives and condom-centered STD prevention for students of all sexual orientations and some information on abstinence. Criticisms of abstinence-only education have helped shape comprehensive programs in several ways—a few of which should be discussed in order to better understand CSE.

CSE Provides Medically and Scientifically Accurate Information. Santelli et al. (2006) and the U.S. House of Representatives Committee on Government Reform (2007) noted that a primary criticism of AOE has been that it contains inaccurate information and information based on religious teachings, not science. Therefore, one of the primary reasons many educators have endorsed CSE it is that it aims to provide medically and scientifically accurate information to youth. Medically and scientifically accurate information is that which has been published by scholarly, reputable, and peer-reviewed sources.

CSE Gives Sexually Active Teens Needed Information. A second criticism emphasized by Santelli et al. (2006), is that AOE does not offer safer sex education for adolescents that choose to become sexually active before marriage. Santelli et al. pointed out that most Americans do become sexually active before marriage. CSE teaches students how to protect themselves from STDs and pregnancy if they choose to be sexually active. In support of CSE Santelli et al. (2006) stated: "We believe that it is unethical to provide misinformation or to withhold information from adolescents about sexual health, including ways for sexually active teens to protect themselves from STIs and pregnancy" (p.78-79).

Santelli, et al. (2006) also noted that the age of first sexual intercourse has decreased, and the age of first marriage has increased, making abstinence until marriage a difficult goal. Abma, Martinez, Mosher and Dawson and Fields (as cited in Santelli et al., 2006) showed that the median age of sexual debut has decreased and the median age of first marriage has increased in women, leaving a larger span of time for individuals before potentially entering a long-term, mutually monogamous relationship. Studies showed that in 1970 median age of first intercourse for women was 19.2 years; and in 2002, the median age of first intercourse was 17.4 years. Likewise, in 1970 median age of first marriage for women was 20.8 years; and in 2002, it was 25.3 years. For men in 2002, median age at first sex was 17.7 years and median age for marriage was 27.1 years. (Santelli et al., 2006)

CSE Gives Information to Students of All Sexual Orientations. Thirdly, AOE has been criticized for ignoring the needs of students of all sexual orientations (Santelli et al., 2006). Therefore, CSE aims to provide students with more explicit sexual health information that is inclusive of gay, lesbian, bi-sexual, transgender, and questioning (GLBTQ) youth, in addition to explicit information for heterosexual youth.

Criticisms of AOE aside, proponents of CSE support it for a few other important reasons. These include public and organizational support for CSE, as well as the emergence of studies in favor of CSE.

Public support. Public support for CSE has grown as young people in America have been faced with nationwide epidemics of STDs and as teen pregnancy rates have begun to climb. Public opinion polls by the National Campaign to Prevent Teen Pregnancy (Albert, 2003), and the Alan Guttmacher Institute (2001) indicated that there is strong support for abstinence as a

behavioral goal for adolescents; yet according to these polls, support for teaching students about condom and contraceptive use is equally strong.

Organizational Support. Many medical professionals and organizations endorse CSE, including the American College Health Association (ACHA) and the Society for Adolescent Medicine (SAM). On behalf of SAM, Santelli et al. (2006) offered the following recommendation: "Current U.S. federal law and guidelines regarding abstinence-only funding are ethically flawed and interfere with fundamental human rights…. Current funding for abstinence-only programs should be replaced with funding for programs that offer comprehensive, medically accurate sexuality education" (p. 86). Additionally, the American Foundation for AIDS Research (2005) recommended a similar path:

> Scientific evidence does not support the U.S. government's current policy of making abstinence-only-until-marriage programs the cornerstone of its HIV prevention strategy for young people…. Rather, the scientific evidence to date suggests that investing in comprehensive sex education that includes support for abstinence but also provides risk-reduction information would be a more effective HIV prevention strategy for young people. (p. 2)

Planned Parenthood Federation of America (2007), one of the nation's largest supporters and providers of CSE also asserted that AOE does not work, and claimed that: "Students in comprehensive sexuality education classes do not engage in sexual activity more often or earlier, but do use contraception and practice safer sex more consistently when they become sexually active" (p. 7). Planned Parenthood (2007) also declared that, "Every reputable sexuality

education organization in the U.S., as well as prominent health organizations including the American Medical Association, have denounced abstinence-only sexuality programs" (p. 8).

Comprehensive Studies. As a response to public support of both abstinence and safer-sex education, scholars began to review CSE and AOE programs for effectiveness. Peer reviewed studies have emerged that support comprehensive sexual health education approaches. Some of these studies indicated that when an abstinence message is included in CSE, there is a delay in initiation of sex for some teens. Widespread reporting of this information has been an important tool for proponents of CSE who are strongly opposed to AOE programs.

Kirby (as cited in Santelli et al., 2006) reviewed studies for 28 comprehensive programs that were evaluated for their effectiveness. Of those, nine programs resulted in delayed initiation of sexual intercourse, 18 showed no change in behavior, and one program yielded earlier initiation of sexual intercourse.

Manlove, Romano-Papillo, and Ikramullah (2004) reviewed four types of comprehensive programs: (a) sex education programs, (b) HIV/STI prevention programs, (c) youth development programs, and (d) service learning programs. Of the programs reviewed, Manlove et al. (2004) found that six out of nine sex education programs delayed sexual debut, five of seven HIV/STI programs delayed sexual debut, all three of the youth development programs and the service learning program delayed sexual debut. In the same study, two types of abstinence programs were also evaluated, one of which delayed sexual debut.

Considering that a great deal of funds have been channeled into AOE, with apparently minimal results, and considering the aforementioned studies-- it should come as no surprise

that the U.S. has been grappling for solutions to the current adolescent sexual health crisis. Before concluding indefinitely that CSE is the one-size-fits-all solution, one must take a closer look at the criticisms of comprehensive sexuality education.

