

**SEX EDUCATION AND ADOPTION EDUCATION
(IN 7TH – 12TH GRADES)
A COMPREHENSIVE REVIEW OF THE LITERATURE**

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INTRODUCTION

In 2007, Governor Strickland signed Ohio's budget bill to redirect funds that were used exclusively on a sexual abstinence-only message to include more comprehensive sexuality education information. The Ohio budget bill created the Abstinence Plus Adoption Education Project within the Ohio Department of Health (ODH). The project's purpose is "to create guidelines for the development of abstinence and adoption education programs with the purpose of decreasing unplanned pregnancies and abortion." (A. Sub. H.B. No.119 – 6/30/07) As part of this project, ODH selected Cincinnati Children's Hospital Medical Center to perform a review of the professional literature on adolescent sexuality education and adoption.

During the summer of 2008, Cincinnati Children's Hospital researchers conducted a comprehensive review of the literature using four search databases: Ovid Medline, PubMed, Academic Search Premier, and Academic Search Complete. The general sex education search focused on studies of school-based programs implemented in classroom settings published in 2007 and 2008. Studies published in 2006 or earlier were previously reviewed by Alford (2008) and Kirby (2007). Since Alford and Kirby thoroughly reviewed research on risk and protective factors impacting teen sex, pregnancy and STD/HIV, only a few relevant studies prior to their articles are included in this review.

Since the review identified no published studies of classroom curricula on adoption, attention was devoted to studies that addressed factors that influence an adolescent's decision on whether or not to make an adoption plan. The research team reviewed select adoption education modules, curricula and other programs. The team also interviewed local and national experts in the field of adoption, as well as publications from a national adoption research foundation.

This overall report is divided into two sections. The first section discusses the findings from the Sex Education Literature Review. The second section discusses the Literature Review on Adoption Education.

Sex Education Literature Review

BACKGROUND

Adolescence is a time of profound change which includes the physical changes of puberty as well as cognitive and psychosocial development. For the majority of individuals, the cognitive changes ultimately lead to the development of abstract thought and problem solving abilities which are key elements in self sufficiency as an adult. Teens are faced with the challenges of understanding and becoming comfortable with the physical changes of puberty. Reproductive maturation usually precedes full cognitive/ psychosocial development and many teens become sexually active before they are completely ready to handle the responsibilities and potential negative consequences of their decisions. Data from the 2002 survey of the National Survey of Family Growth showed that the median age of premarital sex in the United States is 17.2 years for females and 17.6 years for males while the median age at first marriage is 25.8 for females and 27.4 for males. There is a time frame of approximately 13 years between fertility and marriage for both males and females. (1)

Data from the 2007 *Youth Risk Behavior Survey (YRBS)* (2) conducted by the Centers for Disease Control and Prevention on a nationally representative sample of high school students revealed that approximately one-half (47.8%) of high school students in the U.S. reported ever having sexual intercourse, with 7.1% initiating sexual intercourse prior to the age of 13 and two-thirds (64.6%) becoming sexually active by their senior year in high school. The 2007 *YRBS* data further indicated that 14.9% of students have had four or more sexual partners throughout their lifetime and 35.0% are currently sexually active. The 2007 *YRBS* data for Ohio showed similar trends with 44.5% of 9th through 12th graders reporting ever having sexual intercourse, 6.3% initiating sexual intercourse prior to age 13, 14.1% having four or more lifetime sexual partners, and 35.1% reporting current sexual activity (sexual intercourse during the three months prior to the survey).

Sexual activity places youth at risk for negative consequences including unplanned pregnancies, sexually transmitted diseases (STDs), and HIV infection. The United States has the distinction of having among the highest teen pregnancy, teen birth and teen abortion rates in the developed world. (3, 4) This is in spite of the fact that the age of first sexual intercourse in other developed countries is similar to the United States. (4) Although nationally, teen birth rates declined by 34% between 1991 and 2005, rates rose for the first time in 2006 with a 3% increase in birth rates between 2005 and 2006 for 15-19 year olds. A similar trend was observed in Ohio with live births to mothers under age 20 increasing from 10.6% to 10.7% during the same time period and Ohio's teen birth rate for youth ages 15-19 years increasing by 2.5%. (5)

In order to more thoroughly understand the declines in the teen birth rate since the early 1990s, Santelli and colleagues (6) analyzed data from the 1995 and 2002 versions of the *National Survey of Family Growth (NSFG)*. This survey was a nationally representative household survey and included teens who may not be attending school. Their analysis showed that 14% of the change in pregnancy rates in 15-19 year olds was attributable to decreased rates of sexual

activity while 86% was attributed to increased use of contraception. All of the change in the pregnancy rate among the 18-19 year old age group was attributed to increased use of contraception while 77% of the change in the pregnancy rate among the 15-17 year old group was attributed to increased use of contraception. The authors asserted that this pattern was similar to that observed in other developed countries, where the decline in teen pregnancy largely results from improvement in the availability and use of contraception. Consistent and proper use of contraception among those sexually active was a major factor in reducing overall pregnancy rates in individuals under the age of 20. In another study, using national data sets, Santelli found that between 1991 and 2003 there was an increase in self-reported condom use at last sex with declines in the use of withdrawal and stable use of hormonal contraception. (7) The decrease in birth rate does not appear to be related to an increase in abortion rates since abortion rates in 15-19 year olds decreased during this timeframe. (8)

One explanation for the difference in the teen pregnancy rate between the U.S. and other countries may be related to the attitudes toward sexual activity in the United States as compared to that in other countries. In a review by Hampton (9), the author described the results of a study conducted in the Netherlands which has one of the lowest rates of teen pregnancy and abortion in the world. Researchers found that in the Netherlands adolescent sexuality is normalized and teens are provided information about reproductive health and access to family planning services. Personal sexual responsibility and open communication in the family are the main focus areas. Societal attitudes towards sexual behavior and sexual communication in the U.S. are much different and may play a role in explaining higher teen pregnancy rates currently experienced in this nation.

STDs and HIV infection are other major morbidities of sexual activity. While adolescents and young adults age 15 to 24 account for only one-quarter of the sexually active population in the U.S., nearly one-half of all new cases of STDs occur in this age group. (10,11) Teens age 10-19 are at higher risk for acquiring STDs for a variety of behavioral, biological and cultural reasons.(10,11,12) Nearly 4 million new STD cases occur each year among teens. (10) As a result, about one-third of all sexually active young people become infected with an STD by age 24. (10) Data from the 2006 *STD Surveillance Report* demonstrated increases in rates of gonorrhea, syphilis, and chlamydia in the 15-19 year old age group. This data covered Region V which includes Ohio. (12).

Most young people infected with HIV acquired the infection through sexual transmission. Sexual abstinence is the most effective way of reducing STD and HIV transmission. For youth who are currently sexually active, the use of condoms most effectively reduces the risk of STD and HIV transmission. Data from the 2007 *YRBS* (2) indicated that among currently sexually active students, 61.5% reported that they or their partner used a condom during last sexual intercourse. Prevalence of having used a condom during last sexual intercourse was lower among sexually active 11th grade (62.0%) and 12th grade (54.2%) students than sexually active 9th grade (69.3%) students. This data indicates that among sexually active students, greater than one-third do not consistently use condoms during sexual intercourse and thus place themselves at elevated risk for unplanned pregnancy and STD/HIV transmission. Among sexually active students, 16.0% reported that they or their partner had used the birth control pill to prevent pregnancy before last sexual intercourse. The birth control pill does not prevent against STD/HIV infection.

