



9-2017

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Repository Citation

Latta, Hannah; Omar, Hatim A.; and Shahtahmasebi, Said, "Negative Outcomes of Teen Sexual Activity: A Review" (2017). *Pediatrics Faculty Publications*. 239.

https://uknowledge.uky.edu/pediatrics_facpub/239

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Notes/Citation Information

Published in *Dynamics of Human Health*, v. 4, issue 3.

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Negative Outcomes of Teen Sexual Activity: A Review

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Keywords: teenage pregnancy, adolescent health, adolescent behaviour

Received: 24/4/2017; **Revised:** 5/8/2017; **Accepted:** 30/8/2017

Abstract

A recent victory with respect to teen sexual behavior is the reduction of the national teen birth rate. In 1991, there were 61.8 births per 1000 females aged 15-19. By 2014, this rate plummeted to 24.2 births per 1000 adolescent females. Averages, however, do not reflect state-level variation. For example, in 2014, Kentucky reported 35.3 births per 1000 adolescent females, while New York reported a teen birth rate of 16.1 births per 1000 adolescent females. In this paper divergent outcomes in teen sexual behavior are reviewed which are likely due to numerous factors including socioeconomic status, educational attainment, and history of abuse. It is plausible that differentials in regional outcomes can be explained by the regional variations in social, economic and educational variables, which is the subject of a forthcoming paper.

Introduction

In the United States, premarital teen sexual activity has traditionally been considered a taboo topic. Parents' reluctance to engage in open, honest conversations with their teens concerning sexual behavior and their reliance upon traditional methods of socialization to propagate their attitudes from generation to generation have been well-documented since the 1960s (Bell and Buerkle, 1961; Fox, 1980). Even when changing ideologies during the late 20th century prompted parents to modify their approach to this topic, they addressed sexual behavior differentially with their daughters and sons (Kennedy, 1991). Daughters were more likely to receive information concerning sexual behavior before they engaged in sexual intercourse, whereas sons were more likely to receive this information after they had already begun having sex (Moore et al, 1986).

An increasingly liberal attitude toward sexual behaviour resulted in rising teen pregnancy rates during the 1970s and 1980s (Kennedy, 1991). In 1991, the national teen birth rate was a staggering 61.8 births per 1000 females aged 15-19 (HHS, 2016). Since that year, a steady decline in the national teen pregnancy and birth rates has been observed. In 2014, the national teen birth rate was substantially lower at 24.2 births per 1000 females aged 15-19 (HHS, 2016). Although it is difficult to pinpoint factors responsible for this trend, researchers highlight teens' increased use of contraceptives and delayed first sex as primary explanations (Boonstra, 2014).

The decline in national teen pregnancy and birth rates has been reflected in a similar trend at the state level. However, teen birth rates in some states still remain high. Teen birth rates in 2014 in rural states such as Kentucky and Tennessee were 35.3 and 33 births per 1000 adolescent females, respectively (The National Campaign, 2016). In that same year, by comparison, more urban states such as New York and Florida reported teen birth rates of 16.1 and 22.5 births per 1000 adolescent females, respectively (The National Campaign, 2016). This discrepancy between rural and urban states suggests the presence of some regional

differences. In an effort to understand these differences, this report will explore the following factors, by region: adolescent sexual behaviors, attitudes toward sex, and sexual education.

Despite the decrease in adolescent pregnancy and birth rates, unplanned teen births still have many negative economic and social outcomes. For instance, unplanned teen births cost taxpayers over \$9 billion in 2010 alone (The National Campaign, 2016). Additionally, adolescent moms often attain lower levels of education, rely more heavily on federal economic assistance, have more children overall, and earn fewer dollars than women who delayed starting a family (Hoffman & Maynard, 2008). Even if these women are able to complete their education by earning a GED, it takes them longer to do so, and this accomplishment is often not viewed as favorably by potential employers as is a high school diploma (National Research Council (US) Panel on Adolescent Pregnancy and Childbearing, 1987). Furthermore, adolescent bodies are often not mature enough to carry a baby to full term, and these teen mothers and their babies often suffer costly health consequences (University of Wisconsin Population Health Institute, 2016).

Teen pregnancy and birth are not the only consequences that result from sexual activity. Unfortunately, STDs such as chlamydia, gonorrhea, and syphilis often accompany these teens throughout high school and into early adulthood. With rates of STDs at an all-time national high and teens representing a large majority of newly-diagnosed STD cases, there are clearly misconceptions regarding sexual activity and its consequences that prevail among members of this population (CDC STD Surveillance Report). Similar disturbing trends exist for the incidence of HIV and sexual violence in this age group, which will be addressed in more detail later in this report.