Problems with Comprehensive Sex Education

Rarely Prevents Sexual Activity. Comprehensive programs claim that they do not *increase* sexual activity, but other studies have shown that they rarely *prevent* sexual activity—which is the goal of abstinence education. When teens avoid sexual activity, they enjoy health benefits, and avoid problems their sexually experienced peers may face. In 2007, the Administration for Children and Families (ACF), of the Department of Health and Human Services (HHS) released a report detailing a review of well-known CSE curriculums that were advertised as *effective, and comprehensive* or *abstinence-plus* programs. Both of the terms *comprehensive* and *abstinence-plus* imply that abstinence is taught. Further the advertisements imply that the curriculum is *effective*. The HHS (2007) review concluded that the nine commonly used CSE curriculums showed "small positive impacts on increasing condom use among youth" (p. 8), partially meeting the claim for effectiveness. The study also revealed that "only a couple of curricula show impacts on delaying sexual debut; moreover, effects most often disappear over time" (p. 8-9). This does not strongly support the claim of effectiveness for abstinence. The review noted that the "stated purpose and the actual content of these curricula emphasize ways to lessen risks associated with sexual activity—and not necessarily avoiding sexual activity—may explain why research shows them to be more effective at increasing condom use then at delaying sexual debut" (p. 9).

Minimal Time Spent Promoting Abstinence. In an effort to gain public support, many CSE programs have marketed themselves as abstinence-plus, when in reality, they spend minimal time promoting abstinence. The National Abstinence Education Association (2007) noted of CSE curricula: "Instead [of promoting abstinence], there is a presumption and often an encouragement of sexual activity" (Para. 2). The HHS (2007) report found:

> Of the curricula reviewed, the curriculum with the most balanced discussions of abstinence and safer-sex still discussed condoms and contraception nearly seven times more than abstinence. Three of the nine curricula reviewed did not have a stated purpose of promoting abstinence; however, two of these three curricula still discussed abstinence as an option (although, again, discussions of condoms and safer sex predominated). As a last note, it is important to recognize that, although some of the curricula do not include abstinence as a stated purpose, some sexuality information organizations and resources recommend these curricula as comprehensive sex education. (p. 6)

The HHS (2007) report noted that one of the reviewed CSE curricula, *Aids Prevention for Adolescents in School*, "makes *no* [emphasis added] reference to abstinence, committed relationships, or marriage" (p. 24).

Safe Sex and Abstinence Portrayed as Equally Safe. Safe sex and Abstinence are not equally safe. Taverner (2007) noted that when abstinence from sexual activity is *practiced* 100% of the time, it is the only 100% sure way to avoid pregnancy and STDs. Likewise, condoms are primarily effective when used consistently, with every act of intercourse, and correctly. Even then, condoms are not 100% effective. Studies by Crosby et al. and Winer et al. (as cited in

Weed, 2008) showed that "even with consistent [condom] use, 20% to 30% of those exposed to an STD will acquire it, though they are assumed to be protected" (p.5). Students are sometimes led to believe that if they use hormonal contraceptives for pregnancy prevention and condoms for STD prevention, they are 100% safe—but that is medically inaccurate. It is even less safe if teens are practicing *typical use*—which is inconsistent or incorrect use of condoms. Fu et al. (as cited in Hendricks et al., 2006) showed typical use of condoms and contraceptives among low socioeconomic status females:

> Within one year, 13% of… females under 20 years of age using the "pill" become pregnant, and 23% using condoms become pregnant. A much larger percentage become pregnant within one year if they are cohabitating– 48% using the "pill" and 72% using condoms. (p. 5)

Crosby et al. (as cited in Hendricks et al., 2006) also found that "18% of African American adolescent females who reported 100% condom use acquired chlamydia, gonorrhea, or trichomoniasis over a 6-month study period" (p. 5).

Further, studies by Giedd et al. and Romanczyk et al. (as cited in Weed, 2008b) reported that the areas of the adolescent brain responsible for "impulse control, risk assessment, anticipation of consequences, forward planning, and reasoned judgment—all of which are required for consistent correct condom use— are not fully developed until… the early twenties" (p. 10).

Withholding Information and Inaccuracies. HHS (2007) reported another problem with comprehensive sexual education: CSE sometimes withholds important information about condom failure rates from adolescents for fear they will abandon the practice of using condoms

altogether. The HHS also reported that some CSE curricula use subjective terms when describing effectiveness of condoms in protecting against certain STDs. For example, one curriculum stated, "latex condoms provide *good* [emphasis added] protection from HIV when used consistently and correctly…." (p. 14). However, estimates for risk reduction of HIV when always using a condom for vaginal sex is about 85% (Santa Maria and Thickstun, 2008).

Another CSE curricula, designed for 11-13 year olds, was misleading. It stated: "Condoms make you feel good about yourself. *You know you are safe* [emphasis added] when you use condoms", and "the *surest way* [emphasis added] not to get HIV is to practice safer sex". These statements are inaccurate because the only 100% safe way, and surest way to avoid these things is to practice abstinence from sexual activity.

Likewise, Weed (2008b) pointed out another significant incidence where vital information was withheld:

> As early as 1999, the CDC knew that HPV was directly linked to cancer, and that condom use was not an effective barrier to transmission of the virus, but chose not to warn the public about this because they felt it would be counterproductive to condom use that could still provide some protection for other STDs. At the same time some abstinence programs were criticized for stressing these facts about HPV. (p. 9)

This is not providing teenagers-- or the public in general—with accurate and up-to-date medical information to which they have a right. Weed (2008b) also contended that most parents object to having information withheld from their children about the limitations of condoms in preventing STDs.

Parents Oppose Sexually Explicit Content. CSE has sexually explicit content that parents largely disapprove of (Weed, 2008). Weed noted, "When asked to respond to the actual content of popular comprehensive sex education curriculum materials, the large majority of parents (70% to 90%) opposed the explicit information they contained about sexual practices, condom application and use, and masturbation" (p. 12).

Comprehensive programs often promote sexual exploration and activity among teens, sometimes including children younger than 13 years of age. Several polls, including NPR/Kaiser Foundation 2004 and Zogby 2003 and 2004 (as cited in Weed, 2008b), revealed that only 7% of parents wanted sexual health programs to send a permissive message about teen sex, "as long as they use a condom" (p. 12). Based on the aforementioned polls, and according to HHS (2007), several widely used CSE programs have presented information that is contrary to most parents' wishes. For example one curriculum, *Reducing the Risk* stated, "What would be the most romantic way to use the condom and foam?" (HHS, 2007, p. 14).

