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GENDER-BASED VIOLENCE AND REPRODUCTIVE HEALTH



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INDEXES. *Abstracts on Hygiene and Communicable Diseases, Academic Search Premier, Biology Digest, CSA Sociological Abstracts, Cumulative Index to Allied Health Literature, Current Contents, Environmental Abstracts, Excerpta Medica, Index Medicus, ISI Alerting Services, JSTOR, Medline, PAIS, POPLINE, Research Alert, Social Sciences Citation Index, Social SciSearch, Sociological Collection and Statistical Reference Index.*

According to one estimate, one in three women worldwide are physically assaulted, sexually coerced or otherwise abused in their lifetime, in most cases by an intimate partner. The accuracy of this estimate is unclear; efforts to collect reliable data on the prevalence and consequences of violence—especially in developing countries—have been hampered by such problems as a lack of representative samples, variations in interview techniques and in the wording of questions, differing cultural definitions of and attitudes toward violence, and unknown levels of underreporting. Given this situation, it is not surprising that so little is known about the sexual and reproductive health consequences of violence. This issue of *International Family Planning Perspectives* is dedicated to the examination of how abuse affects risk behaviors and health outcomes, and what reproductive health care providers can do to reduce the prevalence of gender-based violence and alleviate its consequences.

In the lead article, Michael Koenig and colleagues examine the impact of coerced first intercourse on the reproductive health of adolescent women in Rakai, Uganda [page 156]. Of 575 sexually experienced young women, 14% reported that their first intercourse had been coerced. After the effects of other factors were accounted for, adolescents who had been coerced were significantly less likely than those who had not to be using modern contraceptives, to have used a condom at last intercourse or to have used condoms consistently over the previous six months; they were significantly more likely to say that their current or most recent pregnancy was unintended and to report one or more genital tract symptoms. In addition, the proportion of respondents who had experienced recent coercion was significantly higher among those who had been coerced at first intercourse than among those who had not.

Using data from the 2000 Colombia Demographic and Health Survey, Christina Pallitto and Patricia O'Campo look specifically at links between domestic violence and unintended pregnancy [page 165]. In their sample of ever-married women who were currently pregnant or had given birth in the previous five years, 55% had had at least one unintended pregnancy and 38% had been physically or sexually abused by their current partner. In a multivariate analysis, the odds of unintended pregnancy were 40% higher among women who had been abused than among those who had not.

William Parish and colleagues provide the first national estimates of intimate partner violence in China—including violence perpetrated by the man, the woman or both partners—and look at risk factors and associated health problems [page 174]. In their representative sample of adults aged 20–64 who had a spouse or other steady partner, 34% of women and 18% of men had ever been hit by their current partner; for 12% and 5%, respectively, the hitting had resulted in injury. After the effects of individual characteristics were controlled, risk factors associated with hitting included sexual jealousy, low female contribution to household income, low male socioeconomic status, female alcohol consumption and male inebriation. Hard hitting was linked to self-reported sexual health problems such as sexual dysfunction, sexual dissatisfaction and unwanted

sex, as well as to negative general health conditions.

Annabel Erulkar, who examines young people's experiences of sexual coercion, also looks at the experiences of both females and males [page 182]. In a large, population-based sample of 10–24-year-olds, 21% of young women and 11% of young men said they had experienced sexual coercion. The great majority of coerced respondents said the perpetrator was an intimate partner (for 28% of young women, it was their husband), but a sizeable minority identified an acquaintance. Young women who had been coerced had elevated odds of having had three or more sex partners and of having experienced symptoms of reproductive tract infections. Young men who had been coerced were more likely than those who had not to have had a first partner who was five or more years older.

Lisa Bates and colleagues use qualitative and quantitative methods to examine the prevalence of abuse and its association with the status of women in rural Bangladesh [page 190]. Of more than 1,200 married women in six villages, 67% had ever experienced intimate partner violence, including 33% who had been kicked, burned or had a weapon used against them. Eighteen percent had been mistreated while pregnant. Women who were members of a microcredit program and those with a higher-than-average level of education (six years or more) were less likely than other women to have been abused in the last year, while women who contributed more than nominally to household expenses and those who had outstanding unpaid dowry were more likely to have been abused.

Heidi Lary and colleagues use qualitative data to explore an association between intimate partner violence and HIV found in earlier quantitative research in Tanzania [page 200]. Interviews with 40 men and 20 women aged 16–24 who lived in Dar es Salaam indicate that infidelity and forced sex were widespread in youth's intimate relationships. Young men who had multiple concurrent sexual relationships reported abusing their female partners when confronted about their infidelity, and forcing partners to have sex if they initially refused. In contrast, young people who felt that violence and forced sex could not be justified under any circumstances were usually in monogamous partnerships or had not yet had sex.

Finally, a Comment by Charlotte Watts and Susannah Mayhew examines ways in which responses to violence can be integrated into reproductive health services [page 207]. The authors recommend that clinics that have adequate private space provide violence screening and counseling during reproductive health consultations; train and support staff interested in helping abused women; document abuse and its medical consequences; provide appropriate clinical care; and offer women information and referrals to other services. In addition, they suggest that ministries of health issue statements condemning violence and incorporate specialized modules on violence into health worker training. Above all, they stress that a “considered, sustainable and context-specific approach” to integration of violence interventions be used to avoid further jeopardizing women's safety.

—The Editors

Coerced First Intercourse and Reproductive Health Among Adolescent Women in Rakai, Uganda

By Michael A. Koenig, Iryna Zablotska, Tom Lutalo, Fred Nalugoda, Jennifer Wagman and Ron Gray

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CONTEXT: Although there is increasing recognition of the scope and significance of sexual coercion experienced by adolescent women in developing countries, evidence on its consequences for reproductive health remains limited.

METHODS: A sample of 575 sexually experienced 15–19-year-old women were interviewed in 2001–2002 as part of the ongoing Rakai surveillance project in rural Uganda. Chi-square tests and logistic regressions were used to investigate associations between coerced first intercourse and selected reproductive health behaviors and outcomes.

RESULTS: Fourteen percent of young women reported that their first sexual intercourse had been coerced. After the effects of respondents' demographic characteristics were accounted for, young women who reported coerced first intercourse were significantly less likely than those who did not to be currently using modern contraceptives, to have used condoms at last intercourse and to have used them consistently during the preceding six months; they were more likely to report their current or most recent pregnancy as unintended (among ever-pregnant women) and to report one or more genital tract symptoms.

CONCLUSIONS: Coerced first intercourse is an important social and public health problem that has potentially serious repercussions for young women's reproductive health and well-being. Interventions to improve adolescent women's reproductive health should directly address the issue of sexual coercion.

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Over the past decade, the issue of domestic violence has received increasing international recognition and attention. The World Health Organization defines domestic violence as “the range of sexually, psychologically and physically coercive acts used against adult and adolescent women by current or former male intimate partners.”¹ There is also growing awareness of the importance of sexual violence and coercion as a component of overall domestic violence.

Most research on sexual violence is based on data from reproductive-age women in intimate partnerships. Studies have indicated high rates of nonconsensual intercourse in developing countries, where as many as one-fifth to one-half of all female respondents report having been coerced into sexual intercourse by an intimate partner.² However, comparatively few studies from developing countries have explored the prevalence of sexual abuse and coercion specifically among adolescent women.

One indication that sexual violence is common among female adolescents is the substantial proportion of women who report that their first sexual intercourse (also referred to as “first sex” in this article) was coerced; this finding has been documented by a number of studies, although definitions of coercion have varied. Although the reported prevalence of coerced first sex is relatively low (less than 10%) in several developed and developing country studies,³ in a number of other studies, largely from Sub-Saharan Africa, it typically ranged from 20% to 30% of all women⁴ and in some cases exceeded 40%.⁵ These quanti-

tative results have been reinforced by qualitative findings from Sub-Saharan Africa that underscore the important role that coercion frequently plays in compelling young women to engage in sexual intercourse.⁶

Concern over the issue of coerced sex among adolescent women has been elevated by a growing body of research—much of it from developed countries—that has reported significant associations between coerced sex and a range of negative health and reproductive health outcomes for women of reproductive age.⁷ One of the strongest associations to emerge from the literature is the link between sexual abuse and the risk of unintended pregnancy, a relationship found in a number of studies from the United States.⁸ Studies from South Africa, Tanzania and India have also found a significant association between physical violence and coerced sex and the occurrence of unintended pregnancy.⁹ Other relevant work has documented a reduced likelihood of contraceptive use among women who have prior or current exposure to physical or sexual abuse by an intimate partner, or who are afraid of such violence.¹⁰

Other studies from developed countries have reported a significant link between physical or sexual abuse among reproductive-age women and a range of gynecological problems, including vaginal bleeding, pain during intercourse, chronic pelvic pain, urinary tract infection and medically treated pelvic inflammatory disease.¹¹ Another set of studies has highlighted the possible association between women's experience of physical or sexual violence

and their risk of contracting a sexually transmitted infection (STI),¹² including HIV,¹³ in several studies from Sub-Saharan Africa, HIV-positive women were significantly more likely to report prior physical abuse or coerced sex than were HIV-negative women.¹⁴ Consistent with these results are findings from U.S. studies that indicate elevated levels of sexual risk behavior among women who have experienced coerced sex,¹⁵ along with decreased levels of condom negotiation or use.¹⁶

Evidence concerning the reproductive health sequelae of physical and sexual violence thus remains limited and has been drawn largely from studies in the United States or other developed countries. Moreover, most studies have focused on women of all reproductive ages rather than on adolescents specifically. Many of the existing studies have also used data from special, high-risk populations rather than from more broadly representative samples. Finally, existing studies display substantial variability in methodological rigor with respect to study design and controls for potentially confounding risk factors.

Data collected in rural Uganda in 2001–2002 provide a unique opportunity to explore in greater depth the issue of coerced sex and its reproductive health sequelae among young women in a community-based sample. In this paper, we present findings on the linkages between coerced first sex and selected reproductive health behaviors and outcomes in a sample of 575 sexually experienced adolescent women.

METHODS

Setting and Data

The setting for this study is rural Uganda. Premarital sex is common in Uganda and is a widely accepted behavior for young people of both genders.¹⁷ One-quarter of Ugandan women have had sex by age 15, and two-thirds have done so by age 18;¹⁸ a significant proportion initiate sex prior to marriage.¹⁹ Although many young women's sexual relationships appear to be volitional, some qualitative evidence from Uganda suggests that force and coercion may also frequently be a factor.²⁰

Data for the present study came from the ongoing Rakai Project, which was started in 1987 as a collaborative intervention research initiative to understand and reduce HIV transmission in rural Uganda. Rakai, a rural district in southwestern Uganda that borders Tanzania and Lake Victoria, has been at the center of the country's HIV/AIDS epidemic, with an estimated HIV prevalence of 16% in the mid-1990s.²¹ In 1994, 56 communities located on secondary roads in Rakai were randomly selected and aggregated into 10 clusters; each cluster was randomly assigned to an intervention arm, which received mass STI treatment, or to a control arm.^{*22} Interviews were conducted in respondents' homes at regular 10-month intervals and included a detailed questionnaire that collected data on demographic characteristics, health status and sexual behavior and partnerships. Respondents were also asked to provide blood and urine samples to be tested for HIV and

selected STIs. All participants in both arms were educated about HIV, other STIs and family planning; given condoms free of charge; and provided with HIV test results, HIV/STI counseling, and treatment for general health problems and STIs on request.²³ No financial incentives were provided to respondents for their participation in the study. The study was approved by one institutional review board in Uganda and two in the United States.

Between March 2001 and February 2002, all 15–49-year-old women who had been enrolled in the Rakai surveillance system prior to the 2001–2002 round were asked a series of questions concerning their experience of physical and sexual violence during their lifetime and in the last 12 months.²⁴ Respondents were specifically asked whether force had been used the first time they had sex. Those who replied affirmatively were asked about the specific actions (both verbal and physical) that accompanied coercion at first sex. Respondents were also asked how willing they had been to engage in sex the first time. In this study, all women who reported that force had been used to compel them into first intercourse were classified as having had coerced first sex.[†] The 2001–2002 survey round also collected information on current use of contraceptives, pregnancy history, experience with unintended pregnancy, lifetime number of sexual partners, condom use at last sex, consistency of condom use in the last six months, and current symptoms of STIs and genital tract morbidity.

Procedures carefully established over the last decade in the Rakai Project for the collection of sensitive information included safeguards to protect the confidentiality of information provided by respondents and to minimize potential risks associated with participation in the study. Consent to participate was obtained from all respondents at enrollment and at each follow-up contact. Interviews were conducted in complete privacy by highly trained, same-sex interviewers, and no information from the survey was disclosed to respondents' family members. Completed questionnaires were kept in secure facilities, and interview schedules were coded with participants' study identification; no personal identifiers were included. In 2001–2002, only limited domestic violence services existed in this rural setting, but the Rakai Project has subsequently expanded both violence prevention efforts and counseling and support services for abused women.

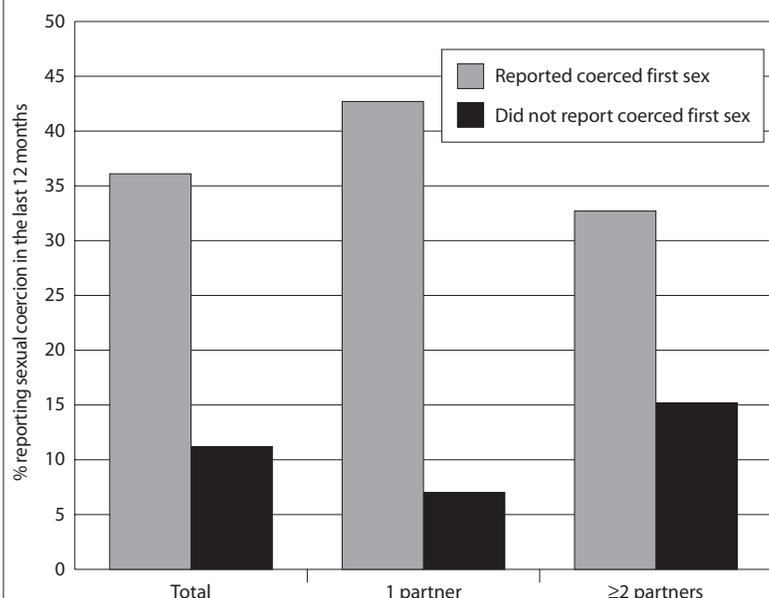
Our primary study population consisted of all sexually experienced women who were aged 15–19 at the time of the 2001–2002 survey, had been enrolled in the surveillance system prior to this round,[‡] and provided informa-

*In 1999, 12 communities from the original Rakai surveillance area were dropped, and 12 new communities were added.

†This measure exhibited a high level of internal consistency with the measure of how willing respondents had been to have sex the first time: Eighty-four percent of young women who reported that their first sexual experience had been coerced also stated that they had been unwilling to engage in sex at that time.

‡New entrants into the surveillance system—many of whom had recently turned 15—were interviewed separately and not included in the follow-up survey; as a result, newly sexually active women may be under-represented.

FIGURE 1. Among sexually experienced women aged 15–19, percentage who reported having experienced sexual coercion in the 12 months preceding the survey, by experience of coerced first sex, according to cumulative number of partners



Note: Difference between those who reported coerced first sex and those who did not was significant at $p \leq .01$ for each comparison.

tion on their first sexual intercourse. These selection criteria yielded a sample of 575 young women.

Statistical Analysis

We used Pearson chi-square tests to assess significant differences in the prevalence of reproductive health outcomes among women who reported coerced first sex and among those who did not. We used multivariate logistic regressions, stratified by marital status, to evaluate associations between coerced first intercourse and dichotomous variables

designed to measure reproductive health behaviors and outcomes: current use of modern contraceptive methods,* condom use at last intercourse, consistent condom use with all partners during the last six months, reporting one or more current genital tract symptoms and, among ever-pregnant women, reporting the current or most recent pregnancy as unintended (i.e., mistimed or unwanted). The following demographic characteristics were included as categorical variables in all adjusted regression models: educational level (fewer than five years of schooling, 5–7 years and eight or more years), age at first intercourse (younger than 14, 14–15 and 16 or older), religious affiliation (Catholic, Muslim or other) and current marital status (marriage was defined as either legal or consensual union). The statistical package of STATA 8.1 was used for all analyses.²⁵

RESULTS

Overall, 19% of young women had had fewer than five years, 49% had had 5–7 years and 33% had had eight or more years of schooling. Nineteen percent reported that they were still attending school; thus, levels of education ultimately attained are likely to be somewhat higher than the levels reported in the survey. Roughly three in five participants were Catholic, one in five were Muslim, and the remainder reported other religious affiliations. In this population of sexually experienced young women, 13% said that they had first had sex before the age of 14, 46% at age 14 or 15, and 41% at age 16 or older. At the time they were interviewed, 52% of women were married, 44% were never-married and 4% were previously, but not currently, married.

Prevalence of Coerced First Sex

Fourteen percent of all respondents reported that their first sexual intercourse had been coerced (not shown). The likelihood of a respondent’s first intercourse having been coerced was strongly associated with the age at which it occurred: Although 26% of young women who had first had sex when they were younger than 14 described that experience as coerced, this proportion fell to 15% among respondents whose age at first intercourse was 14 or 15, and to 10% among those who had first had sex at age 16 or older. Differences among the three subgroups were statistically significant.

Figure 1 shows the association between young women’s reports of coerced first intercourse and experience of sexual coercion in the last 12 months. Respondents who reported that their first intercourse had been coerced were significantly more likely than those who did not to report that they had experienced recent coercion (36% vs. 11%). Because this difference may be attributable in part to cases in which respondents’ first and most recent partners were the same person, we further stratified young women by their reported cumulative number of partners. Among respondents who reported having had only one partner—and whose most re-

TABLE 1. Percentage distributions of sexually experienced Ugandan women aged 15–19, by selected measures of reproductive behavior, according to marital status and experience of coerced first sex

Measure	All		Married		Unmarried	
	Coerced first sex		Coerced first sex		Coerced first sex	
	Yes	No	Yes	No	Yes	No
Current contraceptive use	(N=83)	(N=492)	(N=46)	(N=249)	(N=37)	(N=243)
Yes	18.1	33.5	8.7	17.7	29.7	49.8
No	81.9	66.5	91.3	82.3	70.3	50.2
χ^2 p-value	.005		.130		.023	
Ever pregnant	(N=82)	(N=492)	(N=45)	(N=249)	(N=37)	(N=243)
Yes	80.5	64.6	100.0	97.2	56.8	31.3
No	19.5	35.4	0.0	2.8	43.2	68.7
χ^2 p-value	.005		.255		.002	
Intendedness of current or most recent pregnancy†	(N=66)	(N=316)	(N=45)	(N=242)	(N=21)	(N=74)
Intended	40.9	58.5	46.7	64.9	28.6	37.8
Unintended	51.5	36.7	44.5	29.3	66.7	60.8
No preference	7.6	4.8	8.9	5.8	4.8	1.4
χ^2 p-value	.031		.069		.500	
Total	100.0	100.0	100.0	100.0	100.0	100.0

†Restricted to ever-pregnant women.

*Modern methods include oral contraceptives, condoms, spermicides, injectables, IUDs, male and female sterilization and the implant.

cent partner was therefore presumably also the first partner—those whose first sex had been coerced were significantly more likely to report recent coercion than those whose first sex had not been forced (43% vs. 7%). Even among women who reported two or more cumulative partners—whose first and most recent partners were probably different*—the proportion experiencing recent coercion was significantly higher among those who reported coerced first sex than among those who did not (33% vs. 15%); this suggests that women whose first intercourse was coerced may be vulnerable to continued sexual coercion, even within subsequent partnerships.

Coerced First Sex and Reproductive Behavior

Table 1 examines the relationships between coerced first intercourse and current contraceptive use, pregnancy and unintended pregnancy, overall and by marital status. Among all respondents, those who reported coerced first intercourse were significantly less likely than those who did not to be currently using contraceptives (18% vs. 34%). Although a similar pattern appeared among both currently married and unmarried young women, the difference was statistically significant only among the latter subgroup (30% vs. 50%).

A significantly higher percentage of young women who had been coerced into first intercourse than of those who had not been coerced reported having ever been pregnant (81% vs. 65%). This difference was also significant among unmarried women (57% vs. 31%) but not among married women, almost all of whom had experienced at least one pregnancy.

To measure unintended pregnancy, ever-pregnant women were asked to recall whether their current or most recent pregnancy had been wanted then, wanted later or unwanted. Among ever-pregnant young women, a significantly higher percentage of those who reported coerced first sex than of those who did not indicated that their current or most recent pregnancy had been unintended (52% vs. 37%). This differential was of borderline significance among currently married young women (45% vs. 29%, $p=.069$), and was not statistically significant among unmarried young women.

Further analysis revealed that among all ever-pregnant respondents, both unwanted and mistimed pregnancies were more common among young women who had been coerced than among those who had not (15% vs. 6% and 36% vs. 31%, respectively; data not shown).

Coerced First Sex and Sexual Risk Behavior

Table 2 shows distributions of married and unmarried women by three indicators of sexual risk behavior—reported cumulative number of sexual partners, condom use at last sex and the consistency of condom use during the last six months—according to experience of coerced first inter-

TABLE 2. Percentage distributions of sexually experienced Ugandan women aged 15–19, by selected measures of sexual risk behavior, and according to marital status and experience of coerced first sex

Measure	All		Married		Unmarried	
	Coerced first sex		Coerced first sex		Coerced first sex	
	Yes (N=83)	No (N=492)	Yes (N=46)	No (N=249)	Yes (N=37)	No (N=243)
Cumulative no. of partners						
1	33.7	49.2	32.6	46.2	35.1	52.3
≥2	66.3	50.8	67.4	53.8	64.9	47.7
χ^2 p-value	.001		.088		.052	
Condom use at last sex						
No	86.7	67.1	95.6	94.8	75.7	38.4
Yes	13.3	32.9	4.4	5.2	24.3	61.6
χ^2 p-value	.004		.804		.001	
Consistent condom use over last 6 mos.†						
Always	7.2	25.3	0.0	1.6	16.2	49.6
Sometimes	18.1	15.5	8.7	11.2	29.7	19.8
Never	74.7	59.3	91.3	87.2	54.1	30.6
χ^2 p-value	.001		.592		.001	
Total	100.0	100.0	100.0	100.0	100.0	100.0

†Total N for this measure was 574.

course. Overall, a modest but significant difference in cumulative number of partners was evident between respondents who had been coerced and those who had not: Young women whose first intercourse had been coerced were significantly more likely than those who had not been coerced to report having had two or more sexual partners (66% vs. 51%). This difference was of borderline statistical significance among both married and unmarried respondents.

A significant relationship was evident between coerced first intercourse and condom use at last sex: Respondents who reported coerced first intercourse were less likely than those who did not to say that they had used a condom at last intercourse (13% vs. 33%). Young women who reported coerced first sex were also less likely than other respondents to report that they had always used condoms with all sexual partners in the preceding six months (7%

TABLE 3. Percentages of sexually experienced Ugandan women aged 15–19 who reported at least one genital tract symptom and who reported specific symptoms, by marital status and experience of coerced first sex

Symptom	All		Married		Unmarried	
	Coerced first sex		Coerced first sex		Coerced first sex	
	Yes (N=83)	No (N=492)	Yes (N=46)	No (N=249)	Yes (N=37)	No (N=243)
At least one symptom	42.2***	20.5	43.5*	28.1	40.5***	12.8
Lower abdominal pain	19.3**	9.4	17.4	14.1	21.6***	4.5
Discharge	10.8	7.3	8.7	10.0	13.5*	4.5
Vaginal itching or unpleasant odor	18.1*	9.8	17.4	11.7	18.9*	7.8
Frequent or painful urination	9.6	5.7	10.9	8.8	8.1	2.5
Pain during intercourse	3.6	2.9	6.5	4.0	0.0	1.7
Genital ulcer	2.0*	0.6	4.4	0.8	2.7	0.4
Genital warts	2.4	1.2	2.2	1.6	2.7	0.8

*Difference from those who did not report coerced first sex significant at $p \leq .05$. **Difference from those who did not report coerced first sex significant at $p \leq .01$. ***Difference from those who did not report coerced first sex significant at $p \leq .001$.

*For women reporting two or more cumulative partners, some current primary partners may also have been the initial sexual partners.

TABLE 4. Odds ratios (and 95% confidence intervals) from multiple logistic regressions assessing the association of reproductive health behaviors and outcomes with coerced first sex among sexually experienced Ugandan women aged 15–19

Behavior and outcome	Current contraceptive use (N=575)	Condom use at last sex (N=574)	Consistent condom use during last 6 mos. (N=574)	≥1 genital tract symptom (N=575)	Current or most recent pregnancy unintended† (N=384)
Coerced first sex					
No	1.00	1.00	1.00	1.00	1.00
Yes	0.47 (0.25-0.88)*	0.26 (0.12-0.55)***	0.19 (0.08-0.50)***	2.60 (1.57-4.32)***	2.06 (1.17-3.63)*
Education level (yrs.)					
<5	1.00	1.00	1.00	1.00	1.00
5–7	1.34 (0.72-2.52)	1.33 (0.58-3.04)	2.54 (0.79-8.15)	0.97 (0.58-1.62)	1.26 (0.75-2.12)
≥8	2.90 (1.49-5.63)**	3.98 (1.72-9.26)***	7.38 (2.31-23.61)***	0.57 (0.30-1.08)	1.94 (1.00-3.78)*
Religious affiliation					
Other	1.00	1.00	1.00	1.00	1.00
Catholic	2.11 (1.28-3.45)**	1.57 (0.90-2.74)	1.82 (1.00-3.34)	0.84 (0.52-1.36)	1.65 (0.97-2.82)
Muslim	1.33 (0.71-2.50)	1.17 (0.57-2.40)	0.78 (0.35-1.70)	0.82 (0.43-1.54)	1.29 (0.65-2.58)
Age at first sex					
<14	1.00	1.00	1.00	1.00	1.00
14–15	1.22 (0.65-2.32)	0.98 (0.46-2.09)	1.17 (0.49-2.83)	0.73 (0.42-1.27)	1.04 (0.58-1.88)
≥16	1.32 (0.63-2.78)	1.33 (0.56-3.17)	1.74 (0.65-4.66)	0.52 (0.25-1.09)	0.70 (0.32-1.55)
Marital status					
Unmarried	1.00	1.00	1.00	1.00	1.00
Married	0.29 (0.19-0.44)***	0.05 (0.03-0.10)***	0.02 (0.01-0.06)***	1.80 (1.15-2.81)**	0.40 (0.24-0.65)***

*p≤0.05. **p≤0.01. ***p≤0.001. †Restricted to ever-pregnant women.

vs. 25%), and were more likely to report that they had never used condoms (75% vs. 59%) during that time. Both associations were statistically significant.

Stratification by marital status revealed that the relationships between coerced first sex and both measures of condom use remained significant only among unmarried women. Twenty-four percent of unmarried women who reported coerced first sex had used a condom at last sex, compared with 62% of those who reported no coercion at that time. When asked about condom use during the last six months, 16% of women who had been coerced had always used them, 30% had used them sometimes and 54% had never used them. Among women who had not been coerced, those proportions were 50%, 20% and 31%. Condom use among married young women was extremely low in both coercion categories.

