

HIV-Related Sexual Risk Behaviours among Late-adolescent Jamaican Girls with Older Male Partners

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ABSTRACT

Objective: To describe HIV-related sexual risk behaviours among late-adolescent Jamaican girls and examine whether having an age-discordant male sexual partner (≥ 2 years older) was associated with a decrease in condom use at last coitus.

Methods: Utilizing an expanded Theory of Planned Behaviour, a survey was designed to capture HIV-related sexual risk behaviours. Descriptive and inferential statistics were used to analyse the final sample of one hundred and eighty-four late-adolescent girls (18–21 years) in Kingston, Jamaica.

Results: At first coitus, 70.3 per cent of the survey participants had done so with an older partner. At the time of the survey, 58.7 per cent of the sample reported being in an age-discordant relationship, with age differences between 2 and 39 years. While only 12 per cent of the sample reported having more than one sexual partner, 40 per cent of the sample reported that their older male partner had multiple sexual partners. Slightly more than half (58%) of late-adolescent girls reported condom use at last coitus. No significant differences were found in condom use between girls who had age-discordant partners and girls who had similar aged-partners.

Conclusion: Sexual relationships with older male partners are common among late-adolescent Jamaican girls, and may put girls at risk for acquiring HIV through unprotected coitus and coitus with someone who has multiple partners. As Jamaica and the broader Caribbean struggle to curtail the emergent HIV epidemic among adolescent girls, age-discordant relationships are a significant area for research and prevention efforts of clinicians and public health professionals.

Key words: HIV, late adolescent Girls, older Male, sexual risk behaviours.

Comportamientos de Riesgo Sexual en Relación con el VIH entre las Adolescentes Tardías Jamaicanas con Parejas Masculinas de Mayor Edad

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RESUMEN

Objetivo: Describir los comportamientos de riesgo sexual relacionados con el VIH entre las muchachas jamaicanas adolescentes tardías, y examinar si el tener un compañero sexual de edad discordante (≥ 2 años mayor) estaba o no asociado con la disminución del uso del condón en el último coito.

Métodos: Utilizando una teoría del comportamiento planificado extendida, se diseñó una encuesta para registrar comportamientos de riesgo sexual en relación con el VIH. Se usaron estadísticas descriptivas e inferenciales a fin de analizar la muestra final de ciento ochenta y cuatro muchachas adolescentes tardías (18–21 años) en Kingston, Jamaica.

Resultados: El primer coito, 70.3 por ciento de las participantes en la encuesta lo tuvieron con un compañero de mayor edad. Al momento de la encuesta, 58.7 por ciento de la muestra informó hallarse en una relación de edad discordante, con diferencias de edad entre 2 y 39 años.

Mientras sólo 12 por ciento de la muestra informó tener más de un compañero sexual, 40 por ciento de la muestra informó que su pareja masculina de mayor edad tenía múltiples parejas sexuales. Casi más de la mitad (58%) de las adolescentes tardías reportaron uso del condón en el último coito. No se encontraron diferencias significativas en el uso del condón entre las muchachas con compañeros de edad discordante y muchachas con parejas de edad similar.

Conclusión: *Las relaciones sexuales con parejas masculinas de mayor edad, son comunes entre las muchachas jamaicanas adolescentes tardías. Estas relaciones pueden poner a las muchachas en riesgo de adquirir el VIH a través del coito no protegido y el coito con alguien que tiene múltiples parejas. En un momento en que Jamaica y la región del Caribe luchan por cortar el desarrollo de la epidemia de VIH entre las adolescentes, las relaciones de edades discordantes son un área significativa para los esfuerzos de investigación y prevención por parte de los médicos y los profesionales de la salud pública.*

Palabras claves: VIH, adolescentes tardías, hombre de mayor edad, comportamientos de riesgo sexual

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INTRODUCTION

The Caribbean has one of the highest prevalence rates of Human Immunodeficiency Virus (HIV) in the world, second only to Sub-Saharan Africa (1). HIV transmission in Jamaica is occurring largely through heterosexual contact and disparities in HIV infection rates exist between males and females (2). It is estimated that 20 per cent of women who currently have HIV/AIDS in Jamaica had no obvious risk factors for acquiring the disease besides having coitus with their regular male partner or husband (3).