Be Proud! Be Responsible!, another CSE curriculum listed *showering together* as a no-risk activity (HHS, 2007). This curriculum also suggested that students could, "Use condoms as a method of foreplay…Hide [condoms] on your body and ask your partner to find them" (p.17). The curriculum also stated, "Once you and a partner agree to use condoms, do something positive and fun. Go to the store together. Buy lots of different brands and colors. Plan a special day when you can experiment. Just talking about how you'll use all of those condoms can be a turn on" (p. 16).

Making Proud Choices, curriculum for 11-13 year olds exhorted, "Girls who carry condoms are smart, responsible, proud, and safe" (HHS, 2007, p. 34). There is no denying that

some young teens need to learn how to practice safer sex. However, some self-proclaimed *abstinence-plus* programs are more akin to sexual promotion programs than prevention programs.

Problems with CSE Studies. Several key studies and reports in support of CSE have significant flaws that do not accurately represent their claims of CSE's effectiveness. Weed (2008b) emphasized that sexual health education studies must measure relevant *outcomes* like teen pregnancy and STD rates in order to determine whether or not a program is *effective*. For example, Weed noted that a report from the National Campaign to Prevent Teen and Unplanned Pregnancy, *What Works 2008: Curriculum-Based Programs that Prevent Teen Pregnancy,* recommended 28 programs that claimed evidence of successfully preventing teen pregnancy. These programs were advertised as successful, as implied by the title of the report, but a breakdown of the programs revealed a different story. Weed explained:

> ...20 of those 28 programs did not even measure rates of teen pregnancy as an outcome. Of the 8 programs that did, 2 did not reduce teen pregnancy, 3 had an impact on pregnancy that lasted less than 12 months, and only 3 reduced pregnancy for 12 months or longer. Of those 3, one was not a sex education program—it did not include any sex education or discussion of sex (Lonczak et al., 2002)—and one of the remaining 2 was found to be ineffective in a second evaluation study by Dr. Doug Kirby (Kirby et al., 2005). This leaves only one comprehensive sex education program that reduced teen pregnancy rates for at least one year, out of 28 supposedly effective programs. This does not constitute 'strong evidence for success' as the brochure claims. (p. 2)

Additionally, proponents of CSE do not always hold CSE to the same standards that they hold for AOE. Weed (2008b) noted another review conducted by Kirby (2007) on 115 quality studies of sex education research. Only 22 of these studies even measured reduction of STDs as a program outcome; 20 of these did not reduce STDs. This left only two programs that reduced STDs, and these programs were with self-selecting patients in a clinical setting. None of the reviewed abstinence programs reduced STDS, but neither did any of the school or community based CSE programs.

Weed (2008b) also evaluated the Mathmatica report, a well-known report that supported CSE approaches. This report has also been used to imply that AOE does not work. Trenholm et al. (as cited in Weed, 2008b) noted that the report evaluated 4 abstinence-centered programs by measuring outcomes 4 to 6 years after the program's end, with no reinforcement of the message. Weed asserted:

> When the 107 comprehensive or condom-centered programs in the Kirby review were held to the same time frame (Kirby, 2007), not one of them reported an increase in consistent condom use (CCU), nor did any of them report a decrease in STDs over that time period. And only one program reported a decrease in pregnancy rates (Vincent et al., 2004). This lack of program impact was not similarly reported in the news as evidence that comprehensive sex education programs do not work. (p. 3)

The Case for Abstinence

Abstinence education means different things to different people. Many individuals hear the word *abstinence* and they think of *Just Say No* campaigns, others think of the *Religious Right.* Still others, including some teenagers, have no idea what abstinence means. Therefore, in order to move toward to productive discourse of the subject of abstinence education, and in keeping with the teachings of many AE programs -- a definition for use in AE and CSE programs is suggested here. *Abstinence* is: *abstaining from sexual behaviors including vaginal, oral, anal, and digital intercourse, until a time when one is in a committed, mutually monogamous relationship.* This definition is not exclusive of any person regardless of sexual orientation, and brings risk associated with sexual behaviors to a minimum.

Proponents of AE support it for a variety of reasons. Below a few of these reasons are depicted, taken from literature in support of AE:

Abstinence Education is Healthy and Holistic. A coalition of abstinence educators and researchers (Family Research Council (FRC) et al., 2009) emphasized that AE is not a *Just Say No* campaign. They asserted: "Abstinence Education (AE) addresses the physical, social, academic, and emotional needs of teens" (p. 3). The coalition also asserted that it teaches more than just the medically and scientifically accurate physical consequences of early sex—it teaches students about "self-worth, healthy relationships, education [and] career goals [and] preparing for a positive family life" (p. 3). Additionally, AE empowers adolescents of all sexual orientations with life-skills to make healthy choices.

Abstinence Offers Teens a Clear Message. One of its greatest criticisms is also one of AE's greatest strengths. Abstinence Education programs take a firm stance on the issue of teen

sex: sex is not healthy for teenagers; the risks often outweigh the benefits. Though opponents may not like it, effective programs offer a clear message. The National Campaign to Prevent Teen and Unplanned Pregnancy (2010) said that effective curricula "convince teens that *not having sex* [emphasis added] or that using contraception consistently and carefully is the *right* thing to do, as opposed to simply laying out the pros and cons of different sexual choices. That is, there is a clear message" (p.5). Hendricks et al. (2006) similarly noted that research on adolescent brain development indicates that adolescents need *direction*, not just *information*. This does not mean that AE programs should in any way demean students who choose to be sexually active, or denigrate safer-sex approaches.

Parents Support Abstinence Education. Studies show that parents support a strong abstinence message in school. Zogby and Albert (as cited in FRC et al., 2009) showed that 83% of parents say it is important for their children to postpone sex until marriage. According to these sources, when the differences between AE and CSE are explained to parents, 61% prefer AE compared to 30% in support of CSE. FRC et al. (2009) also stated: "AE teaches about sexuality using an approach that most parents approve, regardless of political persuasion" (p.3).

AE promotes open discussions between parents and teens about sexual values, expectations and boundaries (FRC et al., 2009). This is particularly important as children need direction when it comes to important issues of sexuality. No matter how accurate and thorough the education system becomes at educating teens about sexual health, it will never be a suitable substitute for parental guidance.