Coerced First Sex and Genital Tract Symptoms

Overall, the proportion of adolescent women who reported at least one genital tract symptom was twice as high among those who had experienced coerced first sex as among those who had not (42% vs. 21%), a statistically significant difference (Table 3, page 159). Moreover, the prevalence of specific symptoms was consistently higher among young women whose first intercourse had been coerced than among other respondents (2–19% vs. 1–10%); differences between the two groups were statistically significant for lower abdominal pain, vaginal itching or unpleasant odor, and genital ulcers. The proportion of married respondents who reported at least one genital symptom was significantly higher among young women whose first intercourse had been coerced than among others (44% vs. 28%). This relationship was even stronger among unmarried respondents (41% vs. 13%).

Multivariate Analyses

The relationships of risk behaviors and reproductive health outcomes with coerced first sex that were found at the bivariate level remained significant in the multivariate models, which controlled for education, religious affiliation, age at first sex and marital status (Table 4). Compared with young women who did not report coerced first intercourse, those who did had significantly reduced odds of current contraceptive use (odds ratio, 0.5). This negative relationship was even stronger for condom use at last intercourse (0.3) and for consistent condom use in the last six months (0.2). The risk of reporting one or more genital tract symptom was significantly higher among women who had experienced coerced first intercourse than among those who had not (2.6). Among ever-pregnant women, coercion was associated with significantly elevated odds of reporting the current or most recent pregnancy as unintended (2.1). In addition, having had eight or more years of schooling was strongly associated with contraceptive use, condom use at last sex and consistent condom use in the last six months (2.9–7.4). Catholic women had significantly higher odds of reporting current contraceptive use relative to those in the “other” religious affiliation category (2.1). Compared with unmarried respondents, currently married women had significantly decreased odds of current contraceptive use, condom use at last sex, consistent condom use and unintended pregnancy (0.02–0.40), and had significantly increased odds of reporting at least one genital tract symptom (1.8).

DISCUSSION

At least three plausible mechanisms have been put forward to explain the potential association between physical or sexual violence and adverse reproductive health out-

comes. One mechanism concerns the direct biological effects of coerced intercourse, such as unintended pregnancy, abortion, and STIs and their sequelae.²⁶ A second mechanism suggests that physical or sexual violence may disempower women in negotiating safer sex and may negatively affect protective behaviors related to fertility regulation and STIs, including contraceptive use, STI treatment seeking, use of condoms and ability to affect their partners' risk-taking behavior.²⁷ A third mechanism relates to sexual coercion and abuse during childhood, which may increase women's propensity to subsequently engage in high-risk sexual behavior during adolescence.²⁸

Whether an indicator of subsequent elevated risk or a direct contributing factor, coerced first sex was strongly and systematically associated with a number of adverse reproductive health outcomes in our study: decreased contraceptive use, condom nonuse at last sex, inconsistent condom use during the last six months, unintended pregnancy, and genital tract symptoms, which may indicate the presence of an STI. Other research from Rakai has highlighted the significant association between coerced first intercourse and young women's risk of HIV infection.²⁹ That these associations may arise not solely from coercion at first sex, but from repeated acts of coerced intercourse, is suggested by our finding that young women whose first intercourse had been coerced were at increased risk of recent coercion, regardless of whether their first and current partners were the same person.

This is one of the first developing country studies to present evidence on the association between coerced first intercourse and adverse reproductive health outcomes among adolescent women; still, several limitations merit discussion. First, underreporting associated with respondents' reluctance to acknowledge a highly sensitive experience may have led to an underestimate of the prevalence of sexual coercion. However, the prolonged exposure of respondents to the Rakai Project and its interviewers over the past decade, the rapport that has been established between respondents and interviewers as a result of this exposure, and the safeguards for privacy and confidentiality of information are likely to have increased respondents' willingness to discuss the issue of sexual coercion. The order of questions on coerced first sex may also have contributed to underreporting: Respondents were initially asked whether their first sex had been coerced, which left them to define what constitutes coercion. Only those who answered affirmatively were asked about the range of coercive acts that accompanied first intercourse. If the order of questions had been reversed, more women might have identified coercive actions that had accompanied first sex and subsequently defined that experience as "coerced."

Second, our study is limited by the measurement of several reproductive health outcomes included in the analyses. For example, retrospective assessments of pregnancy intendedness often underestimate the prevalence of unintended pregnancy, largely because mothers tend to rationalize unintended births as having been intended.³⁰ Moreover, the correspondence between self-reported genital

tract symptoms and clinically identified or laboratory-confirmed gynecological morbidity has been shown to be quite low.³¹ Nevertheless, self-reported symptoms are useful in assessing women's perceptions of gynecological problems and in many cases may indicate the presence of an STI. A related concern is that women with adverse reproductive health outcomes (e.g., unintended pregnancy and genital tract symptoms) may be more likely to view their first sexual experience in a negative light and to classify it as coerced. Although we cannot rule out this possibility, the absence of such response bias is supported by the findings from another study in Rakai, which revealed that the relationship between coerced first intercourse and HIV infection was statistically significant whether or not women were aware of their HIV status.³²

Finally, we are unable to assume temporality or causality in the relationships between sexual coercion and the outcomes considered. Many of these observed associations may be attributable to unmeasured antecedent factors (e.g., unstable family environment or economic adversity) that both place young women at increased risk of sexual coercion during adolescence and increase their vulnerability to subsequent adverse reproductive health behaviors or outcomes. Moreover, the cross-sectional nature of the data complicates our ability to establish temporality or causality in many of the observed relationships,* although this issue is addressed somewhat by our consideration of coercion at first intercourse as the exposure variable. Before assumptions of causality can be attributed to these associations, further quantitative and qualitative research is required to elucidate the specific pathways through which sexual coercion increases young women's vulnerability to adverse outcomes.

Our findings highlight the magnitude of the problem of sexual coercion among adolescent women in this rural Ugandan population. However, coerced intercourse represents only one of the more extreme forms of sexual abuse. Had the survey also included questions about attempted sexual coercion and forms of sexual abuse other than penetrative intercourse, the prevalence of sexual violence in our study would most likely have been substantially higher. In addition, it is noteworthy that the levels of coerced intercourse reported here are significantly lower than those reported by many studies from Sub-Saharan Africa. Other research suggests that the prevalence of sexual coercion—at least at first intercourse—appears to have significantly declined across successive age cohorts in Rakai.³³ It is of interest to consider the role this trend may have played in the apparent decrease in HIV prevalence that has recently taken place in Uganda.³⁴

The issue of sexual coercion and violence remains largely overlooked within current family planning and reproductive health service programs. Although sexual abuse is

*Most notably, it was impossible to determine from the data whether sexual coercion had led to unintended pregnancy or whether young women's partners had reacted to unintended pregnancy with physical or sexual violence.

an important social and public health issue in its own right, the results of our study strongly suggest that such behavior has major adverse consequences for important aspects of young women's sexual and reproductive health. Our study highlights the potential importance of addressing the issue of sexual coercion and violence as an integral component of current reproductive health service programs.

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RESUMEN

Contexto: Si bien hay un mayor reconocimiento del ámbito y significado del sexo forzado que experimentan las adolescentes en los países en desarrollo, son limitadas las pruebas que existen sobre sus consecuencias con relación a la salud reproductiva.

Métodos: En 2001–2002, se entrevistaron a 575 mujeres con experiencia sexual de 15–19 años como parte de un proyecto continuo de monitoreo en el distrito de Rakai, en una zona rural de Uganda. Se utilizaron pruebas de chi-cuadrado y análisis de regresión logística para investigar la relación entre la primera relación sexual mantenida en condiciones de coerción y determinados comportamientos y consecuencias sobre la salud reproductiva.

Resultados: El 14% de las mujeres jóvenes indicaron que su

primera relación sexual había sido mantenida en una situación de coerción. Después de haber tomado en cuenta las características demográficas de las entrevistadas, las jóvenes que indicaron haber mantenido relaciones sexuales en situación de coerción eran significativamente menos proclives que otras mujeres a ser usuarias actuales de anticonceptivos modernos; a haber utilizado un condón durante su última relación; y a haber usado este anticonceptivo en forma continua durante los últimos seis meses. Asimismo, se mostraron más proclives a indicar que su último embarazo era no planeado (entre las mujeres que alguna vez estuvieron embarazadas) y que habían tenido uno o más síntomas de infección en el tracto genital.

Conclusiones: La coerción durante la primera relación sexual es un importante problema social y de salud pública que tiene serias repercusiones en la salud reproductiva y el bienestar de las mujeres jóvenes. Las medidas que se adopten para mejorar la salud reproductiva de las adolescentes deben encarar directamente la cuestión de la coerción sexual.

RÉSUMÉ

Contexte: Malgré la reconnaissance grandissante de l'ampleur et de la signification de la contrainte sexuelle subie par les adolescentes des pays en développement, la constatation de ses conséquences sur la santé reproductive demeure limitée.

Méthodes: Un échantillon de 575 femmes sexuellement expérimentées de 15 à 19 ans a été interviewé en 2001–2002 dans le cadre du projet de surveillance continue de la région ougandaise rurale de Rakai. La recherche des associations entre premiers rapports sexuels vécus sous la contrainte et certains comportements et issues de santé reproductive a été menée par tests chi carré et régressions logistiques.

Résultats: Quatorze pour cent des jeunes femmes ont déclaré avoir subi leurs premiers rapports sexuels sous la contrainte. Compte tenu des effets des caractéristiques démographiques des répondantes, les jeunes femmes ayant déclaré une première expérience sexuelle vécue sous la contrainte étaient significativement moins susceptibles que les autres de pratiquer une méthode contraceptive moderne au moment de l'entrevue, d'avoir utilisé le préservatif lors de leurs derniers rapports sexuels et d'en avoir fait usage régulièrement durant les six mois précédents. Elles étaient du reste plus susceptibles de qualifier leur dernière grossesse de non planifiée (parmi les femmes qui avaient jamais été enceintes) et de déclarer au moins un symptôme d'affection de l'appareil reproductif.

Conclusions: Les premiers rapports sexuels vécus sous la contrainte posent un sérieux problème social et de santé publique, susceptible de répercussions graves sur la santé reproductive et le bien-être des jeunes femmes. Les interventions d'amélioration de la santé reproductive des adolescentes doivent confronter de manière directe le problème de la contrainte sexuelle.

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2. Hatcher RA et al., *Contraceptive Technology*, 16th ed., New York: Irvington Publishers, 1994.

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The Relationship Between Intimate Partner Violence And Unintended Pregnancy: Analysis of a National Sample From Colombia

CONTEXT: Intimate partner violence is associated with a number of reproductive and mental health problems. However, the relationship between intimate partner violence and women's ability to control their fertility has not been adequately explored, especially in developing countries.

METHODS: Data from the 2000 Demographic and Health Survey for Colombia were used in multivariate logistic regressions to explore the relationship between intimate partner violence and unintended pregnancy, which was included as a measure of fertility control. Regional differences in the relationship were also explored, and population-attributable risk estimates were calculated. The sample consisted of 3,431 ever-married women aged 15–49 who had given birth in the last five years or were currently pregnant.

RESULTS: Fifty-five percent of respondents had had at least one unintended pregnancy, and 38% had been physically or sexually abused by their current or most recent partner. Women's adjusted odds of having had an unintended pregnancy were significantly elevated if they had been physically or sexually abused (odds ratio, 1.4); the association was observed in the Atlántica and Central regions (1.7 each), but was not significant elsewhere in the country. Eliminating intimate partner violence in Colombia would result in an estimated 32,523–44,986 fewer unintended pregnancies each year.

CONCLUSIONS: These findings indicate the need to include intimate partner violence screening and treatment in reproductive health programs, to promote men's involvement in fertility control programs, and to improve the social and political response to intimate partner violence.

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The infliction of violence by intimate partners is common in many societies and affects millions of women throughout the world each year. Partner abuse's private nature has made it difficult to quantify its prevalence, understand its risk factors or address its consequences. In the last decade, however, research has revealed high rates of intimate partner violence in the United States and worldwide,¹ and has identified some of the direct and indirect health consequences of abuse, including mental and reproductive health problems.² Studies have also reported high rates of abuse during pregnancy³ and have linked such abuse to intrauterine growth restriction, low birth weight, fetal and infant death and other maternal complications.⁴

However, the relationship between intimate partner violence and women's ability to control their fertility has not been adequately explored, especially among women in developing countries.⁵ One indicator of a lack of fertility control is unintended (i.e., mistimed or unwanted) pregnancy, which has been associated with adverse outcomes for women, fetuses and infants.⁶ Therefore, it is important to understand the risk factors for unintended pregnancy, particularly those related to intimate partner violence.

Some of the existing research on intimate partner violence and fertility control has focused on women's fear of violence as a barrier to contraceptive use in general.⁷ Other

researchers have explored relationships between partner abuse and the use of male methods, because women may face violence when attempting to negotiate condom use,⁸ and between abuse and female methods, because partners may become abusive when they discover covert use or suspect infidelity.⁹ While the anecdotal evidence from these studies helps clarify the mechanisms through which violence and fear of violence could affect fertility control, the issue merits further investigation.

With the exception of a few studies based on data from postpartum women in the United States, limited quantitative research has directly explored the relationship between intimate partner violence and fertility control.¹⁰ Several studies found that women who had experienced intimate partner violence during pregnancy were more likely than nonabused women to report that the pregnancy was unplanned or closely spaced, or that they had had unhappy feelings about it.¹¹ However, these studies examined bivariate relationships without controlling for other factors. Another study found no significant association between abuse and unwanted pregnancy, but the fact that mistimed pregnancies were categorized with wanted pregnancies may have affected the findings.¹²

Most induced abortions are of pregnancies that were unintended. Studies exploring intimate partner violence

TABLE 1. Selected characteristics of ever-married women who had given birth in the last five years or were currently pregnant, and of ever-married women who had not given birth during that time and were not currently pregnant, Colombia Demographic and Health Survey, 2000

Characteristic	Recent birth or current pregnancy (N=3,431)	No recent birth or current pregnancy (N=4,285)
Demographic		
Age (mean yrs.)	28.0***	37.8
Age at first birth (mean yrs.)†	20.7	20.7
No. of children (mean)	2.3***	2.6
Socioeconomic composite score (mean)	4.9***	5.6
Have item in household (%)		
Refrigerator	56.5***	71.4
Telephone	40.0***	55.0
Radio	83.4***	89.9
Television	81.3***	89.2
Running water	82.3***	87.6
Durable floor	83.7***	89.6
Flush toilet	63.0***	73.9
Urban residence (%)	69.4***	76.9
Education level (%)		
None	3.4***	5.3
Primary	39.3	40.8
Secondary	48.4***	42.3
Higher than secondary	9.0***	11.6
Employment (%)		
Professional, technical or managerial	5.3***	8.1
Clerical or sales	17.5***	21.2
Manual, agricultural or service	28.9***	38.1
None	47.3***	32.4
Currently married or living with partner (%)	84.4***	72.4
Region		
Atlántica	29.2	27.0
Bogotá	13.6	13.8
Central	25.1	25.8
Oriental	16.6	16.1
Pacífica	15.4	17.3
Fertility		
Ever used contraceptives (%)	87.5**	89.4
Currently using contraceptives (%)	55.1***	61.8
Big problem if became pregnant (%)‡	50.2***	44.6
Ever had a terminated pregnancy (%)	22.4***	9.0
Discussed family planning		
with partner (%)	16.6***	7.3
Discussed family planning with nonpartner (%)	52.4***	46.1
Abuse		
Father hit mother (%)	33.1*	30.2
Ever forced to have sex by nonpartner (%)	7.1	6.4

*Difference from women with no recent birth or current pregnancy significant at $p < .05$. **Difference from women with no recent birth or current pregnancy significant at $p < .01$. ***Difference from women with no recent birth or current pregnancy significant at $p < .001$. †The sample for this measure was limited to women who had ever given birth. Percentages are based on 3,297 women with a recent birth or current pregnancy and 3,878 women with no recent birth or current pregnancy. ‡Based on 2,311 women with a recent birth or current pregnancy and 2,029 with no recent birth or current pregnancy.

among women obtaining abortions therefore provide important information about the association between intimate partner violence and unintended pregnancy.¹³ One such study revealed a significant association between abuse and abortion.¹⁴ Three others found that rates of prior abortion were significantly higher among abused women than among nonabused women.¹⁵

These studies provide some evidence that a relationship exists between partner abuse and unintended pregnancy. However, more investigation is needed to determine whether the relationship would be significant in a multivariate analysis and whether similar results would be found in other contexts, particularly in developing countries. In this study, we used multivariate logistic regressions to explore the relationship between intimate partner violence and unintended pregnancy in a population-based sample of Colombian women. It is the first study to explore this issue in a Latin American setting.

METHODS

Data

Analyses are based on cross-sectional data from the 2000 Demographic and Health Survey (DHS) for Colombia.¹⁶ We used information from the women's questionnaire, in which women of reproductive age (15–49) were asked about their reproductive and sexual history, contraceptive knowledge and practices, knowledge and attitudes about HIV/AIDS, fertility desires, nutritional status, family violence experience and births in the last five years. Of the 11,585 women surveyed, 7,716 had ever been married (i.e., legally married or in a cohabiting relationship) and answered a series of questions related to intimate partner violence; lack of privacy prevented interviewers from asking these questions of an additional 31 ever-married respondents. The remaining 3,838 women had never been married and thus could not have experienced abuse by an intimate partner (which is defined in this study as a legal spouse or cohabiting partner).

Of the 7,716 respondents who completed the partner violence module, 3,431 reported that they had given birth in the last five years or were currently pregnant, and therefore could have had an unintended pregnancy.* This subgroup, which we refer to as “recently pregnant women,” makes up the sample for our analysis.

Abuse Variables

A woman was categorized as having experienced physical abuse if she answered affirmatively when asked if her partner had pushed her, hit her with his hand, hit her with a hard object, bitten her, kicked or dragged her, threatened her with a knife or gun, attacked her with a knife or gun, or tried to choke or burn her, either sometimes or frequently. A woman was classified as having experienced sexual abuse if she stated that her partner had forced her to have sex, either sometimes or frequently. We pooled this information to create an aggregate measure of abuse, which was coded positive for all women who reported either physical or sexual violence at any frequency.

It should be noted that respondents were asked about their experience of abuse in their current or most recent partnership, rather than over their lifetime. As a result, we assume that this analysis underestimates actual rates of

*Women in the study population had 4,684 pregnancies in 1995–2000, of which approximately one-half were unintended. Of the unintended pregnancies, 54% were mistimed and 46% were unwanted.

abuse and indicates a weaker relationship between abuse and unintended pregnancy than actually exists. In addition, because respondents were not asked when abuse occurred relative to each unintended pregnancy, they could have been abused by a partner other than one with whom they had an unintended pregnancy.

Unintended Pregnancy Variable

Respondents were asked about the intendedness of all pregnancies they had had in the last five years that had ended in live births, and about the intendedness of their current pregnancy (if relevant). For each pregnancy, women were asked whether they had wanted the pregnancy at the time of conception, had wanted it later or had not wanted it at all. We categorized women as having had an unintended pregnancy if they reported their current or any past pregnancy as wanted later or not at all. We chose to make this variable dichotomous rather than continuous because 79% of the 1,900 women who reported at least one unintended pregnancy reported only one.

Explanatory Variables

Demographic variables included women's age, number of children, urban or rural residence and education level (none, primary, secondary or higher than secondary). To measure socioeconomic status, we created a composite score that summarized how many of the following items were in respondents' households: refrigerator, telephone, radio, television, running water, durable flooring materials and flush toilet.

Fertility-related characteristics included whether women had ever had a pregnancy that terminated early (without distinguishing between spontaneous and induced abortion); whether they had had a child who died; whether they had ever used modern contraceptives; whether they were currently using modern contraceptives; and whether they had discussed family planning with their partner or with someone other than their partner. Other abuse-related variables included whether women had a family history of abuse (i.e., whether their father hit their mother) and whether someone other than their partner ever forced them to have sex.

Analysis

All analyses were conducted using Stata statistical analysis software. We calculated descriptive statistics for demographic and fertility-related characteristics, family abuse history and coerced sex by a nonpartner among the 3,431 ever-married women who had given birth in the last five years or were currently pregnant, and among the 4,285 ever-married women who did not report a recent birth or current pregnancy. We compared the two groups using t-tests for continuous variables and chi-square tests for categorical variables to determine how representative recently pregnant women were of all ever-married respondents.

We summarized rates of intimate partner violence among recently pregnant women for each type of abuse and determined the overlap of physical and sexual violence. We decided to categorize women who reported either type of

TABLE 2. Among ever-married women who had given birth in the last five years or were currently pregnant, percentage who reported abuse by their current or most recent partner, by type of abuse and violent act, according to frequency

Type and act of abuse	Frequently	Sometimes	Total
Physical			
Pushed	4.2	29.1	33.2
Hit with hand	3.3	23.4	26.7
Hit with hard object	1.7	4.9	6.6
Bit	0.5	2.8	3.3
Kicked or dragged	1.6	8.7	12.4
Threatened with knife or gun	0.7	5.5	6.3
Attacked with knife or gun	0.3	2.3	2.6
Tried to choke or burn	0.4	3.2	3.7
Sexual	1.5	7.1	8.5

violence in one group, although it could be argued that the mechanisms that operate between physical abuse and fertility control are different from those that operate between sexual abuse and fertility control. However, most women who reported any type of violence had not been sexually abused (77%), and the number of recently pregnant women who had experienced sexual abuse without physical violence was too small for meaningful analysis. We included the 293 women (9%) who had experienced sexual abuse alone or in combination with nonsexual physical violence, because sexual abuse is a form of physical abuse and is likely to affect women's fertility control.

Verbal abuse was not considered as a separate category because the majority of verbally abused women had also been physically or sexually abused. The 218 women who reported verbal abuse without any other form of abuse did not constitute an analytically viable group.

We conducted bivariate logistic regression analyses to calculate the unadjusted odds of unintended pregnancy associated with the summary measure of physical and sexual abuse and with respondents' demographic and fertility-related characteristics. We used these findings to construct a series of multiple logistic regression models, each of which included unintended pregnancy as the dependent variable and physical or sexual abuse as the main independent variable. All models controlled for age, education level, number of children, socioeconomic status and urban or rural residence. We then added the following variables and assessed their significance: ever-use of contraceptives, current contraceptive use, family abuse history, coerced sex by a nonpartner, a pregnancy that had terminated early, a child who had died, and discussion of family planning with a partner and with a nonpartner.

We tested for interactions between abuse and age, education level, urban residence and socioeconomic status, and between socioeconomic status and urban residence. We assessed the significance of the interaction terms and conducted likelihood ratio tests to determine whether the model fit improved when interaction terms were added.

Regional Variation

To determine whether relationships between intimate partner violence and unintended pregnancy were similar across the country, we compared rates of abuse and unintended

TABLE 3. Among ever-married women who had given birth in the last five years or were currently pregnant, odds ratios from bivariate logistic regressions assessing the associations between having had at least one unintended pregnancy and selected characteristics

Characteristic	Odds ratio
Demographic	
Age	0.99
Age at first birth	0.93***
No. of children	1.46***
Socioeconomic composite score	0.91***
Urban residence	0.93
Fertility	
Ever used contraceptives	1.05
Currently using contraceptives	0.86*
Big problem if became pregnant†	2.13***
Ever had a terminated pregnancy	0.87
Discussed family planning with partner	0.90
Discussed family planning with nonpartner	0.94
Abuse	
Physical or sexual abuse by partner	1.64***
Father hit mother	1.05*
Ever forced to have sex by nonpartner	1.48**

*p<.05. ***p<.001. †Based on 2,311 women.

pregnancy—and associations between the two—across five main regions: Atlántica, Bogotá, Central, Oriental and Pacifica. An in-depth analysis of municipality-level differences was presented elsewhere.¹⁷ Although we controlled for socioeconomic status and urban or rural residence, the great diversity and complexity of Colombian society are not fully captured in our analysis of the national sample.

Population-Attributable Risk

We calculated the population-level risk of unintended pregnancy in Colombia that could be attributed to intimate partner violence (i.e., population-attributable risk), after adjusting for confounding factors, to estimate the reduction in unintended pregnancy that would result if intimate partner violence could be eliminated. We then used rates of birth, induced abortion and unintended pregnancy to calculate the total number of unintended births and abortions of unintended pregnancies that could be avoided by eliminating intimate partner violence in Colombia.

RESULTS

As shown in Table 1 (page 166), respondents who had given birth in the last five years or were currently pregnant had a mean age of 28, a mean age at first birth of 21, a mean of 2.3 children and a mean socioeconomic composite score of 4.9. Although most of these women had a radio, television, running water and durable floor (81–84%), lower proportions had a refrigerator, telephone and flush toilet (40–63%). The majority lived in urban areas (69%). Almost half (48%) had a secondary education, but only 9% had been educated at a higher level.

Most recently pregnant respondents said they had ever used modern contraceptives (88%), and 55% were using a modern method at the time of the survey. One-half stated that becoming pregnant now would be a big problem.

Nearly one-quarter said they had had a pregnancy that terminated early. While only 17% reported discussing family planning with their partner, 52% had discussed family planning with someone other than their partner. Further investigation revealed that 84% of women who were not using contraceptives and said that becoming pregnant would be a big problem were either breast-feeding, unmarried, not having sex, menopausal or subfecund (not shown).

Recently pregnant women differed significantly from other respondents on most of these measures: mean age, number of children and socioeconomic composite score; and each of the household items, urban residence, education level, employment, marital status, all fertility-related characteristics and family history of intimate partner violence.

Thirty-eight percent of recently pregnant women had experienced physical or sexual violence, 29% reported physical abuse only, 1% reported sexual abuse only and 7% had experienced both types of violence. The most common forms of physical abuse reported (Table 2, page 167) were being pushed by a partner (33%) and being hit with a hand (27%); the least common were being bitten and being attacked with a knife or gun (3% each). The majority of women reporting any act of abuse said that the abuse occurred only sometimes. Approximately 18% of the women reported severe consequences of abuse, including pain, wounds, broken bones, pregnancy loss, organ damage or loss of bodily function (not shown).

Slightly more than half of the women (55%) had had at least one unintended pregnancy in 1995–2000. Among women who had experienced physical or sexual abuse, the proportion who reported at least one recent birth or current pregnancy as unintended was higher than the proportion who reported all recent births and current pregnancies as wanted (63% v. 37%). Among nonabused women, however, there was basically no difference between these two proportions (51% v. 49%).

Table 3 shows unadjusted odds ratios for unintended pregnancy and respondents' demographic and fertility-related characteristics, and abuse-related variables. Women's odds

TABLE 4. Among ever-married women who had given birth in the last five years or were currently pregnant, odds ratios from multivariate logistic regression assessing the association of abuse and other characteristics with unintended pregnancy

Characteristic	Odds ratio
Physical or sexual abuse	1.41***
Age†	0.92***
Education level	
Primary	1.09
Secondary	1.29
Higher than secondary	1.47
No. of children‡	1.88***
Socioeconomic composite score	1.07*
Ever had a terminated pregnancy	0.81*
Socioeconomic composite score x urban residence	0.90*

*p<.05. ***p<.001. †Odds ratio indicates change in risk of unintended pregnancy with each year of age above the average of 28. ‡Odds ratio indicates change in risk of unintended pregnancy with each additional child above the average of two.