In this paper a review and discussion of the negative outcomes of teens sexual behaviour is provided. In a second paper (forthcoming) Regional differentials in teens sexual outcomes are explored and discussed.

Method

Specific states that will be highlighted are: Kentucky, Tennessee, New York, and Florida. These states were chosen for their differences in percentage of population residing in rural counties, percentage of rural counties, sexual education policies, and regional location in the United States.

Initially, Google Scholar searches were conducted to identify appropriate literature sources and databases for this paper. Terms searched included: “adolescent development,” “teen pregnancy and birth rates,” “teen pregnancy physiological effects,” “differences in rural and urban teen pregnancy rates,” “teen pregnancy social and economic consequences,” “teen STD rates,” “adolescent intimate partner violence rates,” “sexual education programs,” and “parental attitudes toward teen sexual activity.” Key sources such as the Centers for Disease Control and Prevention (CDC), The National Campaign to Prevent Teen and Unplanned Pregnancy (The National Campaign), Health Indicators Warehouse (HIW), Guttmacher Institute, Kaiser Family Foundation, and United States Department of Human and Health Services (HHS) were identified through these searches. Within each of these databases, subject-specific searches were conducted to ascertain the appropriate data and reports for this review. For example, national and state YRBS reports, STD surveillance reports, and intimate partner violence reports were searched using the CDC database. National and state teen pregnancy rates were searched using The National Campaign database, and national, state, and county teen birth rates were searched using the HIW database. State sexual education policies were searched using the Guttmacher Institute and the Kaiser Family Foundation. Finally, teen pregnancy reports were searched using the Guttmacher Institute and United States Department of Human and Health Services.

Background

Adolescent Development

Adolescence is a key developmental phase in which teenagers experience significant physical changes. Surging levels of hormones prompt these individuals to initiate romantic relationships, which have the potential to promote emotional health during this critical time (McNeely & Blanchard, 2009). However, equally impactful on adolescent development is an unhealthy relationship filled with physical, sexual, and emotional abuse. Of particular interest is the group of adolescents who experience precocious puberty—defined as the early development of primary and secondary sex characteristics such as breasts, wider hips, and menarche in females and deeper voices, more defined muscles, and enlarged testicles in males (McNeely & Blanchard, 2009). Since this event is associated with noticeable physical changes, these individuals are often somewhat “othered” by their classmates (McNeely & Blanchard, 2009). This othering can manifest itself in the form of excess sexual attention from their older peers. Whether wanted or not, this occurrence can lead to unfortunate consequences if teens are ill-prepared to handle the situation. This is related to the critical changes in brain development that accompany (and more importantly, follow) the physical changes manifested in their bodies. While adolescents generally experience most of their physical development before age 21, the frontal lobes of their brains do not reach full maturity until as late as age 25 (McNeely & Blanchard, 2009). The frontal lobe is a key brain region implicated in planning, impulsivity, and decision-making (Johnson, Blum & Giedd, 2009). A consequence of the underdevelopment of this structure during early adolescence is the tendency for teenagers to engage in risky behaviors without properly considering the consequences (McNeely & Blanchard, 2009). Therefore, individuals who experience precocious puberty are especially vulnerable to succumbing to outside influences and the sexual attention directed toward them by older peers since their frontal lobes are not nearly fully developed (McNeely & Blanchard, 2009). Girls at particular risk of this event are those who enter into relationships with men at least three years their senior (Kirby & Lepore, 2007). Not only are these young individuals more likely to experience teen pregnancy and have more sexual partners during their lifetime, but they are also more susceptible to contracting STDs (Kirby & Lepore, 2007). Even when considering older adolescents whose frontal lobes may be in the more advanced stages of development, drugs and alcohol can render their decision-making capabilities ineffective. Although the prevalence of high schoolers who engaged in sexual intercourse when under the influence of these substances has significantly decreased since 1999, the rate still remained high at 20.6% in 2015 (Centers for Disease Control and Prevention, 2015).