Abstinence from sexual intercourse, oral sex, and anal sex is an important behavioral strategy in helping to prevent unplanned pregnancy, STDs, and HIV infection. Two recent national surveys (13, 14) demonstrated that the majority of adults think that abstinence until one is older or married is an ideal that should be emphasized to teens. Federal funding for abstinence-only education has been available since the early 1980s. In 1996, the federal government expanded funding for abstinence-only programs under Title V, Section 510 of the Social Security Act and in 2000 through the *Community-Based Abstinence Education (CBAE)* projects under Title XI of the Social Security Act formally known as *Special Projects of Regional and National Significance (SPRANS)*. Funding for abstinence-only programs has also been made available through the Adolescent Family Life Act under Title XX of the Public Health Service Act. Although Title V funding goes to states to distribute, *CBAE* funding can go directly to private and public community-based organizations.

Per the Social Security Act, the abstinence-only programs have an eight point definition of abstinence-only education. (Table 1) These eight points include the concepts that one should remain abstinent outside marriage; sexual activity outside of marriage will have harmful physical and psychological consequences; and that an expected standard of sexual activity is within a mutually faithful monogamous relationship in the context of marriage. Originally, grantees of this funding were allowed to choose among the eight points as long as they did not offer information that contradicted the points. The *SPRANS*-funded programs however, were required to teach all eight components. Significant restrictions were placed on providing information on contraceptives or safe-sex practices even when other funding sources were used.

A study published by Lindberg (15) in 2006 analyzed national data from the *National Survey of Adolescent Males and National Survey of Family Growth* and found that between 1995 and 2002 there was an increase in abstinence-only education and a decline in instruction on other birth control methods for both males and females. The study revealed that abstinence-only education was taught approximately two years before any education that included contraception. Results also indicated that a sizeable percentage of sexually experienced individuals never received instruction on contraception prior to initiating sexual activity. The study showed that 62% of sexually experienced females and 54% of sexually experienced males received contraception education before initiating sexual activity.

Historically, abstinence-only programs have instructed adolescents to abstain from sexual activity until marriage, have limited the discussion of contraception and condoms to failure rates, have mainly focused on condoms rather than other contraceptives, and have often provided medically inaccurate information on STDs and HIV infection. (16, 17) Several states including Ohio have recently refused Title V abstinence-only funding largely because of these restrictions.

Comprehensive sex education that promotes abstinence and provides information about contraceptive choices and safe sex practices is supported by the major medical and professional organizations in the United States. These organizations include the American Medical Association, American Public Health Association, American Academy of Pediatrics, Society for Adolescent Medicine, American Academy of Family Physicians, American School Health

Association, and the American College of Obstetrics and Gynecology. Their position statements can be viewed by the public by accessing their websites.

Several national surveys have recently examined public opinion regarding the content of sex education. A cross-sectional telephone survey of a nationally representative sample of adults in the U.S. (18) found that 82% felt that both abstinence and other methods of pregnancy and STD prevention should be taught in schools. The study also indicated that 65.8% of adults felt that the proper use of condoms should be taught. This finding was corroborated by the *With One Voice* 2007 survey (14) which found that 93% of adults and 90% of adolescents aged 12-19, felt that it is important to give teens the strong message that they should delay sexual activity until they are at least out of high school. The same survey found that 73% of adults and 56% of teens wanted more information for teens about both abstinence and contraception. Most teens in this survey recognized that teen parenthood had negative consequences with 81% agreeing with the statement that being a teen parent would delay or prevent them from reaching their future goals.

Similar results were found from a 2003 survey by the NPR/Kaiser Family Foundation /Kennedy School- *Sex Education in America*. (13) The results of this random nationally representative telephone survey showed that 67% felt that federal money should be used to fund more comprehensive sex education programs which include information on how to obtain and use condoms and other contraceptives. Two-thirds (62%) felt that abstinence from sexual activity outside marriage should be an expected standard for 7th-12th graders, though the definition of abstinence was not consistent. Two-thirds (63%) included intimate touching in their definition of abstinence while 95% and 89% respectively included sexual intercourse and oral sex in that definition. More than 90% felt that sex education in schools should include reproductive physiology, HIV/AIDS, STDs, contraception, making responsible choices, and delaying sexual intercourse until older or marriage. In addition, greater than 80% stated that information on abortion, how to put on a condom, how to use contraceptives, and where to get contraceptives should be included.

Data from Ohio shows similar information as these national surveys. In 2008, data was available from the Ohio Department of Health, Title V, *Parent and Child Communication: Sexual Health Needs Assessment and Program Implementation* evaluation. (19) The majority of parents surveyed felt that adolescents should receive more than abstinence-only education. One-third of parents felt that abstinence-only sex education should be taught for junior high school students, while 13% felt that abstinence-only sex education should be taught for high school. One-half of parents felt that sex education for junior high school should include both abstinence and comprehensive sex education while almost two-thirds felt that both abstinence and comprehensive sex education should be used for high school students. When parents were asked about the content of sex education, the majority of parents reported that they definitely wanted a more comprehensive approach which included the following topics: STDs/ HIV (95%), puberty (94%), relationships/dating (88%), HPV/Cervical cancer (84%), abstinence until marriage (80%), contraception/ condoms (79%), safe sex practices/ how to use a condom (70%), and sexual identity/ sexual orientation (61%). Results from the teen survey showed results similar to the adult data.

Some individuals have voiced concern that more comprehensive discussions about sexual behavior may encourage teens to become sexually active. The 2007 *With One Voice* survey (14)

found that 53% of teens and 52% of parents of teens reported that the statement, “Don’t have sex, but if you do you should use birth control or protection,” would not encourage teens to have sex. In the NPR/Kaiser/Kennedy School study (13), two-thirds of respondents were more concerned that not providing information about how to obtain and use condoms and contraceptives might result in more teens having unsafe sexual intercourse than whether the information would encourage teens to have sexual intercourse. Similarly, in the 2008 Ohio ODH survey (19), 92% of parents strongly disagreed that talking about sexual issues would encourage their 13-18 year old adolescent to have sex and 82% of 13-18 year olds strongly disagreed that this discussion would encourage them to have sex.

Although schools play an important role in sexuality education, the role of parents is vitally important. National data have shown that teens have consistently listed parents as the most influential individuals regarding decisions about engaging in sexual activity. In the 2007 *With One Voice* survey (14), 47% of 12-19 year olds listed parents first as a source of information with the second choice being 18% for friends. Two-thirds of teens reported sharing their parents’ values about sex, while 3% reported that they didn’t know their parents’ values. A total of 71% reported having talked to their parents about delaying sex and avoiding teen pregnancy. The majority of parents of teens (88%) reported that they did not know when or how to have this discussion. Data from the 2008 Ohio ODH survey found that 57% of parents and 41% of youth agreed that sex education should primarily come from the family and be supplemented by the school. (19)

Recent reviews and analyses of the various types of sex education programs have been published. This literature review will discuss these findings along with the characteristics of programs that have been demonstrated to positively impact sexual behavior and outcomes in adolescents. Before embarking on this review, it is important to note that much of the literature is not consistent in how the term “abstinence” is used. For example abstinence can mean anything from delaying sex until marriage to choosing not to be sexually active after becoming sexually experienced. In addition, the term sexual activity may or may not include non-coital activities. (16, 20) There are also a variety of terms that describe sex education. Abstinence-only, Abstinence-only until marriage, and Abstinence-centered education usually refer to education that teaches that abstinence is the only valid option for unmarried people or teens. These programs have been found to provide incomplete and sometimes biased information on contraception or condoms. Comprehensive sex education, abstinence-based education and abstinence-plus education usually refer to programs that emphasize abstinence as the most effective way to avoid STDs and unplanned pregnancy but also teach about condoms and contraception as risk reduction strategies. These programs also include interpersonal and communication skills that address ways to explore attitudes and options.