TABLE 5. Among ever-married women who had given birth in the last five years or were currently pregnant, percentage who reported physical or sexual abuse, percentage who reported at least one unintended pregnancy, and adjusted odds ratios, by region

Region	Physical or sexual abuse	Unintended pregnancy	Odds ratio
Atlántica	31.1	53.7	1.65**
Bogotá	42.1	53.9	1.22
Central	35.7	55.9	1.66**
Oriental	41.3	56.4	1.13
Pacífica	45.4	58.0	1.15

**p<.01. Notes: Figures based on 1,002 women for Atlántica; 468 women for Bogotá; 861 women for Central; 571 women for Oriental; and 529 women for Pacífica. Odds ratios are adjusted for age, number of children, socioeconomic composite score, education level, history of terminated pregnancy and interaction between socioeconomic composite score and urban residence; the odds ratio for Bogotá was not adjusted for the interaction between socioeconomic score and urban residence because that region is considered urban.

of having had an unintended pregnancy decreased significantly as age at first birth and socioeconomic composite score increased (odds ratio, 0.9 for both measures); the odds increased with each additional child (1.5). As expected, current contraceptive use was a protective factor against unintended pregnancy (0.9), and women who stated that it would be a big problem if they became pregnant had an increased likelihood of having an unintended pregnancy (2.1). Having a parental history of intimate partner violence and coerced sex by a nonpartner were positively associated with unintended pregnancy (1.1 and 1.5, respectively). We also found a statistically significant relationship between unintended pregnancy and intimate partner violence (1.6).

In a logistic regression analysis that controlled for demographic and fertility-related factors (Table 4),* intimate partner violence was significantly associated with unintended pregnancy after we controlled for other factors (odds ratio, 1.4). Each additional year above the average age of 28 was significantly associated with a reduction in women's risk of unintended pregnancy (0.9). Each additional child above the average of two children was associated with an elevated risk of unintended pregnancy (1.9).† The odds also increased significantly with each additional point on the respondents' socioeconomic composite score (1.1). Women who had had a pregnancy that terminated early were significantly less likely to report an unintended pregnancy than were women without this characteristic (0.8). Education level was not significantly associated with women's risk of unintended pregnancy in this model.

We found a statistically significant interaction between socioeconomic composite score and urban residence, which suggests that socioeconomic status was an important protective factor against unintended pregnancy only in urban areas. Although we tested other interaction terms, this was the only one that was statistically significant or improved the model fit.

Table 5 shows percentages of women experiencing intimate partner violence and unintended pregnancy, as well as adjusted odds ratios, in the five major geographic regions. The rate of abuse was highest in the Pacífica region (45%),

followed by Bogotá (42%) and Oriental (41%). The Atlántica region had the lowest rate of abuse (31%) and, along with Bogotá, had the lowest rate of unintended pregnancy (54%), while the Pacífica region had the highest rate of unintended pregnancy (58%). Adjusted odds ratios indicated that unintended pregnancy was significantly more common among abused women than among other women in both the Atlántica and the Central region (odds ratios, 1.7 for both regions).

Calculations based on population-attributable risk estimates suggest that unintended pregnancies would decrease by 5% if intimate partner violence were eliminated in Colombia. This would translate to 24,736 fewer unintended births[‡] and 7,787–20,250 fewer abortions per year,[§] for a total of 32,523–44,986 fewer unintended pregnancies annually.

DISCUSSION

We found a moderate relationship between unintended pregnancy and intimate partner violence, even after we adjusted for respondents' demographic and fertility-related characteristics. This relationship may be explained by several different mechanisms. One possibility is that some women became pregnant unintentionally as a direct result of sexual abuse. However, because women who reported only physical abuse also had an elevated risk of unintended pregnancy, it is more likely that another mechanism was at work, in which abused women living in an environment of fear and male dominance lacked the ability to control their fertility.

In a previous study based on the same Colombian data, Pallitto and O'Campo tested the community-level effects of gender inequality, female autonomy and patriarchal control on the relationship between intimate partner violence and fertility control.¹⁸ Having had an unintended pregnancy was significantly associated with living in a highly patriarchal community and living in a community with a high rate of intimate partner violence. Although previous studies have

*Contraceptive use, family abuse history, coerced sex by a nonpartner, and discussion of family planning with a partner and with a nonpartner did not have significant effects and were omitted from the model.

†Age and number of children were centered around average values to make the results more interpretable.

‡Colombia's birthrate is approximately 21.6 births per 1,000 people, and the population in January 2003 was approximately 41,662,073 people (source: Central Intelligence Agency, *The World Factbook 2003*, 2003, <<http://www.cia.gov/cia/publications/factbook/geos/co.html>>, accessed Jan. 10, 2004). Using these statistics, we calculated the total number of births per year to be 899,484 and—given that 55% of births reported in the 2000 Demographic and Health Survey for Colombia were unintended—the total number of unintended births per year to be 494,716. If unintended pregnancies could be reduced by 5% by eliminating intimate partner violence, then 24,736 unintended births could be avoided each year.

§This figure is based on a range of abortion estimates for Colombia; the most conservative estimate is 173,037 abortions per year (source: Singh S and Wulf D, 1994, reference 30), and the highest estimate is 450,000 abortions per year (source: reference 29). We assumed that 90% of abortions (155,733–405,000) are due to unintended pregnancy, because a study of U.S. women showed that 10% of abortions were obtained for other reasons (source: reference 31). A 5% reduction in abortions would result in 7,787–20,250 fewer abortions per year and 32,523–44,986 fewer unintended pregnancies (births plus abortions) per year. This probably underestimates the total number of unintended pregnancies that could be avoided, because at least some unintended pregnancies end in spontaneous abortion, which presumably would also be reduced if intimate partner violence were eliminated.

provided some evidence that gender inequality is associated with intimate partner violence,¹⁹ and that a lack of autonomy or status is linked to a lack of fertility control,²⁰ the Colombian study was the first to explore the effects of these constructs on the relationship between intimate partner violence and unintended pregnancy.

The community-level study provides an in-depth analysis of the regional variations in intimate partner violence and unintended pregnancy that were presented here. The presence of regional variations indicates the heterogeneity of Colombian society and the need to consider cultural and regional differences that were not controlled for in this analysis. Further investigation is warranted to determine which subregions or municipalities have particularly high rates of intimate partner violence and unintended pregnancy, to explore the risk factors that exist in these areas and to target resources and programs to address these problems.

A few limitations of the study must be noted. Variables related to partner beliefs and characteristics were not included in the multivariate regression models because a large amount of partner data was missing. As a result, it was impossible to determine the effects of these variables on women's pregnancy intentions and fertility control. However, previous research has suggested that societies in which women's status is improving may exhibit higher rates of intimate partner violence than those in which gender roles are static.²¹ In the Colombian data, high rates of intimate partner violence and unintended pregnancy, and the association between the two, suggest a tension between women and their partners. Further investigation is warranted to determine how these phenomena are associated with changes in women's status and gender relations at the societal level.

The potential for underreporting is an important concern in research on intimate partner violence because of the sensitivity of the subject, social stigma and participants' privacy and safety concerns. Women may not respond honestly to sensitive questions and may be at risk for further abuse or psychological trauma if the researchers do not adequately address safety and ethical issues.²² The problem of underreporting has been demonstrated by Ellsberg and colleagues, who showed that two studies specifically designed to capture data on intimate partner violence among Nicaraguan women yielded higher rates than analyses of data collected in the intimate partner violence module of the DHS.²³ Rates of lifetime abuse were 52% in a study conducted in León and 69% in a study in Managua, compared with only 28% in the nationally representative DHS.

Although it is possible that rates of intimate partner violence were higher in León and Managua than in the rest of the country, Ellsberg and colleagues suggested that results from the studies that focused on partner abuse were more accurate than those based on DHS data because interviewers were trained specifically to collect violence data, safety and security concerns were more fully addressed and referral services were offered. In light of these findings and the fact that the Colombian DHS did not measure lifetime abuse, it

is likely that rates of violence found in our study are underestimates, and that the association between intimate partner violence and unintended pregnancy was weakened.

The cross-sectional nature of the Colombian DHS limits the conclusions that can be drawn from this analysis in several ways. First, there is potential for recall bias or instability in reports of pregnancy intendedness for the preceding five years. Previous studies have shown that women's perceptions of wantedness might change over time and, specifically, that a pregnancy that was originally considered unwanted could be categorized as wanted after the birth.²⁴ In addition, it is not possible to assess the chronology of the relationship between intimate partner violence and unintended pregnancy from these data, although the fact that five years' worth of pregnancy data are analyzed makes the estimates more reliable.

We hypothesized that violence leads to unintended pregnancy, but it could also be argued that unintended pregnancy precipitates abuse. Our hypothesis is supported by several studies in which the majority of women who had been physically or sexually abused during pregnancy reported that the abuse had begun before they got pregnant.²⁵ A study by Saltzman and colleagues also revealed lower rates of abuse during pregnancy than before pregnancy,²⁶ a finding that is supported by a study from Mexico, which showed that physical and sexual abuse decreased during pregnancy despite increases in emotional abuse.²⁷ In another study, Ellsberg and colleagues established the early onset of abuse among married women in a large sample from Nicaragua, which provides further evidence of abuse preceding pregnancy.²⁸

Our study is also limited by the unavailability of intendedness data for pregnancies that occurred more than five years before the survey. The sample of women who had been pregnant in the last five years was not representative of all ever-married respondents; further analysis revealed that rates of physical and sexual abuse were significantly elevated, and rates of current partnership were significantly reduced, among ever-married women who did not report a recent birth or current pregnancy. Excluding these respondents from the analysis may have caused us to underestimate the association between intimate partner violence and unintended pregnancy.

Intendedness was measured only for pregnancies that ended in live births; our analysis could not account for pregnancies that terminated early because of spontaneous or induced abortion. Although induced abortion is illegal in Colombia, one study estimated that 450,000 abortions occur in the country each year;²⁹ more conservative estimates range from 173,037 to 404,000.³⁰ Because pregnancies that end in abortion are generally unintended,³¹ the lack of intendedness data on terminated pregnancies probably caused us to underestimate rates of unintended pregnancy. This assumption is supported by our finding that women's odds of having had an unintended pregnancy that ended in a live birth were significantly reduced if they had had a pregnancy that terminated early.

Despite these limitations, the findings presented here

reveal a significant relationship between intimate partner violence and unintended pregnancy. This is the first population-based study from a Latin American country to find such an association. Further exploration of the mechanisms that govern the relationship between intimate partner violence and unintended pregnancy is warranted, and more research is needed to address similar questions in other Latin American countries and in other regions of the world. In addition, qualitative research would help broaden our understanding of the link between intimate partner violence and unintended pregnancy and of how that relationship is influenced by gender relations at the community and societal levels.

Unintended pregnancy is associated with many adverse health outcomes for women and infants, including late entry into prenatal care, low birth weight, very low birth weight, perinatal mortality and postpartum complications.³² In addition, unintended births are less likely than planned births to occur in an institutional setting, and infants whose conception was unintended are less likely to be breast-fed.³³ Other adverse outcomes may include maternal mortality from abortion complications, especially in countries where abortion is illegal.³⁴ Our findings based on population-attributable risk suggest that the enormous public health implications of unintended pregnancy could be substantially reduced by decreasing or eliminating intimate partner violence. In this context, efforts to reduce risk factors for unintended pregnancy, including intimate partner violence, deserve increased support.

CONCLUSION

The dynamic nature of Colombian society, the rapid changes that have occurred in women's education and employment, and changes in fertility rates over the last 30 years make Colombia an important setting in which to address intimate partner violence and fertility control. Colombian law provides a legal basis for protecting women from abuse; however, the enforcement and application of the law are inconsistent.³⁵ While many governmental and non-governmental organizations in Colombia work toward preventing and addressing intimate partner violence, additional efforts are needed to promote reproductive health programs that involve men; screen women for intimate partner violence in health care settings; undertake campaigns at the societal level to break the intergenerational cycle of considering abuse a socially acceptable behavior; provide protective services for abused women, such as shelters and support groups; and improve women's status through educational and occupational advances.

By gaining a greater understanding of the relationship between partner abuse and fertility control in Colombia, local and international efforts can more effectively address women's risk of violence and unintended pregnancy and the resultant threats to women's health, safety and well-being. This study demonstrates the magnitude of these social problems and the urgency with which they must be addressed.

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RESUMEN

Contexto: La violencia contra la pareja íntima está estrechamente relacionada con una serie de problemas de salud reproductiva y mental. Sin embargo, la relación entre la violencia intrafamiliar y la capacidad de la mujer para controlar su fecundidad no ha sido adecuadamente analizada, especialmente en los países en desarrollo.

Métodos: Se realizaron análisis de regresión logística multivariada con los datos recogidos en la Encuesta Nacional de Demografía y Salud de Colombia, del año 2000, con el objeto

de estudiar la relación entre el sexo forzado y el embarazo no planeado, lo cual fue incluido como un indicador del grado del control que tenían las mujeres sobre su fecundidad. Asimismo, se estudiaron las diferencias regionales con respecto a esta relación y se calculó el riesgo atribuible poblacional. La muestra consistió en 3.431 mujeres casadas alguna vez, de entre 15 y 49 años, que hubieran dado a luz durante los últimos cinco años o que en ese momento estuvieran embarazadas.

Resultados: El 55% de las entrevistadas habían tenido por lo menos un embarazo no planeado, y el 38% habían sido física o sexualmente abusadas por su pareja actual o más reciente. La razón de momios ajustada entre las mujeres que habían tenido un embarazo no planeado fue significativamente más alta si habían sido abusadas física o sexualmente (razón de momios, 1,4); esta relación se observó en las regiones Atlántica y Central de Colombia (1,7 cada una), pero no fue significativa en otras regiones del país. Si se elimina la violencia contra la pareja íntima en Colombia se calcula que podrían evitar unos 32.523–44.986 embarazos no planeados por año.

Conclusiones: Estos resultados señalan la necesidad de incluir la detección y el tratamiento de la violencia contra la pareja íntima en los programas de salud reproductiva, de fomentar la participación del hombre en los programas de control de la fecundidad, y de mejorar la respuesta social y política ante la violencia contra la pareja íntima.

RÉSUMÉ

Contexte: La violence par un partenaire intime est associée à plusieurs problèmes de santé reproductrice et mentale. Le rapport entre cette violence et l'aptitude des femmes à maîtriser leur fécondité n'a toutefois guère été examiné, surtout dans les pays en développement.

Méthodes: Les données de l'Enquête démographique et de santé 2000 de la Colombie ont servi à l'étude, par régressions logistiques multivariées, du rapport entre la violence par un partenaire intime et la grossesse non planifiée, utilisée comme mesure de contrôle de la fécondité. Les différences régionales de ce rapport ont également été examinées, et la fraction étiologique du risque a été estimée. L'échantillon comptait 3.431 femmes mariées ou l'ayant jamais été, âgées de 15 à 49 ans et qui avaient accouché durant les cinq dernières années ou qui étaient enceintes.

Résultats: Cinquante-cinq pour cent des répondantes avaient eu au moins une grossesse non planifiée et 38% avaient subi les violences physiques ou sexuelles de leur partenaire actuel ou de leur dernier partenaire. La probabilité corrigée pour les femmes d'avoir eu une grossesse non planifiée était significativement supérieure si elles avaient été victimes de violences physiques ou sexuelles (rapport de probabilités, 1,4). Observée dans les régions atlantique et centrale (1,7 chacune), l'association ne s'est pas révélée significative dans le reste du pays. L'élimination de la violence par un partenaire intime en Colombie donnerait lieu à une réduction annuelle des grossesses non planifiées estimée entre 32.523 et 44.986.

Conclusions: Ces observations révèlent la nécessité d'inclure le dépistage et le traitement de la violence par un partenaire intime dans les programmes de santé reproductrice, d'encourager la participation des hommes aux programmes de contrôle de la fécondité et d'améliorer la réponse sociopolitique à la violence par un partenaire intime.

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Intimate Partner Violence in China: National Prevalence, Risk Factors and Associated Health Problems

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CONTEXT: Intimate partner violence has been studied in many developed and developing countries. China remains one of the few large societies for which the prevalence and correlates of intimate partner violence are unknown.

METHODS: Data from a nationally representative sample of women and men aged 20–64 with a spouse or other steady partner provide estimates of intimate partner violence in China. Binomial and multinomial logistic regression analyses adjusted for sample design examine risk factors and negative outcomes associated with partner violence.

RESULTS: Altogether, 34% of women and 18% of men had ever been hit during their current relationship; the prevalence of hitting resulting in bleeding, bruises, swelling, or severe pain and injuries was 12% for women and 5% for men. Significant risk factors for partner violence included sexual jealousy, patriarchal beliefs, low female contribution to household income, low male socioeconomic status, alcohol consumption and residence in regions other than the South and Southeast. Severe hitting was a significant risk factor for self-reported adverse general and sexual health outcomes, including sexual dysfunction, sexual dissatisfaction and unwanted sex.

CONCLUSIONS: As in other societies, intimate partner violence in China is common and is correlated with adverse general and sexual health outcomes.

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Research on intimate partner violence in developed and developing countries suggest that intimate partner violence occurs in all societies.¹ Among 28 studies based on national population-based probability samples, the median prevalence of lifetime partner violence against women is 21%; a much higher prevalence is reported for countries such as Egypt (34%), New Zealand (35%) and Colombia (40%). In 10 national and regional studies, the median prevalence of hitting resulting in physical injury is 11%.²

Known risk factors of intimate partner violence include young age, poverty, low social status, women's disempowerment, stress in daily life, alcohol consumption and jealousy.³ Furthermore, intimate partner violence is associated with negative physical and mental health sequelae (e.g., depression, low self-esteem, alcohol abuse) and, potentially, sexual and reproductive health issues.⁴ The pathways for such outcomes include lingering physical and emotional trauma that exacerbates continuing physical health, mental health and gynecological problems.⁵ In addition, threats of violence may reduce individuals' ability to practice safe sex, increasing their risk of sexually transmitted infections (STIs).

Much remains to be understood about the total set of possible negative sexual and reproductive health outcomes associated with intimate partner violence, especially in developing countries such as China.⁶ Since the mid-1990s, the subject has received more attention in China, with sev-

eral studies suggesting that 20–30% of Chinese women have been hit by their spouse;⁷ however, none of these studies provide national estimates. This study supplies the first national analysis of intimate partner violence in China, including prevalence by perpetrator and severity; risk factors; and general, sexual and reproductive health correlates of violence among men and women.

METHODS

Data

We used data from the 1999–2000 Chinese Health and Family Life Survey, which included a nationally representative sample of the adult population aged 20–64. Following standard procedures for complex samples, the probabilistic sample was drawn from 14 strata and 48 primary sampling units (counties and city districts), with probabilities of selection proportional to population size at each of the four sampling steps down to the individual.^{8*} Participants responded to an hour-long computer-based interview; most interviewers were trained social workers and researchers, and were of the same sex as the respondents they interviewed. To protect respondents' privacy, interviews usually took place in a private hotel room or in a meeting facility. Respondents answered most of the questions in the study when the interviewer was in control of the computer, although questions about sexual behavior were answered while the respondent controlled the computer. At the completion of the interview, participants also gave a urine sample, which was tested for chlamydia.

*For details, see <<http://www.src.uchicago.edu/prc/chfls.php>>.

Of 5,000 individuals initially sampled, 3,806 completed the interview and provided valid data for analyses—for a response rate of 76%. Of those, we used reports from the 1,665 women and 1,658 men who had a steady sexual partner at the time of interview. We defined a steady partner as someone with whom the respondent was currently involved in a sexual relationship of at least a month's duration; for the vast majority (98%), the steady partner was a spouse.

Dependent Variables

Respondents were asked whether their partner had ever hit them, not including hitting in a joking or playful way.* Conversely, participants were asked if they had ever hit their partner. The possible responses for both questions were “yes, in last 12 months,” “yes, but more than 12 months ago” and “never.” We combined the first two categories to analyze any hitting during the lifetime of the current relationship. Respondents who had ever been hit by their partner were asked, “Did your partner ever hit you hard?” This was defined as an attack resulting in bleeding, a bruise, swelling or severe pain and injury; respondents could answer yes or no.

Independent Variables

Respondents were asked questions about social and demographic characteristics, beliefs and attitudes considered risk factors for intimate partner violence, with an emphasis on sexual jealousy, patriarchal values, bargaining and dependency, and stress and lifestyle. Sexual jealousy is thought to be an important factor involved in partner violence.⁹ In the questionnaire, respondents were asked “Have you ever felt insecure, “green eyed” (*chi cu*) or even jealous about your partner?” Conversely, respondents reported whether their partners had ever felt this way about them. The possible answers for both questions were “often,” “occasionally,” “rarely” and “never”; we condensed the first two responses into yes and the last two to no.

Another factor associated with partner violence in previous studies is patriarchal values that legitimate men's control of women.¹⁰ In the questionnaire, this type of attitude was examined with the question “Women say that in sex, men should be proactive and take the lead while women should be cooperative and acquiescent. What is your opinion?” Respondents could answer “women should not be proactive” or “women should be proactive.”

Women's disempowerment can inhibit women from leaving or resisting abusive relationships. Women's increasing income diminishes violence, but only up to a point. When a woman earns much of the family income, her partner may lash out in frustration—suggesting a possible curvilinear relationship between women's income and hitting.¹¹ In this study, disempowerment was measured by whether the female partner was more than two years younger than the male and by whether she earned 30% or less of the couple's joint income. To investigate the aforementioned violence that can occur when a woman earns much of the couple's income, we also included whether the women earned more than

45% of the couple's income. Most hitting occurs when spouses are young.¹² Thus, the most relevant income figure, particularly for older couples who are out of the labor force, is not current income but an estimate of what each partner would have been earning at an earlier age. We determined this estimate from regression equations (separate for men and women) that included education, occupation, geographic region and work status. We then used the results to estimate partners' relative income, and expressed it as the proportion of income contributed by the woman.

Low education, menial occupation and low income have previously been shown to be risk factors for partner violence, with some research suggesting that these elements create more stress between spouses—particularly when the man is of low socioeconomic status.¹³ A woman may also be at higher risk if she or her partner uses alcohol.¹⁴ In this study, male socioeconomic status combines the man's education (six-point scale) and occupation (nine-point scale) in a factor analysis. This scale was divided into three groups, with most of the men clustered in the middle group.

We included several other factors likely to influence hitting. As our outcome measure is any hitting during the relationship, it is likely that hitting is associated with relationship duration—with the greatest increase being in the early years when partners are younger.¹⁵ We also control for region and urban location. The South and Southeast coastal region, which extends from Shanghai to Guangzhou, includes provinces with a booming economy and multiple foreign influences. The North and Northeast region includes both China's heavy-industry rust belt and sites in and around the capital of Beijing. The “inland” region includes central and western China. We defined urban sites as locales with less than 15% of the labor force in farming.

In existing research, partners often disagree on the level of hitting.¹⁶ For the sake of simplicity, we included “male respondent” to take into account consistent under- or over-reporting by either partner. We conducted separate analyses (not reported here) for each gender and for gender interactions with each risk factor. In various places, we note differences between the reported and unreported results.

Negative Outcomes

To examine the negative outcomes associated with intimate partner violence, respondents were asked questions about their general happiness and health, and their sexual health and satisfaction. We included 15 items that examined respondents' self-reports of unhappiness with life or poor health in the past year; mental distress during the last three months; having had at least one problem during sex that lasted two months or more during the past year (i.e., lack of interest in sex, inability to achieve orgasm, inability to find pleasure in sex, performance anxiety in sex, erectile dysfunction, premature ejaculation, inadequate lubrication or pain during sex); physical or emotional dissatisfaction

*Literally, the question was whether their partner had “moved his/her hand/foot to hit (*da*) you,” which could include slapping, hitting, kicking or other types of beating.

TABLE 1. Percentage distribution of respondents; and percentage of respondents who had ever experienced intimate partner violence during their current relationship and relative risk ratios (and 95% confidence intervals) from multinomial logistic regression analyses examining the likelihood that respondents had ever experienced intimate partner violence, by type of hitting—all according to selected characteristics

Characteristic	% (N=3,323)	%			Relative risk ratios		
		Male-on-female	Mutual	Female-on-male	Male-on-female	Mutual	Female-on-male
All	100	19.0	15.0	3.3	na	na	na
Gender							
Female (ref)	50	15.4	15.2	3.5	1.00	1.00	1.00
Male	50	22.6	14.8	3.0	1.13 (0.38–3.32)	1.08 (0.63–1.85)	0.61 (0.32–1.14)
Region							
South/Southeast coast (ref)	11	11.2	8.1	2.6	1.00	1.00	1.00
North/Northeast	24	14.4*	13.9*	4.4*	1.31 (0.87–1.97)	2.18 (1.54–3.11)*	2.48 (1.43–4.30)*
Interior	65	22.0*	16.5*	2.9	2.61 (1.51–4.51)*	3.40 (1.76–6.60)*	2.22 (0.94–5.26)
Residence							
Urban (ref)	29	13.6	12.6	3.9	1.00	1.00	1.00
Rural	71	21.1*	15.9	3.0	0.86 (0.55–1.33)	0.85 (0.50–1.45)	1.03 (0.55–1.91)
Relationship duration							
0–5 (ref)	18	10.7	12.4	4.9	1.00	1.00	1.00
6–15	35	20.1*	21.4*	4.7	2.54 (1.07–6.01)*	2.13 (1.17–3.87)*	1.05 (0.32–3.52)
≥16	47	21.3*	11.2	1.6	2.89 (0.84–9.98)	1.10 (0.44–2.75)	0.43 (0.09–2.09)
Age difference							
Male ≤2 yrs. older (ref)	69	20.7	15.1	3.9	1.00	1.00	1.00
Male 3–11 yrs. older	31	15.1*	14.8	1.8	0.71 (0.50–0.99)*	0.99 (0.45–2.16)	0.45 (0.20–1.03)
Man's socioeconomic status							
High (ref)	16	12.5	13.1	3.7	1.00	1.00	1.00
Middle	59	18.1*	12.4	4.0	2.02 (1.39–2.93)*	1.21 (0.71–2.06)	1.64 (0.81–3.10)
Low	24	25.5*	22.4*	1.2	3.65 (2.10–6.34)*	4.22 (2.42–7.37)*	1.71 (0.26–11.10)
Woman's contribution to income							
0–30%	14	21.9	12.0	4.1	1.56 (1.01–2.42)*	1.11 (0.65–1.89)	1.45 (0.69–3.08)
31–45% (ref)	59	16.8	13.7	3.9	1.00	1.00	1.00
46–100%	27	22.3	19.3	1.3	1.32 (0.58–3.01)	1.08 (0.66–1.78)	0.31 (0.10–0.94)*
Alcohol consumption							
Female							
None (ref)	78	15.1	12.7	2.4	1.00	1.00	1.00
Any	22	16.4	23.8	7.3*	1.68 (1.01–2.78)*	2.29 (0.81–6.44)	2.85 (1.13–7.23)*
Male							
Never inebriated (ref)	57	16.4	12.3	2.5	1.00	1.00	1.00
Inebriated in last year	43	30.7*	18.0*	3.6	3.09 (1.56–6.12)*	1.97 (1.00–3.90)	1.43 (0.57–3.56)
Sexual jealousy							
None (ref)	78	17.8	10.9	2.4	1.00	1.00	1.00
Male	5	11.7	35.9*	11.1*	1.48 (0.65–3.34)	6.47 (3.57–11.71)*	5.68 (2.40–13.44)*
Female	9	29.5*	25.4*	6.3*	4.42 (2.54–7.69)*	6.10 (4.22–8.84)*	4.23 (1.17–15.24)*
Both	8	22.9*	29.7*	3.8*	3.54 (2.29–5.47)*	6.27 (2.58–15.22)*	1.95 (0.77–4.91)
Belief that men lead in sex							
Male							
No (ref)	74	20.4	14.6	3.0	1.00	1.00	1.00
Yes	26	28.9	15.4	3.1	1.56 (1.00–2.46)	1.30 (0.66–2.58)	1.50 (0.20–11.52)
Female							
No (ref)	50	11.6	14.7	6.3	1.00	1.00	1.00
Yes	50	19.2*	15.7	0.7	1.53 (0.58–4.01)	1.32 (0.63–2.78)	0.16 (0.04–0.66)*
Total	100	na	na	na	na	na	na

*Significantly different from the referent at p<.05. Notes: na=not applicable. N is unweighted. All results are weighted. Absence of hitting is the referent outcome for both the percentages and the multinomial logistic regression.

with sex with spouse during the past year; absence of kissing during sex; absence of intimacy or foreplay during sex; ever having had unwanted sex with spouse; having participated in unwanted acts during sex with spouse during the past year; partner's extramarital sex (suspected or proven); having had at least one genitourinary symptom

in the past year (i.e., burning pain while urinating; genital lesion, blister or sore; genital discharge of unusual color or odor; warts; irregular vaginal bleeding or lower abdominal pain); ever having had an STI; having a positive urine test for chlamydia; and giving fewer than three correct answers on six knowledge questions about HIV/AIDS.

