Coercive Forms of Sexual Risk and Associated Violence Perpetrated by Male Partners of Female Adolescents

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CONTEXT: *Partner violence is associated with STDs among female adolescents, but the mechanisms underlying this association remain unclear. Sexually coercive and deceptive behaviors of male partners that increase female STD risk may be factors in this relationship.*

METHODS: *A sample of 356 females aged 14–20 who attended adolescent health clinics in Greater Boston between April and December 2006 were assessed for physical and sexual violence perpetrated by male partners and for exposure to sexual risk factors. Adjusted logistic regression models were used to examine the associations between intimate partner violence and standard sexual risk behaviors (e.g., multiple partnerships) and coercive or deceptive sexual risk factors (e.g., coerced condom nonuse).*

RESULTS: *More than two-fifths of the sample had experienced intimate partner violence. In adjusted analyses, adolescents reporting intimate partner violence were more likely than others to report standard sexual risk behaviors—multiple partners, anal sex and unprotected anal sex (odds ratios, 1.7–2.2). They also were more likely to report coercive or deceptive sexual risk factors—partner sexual infidelity, fear of requesting condom use, negative consequences of condom request, and coerced condom nonuse (2.9–5.3).*

CONCLUSION: *The high prevalence of intimate partner violence against young women attending adolescent clinics strongly indicates the need to target this population for abuse-related interventions. This need is underlined by the observed association between partner violence and sexual risk involving coercion or deception by male partners. Clinic-based STD and pregnancy prevention efforts should include assessment of sexual risk factors that are beyond the control of young women, particularly for those experiencing abuse.*

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STDs, including HIV, are a major public health concern in the United States, and adolescent and young adult females are at disproportionately high risk;[1,2] half of all newly diagnosed STDs in the United States occur among individuals aged 15–24, and young women bear the greatest burden.[1,2] Biological factors,[3] as well as greater opportunities for screening (and, hence, diagnosis) among females, are thought to be partially responsible for these age and gender disparities.[1] However, mounting evidence indicates that social factors significantly contribute to STD risk among adolescent women, particularly gender-based inequalities in power within sexual relationships that reduce adolescent women's ability to negotiate condom use or avoid unwanted sex.[4–7]

A major concern related to this gender-based power imbalance is violence perpetrated by male dating partners against female adolescents. Adolescence is the period in which young women are most vulnerable to such violence; those aged 16–24 are more likely than any other age-group to be victimized.[8] In nationally representative surveys of high school students and in clinic- and school-based studies of black adolescents, 18–32% of sexually active adolescent females have reported physical or sexual violence perpetrated by a dating partner.[9–12] Evidence from these adolescent samples, as well as from samples of adult women,[5,13,14] demonstrates that partner violence confers increased STD risk.[9,11,12,15] In addition, abusive adult men sampled at urban health clinics and drug treatment programs have been found to have higher STD infection rates than their nonabusive counterparts, indicating the need to determine if the association is also true among adolescent samples.[16–18]

Associations between abuse and standard sexual risk behavior (e.g., early initiation of sex,[10,15,19] multiple partnerships[11,19] and condom nonuse[12]) have been documented among adolescents, partially explaining the consistent associations of intimate partner violence with STDs. However, these studies have not considered the fear and lack of agency that young women often experience during risky sexual interactions, particularly with male partners who have perpetrated physical or sexual violence. Studies conducted among Latina and black adult women in clinic and urban community settings have found that particular sexual risk factors known to be outside of women's control, including forced and coerced unprotected sex, are associated with experiences of partner violence.[4,20] Studies with adult men parallel these findings; abusive men are more likely than others to report forcing or coercing a partner

to have unprotected sex.[16–18] Qualitative investigations conducted both domestically and internationally have illustrated that fear of physical and sexual violence and other forms of retaliation by a male partner reduces women's likelihood of negotiating condom use.[21,22] Such fear sometimes results from experiences of negative consequences of condom negotiation (e.g., sexual and physical violence, accusations of female STD infection, infidelity or threats to end the relationship).[22]

Despite the clear implications of these abusive experiences for STD rates among young women,[12,20] quantitative investigation of the role of partner violence in coercive or deceptive sexual risk is limited. Studies conducted among a sample of black women aged 15–21 recruited from schools and clinics support the contention that partner violence relates to a subset of these gender-based sexual risk factors (e.g., fear of requesting condom use, male partner sexual infidelity).[6,20,23] These coercive male sexual behaviors are likely to have a direct negative effect on sexual negotiation among adolescent and adult women;[4,20] thus, understanding these understudied factors may be key to improving STD prevention efforts.