LITERATURE ON ABSTINENCE-ONLY AND COMPREHENSIVE SEX EDUCATION PROGRAMS

Several excellent reviews of the literature regarding sex education programs have been conducted by Santelli (20), Kirby (10, 21), Underhill (23), Manlove (24), Alford (25), and Trenholm. (26) Specific studies are detailed in the paragraphs below. The overall findings of these studies indicated that abstinence-only programs do not delay the onset of first sexual

activity, increase sexual abstinence, prevent unprotected sex, or decrease number of sexual partners. Comprehensive sex education programs on the other hand have been shown to significantly delay the onset of sex, reduce the frequency of sex, reduce the number of sexual partners, decrease unprotected sex, and increase condom and contraception use. Some of the comprehensive programs have also lowered STD and pregnancy rates. Research has not shown comprehensive programs to increase rates of sexual initiation, lower the age at first sex, increase the number of sexual partners or increase the frequency of sexual activity among adolescents. In addition, research has shown that dual messages of abstinence and use of condoms and/or contraception if sexually active have not adversely affected the program results.

Abstinence-only programming

In 2001, Kirby's report *Emerging Answers* was published by the National Campaign to Prevent Teen Pregnancy. (21) In that report, Kirby evaluated sex education programs that were conducted in 1980 or later in the U.S. or Canada; targeted middle and high school age adolescents; had an experimental or quasi-experimental design; had at least 100 individual subjects in the combined treatment and control group; and measured impact on sexual or contraceptive behavior, pregnancy, or childbearing. At the time of that report, only three studies of abstinence-only programs met these criteria and definitive conclusions could not be drawn about their program effectiveness. Similar conclusions were drawn in the review by Manlove in 2004. (24) In his 2006 review of sexuality education programs, Santelli (20) examined non-peer reviewed studies of abstinence-only programs and found that these programs were less likely to meet minimum scientific criteria for evaluation and that all had flaws in methodology or data interpretation that affected the final conclusions.

Numerous behavioral interventions have been developed to promote abstinence in young adolescents. Most of these interventions have not been evaluated fully and have not demonstrated long-term changes in sexual behavior. (27) In 2006, Denny and Young (28) evaluated the efficacy of an abstinence-only sex education curriculum for elementary, middle and high school students in 15 school districts. Pretests, posttests, and 18-month follow-up surveys were used to evaluate program effectiveness. Long-term results from their study indicated that middle school intervention students were less likely than control students to report ever participating in sexual intercourse and participating in sexual intercourse in the past month. High school intervention students and control students did not significantly differ at 18-month follow-up in reported lifetime participation in sexual intercourse and recent participation in sexual intercourse (past month). The authors and Kirby (10) stated that the study possessed several limitations including a modest effect size, quasi-experimental design, low response rate at follow-up, and lack of significant behavioral change in high school students.

In his 2007 review, Kirby (10) addressed other studies which evaluated abstinence-only programs. Two studies that were not included in Kirby's (10) report illustrating additional evaluation limitations of abstinence-only programs are those conducted by Vessey (29) and Weed and Anderson (30).

An evaluation of one abstinence-only educational program conducted by Vessey (29) showed an increase in students' attitudes and behavior over a one-year follow-up. However, the increase was only among students who had not been involved in other risky behaviors (i.e. drinking and

smoking) at pretest–posttest. For students who became involved in risky behaviors after pretest there was a decline in both attitude and behavior toward premarital sexual activity. Given the associations among drinking, smoking, and sexual behavior, Vessey stated that the success of the program may depend upon whether it is coordinated with additional efforts to discourage other risky behaviors and whether these coordinated efforts start at an early age in school.

Weed and Anderson (30) evaluated an abstinence-only curricula among 7th through 9th grade students and found that program students had more positive scores than control students on intervening variables associated with delaying sexual intercourse at posttest and at 12-month follow-up. The authors also reported a significant decrease in the initiation of sex at 12-month follow-up. However, the study had limitations due to the low sample size (N = 143), disproportionate sampling of younger grade levels (75% of students were in 7th or 8th grade), and failure of assessing whether the decrease in sexual initiation differed based on grade level. The authors collapsed all of the data together (7th, 8th and 9th graders) and then examined virgin to non-virgin transition rates. The large percentage of 7th and 8th grade students and low percentage of 9th grade students (N = 46 9th graders) in the sample may have affected the results. In addition, students were not tracked into the upper high school grades when sexual initiation is likely to occur (11th and 12th grades).

Since those reports were published, additional reviews and analyses have clarified these issues. In April 2007, The Mathematica Policy Research, Inc. (26) issued the U.S. government contracted report entitled “*Impacts of Four Title V, Section 510 Abstinence Education Programs.*” Mathematica examined the effect of four abstinence-only programs on adolescent sexual activity and risks of pregnancy and STDs. The four programs began serving study youth in either upper elementary or middle schools within a few years after the start of the Title V, Section 510 abstinence education funding. The programs were selected because they reflected the range of implementation settings, program strategies, and operational experiences of the Title V programs that received funding nationally. All had curricula consistent with the federal abstinence-only guidelines and were relatively intense. The four programs included a year-long class that met daily as part of the students’ regular schedule; a three-year program with 30 sessions in year one and 14 in year three; a daily two-and-a-half-hour after-school program for up to four years; and a two-year program with weekly pull-out class sessions. Demographics of participants included middle- and working-class two-parent White, non-Hispanic families in a semi-rural setting; low income, single-parent African American and Hispanic families in an urban setting; and low-income single-parent African American families in a rural setting.

Mathematica analyzed survey data collected in 2005 and early 2006 four to six years after the study began and all youth had completed the programs. Approximately 2,000 teens were randomly assigned to either a program group that was eligible to participate in one of the four programs or a control group that was not. The findings showed no significant differences between the program and control group subjects with respect to remaining abstinent, engaging in unprotected sex, age at first intercourse, or number of sexual partners. Youth who were not in the program (control group youth) were equally as likely as youth in the program to have remained sexually abstinent. Approximately half in each group (56% in program group and 55% in control group) reported that they were abstinent within the 12 months prior to the follow-up survey. During the past 12 months, 23% of youth in each group reported having had sex and

always using a condom. Although youth in the program group had higher knowledge scores on STD identification than the control group, the program group did not demonstrate any significant difference compared to the control group in understanding the consequences of STDs or unprotected sex risks. Overall, youth in the programs were significantly less likely than controls to perceive that condoms are usually effective at preventing STDs (such as HIV, Chlamydia, Gonorrhea, Herpes and HPV) and were significantly more likely to perceive that condoms are never effective at preventing STDs. Slightly more than half (55%) of youth in each group reported that correct use of birth control pills usually prevents pregnancy. Youth in the programs were significantly more likely to correctly report that birth control pills were not effective in preventing STDs. There were no significant differences between the groups in perceived effectiveness of condoms or birth control pills for the purpose of pregnancy prevention.

