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# Intimate partner violence among married couples in India and contraceptive use reported by women but not husbands

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#### **Abstract**

**Objective**—To assess whether intimate partner violence (IPV) is associated with discordant reports of contraceptive use (whereby wives but not husbands report such use) among married couples in Maharashtra, India.

**Methods**—The present cross-sectional study in rural Maharashtra, India, analyzed survey data collected in 2012 among husbands and wives aged 18–30 years, fluent in Marathi, with no prior sterilization, and with no current pregnancy or plans to conceive. Crude and adjusted logistic regression models assessed husbands' perpetration of IPV in relation to discordant reports of contraceptive use.

**Results**—Among 577 couples meeting the eligibility criteria, 207 (35.9%) women reported ever experiencing physical IPV from their husbands, and 183 (31.7%) reported ever experiencing sexual IPV from their husbands. In adjusted logistic regression models, discordant contraceptive use was significantly associated with wives' experiences of physical IPV (adjusted odds ratio [AOR] 1.81, 95% confidence interval [CI] 1.15–4.42) and sexual IPV (AOR 1.95, 95% CI 1.08–4.82).

**Conclusion**—Women who reported IPV from their husbands might be more likely to use contraceptives without informing their husbands, possibly to redress the reproductive control often exerted by abusive male partners.

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#### **Keywords**

Contraception; Intimate partner violence; Reproductive health

#### 1. Introduction

Intimate partner violence (IPV) occurs at a high rate among women, with one in three reporting IPV globally [1]. In a recent national study in India, 35% of women reported experiencing such violence [2]. IPV affects reproductive health and pregnancy outcomes among women, both directly as a result of physical injury and other trauma during pregnancy, and indirectly as a result of stress, increased risk of sexually transmitted infections related to IPV, reduced access to health care, and male partners limiting women's reproductive control (e.g. pregnancy coercion and control of contraceptive use) [1–6].

A woman's ability to access and make decisions about family planning has significant benefits for her reproductive health, particularly in terms of greater control over pregnancy and pregnancy timing [7–12]. In rural India, there is high and early fertility owing to the commonality of adolescent marriage and low contraceptive use before female sterilization, a procedure that women typically undergo after 30 years of age [13–16]. Among married women aged 15–24 years in rural areas, use of any contraceptives (including condoms) is reported by only 18% of the population [14]. Most young married women in rural areas (98%–99%) are aware of diverse forms of contraception, and most report a preference to delay and space their pregnancies [14]. However, barriers related to IPV—in addition to women's low social positioning within the household—have often impeded the use of family planning services in this population.

Whereas some types of contraception require involvement of the husband (e.g. condoms), other forms (e.g. pills, implants, and intrauterine devices [IUDs]) can be used by women without their partner's knowledge. Recent studies have documented that women experiencing IPV are more likely to report using these female-controlled methods than are women not reporting IPV [17–19]. One study [17] has suggested that women could be using modern, female-controlled forms of contraception without the approval (or knowledge) of their husbands. Use of contraception without the husbands knowing could be especially critical in situations when women are experiencing IPV and reproductive control by these partners [17].

As a result, the aim of the present study was to determine whether IPV perpetrated by husbands is linked to discordant reports of contraceptive use (i.e. when use is reported by wives but not husbands) among a population of married couples in rural Maharashtra, India.

#### 2. Materials and methods

For the present cross-sectional study, data were assessed from a baseline survey conducted among couples participating in a male-centered family planning intervention for young couples (Counseling Husbands to Achieve Reproductive Health and Marital Equity [CHARM]) in the rural Thane District of Maharashtra, India, between March 1 and

December 31, 2012. Data collection and analysis procedures were approved by the Institutional Review Boards at the University of California, San Diego (San Diego, CA, USA), and the National Institute for Research in Reproductive Health (Indian Council of Medical Research; Mumbai, India). All survey respondents provided informed consent.

CHARM consisted of three sessions of family planning counseling focusing on gender equity delivered by male health providers to husbands of young couples in rural Maharashtra. Participants were recruited from households within 50 geographic clusters preselected on the basis of community mapping using geographic boundaries, population density (300 households), and presence of a private healthcare provider. Trained research staff approached households to identify married men and their wives who were aged 18–30 years and fluent in Marathi within the selected clusters. Eligible couples reported no previous sterilization procedures, had resided together for the previous 3 months, and had no plans to move in the next 2 years. Research staff provided informed consent in a private space in the house among interested and eligible couples. Because of low literacy rates in the population, consent forms were read to participants in full.

Sex-matched research staff administered a 60-minute paper baseline survey separately to husbands and wives. Survey measures included assessments of sociodemographic characteristics, contraception knowledge and use, marital communication, substance use, sexual history, and gender equity attitudes. No monetary incentive was provided for study participation.