The analysis of negative outcomes examines the bivariate and multivariate correlates of hitting and severe hitting. The multivariate analysis controls for possible confounding factors, including for all outcomes 10-year age-group, urban residence and geographic region of the respondent. Moreover, in stepwise regressions that allowed variables to enter the equation when they had even a very modest statistical significance ($p < .20$), equations could include education, household income and menopause for women. Also, in the analysis of unhappiness with life, mental distress, poor health, marital status and presence of preschool children could enter the stepwise equations.

Analysis

We weighted results in our analyses, first using population weights that adjusted for the intentional oversampling of coastal and urban settings. After comparison of the resulting age distribution to census results for 2000, we adjusted weights by age to compensate for the smaller number of usable interviews of 20–29-year-olds and 50–64-year-olds. With these adjustments, the percentage distributions by age, occupation, urban residence and education closely parallel those in the national census. Using STATA 8.0, we adjusted standard errors in our logistic regression analyses for sample stratification (sampling strata independently) and clustering (sampling individuals within each of 48 primary sampling units).¹⁷

RESULTS

The sample was equally divided between men and women (Table 1). After the sample was weighted, most respondents lived in the interior part of the country and in a rural area. Nearly half (47%) had been with their current partner for at least 16 years, and more than two-thirds reported that the age difference between themselves and their partner did not exceed two years. Twenty-four percent described the male in the relationship as being of low socioeconomic status, and 27% reported that the female contributed more than 45% of the couple's income. The level of any alcohol use was low among women (22%) and high among men (75%—not shown); 43% of men reported having been drunk in the past year. Seventy-eight percent of respondents reported that neither they nor their partner had felt sexual jealousy or had done so only rarely; 5% reported that the male had often or sometimes felt jealous, 9% the female and 8% both. Some 74% of men believed that men should lead during sex, compared with 50% of women.

Overall, 19% of respondents reported male-on-female violence within their relationship, and 3% reported female-on-male violence (Table 1). Another 15% had experienced mutual hitting, and thus a total of 34% had experienced male-on-female intimate partner violence and 18% had experienced female-on-male intimate partner violence. When the data were separated by gender, 15% of women and 3% of men reported having ever been hit by their partner; an additional 15% of each reported mutual hitting. Twelve percent of women and 5% of men had experienced hard hitting (not shown).

An additional analysis provided more descriptive detail. When male-on-female hitting and mutual hitting were combined, 37% of men reported that the woman in the relationship had ever been hit, compared with 31% of women. The reason for this gap might be that the sample was not made up of couples, so that males and females were not reporting on a shared history. Nevertheless, when we used an equation to control for possible confounding factors (e.g., age of woman, region, rural residence, duration of the relationship, man's socioeconomic status and woman's income share), men remained statistically more likely than women to report that the woman in the relationship had experienced violence (odds ratio, 1.5—not shown).

In bivariable analyses, partner violence was associated with most of the explanatory measures (Table 1). Significantly greater proportions of respondents living in the interior of the country and in the North or Northeast than of those in the South or Southeast reported male-on-female (22% and 14% vs. 11%) and mutual hitting (17% and 14% vs. 8%); a greater proportion of respondents living in the North than of those in the South reported female-on-male hitting (4% vs. 3%). Similarly, male-on-female hitting was more common in rural areas than in urban areas (21% vs. 14%).

As anticipated, male-on-female hitting increased with relationship duration: Eleven percent of respondents in relationships of five years or less reported hitting, compared with 20–21% of those in relationships of more than five years. Mutual hitting was most common within relationships of 6–15 years. Surprisingly, the proportion of respondents reporting male-on-female hitting was lower in relationships in which the age difference between the male and female partner was three or more years than in relationships in which the age difference was two or fewer years (15% vs. 21%).

Financial factors also appear to be important. When the proportion of women experiencing male-on-female hitting was added to the proportion involved in mutual hitting, almost half of women whose partner was of low status had ever been hit, compared with about a quarter of women whose partner was of high status. In addition, the proportion of women who reported hitting their partner was higher among those who used alcohol than among those who did not; the proportion of men who had hit their partner was higher among those who had been inebriated in the last year than among those who had not.

Sexual jealousy, from either partner or both, correlated with all three types of hitting. For example, the proportions of respondents reporting male-on-female and mutual hitting were greater in relationships in which both partners had felt jealous (23% and 30%, respectively) than in relationships in which neither had ever been jealous (18% and 11%, respectively). Male-on-female hitting was most common when the female partner had been jealous, whereas mutual and female-on-male hitting was most common when the male partner had been jealous. The proportion of women reporting male-on-female hitting was greater among those who believed that men should lead in sex than of those who disagreed with that statement (19% vs. 12%).

TABLE 2. Percentage of women and men experiencing selected health outcomes, and adjusted relative risk ratios (and 95% confidence intervals) from binomial logistic regression analyses examining the likelihood of those outcomes, by level of intimate partner violence

Characteristic	%			Relative risk ratios	
	None	Hit	Hit hard	Hit	Hit hard
Women (N=1,665)					
Unhappy with life	11.3	28.5*	37.8*	2.00 (0.83–4.83)	4.11 (1.06–15.93)*,†
Mental distress	41.3	55.8*	68.1*	1.80 (1.13–2.84)*	3.10 (2.25–4.27)*,†
Poor health	31.6	36.2	49.1*,†	1.10 (0.67–1.80)	2.39 (1.10–5.23)*,†
Sexual dysfunction	37.2	41.9	51.8	1.17 (0.68–2.01)	1.95 (1.03–3.67)*
Sexual dissatisfaction					
Physical‡	13.2	16.7	28.1*	1.16 (0.52–2.57)	2.99 (1.46–6.13)*
Emotional‡	8.7	16.1*	28.1*	1.60 (0.62–4.14)	4.40 (2.07–9.33)*
Kissing absent‡	24.0	31.2	38.5	1.30 (0.82–2.06)	3.10 (1.20–8.04)*
Intimacy in sex absent‡	42.2	51.6*	68.0*,†	1.51 (0.86–2.63)	3.46 (2.21–5.39)*,†
Unwanted sexual behavior					
Sex	22.1	30.0*	41.4	1.62 (1.15–2.30)*	2.60 (1.04–6.52)*
Act during sex‡	19.0	31.9*	37.7*	2.18 (1.35–3.51)*	2.60 (1.32–5.13)*
Partner's extramarital sex	8.8	10.8	36.2*,†	1.43 (0.95–2.15)	6.70 (1.85–24.22)*,†
Recent genitourinary symptoms	40.6	50.4*	54.5*	1.54 (1.12–2.12)*	1.67 (1.19–2.33)*
Ever had an STI	1.1	0.3	3.5*,†	0.39 (0.10–1.53)	4.20 (0.89–19.89)†
Positive chlamydia test	3.3	1.0*	1.0*	0.38 (0.15–0.95)*	0.34 (0.13–0.88)*
Lack of AIDS knowledge	54.3	53.4	37.5*,†	0.70 (0.50–0.99)*	0.42 (0.31–0.57)*,†
Men (N=1,658)					
Unhappy with life	10.4	12.4	34.8*	0.93 (0.65–1.35)	5.68 (2.42–13.30)*,†
Mental distress	50.7	54.0	73.6*	1.16 (0.55–2.42)	2.36 (1.12–4.96)*
Poor health	30.5	41.8	55.1*	1.71 (0.67–4.32)	3.62 (1.73–7.57)*
Sexual dysfunction	31.5	36.6	45.0	1.12 (0.62–2.03)	2.53 (0.92–6.92)
Sexual dissatisfaction					
Physical‡	9.0	19.7*	17.8	2.29 (1.01–5.19)*	2.45 (0.60–9.95)
Emotional‡	6.0	21.1*	23.9*	3.87 (2.46–6.08)*	4.90 (2.31–10.39)*
Kissing absent‡	16.6	15.6	8.0	0.73 (0.18–3.01)	0.76 (0.19–3.00)
Intimacy in sex absent‡	62.1	67.8	65.3	1.25 (0.66–2.38)	1.38 (0.62–3.07)
Unwanted sexual behavior					
Sex	6.9	17.1	7.2	2.90 (0.76–11.00)	0.97 (0.26–3.65)
Act during sex‡	10.0	26.4*	11.0	3.19 (1.84–5.52)*	1.11 (0.47–2.61)
Partner's extramarital sex	7.7	18.9	35.0*,†	3.05 (1.06–8.75)*	6.59 (2.52–17.22)*,†
Recent genitourinary symptoms	17.8	16.5	38.5*,†	0.90 (0.47–1.73)	2.74 (1.29–5.80)*,†
Ever had an STI	3.0	6.3	13.9	2.38 (0.35–16.24)	4.85 (1.25–18.75)*
Positive chlamydia test	1.9	3.3	1.1	1.84 (0.09–37.32)	0.38 (0.03–5.80)
Lack of AIDS knowledge	44.0	47.8	33.9	1.15 (0.73–1.81)	0.66 (0.13–3.30)

*Significantly different from "none" at $p < .05$. †Significantly different from "hit" at $p < .05$. ‡Among sexually active respondents (1,554 women and 1,590 men). Note: All multivariate equations included 10-year age-group, urban residence and geographic region; some equations included additional measures—see text for details.

In multivariate analyses in which absence of hitting was the outcome reference category, certain variables were associated with all three types of hitting. Compared with those who lived in the South or Southeast coast, respondents who lived in the interior of the country had significantly greater risks of male-on-female and mutual hitting (risk ratios, 2.6 and 3.4), and those in the North or Northeast had greater risks of mutual hitting and female-on-male violence (2.2 and 2.5). In addition, the risks of all types of hitting were elevated among those reporting the female partner had been sexually jealous of the male (4.2–6.1); male jealousy of the female was associated with increased risks of mutual and female-on-male hitting (6.5 and 5.7, respectively), whereas jealousy in both partners was associated with male-on-female and mutual hitting (3.5 and 6.3).

Other measures were associated with only certain types of partner violence. Male-on-female hitting (as opposed to no hitting) was positively associated with relationships of

6–15 years, the male partner being of low or middle socioeconomic status, the female's financial contribution being 30% or less of household income, female alcohol consumption and male inebriation (1.6–3.7); it was negatively associated with the male partner being three or more years older than the female (0.7). Female-on-male hitting (as opposed to no hitting) was positively associated with use of alcohol by the female partner (2.9) and negatively associated with the female's financial contribution being more than 45% of the household income (0.3) and with women believing that men should lead during sex (0.2); mutual hitting was associated with relationships of 6–15 years (2.1) and the male partner being of low socioeconomic status (4.2).

When we conducted logistic regression analyses on hitting without controlling for sexual jealousy, the effect of the other variables on hitting changed only slightly, and the overall pattern was similar to what we found when sexual jealousy was included (not shown). This suggests that in the full set of results, jealousy is not mediating, and therefore obscuring, the effects of other factors, such as the woman's contribution to income.

Adverse Health Outcomes

In other analyses, we investigated whether certain negative outcomes were associated with intimate partner violence. The prevalence of many of the negative outcomes studied was significantly greater among women who had ever been hit than among those who had never experienced partner violence, and even greater among those who had ever been hit hard (Table 2). For example, 11% of women who had never been hit reported feeling unhappy with life, compared with 29% of those who had been hit and 38% of those who had been hit hard. Exceptions included having a history of STI, testing positive for chlamydia and having a lack of AIDS knowledge. Among men, the prevalence of three outcomes were greater among those who reported hitting than among those who did not, and six were greater among those who reported hard hitting.

In multivariate analyses limited to women, having ever been hit was associated with increased risks of mental distress, having had unwanted sex, having participated in an unwanted act during sex and having had recent genitourinary symptoms (risk ratios, 1.5–2.2); it was associated with decreased risks of testing positive for chlamydia (0.4) and lacking AIDS knowledge (0.7). Having ever been hit hard was associated with increased risks of experiencing almost every adverse health outcome (1.7–6.7); however, severe hitting of women was linked to reduced risks of testing positive for chlamydia (0.3) and lacking AIDS knowledge (0.4).

For men, having been hit was associated with increased risks of feeling physical or emotional dissatisfaction with sex, having participated in an unwanted act during sex and believing that their partner had had extramarital sex (2.3–3.9). Hard hitting was linked with seven out of the 15 possible adverse outcomes, including being unhappy with life, feeling mental distress, having poor health, feeling emo-

tional dissatisfaction with sex, partner's extramarital sex, recent genitourinary symptoms and ever having had an STI (2.4–6.6).

DISCUSSION

This study presents the first national estimates of partner hitting in China, using data from a population-based probability sample. Among the sample of adults aged 20–64, one-third of women and nearly one-fifth of men had ever been hit by their current partner. A greater proportion of women than of men had experienced partner violence, as seen in both the direction and severity of reported hitting: Nineteen percent of respondents reported only male-on-female hitting, compared with 3% who reported only female-on-male violence. In addition, a greater proportion of women than of men had ever been hit sufficiently hard to cause cuts, bruises or other injuries.

Given the wide variability in sampling procedures, interview conditions and question wording, any comparison to other societies is fraught with difficulties. To begin with, age ranges and the gender of the respondent vary. In 23 of the 28 national studies on partner violence, the sample consisted of women no older than 44 or 49. If we make our sample more comparable by limiting it to female respondents no older than 49, 33% report any hitting and 14% report severe hitting. Compared with findings from other countries, the proportion of Chinese women reporting any hitting is high and the proportion of severe hitting is about average.

Many risk factors for partner violence in China are similar to those in other countries. Like women in other countries, Chinese women are at increased risk of partner violence when their male partner is of low socioeconomic status and when either partner uses alcohol.¹⁸ The presence of only a modest relationship between women's income share and hitting is also a common finding.¹⁹

Another finding consistent with what is at least asserted (although often not shown) in the existing literature is the link between patriarchal beliefs and hitting.²⁰ Acceptance of the belief that "men should lead in sex and women should follow" is at best an imperfect measure of only one set of possible patriarchal values. Nevertheless, this belief is associated with increased male-on-female and reduced female-on-male hitting.

Several other patterns in the data are less consistent with the existing literature. In U.S. studies, men report less male-on-female hitting than women, possibly because of legal and social disapproval.²¹ In contrast, our findings suggest that Chinese women may underreport male-on-female hitting. This is consistent with the victim being more socially stigmatized than the offender—a pattern that may result when social and legal disapproval of partner violence has yet to be normalized in society and when men and women continue to accept the premise that women should be hit when they displease their partner.²² In addition, our data suggest that women's bargaining position has some relationship to whether they have ever been hit: In the multi-

variate results for male-on-female hitting, women are most at risk when they contribute only a small share of the couple's income. This is a noteworthy finding that is not always easily demonstrated in the literature.²³

Another finding inconsistent with previous research is the complexity of links between jealousy and hitting. Some previous research suggests that jealousy and hitting are learned at a young age by males in cultures that believe men should control women.²⁴ A second line of interpretation is that jealousy and the attempt to control one's partner are not learned but instinctual.²⁵ In contrast to the first theory, we find that Chinese women are just as likely as Chinese men to be jealous. Moreover, jealousy provokes lashing out by both genders—although male-on-female violence is more common and more physically damaging.²⁶

What is unanticipated in both theories is that it is often not one's own jealousy that ignites partner violence. Rather, violence tends to be one partner's reaction to the other's jealousy (and, probably, nagging). For example, the odds of male-on-female hitting are significantly increased when the female partner is jealous but not when the male partner is jealous, and the odds of female-on-male hitting are greater when the male is jealous than when the female is jealous. In short, the theory that jealousy and hitting are part of the same control syndrome is not sufficient. Jealousy may be centrally involved, but the jealous partner is usually not the one who becomes violent.

A final set of concerns is whether hitting is associated with negative outcomes among women (and possibly among men as well). The Chinese data are limited in at least two respects. The diagnosis of chlamydia among participants was based on a laboratory test of a urine sample, and although respondents were instructed to report only STIs that had been diagnosed by a doctor, we cannot guarantee that they followed the instructions. All other measures are based on self-reports unsupported by laboratory tests or a documented clinician's diagnosis, thereby introducing unknown error into the results. Second, because this was not a longitudinal study, the data provide evidence for associations but not for causality. Nevertheless, our findings provide at least circumstantial evidence of correlations between past hitting and current health conditions in ways that justify further work in this area.

Chinese women and men who had been hit hard were more likely than those who had not been hit to be unhappy with their life, to be in poor health and to feel mental distress. In addition, female victims reported a variety of other negative correlates, including sexual dysfunction, sexual dissatisfaction, absence of kissing or intimacy during sex, unwanted sex during the relationship and unwanted sexual acts during the previous year. These reports are consistent with sex being induced by a male control syndrome—of which hitting is a part. And although males have some of the same patterns, the much more consistent pattern for females suggests that it is male control of females that is the more common problem.

The STI-related aspects of sexual health do not have a

consistent relationship to spousal hitting. Hitting, particularly severe hitting, was associated with partner's extramarital sex, recent genitourinary symptoms and (among men) ever having had an STI. However, testing positive for chlamydia and having a lack of AIDS knowledge were either statistically unrelated (among men) or associated with an absence of hitting (among women).

CONCLUSIONS

Intimate partner dynamics in China are similar to those in the rest of the world, adding one more populous society to the list of places where intimate partner violence is a public health issue. For both men and women, our findings suggest that sexual jealousy is an underappreciated and complex risk factor for partner violence. Also, as in other societies, patriarchal values, women's lack of financial autonomy, low male socioeconomic status and alcohol consumption are associated with partner violence. Moreover, our data provide some evidence that hitting is correlated with negative health outcomes—including sexual dysfunction and unwanted and unsatisfying sex—and that these problems particularly affect women.

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RESUMEN

Contexto: La violencia contra la pareja íntima se ha estudiado en muchos países desarrollados y en desarrollo; China permanece siendo una de las pocas sociedades populosas de la cual no se conoce el nivel de prevalencia y los determinantes de la violencia contra la pareja íntima.

Métodos: Los datos de una muestra representativa a nivel nacional de mujeres y hombres de 20–64 años, casados o con una pareja constante, ofrecen unas estimaciones de los casos de violencia contra la pareja íntima en China. Se utilizaron análisis de regresión logística binominal y multinominal, ajustados por el diseño de la muestra, para examinar los factores de riesgo y los resultados negativos que están relacionados con la violencia contra la pareja.

Resultados: En conjunto, el 34% de las mujeres y el 18% de los hombres habían sido blanco de golpes durante su relación actual; la prevalencia de golpes que resultaban en sangrados, contusiones, hinchazones o dolor y heridas severas era el 12% de las mujeres y el 5% de los hombres. Entre los factores de riesgo significativos de la violencia intrafamiliar se incluían los celos, las creencias patriarcales, los bajos ingresos aportados por la mujer al hogar, la condición socioeconómica baja del hombre, el consumo del alcohol, y la residencia en regiones que no fueran el sur o el sudeste del país. Los golpes severos constituyeron un factor de riesgo significativo para la notificación individual de problemas de salud general y sexual, incluida la disfunción sexual, insatisfacción sexual y sexo no deseado.

Conclusiones: Al igual que en otras sociedades, la violencia contra la pareja íntima en China es común y está relacionada con resultados adversos en la salud general y sexual.

RÉSUMÉ

Contexte: La violence par un partenaire intime a fait l'objet d'études dans de nombreux pays industrialisés et en développement. La Chine demeure l'une des rares grandes sociétés où la prévalence et les corrélations de ce type de violence restent inconnues.

Méthodes: Les données d'un échantillon nationalement représentatif des femmes et hommes de 20 à 64 ans mariés ou en relation stable permettent d'estimer la violence par un partenaire intime en Chine. Les facteurs de risque et les issues négatives associées à la violence par un partenaire sont examinées par analyses de régression binomiale et multinomiale corrigées en fonction du plan d'échantillonnage.

Résultats: Dans l'ensemble, 34% des femmes et 18% des hommes avaient jamais été battus dans le contexte de leur relation au moment de l'enquête; la prévalence des coups donnant lieu à saignements, ecchymoses, tuméfactions ou douleurs et blessures graves était de 12% pour les femmes et de 5% pour les hommes. Les facteurs de risque significatifs de violence par un partenaire se sont révélés être la jalousie sexuelle, les croyances patriarcales, la faible contribution de la femme au revenu du ménage, le faible rang socioéconomique de l'homme, la consommation d'alcool et la résidence dans les régions autres que le Sud et le Sud-Est. Le frapement grave s'est avéré un facteur de risque significatif d'issues de santé générale et sexuelle négatives auto-déclarées (dysfonctionnement sexuel, insatisfaction sexuelle et rapports sexuels non désirés).

Conclusions: Comme dans d'autres sociétés, la violence par un partenaire intime en Chine est courante et associée à des issues de santé générale et sexuelle indésirables.

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The Experience of Sexual Coercion Among Young People in Kenya

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CONTEXT: Studies of sexual behavior among young people in the developing world have generally neglected the circumstances in which sex takes place, most often assuming that when young people have sex, it is wanted and consensual. The few published studies on nonconsensual sex have often used highly selective samples, ignoring the experience of males and of married young people.

METHODS: A 2001 population-based survey of young people in Nyeri, Kenya, included a special module on sexual coercion. Descriptive data and multivariate analysis are used to explore the prevalence and patterns of sexual coercion among married and unmarried males and females aged 10–24.

RESULTS: Among the sexually experienced respondents, 21% of females and 11% of males had experienced sex under coercive conditions. Most of the perpetrators were intimate partners, including boyfriends, girlfriends and husbands. In a multivariate logistic regression, females who had ever been married and those who did not live with a parent or spouse had a significantly elevated risk of sexual coercion (odds ratios, 2.6 and 3.1, respectively); sexual coercion was associated with having had multiple sexual partners and with having had a reproductive tract infection (2.2 and 2.5). Males who had been coerced into sex were significantly more likely than those who had not to have had a first partner who was older by at least five years (82.9).

CONCLUSION: Reproductive health programs for young people need to address nonconsensual sex, including the special needs of males and of married females.

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The sexual behavior and reproductive health of young people in developing countries have attracted considerable attention over the last 15 years; youth constitute a large proportion of the population in these countries and are disproportionately affected by HIV and other negative reproductive health outcomes.¹ The existing literature documents that adolescents engage in premarital sex with insufficient knowledge of reproduction and family planning, and that small proportions use contraceptives, especially condoms.² Unfortunately, such studies have paid little attention to the social context of adolescent sexual activity—particularly the influence that gender relations and power imbalances have on whether and when young people have sex. Moreover, most of these studies have assumed that sex among young people is wanted and consensual. Evidence is emerging, however, that a sizeable proportion of episodes of sex among youth may result from coercion.

BACKGROUND

Sexual coercion refers to a range of experiences that compel a person to have sex against her or his will.³ These experiences include the use of “violence, threats, verbal insistence, deception, cultural expectations or economic circumstances”; the consequence is a “lack of choice to pursue other options without severe social or physical consequences.”⁴

The dearth of research on the experience of sexual coercion among young people is due, in part, to limited aware-

ness, stigma, methodological constraints and ethical issues. Most of the existing research has been conducted among college-age women in developed countries. Eight percent of young women in a Canadian study and 15% of those in a U.S. study reported having been physically forced to have sex.⁵ In a nationally representative study of 1,121 U.S. youths aged 18–22 conducted in 1987, 7% reported ever having been forced to have sex, with the highest rates among white females, of whom 13% reported having had such an experience before age 20.⁶ Moreover, 9% of women aged 15–24 participating in the 1995 National Survey of Family Growth, a nationally representative U.S. study, reported that their first intercourse had not been voluntary.⁷

Studies have also examined long-term negative consequences of sexual coercion. Compared with young women who have not been sexually abused, those who have been abused tend to have more sex partners,⁸ as well as to have less control over the terms of sex, a lower likelihood of practicing family planning and using condoms; and a higher likelihood of experiencing sexually transmitted infections (STIs) and unwanted pregnancy.⁹ Long-term psychological consequences of early sexual abuse include depression, thoughts about suicide, negative self-esteem and lowered self-efficacy, drug addiction and alcoholism.¹⁰ A study in the U.S. state of Washington found high rates of sexual abuse among ever-pregnant teenagers.¹¹ In addition, young women in the study who had been abused experienced sex-

ual debut nearly two and a half years earlier than young women in the general population.

Over the past decade, a number of studies have demonstrated the difficulty of eliciting reliable reports of sexual coercion.¹² Moreover, underreporting of sexual coercion among adolescents is likely to be compounded by underreporting of sexual intercourse.¹³ Premarital sex among young women is such a sensitive issue in many countries that accurate reporting is unlikely.¹⁴ In contrast, young men in many cultures may exaggerate their sexual experience because it is seen as a mark of manhood.¹⁵

The reporting of coerced sex in surveys may be even more problematic: Fear of retaliation, social stigma and lack of social support are often cited as barriers.¹⁶ Moreover, abused women may be less likely to participate in studies and lack rapport with interviewers.¹⁷

A comparison of three Nicaraguan surveys concluded that the reporting of violence improved when respondents were given several opportunities to disclose abuse, when the survey focused on violence and when the interviewer asked specific behavioral questions rather than general ones, such as "Have you ever been abused?"¹⁸ Although asking behaviorally specific questions may improve reporting, the means of sexual coercion are likely to vary across cultural settings. Therefore, defining exactly what behaviors to probe for in the context of large surveys of abuse poses additional challenges to the researcher, particularly those working in regions where few coercion studies have been conducted.