In his 2006 review, Santelli (20) discussed in detail important issues related to the eight abstinence-only program criteria. With respect to abstinence until marriage, Santelli asserted that this concept does not reflect societal norms since most people in the U.S. become sexually active during adolescence at approximately age 17 and do not marry until their mid-20s. In terms of the harmful psychological effects of sex outside marriage, there is no evidence that initiating intercourse during adolescence adversely affects mental health. Rather, the reverse is actually true in that early sexual activity among teens and teen pregnancy are associated with preceding events such as sexual abuse, poorly supportive social environments and/or underlying mental health or substance abuse issues. Furthermore, most of the adverse social and health outcomes are related to economic and social issues that are considered contributing factors to teen pregnancy in the first place. There are certain pitfalls in teaching that sexual abstinence is the only certain way to avoid STDs since non-coital behaviors including kissing, oral and manual stimulation can transmit STD pathogens. Furthermore, planning to be abstinent and actually remaining abstinent are not one in the same. Santelli's review of the literature examining youth who pledged virginity revealed that although virginity pledgers were more likely to delay intercourse and have fewer sexual partners, they had high rates of unprotected sex when they became sexually active and greater than 80% had vaginal intercourse before marriage.

Santelli (20) also commented regarding sexual orientation and stated that abstinence-only education has traditionally excluded issues of gay, lesbian, bisexual, transgender, and questioning youth by emphasizing heterosexual marriage as the only acceptable avenue for sexual relationships. Research indicates that approximately 10% of adolescents or more deal with issues of sexual identity. These youth are often stigmatized, ignored, and/or ridiculed which places them at increased risk for depression, suicide, substance abuse, and violence. Sex education that negates the sexual issues they are facing may serve to further alienate these youth.

Comprehensive sex education programs

Programs that include abstinence messages along with more comprehensive sex education messages have been found to positively impact sexual behavior in teens. In the 2001 Kirby evaluation (21), several comprehensive sex education and HIV education programs were found that significantly delayed the onset of sex; reduced the frequency of sexual activity; reduced the number of sexual partners; and increased condom or other contraceptive use. In addition, some service learning programs that focused on non-sexual issues were promising in reducing teen pregnancy rates. In the report, Kirby developed ten characteristics of sex and HIV education

programs that were effective. These characteristics included providing the dual message of abstinence and use of condoms or contraceptives if sexually active; addressing social pressures; providing accurate information on sexual activity, contraception, and STD protection; and providing practice with communication and refusal skills. Kirby further stated that educating about contraception does not increase sexual activity and that emphasizing abstinence while also teaching about contraception does not adversely affect contraceptive use.

The review by Manlove (24) in 2004 used similar criteria as Kirby and found similar results in identifying programs focusing on sex education, HIV/AIDS and other STD Education and youth development that delayed the onset of sex. The author concurred with Kirby's 2001 findings that sexual intercourse can be delayed even when the dual messages of abstinence and contraception if sexually active are addressed. The dual message issue has also been evaluated more globally. A recent review of programs from high-income countries around the world including North America was conducted by Underhill (23) who evaluated 39 trials of HIV prevention programs that emphasized abstinence as the most effective means of HIV prevention while actively promoting safer sex practices. None of the 39 trials demonstrated adverse affects on incidence, frequency of sex, sexual initiation, or condom use. Participants were not confused with the dual message and 23 of the 39 trials showed effects on at least one protective sexual behavior including abstinence, condom use, and unprotected sex.

In 2007, Kirby (10) updated his 2001 review and compiled a list of fifteen different programs in different settings that possessed strong evidence of positive impact on sexual behavior or pregnancy or STD rates. Studies of prevention programs had to meet several criteria similar to those included in Kirby's 2001 review. These criteria included programs that: (1) were conducted in the United States; (2) were completed or published between 1990 and 2007; (3) focused on teens age 12 to 18; (4) examined impact on sexual behavior; use of condoms or other contraceptives; combined measures of sexual risk, and pregnancy, birth or STD/HIV rates; (5) had a reasonably strong experimental or quasi-experimental research design and a sample size of at least 100 teens; (6) measured behavior for a sufficient length of time; and (7) used appropriate statistical analyses.

As in the 2001 report, Kirby concluded that none of the programs that focused only on abstinence had enough evidence to justify widespread dissemination. Two-thirds of the 48 comprehensive programs that addressed abstinence as well as the use of condoms and contraceptives if sexually active had positive behavioral effects. These included delaying sexual debut; reducing the number of sexual partners and frequency of sex; reducing unprotected sex; and increasing the use of condoms and other contraceptives. Forty percent of the programs demonstrated positive effects on at least one of these behaviors. Some programs resulted in a choice of abstinence even after sexual activity had already been initiated. None of these programs negatively impacted the initiation of sexual activity or increased the frequency of sex. Other positive program effects included improvement in knowledge about pregnancy and STDs, as well as values and attitudes about sexual activity, contraception, and condoms; and improved confidence in their ability to resist negative peer pressure and communicate with parents and adults about sexuality topics. Kirby found that it was important for programs to be implemented as designed. Replication of programs with fidelity demonstrated similar positive results in other communities and with other researchers. Shortening the original program or eliminating

behavioral activities such as the use of condoms affected replication results. From this 2007 publication, Kirby expanded on his original 10 program characteristics and developed 17 characteristics of programs in the three categories: 1) process of curriculum development; 2) curriculum content; and 3) curriculum implementation (See Table 2). In another recent 2007 publication, Kirby (22) expanded his evaluation to include programs conducted in other parts of the world including developing countries. In this evaluation, he found positive effects on knowledge, risk awareness, values and attitudes, self efficacy, intentions, and sexual behavior. These effects were observed across different countries and cultures. Further, the same 17 characteristics of effective programs applied to programs worldwide.