Another factor influencing the sexual behavior of teenagers aged 15-19 is the attitude of their peers regarding sexual intercourse. The attitude of today’s teenager toward sexual activity is markedly different from that possessed by their counterparts in 1991, as evidenced by recent data reported by the 2015 YRBS. In 1991, 54.1% of high school students had engaged in sexual intercourse at some point during their life; however, in 2015, this figure had decreased to 41.2% (CDC, 2015). Not only are teens’ sexual activity decisions influenced by their peers, but their attitudes regarding condom use and pregnancy are under similar determination (Kirby & Lepore, 2007).

Some individuals who do not experience precocious puberty are still more likely to have sexual relations during their teenage years. Males that can be classified into this group include those who consistently embody traditional ideals of masculinity such as the idea that getting a girl pregnant is associated with manhood (Rolleri, 2013). Additionally, members of this group often view condom use as unnecessary, have multiple sexual partners over the course of a year, and do not assume active roles in their personal health (Rolleri, 2013). Females who are more likely to practice unsafe sexual behavior are also an important group

within this 41.2% of high schoolers who have ever had sexual intercourse. These individuals embody “acquiescent femininity,” which is defined as a gender norm in which females are more likely to yield to the wishes of their male peers (Rolleri, 2013). Oftentimes, these girls are subjected to abuse by their sexual partners, experience unplanned pregnancy, and are not assertive when communicating with their partners, especially concerning sexual intercourse (Rolleri, 2013).

Another critical factor influencing teens is their parents. The marital status of their parents and the teens’ living arrangement with their parents is a particularly important predictor of their likelihood to engage in unprotected sex and experience pregnancy during their adolescent years (Kirby & Lepore, 2007). This likelihood is significantly lower for teenagers who live with both of their biological parents (Kirby & Lepore, 2007). A similar trend is observed in teenagers whose parents earn higher incomes and who are more educated (Kirby & Lepore, 2007). Teenagers who are raised in a family environment where drug and alcohol abuse abound are likely to have more sexual partners and engage in sexual activity more often (Kirby & Lepore, 2007). The sexual behavior espoused and practiced by their parents or parental figures is also a key factor in determining teens’ sexual activity (Kreipe, 2010). For example, if a teenager’s parents experienced pregnancy during adolescence and deride contraceptive use, then the teen is more likely to become a parent during this same time and less likely to use contraceptives (Kirby & Lepore, 2007). Parental sexual behavior is useful when considering adolescents who have been sexually abused at a young age, especially when this abuse is defined as coercive sexual intercourse (Kreipe, 2010). These individuals are more likely to experience unplanned pregnancy as teens and have a greater number of sexual partners, because they often use this abuse experience as a reason for engaging in sexual intercourse (Kreipe, 2010). Furthermore, these partners are often older individuals; such sexual relationships are associated with decreased contraceptive use and increased pregnancy rates (Kreipe, 2010).

As discussed above, these individuals are more prone to take (sexual) risks without fully considering the consequences (McNeely & Blanchard, 2009). Therefore, presenting only the risks (or negatives) of early and/or unprotected sexual intercourse does not significantly discourage teens from engaging in the activity (Kreipe, 2010). Educators should also identify the positive consequences of practicing safe sex that does not occur under the influence of alcohol or drugs (Kreipe, 2010). Focusing on a complex array of factors during these instructional events is also key to their efficacy. Both risk and protective factors regarding sexual activity are addressed in the most successful programs (Kirby & Lepore, 2007). Additionally, educators often make the mistake of presenting factors that are merely correlated with teen pregnancy and STDs rather than emphasizing the ones that are causes of these events (Kirby & Lepore, 2007). These causal factors are often behaviors that can be altered via impactful presentation during educational programs (Kirby & Lepore, 2007). Examples of causal risk factors that significantly affect teen sexual activity include: residing in impoverished and dysfunctional neighborhoods, being a member of a gang, and working at least 20 hours each week (Kirby & Lepore, 2007). Protective factors for teens include: meaningful community and school involvement, informed attitudes regarding contraceptive use, and a more conservative approach regarding the initiation of sexual activity (Kirby & Lepore, 2007). Educators should also present the issue of dating violence, including discussion of risk and protective factors related to this event.

Pregnancy/Birth

Individual health is important to consider in pregnancy, since maternal health is a known determinant of fetal health. This becomes especially important during teenage pregnancy, since adolescent mothers often experience a whole host of other problems including anemia,

inability to gain weight, and gestational hypertension simply by virtue of their age (University of Wisconsin Population Health Institute, 2016). Sadly, their babies experience resulting health consequences in the form of low birthweight, prematurity, and later developmental issues (University of Wisconsin Population Health Institute, 2016). Additionally, these teen mothers have a strikingly similar socioeconomic profile: most are often raised by only one parent, hail from impoverished homes, and have uneducated parents when compared to women who gave birth to children after their teenage years (National Research Council, 1987).