Sexual Coercion of African Young People

One of the earliest surveys that revealed the extent of coercion of youth in Sub-Saharan Africa was conducted in 1993 among 10,000 female secondary school students in Kenya.¹⁹ In this study, 24% of sexually experienced females reported that they had been forced into their first encounter. Moreover, in a study of contraceptive use among Kenyan high school students, 9% of sexually experienced young women explained that they had not used contraceptives the last time they had intercourse because they had been forced to have sex.²⁰ More recently, studies in Ghana and Zimbabwe have found that sexual coercion is an important factor in sexual initiation and subsequent intercourse. In Ghana, 25% of females aged 12–24 reported that their first intercourse had been forced;²¹ the respective figures in Zimbabwe were 12% in an urban study and 33% in a rural setting.²² All of these studies were based on large surveys that included sexual coercion as a minor component or a single question, rather than as the primary focus of the research. Little attention was paid to methodological issues, such as how questions on nonconsensual sex were asked, and none of the studies went beyond basic prevalence estimates to examine the experience of sexual coercion among young people.

Much of the published research focusing on sexual coercion among African adolescents has been qualitative, and many of studies have been conducted in South Africa. The South African studies, in particular, reveal a high frequency of violence in the context of intimate partner relation-

ships, which is often attributed to the country's recent political and social transition.²³ Pregnant young women in a study in Cape Town reported that partners used violence to initiate sexual relationships and physical assault to maintain them.²⁴ In a clinic-based study to assess sexual decision-making in Durban, young women reported that fear of violence was one major reason for not discussing AIDS and for not using condoms.²⁵ In this study, young women reported that refusing to have sex with their boyfriends nearly always resulted in forced sex.

Few studies have sought to understand the perceptions and meanings of coerced sex among African adolescents. One study in Nigeria used the narrative research method with secondary school students and youth in apprenticeship programs to explore the meaning and nature of coerced sex.²⁶ Participants described coercive behavior as threatening or forcing someone into sex, engaging in unwanted touching, verbal abuse, deceiving someone into sex through forced exposure to pornography or the use of traditional charms, or not taking no for an answer. Females most often described perpetrators as males they knew, and males generally viewed females as naïve, and therefore vulnerable to coercion.

One study in Cape Town investigated the relationship between teenage pregnancy and the experience of coercion.²⁷ In that study, pregnant teenagers were significantly more likely than never-pregnant teenagers to have older partners and to have experienced forced sex. Similarly, 32% of pregnant teenagers reported that their sexual initiation had resulted from rape or force, compared with 18% of never-pregnant teenagers. Study respondents made a distinction between rape (physical coercion by strangers or relatives) and forced sex (physical coercion by a boyfriend). This finding adds additional ambiguities to the measurement of coerced sex.

Research on adolescents' experience of sexual coercion in Sub-Saharan Africa is much less developed than in the West; coercion is a new area for researchers in developing countries, there have been few opportunities for studies based on representative samples, and measurement of sexual coercion has not evolved. Many of the studies have used selective samples, such as pregnant teenagers, students or clinic patients, resulting in findings that are not generalizable to the entire population of adolescents. For example, rates of coercion from studies of pregnant teenagers are generally higher than those from representative samples of adolescents. Males' experiences of sexual coercion have been virtually ignored by developing country research,²⁸ and practically all adolescent sexual behavior studies in Sub-Saharan Africa have included only the unmarried, neglecting the sizeable proportion of young women on the continent who marry during adolescence. Other studies have used ambiguous wording in questions about nonconsensual sex. For example, asking respondents whether they have been "forced" to have sex raises the possibility that respondents interpret the question as figurative force or compulsion, rather than literal physical force.

TABLE 1. Percentage distribution of respondents aged 10–24, by selected characteristics, according to gender, Nyeri District, Kenya, 2001

Characteristic	Males (N=754)	Females (N=999)
Age***		
10–14	36.2	28.0
15–19	30.6	26.2
20–24	33.2	45.7
Ethnicity**		
Kikuyu	93.7	88.9
Non-Kikuyu	6.3	11.1
Religion*		
Catholic	43.0	36.9
Other Christian	53.4	59.2
Other non-Christian	3.6	3.9
Education		
None	1.2	1.0
<9 yrs.	67.2	66.1
≥9 yrs.	31.6	32.9
Currently attending school***		
Yes	51.1	35.6
No	48.9	64.4
Marital status***		
Never-married	94.3	69.8
Ever-married	5.7	30.2
Socioeconomic status		
Low (score, 0–4)	29.4	31.4
High (score, 5–10)	70.6	68.6
Sexually experienced		
Yes	44.7	46.2
No	55.3	53.8
Total	100.0	100.0

*Distribution for males significantly different from distribution for females at $p < .05$. **Distribution for males significantly different from distribution for females at $p < .01$. ***Distribution for males significantly different from distribution for females at $p < .001$. Note: Percentages may not total 100 because of rounding.

This is one of the first large studies to focus on the prevalence, context and consequences of sexual coercion among young women and men in Sub-Saharan Africa. In contrast to most previous studies on the continent, it draws from a representative, population-based sample that includes married adolescents. Finally, the study recognizes that young men also experience coerced sex and includes their experiences. The study pays special attention to the measurement of sexual coercion, taking into account the methodological recommendations arising from previous studies of gender-based violence.

METHODOLOGY

Data

Data for this study were drawn from a large population-based survey conducted in 2001 in Central Province, Kenya. The survey was carried out as part of a research project assessing the effect of an innovative reproductive health intervention for young people in the region.

In the initial stages of the study, all households were listed in a house-to-house survey. Households with young peo-

ple aged 10–26 were selected for inclusion using a random number generator available in SPSS. To control for potential intrahousehold correlation, we used a Kish grid to randomly select one young person if a household had two or more who were eligible to be interviewed. Interviewers paid a maximum of three visits to the household to locate the selected respondent. In all, 2,712 married and unmarried young people were interviewed; for this analysis, however, we limited the sample to 10–24-year-olds to make it comparable to samples in other studies, and used data only from respondents living in Nyeri District. The overall response rate of the survey was 90%, with a 92% response rate for females and an 86% response rate for males.

A special module on sexual coercion was included in the survey. The module drew on the definition proposed by Heise and colleagues²⁹ as well as on previous research in Kenya that described sex taking place as a result of deception or trickery, physical force or entrapment.³⁰ Among the Kikuyu, especially those living in rural areas, young men who have just been circumcised often build their own dwelling or room separate from their parents’ house. Earlier qualitative research has revealed that such rooms are frequently the location for sex, especially as newly circumcised males are often under pressure to have sex.³¹ Young women have reported being trapped in these rooms, while young men have reported locking young women in.³² The introduction to the question was worded specifically to make respondents feel that they were not being singled out and that such occurrences are not uncommon: “I will read a list of experiences that adolescent males and females may have as they grow up....” Following the recommendations of Ellsberg and colleagues,³³ we used behaviorally specific questions on coercion: Has anyone ever tricked you into having sex? Has anyone ever threatened you to make you have sex? Has anyone ever insisted on having sex with you, or not taken no for an answer? Has anyone ever locked you in a room to make you have sex? Has anyone ever physically forced you to have sex? Has anyone ever raped you?

Respondents who reported any of these experiences were asked follow-up questions on the number of times they had had the experience, the identity of the perpetrator, the age of the perpetrator, and whether they had reported the event. Because previous studies have shown that respondents reporting coerced sex may distinguish between “physically forced sex” and “rape,” we asked about both.³⁴ This study included only coercive acts that resulted in sexual intercourse; it did not measure attempts that were unsuccessful or forms of sex other than intercourse. The questionnaire was translated into both Kiswahili and Kikuyu by teams brought together for that purpose. Teams worked to achieve accurate translations of difficult terms, including descriptions used when exact translation was not possible.*

*The questionnaire was administered in Kikuyu for 57% of survey respondents. The word “threatened” in the question “Has anyone ever threatened you to make you have sex?” did not have a direct Kikuyu translation. Hence, the translated question most closely corresponds to “Has anyone ever blackmailed you or said that they would harm or hurt you in any way, to make you have sex?”

The safety of respondents and the confidentiality of the information they provided were emphasized during the study. Informed consent was obtained from respondents and from the parents or guardians of respondents younger than 18. The survey, which solicited information on a broad range of topics—including time use, education, work, marriage, sexual behavior and reproductive health knowledge—was described to parents as a study of adolescents' experiences. The interviewers' training stressed that confidentiality was crucial and that violation of confidentiality was grounds for dismissal. To that end, the study protocol mandated that all interviews take place in a private place and that no one but the interviewer and the respondent be present during the interview.

During the introduction to the interview, respondents were told that they could skip any questions they did not wish to answer. At the end of the interview, they were given the opportunity to make comments or ask questions of the interviewer. If respondents needed assistance, interviewers gave them the names and contact information of the youth officer at a reproductive health agency and a local counselor who specialized in working with adolescents.

All analysis was stratified by sex to show how the circumstances of sexual coercion differ for males and females. First, descriptive analysis was used to characterize young people's experiences of coerced sex. Logistic regression was then used to explore factors associated with the experience of sexual coercion among sexually experienced young people.

Variables

Lifetime experience of sexual coercion was measured by asking respondents if they had ever had sex that resulted from deception, insistence, threats, physical force or rape, or being locked in a room.* It is examined in relation to individual and household-level background factors and reproductive health outcomes.

Demographic variables—age, school status, level of education and marital status—were included in the analysis to identify the characteristics of young men and women who were at elevated risk of sexual coercion. A variable indicating whether the respondent was engaged in paid work was also included in the model.

Household-level variables included living arrangements and a measure of socioeconomic status. Parental presence in the household has been shown to be protective against a range of risk behaviors and experiences during adolescence, including risky sexual behavior.³⁵ Because the sample included both married and unmarried adolescents, the living arrangement variable reflected whether respondents had a resident parent or lived with a spouse. Household economic status was measured by an aggregate score based on 10 household assets. Respondents were asked whether or not their household had tap water, a flush toilet, electricity, radio, television, refrigerator, bicycle, livestock, land, and a market stall or shop. Scores ranged from zero to 10, with a mean score of 4.1. Because this survey took place in

TABLE 2. Percentage of sexually experienced young people who had ever been coerced into sex, by type of coercion, according to gender

Type	Males (N=337)	Females (N=462)
Any	11.0	20.8
Deception/trickery	6.0	11.9
Threats	0.6	3.7
Insistence/not taking no for an answer	4.2	7.6
Locked in a room	1.5	3.0
Physical force	1.2	5.0
Rape	0.9	3.2

Note: Respondents could indicate more than one type of coercion.

the context of a reproductive health intervention research project, a variable measuring exposure to the intervention was included, although the intervention paid no explicit attention to gender-based violence or sexual coercion.

Studies in other settings have suggested that young women who have been coerced experience earlier sexual debut than those who have not.³⁶ In addition, sexual coercion has been associated with a host of negative reproductive health problems and behaviors, including a higher incidence of reproductive tract infections, multiple sex partners, early pregnancy, lower condom use, and drug and alcohol use. These measures were included in the model to ascertain whether young people's experience of coercion was associated with subsequent risk-taking behavior and negative reproductive health outcomes. Because STIs are difficult to measure through self-reports, respondents were asked about symptoms (pain, unusual discharge or burning) associated with STIs and other reproductive tract infections. The variable for multiple partners was a dichotomous measure dividing respondents who had had three or more cumulative sex partners from those who had had fewer. In this survey, use of condoms during last intercourse was the measure of current condom use.

RESULTS

After the exclusion of respondents who lived outside Nyeri and those aged 25 or 26, the sample for our study consisted of 1,753 young men and women aged 10–24 (Table 1). The female sample was slightly older than the male sample, with a larger proportion aged 20 or older. Educational levels in the region were relatively high: Virtually all respondents had been to school, with roughly one-third having reached the secondary level. There was no significant difference in educational attainment between males and females. The proportion in school was higher among males than among females, probably reflecting age differences between the male and female samples. Fewer than 6% of males had been married, compared with 30% of females. Sexually experienced respondents (337 males and 462 females), who made up almost half of the sample, were the focus of our analyses.

Among the sexually experienced, 11% of males and 21%

*The outcome measure was dichotomous, because dividing the outcome by specific forms of coercion would have resulted in too few cases for analysis.

TABLE 3. Percentage of young people who had been coerced into sex, by reported perpetrator, according to gender

Perpetrator	Males (N=37)	Females (N=96)
Boyfriend/girlfriend	62.2	51.0
Husband/wife	5.4	28.1
Acquaintance*	35.1	21.9
Stranger	5.4	8.3
Teacher/employer/relative	0.0	5.1

*Includes friends, neighbors and classmates. Note: Respondents may have reported more than one perpetrator because they had experienced more than one incident of coerced sex.

of females had experienced at least one form of coercion (Table 2, page 185). Among young people who had been coerced, the majority reported having been deceived or tricked into having sex, and many reported partner insistence or “not taking no for an answer.” In a finding consistent with previous research suggesting that respondents may consider forced sex different from rape, 5% of sexually experienced females reported having been physically forced into sex, and 3% reported having been raped. Seventy-five percent of young women who reported rape also reported having been physically forced into having sex, possibly referring to the same event (not shown). However, only 48% of those who reported sex by physical force also reported rape, suggesting that the term rape had particular connotations for respondents. Indeed, young women who reported having been raped were more likely than those who reported physically forced sex to say that a stranger was the perpetrator.

For young women, intimate partners—boyfriends and husbands—were the most common perpetrators of sexual coercion, followed by acquaintances (Table 3). Of the coerced young women who were married, 45% had been coerced by their husbands, 33% by someone else and 22% by both their husband and someone else (not shown). Among males who had been coerced, the most common perpetrator was a girlfriend, followed by an acquaintance. Few respondents reported having been coerced by a relative, teacher or employer; this figure, however, is probably an underestimate, given the stigma attached to incest and the disapproval of intimate relationships between young people and their teachers or employers. Only 23% of young women and 22% of young men who had been coerced told anyone about the experience (not shown). When they did tell someone, it was usually a family member or friend.

TABLE 4. Percentage of sexually experienced young people, by selected characteristics at first intercourse, according to gender and experience of sexual coercion

Characteristic	Males		Females	
	Never coerced (N=276)	Ever coerced (N=35)	Never coerced (N=357)	Ever coerced (N=92)
1st sex before age 15†	23.2	34.3	9.8	17.4*
1st partner ≥5 yrs. older	1.7	21.6***	46.0	56.2*
1st partner ≥10 yrs. older	0.3	5.4*	9.8	15.7

*p<.05. ***p<.001. †Among respondents aged 15 or older.

Respondents’ Characteristics and Coercion

Seventeen percent of young women who had ever been coerced had had sex before age 15, compared with 10% of those who had not (Table 4). Among both genders, young people who had experienced coercion were significantly more likely than those who had not to have had first sex partners who were five or more years older than themselves. Some 22% of young men who had been coerced had had much older first partners, compared with fewer than 2% of their counterparts who had not been coerced. Fifty-six percent of young women who had experienced coercion had had first partners who were five or more years older, compared with 46% of other young women.

Multivariate logistic regression was used to identify the characteristics that differentiated sexually experienced young men and women who had experienced sexual coercion from those who had not (Table 5). With the exception of marital status, no individual-level demographic variables were associated with the experience of nonconsensual sex. Among young women, those who had ever been married had significantly elevated odds of having experienced sexual coercion (odds ratio, 2.6), a finding that suggests a high prevalence of coercion within marriage. However, separated and divorced women were more likely to have experienced coercion than currently married young women who were living with their husbands (4.7; not shown). Likewise, young women who lived alone were more likely than those who lived with at least one parent or a spouse to have experienced coercion (3.1).

For young women, nonconsensual sex was associated with negative reproductive health behavior and outcomes. Those who had been coerced were more likely to have had three or more cumulative sex partners and to have experienced symptoms of reproductive tract infection (2.2 and 2.5). Because condom use among young women did not differ significantly by whether they had been coerced into sex, it is likely that their more frequent reporting of symptoms resulted from a greater number of sex partners.

For young men, the experience of sexual coercion was associated with only one variable, having had a first sex partner who was five or more years older (82.9). Having a first partner who is much older is fairly common for young women in Africa. For young men, however, having a much older first partner is unusual and confers a much higher risk of coercive sex.

DISCUSSION

This study draws on a representative sample of married and unmarried young men and women aged 10–24 in Kenya to explore the prevalence and patterns of sexual coercion. Our findings reveal that nonconsensual sex is a common—and often overlooked—feature of the early sexual experiences of the country’s young women and men. Contrary to the popular assumption that sex among young people is consensual, a substantial number of respondents in our sample had had sex when they did not want to. More than one in five sexually experienced young women and

TABLE 5. Odds ratios from logistic regression analyses assessing the odds of sexual coercion among sexually experienced young people, by selected characteristics, according to gender

Characteristic	Males (N=257)	Females (N=368)
Demographic		
Age	0.95	0.93
Currently attending school	0.50	0.97
Educational attainment		
<9 yrs.	1.00	1.00
≥9 yrs.	1.34	1.52
Currently working for pay	0.83	0.78
Ever married	0.99	2.59*
Aware of RH intervention	1.77	1.65
Household		
Household economic index		
Low	1.00	1.00
High	1.09	1.04
Living arrangements		
Live with no parents or spouse	1.61	3.09*
Live with parent(s) or spouse	1.00	1.00
Sexual behavior/reproductive health		
First sex before age 15	1.78	1.10
First partner ≥5 yrs. older	82.92***	1.26
Had ≥3 cumulative sex partners	1.53	2.16*
Has drunk alcohol	2.15	1.45
Ever experienced RTI symptoms	2.60	2.50*
Used condom at last sex	0.54	0.67
Ever pregnant	na	0.51
<i>-2 log likelihood</i>	<i>157.40</i>	<i>338.38</i>
<i>R²</i>	<i>.246</i>	<i>.148</i>

*p<.05. **p<.01. ***p<.001. Note: na=not applicable.

one in 10 sexually experienced young men had had non-consensual sex. The perpetrators were often the young people's intimate partners—their boyfriends, girlfriends and husbands.

Young men whose first partner had been five or more years older had a higher risk of sexual coercion than did other young men. Ever-married young women were more likely than their never-married counterparts to report coercion, and their husbands were often the perpetrators. Those who reported coercion had elevated odds of being separated or divorced, suggesting that coercion may have contributed to marriage dissolution. Thus, although it is commonly assumed that marriage is a safe refuge for young women,³⁷ our results suggest that marriage may increase the risk of sexual violence, and other research indicates that it may increase a young woman's risk of HIV infection.³⁸ Young women who are coerced into sex by their husbands may have fewer options than unmarried women to protect themselves against infection, may find it harder to leave an abusive relationship and may not have recourse to legal protection. In Kenya generally, as well as among the Kikuyu traditionally, husbands cannot be accused of raping their wives because marriage is considered as blanket consent to intercourse.³⁹

Under Kenya's penal code, rape, attempted rape and other forms of nonconsensual sex are crimes punishable by imprisonment.⁴⁰ In practice, however, the law is rarely enforced, and society tends to blame rather than support

the victim, which discourages reporting.⁴¹ Moreover, rape is often looked on as a normal and forgivable action by males who cannot control themselves. For example, when 19 secondary schoolgirls were killed and 71 others were raped in 1991 by male students in their dormitory at St. Kizito in Meru, Kenya, the deputy principal at the school was quoted as saying, "The boys never meant any harm against the girls. They just wanted to rape."⁴²

Compared with young women who have never experienced coercion, those who have are at higher risk of reproductive tract infections and are more likely to have had multiple sexual partners. African programs for young people, which tend to emphasize abstinence, usually overlook early experiences of violence and coerced sex. The message in these programs, which is often directed at young women, advises them to "just say no" to young men's advances. However, as our study shows, many young women do not have a choice on whether to have sex. Moreover, many of risky behaviors programs are attempting to combat are associated with early experiences of abuse. Addressing sexual violence in programs will not only respond to the contextual realities of many young women and men, but will help to prevent long-term negative reproductive health outcomes that result from violence.

By failing to address nonconsensual sex and gender-based violence, reproductive health programs for young people are also missing an important opportunity to change the community perception that these experiences are the victim's fault. Program staff have ongoing contact with young people and often broach sensitive topics such as sexuality. In addition, many enjoy high status in their communities, either because of their affiliation with the program or because they are teachers, respected community leaders or health care workers. Because of this stature, program staff are well-placed to break the silence and challenge the misconceptions associated with violence, as well as to promote systems that support and protect victims and punish offenders. Finally, married young women, a large but vulnerable population, need a prominent place in adolescent policies and programs, with recognition of the risks they face in marriage and their right to protection.

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RESUMEN

Contexto: Los estudios sobre la conducta sexual de los jóvenes en los países en desarrollo generalmente no dan importancia a las circunstancias en las cuales se mantiene una relación sexual, y en la mayoría de los casos se asumen que esa relación es deseada y consensual. Los pocos estudios publicados sobre sexo no consensual utilizan muestras sumamente selectivas y dejan de lado la experiencia de los hombres y los jóvenes casados.

Métodos: Una encuesta de 2001 con base en la población realizada a jóvenes de Nyeri, Kenya, incluyó un módulo especial sobre coerción sexual. Se utilizan datos descriptivos y análisis multivariados para examinar la prevalencia y las tendencias del sexo forzado entre hombres y mujeres casados y solteros, de entre 10 y 24 años.

Resultados: Entre los entrevistados sexualmente activos, el 21% de las mujeres y el 11% de los hombres indicaron haber tenido relaciones sexuales en condiciones de coerción. La mayoría de los perpetradores eran personas de su intimidad,

inclusive novios, novias y cónyuges. Los resultados de un análisis de regresión logística multivariada indicaron que las mujeres casadas alguna vez, y aquellas que no vivían con sus padres o su cónyuge, presentaban un riesgo significativamente más elevado de sufrir coerción sexual (razones de momios de 2,6 y 3,1, respectivamente); el sexo forzado estuvo relacionado con haber tenido varias parejas sexuales y una infección del tracto reproductivo (2,2 y 2,5). Los hombres que habían sido objeto del sexo forzado eran mucho más proclives que otros hombres a haber tenido una primera pareja sexual que tenía por lo menos cinco años más edad que él (82,9).

Conclusion: Los programas de salud reproductiva para jóvenes deben prestar atención al sexo no consensual, prestando especial atención a las necesidades particulares de los hombres y de las mujeres casadas.

RÉSUMÉ

Contexte: Les études de comportement sexuel des jeunes du monde en développement négligent généralement les circonstances dans lesquelles interviennent les relations sexuelles, présumant le plus souvent que les rapports sexuels des jeunes sont voulus et consensuels. Les rares études publiées sur les rapports sexuels non consensuels reposent souvent sur des échantillons hautement sélectifs, omettant l'expérience des hommes et des jeunes mariées.

Méthodes: Une enquête en population générale menée en 2001 parmi les jeunes de Nyeri (Kenya) comportait un module spécial sur la contrainte sexuelle. Les données descriptives et l'analyse multivariée servent à explorer la prévalence et les profils de la contrainte sexuelle parmi les jeunes hommes et femmes mariés et célibataires de 10 à 24 ans.

Résultats: Parmi les répondants sexuellement expérimentés, 21% des femmes et 11% des hommes avaient connu des relations sexuelles sous contrainte. Les responsables en étaient pour la plupart des partenaires intimes: petits amis, petites amies et maris. Selon un modèle de régression logistique multivariée, les femmes mariées ou qui l'avaient jamais été et celles qui ne vivaient pas avec un parent ou un conjoint couraient un risque significativement élevé de contrainte sexuelle (rapports de probabilités, 2,6 et 3,1, respectivement). La contrainte sexuelle était du reste associée à la multiplicité des partenaires sexuels et au vécu d'une infection de l'appareil génital (2,2 et 2,5). Les hommes qui avaient subi une contrainte sexuelle étaient significativement plus susceptibles que les autres d'avoir eu pour première partenaire une femme d'au moins cinq ans leur aînée (82,9).

Conclusion: Les programmes de santé reproductive destinés aux jeunes doivent faire face au problème des rapports sexuels non consensuels et considérer, notamment, les besoins spéciaux des hommes et des femmes mariées.

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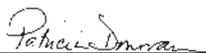
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Socioeconomic Factors and Processes Associated With Domestic Violence in Rural Bangladesh

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CONTEXT: Although the pervasiveness of domestic violence against women in Bangladesh is well documented, specific risk factors, particularly those that can be affected by policies and programs, are not well understood.

METHODS: In 2001–2002, surveys, in-depth interviews and small group discussions were conducted with married women from six Bangladeshi villages to examine the types and severity of domestic violence, and to explore the pathways through which women's social and economic circumstances may influence their vulnerability to violence in marriage. Women's odds of experiencing domestic violence in the past year were assessed by logistic regression analysis.

RESULTS: Of about 1,200 women surveyed, 67% had ever experienced domestic violence, and 35% had done so in the past year. According to the qualitative findings, participants expected women with more education and income to be less vulnerable to domestic violence; they also believed (or hoped) that having a dowry or a registered marriage could strengthen a women's position in her marriage. Yet, of these potential factors, only education was associated with significantly reduced odds of violence; meanwhile, the odds were increased for women who had a dowry agreement or had personal earnings that contributed more than nominally to the marital household. Women strongly supported educating their daughters, but pressures remain to marry them early, in part to avoid high dowry costs.

CONCLUSIONS: In rural Bangladesh, women's social and economic circumstances may influence their risk of domestic violence in complex and contradictory ways. Findings also suggest a disconnect between women's emerging expectations and their current realities.

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Intimate partner violence is the most prevalent form of gender-based violence worldwide.¹ Domestic violence has been directly linked to numerous kinds of immediate and long-term physical and psychological injury to women.² Such violence also may contribute to unwanted pregnancies and may increase the risk of sexually transmitted infections among victims by compromising their ability to dictate the terms of their sexual relationships.³ Moreover, domestic violence is a common problem during pregnancy⁴ and has been associated with increased risks of miscarriage, preterm labor, fetal distress and low birth weight.⁵ In light of mounting evidence of its varied and deleterious immediate and secondary effects, domestic violence is increasingly being recognized not only as an issue of human rights but also as a serious public health concern.⁶

Numerous studies have identified possible determinants, or “triggers,” of intimate partner violence, many of which are salient across diverse cultural and social contexts. Theories to explain intimate partner violence remain relatively limited, however. This lack of a theoretical perspective may limit efforts to better understand intimate partner violence and to respond to it effectively,⁷ particularly at the level of primary prevention.

Heise has proposed an ecological framework suggesting that intimate partner violence arises from an interplay among personal, situational and sociocultural factors.⁸ This

framework draws on the cross-cultural literature to identify potential specific factors associated with abuse at each level of the social ecology.⁹ However, more empirical information and theory are needed regarding the relative importance of these various factors,¹⁰ how they are inter-related, and how they may interact with one another to influence women's risk of violence.

We report findings on the prevalence, nature and potential determinants of domestic violence—that is, violence perpetrated against a woman by her husband—among married women in six Bangladeshi villages. We explore some of the complex processes underpinning domestic violence in this context by looking at relationships and interactions among variables and by drawing on both quantitative analyses and qualitative data.

BACKGROUND

Domestic violence is common in rural Bangladesh. Among rural married women surveyed in 1992¹¹ and 1993,¹² 47% and 42%, respectively, reported having experienced physical violence at the hands of their husband; 43% of women in a 1999 study reported having been slapped and beaten.¹³ In addition, domestic violence appears to be an important cause of maternal mortality in Bangladesh.¹⁴

In Bangladesh, violence against women is closely linked to the institution of marriage, as it is in India.¹⁵ Marriage-

related norms and practices reinforce women's relative powerlessness, often exposing them to domestic violence. Bangladeshi females frequently are married in childhood to an older man who is unknown to them. Despite a law prohibiting marriage for females younger than 18, rural women aged 20–49 reported a median age at marriage of 15 years in a 1999–2000 national survey.*¹⁶ At the time of marriage, young women usually know little or nothing of sex,¹⁷ and sexual initiation can be a traumatic experience. Domestic violence is often used to establish and enforce gender roles early in marriage, and very young women may be particularly vulnerable and unable to resist.