In 2008, Alford (25) conducted a similar comprehensive literature review as Kirby and had similar criteria for inclusion. A total of 26 programs met five specific and measurable criteria for inclusion as a program that works to prevent the adverse consequences of teen sexual involvement. The programs all had evaluations that: (1) were published in peer-reviewed journals; (2) used an experimental or quasi-experimental design with treatment and control/comparison conditions; (3) included at least 100 young people in treatment and control/comparison groups; (4) continued to collect data from both groups for at least three months after the intervention; and either (5a) demonstrated that the program led to at least two positive behavior changes among program youth compared to controls related to postponing sexual initiation, reducing the frequency of intercourse and number of partners, increased and consistent use of condoms and/or contraception, and reduced the incidence of unprotected sex, or (5b) reduced rates of pregnancy, STDs, or HIV in intervention youth, compared to controls. A total of 23 of the 26 programs included information on abstinence and contraception and 10 of the 11 school based programs were designed for middle and high school students. The effective programs were delivered in a variety of settings and to a variety of populations including urban, suburban, and rural locations; school-based, community-based, and clinic-based settings; elementary, middle, and high school; 18- to 24-year-olds; White, Black, Hispanic/Latino, Asian and Native American youth; and co-ed, male only, and female only groups. Thirteen of the programs for middle and high school youth delayed the onset of first sex; 14 demonstrated increase condom use in sexually active youth; 9 increased other contraceptive use; 13 demonstrated fewer sex partners; 7 reduced the frequency of sexual activity; and 10 reduced unprotected sex. In addition, 13 of the programs had statistically significant declines in teen pregnancy, HIV, or STDs. Ten of Kirby's 15 programs with strong evidence of positive impact on behavior were included in Alford's 2008 review of programs that work. Of these 10 programs, five included curriculum-based programs that were effective for both males and females and had at least two behavioral outcomes including delayed sex, reduced frequency of sex, reduced number of partners, increased condom use, increased contraceptive use, or decreased unprotected sex. These programs included:

- *Reducing the Risk: Building Skills to Prevent Pregnancy, STD & HIV*
- *Safer Choices: Preventing HIV, Other STD, and Pregnancy*
- *Becoming a Responsible Teen: An HIV Risk Reduction Program for Adolescents*
- *Making Proud Choices: A Safer Sex Approach to HIV/STDs and Teen Pregnancy Prevention*
- *¡Cuidate! (Take Care of Yourself) The Latino Youth Health Promotion Program*

Of these five programs, *Becoming a Responsible Teen*, *Making Proud Choices*, and *Reducing the Risk* have had their outcomes replicated in other evaluation studies. *Making Proud Choices*, *Reducing the Risk*, and *Safer Choices* focus on both Pregnancy and STD/HIV prevention while the primary focus for *Becoming a Responsible Teen* and *¡Cuidate!* is on STD/HIV prevention. *¡Cuidate!* is designed to focus on Hispanic/Latino youth while *Becoming a Responsible Teen* and *Making Proud Choices* were designed for African American youth. *Safer Choices* and *Reducing the Risk* are applicable to youth of all ethnic backgrounds. (10, 25) (See Table 3)

Another study published in 2008 further supports the previously discussed reviews. This study (31) evaluated 522 sexually experienced African-American female teens, aged 14-18 years, in Birmingham, Alabama. These teens received an HIV educational program which included instruction about condom use. Results of the study showed no significant differences in the frequency of sex between the HIV education intervention group and the general health-promotion comparison group 6 months and 12 months after program intervention. Thus, the researchers concluded that hierarchical messages in sex education that teach students that abstinence is the most effective way to prevent negative outcomes of sexual activity, while presenting the importance of using condoms for those who choose to be sexually active do not promote sexual activity in teens.

In 2008, Kohler and colleagues (32) examined the comparison of abstinence-only and comprehensive sex education program outcomes in a different way. Rather than comparing intervention studies, the authors conducted a retrospective population level analysis of Cycle 6 (2002) of the National Survey of Family Growth (NSFG). The survey asked whether an individual ever participated in a formal sex education program. The study question relied on self-report and provided no information as to the quality, content, context or duration of the program. The NSFG consisted of a sample of 1,719 never-married heterosexual teens aged 15-19 years who reported either no formal sex education, formal sex education on “how to say no to sex” only (abstinence only), or formal sex education covering both “saying no to sex” and teaching about birth control (comprehensive). One quarter received abstinence-only education and two-thirds reported receiving comprehensive sex education. The study found that abstinence-only programs had no significant difference in delaying the onset of sexual activity or in reducing teen pregnancy and STDs compared to those who received no formal sex education. Conversely, when comparing comprehensive sex education programs to abstinence-only or no sex education there was a significant reduction in teen pregnancy. In addition, there was a marginally associated decrease in the likelihood of becoming sexually active compared with no sex education. Reported STDs were not affected by comprehensive sex education programming in this study.

IDENTIFICATION OF SEX EDUCATION PROGRAMS THAT WORK

In addition to the articles developed by Alford (25) and Kirby (10), another source of information on programs that work is the Program Archive on Sexuality, Health & Adolescence (PASHA). (33) Between 1990 and 2005, PASHA convened a scientific expert panel to guide the development of selection criteria and the selection of programs designed to prevent the adverse outcomes of teen sexual activity. PASHA presented 92 prevention programs to the panel and selected 56 of these programs as effective based on changing risky sexual behaviors related to

teen pregnancy or HIV among youth ages 10-21. The article has a table summarizing each program, including original site, sample size, age, gender and race/ethnicity of participant, geographic profile, income level, and expert panel rating score on strength of effectiveness. PASHA selection criteria for a methodologically rigorous scientific evaluation in prevention programs included pretest and posttest, follow-up assessments at least 3 or 6 months beyond the end of the intervention period, and random assignment to a control group. Twenty-six of PASHA's effective programs were originally implemented and studied in a school classroom setting. At the time of publication, 35 of PASHA's effective programs were available from PASHA, with others pending availability.

CURRICULUM DELIVERY

When considering school-based interventions, it is crucial to assess the training of teachers and the curricula available to them. One study of 335 sex education teachers in Illinois (34) found that availability of curriculum and training were key issues in determining the content of sex education materials. One-third of teachers had no formal training in sex education. Such findings underscored the need to provide training to teachers to ensure accurate and thorough program content. Education need not be limited to direct teacher-student interactions. Alternative modes of teaching sex education curricula have also been assessed. Use of computer-based activities have also been shown to be effective in both school-based and family planning clinic based settings. (35,36)

PARENTAL INVOLVEMENT

School-based interventions commonly do not include parents. As discussed earlier, parents are the primary desired source of information about sexuality issues by teens. Kirby (10) reviewed programs for parents and teens and found that there were not enough studies to make definitive conclusions. However, some programs did show risk reduction particularly related to increased condom use. A recent study by Lederman (37) evaluated 192 parent-adolescent dyads in an afterschool program in southeast Texas. They compared an interactive approach utilizing role play, resistance skill practice, and parent-child discussions to a traditional didactic format containing the same information. Students were followed over a two year period with three single booster sessions during that time frame. Students in the interactive group were more likely than the didactic group to have an increase in reporting that their parents had rules about dating, drinking, contraception etc. and were also more likely to continue endorsing that these rules existed. Students in the interactive group also reported greater self-control in resistance responses related to pressure to have sex. These resistance responses did not decrease over time as they did in the didactic group. This study provides encouraging information for including parents in sex education programming with teens. Based on the survey results of the Title V ODH report from Ohio, (19) parents want to improve their communication with their adolescents about sex. Nine in ten parents indicated that it would be helpful (91%), useful (89%), and valuable (90%) if ODH offered a program to improve communication between parents and children about sex. About half (47%) reported that they would participate in the program if such a program became available in the next year.

SUMMARY

In summary, comprehensive sex education programs that clearly promote abstinence and provide medically accurate information on contraception and STDs have been shown to be most effective in delaying sexual activity and reducing teen pregnancy and STDs. Attention needs to be devoted to teacher education and training regarding the appropriate delivery of sex education in the schools. Efforts to improve parent-child communication regarding sexual issues should be included. In addition, research has shown that in order for sex education programs to be most effective, they should take a multi-intervention approach in regards to dealing with teen risky behaviors, especially sexual behaviors. Programs that advocate strong parental involvement, proper training of educators, increased family and school connectedness, intense media interventions and coordinated efforts in dealing with all aspects of peer pressure and influence have been most successful. (10, 38) Future programs aimed at decreasing teen pregnancy and STD rates should consider the findings from this review.