Abstinence Education Is Primary Prevention. Abstinence is 100% effective when practiced 100% of the time; condoms offer *partial protection* when used 100% of the time. FRC

et al. (2009) stated that AE offers total protection from physical and emotional consequences of teen sex, while condoms only offer partial protection from physical consequences and no protection from emotional consequences. That being the case, focusing all of government funding on CSE programs and eliminating quality AE programs would be equivalent to canceling all educational programs used to discourage adolescents from smoking, instead teaching them to use filtered cigarettes and how to identify early signs of emphysema. The second approach might be necessary for some teens, but many more could be spared the consequences of smoking with primary prevention.

Recent Studies Support Quality Abstinence Education Programs. Weed (2008b) noted that scientific evidence in support of high-quality, abstinence-centered sexual education programs is growing. This research has indicated that AE has a significant impact on delaying sexual activity for significant amounts of time with no negative impact on condom use by teens that are sexually active.

Weed (2008b) further asserted that many of the recent reviews of abstinence education studies were conducted on programs that were *early* prototypes of abstinence education, making the studies that have influenced recent legislative action outdated. None of the following studies were referred to in the supporting literature for CSE programs, as they were either overlooked or not yet published (Weed, 2008a). The three studies mentioned below were all school-based programs. These studies represent racially diverse demographics, showing that AE programs may be effective among diverse populations.

In the *Heritage Keepers Abstinence Education Study*, Weed et al. (2005) found that the virgin participants in the abstinence-centered intervention group were about half as likely to

initiate sexual intercourse after one year than the participants in the comparison group who had no intervention. In this study, the 1535 participants were of mixed ethnicity, and in grades 7 though 9.

Weed et al. (2008b) evaluated another abstinence curriculum, *Reasons of the Heart*, and found that the virgin participants who received the intervention were a little less than one-half as likely to initiate sexual activity as virgin participants in the comparison group. This study was conducted with 550, predominantly white adolescents.

Jemmott, Jemmott and Fong (2010), conducted a study among 662 African American students in grades 6 and 7. The students were divided into five intervention groups: a 12-hour comprehensive intervention, 8-hour comprehensive intervention, 8-hour safer sex-only intervention, 8-hour abstinence-only intervention, and a health control group. At 24 months after the initial intervention, Jemmott, et al. found that 32.6% of the students in the abstinence-only intervention had initiated intercourse, while 51.8% of the students in the safer-sex intervention had initiated intercourse, and 41.8% of the students in the comprehensive interventions had initiated intercourse. They also found that students in the abstinence-only intervention had a reduced number of sexual partners, and the abstinence-only intervention did not deter condom use for sexually active students. Though this intervention was an abstinence-only intervention, it would not have met the A-H federal definition of abstinence.

In addition to the aforementioned school-based interventions, Hendricks et al. (2006) recalled two community-based abstinence-centered interventions that showed reductions in teen pregnancy rates. Other studies have indicated that AE approaches have been successful in delaying teen sex; some of these have not been peer-reviewed, so they are not discussed here.

Opponents of Abstinence Education

Generally speaking, there are three types of opponents of AE. The first does not think AE works (Weed, 2008b). These have read studies on the inefficiencies and inaccuracies of old programs and have been led to believe that all AE programs are ineffective. Recent studies on AE have shown that this is not true; there are effective AE programs. Still, as FRC et al. noted, "Like condom education, more AE programs show no effects than positive effects" (p. 3). This does not need to be so. With emerging AE research and time to learn from past failures, abstinence-centered approaches can become much more efficient than ever.

The second type of dissenter thinks AE is not realistic. These believe that media, family and cultural influences, peer pressure and other influences make it too difficult for some or all teens to commit to or to remain abstinent.

The third type of opponent to AE has another worldview; AE goes against their core value system (Weed, 2008b). Taverner, author of a Planned Parenthood endorsed, abstinence-centered curriculum (2007) wrote of a personal communication. It read: "…I am 100% against ABSTINENCE! [*sic*]" (p. 2). Taverner recalled several other instances of CSE educators and advocates wanting no association with the term abstinence. He referred to them as *anti-abstinence*. It is likely that these individuals simply do not value teaching adolescents about abstinence. In fact, some individuals refer to abstinence education as "morally problematic, by withholding information and promoting questionable and inaccurate opinions" (Santelli et al., 2006, p. 73). Those who are anti-abstinence are the least likely to change their thinking about AE because they are fundamentally opposed to it.

Abstinence Education will not win the approval of all its critics. However, AE proponents should seek to understand the criticisms so that AE can address these issues, continue to improve its methods, and gain support from educators and legislators who may realize that this primary intervention strategy works and is relevant to adolescents. Below is an overview of many of the most prominent criticisms of AE.

Criticisms centered on A-H guidelines for federally funded programs. Several of the criticisms of AE are centered on the federal definition of abstinence education under section 510 of the 1996 Social Security Act (Santelli et al., 2006). All programs that receive federal grant monies, must abide by the definition in Table 2. Some critics noted that according to the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, AE programs are also prohibited from providing students with information about contraception and condoms, except in reference to their failure rates (AMFAR, 2005).

Santelli, et al. (2006) agreed with proponents of abstinence education: "Schools and health care providers should encourage abstinence as an important option for teenagers" (p. 1). However, the Society for Adolescent Medicine (Santelli, et al., 2006) asserted that AOE, as described by the guidelines in Table 2, should not be the "basis for health policies" and "should be abandoned" (p. 1).

Many sexual health organizations favor abandoning separate AOE programs in exchange for CSE programs that incorporate abstinence education. Doing so would require a new, undefined paradigm for abstinence. It would eliminate federal and state monies for the *effective* AOE programs along with the poorly designed AEO programs. That would be untimely as literature is showing signs of effectiveness in quality abstinence education programs.

Table 2

Federal Definition of Abstinence Education Under Section 510 of the Social Security Act

The Term *Abstinence Education* means a motivational or educational program which—

(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-age children;

(C) teaches that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases 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 increases vulnerability to sexual advances; and

(H) teaches the importance of attaining self-sufficiency before engaging in sexual activity.

Other Major criticisms of Abstinence Education

AE Denigrates Condom Use. CSE educators often criticize abstinence educators for teaching the failure rates of condoms for both pregnancy and disease prevention. Studies show that condoms can provide *increased* protection for sexually active teens, but not *total* protection. Therefore, abstinence educators should carefully consider whether they ought to present this information to sexually active students and, more importantly, *how* to present it. In the Waxman Report (U.S. House of Representatives, 2004) a case is made that several abstinence curricula "misrepresent the data to exaggerate how often condoms fail to prevent pregnancy" (p.12). For this reason, abstinence educators should be careful to understand and accurately explain the data they teach.