Domestic violence is used in both Bangladesh and India to extort dowry payments and other property from the families of young married women.¹⁸ Violence—often of escalating severity over time—may be perpetrated against women in conjunction with demands for outstanding (often unaffordable) dowry payments or demands for additional amounts.¹⁹ In a study in India, perceived dowry inadequacy was one of the main reasons cited to explain domestic violence.²⁰

In studies by Schuler and colleagues on the connections between violence and gender inequality and the factors that may influence these outcomes in Bangladesh, men often used violence to enforce their dominance and nonegalitarian gender norms, particularly in the initial years of marriage. This research suggested that the effects of interventions such as microcredit loan programs—which empower women economically and socially—on domestic violence are ambiguous. Participation in such programs can, on the one hand, reduce a woman's risk of domestic violence by making her life more visible and by increasing her perceived value in the family; on the other hand, if the woman's economic empowerment results in her acting more assertively, her husband may respond with violence.²¹

We report results from in-depth interviews, small group discussions and survey data collected in 2001–2002 in six villages in Bangladesh to document the types and severity of violence against women in marriage, and to explore the potential social determinants of domestic violence and the pathways through which social and economic factors might influence women's vulnerability in marriage. Key assumptions guiding this work are that marriage is an important site for the negotiation and expression of gender roles and relations, and that the prevailing marriage systems and practices in Bangladesh need to be understood in the context of strategies developed by individuals and families for economic survival.

In this article, we focus on five potential social and economic factors that have been identified in previous studies, including our own previous qualitative research in these sites, as possible determinants of women's rights and vulnerability in marriage: women's education, women's participation in microcredit lending programs, women's contribution to covering household expenses, dowry arrangements and marriage registration. All these factors are evolving phenomena in the context of Bangladesh; related changes may work to subvert and redefine traditional gender roles, rights and re-

sponsibilities. Men may, in response, use violence to reassert their control and reinforce the prevailing gender order.²²

Girls' education has been promoted extensively by the Bangladesh government and by nongovernmental organizations (NGOs). The proportion of girls enrolled in formal and informal schooling has risen dramatically; it is now nearly at a par with the proportion of boys.²³ Simultaneously, women have increasingly become economically active; for example, many participate in income-generating schemes, such as microcredit loan programs, or seek paid employment outside the home, which can entail a departure from traditional gender norms mandating women's seclusion.

In Bangladesh, a minimum legal age at marriage of 18 years for females was established in 1929, and the practice of dowry was outlawed in 1980.²⁴ Although these laws have been publicized in recent years through various channels, families typically disregard them and enforcement barely exists. Similarly, a law requiring the registration of marriages has existed since 1974. The practice has recently been promoted by officials and NGOs interested in supporting women's rights because of women's profound dependence on marriage for economic survival. One requirement of Muslim marriage in Bangladesh (and in many other Muslim countries where laws pertaining to marriage are based on religious tradition) is that the husband must agree to provide *mehr* (or, colloquially, *den mohor*) at the time of marriage.²⁵ Often translated as “dower,” *mehr* is property or payment promised by the groom and his family to the bride—a practice originally intended to provide the wife with economic security and to limit the husband's arbitrary use of unilateral divorce. The amount is customarily recorded in the marriage contract and can be claimed in the event of divorce or death of the husband. (Theoretically, wives may claim this payment at any time, but in practice, they rarely do so.²⁶) Thus, in theory, legal registration of a marriage provides the wife with a basis for filing suit to collect the dower if her husband deserts her or divorces her, or if he gives her grounds for divorce by habitually assaulting her.

METHODS

Setting

The data are drawn from six villages in three districts (Rangpur, Faridpur and Magura). Our criteria for selecting the villages were designed, in part, to ensure some geographic variation and to include areas in which the two largest microcredit lending programs in Bangladesh were well established. They were also selected to avoid areas near the capital city, which could be atypical of rural Bangladesh, and areas in which other studies were under way. Although

*In that study, women's median age at marriage had increased over time—from 14 years among 45–49-year-olds to 16 years among 20–24-year-olds; still, 75% of married women reported having been married before age 18. However, such data should be treated with some caution, as we have found that many rural Bangladeshis do not know their precise age or birth date. In addition, because educational improvements and media campaigns sponsored by government agencies and nongovernmental organizations have, over time, increased awareness of the minimum legal age requirement for marriage, respondents increasingly may have tended to intentionally misreport their age at marriage.

we did not select the villages randomly, when we compared our survey data with rural averages from the most recent Demographic and Health Survey,²⁷ the villages collectively appeared indistinguishable from others in Bangladesh, except that they had a somewhat lower mean educational level among women and a lower use of antenatal care. The villages are poor and somewhat conservative, but not unusually so for rural Bangladesh. The religious composition is typical of Bangladeshi villages—96% of women are Muslim. In or near the villages are schools operated by the government, NGOs or religious organizations.

In 1991, when we began conducting research in these villages, NGOs providing microcredit loans were active in four of the villages; now at least one such NGO is present in each. Nongovernmental organizations working in these villages also promote girls' education and raise awareness about marriage- and family-related national laws. According to our own data, from 1994 to 2001–2002, the proportion of married women with no education decreased from 63% to 45%. Rice-processing centers and road maintenance projects employ women from some of the villages.

Qualitative Components

The qualitative data come from semistructured, in-depth interviews with 76 women and from four small group discussions conducted among married female villagers in 2001–2002. Participants were selected to represent different groups of interest—for example, poor women; women, or mothers of women, who married at a relatively young or old age; and women whom the field researchers considered relatively empowered or disempowered. All participants were briefed in advance on the nature of the interview; they provided oral consent to participate in the study. No incentives were given.

The study's qualitative components examined the social and economic processes underlying early marriage, gender inequality and violence within marriage. Much of the material pertinent to the topic of domestic violence emerged spontaneously during interviews on broader topics related to marriage and to women's rights and roles within marriage. To explore the range of potential social and economic factors shaping women's experiences of marriage, including violence, the interviewers asked women open-ended questions about the process of marriage formation and about their perceptions of what influenced it and women's status within marriage. Participants were also asked to describe their own experiences and those of women in general, especially whether and how they perceived women's circumstances in marriage to have changed over time.

Experienced female Bangladeshi researchers conducted the in-depth interviews and small group discussions; each generally lasted 1–4 hours. The in-depth interviews were conducted one-on-one, usually in the participant's home. Two or three researchers facilitated each small group

discussion, typically in a place where 5–8 participants were already gathered.

The field researchers subsequently generated written transcripts in Bangladeshi by reviewing tape recordings and field notes. The transcripts were then translated into English by local translators unaffiliated with the project. The translations were checked for accuracy and corrected by the interviewer and, when needed, by another member of the research team. This process was designed to minimize the imposition of interpretations during transcription or translation. We subsequently reviewed and coded the transcripts (using open-ended and thematic codes); the field researchers provided clarifications and checked interpretations, as needed. During periodic meetings in Dhaka, the field researchers reviewed our preliminary analyses and provided evidence to confirm or refute these interpretations. The field researchers also offered alternative interpretations and suggested previously unidentified themes and patterns.

Quantitative Component

• **Data collection.** The quantitative data come from a survey administered orally in 2002 to married women of reproductive age (younger than 50 years) in the six villages, plus 130 married women older than 50. The latter group had participated in a 1994 study by Schuler and colleagues involving all women of reproductive age in the villages. Our sample comprised 1,212 respondents, representing 86% of eligible women. After obtaining informed consent, female researchers administered the surveys according to World Health Organization (WHO) ethical safety guidelines for research on violence against women.²⁸ Every effort was made to ensure privacy during the interviews; interviews were suspended during discussion of sensitive topics when interruptions by other household members or neighbors could not be avoided.* The researchers were trained to deal with reactions to questions on domestic violence.

The survey covered a range of topics related to women's social, economic and physical well-being, including their capacities and access to resources, empowerment, marriage characteristics, experiences of domestic violence and health outcomes. Development of the questionnaire content was guided by the 1994 survey and the qualitative findings to date. The final questionnaire was pretested extensively in areas comparable but not adjacent to the study sites. All survey data were double entered into a database and analyzed by using SAS software.

• **Measures and data analysis.** Our measures of domestic violence were consistent with WHO guidelines, and we adapted questions from the WHO Violence Against Women Instrument.²⁹ Currently married women whose husband lived at home were asked six questions on whether their husband had committed violent acts of increasing severity against them ever or in the past 12 months. To minimize bias based on subjective perceptions of abuse, all these questions asked about specific behaviors. The primary outcome used in the main logistic regression analysis was any domestic violence experienced in the past year.

*To minimize the odds of systematic error due to differential questionnaire administration, researchers asked standardized "filler" questions during such interruptions.

Education, one of the independent variables, was measured as number of years of school completed. In addition, two variables were used for women's economic activity. The first, contribution to household expenses, was based on the woman's rough estimate of her relative economic contribution to meeting household expenses. The second such variable was an indicator of whether the woman currently belonged to an NGO microcredit loan program.

The dowry variable is based on the woman's report of whether an agreement on dowry (in the form of cash or property) was made at the time of marriage. Marriage registration indicates whether her marriage was formally registered.

Additional control variables were marital household socioeconomic status and age. Socioeconomic status was measured by an aggregate scale of seven dichotomous items based on household size; substances used to build the walls, roof and latrine of the house; presence of electricity in the home; and television and radio ownership. Age was ascertained by asking current age. For those who responded "don't know" (24%), we inferred the woman's age on the basis of additional information asked about age in relation to individual (e.g., menarche, marriage, childbearing) and national (the 1971 Liberation War) events.*

With the exception of socioeconomic status and age, all variables used in the analyses were dichotomous. Logistic regression models were used to examine associations between domestic violence and the five primary variables of interest. To further explore the processes and potential influences suggested by the qualitative findings, we performed additional logistic regression analyses, which examined the relationships among key covariates.

RESULTS

Qualitative Findings

Many women recognized and were dismayed by the increasing practice of dowry throughout Bangladesh.[†] (Until the 1960s, a "bride price" system of material exchange was customarily observed, in which the groom's family gave money and gifts to the bride's family at marriage.³⁰) According to numerous respondents, women are highly vulnerable to maltreatment if the economic resources they bring to their marriage—usually in the form of dowry—are perceived as meager. Respondents universally condemned the practice of dowry; they recognized its common use as a tool of resource extraction and exploitation.

A 40-year-old woman provided this explanation: "If the dowry is not paid, then a husband...beats his wife or usually says that he will marry again to a girl whose parents are able to pay dowry. Some men also send the(ir) wife to her parents' house to pressure them to pay the dowry."

Despite their condemnation of dowry, most women seemed resigned to it, as they believed it affords young women an important degree of social legitimacy and security. As a 32-year-old woman with no education or income explained, "If a girl brings dowry, then she has a stronger position in her in-laws' home....Her mother-in-law cannot torture her, nor can her husband beat her. If they do, then

she can say, 'Did I come here empty-handed?'" According to this interpretation, a dowry can raise a bride's status and improve her security in her husband's home. The practice is therefore perpetuated reluctantly, and often with considerable shame, by families to help ensure that their daughters are treated well in the marital home.

Dowry demands and the stress and hardship they impose on many families and on new brides emerged as a paramount consideration in decision-making about marriage formation—a consideration that increasingly seems to dwarf all others, such as social status or the quality of the groom and his family (although these issues remained important). For most respondents, managing a daughter's marriage negotiations is an agonizing process fraught with tension and fear. The economic burden of dowry can be high—even exorbitant—but mothers often reported feeling that dowry is necessary for their daughters' well-being. The interaction of these concerns can clearly translate into downward pressure on age at marriage, because young women's marriageability is believed to diminish with age, not least because of concerns about "sexual purity";[‡] mothers feared that they would have to pay higher dowry to find acceptable husbands for older daughters. Although numerous women expressed a strong desire to educate their daughters, the apparent social and, increasingly, economic imperative to marry daughters early is likely to compromise girls' educational attainment and undermine the potential for girls' increased education to translate into delayed marriage.

Women often spontaneously mentioned females' increasing education level as a major change in recent years and an important determinant of women's experiences. Participants suggested that education can improve the circumstances in which females enter marriage—for example, by allowing them legitimate reasons to postpone marriage; by improving their marriageability and, therefore, their prospects for marrying a "good" man (by making them more desirable to prospective husbands and their families); and by increasing the affordability of marriage by acting, at least in part, as a surrogate for dowry.

Many women perceived education as also improving women's status and opportunities in their conjugal households, thereby affording them more freedom and less dependence. In their view, education has both direct effects on women's status and indirect effects that operate through increased earning potential.

Many participants argued that education can also help a woman speak on her own behalf and defend herself, regardless of personal earnings or family wealth. As one uneducated

*In general, women for whom age was inferred had less education than did women who stated their age (60% vs. 40% had no education). Thus, we created a dummy control variable indicating whether age had been inferred.

†The use of dowries in the six study villages has increased dramatically over time: The quantitative data show that among women aged 15–19, 72% had dowry agreements at marriage, compared with fewer than 20% among those aged 45 or older.

‡Numerous women expressed concern that they cannot keep their unmarried adolescent daughters safe from sexual violence or prevent them from developing consensual romantic liaisons.

TABLE 1. Percentage distribution of rural married women surveyed in six Bangladeshi villages, by selected characteristics, 2002

Characteristic	%
Yrs. of education	
0	45.1
1–5	34.8
>5	20.1
Member of microcredit program	
No	59.9
Yes	40.1
Economic contribution to household	
Nominal or none	80.4
More than nominal	19.6
Dowry agreement	
No	54.1
Yes	45.9
Outstanding dowry debt	
No	78.4
Yes	21.6
Registered marriage	
No	37.7
Yes	62.3
Total	100.0

Note: Percentages for outstanding debt were calculated for the 551 women with a dowry agreement. For other items, denominators range from 1,189 to 1,203, depending on the number of women eligible to answer questions and the number of eligible women who answered them.

32-year-old woman said, “Not only daughters of wealthy fathers can speak for themselves. Those girls with education who are aware can protest when their situation is bad.”

An employed woman with a secondary education believed that educated women’s assertiveness can be contagious:

“The act of protesting has...increased due to...education. [But] it is not like all who are protesting are [highly educated]. When I, an educated woman, protest against my husband’s misbehavior, then my neighbor..., who has studied [only] up to class five, thinks...she will...protest against her husband’s behavior as I protested. [She will think,] ‘Why should I tolerate such oppression?’”

Some women expected that education could translate into at least the potential for employment or earnings; the earnings would then afford women greater status and rights in the home and protection from abuse. A 40-year-old woman with a source of personal income noted, “If a woman earns, then she has to be treated as an equal to her husband, because both are earning members of the family. In that case, the husband can’t beat her.”

A few women even suggested that with education, women have opportunities for independence from marriage: If they cannot change the nature of the marriage, they can leave it. An educated respondent explained:

“If women are educated, they can get jobs, and they will be happy...because they themselves are independent. They don’t need to tolerate the torture and oppression of their husbands. If [a woman] thinks she cannot go on, then she can leave her husband.”

However, this optimistic scenario contradicts most of our

findings. Interviewed women who themselves were desperate (e.g., severely abused or neglected) were indeed better able to survive and support their children if they were earning money, but they did not achieve independence. Often these women earned money when their husbands did not, and in these situations, the wife was likely to use her earnings to support her husband and family rather than leave.

Finally, some respondents saw a great potential for marriage registration, an increasingly common practice, to ensure marital security and protect families’ financial investment in marriages. Many said that women with registered marriages felt more secure because their husbands would be unlikely to abandon or severely mistreat them for fear of financial repercussions. According to one participant, “...women can take shelter of law if their husbands beat them—it is written in the registry.” Another participant provided this explanation:

“If the marriage is registered, a man cannot leave his wife easily. He has to pay the amount of dowry given at his wedding time back to his wife...Now, if I have to pay this amount of dowry to get my daughter married, I will, of course, want the safety of registered marriage, so...they cannot send our daughter back without the money.”

Survey Findings

Among survey respondents, the median age was 31, and the median age at marriage was 14. Forty-five percent of women had had no schooling, and 20% had completed more than five years (Table 1). Nearly half of women (49%) had ever belonged to a microcredit program (not shown), and 40% currently belonged to one. Twenty percent of women were contributing earnings toward at least some household payments. Forty-six percent had dowry agreements, and 62% had registered marriages. Use of marriage registration, like that of dowries, has increased consider-

TABLE 2. Percentage of rural married women reporting domestic violence, by experience

Experience	%
Violence ever (N=1,186)†	
Any	67.0
Minor	66.2
Major	33.4
Violence in past year (N=1,084)†	
Any	34.6
Minor	32.1
Major	17.3
Violence during pregnancy (N=1,158)	
Any	17.7
Violence worse during pregnancy	2.6
Violence resulted in injury (N=1,185)	
Any injury	23.5
Injury interfered with work	17.3
Injury warranted medical attention	18.6
Injury received medical attention	14.9

†Violence was considered minor if the woman reported being slapped, pushed or hit, and major if she reported being kicked or burned, or having had a weapon used against her. Note: Denominators vary according to the number of women eligible to answer questions and the number of eligible women who answered them.

TABLE 3. Percentage of rural married women experiencing any domestic violence in the past year, by selected marital and socioeconomic characteristics

Characteristic	%
Yrs. of education	
0	36.0
1–5	35.7
>5	30.0
Dowry agreement***	
No	24.5
Yes	45.3
Registered marriage***	
No	27.6
Yes	38.8
Member of microcredit program	
No	35.1
Yes	33.7
Economic contribution to household**	
Nominal or none	32.8
More than nominal	42.4
Household socioeconomic status***	
Median or lower	41.7
Higher than median	22.4

*p≤.05. **p≤.01. ***p≤.001. Note: Denominators range from 1,072 to 1,084, depending on the number of women eligible to answer questions and the number of eligible women who answered them.

ably over a relatively short period: More than 70% of women younger than 30 had registered marriages, compared with fewer than 40% of those aged 45–49 (not shown).

Sixty-seven percent of respondents reported ever having experienced domestic violence, and one-third of women reported ever having experienced major violence (i.e., involving kicks, burns or use of weapons; Table 2). Slightly more than one-third of women had experienced violence in the past year; 17% of respondents said that they had experienced at least one episode of major violence in the past year. Eighteen percent of respondents had experienced violence during pregnancy, and 3% of respondents said that violence they had experienced during pregnancy seemed worse than usual. About one-quarter of respondents reported ever having been injured by their husband; 17% of women said such an injury had interfered with normal work, 19% had had an injury that warranted medical attention and 15% had received medical care for such an injury.

The proportion of women who reported experiencing domestic violence in the past year was significantly higher among women with a dowry agreement than among women with no such agreement (45% vs. 25%; Table 3). Domestic violence was also significantly higher among women with a registered marriage (39%, vs. 28% of women without a registered marriage), women who cover at least some of their household expenses with their own income (42%, vs. 33% of those who cover little or none) and women with a marital household socioeconomic status at or below the median for the sample (42% vs. 22%). The proportion experiencing domestic violence was nonsignificantly lower among women with more than five years of education than among less educated or noneducated women (30% vs.

36%). Members and nonmembers of microcredit programs had roughly comparable proportions reporting domestic violence (34% and 35%, respectively).

In the main multivariable logistic regression analysis (Table 4), women with a dowry agreement were more likely than those without a dowry agreement to report experiencing violence in the past year (odds ratio, 1.5). This finding may be driven primarily by an effect of unpaid dowry: Women with outstanding dowry debt had significantly elevated odds of violence (1.7; not shown). In a further analysis, restricted to women without outstanding dowry obligations, the association between having a dowry and experiencing violence decreased in size and statistical significance (1.3).

Compared with uneducated respondents, women with more than five completed years of education had significantly lower odds of violence (0.6). Moreover, current membership in a microcredit program was associated with lower odds of violence (0.8). In contrast, women whose earnings contributed more than nominally to covering their household's expenses were significantly more likely to report violence than were women who contributed very little or none (1.8). However, the odds of violence decreased as women's household socioeconomic status or current age increased (0.8 and 0.7, respectively). The difference in the odds for women with a registered marriage and those for women with a non-registered marriage was only marginally significant (p=.06).

In the first of two additional logistic regression analyses exploring the processes and influences suggested by the qualitative findings, the odds of having a dowry agreement were significantly lower among women with more than five completed years of schooling than among those with no education (0.6; Table 5, page 196). The odds declined with rising socioeconomic status (0.9), but they increased with age at marriage (1.1). Age at marriage was also positively associated with the amount of the dowry (not shown). In the final logistic regression analysis, the odds of marriage registration were significantly higher for women with 1–5 or more than five completed years of education than for women with no education (1.6 and 2.3, respectively; Table 5). However, the odds were reduced significantly for those with a dowry agreement (0.6).

TABLE 4. Adjusted odds ratios (and 95% confidence intervals) from logistic regression analysis assessing the association between selected characteristics and women's report of domestic violence in the past year

Variable	Odds ratio (N=1,056)
Registered marriage	1.35 (0.99–1.85)†
Dowry agreement	1.46 (1.08–1.98)*
Yrs. of education	
0 (ref)	1.00
1–5	0.78 (0.56–1.08)
>5	0.62 (0.40–0.97)*
Member of microcredit program	0.75 (0.56–1.00)*
Economic contribution to household	1.79 (1.26–2.54)***
Household socioeconomic status	0.81 (0.73–0.89)***
Current age	0.74 (0.68–0.81)***

*p≤.05. **p≤.01. ***p≤.001. †p<.10. Notes: Model is adjusted for whether age was inferred from other data. ref=reference group.

TABLE 5. Adjusted odds ratios (and 95% confidence intervals) from logistic regression analyses assessing the association between selected characteristics and women's having a dowry agreement or a registered marriage

Variable	Dowry agreement (N=1,053)	Registered marriage (N=1,177)
Yrs. of education		
0 (ref)	1.00	1.00
1–5	0.98 (0.71–1.35)	1.56 (1.17–2.07)**
>5	0.60 (0.38–0.92)*	2.29 (1.51–3.48)***
Household socioeconomic status	0.85 (0.77–0.93)***	1.01 (0.93–1.09)
Age at marriage	1.08 (1.02–1.14)*	na
Dowry agreement	na	0.58 (0.43–0.77)***

*p≤.05. **p≤.01. ***p≤.001. Notes: Both models are adjusted for whether age was inferred from other data. na=not applicable. ref=reference group.

DISCUSSION

This study has several important limitations. First, although the villages in this study generally are typical of rural Bangladesh, they were not selected randomly; the generalizability of the results is therefore limited. Second, because of our study's cross-sectional design, no cause-and-effect relationships could be established. In addition, the associations observed in the regression analyses could be the function of some common prior cause. For example, families with an increased likelihood of domestic violence may be predisposed to seek a less educated bride (perhaps because of cultural conservatism).

Another potential limitation is reporting bias: Women may be differentially likely to report certain outcomes in ways that are systematically related to other characteristics of interest in the analyses. This may help explain, for example, the inverse association between dowry agreement and education or household socioeconomic status. Our qualitative data indicate widespread condemnation of the practice of dowry and shame among many who nevertheless felt compelled to perpetuate it. Relatively well educated and well-off respondents may have had an increased sensitivity to these views and, as a result, may have been less likely to report their practice of dowry. However, as other researchers have noted, Bangladeshi women are unlikely to falsely deny domestic violence, because such violence is widespread and, for the most part, socially sanctioned, at least in some circumstances.³¹ Furthermore, the research team included highly skilled interviewers who were already known and trusted in the communities; thus, they could elicit candid responses from participants. Finally, according to observations of the field researchers and feedback solicited from participants after the study, the questions on domestic violence seemed not to be troublesome to most participants.

Despite these limitations, we believe this study contributes to our understanding of the prevalence and possible determinants of domestic violence in rural Bangladesh. Generated by using specific reference periods and concrete,

*The quantitative finding that poorer families are more likely to demand dowry assumes that household socioeconomic status at the time of the survey corresponds to that at the time of marriage.

behavioral measures of domestic violence, these data on the prevalence and severity of physical abuse can be compared with findings from other studies in Bangladesh. By integrating qualitative and quantitative data and examining the relationships among possible factors, we can begin to understand the interplay of complex economic and social factors that influence women's risk of violence in the evolving context of Bangladesh.

Our study results highlight the centrality of marriage as a setting where various influences intersect—particularly gender inequality and poverty—and lay the foundation for women's vulnerability. The findings also highlight the complex and often contradictory nature of the relationships among factors at different levels, and the ways in which they may influence women's risk of violence. Another theme that emerges is the extent to which norms and practices in Bangladesh are in transition, and how that transition itself may be a risk factor.

Our quantitative findings of a negative association between women's education and dowry agreement and also between household socioeconomic status and dowry agreement* suggest that the practice of dowry disproportionately affects the disadvantaged. Poor men and their families may demand dowry to obtain resources by exploiting the vulnerability of brides' families. Perhaps, in turn, the poor are less able to leverage resources (including their daughters' education) against dowry demands. In this context of gender inequality and poverty, the practice of dowry appears to exacerbate women's risk of domestic violence. The association between dowry and violence probably reflects a selection process, at least to some extent, whereby families who demand dowry may also be more likely than others to perpetrate or tolerate violence. Formal dowry arrangements are associated with some social disapprobation; parents who can afford to give informal gifts instead often do so. The most economically desperate families may be the least likely to find brides whose parents will spontaneously give gifts, and more likely to press for a dowry agreement and then resort to violence or the threat of violence to obtain outstanding dowry payments or to add to the agreed amount. Consistent with the extortion interpretation, our qualitative and quantitative results suggest that unpaid dowry may put women at especially high risk of violence, as shown elsewhere.³²

In addition, an alternative pathway could be at work. The qualitative findings suggest that women with dowries may feel more entitled and therefore may behave more assertively in the marital home, and such behavior may meet with a violent response. Other researchers have theorized that violence may occur in situations in which women's increased bargaining power threatens men's sense of control and superiority.³³ This interpretation also may help explain the seemingly contradictory findings on marriage registration and domestic violence. Perhaps, as interviewed women contended, marriage registration does indeed give women some measure of long-term economic security (by decreasing their risk of abandonment and increasing their chances of se-

curing access to money or property should abandonment occur); yet, as our survey findings suggest, marriage registration does not seem to protect women from domestic violence. If anything, marriage registration may be associated with an increased risk of domestic violence, possibly by undermining husbands' sense of control.

Our survey results indicating that dowry agreement and marriage registration are inversely associated contradicts interviewees' stated rationale for marriage registration as a means to protect dowry investments in daughters' marriages. One possible interpretation of our quantitative findings is that families' agreement to give dowry reflects a degree of vulnerability and desperation in the marriage market that also makes these families willing to forego other measures, such as marriage registration, that might protect their daughter in the event of mistreatment or divorce.