Paralleling most HIV-affected regions, the disease is being rapidly disseminated into younger segments of the Caribbean population, with a growing number of women and girls shouldering the burden of infection (4). In Jamaica, adolescent girls between the ages of 10 and 19 years have an estimated risk of acquiring HIV that is two and a half times higher than that of their male counterparts (1).

It has been posited that the leading cause of the disparate HIV rate between males and females in Jamaica is the occurrence of adolescent girls having sexual partnerships with older men (4). However, research addressing HIV risk among adolescent girls who have older male sexual partners has been conducted primarily in African countries. Although relationships with older men have been described as part of the daily lives of Jamaican adolescents (5, 6), these relationships have not been examined for their contribution to HIV risk among Jamaican youth. This leaves a gap in the culturally specific knowledge available to create HIV/AIDS prevention initiatives that are explicitly designed for adolescent girls living in the Caribbean. Theoretically-based research is needed to examine age-discordant relationships within the Jamaican cultural context to guide HIV prevention-intervention design and direct future research on HIV risk for adolescents in the Caribbean.

This paper presents research that was part of a larger mixed-method study, the purpose of which was to examine the context of sexual relationships between late-adolescent girls in Jamaica (18–21 years) and older men (> 2 years older). In addition to presenting findings related to prevalence of older (age-discordant) male sexual partners, multiple partners and condom use, this study also examined the relationship between age-discordance and condom use behaviours among late-adolescent girls in Jamaica. Based on previous studies, it was hypothesized that late-adolescent girls with male sexual partners who were two or more years

older than themselves would be less likely to report condom use at last coitus than girls with partners who were closer in age (7–11).

SUBJECTS AND METHODS

Instrumentation

Guided by an expanded Theory of Planned Behaviour, a survey instrument was designed to assess the salient theoretical constructs that influence condom use among adolescent Jamaican girls with older male sexual partners (12, 13). The data described in this article include the results from survey questions addressing the demographic information, partner information and condom use behaviours of study participants. The survey instrument was pre-tested with a sample of 120 students from The University of the West Indies. Participants in this pre-test reported that the survey was too long, and some students met individually with the investigator to point out questions that were unclear. For example, participants pointed out that the word “boyfriend” meant a serious, emotional relationship, and therefore participants were not thinking about more casual older partners when they answered the survey. The investigator revised the survey based upon the results of the pre-test and comments from participants. The final version of the survey was then tested with key informants and a small group of students who had taken the first version of the survey to make sure the survey was culturally appropriate and easy to understand.

Participants were recruited in two ways to complete the survey. First, all study participants who were recruited to be part of the focus group portion of the study also completed the survey instrument. The second recruitment technique involved giving out surveys in public areas where late-adolescent girls gathered. Settings included a shopping centre, a library and a popular mall. Participants met the following inclusion criteria: 1) ≥ 18 and ≤ 21 years of age, 2) female, 3) able to speak and read English, 4) able to provide informed consent to participate in the study and 5) self-identification of Jamaican ethnicity.

The Statistical Package for Social Sciences (SSPS) version 13.0 was used for the analysis of quantitative data (14). All survey data were entered into a spread sheet programme and uploaded into SPSS. The data were cleaned and cases were removed if they did not fit the sampling criteria. Descriptive and inferential statistics were used to analyse the variables described in this paper. To test the research hypo-

thesis that late-adolescent girls with male sexual partners who are two or more years older than themselves will be less likely to report condom use at last coitus than late-adolescent girls with same-age partners, a combination of cross-tabulation and correlations was used. Study findings were considered significant at the $p = 0.05$ level.

This study was approved by the Institutional Review Committee of the University of Pennsylvania and by the Faculty of Medical Sciences, The University of the West Indies/University Hospital of the West Indies Ethics Committee. Human subjects considerations for this study centred around protecting the confidentiality of the subjects, who are considered children by the National Institutes of Health (15). Confidentiality procedures were explained to the members of the study and written informed consent was obtained from participants prior to their involvement in the study.