A common concern among critics of AE is that presenting information about condom failure rates to adolescents may result in more risky behaviors because sexually active teens may conclude that condoms do not work at all, or may conclude that condoms are not *worth* the effort. However, if students are not taught about failure rates they may not realize that there is risk involved in sex while using condoms, jeopardizing their sexual health. Instead of arguing *what* should be taught to students regarding effectiveness of condoms, AE and CSE educators must focus on relaying accurate information about condoms—not inflating, nor ignoring failure rates.

AE Ignores the Needs of Sexually Active Adolescents. Two of the goals of abstinence education are: (a) to inform students, sexually experienced or not, of the risks of teen sex; and (b) to help them make a different choice for their future-- if they so desire. If this is done in a sensitive and appropriate way, many teens respond positively to this message, no matter what

their choice is. However, AE is commonly accused of ignoring sexually active students. Santelli et al. (2006) insisted: "Programs geared to adolescents who have not yet engaged in coitus systematically ignore sexually experienced adolescents, a group with specific reproductive health needs and who often require more than abstinence education" (p. 77). Taverner (2007) also missed the point. He stated, "They tell these teens to get with the program, but have no advice otherwise, for teens that don't get with the program." In a review of AE programs, Borawski noted (as cited in Hendricks et al., 2006) that AE was "designed to address both the sexually experienced and inexperienced by emphasizing the value of renewed abstinence among the sexually experienced" (p. 14). The discrepancy is that AE is a *primary prevention strategy* (FRC et al., 2009); CSE and safer sex education are *secondary prevention* strategies. AE's and CSE's target outcomes are not the same; therefore their strategies are not the same.

The implication that supporters of AE are completely opposed to safer-sex education and CSE for sexually active students-- or those who will become sexually active-- is a common misnomer in supporting literature for CSE. For example, Santelli et al. (2006) stated that withholding information on contraceptives for sexually active students "violates the principle of beneficence (i.e., do good and avoid harm) as it may cause an adolescent to use ineffective (or no) protection against pregnancy and STIs" (p. 79). While proponents for abstinence are not in support of *all* aspects of CSE programs, many AE program advocates are not opposed to some form of CSE. Rather, they prefer that AE approaches be taught separately from CSE approaches. Jemmott, et al. (2010) found that a separate AE program was the most effective form of sex education in their study. Therefore, CSE advocates might reconsider their strategies to disqualify abstinence education, in favor of petitioning for equal program time in public schools.

AE Ignores the Needs of GLBTQ Adolescents. Proponents of CSE have claimed that AE is discriminatory toward gay, lesbian, bi-sexual, transgender, and questioning (GLBTQ) youth. One reason for this argument is because same-sex marriage is not legal in many states, which disqualifies some youth from marriage. As the federal definition for abstinence focuses on abstinence until marriage, gay and lesbian youth may be expected to be abstinent their entire lives (Santelli, 2006). However, The problem with this claim is similar to the previous argument-- AE is about primary prevention. GLBTQ youth also need primary prevention, and delaying intercourse reduces risk among GLBTQ youth as well. Further, progressive AE programs have changed their vernacular to include students of all sexual orientations. Discrimination toward GLBTQ youth must be unacceptable practice for AE, CSE, or any other programs.

AE is Inaccurate. For the past several years, critics of AE have claimed that it is medically and scientifically inaccurate. This criticism has been very effective in improving AE programs. AE programs across the nation have mobilized to find medically and scientifically accurate, peer-reviewed sources for their programs, which has added strength to their arguments. This criticism has forced many AE programs to closely examine several important areas of content including: a) psychological consequences of sex; b) risks of abortion; c) teaching religious values as fact; and d) teaching stereotypes about boys and girls as scientific fact.

The debate about psychological consequences of teen sex continues. Santelli et al. (2006) wrote, "Although federal AOE funding language requires teaching that sexual activity outside of marriage is likely to have harmful psychological effects, there are no scientific data suggesting that consensual sex between adolescents is harmful" (p. 74). Santelli et al. further asserted that early sexual debut and pregnancy have been linked with several other factors

including sexual abuse, dysfunctional social systems, and other pre-existing mental health problems, and that emotional disturbances and depression cannot solely be linked to teen sex. While these factors should be taken into consideration when discussing teen sex, other research has suggested that teen sex itself can cause emotional distress. Hallfors et al. and Rosenthal et al. (as cited in Santa Maria & Thickstun, 2008, p. 172) suggested that not only do some sexually active teens experience depression; but also, depression increases for those who become pregnant or contract an STI. Hallfors et al. also noted that teens commonly experience a lowering of self-esteem after becoming sexually active.

Another common criticism of AE is that it exaggerates problems with induced abortion, a legal medical procedure in the United States. Physical and psychological risk associated with abortion is a controversial topic that opponents of AE have claimed is not backed by science (Santelli, et al., 2008). However, this too is an issue that has conflicting research. AE programs must carefully decide whether or not they are going to present the risks of abortion. If they do, they should only do so with the support of medically and scientifically accurate, peer-reviewed research.

Opponents to AE argue that it blurs religious ideology with scientific fact. Planned Parenthood (2007), inarguably one of AE's largest opponents, claimed, "Abstinence-only programs… force-feed students religious ideology that condemns homosexuality, masturbation, abortion, and contraception. In doing so, they endanger student's sexual health" (p.1).

One does not have to be a religious fanatic to understand, teach, and practice sexual abstinence. This is a misnomer, spread by those who are fundamentally opposed to abstinence education. Abstinence education does not have to be tied to the religious right. Though many

religious people value sexual abstinence until marriage, the practice of sexual abstinence is valid *apart* from religious teachings. Though, if a teen's religion and community support abstinence, they will likely have the necessary support to delay sexual debut (Benson, 2006). Regardless, public programs that mingle religious teachings and science should abandon the practice. AE programs should use only medically and scientifically accurate data and should abandon the practice of mingling religious teachings and science in public schools. AE programs should be sensitive and affirming to all students, including those of all sexual orientations, those who have had or may have an abortion, and those who choose to be sexually active.