Sexually Transmitted Diseases (STDs) and HIV

Cervical cell maturity in females is directly related to age; therefore, younger women possess more immature cervical cells (Hwang et al, 2009). Immature cervical cells are particularly vulnerable to infection, which explains the finding that young women are especially at risk for contracting STDs (Hwang et al, 2009; Kirby & Lepore, 2007).

One particularly interesting fact is that sexually active individuals aged 15-24 account for 10 million of the 20 million new STD cases in the United States each year (ACT for Youth Center of Excellence, 2016). Not only is this disturbing to consider in light of the young age of these individuals, but it is also concerning because this group represents only one-fourth of the sexually experienced U.S. population (ACT for Youth Center of Excellence, 2016). Among 15- to 19-year-olds alone, over 450,000 were diagnosed with gonorrhea, chlamydia, and syphilis in 2014 (CDC, 2015). Additionally, approximately 1,828 individuals in this age group were diagnosed with HIV in this same year (CDC, 2015). These statistics are supported by the significantly declining rate of condom use among high school students for the past twelve years (CDC, 2015). Since 2003, this figure has dropped approximately 6 percentage points—from 63% to its current rate of 56.9% (CDC, 2015). Further support for the HIV statistic can be found in the declining prevalence of high schoolers who have been tested for this infection. From 2011 to 2015, the percentage of this age group who received HIV testing dropped from 12.9% to 10.2% (CDC, 2015).

This disproportionate rate of infection also speaks directly to the sexual education (or more appropriately, lack thereof) that adolescents are receiving. Abstinence-only sexual education programs have traditionally received ample federal funding in the United States; however, recent studies such as the one conducted by Stanger-Hall and Hall demonstrate that these programs yield less effective results, with “effective” being defined as rates of teen pregnancy and teen birth (2011). Thus, their evidence suggests the importance of directing federal funding to the development of comprehensive sex-ed programs (Stanger-Hall and Hall, 2011).

Intimate Partner Violence (IPV)

Individuals who initiate sexual activity at a younger age and have several sexual partners are also more susceptible to experiencing and perpetrating dating violence, which can include physical and/or sexual elements. In 2015, 9.6% of high school students had incurred physical abuse and 10.6% of high schoolers had experienced sexual abuse within their romantic relationships (CDC, 2015). Not surprisingly, a greater percentage of females (21%) comprised this group than males (10%) (CDC, 2016). Consequences of these events include an increased risk for suffering from suicidal thoughts, eating disorders, depression, and using substances such as drugs, tobacco, and alcohol (CDC, 2016; Olson, Rickert, & Davidson, 2004). Additionally, female victims of dating violence are more likely to experience complications during pregnancy (Olson, Rickert, & Davidson, 2004). When compared to adult pregnant women, pregnant adolescents are more at risk for experiencing abuse from their partners (Olson, Rickert, & Davidson, 2004). Additionally, impoverished individuals in

this group are more likely to experience miscarriage and successive pregnancies (Olson, Rickert, & Davidson, 2004). Unfortunately, physical and psychological effects are not the only results of dating violence; an equally, if not more, concerning consequence is that high school-aged victims are more likely to experience sexual violence during their college years (CDC, 2016).

Key factors related to home life and peer relationships influence perpetrators of dating violence. Individuals who were raised in a violent home atmosphere or who have a history of violent behavior themselves are particularly likely to subject their partner to dating violence (CDC, 2016). If their peers are involved in romantic relationships corrupted by intimate partner violence or if these individuals interact violently with their peers, they are also more likely to perpetrate dating violence (CDC, 2016).

One of the most effective methods for preventing and decreasing the occurrence of dating violence is through education (CDC, 2016). This education should not be limited to an academic institution, however. Although it is the responsibility of physicians to screen for this event and educate their patients during office visits, oftentimes, this does not occur (Olson, Rickert, & Davidson, 2004). Physicians are typically uncomfortable broaching the issue with their patients, and even if they aren't, they are often uncertain as to how to conduct an accurate screening (Olson, Rickert, & Davidson, 2004). This issue is of particular importance when considering the adolescent population, because few research studies have been conducted to investigate optimal screening procedures for these individuals and their receptivity to such measures (Olson, Rickert, & Davidson, 2004).

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