In light of the current gaps in knowledge, the present study examined the prevalence of physical and sexual violence perpetrated by male partners, standard sexual risk behaviors, and coercive or deceptive sexual risk factors, as well as the association of these risks with violence perpetrated by male partners of a racially and ethnically diverse sample of adolescent women attending school- or community-based adolescent health clinics. The study's aim is to improve understanding of how different qualities of sexual risk relate to partner violence and, thus, of whether intimate partner violence is a likely marker for these experiences.

METHODS

Sample and Data Collection

The study utilizes data collected between April and December 2006 via a survey conducted in collaboration with adolescent health centers located within school- or community-based health clinics in urban neighborhoods of Greater Boston. To maximize efficiency of data collection, we sought clinics that provide confidential services to at least 120 adolescents per month. Six clinics met the criteria, and four agreed to participate; demographic characteristics of the patient population did not differ between participating and nonparticipating clinics. Women were eligible to participate if they were aged 14–20 and spoke English or Spanish. At each clinic, all female patients presenting to the main reception desk were screened for eligibility by a trained research assistant fluent in these languages. Before women saw the clinician, data were collected via an audio computer-assisted survey instrument (ACASI) in English or in Spanish; given the confidential nature of the clinic services offered, parental consent for participation was waived. Following survey completion, the research assistant screened participants for psychological distress and the potential need for on-site counseling (available at all clinics); no participants demonstrated survey-related distress. Each participant also received a list of local relevant resources (e.g., violence victimization support services, mental health services).

In all, of the 743 women approached who met the eligibility criteria, 495 (66%) agreed to complete the survey; the primary reason provided for nonparticipation was lack of time. Analyses were limited to those reporting having ever had penile-vaginal or penile-anal sex, resulting in a final sample of 356. All study procedures were reviewed and approved by human subjects research committees at the Partners Health Care System, Cambridge Health Alliance and Harvard School of Public Health.

Measures

The primary outcome of interest, lifetime history of physical and sexual violence victimization by a current or former intimate partner, was assessed via 12 items from the revised Conflict Tactics Scale.[24] Items were modified on the basis of findings from a qualitative study we conducted of adolescent intimate partner violence.[21] This assessment was referred to in the survey as "questions about your sexual and dating relationships," and partner was defined as "someone you were dating or going out with" or "regularly having sex with."

We used single items, created for this survey, to assess four standard sexual risk behaviors: number of vaginal sex partners in the past three months, unprotected vaginal sex in the past three months, lifetime experience of anal sex and unprotected anal sex in the past three months. Drawing on our prior qualitative work,[21] we developed a series of items concerning coercive or deceptive sexual risk. Single items assessed male partner sexual infidelity ("Did someone you were dating or going out with ever cheat on you by having sex with someone else when they were supposed to only be having sex with you?") and coerced condom nonuse ("Has a male sex partner ever made you have sex without a condom even though you wanted to use one?"). Two questions regarding anal sex were used to determine whether someone had been forced into anal sex ("The first time you had anal sex with a boy or man, did he use force or threats you make you do this?" and "Has anyone else ever used force or threats to make you have anal sex?"). Fear of requesting condom use was assessed by asking the participants if they had ever been afraid to ask a partner to use a condom because of any of the following reasons: "He might have sex with other people"; "He might leave you"; "He might accuse you of cheating"; "He might say you were accusing him of cheating"; "He might physically hurt you"; "He might make you have sex or do something sexual you didn't want to"; or "He might do something else sexually to hurt you." Participants reporting being fearful of requesting condom use for one or more of these reasons were classified as having experienced such fear. To assess experiences of negative consequences of condom requests, we asked participants about partner actions following condom

TABLE 1. Percentage distribution of sexually experienced female adolescent clinic attendees, by selected characteristics, Greater Boston, 2006

Characteristic	% (N=356)
Age	
14–15	14
16–17	47
18–20	39
Race or ethnicity	
White	40
Black	20
Hispanic	34
Other	6
Education	
Enrolled in high school	62
GED program/high school dropout	7
≥high school	32
Living situation	
With parents or family	83
With partner	7
Other*	10
Experienced partner abuse	
Yes	45
No	55
Total	100

*With friends, between homes, with child protection services or in foster care.
Note: Percentages may not total 100 because of rounding.

request; possible responses were the same as those for fear of requesting condom use. Participants who indicated that they had experienced one or more consequence of condom request were classified as having experienced a negative consequence of condom request. All measures were pilot-tested among female adolescent clinic attendees prior to implementation of the survey.