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TABLE 1

FEDERAL DEFINITION OF ABSTINENCE ONLY EDUCATION

The eligible abstinence education program is one that:

1. has as its exclusive purpose teaching the social, psychological, and health gains to be realized by abstaining from sexual activity
2. teaches abstinence from sexual activity outside marriage as the expected standard for all school-age children
3. 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
4. teaches that a mutually faithful monogamous relationship in the context of marriage is the expected standard of human sexual activity.
5. teaches that sexual activity outside the context of marriage is likely to have harmful psychological and physical effects
6. teaches that bearing children out-of-wedlock is likely to have harmful consequences for the child, child's parents, and society
7. teaches young people how to reject sexual advances and how alcohol and drug use increase vulnerability to sexual advances and
8. teaches the importance of attaining self-sufficiency before engaging in sexual activity

Source: U.S. Social Security Act 510 (b)(2)

TABLE 2

KEY CHARACTERISTICS OF EFFECTIVE SEX EDUCATION PROGRAMS

THE PROCESS OF DEVELOPING THE CURRICULUM

- 1) involved multiple people with expertise in theory, research, and sex and STD/HIV education to develop the curriculum;
- (2) assessed relevant needs and assets of the target group;
- (3) used a logic model approach that specified the health goals, the types of behavior affecting those goals, the risk and protective factors affecting those types of behavior, and activities to change those risk and protective factors;
- (4) designed activities consistent with community values and available resources (e.g., staff time, staff skills, facility space and supplies);
- (5) pilot-tested the program.

THE CONTENTS OF THE CURRICULUM ITSELF

- (6) focused on clear health goals-the prevention of STD/HIV, pregnancy, or both;
- (7) focused narrowly on specific types of behavior leading to these health goals (e.g., abstaining from sex or using condoms or other contraceptives), gave clear messages about these types of behavior, and addressed situations that might lead to them and how to avoid them;
- (8) addressed sexual psychosocial risk and protective factors that affect sexual behavior (e.g., knowledge, perceived risks, values, attitudes, perceived norms, and self-efficacy) and changed them;
- (9) created a safe social environment for young people to participate;
- (10) included multiple activities to change each of the targeted risk and protective factors;
- (11) employed instructionally sound teaching methods that actively involved participants, that helped them personalize the information, and that were designed to change the targeted risk and protective factors;
- (12) employed activities, instructional methods, and behavioral messages that were appropriate to the teens' culture, developmental age, and sexual experience;
- (13) covered topics in a logical sequence.

THE PROCESS OF IMPLEMENTING THE CURRICULUM

- 14) secured at least minimal support from appropriate authorities, such as departments of health, school districts, or community organizations;
- (15) selected educators with desired characteristics, trained them, and provided monitoring, supervision and support;
- (16) if needed, implemented activities to recruit and retain teens and overcome barriers to their involvement (e.g., publicized the program, offered food or obtained consent); and
- (17) implemented virtually all activities with reasonable fidelity.

From: Kirby, Reference 10

TABLE 3

EFFECTIVE CURRICULUM-BASED SEX EDUCATION PROGRAMS

Program	Grade	U/S/R	Race/Ethnicity	Program Focus
Reducing the Risk	Senior HS	U/S/R	W/B/H/A	Pregnancy/ STD/HIV
Safer Choices	Senior HS	U/S	W/B/H/A	Pregnancy/STD/HIV
Becoming a Responsible Teen	Senior HS	U	B	STD/HIV
¡Cuidate!	Senior HS	U	H	STD/HIV
Making Proud Choices	Middle	U	B	Pregnancy/STD/HIV

U=Urban; S=Suburban; R=Rural; W=White; B=Black; H=Hispanic; A=Asian
 Adapted from Kirby (10) and Alford (25)

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Adoption Education Literature Review

BACKGROUND

In 2004, there were 729,000 pregnancies to adolescents aged 15-19 in the United States. (1) Of those pregnancies, 57% resulted in a live birth, 27% in an induced abortion, and 16% in fetal loss. When faced with a pregnancy, adolescents need to address the decision regarding pregnancy outcome options including continuing with the pregnancy or abortion. Although a proportion of teens do pursue abortion, data from the National Center for Health Statistics show that between 1990 and 2004, abortion rates for teens in the U.S. declined by approximately one-half. (1) Those who continue a pregnancy to term are faced with the decision about whether to parent or make an adoption plan. In general, adoption is not chosen as an option regardless of the age of the mother. (2)

Over the past 40 years, there has been a steady decline in the percentage of children relinquished for adoption who are born to women under age 45. (2) The adoption rate was 8.7% before 1973 and fell to approximately 1% in 2002. (3) This trend is observed in teens as well as adult women and is particularly sobering when one considers that 40-50 years ago approximately 95% of unmarried teens chose this option. (4) In addition, unlike in the past when teen mothers dominated the birth mother adoption pool, currently only one-quarter of birth parents are adolescents and most placers are now in their 20s. (5)

Some of this downward trend in adoption is attributed to societal change in which single and unwed parenting is considered more acceptable. In the past, pregnancy outside of marriage and illegitimacy were poorly tolerated. Today, teens see daily examples of unwed parenthood in their personal lives and in the media including among popular teen celebrities. Another potential explanation comes from research in the 1980s which found that adoption as an option was not being addressed adequately with many teens, in part because of an assumption that teens were not interested in this option (4, 6). However, a study by Mech in 1986 among 320 pregnant teens demonstrated that this was not necessarily the case. Approximately 75% of the subjects expressed some interest in discussing adoption with one-third having a moderate or high level of interest. (6) Depending on the cognitive development of the adolescent, a discussion of pregnancy outcome options can be challenging. Teens may not be able to truly assess the future consequences of the parenting or adoption decisions for either themselves or their child. (7) However, the topic still should be addressed, tailoring the discussion to the developmental needs of the teen. Comprehensive review of all pregnancy options is recommended for adolescents and explicitly supported by the American Academy of Pediatrics. (8)

The purpose of this portion of the literature review is to examine what is known about the knowledge and attitudes of adolescents toward adoption; to determine if any evidence-based adoption education programs exist for adolescents; and to determine which factors would be important in developing guidelines for an effective adoption education module for secondary school female and male students in Ohio.

ATTITUDES TOWARD ADOPTION IN THE UNITED STATES

Adoption is generally supported by Americans. A survey of 1554 adults in the United States was conducted by the Princeton Survey Research Associates in 1997 entitled, “*Benchmark Adoption Survey Report on the Findings*,” for the Evan B. Donaldson Adoption Institute. The survey found that 60% of Americans have experience with adoption through personal experience or through friends and relatives. (9) Results indicated that over one-half had a very favorable opinion toward adoption while one-third was somewhat favorable. Less than 10% of those surveyed had an unfavorable opinion toward adoption and more than one-third had seriously considered adopting a child. Adults who were most supportive tended to have a higher level of education, were female, and were white. In addition, most respondents (69%) supported a birth mother’s decision to choose adoption and more than 70% considered this decision responsible, caring, and unselfish. Racial differences in support of adoption were observed with one-half of African Americans compared to only 20% of Whites disapproving of a birth mother’s adoption decision. When asked about pregnancy outcomes in adolescents, overall 39% felt that adolescents should choose parenting and 37% favored adoption. Again racial differences were observed with two-thirds of African Americans compared to one-third of Whites favoring the parenting option for teens. As reviewed by Resnick, (7) the low rates of choosing adoption as a pregnancy resolution by African American parents may be due to long held cultural norms and attitudes which have traditionally included the role of the extended family in “informal adoption”.