The Waxman Report (U.S. House of Representatives, 2004) asserted that AE programs teach stereotypes about boys and girls as scientific fact. The report claimed that AE programs teach: stereotypes that undermine girl's achievement, stereotypes that girls are weak and need protection, and stereotypes that reinforce male sexual aggressiveness. AE programs should review their content to identify and eliminate these stereotypes as much as possible. However, while there are deviations from norms of all types, gender differences that affect large portions of a community should not be ignored, but addressed with sensitivity.

In all, the Waxman Report detailed approximately 49 errors in about 5000 pages, taken from 13 abstinence curricula. The HHS (2007) argued, "…the comprehensive sex education curricula reviewed for this report have a similar rate of error compared with abstinence-until-marriage curricula" (p. 8). There are certainly a variety of AE programs and curricula that are everything their critics say they are. However, there are growing numbers of AE approaches that strive to learn from the past failures of AE and CSE, in search of best practices for educating teenagers about *how* and *why* to abstain from sex for the time being.

Compromise For a Solution

It is yet to be determined if CSE and quality AE will be able to co-exist in public schools. Despite new studies showing the effectiveness of AE interventions, it may be too late, as federal funding for AE has been cut off. Additionally, without the stipulations of the A-H Federal guidelines, there is no telling what will be required of *abstinence-within-comprehensive-sexual-education* (AWCSE). Still, hope for a compromise between the two paradigms need not be lost. In this section, suggestions for compromise will be detailed and explored.

Theoretically, according to CSE, teaching abstinence is valued and mandatory. Santelli, et al. (2006) stated: "There is broad support for abstinence as a necessary and appropriate part of sexuality education. Controversy arises when abstinence is provided to adolescents as a sole choice and where health information on other choices is restricted or misrepresented" (p. 72). Therefore, proponents of AE should petition for *equal* time with safer-sex education in all school and community-based programs, and should insist that AE curricula be taught separately, so that the message is not diluted and ineffective. Likewise, CSE proponents should prepare to expand current CSE curricula to include in-depth abstinence interventions that are offered apart from other safer-sex curricula (Jemmott, et al., 2010).

Comprehensive Approaches to Teaching Abstinence

Comprehensive approaches to teaching abstinence vary greatly. Some approaches give teens conflicting information about sexual abstinence. Some comprehensive curriculum writers fail to consult those with expertise in the field of abstinence education-- those who have valued and taught abstinence for decades, leaving room for critical error. It is possible that comprehensive writers do this because they believe that all abstinence programs are erroneous

and ineffective. This is not true. Many CSE educators do not know how to promote abstinence; therefore they should look to successful AE programs for direction.

Taverner and Montfort (2005) wrote an AWCSE curricula called *Making Sense of Abstinence.* This curriculum, published by Planned Parenthood, is a middle ground approach for AE and CSE. This award-winning curriculum generally represents abstinence as an achievable and worthwhile goal, though its effectiveness on target outcomes is not yet known. CSE supporters know it as a program that is "reframing abstinence education" (Taverner, 2007, p.1), but it has a few problems.

First, it mingles the abstinence message with a safer sex message. Second, the curriculum has objectionable content. For example, the curriculum promotes *outercourse*. Taverner and Montfort defined outercourse as "sexual behaviors without intercourse" (p.61). The curriculum stated, "When outercourse is considered consistent with a person's own definition of abstinence, most of the pleasures of sexual intercourse are possible, and much safer" (p. 61). Using this curriculum, through a process of consensus, students decide on the definition of abstinence and what sexual behaviors it allows. According to the source, abstinence might include some of the following activities: "holding hands, dry kissing, deep kissing, showering together, mutual masturbation, reading erotic literature, cuddling naked, talking sexy, oral intercourse, masturbation, watching porn videos, massage, and body painting…. " (p. 15). Many parents and educators object to teaching teenagers that these activities are safe and acceptable behaviors.

Second, abstinence should have a clear definition with the aim of keeping teens 100% safe; and this should not promote activities that are not safe. A few of the listed activities can

be so arousing that it may be difficult for young people to stop short of having intercourse. Encouraging or approving of activities that are highly arousing makes the practice of abstinence far more challenging. It also potentially endangers teens that wish to abstain from sex, and in some instances, could lead to date rape.

Alternatively, some AE programs encourage students to set physical boundaries that stop short of sexual arousal. They list a sequence of activities that can lead to digital, oral, anal, or vaginal intercourse-- and encourage teens to determine a safe place to draw a line if their goal is abstinence (Figure 2).

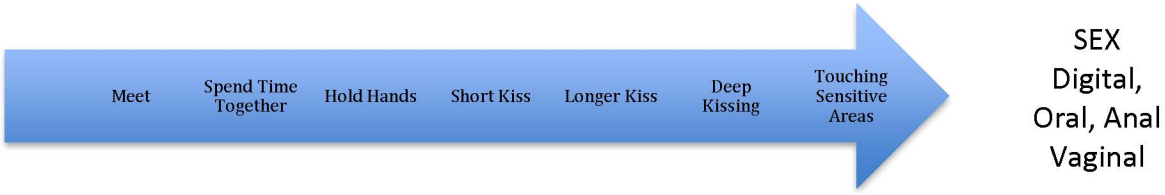

Figure 2. Sexual Progression Line

From Smart Love Presentation (p. 2-3), 2009, Tacoma, WA: Care Net Pregnancy and Family Services. Adapted with Permission.

A third problem with Taverner's curriculum is that some of the listed activities present risks similar to those of intercourse-- namely, mutual masturbation and oral intercourse. Oral intercourse is a popular activity for teens, even those who believe they are committed to *abstinence*. The widespread use of oral intercourse in place of vaginal intercourse has led to the transmission of many STIs. Taverner (2007) noted one abstinence-only curriculum defined abstinence as "abstaining from sexual intercourse" (p. 5), meaning *vaginal intercourse*. This curriculum did not warn students of the dangers of other types of intercourse, including oral and anal sex. Quality AE and AWCSE programs should not make this mistake.