In our analyses examining associations with domestic violence, we found different results for the two measures of women's economic activity—participation in a microcredit program and contribution of personal earnings to the household budget. The effect of membership in a microcredit program on women's status and autonomy, and on their risk of domestic violence, is a subject of ongoing debate.³⁴ Schuler and colleagues have noted that a reduced risk for violence among women in microcredit programs might not reflect a protective effect of program participation; instead, women whose husbands have a reduced inclination toward violence may be more likely than other women to enter such programs.³⁵ Findings reported by Mahmud suggest a different selection process, whereby women in less equitable relationships may be pressured by their husbands to join credit programs; these women also may be more likely to experience violence, independent of their credit involvement, than women in more equitable relationships.³⁶

It is also possible that participation in microcredit programs is becoming socially acceptable as a way for women to contribute resources to their household, not least because they often make the loan money available for their husbands' use.³⁷ Khan and colleagues reported that physical abuse was slightly more prevalent among members of the Bangladesh Rural Advancement Committee (BRAC) credit and savings program than among nonmembers; however, that abuse seemed to decrease with duration of membership.³⁸ Koenig and colleagues' findings from Bangladesh highlight the importance of the normative context in shaping the effects of individual-level factors.³⁹ Thus, our finding of no positive association between microcredit program participation and domestic violence may indicate that program participation has become normalized in the study sites and that, as a result, such participation today does not increase women's risk of violence because it is not seen as provocative.

However, women whose income is substantial enough to make them more than marginal contributors to the household budget may be at increased risk of violence. The observed positive association between women's financial contribution to the household and their odds of domestic violence may, again, reflect a shift in the balance of power

between husband and wife that leads to violence. However, it also may reflect a degree of material hardship not captured by our measure of household socioeconomic status that may, by itself, explain the increased odds of violence. Our study, like other research,⁴⁰ indicates an association between poverty and domestic violence. In our sample, women who earned money and contributed meaningfully to the household budget typically were in the most economically deprived families. Particularly in the context of deprivation, women's economic contribution may increase the risk of violence by undermining male authority and established gender roles. This interpretation is supported by qualitative data suggesting that men's inability to provide economically for their families may place women at increased risk of maltreatment. Several respondents described conflict over scarcity as precipitating violence, a finding supported elsewhere.⁴¹

Our observation of a negative association between women's education and domestic violence seems less ambiguous, but its implications are limited. The odds of domestic violence were reduced only for women who had at least six years of education,* suggesting that the modest increases in educational attainment available to the majority of females in rural Bangladesh will not substantially alter their risk. The expectation expressed in the qualitative data that women's education would lead to higher status and security through increased economic participation appears less realistic in light of the quantitative results. Furthermore, our results indicate that education cannot be assumed to improve the terms under which women enter marriage. Findings of an earlier qualitative study in Bangladesh suggest that the role of girls' education in families' marriage decisions is largely dwarfed by other considerations.⁴²

The social and economic environment in Bangladesh has been undergoing rapid change. In response to economic necessity, new opportunities and changing norms, women are increasingly deviating from traditional roles, developing new aspirations and, often unintentionally, challenging the prevailing gender order. In this changing environment, people have been exposed to information and behavioral change messages on various health and social issues, including marriage age, dowry, marriage registration, girls' education and, to a lesser extent, women's rights. The disconnect between some of our qualitative and quantitative findings may reflect the lag between women's emerging awareness and expectations on the one hand, and their present situation on the other. The changes under way and the further transitions that may be signaled by this disconnect could continue to put women at risk.⁴³ As we have suggested previously, and Jewkes and colleagues also have argued, changes that somewhat empower women may lead to violence in the near term.⁴⁴ Such changes may become protective only after a critical threshold of empowerment has been reached and gender roles have shifted substantially.

*However, another study in Bangladesh found strong protective effects of education at low and high levels (source: reference 12).

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RESUMEN

Contexto: Si bien está bien documentada la presencia generalizada de la violencia contra la mujer en Bangladesh, aún no se conocen a fondo los factores de riesgo específicos, en particular aquellos que pueden ser afectados por políticas y programas.

Métodos: En 2001-2002, se llevaron a cabo encuestas, entrevistas detalladas y grupos de estudio pequeños con mujeres casadas de seis poblados de Bangladesh, con el objeto de examinar los diferentes tipos y niveles de severidad de la violencia doméstica y para explorar las formas a través de las cuales las circunstancias sociales y económicas de la mujer pueden influenciar su vulnerabilidad a la violencia en su vida en pareja. Mediante el uso de análisis de regresión logística, se evaluaron las probabilidades de que la mujer sufriera actos de violencia doméstica durante el último año.

Resultados: De aproximadamente 1.200 mujeres encuestadas, el 67% alguna vez habían experimentado violencia doméstica, y el 35% eran objeto de violencia durante el último año. De acuerdo con los datos cualitativos, las participantes esperaron que las mujeres con un mejor nivel educativo y con mayores ingresos debían ser menos vulnerables a actos de violencia doméstica; también creían (o esperaban) que el tener una dote o un matrimonio registrado podría fortalecer la posición de la mujer en su matrimonio. No obstante, de estos factores potenciales, solamente el nivel educativo estuvo relacionado con una significativa reducción de las probabilidades de sufrir violencia; al mismo tiempo, las probabilidades fueron significativamente elevadas entre las mujeres que tenían un acuerdo de dote o ingresos personales que contribuían en forma efectiva al hogar. Las mujeres apoyaban sólidamente la educación de sus hijas, aunque existen presiones para que contraigan matrimonio a edad temprana, en parte para evitar los elevados costos de la dote.

Conclusiones: En las zonas rurales de Bangladesh, las circunstancias sociales y económicas de la mujer pueden influenciar el nivel de riesgo con respecto a la violencia doméstica en formas complejas y contradictorias. Los resultados obtenidos también sugieren que hay una falta de conexión entre las expectativas emergentes de la mujer y su realidad actual.

RÉSUMÉ

Contexte: Si l'omniprésence de la violence familiale à l'encontre des femmes au Bangladesh est bien documentée, les facteurs de risque spécifiques—ceux que peuvent affecter les politiques et programmes surtout—ne sont pas bien compris.

Méthodes: En 2001-2002, des enquêtes, entrevues en profondeur et discussions en petit groupe ont été menées auprès des femmes mariées de six villages ruraux du Bangladesh dans le but d'examiner les types et la gravité de la violence familiale, ainsi que d'explorer les voies par lesquelles les circonstances socioéconomiques des femmes peuvent influencer leur vulnérabilité à la violence au sein du mariage. Les probabilités de violence familiale à l'encontre des femmes durant l'année précédente ont été évaluées par analyse de régression logistique.

Résultats: Des quelque 1.200 femmes soumises à l'étude, 67% avaient été victimes de violence familiale, et 35% l'avaient été durant la dernière année écoulée. Selon les observations qualitatives, les participantes pensaient que les femmes instruites et disposant d'un revenu supérieur étaient moins vulnérables à la violence familiale; elles croyaient (ou espéraient) du reste que l'apport d'une dot ou l'enregistrement du mariage pouvaient renforcer la position de la femme au sein du mariage. De ces facteurs potentiels pourtant, seule l'éducation s'est avérée associée à une probabilité significativement moindre de violence. En revanche, les femmes étaient significativement plus susceptibles d'être victimes de violences en présence d'un accord de dot ou de revenus personnels contribuant plus que nominale-ment au ménage. Les femmes soutenaient fortement l'éducation de leurs filles, tout en demeurant toutefois sensibles aux pressions de les marier jeunes, en partie pour éviter les coûts de dot élevés.

Conclusions: Aux zones rurales de Bangladesh, les circonstances socioéconomiques des femmes peuvent influencer le risque de violence familiale qu'elles courent de manières complexes et contradictoires. Les observations semblent également indiquer une discordance entre les attentes naissantes des femmes et leurs réalités.

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Exploring the Association Between HIV and Violence: Young People's Experiences with Infidelity, Violence And Forced Sex in Dar es Salaam, Tanzania

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CONTEXT: Prior research has shown a strong correlation between HIV infection and a history of intimate partner violence, particularly among young women. However, the role violence plays in the sexual relationships of young people in Sub-Saharan Africa is not well understood.

METHODS: Locally trained interviewers conducted semi-structured interviews with 40 young men and 20 young women aged 16–24 who were recruited from public venues in Dar es Salaam, Tanzania.

RESULTS: The participants described complex interactions among violence, forced sex and infidelity in their sexual relationships. Men who were violent toward female partners also frequently described forced sex and sexual infidelity in these partnerships. Men with multiple concurrent sexual partners reported becoming violent when their female partners questioned their fidelity, and reported forcing regular partners to have sex when these partners resisted their sexual advances. Youth who felt that violence and forced sex could not be justified under any circumstances were often those who had not yet initiated sexual relationships or who were in monogamous partnerships.

CONCLUSIONS: The association between HIV and violence identified among young people in prior research may be partially explained by their experiences with infidelity and forced sex in their intimate partnerships. HIV prevention interventions that fail to take into account the infidelity, violence and forced sex frequently involved in youth's sexual relationships will have a limited impact.

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Studies throughout the world have found an association between gender-based violence and HIV risk behaviors and HIV serostatus.¹ Research conducted in Soweto, South Africa, provided evidence supporting this association by finding that male partners who are abusive are more likely than those who are not to be HIV-positive.² Moreover, a quantitative study conducted by our research team in 1999 to explore the association between HIV and violence among women at an HIV voluntary counseling and testing clinic in Dar es Salaam, Tanzania, found a strong and consistent association.³ HIV-infected women reported significantly more sexual violence in their relationships, a larger mean number of physically violent partners in their lifetime and a larger number of physically violent episodes with their current partner.

An association between women's history of violence and their HIV serostatus has been found in other settings. A study conducted in Kigali, Rwanda, revealed that women with a history of sexual coercion were more likely than those without such a history to be HIV-positive. The study also found that violent male partners had elevated odds of being HIV-positive.⁴ In the Soweto study mentioned earlier, women's risk of being HIV-positive was associated with both intimate partner violence and high levels of male control in the current relationship after the effects of women's risk behaviors were accounted for. The authors postulated that abusive men are more likely than nonabusive men to be HIV-positive and to practice risky sexual behaviors with their partners.⁵

In our previous research in Tanzania, we found a particularly strong association between history of violence and HIV serostatus among women younger than 30. In that age-group, the odds of reporting physical violence with a current partner were 10 times as high among HIV-positive women as among HIV-negative women.⁶ This association between HIV and violence among youth in particular has since been documented by researchers in other countries.⁷

Youth and HIV/AIDS in Tanzania

The United Republic of Tanzania, located in Southeastern Africa on the coast of the Indian Ocean, is home to a population of more than 36 million that is growing at almost 2% annually.⁸ With estimated per capita income of about \$250 per year, Tanzania is considered one of the world's poorest countries. On average, only 47% of boys and 51% of girls of primary school age attended school between 1992 and 2001.⁹

Tanzania is one of the Sub-Saharan African countries most affected by HIV, with overall prevalence of about 10%.¹⁰ Nationally, an estimated 17% of females and 8% of males aged 15–19 years are HIV-positive.¹¹ In 2001, 25% of women younger than 24 attending a health clinic in Dar es Salaam were infected.¹² Moreover, a 2001 study of young blood donors in the Arusha, Iringa, Kagera and Morogoro regions found HIV prevalence of 15–18%.¹³

Unprotected sex and the rarity of monogamous partnerships are fueling the rapid expansion of the HIV epi-

demographic among youth. A 2001 study found that 50% of males and 25% of females reported that they had had one or more casual sexual partners in the past year, and just 35% of males and 24% of females reported using a condom during their last sexual encounter with a casual partner.¹⁴ In a study conducted in Dar es Salaam, more than 50% of young men and women reported having had more than one partner in the previous six months, and 23% of men and 17% of women reported ongoing relationships with more than one partner.¹⁵ Despite high levels of knowledge about the effectiveness of condoms against HIV infection, only 10% of young people reported using them regularly.

Men in Tanzania, as in many other areas of the world, usually determine when, with whom and under what circumstances they have sex with their partners.¹⁶ Most young women cannot freely choose safer sexual practices or refuse unsafe sexual activity, but instead must negotiate within unequal social relationships.¹⁷ Gender expectations limit young women's power to negotiate safe sexual behaviors in their relationships. The impact of the power dynamics between adolescent women and men in sexual relationships on women's ability to negotiate safe sexual relations has been well described in contexts with relatively low rates of HIV infection.¹⁸ However, we have yet to fully understand how these power dynamics play out in contexts such as Tanzania, where up to 25% of adolescents may be infected.

Given the heightened vulnerability of Sub-Saharan African youth to HIV and the strong association found between HIV and violence, particularly among youth, a better understanding of the role of violence in the sexual relationships of young people is needed. In prior research, there has been little attention to young men's perspectives on these issues. Qualitative research carried out with adolescent males in Latin America, Asia, North America and Sub-Saharan Africa suggests that attitudes that condone viewing women as sexual objects, seeing sex as performance-oriented and justifying sexual coercion as acceptable begin in adolescence.¹⁹ This finding provides a strong rationale for efforts to work with younger men on issues of sexual and reproductive health.

The literature on programs related to reproductive health, HIV/AIDS and violence that target young men is small but growing. Few rigorous evaluations of such programs exist. This article, which reports on an intervention study with young men in Dar es Salaam, is a response to this gap in the literature. It describes data gathered in the first phase of the project, during which we conducted in-depth interviews with young men and women in the community to explore the links between HIV and violence from the perspective of youth.

METHODS

In July through December of 2003, we carried out in-depth interviews with 40 men and 20 women aged 16–24 years. The goal of this study, which was conducted in collaboration with colleagues from the Muhimbili University College of Health Sciences in Dar es Salaam, was to describe

the attitudes and behaviors of youth, particularly young men, regarding sex, violence and gender expectations within their own intimate relationships. We used an iterative data collection approach, which allowed the team to refine and redefine the questions central to understanding the interplay between violence and HIV in these young people's lives. To determine if new thematic areas needed to be explored with future respondents, the principal investigators and technical adviser combed new information as it was collected, transcribed and entered, and offered immediate feedback to the research team and interviewers. Because of this process, the content of the field guides the interviewers used was revised in response to the data that emerged in successive waves of interviews. The research protocol, field guides and consent forms were reviewed and approved by the Johns Hopkins Bloomberg School of Public Health's Committee on Human Research and the Muhimbili College of Health Sciences' ethics board.

The two interviewers, university graduates with sociology degrees and prior research experience, were given an intensive two-week course on qualitative research methods, proper interviewing technique and techniques for eliciting sensitive information. All staff involved in the project were trained in and tested on their understanding of and respect for research ethics.

Youth were recruited from public venues in one of the 12 wards of Dar es Salaam. These venues included sports grounds, marketplaces, bus depots and bars. Venues were chosen during the participatory mapping exercise, which consisted of developing an extensive map of the community and its most prominent youth gathering venues on the basis of information gathered from adults and youth in the community. The ward from which the youth were drawn is demographically typical of Dar es Salaam. Although information on socioeconomic status was not gathered from each participant, the community in general tends to be lower middle class.

To recruit participants, interviewers screened young men and women in the venues identified through the community mapping exercise. Those who were 16–24 and resided in the community were asked to participate in this study. Most of the participants were currently in intimate relationships with at least one partner. Most of the men who were interviewed had finished at least seven years of schooling, whereas the majority of women had not completed their primary education.

The semi-structured interviews were based on a qualitative field guide that highlighted major topics for discussion and suggested probes having to do with violence, HIV and sexual relationships. The interviewers were trained to use the qualitative instruments as guides rather than as standardized survey instruments. They encouraged informants, through effective probing, to expand on the topics on which they indicated more knowledge and experience. Thus, not all questions on the field guides were asked of all informants. Interviews lasted about 60–90 minutes and were tape recorded after acquiring the participant's consent.

The audiotapes were transcribed into Kiswahili text, translated into English and entered into a word processing program. The data were first exhaustively reviewed by the entire research team for main themes and then individually by the principal investigators and the technical adviser. They were then coded for retrieval and analysis using the NUD*IST program. Second, matrices of the interconnections of the three areas of interest were constructed to condense and organize the data and make cross-informant analysis easier. Themes were generated to represent the ideas or experiences of a large proportion of informants. We summarized the key themes that emerged from the interviews and selected quotations that represent these themes.

RESULTS

Context of Sexual Relationships

It is important to understand the context of sexual relationships among youth in this setting before trying to disentangle the links among HIV, violence and infidelity. These links may have their roots in the gender norms, expectations and relationship structures that characterize the sexual relationships of young people.

• *Sex is the basis of intimate relationships.* Young people report that to be considered intimate partners, a young man and woman must have sexual intercourse. Almost unanimously, the men say that a woman must be willing to have sex if she wants to be considered more than a friend:

“How can she be my partner without making love? To know that she loves you and she’s your partner you must make love; that’s why I convinced her.”—*unmarried 24-year-old male*

When asked why they had sex the first time with their present partner, young men explained that sex was their primary reason for starting the relationship. Young women, however, speak of other reasons for initiating intimate relationships, including love, financial reasons and identifying prospective husbands. The reality that young women in this community are focused on finding husbands cannot be underestimated in terms of its implications for the types of sexual relationships they entertain. An unmarried 20-year-old woman explained very clearly that she had sex in exchange for a marriage proposal:

Participant (P): “I didn’t even want him in the beginning.”

Interviewer (I): “So why did you have sex with someone you didn’t want?”

P: “My sister-in-law was telling me that her brother wanted to marry me and then I knew that I had found someone to marry me.”

Young men are aware of young women’s motives for entering sexual relationships and often take advantage of this to initiate sexual relationships:

“For now many youths, including me, like to tempt the girl, telling the girl, “I love you very much.” That’s a lie, because when you tell her that you love her, your aim is to make love to her. It’s not that you love her so that you marry her. You persuade her, lie to her somehow.”—*unmarried 20-year-old male*

• *Opportunities for relationships are tightly controlled.* The opportunities for young men and women to meet in this community are tightly controlled by parents and other older family members. As a consequence, young people usually meet their partners in school or through mutual friends or family members. They have to be creative in identifying opportunities and places to meet their partners for sex, because almost all unmarried women live with their parents and most young men live either with their parents or in a shared space with other men. Often young partners meet in the house of the man’s friend, in the man’s house if he has one of his own, or in a rented room in a guesthouse. When young couples do find an opportunity and place to meet, they often have little time together; they report that their main aim at such meetings is to have sexual intercourse.

• *Young women are expected to be settled, forgiving and enduring.* Community gender norms encourage and promote male initiation of sex and simultaneously limit women’s ability to express their own sexual needs and desires. Young women report feeling reluctant to initiate sex with their partners for fear of being considered immoral and sexually aggressive.

“Often it’s a man who persuades; it’s difficult for women and it can’t happen for a woman because they feel shy that they’ll be regarded as prostitutes.”—*unmarried 21-year-old male*

As a result, many young women perceive their role as one of serving their partner’s sexual needs. This cultural norm limits young women’s ability to negotiate the terms of their sexual relationships.

Because intimate partner violence has its roots in socially constructed gender norms,²⁰ we attempted to understand these norms so that we could contextualize violence. We asked participants about community perceptions of “ideal” men and women. Most female respondents described an ideal woman as one who is “settled.” Young women who are not in school are expected to remain at home unless they need to leave the house. Many women expressed fear that they would be seen as “unsettled” if they took a walk or left the house without a specific purpose.

“An ideal woman is the one who stays at home, is a woman who is settled, being busy at home. Even if she’s employed, when she comes from work she continues with her work and is settled at home. People regard this woman as an ideal woman.”—*unmarried 17-year-old female*

Relatives may use violence as punishment for young women who deviate from prescribed behaviors. According to an unmarried 16-year-old female, “When she’s found sitting with people who aren’t known to the family she’s beaten, when she comes from school she comes inside.”

Young women place great value on community perceptions of their character. They fear being the source of community gossip, because of the impact that this may have on their opportunities for finding an eligible husband.

“If you are not married then you should be settled. You are supposed to settle down to get a fiancée who will like your character.”—*unmarried 20-year-old female*

Both women and men say women must be “enduring” and “forgiving” to deal with hardships in life and relationships:

“A woman who is ideal is the one who endures, respects her marriage, loves her family and the community in general and is able to have children. These are the characteristics of ideal women.”—*unmarried 24-year-old male*

Violence and Infidelity

• *Sexual infidelity among youth is common.* Young men and women describe a great deal of infidelity in their relationships. The way youth used the word in Kiswahili referred to engaging in sexual relationships with partners other than their primary partner. A primary partner was defined as someone a respondent had been with for at least three months and was committed to above all others.

Most of the young men interviewed said they had multiple concurrent or serial relationships. More often than not, the men said they had had unprotected intercourse despite knowing that they were putting their partners and themselves at risk for HIV. Young women also reported multiple sexual partnerships, although they did so less frequently than the men in our sample. Although few women admitted their own infidelities, men talked about their experiences with women who had other partners.

Because infidelity is so common, men and women described deep mistrust of partners:

“I don’t trust my fellow and he doesn’t trust me, so we plan that we should go for a test (for HIV). It’s not easy to trust each other because the youths of these days don’t settle down; one may lie to you while he has another woman apart from you.”—*unmarried 23-year-old female*

Despite the frequency of infidelity, several informants reported being committed to faithfulness in their relationships. Fear of HIV/AIDS is one of the major motivators for maintaining monogamous relationships:

“I don’t have another partner apart from this one that I described. I don’t have others because there are many things that make one not have another. AIDS is a big problem, so if I have outside partners and then my partner has other partners and those partners have other partners, then you may find yourself getting diseases from other places.”—*unmarried 19-year-old male*

• *Violence is condoned by many youth.* When asked about their involvement in violence, youth most commonly reported hitting, slapping, punching and kicking. Many of the men and some of the women condoned such behavior under certain conditions. Several young men said men are justified in using violence to control a wife or a long-term partner; with a casual partner, they considered it best to simply end the relationship.

“If he wants to live with her then he can use force to take her back to the characteristics that he thinks are good. So the force may lead even to beat her, it’s ok. However, if he has no plans then he can just leave her and look for another one.”—*unmarried 24-year-old male*

According to male respondents, violence is also justified when women lie to their partners, when women make pub-

lic things that men consider private, and when there are disagreements about financial matters. Men also described violence as a tool to teach a partner right from wrong.

“There’s a time that she refused to tell me but when I beat her she agreed he was her partner. That’s the basis of not having faith with these women. These women, there’s time they need a teaching, because there are many women that have many men.”—*married 20-year-old male*

However, other young men felt that violence could not be justified under any circumstance.

“There is no need of getting into a relationship and then you start fighting. When there’s force in love then it’s no longer love, because love is the consent of two people coming together.”—*unmarried 19-year-old male*

• *Infidelity is a catalyst for violence.* Men and women identified infidelity—whether real or suspected—as the most common trigger for violence in their relationships. Men became violent when they suspected their partner of unfaithfulness or when their partner confronted them about their own sexual infidelities.

All of the male participants who condoned violence or reported violence in their relationships also said that infidelity justifies the use of violence.

“When a woman isn’t faithful, there’s a need to use force. There’s a need to slap her twice or thrice to know that she wronged and correct herself.”—*married 23-year-old male*

Several young women also considered infidelity a justification for men’s violence toward their female partners.

“For example, when he guesses that you have a certain boy. When he calls you, then you deny while it’s true. So when he finds you, he must use violence a bit.”—*unmarried 19-year-old female*

A few men described experiences in which their partners had confronted them about their own infidelity.

“One day she found me with a girl standing on the road. Therefore, when she came there and wanted to fight, I forbade her. When I forbade her she turned to me and started beating me. I got angry and beat her very severely. I beat her and then we left.”—*married 20-year-old male*

Women also described situations in which they had been physically abused for confronting men about their infidelities.

“He had another woman while I was five months pregnant.... I was passing on a road that he didn’t want me to pass because he didn’t want me to see him. He was with his friend (partner), and telling me not to pass at the road. So I insisted and passed by that road. When I passed, I said he was the father of this (showing her child). He attacked and started beating me.”—*unmarried 20-year-old female*

Forced Sex

• *Forced sex is narrowly defined by men.* Our interviews with young men made clear that many hold a very narrow definition of what can be defined as “forced sex.” Several men reported that they had never forced a woman into sex, but then narrated a story in which they became physically violent with their partner to “persuade” her to have sex. Many

men felt that only forceful intercourse could be categorized as forced sex. One man said he beat his partners when they refused his sexual advances:

“When you find that she doesn’t agree you give some beating. If she agrees you make love, and if she doesn’t agree you leave her.”—*unmarried 24-year-old male*

This informant, when asked later in the interview, reported that he had never forced a woman to have sex:

I: “Have you used force to make love to a woman?”

P: “That I have never done. When we want to make love, we just do that and she doesn’t refuse. I have never done that.”

Another young man described using physical violence to “persuade” a reluctant female partner to have sex:

I: “Have you used force to make love to a woman?”

P: “I did that once...I persuaded her with all means but she refused, I lured her but she refused. Because we were in the room I told her she couldn’t leave the room until we made love, but she continued to refuse. Therefore, I caught her and you know that girls are weak somehow. When I caught and undressed her she agreed and we made love.”—*unmarried 23-year-old male*

Young men use other strategies as well to encourage reluctant partners to have sex. These include gifts and the promise of financial security. When asked if he had ever forced a woman into sex, one unmarried 23-year-old male tried to clarify what type of force the interviewer meant: “There are many ways of force (power). Some use body power to rape, some use money, you see?”

• *Circumstances considered justifications for forced sex.* The situation young men most frequently cited as a justification for force was a lengthy period during which a female partner had refused a man’s sexual advances. Men also considered it appropriate to punish an unfaithful partner by forcing her to have sex.

“You know when a woman gets another man, use force to make sure that you get what you want.”—*married 20-year-old male*

Forced sex was considered justified more in the context of marital relationships than in nonmarital relationships. Some young men said that when married, men—and sometimes women as well—have a right to have sex with their partner. Therefore, they considered force to be justified when a marital partner refused.

“It’s only to a wife where you can force her because there’s no other place where he can get the love except his wife and the wife also has no other place except her husband. Therefore, they can all be forced to make love. Even a woman can use force because it’s her basic right to make love.”—*unmarried 21-year-old male*

Nevertheless, men also described using force against some nonmarital partners. According to a few young men, some women are “used to” being forced into sexual intercourse.

“Yes, but usage of force is caused by the girls or women by themselves. You may find that someone needs to make love and she’s lingering, playing tricks, it gets difficult to

withstand that and you have to use force. In addition, when you use force she agrees to make love.... She may even come to your room but she can’t undress by herself. You have to use force so that you make love. It’s their character and you have to catch her, they are used to it, when you catch her then you make love to her.”—*married 24-year-old male*

Some young men, however, strongly felt that women have sexual rights that should be upheld:

“It’s not allowed to make love to a woman by force. This is against the rights of the women. To make love needs the consent of the two people.”—*unmarried 24-year-old male*

Youth who felt that the use of violence and forced sex could not be justified under any circumstances were likely to be those who had not yet initiated sexual relationships or who were in monogamous partnerships.

Most of the male informants who cited situations in which violence against female partners could be justified also identified situations in which forced sex could be justified. Furthermore, the majority of men who admitted being violent in their relationships also described forcing a partner to have sex.