FACTORS INFLUENCING THE ADOPTION DECISION FOR ADOLESCENTS

Most of the recent studies on adoption attitudes among adolescents were conducted in the 1980s or early 1990s and it is important to recognize that the available information about adoption in adolescents is now 15-20 years old. Many of the studies are retrospective and descriptive and most were conducted on samples of pregnant teens rather than general adolescent populations. “*Rights and Well-Being of Birth Parents in the Adoption Process*” by the Evan B. Donaldson Institute (5) and the “*Handbook of Adoption Implications for Researchers, Practitioners, and Families*” by Javier et al (10) are quality recent reviews of the topic of adoption published in 2007. Throughout these reviews there are references to all members of the adoption triad including birth parents, adoptive parents, and adoptees.

Variables associated with the decision of an adolescent to choose adoption are related to knowledge about adoption; the context in which the decision is being made (e.g. personal attitudes, future educational/vocational goals, and influence of significant others such as parents and birth fathers); and beliefs about parental responsibility and the needs of children. (11). Various studies of pregnant teens faced with this decision indicate that factors associated with teens choosing adoption rather than parenting are being non-Hispanic White (11,12,13); having an intact family (12,14,15); being an older teen (12,13, 14,16); having completed more years of education (12,14,17); having higher educational aspirations (12,14,15,18,19); being from a suburban residence (15,18); having a parent with more years of education (12,13,15); higher socioeconomic status (5,15,16,18,19); and having some personal knowledge of or experience with adoption including another family member (14,15,18). Other significant influences include the positive influence of the teen’s mother toward adoption (7, 14,16, 20); preference for adoption by the male partner (14,18,20); and positive peer approval for adoption (15). For teens

who chose adoption, studies have shown that they did not personally feel ready to parent; thought that the decision was in the best interest of baby for financial reasons; felt that the child needed two parents; and believed that parenting would interfere with their educational goals. (15, 18) Lack of knowledge about the facts surrounding adoption is also a potential deterrent, as evidenced by several studies of pregnant teens finding nonexistent or inadequate counseling from professionals. (6, 21)

Unlike previously reviewed studies that addressed the opinions of pregnant teens, Daly (22) conducted a study in 1994 of a general population of 175 male and female high school students with a mean age of 17 in Ontario, Canada to explore their opinions about adoption. This study is particularly relevant to the current ODH project since one of the goals of the current project is to develop an adoption education module that can be delivered in the general middle and high school classroom setting. It is interesting that when considering the theoretical decision about adoption, teens expressed different opinions regarding themselves versus others. The teens in Daly's study did not strongly endorse adoption for themselves with only 6% saying they would definitely make an adoption plan if they became pregnant and only 17% saying that they probably would. Concerns were raised about "feeling of abandoning the baby" (80%) and "not knowing what is involved and what to expect with adoption" (63%). One-third or less were worried about peer rejection or pressure from adoption counselors. These teens were more likely to feel that adoption was a good plan for others with 43% saying a pregnancy should be resolved for others in this way. Reasons offered for recommending adoption to others included "not mature enough to parent at this point in their lives", "providing the baby with two parents", and being "financially impossible to raise the child". Overall, teens had positive feelings about the adoption decision with more than one-third indicating that those who made an adoption plan were mature, responsible, unselfish, caring and thoughtful.

As in the other studies with pregnant teens, these teens did endorse the support of significant others in their lives saying that they would go to parents, their dating partner, or friends to discuss a pregnancy. Although most subjects thought these individuals would support an adoption plan, 54% had never talked to their parents and 41% had never talked to friends about adoption and they were not actually sure about their opinions. In addition, these teens indicated a significant lack of knowledge about the adoption process including where to go for information and how to negotiate the process. Two-thirds thought that the process was complicated. This study illustrates the need for upfront education with teens about adoption including knowledge about the adoption plan process and opening up discussion between parents and peers about the topic of adoption. (22)

BIRTH FATHERS

Birth fathers are the least studied group (12) both in terms of their role in adoption and how they are affected by the adoption decision. In a review of the literature by Freundlich (12), the factors related to lack of involvement of the birth father in the adoption plan were financial issues; attitudes of adoption agencies; family pressure; and poor relationships with the birthmother. It should not be assumed that birth fathers are not interested in the adoption process. Conversely, studies show that rather than being uninterested and uncaring, the adoption decision was emotionally distressing for many birth fathers. (12)

The legal status of birth fathers is left to the individual states. Although the legal rights of both parents must be terminated or relinquished for an adoption to proceed forward, it is easier to legally terminate the rights of an unwed birth father who has not had contact with the birth mother and has not registered in a putative father registry. (5) The involvement of the birth father usually parallels the degree of his involvement with the birth mother and in some cases, the father does not even know the birth mother is pregnant. However, as noted above it should not be assumed that adolescent fathers do not want to be involved with their children. One study of 126 unmarried father/mother dyads under the age of 21 with a child under one year of age, found that more than 80% of fathers acknowledged their paternity, were involved in the care of the child, and thought having their name on the birth certificate was important. (23) State laws spell out the degree of diligence required in locating and notifying birth fathers. (5)

OPEN ADOPTION

Unlike the previous closed and secretive processes of adoption, open adoption which began in the 1970s has become much more common in the past decade.(5,24,25) Open adoption refers to planned communication between the birth parent, adoptee, and adoptive parents. It can take many forms from the birth parent meeting the prospective adoptive parent; to sharing of information after placement including letters, gifts, phone calls; to actual face to face meetings. This contact can be limited to the pre-placement process or continue for years after the adoption placement. This type of adoption process is also fluid and can be changed over time to become more or less open. (5, 24, 25, 26) In fact, there is recognition in the literature that post adoption counseling services are needed because of this evolving process. (26) It is now uncommon to have totally closed adoptions. (5) Studies have found that adoption is more likely to proceed forward if the birth mother has an opportunity to choose and or meet the prospective adoptive parents. (17)

Open adoptions appear to result in better psychological outcomes. Many birth parents who were involved in closed adoptions in the 1960s and 1970s suffered from grief, stigmatization, depression, posttraumatic stress, and problems with future relationships. Although there is still grief and mourning associated with open adoptions, research has shown that these birth parents are better able to work through that process than those who have no contact with the adoptive family. (12, 26) There is also a recognition that open adoption actually improves self esteem by providing an avenue for responsible decision-making and providing a sense of control. (26) One study in adolescents and their mothers found moderate to strong support for the concept of open adoption. This included wanting information about the child as it grew up and wanting to choose the adoptive family. (27)

In a narrow legal definition per Ohio law, adoption is a relinquishment of birthparents' legal right to parent. That (28) is to say, an Ohio Court will not enforce a birth parent's efforts to be involved in his/her child's life after an adoption has taken place. On the other hand, an Ohio Court will not block a birth parent from being involved in his/her adopted child's life if the adopting parent(s) wants the birth parent(s) involvement.