Analyses

We calculated lifetime prevalence of intimate partner violence victimization and used chi-square analyses to assess differences in experiences of violence based on demographic characteristics; significance for all analyses was set at $p<.05$. Logistic regression models were constructed to assess the associations of intimate partner violence exposure with standard sexual risk behaviors and coercive or deceptive sexual risk factors. All logistic regression models were adjusted for age, race and ethnicity, and recruitment site. Fisher's exact test was conducted to evaluate associations between intimate partner violence and forms of sexual risk with low prevalence (i.e., less than 2%). Statistical analyses were conducted using SAS, version 9.

TABLE 2. Percentage of women reporting standard sexual risk behaviors and coercive or deceptive sexual risk factors, by lifetime history of intimate partner violence, and odds ratios (and 95% confidence intervals) from logistic regression analyses examining associations between sexual risk behaviors and history of violence

Sexual risk behavior or factor	All	Those reporting violence	Those reporting no violence	Odds ratio*
Standard				
>1 vaginal sex partner†	21	27	15	2.2 (1.3–3.7)
Unprotected vaginal sex†	64	62	65	1.0 (0.6–1.5)
Anal sex	27	33	23	1.7 (1.1–2.7)
Unprotected anal sex†	11	15	8	2.2 (1.1–4.3)
Coercive/deceptive				
Male partner infidelity	42	58	29	3.4 (2.2–5.4)
Fear of requesting condom use	12	18	7	2.9 (1.4–6.0)
Experienced negative consequence of condom request	12	21	5	5.3 (2.4–11.6)
Coerced into not using a condom	19	31	9	4.9 (2.6–8.9)
Forced anal sex	1	3	<1	‡

*Adjusted for age, race or ethnicity, and recruitment site. †In the past three months. ‡Because of small cell size, logistic regression was not performed; however, Fisher's exact test showed significant difference between those reporting violence and those reporting no violence ($p<.05$).

RESULTS

The mean age of women in the sample was 17.2 years (standard deviation, 1.6); 47% were age 16–17 (Table 1). Forty percent of participants were white, 20% were black, 34% were Hispanic and 6% were of another race or ethnicity. The majority of participants (62%) were attending high school at the time of the survey, and most (83%) were living with parents or family; 7% reported living with their partner, and 10% reported another living situation (living with friends or being "between homes," with child protection services or in foster care). More than two-fifths of the sample (45%) had ever been physically or sexually abused by a dating partner; prevalence of intimate partner violence did not vary significantly across demographic characteristics assessed (not shown).

One in five young women reported having had more than one vaginal sex partner in the three months prior to the survey, and a majority (64%) had had unprotected vaginal sex in that same period (Table 2). Twenty-seven percent of respondents reported having had anal sex at some point during their lifetime, and 11% had experienced unprotected anal sex in the past three months. Male partner sexual infidelity was reported by 42% of young women. Twelve percent of participants reported that they had feared requesting condom use; the most common reasons for this fear were being afraid that their partner would have sex with someone else in response and fearing that their partner would accuse them of cheating (41% for each; not shown). Twelve percent of participants reported negative consequences of condom request; among these young women, 53% had experienced a cheating accusation, and 25% reported that their partner had had sex with other people following a condom request (not shown). One in five women said that they had been coerced into having sex without a condom, and 1% had experienced forced anal sex.

In adjusted logistic regression models regarding standard sexual risk behaviors, young women who reported a history of intimate partner violence were more likely to have had multiple vaginal sex partners in the past three months than were those not reporting such abuse (odds ratio, 2.2). Intimate partner violence was also positively associated with a history of anal sex and recent unprotected anal sex (1.7 and 2.2, respectively), but not with recent unprotected vaginal sex. Adolescent

participants who had experienced intimate partner violence were more likely than their nonabused peers to report male partner sexual infidelity (3.4), fear of requesting condom use (2.9), negative consequences of condom request (5.3) and having been coerced into not using a condom during sex (4.9). Additionally, Fisher's exact test suggested that female adolescents reporting violence by male partners were more likely to report having been pressured or forced to have anal sex than female adolescents not reporting violence.

DISCUSSION

Among this sample of young women attending school- and community-based adolescent health clinics in urban neighborhoods, partner violence was a common experience: Almost half reported having been physically or sexually abused in this context. The very high prevalence of intimate partner violence in this sample strongly suggests that this is a critical population to target for related intervention efforts, and that adolescent health clinics may be promising venues at which to identify and aid young women at risk for or affected by intimate partner violence. Moreover, such abuse was associated with a number of standard sexual risk behaviors, as well as a broad range of sexual risk factors involving either coercion or deception by a male partner. These findings highlight the need to expand understanding of STD risk factors to include behaviors not under women's control, particularly for women exposed to partner violence.

