



Original article

The Association Between Sequences of Sexual Initiation and the Likelihood of Teenage Pregnancy

Bianka M. Reese^{a,b,*}, Abigail A. Haydon, Ph.D.^c, Amy H. Herring, Sc.D.^{a,d}, and Carolyn T. Halpern, Ph.D.^{a,e}^a Carolina Population Center, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina^b Department of Health Policy and Management, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina^c Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, Maryland^d Department of Biostatistics, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina^e Department of Maternal and Child Health, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Article history: Received December 27, 2011; Accepted June 8, 2012

Keywords: Adolescents; Sexual sequences; Sexual behavior; Teen pregnancy; Longitudinal; Oral–genital sex

A B S T R A C T

Purpose: Few studies have examined the health and developmental consequences, including unintended pregnancy, of different sexual behavior initiation sequences. Some work suggests that engaging in oral–genital sex first may slow the transition to coital activity and lead to more consistent contraception among adolescents.

Methods: Using logistic regression analysis, we investigated the association between sequences of sexual initiation (i.e., initiating oral–genital or vaginal sex first based on reported age of first experience) and the likelihood of subsequent teenage pregnancy among 6,069 female respondents who reported vaginal sex before age 20 years and participated in waves I and IV of the National Longitudinal Study of Adolescent Health.

Results: Among female respondents initiating vaginal sex first, 31.4% reported a teen pregnancy. Among female respondents initiating two behaviors at the same age, 20.5% reported a teen pregnancy. Among female respondents initiating oral–genital sex first, 7.9% reported a teen pregnancy. In multivariate models, initiating oral–genital sex first, with a delay of at least 1 year to vaginal sex, and initiating two behaviors within the same year were each associated with a lower likelihood of adolescent pregnancy relative to teens who initiated vaginal sex first (odds ratio = .23, 95% confidence interval: .15–.37; and odds ratio = .78, 95% confidence interval: .60–.92, respectively).

Conclusions: How adolescents begin their sexual lives may be differentially related to positive and negative health outcomes. To develop effective pregnancy prevention efforts for teens and ensure programs are relevant to youths' needs, it is important to consider multiple facets of sexual initiation and their implications for adolescent sexual health and fertility.

© 2013 Society for Adolescent Health and Medicine. All rights reserved.

IMPLICATIONS AND
CONTRIBUTION

It is important to identify behavioral patterns that reduce the odds of teen pregnancy. This study's findings are the first to demonstrate in a representative U.S. sample that the sequence of initiating different types of sexual behaviors is associated with the likelihood of teen pregnancy, offering a potential avenue for intervention.

Although there has been a significant decline in rates over the past 20 years, teen pregnancy remains a serious public health issue in the United States [1]. With approximately 750,000 preg-

nancies, or 71.5 pregnancies per 1,000, in women younger than 20 years each year, the teen pregnancy rate in the United States remains substantially higher than those of other developed countries [2]. Teen pregnancy brings significant social and economic costs through both immediate and long-term impacts on teen parents and their children. For instance, according to the Centers for Disease Control and Prevention, approximately 50% of teen mothers obtain a high school diploma by age 22 years compared with 90% of teen girls who did not give birth [2].

* Address correspondence to: Bianka M. Reese, Carolina Population Center, University of North Carolina at Chapel Hill, CB #8120, Chapel Hill, NC 27516-2524.

E-mail address: bmreese@live.unc.edu (B.M. Reese).

Additionally, teen childbearing costs U.S. taxpayers about \$9 billion each year in increased costs for health care, child welfare, and lost tax revenue [3].

Most research on adolescent sexual behavior has focused on vaginal intercourse. Although first vaginal intercourse is clearly an important transition, adolescents engage in other types of sexual behavior, like oral–genital sex, that also have implications for health and well-being. More than one-half of adolescents (aged 15–19 years) have ever received or performed oral–genital sex, and incidence increases with age and vaginal intercourse experience [4–6]. Many teens perceive fewer health, social, and emotional risks for oral–genital versus vaginal sex, most notably the elimination of pregnancy risk. Teens may also view oral–genital sex as more acceptable, even outside the context of a romantic relationship [7–10]. On one hand, for some teens, oral sex may be seen as an alternative to vaginal intercourse, allowing more frequent and/or nonromantic sexual contact without compromising the traditional definitions of virginity [11–13]. On the other hand, adolescents who experience oral sex are also less likely to report sexual pleasure relative to their peers with coital experience [14], and teens may not recognize that oral sex can still act as a mode of transmission for sexually transmitted infections and thus may not use barrier protection while receiving or performing oral–genital sex [8,9,15,16].