The present study analyses of CHARM baseline data were further restricted to couples who reported no current pregnancy and who did not report a desire to have another child within 12 months of the baseline survey assessment. The primary outcome of interest (contraceptive use) in the present study was based on the responses from both spousal partners. Discordant contraceptive use was defined as contraceptive use reported by wives that was not reported by husbands. This item was measured by asking the wife and her husband what method they used in the previous 3 months to avoid pregnancy. For example, if a wife reported using modern, non-barrier (i.e. female-controlled) forms of contraception (e.g. oral contraceptive pills, IUD/implant, or injectables) in the previous 3 months that was not reported by her husband, this contraceptive use was categorized as discordant.

Demographic data and reports of IPV were recorded through the survey responses of the wives. The demographic characteristics assessed included wife's age (18–20 years, 21–25 years, or 26–30 years), age at marriage (b18 vs 18 years), education (no school vs some school), number of children (0, 1, or 2), caste (scheduled caste/tribe vs backward class/none), marital age gap (husband <5 years older vs husband 5 years older), and whether the woman was generating any income (yes vs no). Physical IPV was assessed dichotomously (yes vs no) on the basis of an affirmative response to items asking the wife if her husband had ever "slapped you," "twisted your arm or pulled your hair," "pushed you, shook you, or thrown something at you," "kicked you, dragged you, or beat you up," "choked you or tried to burn you on purpose," or "threatened to attack you with a knife, gun, or any other weapon." Sexual IPV was assessed dichotomously (yes vs no) on the basis of an affirmative response to items asking the wife if her husband has ever "physically forced you to have

sexual intercourse with him even when you did not want to" or "forced you to perform sexual acts when you did not want to."

All analyses were conducted via SAS version 9.1 (SAS Institute, Cary, NC, USA). Wald  $\chi^2$  tests were used to assess differences in sample characteristics by report of discordant contraceptive use. Crude and adjusted logistic regression models were used to assess the association between contraceptive use reported by wives but not husbands and physical or sexual IPV. The models were adjusted for demographics measured among wives that were significant (at P < 0.10) in a bivariate analysis. Odds ratios (ORs) were determined with 95% confidence intervals (CIs), using a P < 0.05 as an indicator of statistical significance.

### 3. Results

Among 1881 couples screened for the CHARM survey between March and December 2012, 1143 (60.8%) were eligible to participate, 1081 (94.6%) of whom chose to participate. Of the 1081 couples who completed the CHARM survey, 577 met the eligibility criteria for the present study and their responses were included in the analysis.

More than half the women were aged 21–25 years, were married when aged 18 years or older, attended at least some school, were in a scheduled caste/tribe, and were not generating income (Table 1). Approximately half the women had one child; most of the others had two or more children (Table 1) Just over one-third of the women reported having ever experienced physical IPV from their husbands, and just under one-third reported ever experiencing sexual IPV from their husbands (Table 2).

Discordant contraceptive use was noted in 37 (6.4%) couples. Overall, 86 (14.9%) women reported use of modern non-barrier contraception in the past 3 months: 73 (12.7%) used pills, 12 (2.1%) IUD, and 1 (1.1%) injectables. Among these 86 women, 31 (36.0%) husbands did not report this use of contraception.

Findings were similar across both crude and adjusted logistic regression models. In a logistic regression model adjusted for income generation by wives, experience of physical IPV and sexual IPV were significantly associated with contraceptive use reported only by wives (Table 2).

#### 4. Discussion

The present findings indicate a link between IPV and contraceptive use reported by wives but not husbands, suggesting that women experiencing IPV could be more likely to use modern contraceptives (e.g. pills, IUD, injectables) that do not require their husband's knowledge or approval. They also provide new insight into the potential mechanisms explaining the link between IPV and use of modern, non-barrier contraceptives [17–19], and suggest that women reporting IPV are more likely to use contraceptives, such as pills or other "female-controlled" methods, without their husbands' knowledge.

Previous studies have documented that substantial reproductive control (e.g. inhibiting women's decision making regarding contraceptive use, or sabotaging women's efforts to

prevent pregnancy) is experienced by women reporting IPV by male partners [20,21]. In turn, reproductive control has been linked with greater rates of unintended pregnancy and mistimed pregnancy among women experiencing IPV [20,21]. Nevertheless, recent studies have reported increased contraceptive use among women experiencing IPV [17–19]. The present study highlights a mechanism that would explain this unexpected link between IPV and increased contraceptive use. It suggests that, as compared with women not experiencing IPV, women experiencing IPV could be more likely to use contraceptives that are female-controlled and without the knowledge of the male partner or husband. Although IPV is linked with higher rates of unintended and mistimed pregnancy despite more reports of contraceptive use, women's attempts to use contraceptives are often sabotaged by abusive male partners [6]; in the present study, a relatively small proportion of women among those reporting contraceptive use seemed to be using these methods without their husband's knowledge (36.0%). More work is needed to examine whether contraceptive use reported by wives (but not by husbands) who have experienced IPV also translates to a decrease in unintended and mistimed pregnancy.