B. Taverner (personal communication, March 15, 2010) asserted that *Making Sense of Abstinence* warns adolescents of the dangers of oral, anal, and vaginal intercourse. Taverner

noted that teens have already formed their impressions of what abstinence is and what it is not. *Making Sense of Abstinence* provides information to help teens protect themselves based on their own definition of abstinence. Taverner (2007) stated, "The importance of helping teens define abstinence cannot be underscored enough" (p. 5). However, a teen's decision to abstain from vaginal sex, but participate in oral sex, is inconsistent with the abstinence message which, when practiced, offers 100% safety from the risks of sex. Therefore, curricula that teach that digital, oral, and anal sex is consistent with abstinence should be revised or abandoned.

Moving Toward Effective Abstinence Education

It is unknown if funding will be reinstated in light of new evidence that AE may be effective in delaying teen sexual debut, reducing pregnancy rates and STDs, and reducing the number of sex partners without affecting condom use in the sexually active. Regardless, many AE programs must recreate themselves among CSE programs. Considering the critiques of AE and CSE, and the reviewed literature, the following recommendations are for AWCSE programs and non-federally funded AE programs.

New programs need not be limited to former approaches, as many different types of programs have shown effectiveness in delaying sexual initiation. Manlove (2004) and the National Campaign to Prevent Teen Pregnancy and Unplanned Pregnancy (NCPTUP) affirmed that studies show a variety of effective approaches with an outcome of delayed sexual initiation. These include: curriculum based school or after school programs, service learning programs, youth development programs, programs that involve parents, and community-based programs.

Primary Prevention Strategies for Abstinence Education

There may be certain standards that cannot be compromised for the integrity of the abstinence message, but some can. As previously stated, it is critical that AWCSE programs offer only current, medically and scientifically accurate information. Below, specific suggestions are made for abstinence-centered programs designed for teens and parents

Content Suggestions for Effective Abstinence Education for Teenagers.

Clear Message. The NCPTUP (2010) stated that programs for teens are most effective when they have a clear message. Programs should take the stance that abstinence is a healthy

choice for teens. This message should avoid a moralistic tone (Jemmott et al., 2010), respect student's ability to make good choices, and should not portray sex in a negative light.

Mediating Factors. Weed (2008b) stated that successful programs do not just give students accurate information, but they also "effectively address the key predictors of adolescent sexual risk behavior that are amenable to intervention" (p. 9).

Peer Norms. Studies have shown that adolescents' perception of peer behaviors influence their decisions. Santelli et al. (2004) found an association between peer norms and initiation of sexual intercourse. For example, if a thirteen-year-old perceives that many of her peers are sexually active, she may be more likely to become sexually active. Further, Santelli et al. suggested that influencing personal values and perceptions of peer behaviors may lead to a delay of sexual intercourse. In praxis, the way information is given to teens may make a difference in how they perceive peer norms. For example, when a teen is told that *many teens have had sex*, she may perceive that she is in the minority, out of place. Conversely, if she is told that *over half of all teens have never had sex*, she may be more inclined to feel comfortable with the decision to wait for sex. This is a distinguishing difference between typical safe sex approaches and typical abstinence-centered approaches.

Peer Pressure and Refusal Skills. Quality programs should address peer pressure and teach refusal skills and communication skills (NCPTUP, 2010 and Manlove, 2004). Further, studies have shown that students should be given opportunity to practice refusal skills (Manlove, 2004).

Do Not Disparage Condom Use. Programs should not disparage the efficacy of condoms (Jemmott, 2010). While students have a right to accurate information, discussion of failure

rates should either be minimal or eliminated altogether. Any discussion of condom use should be balanced, acknowledging that they *do* help protect sexually active teens from STDs and pregnancy when used consistently and correctly.

Age & Culturally Appropriate. The NCPTUP (2010) recommended that programs ought to "reflect the age, sexual experience, and culture of young people in the program" (p. 5). Participants should be actively engaged in the program, and efforts should be made to help them personalize the information (NCPUP, 2010). Some studies have suggested that AE may be more effective in delaying sexual debut with younger teens than with older teens or people in committed relationships (Manlove, 2004 and Jemmott et al., 2010). Therefore AE strategies for older teens might continue to present a strong abstinence message while emphasizing a new commitment to delaying further sexual activity as a safe choice.

Plan For Success. Taverner (2007) pointed out that abstinence is a *method* to be used, not just *a state of being*. The former requires thinking and planning, the later requires nothing. For students to be successful at abstinence, they need to think through their options and make a plan for success. Successful programs nurture decision-making skills and offer teens ideas to help them thoughtfully make a plan for using the method of abstinence.

Suggestions for Program Implementation For Teenagers

Effective Messengers. Weed (2008b) suggested that the messenger might be just as important as the message. Weed stated: "Effective teachers make more of a difference in program outcomes than do printed materials. These teachers engage students in the learning process, gain their respect, model their message, and believe in their ability to impact students" (p. 9). A well-meaning instructor that does not relate well to teens or teen culture may face

insurmountable barriers to success. Supportive and well-trained leaders are of upmost importance in programs' success (NCPTUP, 2010).

Adequate Time and Dosage. Some programs are simply not long enough to make a lasting impact. Manlove (2004) and NCPTUP (2010) recommended that programs be of *sufficient length of time,* more than a few weeks long. According to these sources, longer-lasting programs show more lasting results. Weed (2008b), Jemmott et al. (2010) and Manlove (2004) also suggested that adequate dosages might positively impact program outcomes. In the Jemmott et al. abstinence-only intervention, participants were randomly assigned to either receive an intervention-maintenance dosage or not. Students who received the booster interventions did not show any statistically significant decrease in sexual initiation compared with those who did not receive the booster, but the sexually active students in the abstinence-only intervention did show a statistically significant decrease in number of sexual partners.

Evaluation. Weed (2008b) emphasized the need for quality program evaluation, a common criticism of AE programs. Weed also noted that "programs should take seriously the lessons learned, especially those that identify program shortcomings" (p. 9).

Suggestions for Effective Programs for Parents.

There is a broad range of options for parent programs. These can involve both parents and adolescents, or just parents. They can be offered in community-based settings and can target moms, dads, or both parents. Effective parent programs teach parents about effective communication with their teens on sexual and other related topics (NCPTUP, 2010).

Communicate desire for children to wait. It is important for parents to let their teens know what their hopes and expectations are for them regarding sex; they should express their

desire for their children to wait to have sex. Albert (2004b) noted that 88% of teens reported that it would be easier to avoid sexual activity if they were able to have more open and honest conversations with their parents about these topics.

