

Teen Pregnancy: United States vs. Europe

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Abstract: *The United States has the highest rates of teen pregnancy and teen birth among comparable countries in Europe. Teen pregnancy presents many risks due to teenage girls not being physically or psychologically mature enough to reproduce. While contributing to high school drop-out rates, the biology of teen pregnancy, risky behavior, nutrition, socioeconomic status and levels of prenatal care are all risk factors to both the mother and the infant. Comprehensive sexuality education is a way to prevent unintended pregnancies and reduce the risk of sexually transmitted infections. Adolescent sexual health outcomes are more positive in the European countries of France, Germany, and the Netherlands than in the United States due to societal openness and comfort in dealing with sexuality along with pragmatic governmental policies. Such policies create better sexual health outcomes for French, German, and Dutch teens when compared to U.S. teens.*

Keywords: *sexual health, teen pregnancy, unintended pregnancy, sexually transmitted infections, high school drop-out rate, prevention, governmental policies.*

I. Introduction

Although the United States recently has seen a one-third decline in teen birth rates since the early 1990s, it has the highest rates of teen pregnancy and teen birth among comparable countries [1-4]. In 2012, the U.S. teen birth rate was 29.4 births per 1,000 girls age 15-19 [5]. Hispanic/Latino youth, Non-Hispanic black youth, American Indian/Alaska Native youth, and socioeconomically disadvantaged youth of any race or ethnicity experience the highest rates of teen pregnancy and childbirth [6]. Hispanic/Latino youth have the highest teen birth rate of 55.7 per 1,000 [7].

The United States spent \$1.3 billion between 2001 and 2009 promoting abstinence-only-until-marriage programs, according to the Office of Management and Budget [8]. In July of 2009, President Barack Obama proposed to eliminate these sexuality education programs because the White House collected research that showed abstinence-only programs do not help eliminate unwanted pregnancies. Obama advocated for Congress to spend \$178 million on comprehensive sexuality education focusing on preventing teen pregnancy. However, many representatives continue to support funding for just-say-no initiatives [9].

Although many comprehensive sexuality education advocates are thrilled that federal funding for abstinence-only programs may cease, some are worried about programs that focus only on teen pregnancy reduction. Comprehensive sexuality educators are trained in reducing homophobia, avoiding STIs, improving communication skills between partners, preventing sex abuse and assault, along with teen pregnancy prevention [10]. If a program were to focus on teen pregnancy prevention alone, only a fraction of building healthy futures would be addressed [11].

Lobbyists tried to get Congress to shift money from community-based programs to school-based programs. Under Obama's plan, \$110 million of the \$178 million would have gone to programs in neighborhoods and community centers rather than to schools [12]. Obama called for a \$10 million increase in Title X funding. Title X provides funds for birth control and family planning services for our nation's poor. In 2008 and 2009, the U.S. spent \$300 million on Title X. Although \$10 million seems like a lot, it only represents a 3% increase in funding [13].

II. Developmental Issues and Consequences

For the thousands of births each year from adolescent mothers, it is important to discuss the risks of difficult pregnancies and parenthood. An infant's psychological and physical health rests in the hands of its mother. The mother-infant relationship of a teen mother and her baby is often strained, putting the infant at risk [14-16].

Adolescence is the period between 10-19 years, which is considered to be the transition from childhood to adulthood. This period includes structural, functional, and psychological development in a child to prepare her for motherhood [17]. When young women get pregnant, many risks present themselves because a teenage girl is not physically or psychologically mature enough to reproduce [18-21]. Adolescents are egocentric and focused on different roles that will eventually develop into more consolidated identities. Pregnancy alters this development, requiring the teenager to forsake her own path for that of motherhood. As the adolescent struggles with her own conflicted identity, empathy, respect and sensitivity to the infant may be lost [22].

Many risks present themselves throughout an adolescent's pregnancy such as prenatal care, illiteracy, and poor-economic status. Medical complications can arise as well such as preterm birth, poor maternal weight gain, pregnancy-induced hypertension, anemia, and STD's [23-25]. Anemia is a common complication of teenage pregnancy while 72.6% of teenage pregnant women become anemic [26].

Teen pregnancy also introduces the risk of low birth weight [27]. Factors known to vary with birth weight include socio-demographic and anthropometric characteristics of the mother, antepartum care, time of onset of labor, the length of gestation, and the sex of the infant [28, 29]. Preterm labor is considered to be a birth occurring before 37 weeks of gestation and incidences are high in teenage mothers [30]. Probable causes are anemia, malnutrition, pregnancy-induced hypertension, or lack of antenatal care [31-33].