RESULTS

A total of 199 surveys were collected from late-adolescent girls in Jamaica aged 18–21 years. Fifteen of the surveys did not meet the sampling criteria and were excluded from analysis, leaving a final sample of $n = 184$. Post-hoc adequacy of sample size was conducted to estimate a two-group t -test of equal means between two of the study variables, intention to use condoms at last coitus (data not presented in this paper) and condom use at last coitus. Using a two-group t -test, at 80% power, a moderate effect size of 0.472 was detected at the significance level of 0.050 (16).

The majority of the survey participants (38.6%) reported being from Kingston, with the remainder of participants residing primarily in the surrounding parishes of St Andrew (21.7%) and St Catherine (13.6%). Most survey participants reported that they were unmarried (95.7%, $n = 176$), lived with their parents or extended families (67.9%, $n = 125$) and did not have any children at the time they completed the survey (93.4%, $n = 171$). Most survey participants (76%, $n = 139$) were exclusively attending school at the time of the survey. Of those not exclusively attending school, 10.4% ($n = 19$) reported being in school and having a job, 8.7% ($n = 16$) were exclusively working and 4.9% ($n = 9$) reported neither being in school nor working at the time of the survey.

Differences in age between the survey respondents and their first sexual partners ranged from 1 to 36 years. At first coitus, 70.3 per cent of the survey participants had done so with an older partner (someone two or more years older than themselves). Current partners of the survey participants ranged in age from 16 – 59 years. The differences in age between the survey participants and their partners ranged from 2 to 39 years, with a mean age difference between the survey participants and their older partners of 5.47 years.

Age-discordance, for this study, was defined as a partner who was two or more years older than the survey participant. By this definition, 58.69 per cent ($n = 108$) of the survey participants reported being in an age-discordant relationship at the time of the survey; 17.39 per cent ($n = 32$)

of the survey participants reported that they were not in an age-discordant relationship and 23.9 per cent ($n = 44$) did not answer this question.

Survey participants reported that the majority of them were having coitus with only one partner at the time of the survey (66.1%, $n = 115$). Twelve per cent of the survey participants ($n = 21$) reported having more than one sexual partner at the time of the survey. The remainder of the survey participants did not answer the question about multiple partners or reported that they were not currently having coitus.

About four per cent (4.3%, $n = 8$) of the survey participants reported that their sexual partner was currently married to someone other than themselves. A total of 39.1 per cent ($n = 72$) of survey participants “agreed” or “strongly agreed” that their older partner was having coitus with someone other than themselves. Although not a focus of the present study, a post-hoc analysis showed that girls who reported being in age-discordant relationships were more likely than girls who were not in age-discordant relationships to report that they believed their partner was having coitus with someone other than themselves at the time of the survey ($X^2 = .196$, $p = 0.019$).

One hundred and forty-eight survey participants responded to the question “*The last time you had sex, did he use a condom?*” Survey participants were asked to answer the question as if they were thinking about the oldest partner with whom they were currently having coitus. Fifty-eight per cent ($n = 86$) reported condom use at last coitus, while 42 per cent ($n = 62$) did not use a condom at last coitus.

The primary hypothesis of this study was that late-adolescent girls with male sexual partners who were two or more years older than themselves would be less likely to have used a condom at last coitus than late-adolescent girls with same-age partners. To test this hypothesis, a comparison of condom use was conducted between survey participants who reported having an older partner (two or more years older) and those who reported that they did not have an older partner. Sixty-one per cent of girls with same-aged partners reported using a condom the last time they had coitus, compared to 57.5 per cent of those who had older partners. This difference was not statistically significant ($X^2 = 0.143$, $p = 0.705$); Mantel-Haenszel Estimate of Common Odds Ratio = 0.868. Thus, no differences were found in condom use between late-adolescent girls who had partners who were two or more years older than themselves and girls with similar aged partners. In subsequent analyses, age-discordance was left as a continuous variable. Again no significant differences were found. Similarly, when age-discordance of six or more years was examined, the relationship differences in condom use remained non-significant ($X^2 = 0.546$, $p = 0.460$).