There are few studies that have examined the prevalence of varying sexual sequences (i.e., the order and timing of initiating different types of sex) among adolescents and even fewer that explore whether these sequences have health implications. Studies that examine sequences of initiation directly have noted that most adolescents, especially white teens, progress from less intimate (e.g., kissing) to more intimate (e.g., coitus) behaviors [17–20]. Song and Halpern-Felsher [8], in their longitudinal analysis of approximately 600 California high school students, reported that more sexually active adolescents initiated oral–genital and vaginal sex within the same 6-month period and that oral sex typically occurred first. If oral sex experience occurred early in high school, odds of early vaginal sex increased [8].

However, other work suggests that a “linear” sequence of progression from less to more intimate behaviors may delay transition to coitus [7]. Further, linear sequences have been associated with positive outcomes, such as consistent contraceptive use [14,17,19,21]. For example, in their study of sexual trajectories among Dutch adolescents and early adults, de Graff et al found that women and men who followed a nonlinear trajectory more often had vaginal sex without using contraception despite reporting no desire to conceive a child [17]. The investigators hypothesized that these relationships may reflect insufficient skills to plan safer sexual behavior [17]. Other authors have also suggested that a temporal delay in progressing from lower-risk to higher-risk behaviors provides the time needed to become mentally prepared for contraception and to access contraceptive services [18]. Although their findings are intriguing, these studies used different methodologies and vastly different, and homogenous, samples (i.e., young college students, 12–15-year-old black and white adolescents in a large southern city in 1980, Dutch adolescents), and the generalizability of findings to various populations and contexts is not clear.

In the current study, we investigate whether there is an association between sequences of sexual initiation during adolescence (defined here as initiating oral–genital sex or vaginal intercourse first) and the likelihood of subsequent teenage pregnancy using a nationally representative sample. Based on

earlier work, we hypothesize that initiating oral–genital sex first, with a delay of at least 1 year to vaginal sex, would be associated with a lower likelihood of pregnancy before the age of 20 years relative to those who initiate vaginal sex first, even after adjustment for age at first sexual experience.

Methods

Sample

We used contractual data from waves I and IV of the National Longitudinal Study of Adolescent Health (Add Health). Add Health is a prospective cohort study that has followed a nationally representative sample of U.S. adolescents into adulthood. From April to December 1995, 20,745 wave I in-home interviews were completed (79% response rate, grades 7–12). At wave I, a parent (usually the resident mother) also completed an interviewer-assisted questionnaire. Three follow-up interviews have been completed to date: wave II (1996, grades 8–12, 88% response rate), wave III (2001, ages 18–26 years, 77% response rate), and wave IV (2008, ages 24–32 years, 80% response rate). See Harris et al (2009) for a complete design description [22]. All Add Health procedures were approved by the Public Health Institutional Review Board at the University of North Carolina, Chapel Hill. Present analyses were deemed exempt from the institutional review board review.

Our analysis sample was limited to female respondents who reported vaginal sex before the age of 20 years, were interviewed at both waves I and IV, had a valid sample weight, and had complete data on sequence information, pregnancy history, and all other covariates ($n = 6,069$, 78% of wave IV female respondents).

Measures

Because of their sensitive nature, all pregnancy and sexual behavior questions were self-administered using a computer-assisted self-interview.

Outcome: teen pregnancy. A complete pregnancy history for each respondent was collected during the wave IV in-home interview. For each reported pregnancy, respondents recorded the month and year the pregnancy ended. Teen pregnancy was defined as having a pregnancy, regardless of the outcome, that ended before the age of 20 years.

Predictor: sequence of sexual initiation. Questions about oral–genital and vaginal sexual experiences were also taken from the wave IV in-home interview. Respondents were asked, “Have you ever had vaginal intercourse? (Vaginal intercourse is when a man inserts his penis into a woman’s vagina.)” and “Have you ever had oral sex? That is, has a partner ever put his/her mouth on your sex organs or you put your mouth on his/her sex organs?” If the respondents answered yes to either question, they were asked, “How old were you the very first time you had (that type of sex)?” We determined which behavior was experienced first based on the reported ages of initiation and constructed three categories of sexual sequence initiation: vaginal sex first, with a delay of at least 1 year to oral–genital sex; oral–genital sex first, with a delay of at least 1 year to vaginal sex; and two behaviors within the same year (respondents reporting the same age for both vaginal and oral–genital sex). The few ($n = 16$) respondents who reported anal sex first, with a delay of at least 1 year to another

Download English Version:

<https://daneshyari.com/en/article/10511628>

Download Persian Version:

<https://daneshyari.com/article/10511628>

[Daneshyari.com](https://daneshyari.com)