Nurture decision-making skills. Parents should also be taught how to nurture decision-making skills in their adolescents. Research on brain development has shown that the part of a teens' brain that is responsible for making decisions is not fully mature until the early to mid 20's (Santa Maria and Thickstun, 2008). Therefore, they need parent's guidance to help them make good decisions.

Promote the 40 Developmental Assets. In addition to these suggestions, parent programs should encourage parents to familiarize themselves with and promote the 40 Developmental Assets for their children and communities (Benson, 2006).

Promotion of the Developmental Assets

Many AE programs have become singly focused on *preventing* high-risk behaviors, but *promotion* is needed as much as prevention. Benson (2006), of the Search Institute stated:

> As important as it is to reduce or prevent high-risk behaviors, this is only part of what is needed to move young people along the road to a successful life. There seems to be a general consensus on the bad things we want to prevent, but we have not yet achieved a parallel consensus on what we want to promote or encourage. (p. 82)

The 40 Developmental Assets (see Table 3) have emerged in response to the need for promotion. The Developmental Assets focus on a more holistic approach to minimizing risk behaviors for children and teens. The assets are aimed at the second decade of life, when children are transitioning into adulthood.

The Developmental Assets are 40 positive experiences and qualities that parents and educators and communities have the power to bring into the lives of adolescents. The Assets are health-promoting for adolescents of all races, ethnicities, genders and for all students regardless of their socio-economic status. All teens need and benefit from these assets. These are rooted in extensive scientific literature on prevention and protective factors and are built from common developmental themes of different cultures in the U.S. (Benson, 2006).

The assets are crucial for teens because adolescents' experiences significantly affect their future. Benson (2006) asserted: "The more assets young people experience, the higher their chances for growing up successfully" (pg. 88). Also, research has shown that many risky behaviors go hand-in-hand. As teen's assets increase, risky behaviors including substance use, violence, anti-social behavior, too-early sexual activity, driving and drinking, and school dropout decrease (Benson, 2006). Benson also noted: "The majority of middle school and high school youth in the United States, experience half or fewer of the 40 Developmental Assets" (p. 59).

Many of the reviewed studies support the concept that addressing multiple risk behaviors is effective. Santelli et al. (2006) wrote: "Our data suggest that programs that effectively reduce alcohol and drug use may have additional value in delaying the initiation of sexual intercourse" (p. 206). Also NCPTUP (2010) noted that promoting programs such as service learning programs, youth development programs, and community-wide programs can be effective at delaying sexual debut. These are all assets-building programs and can be protective factors even if they do not specifically address sexual health issues.

Table 3

40 Elements of Healthy Development

External Assets	Internal Assets
Support 1. Family support 2. Positive Family Communication 3. Other Adult Relationships 4. Caring Neighborhood 5. Caring School Climate 6. Parent Involvement in Schooling	**Commitment to Learning** 21. Achievement Motivation 22. School Engagement 23. Homework 24. Bonding To School 25. Reading for Pleasure
Empowerment 7. Community Values Youth 8. Youth as Resource 9. Service to Others 10. Safety	**Positive Values** 26. Caring 27. Equality and Social Justice 28. Integrity 29. Honesty 30. Responsibility 31. Restraint
Boundaries and Expectations 11. Family Boundaries 12. School Boundaries 13. Neighborhood Boundaries 14. Adult Role Models 15. Positive Peer Influence 16. High Expectations	**Social Competencies** 32. Planning and Decision Making 33. Interpersonal Competence 34. Cultural Competence 35. Resistance Skills 36. Peaceful Conflict Resolutions
Constructive Use of Time 17. Creative Activities 18. Youth Programs 19. Religious Community 20. Time at Home	**Positive Identity** 37. Personal Power 38. Self-Esteem 39. Sense of Purpose 40. Positive View of Personal Future

Note. From "The Asset Approach: 40 Elements of Healthy Development" by Search Institute. 2006. p. 2. Used by permission of the author for educational, noncommercial uses only.

Recommendations. Organizations that support AE should consider their approach to AE in light of promoting the Developmental Assets. Some effective AE programs already focus on holistic approaches. However, some programs could completely redesign their approach, and possibly find a new niche within schools, organizations and communities that might be equally effective as simply developing an abstinence-centered curriculum.

Children's Participation

Children's participation, within the context of AWCSE, is absolutely vital. In order to allow adolescents to participate in AWCSE, adults must value teens' contributions. Teens can then take ownership of abstinence education and advocate for their right to learn about the option of abstinence. In praxis, this may begin as an afterschool program for teens to learn about abstinence from a balanced and holistic perspective. Student leaders could then be identified and equipped to lead their peers in spreading the word about the option of abstinence within the greater school or community. Also, adolescent participation should be central to AWCSE programs. Teens should be active participants, consultants, peer mentors, decision makers, speakers, examples and advocates in highly effective programs.

Adolescent participation should also be considered when organizations are in the process of designing curriculum. When developing or updating AE or AWCSE programs, program designers should consult with teens, hear what their concerns are, and build a program with those concerns in mind. Advocates For Youth (2006) described effective sex education programs as those that "are developed in cooperation with members of the target community, especially young people" (p. 2). Jemmott et al. (2010) also, noted that they:

"addressed… beliefs about the consequences of sexual involvement derived from the target population" (p. 158).

Children's participation also works in tandem with the Developmental Assets. For example, Benson noted that a team of adolescent's design and lead an annual asset-building conference. In essence, they become advocates for their own assets. Leavitt (as cited in Benson, 2006) noted that not only do the teens benefit from their participation, but, "Adults learned that youth are capable of much more than we give them credit for and will always step up to the challenge if given the chance" (pg. 62). Further, adolescent participation and asset building within communities gives adults a more optimistic view of teens-- when they may have been previously identified with and demonized by risk behaviors.

Conclusion

When faced with seemingly insurmountable obstacles-- such as high teen pregnancy rates and epidemic rates of STDs-- parents, educators, advocates, and adolescents themselves must work together to find effective solutions to these problems. In light of the evidence presented here, AE programs must continue to respond to this health crisis by strengthening, improving-- and sometimes rebuilding-- their programs. The suggestions made here have been gleaned from literature in support of and against AE in an effort to bring together the best of multiple approaches, and to positively impact the lives and future well being of adolescents.

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