DISCUSSION

Past studies provide some evidence that age-discordant relationships are responsible for high rates of STIs among girls

and young women globally (17, 18); yet age-discordant partnering has not been formally examined as a HIV-related risk factor among adolescent girls in Jamaica. With Jamaican adolescent girls at a disparate risk of acquiring HIV when compared to their male counterparts (1, 4), examining age-discordant relationships is critical. This study creates a foundation for future research about sexual partnering between adolescent Jamaican girls and older men and gives shape to our understanding of the HIV-related risks involved.

The results from this study demonstrated that a relatively high percentage of Jamaican late-adolescent girls have an older partner at first coitus. This finding highlights the need to focus HIV prevention efforts on very young adolescents and girls, before they become sexually active. Previous studies have shown that adolescent girls in age-discordant sexual relationships are more likely to have coitus at an earlier age than girls who have same-age sexual partners (19, 20, 21). Early initiation of coitus may mean that girls are less prepared to negotiate condom use with their older partner and may exaggerate the power imbalance between partners. In addition, studies have determined that adolescent girls who have older partners are less likely to use condoms or any other form of contraception during coitus than girls with same-age partners (7, 8, 9, 10). Failure to use condoms with age-discordant partners may be related to another HIV-related risk for adolescent girls, sexual coercion. Girls in a study from the United States of America (USA) were found to experience sexual coercion more frequently if they had boyfriends who were two or more years older than themselves *versus* girls with closer-in-age partners (19). Violence in a sexual relationship impedes the ability of adolescent girls to negotiate condom use during coitus (8). The content of HIV prevention programmes in Jamaica therefore needs to include negotiating condom use with someone older and when there may be coercion involved.

In addition, the majority of the girls sampled were in an age-discordant relationship at the time of the survey. These findings are consistent with studies indicating that globally it is normative for adolescent girls to have older male sexual partners (11, 22, 23). Given the widespread nature of these relationships, it is therefore vital that HIV research and prevention efforts in Jamaica focus explicitly on age-discordant partnerships as an area of HIV-related risk for adolescent girls. Future studies are needed to further explicate the HIV-related risks of partnering with an older man, including studies with men as their primary participants. Clarifying the types of relationships men have with younger girls and gaining their perspective of HIV risk within age-discordant relationships will greatly aid in the efforts of researchers and clinicians who are attempting to curb rates of HIV through programmes aimed at adolescent girls.

Among the late-adolescent girls surveyed, about 42 per cent did not use a condom at last coitus. These rates of condom use are consistent with a 2003 study of condom use among young people under 18 years of age in the wider

Caribbean, in which about 47 per cent of adolescents (males and females) reported that they did not use a condom at last coitus (24). An earlier study by Smikle and colleagues found that 43 per cent of adolescent females in Jamaica, ages 14–19 years, reported never using condoms (25). These reported rates of condom use, while remaining consistent, do not indicate a positive response among young women to the HIV prevention work that has been taking place across Jamaica during the past two decades. While previous work has shown that knowledge about HIV among Caribbean youth is high (26), these research findings reiterate the continued need to reinforce condom-use and safe coitus messages among Jamaican youth and search for innovative and effective strategies to improve condom use.

In the present study, the lack of condom use may be a function of the type of relationships in which the study participants were engaged. Studies have found that girls in relationships with non-casual partners often forgo condom use as their relationship becomes more serious (27). In a 2002 study of Jamaican adolescent males (28), consistent condom use was reported to be 38 per cent with steady partners compared to 65 per cent with non-steady partners. The findings from the current study also indicated that there was no significant difference in the rate of condom use between adolescent girls with older partners and those with partners closer in age. This finding was unexpected in light of conclusions from earlier studies establishing less condom use between age-discordant partners than among closer in age partners (7, 8, 10). However, the sample used in the present study consisted of late-adolescent girls who were slightly older than the samples used in previous research. Therefore, it is possible that condom use patterns are different for older samples. Perhaps as girls mature and transition into adulthood, by experiencing multiple age-discordant relationships, they improve their ability to negotiate condom use in age-discordant relationships.