The present study has several limitations. First, the cross-sectional design does not establish the temporality of these associations, and more work is needed to look at these relations longitudinally. Second, the items used for the analysis relied on self-reported responses. Stigma can often result in under-reporting of sensitive issues or socially undesirable outcomes, such as IPV [22–24]. Third, the numbers reporting discordant contraceptive use (and any modern contraceptive use) were low. Although under-reporting and small sample sizes would decrease statistical power to detect significant associations between key variables, the present study found several strong links among these factors. Last, in terms of generalizability, the findings are most applicable to populations of young, rural, married women in the Indian state of Maharashtra, and more work is needed to assess the relationship between IPV and discordant reports of contraceptive use between husbands and wives in other populations in India and elsewhere, particularly in other global contexts where contraceptive use is higher overall.

These limitations notwithstanding, the current study has used data from couples to understand concordance in reporting contraceptive use to document a link between women's experiences of IPV and modern, non-barrier contraceptive use that is reported only by wives (and not by husbands). Although more work is needed for confirmation, the findings suggest that women who have experienced IPV by husbands could be more likely to use "female-controlled" modern contraceptive methods without informing their husbands as a way to address the high levels of reproductive control often exerted by abusive male partners.

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Reed et al.

**Table 1**Sociodemographic characteristics of the wives participating in the present study.<sup>a</sup>

Characteristic	Total sample (n = 577)	Discordant contraceptive use in past 3 months $(n = 37)^b$	No discordant contraceptive use in past 3 months $(n = 540)^b$	P value
Age, y				0.25
18–20	99 (17.2)	10 (27.0)	89 (16.5)	
21–25	399 (69.2)	23 (62.2)	376 (69.6)	
26–30	79 (13.7)	4 (10.8)	75 (13.9)	
Age at marriage, y				0.84
<18	180 (31.2)	11 (29.7)	169 (31.3)	
18	397 (68.8)	26 (70.3)	371 (68.7)	
Marital age gap				0.42
Husband <5 y older	408 (70.7)	24 (64.9)	384 (71.1)	
Husband 5 y older	169 (29.3)	13 (35.1)	156 (28.9)	
Education				0.30
Attended some school	479 (83.0)	33 (89.2)	446 (82.6)	
No school	98 (17.0)	4 (10.8)	94 (17.4)	
Children				0.60
0	30 (5.2)	2 (5.4)	28 (5.2)	
1	299 (51.8)	22 (59.5)	277 (51.3)	
2	248 (43.0)	13 (35.1)	235 (43.5)	
Caste				0.23
Scheduled caste/tribe	401 (69.5)	29 (78.4)	372 (68.9)	
Backward class/none	176 (30.5)	8 (21.6)	168 (31.1)	
Currently report generating income				0.07
Yes	114 (19.8)	3 (8.1)	111 (20.6)	
No	463 (80.2)	34 (91.9)	429 (79.4)	

Page 8

 $<sup>^{\</sup>mbox{\it a}}\mbox{\it Values}$  are given as number (percentage) unless indicated otherwise.

 $<sup>\</sup>begin{tabular}{ll} $b$\\ Discordant contraceptive use was defined as contraceptive use reported by wives but not husbands. \end{tabular}$ 

Table 2

Logistic regression analysis of the relationship between discordant contraceptive use and physical and sexual IPV.<sup>a</sup>

Variable	Total sample $(n = 577)$	Discordant contraceptive use in past 3 months (n = $37)^b$	Total sample Discordant contraceptive use in past 3 months (n = No discordant contraceptive use in past 3 months (n = S77) $37b$ Crude odds ratio Adjusted odds ratio (n = S77) $37b$ (95% CI) (95% CI)	Crude odds ratio (95% CI)	Adjusted odds ratio (95% CI) <sup>c</sup>
Physical IPV ever					
Yes	207 (35.9)	18 (48.6)	189 (35.0)	1.75 (1.21–4.27) 1.81 (1.15–4.42)	1.81 (1.15–4.42)
No	370 (64.1)	19 (51.4)	351 (65.0)	Ref.	Ref.
Sexual IPV ever					
Yes	183 (31.7)	17 (45.9)	158 (29.3)	1.96 (1.13–4.23) 1.95 (1.08–4.82)	1.95 (1.08–4.82)
No	394 (68.3)	20 (54.1)	382 (70.7)	Ref.	Ref.

Abbreviation: IPV, intimate partner violence; CI, confidence interval.

 $\ensuremath{^{\textit{a}}}$  Values are given as number (percentage) unless indicated otherwise.

 $^{b}$ Discordant contraceptive use was defined as contraceptive use reported by wives but not husbands.

 $^{c}$ Adjusted for income generation by wives.