OUTCOMES OF THE ADOPTION DECISION FOR ADOLESCENTS

In a 1992 review of the literature, Resnick (4) described literature indicating that no matter whether adolescents chose to terminate or continue a pregnancy, they had equal life satisfaction as long as they were allowed to make their own carefully considered decisions. Adolescents needed to feel ownership of the pregnancy outcome decision and to not feel that the decision was forced on them. Overall, adolescents who chose adoption rather than parenting had slightly less satisfaction with their decision but were more likely to complete their education/training, delay marriage, be employed, and delay a subsequent pregnancy. (19) These findings were confirmed in a longitudinal study which followed adolescents for two years after birth. Although those who chose adoption had more personal regret about their decision than those who parented, they experienced a higher socioeconomic status, completed more years of school, had higher employment rates, and had less sexual risk taking. (29)

In its 2007 report, the Evan B. Donaldson Adoption Institute delineated the following factors as being key to a positive long term outcome for birth parents (5)

- Lacking coercion in the adoption decision
- Possessing the ability to express feelings of loss and to receive social support
- Being empowered to choose the adoptive family
- Having some contact with the adoptive family after placement
- Having information about the child's well being
- Resolving feelings of grief
- Coming to terms with the decision to place rather than parent
- Being able to maintain self esteem while incorporating the concept of being a birthparent into one's identity
- Overcoming the impact of adoption on future intimate relationships

EXISTING ADOPTION EDUCATION PROGRAMS

The adoption education literature review did not uncover any research studies on the impact of secondary school-based classroom curricula about adoption. No study to date has been published in the professional, peer-reviewed literature regarding the efficacy of adoption education programs in the school. The review identified only one secondary school classroom program on adoption education ---FLASH-- which has been implemented in King County in the state of Washington and multiple other states since the early 1990s. (30) In an interview with one of the author's of this review, the author of FLASH, Beth Reis, indicated that there were program evaluations on user knowledge, attitudes and satisfaction, with continuous improvement and modification of the adoption lesson based on user feedback. However, there were no comparison/controlled trials on the curriculum's impact on pregnant teens' behavior or decisions to make an adoption plan. (31)

The FLASH curriculum addresses the definition of adoption distinguishing this from foster care and more informal arrangements; clarifies the adoption process including types of agencies and open vs. more traditional closed arrangements; and clarifies facts while dispelling myths through interactive case scenarios and discussions. These discussions include members of the adoption

triad. The program also has an exercise which helps teens explore their personal views about adoption for themselves and others.

CONCLUSIONS ABOUT ADOPTION EDUCATION

Based on this review, the following conclusions are offered:

1. Adolescents are interested in learning more about adoption and the adoption process including open adoption
2. Myths and facts about adoption including the potential positive and negative affects of this decision on the birth parent should be addressed with teens
3. Teens should be encouraged to discuss the topic of adoption with their parents and peers since these groups have significant influence in their decision making processes and attitudes
4. Adoption should be included in all non-judgmental options counseling for pregnant adolescents to allow them to make an informed non-coerced pregnancy outcome decision
5. Individuals providing options counseling for teens should be educated on adolescent cognitive and psychosocial development to ensure developmentally appropriate information

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GUIDELINES FOR SEXUAL HEALTH AND ADOPTION EDUCATION

INTRODUCTION

Evidence suggests that secondary school sex education programs that teach medically accurate, evidence-based comprehensive information about abstinence, pregnancy prevention, and safe sex practices to prevent STDs and HIV infection have a positive impact on healthy sexual behavior. This type of comprehensive programming can delay the onset of first sexual intercourse among teenagers, reduce their frequency of sexual activity, reduce their number of sexual partners, and increase contraceptive and condom use when they become sexually involved.

In *Emerging Answers*, 2007, Douglas Kirby (1) outlines 17 characteristics of effective curriculum programs. These programs had clear health goals with specific behavioral objectives and addressed perceived risks, norms, values, attitudes, and self efficacy in addition to knowledge. The programs also went further than just delineating risky behavior by teaching teens how to avoid situations that lead to negative health consequences. Teaching methods actively involved participants enabling them to understand how the information directly applied to their lives. These programs focused on encouraging protective factors while avoiding risky behaviors. In addition, these programs showed sensitivity to the developmental maturity, cultural values, and levels of sexual experience among the participants.

Several authors Kirby (1), Alford (2), and Card (3) have compiled lists of recommended programs that have been reviewed for effectiveness. These publications provide a wide choice of programs for communities to choose from which best fit in with the community's values, and resources including staff time, skills, space, and supplies. Five curriculum-based programs that were effective for both males and females were mentioned by Alford and Kirby and had at least two behavioral outcomes including delayed sex, reduced frequency of sex, reduced number of partners, increased condom use, increased contraceptive use, or decreased unprotected sex. These programs included:

- *Reducing the Risk: Building Skills to Prevent Pregnancy, STD & HIV*
- *Safer Choices: Preventing HIV, Other STD, and Pregnancy*
- *Becoming a Responsible Teen: An HIV Risk Reduction Program for Adolescents*
- *Making Proud Choices: A Safer Sex Approach to HIV/STDs and Teen Pregnancy Prevention*
- *¡Cuidate! (Take Care of Yourself) The Latino Youth Health Promotion Program*

Of these five programs, *Reducing the Risk* and *Safer Choices* focus on both Pregnancy and STD/HIV prevention and are applicable to youth of all ethnic backgrounds. *Reducing the Risk* has had outcomes replicated in other evaluation studies.

One area that has not received as much attention in designing educational programming is adoption. The literature indicates that most Americans view adoption as a viable option to consider as a pregnancy outcome. Although it is important to recognize that there are significant cultural differences particularly among some groups who have long standing cultural norms that do not view formal adoption outside the family as an option. There are also several studies demonstrating that both pregnant and never pregnant adolescents consider adoption to be a

serious option. The literature also demonstrates however, that adolescents are not given adequate information on the adoption process and many even when faced with a pregnancy do not have comprehensive discussions to explore this option.

As of August, 2008, there are no published evidence-based research studies on the impact of secondary school-based classroom curricula about adoption. Further, only two adoption education curricula have been identified: (F.L.A.S.H.) from Seattle (4) and Adoption University from the Nebraska Children's Home Society (5). At this time, the best approach to teaching adoption would be to ensure that it includes the information found to be absent in surveys of adolescents and that it follow Kirby's guidelines about effective curriculum which include interactive programming that addresses knowledge, attitudes, and self efficacy in decision making.

OVERALL GOALS OF GUIDELINES

The purpose of the following guidelines is to frame the content of a comprehensive curriculum which would achieve the goals of:

1. Improving the overall sexual health of adolescents
2. Promoting abstinence as the most effective way of preventing pregnancy, sexually transmitted infections and Human Immunodeficiency Virus infection
3. Decreasing the risk behaviors that contribute to unplanned pregnancy, sexually transmitted infections, and Human Immunodeficiency Virus infection
4. Increasing the consideration of adoption as a pregnancy outcome option

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