Although preterm labor poses a risk to both the mother and infant, an even more serious risk is the high infant mortality rate. The infant mortality rate in the United States for young women is high [34]. In 1999, the infant mortality rate for women under age 20 was 10.3 deaths per 1,000 live births. With an estimated 470,000 births to teen mothers in the year 2000, over 1,500 infant deaths occurred among adolescent mothers [35, 36].

The biology of teen pregnancy, risky behavior, nutrition, race, socioeconomic status and levels of prenatal care are all risk factors to both the mother and the infant. Poverty, minority status, low education levels, and being unwed are common in adolescent mothers. These factors all play a role in posing risks to the infant and the young mother [37-40].

Adolescent parenthood can have a negative impact on both parents and offspring. Adolescent mothers and fathers typically have lower educational attainment and more limited economic opportunities than those who delay childbearing [41]. Adolescent parenthood may also hinder psychological development of teens, resulting in poorer psychological functioning [42]. Offspring of teen parents are often raised in lower-income homes and are at greater risk of neglect and abuse than children with older parents. Developmental delays, cognitive impairment and undesirable behavior outcomes are common among offspring of teen parents [43].

Pregnancy and birth contribute to high school drop-out rates among girls. Only about 50% of teen mothers receive a high school diploma by 22 years of age, versus approximately 90% of women who had not given birth during adolescence [44]. In addition, children of teenage mothers are more likely to have lower school achievement and drop out of high school, have more health problems, be incarcerated at some time during adolescence, give birth as a teenager, and face unemployment as a young adult [45].

III. Interventions

For the past 30 years, state and local health agencies and public schools in the United States have been addressing high teen pregnancy rates through a number of different strategies. The Panel on Adolescent Pregnancy and Childbearing of the National Academy of Sciences wrote a two-volume report titled, *Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing* [46]. This report summarized various methods of addressing the problem of early childbearing. After reviewing existing service programs, the panel decided that primary prevention must be a priority with a focus on delaying early sexual activity and improving contraceptive use among sexually active teens [47, 48].

Educators, health care providers, and policy makers have an interest in teenage pregnancy trends for many reasons. One reason is that there may be a link between socioeconomic factors and the rate of adolescent pregnancy/childbearing [49-52]. Also, teen pregnancy trends can be used as indicators of adolescent sexual and reproductive health [53, 54]. It is generally assumed that many teenage pregnancies are unintended, therefore reflecting the extent to which young men and women have control over their sexual and reproductive health. When and where teenage pregnancy rates decline, it is possible that the trends reflect increasing levels of effective contraceptive use, greater access to reproductive health services, exposure to higher quality sexual

health education, and/or shifting of social norms in a direction that provides greater support for young women's capacity to exercise reproductive choice [55, 56].

IV. Comprehensive Sexuality Education

Education is necessary to find solutions for prevention and/or intervention. Sexuality among youth should be embraced as a part of healthy human behavior. Comprehensive sexuality education is a way to prevent unintended pregnancies and reduce the risk of sexually transmitted infections [57, 58]. When young people know about their choices, the better their health and future will be. Many organizations are working with schools to offer sexuality education to children and young adults who have their futures in mind [59-61].

Since 1998, *Advocates for Youth* has sponsored study tours to France, Germany, and the Netherlands to explore why adolescent sexual health outcomes are more positive in these European countries than in the United States. The study tour titled "*Rights. Respect. Responsibility.*"[®] includes policy makers, researchers, youth serving professionals, foundation officers, and youth. In France, Germany, and the Netherlands, two themes create greater, easier access to sexual health information and services for all people, including teens. They are: 1) societal openness and comfort in dealing with sexuality, including teen sexuality; and 2) pragmatic governmental policies. This has resulted in better sexual health outcomes for French, German, and Dutch teens when compared to U.S. teens [62].

Throughout the *Advocates for Youth* European study tours, many lessons have been learned:

1. Adults in France, Germany, and the Netherlands view young people as assets, not as problems. Adults value and respect adolescents and expect teens to act responsibly. Governments strongly support education and economic self-sufficiency for youth.
2. Research is the basis for public health policies to reduce unintended pregnancies, abortions, and sexually transmitted infections, including HIV. Political and religious interest groups have little influence on public health policy.
3. A national desire to reduce the number of abortions and to prevent sexually transmitted infections, including HIV, provides the major impetus in each country for ensuring easy access to contraception and condoms, consistent sex education, and widespread public education campaigns.
4. Governments support massive, consistent, long-term public education campaigns, through the Internet, television, films, radio, billboards, discos, pharmacies, and health care providers. Media is a respected partner in these campaigns. Campaigns are direct and humorous and focus on both safety and pleasure.
5. Youth have convenient access to free or low-cost contraception through national health insurance.
6. Sex education is not necessarily a separate curriculum and is usually integrated across school subjects and at all grade levels. Educators provide *accurate* and *complete* information in response to students' questions.
7. Families have open, honest, consistent discussions with teens about sexuality and support the role of educators and health care providers in making sexual health information and services available to teens.
8. Adults see intimate sexual relationships as normal and natural for older adolescents, a positive component of emotionally healthy maturation. At the same time, young people believe it is 'stupid and irresponsible' to have sex without protection. Youth rely on the maxim, 'safer sex or no sex'.
9. Society weighs the morality of sexual behavior through an individual ethic that includes the values of responsibility, respect, tolerance, and equity.
10. France, Germany, and the Netherlands struggle to address issues around cultural diversity, especially in regard to immigrant populations whose values related to gender and sexuality differ from those of the majority culture [63, 64].

The United States can use The Netherlands, Germany, and France as guides to improve adolescent sexual health. Ideally, the United States will achieve social and cultural consensus that sexuality is a normal and healthy part of being a human being- regardless of age. The goal of this research is to promote age-appropriate sexual and reproductive health education for children and adolescents in United States public schools.

France. In 2002, the teen pregnancy rate in France was 25.7 pregnancies per 1000 women ages 15-19, calculated to include birth, abortions, and fetal losses [65]. The general public in France accepts sexuality education and recognizes young people as sexual beings. However, conservative and religious groups, particularly Catholic groups, regularly protest against sexuality education in schools [66].

Sexuality education is mandatory in France and begins at around the age of six. Parents are sometimes involved. The 2003 regulation stated that sexuality education must integrate biological knowledge and psychological, emotional, social, cultural and ethical dimensions of sexuality [67-68].

In France, sexuality education is provided by teachers and health staff. Non-governmental organizations (NGOs) are involved in religious organizations, HIV/AIDS agencies and the French International Planned Parenthood Federation Member Association. Public financing for provision, teaching materials and professional training are thought to be inadequate, while guidelines for sexuality education in France are thought to be generally good [69, 70].

Germany. In 2003, the teen pregnancy rate in Germany was 18.8 pregnancies per 1000 women ages 15-19, calculated to include birth, abortions, and fetal losses [71]. Attitudes towards sexuality education in Germany are generally liberal. According to the 'Pregnancy and Family Aid Act', sexuality education is seen as an effective instrument to avoid unplanned pregnancies. However, due to declining birth rates, the federal government is increasingly committed to support childbearing, while anti-choice groups are said to be using the changing political environment to intensify their activities [72, 73].

Sexuality education is mandatory in Germany. There are no opt-out clauses. The minimum standards for the provision of sexuality education are regulated at the state level. The quality and availability varies from state to state. Although sexuality education is required to be taught in a holistic way, teachers often think of the subject exclusively as knowledge of biology and the human body. Since 19% of the population consists of citizens with migrant backgrounds, it is thought that cultural diversity issues need to be integrated into sexuality education [74, 75].

The Netherlands. The Netherlands has been recognized for its low rates of teen pregnancy. As of 2006, the teen pregnancy rate in The Netherlands was 14.1 pregnancies per 1000 women ages 15-19, calculated to include births and abortions while the U.S. teen pregnancy rate was 61.2 [76]. The United States' teen pregnancy rate was almost three times that of Germany and France, and over four times that of The Netherlands [77].

Human rights and individual liberties play an important role in Dutch society. Attitudes towards young people's sexuality are generally permissive. The media is supportive and informative with regard to sexual matters [78, 79].

Dutch schools are mandated to cover biological aspects of sexuality education. The Ministry of Public Health, Welfare and Sports is responsible for sexuality education policy in cooperation with other ministries and NGOs. Both physical aspects and emotional development should be covered, although not all topics are discussed. Sexuality education starts by the age of 11 or 12 [80, 81].

There is a clear connection between school sex education policy and adolescent sexual health in The Netherlands, the United States, France and Australia [82]. In The Netherlands, France and Australia, comprehensive sex education was considered one of the key determinants contributing to positive sexual health outcomes among adolescents. In this study, The Netherlands proved to show a liberal and comprehensive approach to sex education. This approach was described as a 'sex positive environment' that accepts adolescent sexuality and teaches youth about sexual responsibility [83].