LIMITATIONS

This study has a number of limitations. Through our interviews, we learned that because of strict parental controls, some young women do not socialize in public venues. The experiences of these young women were therefore not reflected in our data and may differ greatly from the experiences of the young women whom we were able to interview. In addition, our cross-sectional study design captured youth at only one point in time. It would be useful to discuss sensitive topics with young people in depth over time and to capture and describe experiences as they are happening and perhaps changing for youth.

DISCUSSION

Our previous research in this setting found a strong association between women’s HIV status and their prior history of violence in relationships. Young HIV-positive women reported significantly more violence in their relationships than young HIV-negative women.²¹ Although a growing body of literature provides evidence of such an association, the mechanisms through which it operates remain unclear. Some possible hypotheses suggest that violence limits women’s ability to negotiate HIV preventive behaviors,²² that violent men are less likely to use condoms,²³ that violent men are more likely than nonviolent men to be HIV-positive,²⁴ that the physical trauma from forced sex results in a higher risk of HIV transmission during intercourse²⁵ and that women who have experienced violence as children are more likely to engage in HIV risk behaviors as an adolescent and adult.²⁶

This qualitative study was conducted to further explore the mechanisms through which HIV and violence may be linked in the relationships of young people. The resulting findings suggest that the association we found between HIV and violence in our quantitative study may be mediated by

suspected or actual sexual infidelity. Infidelity and fear of infidelity are the major triggers for violence in the relationships of young people. Sexual infidelity is also an important risk factor for HIV infection among youth. Women who resist sexual advances from their partners because they fear HIV infection may be forced to have sex by their partners.

Another explanation for the association between women's history of violence and their HIV infection status may lie in women's experiences with forced sex. In our earlier research, we did not find an association between women's experiences with forced sex and their HIV infection status. However, our qualitative findings show that youth narrowly define force during sex as physically holding a woman down and performing forced intercourse. Thus, previous studies may not have been accurately capturing the occurrence of forced sex.

Using physical aggression and other methods to "persuade" reluctant partners to have sexual intercourse was commonly reported in this study. Furthermore, men who reported using violence in their relationships were more likely both to condone forced sex and to report having forced a partner to have sex. Thus, forced sex may account in part for the association between violence and HIV risk.

Finally, this study indicated that the expectations that young women be "settled, enduring and forgiving" underlie their experiences with both sexual infidelity and violence. These norms limit women's ability to confront partners about sexual infidelities and to resist unwanted sexual advances that put them at risk for HIV. These same norms make it difficult for women to leave violent partners.

CONCLUSIONS

The more nuanced understanding that these data provide on links between HIV and violence among young women has implications for programs and research. Given the vulnerability of youth to HIV in settings like Tanzania, there is an urgent need for HIV prevention programs that specifically target youth. Adolescence is a period in which young men and women begin to form their belief systems, pattern their behaviors and begin initiating intimate relationships—and thus, an ideal time to challenge common notions of violence, reproductive and sexual health.²⁷

For these reasons, innovative programs that work with young people to challenge their norms regarding both sex and violence are needed. HIV prevention interventions that fail to take into account the realities of infidelity, violence and forced sex in youth's sexual relationships will have a limited impact.

Equally important, some young men practiced monogamy and condoned neither violence nor forced sex. Program planners need to study and learn from young men who have not accepted traditional gender norms. Young men who felt that the use of violence and forced sex could never be justified generally had not yet initiated a sexual relationship, which highlights the importance of intervening with young men at ages before they become sexually active.

Currently, few HIV and violence prevention interventions target young men.²⁸ The outcomes of these programs suggest the importance of a few common elements, such as separating men by age because of the great differences in levels of maturity and experience among youth,²⁹ extending interventions over a period of several months or years to achieve sustained impact,³⁰ and including out-of-school youth.³¹

Unfortunately, few of these programs have been rigorously evaluated. Programs need to be coupled with rigorous evaluation designs that can measure the impact of the various program elements and describe specific pathways to change. In addition, collection of longitudinal data would allow researchers to examine how young people's attitudes and behaviors change over time and in response to different experiences.

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RESUMEN

Contexto: Trabajos de investigación previos han indicado una sólida correlación entre la infección del VIH y la violencia sexual, en particular entre el grupo de mujeres jóvenes. Sin embargo, aún no es bien comprendido el papel de la violencia en las relaciones sexuales de los jóvenes en la región del África Subsahariana.

Métodos: Entrevistadores locales capacitados realizaron entrevistas semi-estructuradas a 40 hombres y 20 mujeres, de 16-24 años, que fueron escogidos de lugares públicos en Dar es Salaam, Tanzania.

Resultados: Los participantes describieron las interacciones complejas que hay en sus relaciones sexuales entre la violencia, el sexo forzado y la infidelidad. Asimismo, los hombres que se comportaban con violencia hacia sus parejas con frecuencia mencionaron que el sexo forzado y la infidelidad sexual caracterizaban dicha relación. Los hombres que tenían múltiples pare-

jas sexuales al mismo tiempo indicaron que se volvían violentos cuando su pareja les cuestionaba su fidelidad y manifestaron que forzaban a sus parejas a mantener relaciones sexuales cuando ellas se resistían frente a sus avances. Los jóvenes que manifestaron que bajo ninguna circunstancia se podía justificar la violencia y el sexo forzado, generalmente eran aquellos que aún no habían iniciado sus relaciones sexuales o que tenían relaciones monógamas.

Conclusiones: La asociación entre el VIH y la violencia identificada entre los jóvenes en trabajos de investigación anteriores se puede explicar parcialmente por la experiencia con la infidelidad y el sexo forzado en las relaciones íntimas. Las intervenciones para la prevención del VIH que no tomen en cuenta la infidelidad, la violencia y el sexo forzado, los cuales ocurren con frecuencia en las relaciones sexuales de los jóvenes, tendrán definitivamente un impacto muy limitado.

RÉSUMÉ

Contexte: La recherche antérieure a démontré une forte corrélation entre l'infection à VIH et les antécédents de violence par un partenaire intime, parmi les jeunes femmes surtout. Le rôle de la violence dans les relations sexuelles des jeunes d'Afrique subsaharienne n'est cependant pas bien compris.

Méthodes: Des intervieweurs formés localement ont mené des entrevues semi-structurées avec 40 jeunes hommes et 20 jeunes femmes de 16 à 24 ans recrutés en divers endroits publics de Dar es Salaam, en Tanzanie.

Résultats: Les participants ont décrit de complexes interactions entre la violence, la contrainte sexuelle et l'infidélité dans leurs relations sexuelles. Les hommes violents à l'égard de leurs partenaires féminines ont aussi souvent fait état de contrainte et d'infidélité sexuelle dans leurs relations. Les hommes à partenaires sexuelles multiples concomitantes ont déclaré devenir violents lorsque leurs partenaires féminines mettent en doute leur fidélité, et contraignent leurs partenaires ordinaires à avoir des rapports sexuels lorsqu'elles résistent à leurs avances. Les jeunes qui estimaient injustifiables, sous aucun prétexte, la violence et la contrainte sexuelle étaient souvent ceux encore vierges ou en relation monogame.

Conclusions: L'association entre VIH et violence identifiée parmi les jeunes dans le cadre de la recherche antérieure s'explique en partie par leur expérience de l'infidélité et de la contrainte sexuelle dans leurs relations intimes. Les interventions de prévention du VIH qui ne tiennent pas compte de l'infidélité, de la violence et de la contrainte sexuelle souvent présentes dans les relations sexuelles des jeunes ne pourront avoir qu'un impact limité.

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Reproductive Health Services and Intimate Partner Violence: Shaping a Pragmatic Response In Sub-Saharan Africa

*Like it or not, the intersection of violence and reproductive decision-making is showing up in the realities of women's lives. Both movements had better organize to confront it.*¹

More than a decade ago, Lori Heise and other advocates against intimate partner violence highlighted the urgent need for stronger links between their cause and the reproductive health movement. Since then, the magnitude and implications of violence against women have gained more attention, leading to greater recognition and acknowledgment of the negative consequences of violence for women's reproductive health.

At the national policy level, however, violence and reproductive health often remain distinct, despite the framing of both issues as essential components of women's human rights and the growing evidence connecting them.² In particular, linkage is generally inadequately addressed at the service level: Services that explicitly address violence against women are seldom integrated into women's reproductive health services, and there are few initiatives to integrate reproductive health services into a multisectoral response to violence against women.³

In this comment, we examine the context of intimate partner violence in Sub-Saharan Africa, outline the intersections between partner violence and reproductive health, and consider the opportunities for linkage at the program and service levels. In addition, we explore the opportunities and challenges related to developing an active response to domestic violence within reproductive health services in Sub-Saharan Africa.

PREVALENCE OF INTIMATE PARTNER VIOLENCE

One of the most common forms of violence against women is that perpetrated by a husband or other intimate male partner. Intimate partner violence—often called domestic violence—takes a variety of forms, including physical violence (e.g., slaps, punches, kicks, assaults with a weapon and homicide) and sexual violence (e.g., unwanted sexual touching, forced or coerced sex, or forced participation in degrading sexual acts). Violence is commonly accompanied by emotional abuse, economic restrictions and other controlling behaviors.⁴

Several population-based surveys from around the world have explored the prevalence of intimate partner violence. In these, women are asked directly about their experiences of specific acts of violence (for example, “Has a current or former partner ever hit you with his fist or with something else that could hurt you?”).⁵ Globally, 16–50% of ever-

partnered women report having been physically assaulted by an intimate partner.⁶ In Sub-Saharan Africa, 13–49% of women have ever been hit or otherwise physically assaulted by an intimate male partner, with 5–29% reporting physical violence in the year before the survey.⁷

Research also suggests that many women are sexually assaulted by their partners. Cross-sectional household surveys in one province in Zimbabwe and in Ethiopia find that 26% and 59%, respectively, of ever-partnered women have ever been forced to have sex, with 20% and 40% reporting unwanted sex in the year before the survey.⁸ The level of overlap between physical and sexual violence differs: Some men are physically violent only, some are sexually violent only and some are both physically and sexually violent.⁹

Research is also illustrating the extent to which women are physically assaulted during pregnancy. For some women who experience violence during pregnancy, the abuse is a continuation or intensification of previous abuse, whereas for others, the violence starts after they become pregnant. Ten percent of ever-pregnant women in Zimbabwe and at least 7% in South Africa have ever been physically assaulted during pregnancy.¹⁰ In Butajira, Ethiopia, 77% of currently pregnant women report physical abuse during pregnancy; 28% have been punched or kicked in the abdomen.¹¹ In the great majority of cases, the perpetrator is the father of the child.

Although these figures give an indication of the magnitude of partner violence, differences between countries and sites have to be interpreted with caution. Such differences may represent not only actual differences by setting in the prevalence of violence, but also differences in research methodology, definitions of violence, sampling techniques, interviewer training and skills, and cultural differences that affect a respondent's willingness to reveal intimate experiences.¹²

EFFECTS OF VIOLENCE ON REPRODUCTIVE HEALTH

In many countries, violence against women is still predominantly perceived as a legal or human rights issue. Yet, such violence has wide-ranging health consequences. Although national data are scarce, a number of small-scale, community-based studies indicate that intimate partner violence is an important cause of morbidity and mortality,¹³ and an important factor affecting women's reproductive health.¹⁴ Forced sex is associated with a range of gynecological and reproductive health problems, including HIV and other sexually transmitted infections (STIs), unwanted pregnancy, vaginal bleeding or infection, fibroids, decreased sexual desire, genital irritation, pain during inter-

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course, chronic pelvic pain and urinary tract infections.¹⁵ Studies have linked abuse to unwanted pregnancies, especially among adolescent females,¹⁶ and violence greatly limits married women's ability to use contraceptives.¹⁷ Furthermore, a history of domestic violence is commonly found to be more prevalent in families with many children.¹⁸ Although it has been suggested that elevated violence may be associated with the stresses of large families, data from Nicaragua suggest that the onset of abuse generally precedes having children.¹⁹

Even when physical violence is not used to control a woman's behavior, the fear of violence may greatly influence her sexual and reproductive decision-making. In South Africa, for example, 57% of women living in the Eastern Cape believe that they cannot refuse sex with their partner.²⁰ The fear of violence is commonly cited by married women as a barrier to using condoms with their husbands for STI or pregnancy prevention.²¹ For many women in Sub-Saharan Africa, the withdrawal (or threatened withdrawal) of material benefits if they refuse sex or use contraceptives against their partner's wishes can act as a powerful inhibitor of their sexual freedom and safe sex practices.²²

Violence in pregnancy may pose a threat to the life and health of the mother and the fetus.²³ Physical violence during pregnancy is associated with miscarriage, late entry into prenatal care, stillbirth, premature labor and birth, and low birth weight.²⁴ In a study of 400 villages in Pune, India, 16% of all deaths during pregnancy resulted from partner violence;²⁵ partner homicide has also been identified as an important cause of maternal deaths in Bangladesh and in the United States.²⁶ And although data from Africa are limited, recorded partner violence was the fourth leading cause of maternal death at Maputo Central Hospital in Mozambique.²⁷

Violence may also result from reproductive and sexual health problems and issues. Research in Uganda, South Africa and Zimbabwe has found that women's refusal of sex is often cited as a justification for violence.²⁸ In a sample of men interviewed in a workplace in Cape Town, factors significantly associated with sexual violence included involvement in violence outside the home (e.g., brawls or fights in public), alcohol use, multiple sexual partners and conflict over sexual refusal or the perception that their authority had been undermined.²⁹ Also, covert contraceptive use may make some women vulnerable to partner violence.³⁰ Case studies of women experiencing violence in Zimbabwe suggest that intimate partner violence may be associated with sexual health problems and infertility.³¹ Suspected infidelity is a commonly accepted reason for violence, and several studies document cases of violence by men who discovered that their partner had contracted HIV or another STI.³² In six countries in Africa, fear of ostracism and violence in the home is an important reason why pregnant women refuse an HIV test or do not return for their results.³³

Among South African women receiving antenatal care in Soweto, intimate partner violence is significantly associated with HIV seropositivity.³⁴

INTEGRATION OF RESPONSES TO VIOLENCE

Reproductive health providers are increasingly recognized as playing an active role in helping to identify, support and refer victims of partner violence.³⁵ This role may be very important, as many women who have experienced violence will not seek help from the police or support agencies, yet early identification of the problem could help limit the consequences and decrease the likelihood of further victimization.

Several professional medical bodies in industrialized countries have provided guidance for practitioners on intimate partner violence.³⁶ In Sub-Saharan Africa, however, there has been limited discussion of the potential role of reproductive health workers. Reproductive health service providers in Africa typically fall into two categories: antenatal care or midwife staff, who offer pre- and postdelivery care; and family planning staff, who provide contraceptives and advice on sexual issues, and who are now being encouraged to offer STI management services. Some public health family planning nurses may also offer counseling services on sensitive issues, such as contraceptive use, STIs and HIV. Although family planning services have long been criticized for neglecting adolescents and men, family planning and antenatal care providers do, nevertheless, cater to a large proportion of sexually active women, many of whom are or will become victims of intimate partner violence.

Demographic and Health Surveys in Sub-Saharan Africa indicate that up to 95% of women receive some sort of antenatal or family planning care. This contact with the health system provides an important window of opportunity for providers to identify and offer support to women who have experienced violence. Indeed, the involvement of reproductive health providers may be particularly appropriate, given the reproductive consequences of violence and the various reproductive health needs that may put women at increased risk of violence. Furthermore, because reproductive health providers have a long history of dealing with sensitive issues (e.g., sexuality, contraception and sex negotiation) and because there are several initiatives to train them in AIDS counseling, they may become increasingly well equipped to provide support to abused women.

Within any clinic setting providing services on a daily basis (e.g., family planning or antenatal care), it is likely that reproductive health providers come into contact with women who have experienced or are experiencing violence. Some women will disclose abuse or fear of violence, or will report having been raped. Providers also see women who do not openly disclose abuse, but who have physical signs associated with violence (e.g., bruises, lacerations and history of unexplained pregnancy complications). Finally, providers will see women who do not report or present with any problems associated with violence, but who nevertheless are living in a violent relationship.

There is ongoing debate about the extent to which it is feasible for health providers to identify and support women who have experienced violence. The most passive level of activity, which may be appropriate for settings with limited resources, is ensuring that providers do not further vic-

To ensure that women are not further victimized or blamed during the process of consultation and disclosure, reproductive health staff must first confront their own biases, misconceptions and fears about violence against women.

timize women who report having been abused or raped. At this level, policies and training should focus on ensuring that women are treated sensitively and nonjudgmentally, that the incident is recorded and that women receive appropriate STI treatment or are referred to appropriate services if needed.

A more active approach would be for health providers, during health inquiries, to ask either all women or just those who show signs of ongoing or severe violence about their experiences of violence. To identify women at high risk, it would be necessary for providers to come up with a list of potential indicators of partner violence, such as a history of unexplained injury or maternal bleeding, preterm labor or birth, and fetal injury or death.

Routine questioning necessitates the development of a short module of questions about current or past violence that providers would ask their female clients. Several such modules have been developed, and this approach has been adopted in some industrialized countries and in the International Planned Parenthood Federation–Western Hemisphere’s Latin America Program.³⁷ These initiatives generally require training for all clinic staff, and necessitate that services for women experiencing intimate partner violence become an integrated component of clinic activity. As well as being a mechanism for support, this level of investment allows providers to better understand whether presenting problems may have been caused by violence, and to gear their provision of services to reflect the specific needs of clients in violent relationships. For example, contraceptive methods such as the injectable are discreet and may be more suitable than condoms or even the pill for women whose partners oppose contraceptive use.

There is evidence that clients of reproductive health services would support such initiatives: For example, 88% of women attending a community clinic in Cape Town, South Africa, said they would welcome routine screening for violence.³⁸ A more in-depth study in the United States found that both abused and nonabused women favored screening for violence by their health providers.³⁹ Women emphasized the importance of having providers who understand domestic violence and are well informed, willing to listen and able to provide information on community resources;⁴⁰ also, they thought that reproductive health workers could play an important role by providing emotional support to women and by condemning violence. However, any kind of health service response to violence requires institutions to provide women with confidential and nonjudgmental services.⁴¹

Changing Attitudes

Reproductive health providers may hold common misconceptions and stereotypes about women who have experienced partner violence, including the assumption that such women must have done something to warrant violence or that partner violence is not a serious issue.⁴² To ensure that women are not further victimized or blamed during the process of consultation and disclosure, reproductive health staff must first confront their own biases,

misconceptions and fears about violence against women.

Confronting and changing negative or blaming attitudes is a key challenge, particularly as such attitudes may be entrenched among health workers in some settings.⁴³ As violence against women is driven by gender and power inequalities, this fundamentally requires providers to challenge issues of power and abuse in their own lives.⁴⁴ In practice, only some workers may be interested, sensitive and skilled enough to effectively deal with gender violence; even so, those staff should be recognized and supported.

A further impediment lies in an entrenched ethos of institutional hierarchies, and the ways management attitudes and cultures influence the extent to which providers can put new skills into practice. For example, without institutional support, some nurses may not be able to put their training into practice.⁴⁵

Space, Time and Confidentiality

Privacy and confidentiality are paramount considerations for working with women who have experienced violence. Women are unlikely to disclose their experiences if they do not feel confidentiality will be maintained, and women may be put at risk of further violence if their reports are overheard. Maternal and child health and family planning providers have not always been able to ensure privacy.⁴⁶ Where examination rooms are screened only with a curtain, for example, or where initial screenings take place in public, women will be reluctant to disclose violence. In addition, confidentiality may be particularly difficult in rural areas, where providers are likely to live in the same communities and may know both the woman and her partner.

Time constraints are another challenge. Often, health workers do not have much time to spend with individual clients.⁴⁷ This may mean that even if a woman discloses violence, her provider may not be able to spend a sufficient amount of time to provide her an adequate response. Allowing providers the flexibility to spend additional time with clients when needed may be an important issue in establishing trust and confidence between them.

Shaping a Pragmatic Response

Despite clear areas for potential intervention, there are few examples of serious efforts by reproductive health providers to address intimate partner violence in Africa. The dearth of operational linkage between violence and reproductive health programs at the national level results both from the inherent delay between international attention and national action, and from difficulties in developing strategic plans that allow global rhetoric to be acted upon. Even in industrialized countries where resources are not so constrained, there is debate about what form and level of health sector response to intimate partner violence may be appropriate and feasible.⁴⁸

A rush to add domestic violence services to reproductive health activities could lead to insensitive approaches that further jeopardize women’s safety. It is far preferable that a considered, sustainable and context-specific approach be developed in which the pros and cons of different forms

TABLE 1. Ways of addressing intimate partner violence, according to type of provider

Nurse/health worker	Clinic/care setting	Hospital	Ministry of Health
Being informed about the types, extent and underlying causes of violence	Developing policies on violence against women	Accepting referrals and acting as a reference point for clinic/case facilities implementing policies to address violence against women	Publicly condemning violence against women
Screening for abuse during reproductive health consultations	Ensuring private space is available when needed for consultations		Being informed about types of violence, underlying causes and consequences
Supporting women emotionally by validating their experiences, and by being nonjudgmental and willing to listen	Displaying posters/leaflets condemning violence against women	Developing protocols on the management of rape, child sexual abuse and other forms of violence	Supporting the development of policies and protocols on different forms of violence against women
Providing appropriate clinical care (e.g., emergency contraception, pregnancy testing, and STI/HIV testing and treatment)	Supporting staff interested in helping women who have experienced violence, and promoting staff access to appropriate training	Ensuring staff are appropriately trained to handle rape, child sexual abuse and other forms of violence	Incorporating specialized curricula on violence against women into health worker training
Documenting the medical consequences of violence	Supporting staff who have experienced partner violence	Developing statements on the unacceptability of violence	Monitoring and evaluating initiatives to address intimate partner violence
Maintaining confidentiality	Creating links with other local organizations working to address gender violence	Supporting staff interested in helping women who have experienced violence, and promoting staff access to appropriate training	Being active in multisectoral initiatives on intimate partner violence
Referring women to community services and resources, if they exist		Being active in multisectoral initiatives on intimate partner violence	

of intervention are carefully assessed. This must draw upon the experience and expertise of both reproductive health workers and activists against violence. In particular, some of the regional alliances that helped propel the issue onto the global agenda may provide a key asset in the development of appropriate local, national and regional initiatives.⁴⁹ Table 1 outlines the range of responses possible at different levels to provide a comprehensive response to violence.

Provider Skills and Training

If reproductive health service providers are to be trained to help abused women, appropriate and context-specific aims need to be identified. Given the many barriers, policies should be based on realistic expectations about what such an initiative may achieve.

At a minimum, reproductive health providers should give women key messages about the unacceptability of violence, and ensure that women are receiving appropriate health services and are aware of the available forms of support, if they would like to take further action. Where providers have more time or resources, they could become more involved in counseling, providing ongoing support and routinely enquiring about violence.

Expectations, however, need to be realistic. Throughout Sub-Saharan Africa, the number of trained counselors at health facilities generally remains small, and in many settings, there are ongoing doubts surrounding the efficacy of reproductive health counseling.⁵⁰ Many studies report providers’ insensitivity and poor interpersonal skills as a barrier to health seeking behavior.⁵¹ Nevertheless, in Ghana, South Africa and Zimbabwe, among others, considerable efforts by individual staff to support women in difficult sit-

uations often have been noted.⁵² The way forward may be to identify and support individual health providers who are already committed to providing support to abused women.

The development of strategies for health professionals needs to be approached with care. Western models for counseling and support may not be appropriate, and potential country-specific adaptations or models need to be considered. Initiatives should involve and build on the experiences of local and regional women’s organizations, which may have substantial experience providing domestic violence services⁵³ and may already have strong connections with legal and other forms of support.

The current widespread attention being given to HIV/AIDS prevention programs, including investment in health workers’ counseling skills, may offer a significant opportunity for the inclusion in counseling training of skills to discuss intimate partner violence. To support women who have experienced violence, it is important that providers have adequate time to talk with clients. Without the time and privacy for adequate provider-client interaction, women will not benefit, and some could be exposed to greater risk and distress. If counseling is to be beneficial to women, it needs to be done well; otherwise, it may be better to refer clients to specialized providers, if they exist.

Improving Documentation

Given the ongoing relationship that some providers have with clients, reproductive health workers may be in a position to document and testify to women’s experiences of violence. The systematic medical documentation of reports of violence can be critical for women who wish to press charges against their attacker. In addition, clear and prompt

documentation can reduce delays in service delivery: In Zimbabwe, for example, some rape survivors were denied abortions because of documentation delays.⁵⁴

At tertiary levels of care, health ministries and hospitals should develop standard protocols for documenting reports of partner violence, rape and sexual abuse. In Zimbabwe, for example, hospitals already have protocols for managing rape, including STI screening, provision of emergency contraception and access to abortion.⁵⁵ South Africa is currently developing a policy for handling rape cases, including the provision of postexposure HIV prophylaxis.⁵⁶ Procedures to respond to violence should also offer sufficient guidance on how to appropriately document cases. For example, medical affidavits may require an assessment of the severity of violence, but the criteria for this are often unclear.⁵⁷

Due care is needed, however, to ensure that documentation of violence against women does not compromise confidentiality. For example, women's safety could be jeopardized if integrated reporting forms are readily accessible to all clinic staff. The ethical and safety issues involved with services for abused women render it imperative that responding to and documenting violence be done with the utmost sensitivity.

Intersectoral Collaboration and Referral

Women who have experienced violence may need to make contact with a number of agencies, such as the police and social welfare. A coherent response to partner violence should not be confined to the clinical setting, but should coordinate different areas of service provision and support; ultimate responsibility lies with the program planners and managers, although health care providers should also be aware of the need for broader links. When facilities cannot themselves provide services to abused women but wish to refer them to other providers, the logistics of referrals need to be properly streamlined to minimize the number of steps it takes for women to receive help.

One approach to addressing such problems is to identify a "buddy" or advocate—such as a woman who has already left a violent situation and is familiar with the available services—to accompany women. Another is to identify key persons in each agency to whom a client can be directly referred. People in the different agencies could meet to review cases and learn how to strengthen and revise procedures. Where linkage to organizations working against violence is difficult or where nongovernmental organizations' activities are weak, Heise suggests identifying sympathetic community leaders, such as chiefs and clergy, who could help arrange referrals to appropriate support.⁵⁸

In general, working with diverse organizations and structures—each with its own priorities, institutional cultures and practices—can be frustrating and slow.⁵⁹ Nevertheless, there are examples of successful initiatives: For example, Ghana's police force has just established a female police corps as part of a national campaign against gender-based violence,⁶⁰ and in Namibia, the Ministry of Health and Social Services has established 13 Women and Child Protec-

tion Units, one-stop centers that provide health, legal and counseling services to abused women.⁶¹

CONCLUSIONS

In Sub-Saharan Africa, as elsewhere, physical and sexual partner violence is widespread, and has strong implications for women's reproductive health. Despite the broadened mandates at the international level, however, few initiatives are in place to integrate a response to violence into reproductive health services.

Still, pragmatic responses are possible. Even relatively low-resource initiatives can make a difference by trying to ensure that women's experiences are validated and that women are not judged or blamed for the violence they report. In settings with more resources, service providers have more opportunities to better understand the role of violence in the health problems women bring to them, to gear services to specific needs of women who have experienced violence and, where possible, to refer these women to appropriate services. Although the challenges are many, it is imperative that the issues of gender inequality and violence be challenged head on if the promise of women's reproductive rights is to be fulfilled.

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