Although the study hypothesis was proven false, this report provides insight into HIV-related risk among adolescent girls who partner with older men because in general, condom use was fairly low among both groups of study participants. However, girls who partner with older men may be particularly at risk for acquiring HIV or other STIs from their older partners because relationships with older partners may also involve transactions. Internationally, studies have indicated that transactions play an important role in the lives of young people, who often do not have the economic support they need (29, 30). A 2001 report from the Centre for Gender and Development Studies at The University of the West Indies found that money for material things was a main motivating factor for girls to engage in sexual activity and that gifts of some sort were often an expected part of a romantic relationship in Jamaica (6). Both male and female study participants mentioned “big men,” or adult men in their communities, as being the motivation for sexual initiation and instigating coitus in return for money or material things.

These men were presumed to be anywhere from 20 – 50 years older than their adolescent female partners (6). In a second study among Jamaicans aged 12–18 years, adolescents identified a “big man” as an older sexual partner who gave their younger partners shoes, rides to school, trips, plane tickets, material things and clothes (5). Again, students mentioned the motivations to engage in relationships with big men as financial, in response to peer pressure, because they enjoyed coitus, or to fulfill their need for a father figure or someone who can provide love and affection (5). For poor families, their daughters may have received lunch money for school, helping to supplement the family income (5).

Adolescent girls commonly value older partners because they can provide this type of economic support (31, 32). However, for the late-adolescent girls who participated in this study, having a financially supportive partner may exaggerate their HIV-related risk. Past studies, conducted outside of the Caribbean, have concluded that when adolescent sexual activity is motivated by economic factors, it creates an unsafe context in which sexual behaviours occur (6, 33, 34). For example, a study by Kongnyuy and colleagues in the Cameroon found that wealthy men were more likely than less wealthy men to have engaged in sexual behaviours that put them at risk for acquiring HIV. These study findings again highlight the need for future studies examining the behaviours of older men during their relationships with adolescent girls, and for HIV prevention programmes and messages to motivate girls to try and negotiate condom use with older partners.

Late-adolescent girls in this study may also be at risk of acquiring HIV when their older partners have multiple sexual partners. In Jamaica, the tradition of men having multiple partners has historically been linked to their financial abilities and cultural perceptions of masculinity (35–37).

The present study found that about forty per cent (39.1%) of survey participants “agreed” or “strongly agreed” that their older partner was having coitus with someone other than themselves. Despite this knowledge, condom use between age-discordant partners occurred at about the same rate as condom use with same-aged partners. Having coitus with someone whom they believed had multiple partners did not alter the rate of condom use although having coitus with someone who has multiple partners increases an adolescent girl’s risk of being exposed to HIV/AIDS and other STIs. These findings reinforce the need for HIV prevention measures to address the risks of partnering with someone older and underscore the need to reinforce condom use behaviours with risky partners. Risk-reduction strategies to be emphasized would include open communication about condom use and STIs and consistent condom use (38, 39, 40). Finally, this study provides only a snapshot of some of the HIV-related risk behaviours of adolescent girls in Jamaica, but there are multiple factors that influence condom use with older and same-age partners. It is critical that prevention programmes address the multisystem cultural

factors that influence condom use among adolescent girls (5) in order to be effective at curbing the current HIV infection rate in Jamaica.

There are several considerations which must be given to this study, some of which restrict the generalizability of the findings. First, the sample consisted of late-adolescent girls, ages 18–21 years. Younger adolescents may have a different range of partner ages, with larger age-differentials influencing the variables examined in this study. This remains an important area for future research, as studies have determined that sexual risks within age-discordant relationships occur with increasing frequency as the age difference between partners increases (20, 30). The study participants were also from primarily urban communities, and study findings may not be applicable to late-adolescent girls who live in more rural settings. A third consideration is that the study utilized self-reported measures which are not always accurate. Finally, although 199 late-adolescent girls participated in the survey portion of the study, in many of the analyses the final sample consisted of only 148 participants. An effect size of 0.472 was necessary in order to show significant differences (at $p < 0.05$) in some of the tested hypotheses. Thus there was the potential for Type 2 error, as some differences may not have been detected due to a lack of power. It is possible that a larger sample would have generated sufficient power to detect significant differences in the analyses.

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