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Factors Influencing Abstinence, Anticipation, and Delay of Sex Among Adolescent Boys in High–Sexually Transmitted Infection Prevalence Communities

Teresa Cummings [a,*], Colette L. Auerswald, M.D., M.S. [b,c], and Mary A. Ott, M.D., M.A. [a]

[a] Department of Pediatrics, Section of Adolescent Medicine, Indiana University School of Medicine, Indianapolis, Indiana
[b] Division of Adolescent Medicine, University of California at San Francisco (UCSF), School of Medicine, San Francisco, California
[c] UC, Berkeley-UCSF Joint Medical Program, UC, Berkeley School of Public Health, Berkeley, California

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A B S T R A C T

Purpose: Abstinence is a core pregnancy and sexually transmitted infection (STI) prevention strategy. We explore the attitudinal, behavioral, and family contexts relating to abstinence and the decision to delay sex among adolescent boys.
Methods: Adolescent boys ages 14–17 years were recruited from community sites using a venue-based sampling method. All eligible boys at venues were invited to participate in an electronic survey. Question items included sexual behaviors, attitudes related to sex, relationships, masculine values, and family contextual items.
Results: We enrolled 667 participants, mean age 15.7 years, of diverse ethnicity. A total of 252 were abstinent (38%). Abstinent participants were younger and less likely to report non-coital behaviors, and reported lower conventional masculine values. Among abstinent participants, 62% planned to delay sex, whereas 38% anticipated sex in the next year. Participants with lower conventional masculine values and more religious or moral motivations for abstinence were more likely to plan to delay sex.
Conclusions: Abstinence among boys is common, even in high–STI risk communities. For these boys, abstinence appears to be a complex behavioral decision influenced by demographic, behavioral, attitudinal, and contextual factors such as age, race, non-coital sexual behaviors, and masculine values. Understanding the attitudes and contexts of abstinence, including plans to delay sex, can inform the development of public health programs for early fatherhood and STI prevention.

IMPLICATIONS AND CONTRIBUTION

Abstinence is a key component to adolescent sexually transmitted infection prevention. This analysis describes the roles of non-coital behavior, masculine values, and moral motivations in abstinence and intention to delay sex among 14- to 17-year-old boys.

Adolescent boys have high rates of sexually transmitted infections (STIs) and unintended pregnancies with their partners. The Centers for Disease Control and Prevention has identified abstinence as a key pregnancy and STI prevention strategy [1,2], because data suggest that delayed initiation of intercourse decreases the risk of STI and unintended pregnancy [3,4]. For example, a longitudinal school-based study found that early initiation of sexual intercourse was associated with health risk behaviors such as a lower rate of condom use and negative health outcomes such as a disproportionate number of pregnancies [5]. Gender and age are important determinants of abstinence. In the United States 2011 Youth Risk Behavior Survey, the prevalence of abstinence in 9th to 12th graders was lower among males than females, and the gap was highest among ninth graders [6]. Much of the abstinence literature focuses on either young women or both sexes equally. There are considerably fewer data focused on the

* Address correspondence to: Teresa Cummings, Department of Pediatrics, Section of Adolescent Medicine, Indiana University School of Medicine, Indianapolis, IN 46202.
E-mail address: tcumming@iu.edu (T. Cummings).

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unique issues related to abstinence in adolescent boys [7]. Existing research suggests that attitudes, particularly those related to gender, sexual and relationship behaviors, and family contexts, may be important to adolescent boys' decisions to be abstinent.

Abstinence can be considered purely a behavior (i.e., not engaging in sexual intercourse or delaying sexual intercourse) or a complex interaction between motivations, attitudes, and behaviors [8]. Abstinence behaviors and motivations differ with regard to age, gender, development, and sexual experience [8,9]. For this analysis, we define abstinence as a behavior.

Abstinence is an important decision for early and middle adolescent boys. At age 15 years, 87% of boys report being abstinent, but by age 19 years, only three of every 10 continue to report abstinence [10,11]. There are also marked race- and ethnicity-related health disparities in both sexual behavior and negative sexual health outcomes, with increased rates of early sexual onset and STIs among African-American and Latino boys, and boys from lower-income communities [1,6].