The magnitude of associations among intimate partner violence and male partner infidelity, negative consequences of condom request and being coerced to not use a condom during sex is noteworthy; adolescents experiencing intimate partner violence had odds of experiencing these behaviors 3–5 times as high as adolescents not reporting such abuse. Our findings support those of the single previous study of these outcomes, conducted among black adolescents.[12] The current findings provide support for previous studies among adolescent women in which partner violence increased the risk of a broad range of sexual risk behaviors,[19] and for studies describing increased odds of sexual risk-taking among abusive adult men.[17] But beyond that, they emphasize the utility of examining forms of sexual risk outside of female adolescents' control in furthering our understanding of the relations of intimate partner violence and sexual health.

A key question that arises from this work is the extent to which the observed differences in forms of sexual risk based on intimate partner violence exposure indicates that the mechanism through which STD infection occurs is qualitatively different in abused and nonabused women. For instance, given that adolescent women facing intimate partner violence report significantly higher rates of male partner infidelity, negative consequences of condom request and coerced condom nonuse than their nonabused peers, do these factors lead to STDs more often among those experiencing intimate partner violence than among those not abused by partners? Future studies are needed to assess how factors predicting observed STDs might differ between abused and nonabused subsamples. Furthermore, given evidence that male perpetrators of intimate partner violence are more likely than their nonabusive counterparts to be STD-infected,[16,25,26] couples-based analyses may clarify the relative contributions of violence, types of sexual risk factors (standard versus coercive or deceptive) and known pathogen exposure from partners.

Also of note, anal sex and unprotected anal sex were prevalent among this clinic-based sample, consistent with previous examinations of these behaviors;[27] 27% reported ever having had anal sex, and 11% reported having had anal sex without a condom in the past three months. Only 1% reported having been forced or coerced into anal sex. In this first assessment of the associations of such behaviors with partner violence among adolescents, anal sex behaviors, including coercive anal sex, were more commonly reported among those experiencing intimate partner violence than among those reporting no abuse. Although a previous study among adolescents indicates that female partners may choose anal sex to minimize pregnancy concerns,[27] a study among black young men indicates that anal sex is part of a constellation of sexually risky behaviors associated with violence against female partners.[17] Further research is clearly needed to understand the context of adolescent anal sex and how it may relate to sexual coercion and violence perpetration by male partners, as well as to STD risk.

[The] findings highlight the need to expand understanding of STD risk factors to include behaviors not under women's control.

Our results should be viewed in light of several potential limitations related to study design. Self-reported data on such stigmatized experiences as sexual risk and intimate partner violence may be biased by underreporting. However, our study utilized ACASI, which maximizes the reliability of self-reports of sensitive information.[28,29] Also, respondents were asked as part of the survey whether they intended to answer all items honestly, and we excluded from analyses the nine who responded negatively to this item. Our findings represent only adolescents attending clinics from communities in a single metropolitan area. Caution should be taken in generalizing these findings to other geographic areas or to adolescents attending other types of clinics. Perhaps the greatest limitation of the study is the use of a lifetime measure of intimate partner violence, preventing temporality from being determined with regard to sexual risk behaviors: If the sexual risk behaviors occurred prior to experiences of intimate partner violence, our interpretations of the results are invalid. Our interpretations, however, are consistent with the developing literature on the subject and, thus, merit consideration. Also of potential concern is that 34% of eligible adolescents chose not to participate in the study. However, because the vast majority of these women cited lack of time as preventing their participation, current findings likely reflect the relationships of sexual risk exposures to intimate partner violence and

STDs among female users of adolescent health clinics in urban metropolitan areas with similar demographic characteristics.

Conclusion

Further research is needed to clarify how risk behaviors for STDs, including HIV, may differ between adolescents who experience intimate partner violence and those who do not; the role of coercive and deceptive sexual risk factors requires particular attention. Such data will further inform models of interventions that appear to reduce STD risk among higher risk adolescent women, including those with abusive male partners.[30] Practitioners serving in sexual and reproductive health settings (i.e., family planning, STD or HIV clinics) may be best positioned to address experiences of coercive sexual risk behaviors, as current standards of care include discussion of sex partners and behaviors. These professionals, with appropriate training, may screen for these risk behaviors among female clients; information gained from screening would allow clinicians both to make appropriate recommendations about birth control and sexual health protection (i.e., using methods not under male control) and to refer clients reporting violence to services specific to partner abuse. Finally, it is critical that both research and programs target the male partners of adolescent women, to build our understanding of how the perpetration of physical and sexual violence relates to male-controlled sexual risk and, most critically, to develop interventions that reduce such abusive behaviors.

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