A comparison of sexual health outcome data in The Netherlands and the United States, content analysis of current Dutch sexuality materials, and a case study of a national high school sexuality education program produced prominent themes in Dutch sexuality education materials [84]. One theme was *physical and emotional sexual development*, which included information about puberty, addressing physical and emotional changes. Boundary setting and communication were applied to two specific skills: encouraging young people to think about how far they want to go with sexual activities, and how to communicate about safe sex and condom use [85].

The next theme was *relationships*, which treated the topic of relationships as a transition between puberty and before sex and contraceptives are introduced. Materials connect puberty and relationships by discussing puberty as a life stage in which a person begins to have more sexual feelings. The possibility that sexual feelings may be toward someone of the opposite sex or same sex is acknowledged, and, in this manner,

sexual identity and orientation are also introduced, including information on heterosexuality, bisexuality, and homosexuality [86].

Sexuality was the next prominent theme noted. Dutch material generally included the pleasurable aspects of sex and relationships. For instance, masturbation is described as a safe and enjoyable way to discover what pleases you. Masturbation is portrayed as a normal activity for which a young person should not be ashamed [87].

One of the most dominant themes in Dutch materials was *safe sex*. This topic includes contraceptives and the prevention of STIs and pregnancy [88, 89]. There are three main messages within this domain: birth control provides the best protection against pregnancy, the pill does not protect you from STIs, and a condom offers the best protection against STIs. These three messages unite to form one overall recommendation: if you have sex, use a condom and the pill together, commonly referred to as the ‘Double Dutch’ method. *Responsibility* is also a central theme within this domain [90].

One of the main challenges to sexuality education in The Netherlands, like many other countries, is religious convictions opposing sexuality education. There has also been a rise in migrant populations. An increase in perceived risk-taking behavior among young people is also a challenge [91].

The United States. Two approaches to teen pregnancy prevention have dominated U.S. program intervention models- ‘abstinence-only’ and ‘comprehensive sexuality education’, which incorporates abstinence with information about sexual development and contraception. Both models focus on life skills education (e.g., coping with peer pressure, positive and assertive social interactions), changing teens’ attitudes toward risky sexual behaviors and acquiring knowledge about HIV/AIDS and other STDs [92]. Researchers studied the National Survey of Family Growth to determine the impact of sexuality education on youth sexual risk-taking for young people ages 15-19, and found that teens who received comprehensive sex education were 50 percent less likely to experience pregnancy than those who received abstinence-only education [93].

Advocates for Youth, Answer and SIECUS (Sexuality information and Education Council of the United States) are a few groups who are looking ahead. These groups began meeting in 2007, with funding from foundations, and wrote a draft document on the future of sexuality education. They showed this document to approximately 100 professionals in the field. A revised version of this report has been released and is titled “The Future of Sex Education in America’s Public Schools.” This report mentions that the Future of Sex Education (FOSE) group has one goal: “*For every young person in public schools to have a developmentally, culturally appropriate comprehensive sexuality education in Pre-K through Grade 12*” [94].

Many polls have shown that Americans support sex education in schools, although many school boards hesitate to offer it to their students. The FOSE group states that there are three key messages in advocating for comprehensive sex education:

- Good sex education protects the health and safety of young people
- Good sex education includes messages about abstinence and contraception
- Good sex education provides complete information and education, which in turn helps young people take personal responsibility for important life decisions

The report offers short-, mid- and long-term strategies for implementing comprehensive sex education on the national, state and local level. But, because America’s educational system is decentralized, advocates must continue to influence individual school districts [95].

V. Conclusion

The National Campaign to End Teen and Unplanned Pregnancy examined studies of prevention programs, which proved to have a strong experimental design and used appropriate analysis [96]. Two-thirds of the 48 comprehensive sexuality education programs studied had positive effects. Forty percent of these programs helped delay sexual initiation, reduce the number of sexual partners, or increase condom or contraceptive use. Thirty percent reduced the frequency of sex, including a return to abstinence. Sixty percent reduced unprotected sex [97]. Furthermore, researchers studied the National Survey of Family Growth to determine the impact of sexuality education on youth sexual risk-taking for young people ages 15-19, and found that teens who received comprehensive sex education were 50 percent less likely to experience pregnancy than those who received abstinence-only education [98]. However, abstinence-only education is a key part of the Republican National Convention’s Republican Platform [99] which dominates U.S. public schools under the Trump administration.

Many comprehensive sex education programs have been evaluated in recent years. These programs can help youth delay onset of sexual activity, reduce the frequency of sexual activity, reduce number of sexual partners, and increase condom and contraceptive use. Evidence suggests that youth who receive comprehensive sex education are not more likely to become sexually active, increase sexual activity, or experience negative sexual health outcomes.

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