Attitudes, beliefs, and motivations are important predictors of boys' decision making about sex and abstinence. Adolescent boys with more positive attitudes and beliefs about abstinence, including moral and gender beliefs, are significantly more likely to delay the initiation of sexual activity [12,13]. Moral and religious motivations have been associated with sexual decisions in multiple studies [8,10,14,15]. In the nationally representative 2012 National Survey of Family Growth, "against religion or morals" was the most common reported reason to abstain from sexual intercourse among male youth [10]. Intimacy, readiness, sexual pleasure, and social status have also been associated with decisions to have sex [9,14].

Among adolescent youth, it is important to distinguish those who anticipate sex in the near future and those who plan to delay sex. This differentiates lack of opportunity as opposed to a decision to delay sex. In the longitudinal National Survey of Adolescent Males, the intention to delay sex was associated not only with more positive attitudes, education, and maternal factors, but also with a lower likelihood of initiative sex in the next year (13% of delayers vs. 53% of anticipators) [15].

Research has shown that masculine values are important to sexual decision making. Masculine values refer to beliefs about how young men should or should not present themselves. Conventional masculine values include the beliefs that young men should be self-reliant, physically tough, and ready for sex, and not show emotion [16–19]. Homophobia can be an important part of enacting masculinity [16,17]. Conventional masculine values have been associated with high-risk sexual behavior in nationally representative samples, including more sex partners, using condoms less often, and having less favorable attitudes toward condoms [20]. This analysis examines the role of masculine values in decisions to be abstinent.

Intercourse is only one of a range of sexual behaviors. However, non-coital sexual behaviors such as kissing, having a girlfriend, and genital touching are potentially important to the decision to have intercourse, but are relatively understudied [21–23]. Non-coital behaviors are more common among sexually experienced versus abstinent boys, and have been shown to precede sex among sexually experienced boys [15,22,24]. Non-coital behaviors also distinguished abstinent adolescent boys who anticipated sex or planned to delay sex from those who planned to initiate sex in the next year, and who reported more pre-coital experiences than those who planned to delay sex [15].

Communication with parents about sex is also a potentially important contextual influence on of adolescent boys' abstinence decision making. However, existing studies have shown mixed results. Several studies have demonstrated that adolescents with higher reports of parental communication are more likely to delay sex, report fewer partners, and report using condoms [25–27], and approximately half (46%) of adolescents report their parents have the greatest influence on their decisions to engage or not in sexual intercourse [28]. However, others have found that adolescent boys' communication with parents was unrelated to sexual decision making, or even associated with a higher likelihood of sexual experience [29]. Thus, the relationship between parental communication and abstinence requires further study [13].

Sampling approaches are important to our scientific understanding of abstinence. Clinic- and school-based samples may overestimate or underestimate abstinence among boys in communities with the highest rates of STIs [30]. Alternative, community-oriented sampling approaches, such as venue-based or network-based sampling, can capture youth in the locations where relationships and sexual decision making occur [31]. An example of differences based on sampling is a network-sampling study of urban adolescents, in which only 10% of boys reported abstinence, compared with the nationally representative Youth Risk Behavior Survey data, in which approximately half were sexually abstinent [32,33]. Interventions for the most at-risk youth are frequently targeted at communities; a venue-based sampling approach in which young men are sampled in the community locations where the interventions occur may be a better estimate of sexual behaviors and STI risk for program planning.

Better understanding of these behavioral, attitudinal, and family influences on younger adolescent boys (14- to 17-year-olds) may inform prevention and intervention opportunities and programs. The purposes of this research were to (1) use venue-based recruitment strategies to describe community rates of abstinence; (2) examine how attitudes, sexual behaviors, and family communication differ between abstinent and non-abstinent boys; and (3) examine how attitudes, sexual behaviors, and family communication differ by intentions to delay sexual onset in abstinent boys.

Methods

Venue selection

A venue-based recruitment method was used to target boys in community-based settings in high–STI risk communities [31]. Our target community was defined as the neighborhoods in or adjacent to high-STI prevalence zip codes. These zip codes also have high rates of early sexual onset, and were selected so that boys would be actively making decisions about sex. Zip codes were identified through Marion County (Indianapolis) Health Department STI surveillance data. Venues, or community sites where boys hang out, were identified (n = 249) through a community engagement process, including site visits, collaboration with youth-serving agencies, and a youth advisory board. Community-based venues included parks, recreation sites, apartment complexes, theaters, schools, and community-based events (such as festivals and church street fairs). Venue were assessed using the following criteria: (1) location was in or adjacent to one of the high-prevalence zip codes; (2) location