# Paper #1: Intimate Partner Violence and Contraceptive Use


## ABSTRACT

In the US in 1994, 49.2% of pregnancies were unintended; in 2002, 7.4% of women were sexually active and were not trying to get pregnant but were not currently using any form of contraception. Domestic violence has been hypothesized as a factor that may be associated with contraceptive noncompliance. This paper explores differences in contraceptive use between abused and non-abused women, specifically whether abused women utilize different forms of birth control than non-abused women and whether they report more discrepancy between their preferred and actual contractive method. In unadjusted analyses, abused women were less likely to report having used birth control pills and were more likely to have used condoms in the last 12 months. Women experiencing physical and emotional abuse were also more likely to report not using their preferred method of contraception in the past 12 months compared to non-abused women (OR: 1.9, 95%CI: 1.0-3.7).

## INTRODUCTION

In 1994, 49% of pregnancies in the United States were unintended; women less than 20 years old were more likely to experience an unintended pregnancy, as were women who were not currently married and those living in poverty (Henshaw, 1998). In one study, women with an unwanted pregnancy were four times more likely to have experienced physical violence by a partner compared to those with intended pregnancies (Gazmararian et al, 1995). Another study found that women with an unintended pregnancy had 2.5 times the risk of experiencing physical abuse around the time of pregnancy (Goodwin et al, 2000). In a study examining differences between mistimed and unwanted pregnancies among women with a live birth, physical abuse during pregnancy was associated both with an increased risk of an unwanted pregnancy compared to a mistimed pregnancy and of a mistimed pregnancy compared to an intended pregnancy (D'Angelo 2004).

Studies of women seeking abortions have found higher rates of intimate partner violence than in general population studies (Lumsden, 1997; Keeling et al, 2004; Woo et al. 2005). One study found that 39.5% of women seeking an abortion reported a history of physical or sexual abuse (Glander et al., 1998). In this study, women with an abuse history were significantly less likely to inform the partner of the pregnancy, to have partner support for the abortion decision, and less likely to have involved the partner in the abortion decision; they were also more likely to report relationship issues as the primary reason for obtaining the abortion. Women experiencing recent physical abuse were also less likely to disclose an induced abortion to their partners, with a significant subset of abused women reporting fear of personal harm as the primary reason for nondisclosure (Woo et al. 2005). In a study of women obtaining abortions, 46.3% were not using any form of birth control in the month they conceived; nonusers were

more likely to be separated or previously married and to have a high school education or less, and were less likely to be white (Jones, 2002). Reasons for contraceptive nonuse include perception that pregnancy was unlikely; past problems with contraceptive method; fear of side effects; unexpected sex, including unwanted sex; financial barriers; and partner's preferences, including refusal to use contraception. A history of physical abuse by a male partner and a history of sexual abuse or sexual violence were found to be associated with repeat abortion among Canadian women (Fisher et al, 2005).

Unplanned pregnancies are associated with not using any contraception, using less effective contraceptive methods, or noncompliance with effective contraceptive methods, and may result from a lack of control over fertility. Contraceptive use is highly prevalent in the United States. Data from the 2002 National Survey of Family Growth indicate that 61.9% of women had used contraception in the month prior to their interview, and 98% of women who had ever had intercourse had used some method of contraception (Mosher et al., 2004). Given the large proportion of unplanned pregnancies in the United States, contraceptive compliance is an important area of research. A review of compliance with oral contraceptives found that younger age was associated with increased missed doses and increased likelihood of becoming pregnant (Cramer, 1996). Discontinuation of oral contraceptives has been found to be associated with negative side effects, lack of information about the method, and lack of a routine around pill-taking (Dardano & Burkman, 2000).

Despite high rates of contraceptive use in the United States, 7.4% of women were sexually active and were not trying to get pregnant but were not currently using any form of contraception; these women represent the group most likely to experience an unplanned pregnancy (Mosher et al., 2004). Domestic violence has also been hypothesized as a factor that

may be associated with contraceptive noncompliance. Heise (1993) points out that women's use of contraception may be limited due to fears about partner response: women may either use no contraception or rely on methods that can be hidden from their partner. Coercion and lack of negotiating power may also contribute to nonuse of contraception (Heise 1995). Women in abusive relationships may also lack control over the timing of sexual intercourse, which would limit the effectiveness of some methods, particularly barrier methods (Heise 1995; Morewitz, 2004). In another review the authors hypothesize that abusive partners prevent women from using contraception as prescribed or refusing to pay for contraception (Branden, 1998).

A direct link between contraceptive use and intimate partner violence (IPV) in the US has not been established (Gazmararian, 2000), yet it could explain the association between unintended pregnancy and IPV. In a study of women ages 14-26 seen in a family planning clinic, women who used neither a condom nor a hormonal contraceptive at last intercourse were more likely to be in a violent relationship (Rickert et al, 2000). In another study of intimate partner violence and pregnancy intention researchers found that abusive partners made primary decisions about contraceptive use, either by refusing to use condoms or in some cases by throwing out birth control pills or diaphragms (Campbell et al, 1995). Another small qualitative study of women experiencing domestic violence found that 34% reported that their partners restricted their ability to choose whether to have children (Hathaway et al. 2005). Men engaged in behaviors which forced women to have children (such as forced sex, refusing to use birth control themselves or allowing their partners to do so, and preventing a woman from having an abortion) and preventing them from having children (in the form of pressure to have an abortion). Women also described not having children when they wanted to because they were unwilling to bring new children into an abusive relationship.

Given the associations between violence, unwanted pregnancy, and abortion, the links between domestic violence and contraceptive behavior need to be better understood. Domestic violence is a significant problem in the United States: one national survey found that 25% of women had ever been physically assaulted and/or raped by a current or former intimate partner, and 1.5% of women were assaulted and/or raped by a current or former intimate partner in the last year (Tjaden & Thoennes, 1998). This paper explores the association between contraceptive use and recent IPV, including the methods of reversible contraception utilized and any discrepancy between preferred and actual contraceptive method. The hypothesis is that the dynamics of abusive relationships may prevent women from using the contraceptive methods that they would prefer to use due to lack of partner cooperation or experiences with forced sexual intercourse, resulting in different patterns of contraceptive use. The aims of this study are to ascertain whether: (1) abused women rely on different types of contraception than non-abused women; (2) abused women are more likely than non-abused women to not use any form of contraception; and (3) abused women are more likely to not use their preferred method of contraception.

## METHODS

### *Study Design*

This is a case-control study of 309 women. Many of the cases and all controls were initially approached at a health care setting. Surveys were distributed to women in waiting rooms at various medical sites including 4 emergency departments, 5 OB/GYN, 2 pediatrics, 2 primary care and 1 addiction recovery unit at several greater-Boston hospitals. They were asked to complete a brief survey of women's stress and health; 2,465 women completed written surveys. Women were able to provide contact information if they were interested in further

participation. Overall, 156 women who provided contact information had a male partner in the past year and reported that they had experienced physical or sexual violence in the past year based on 10 items. These items included six questions from the Severity of Violence Against Women Scale (SVAWS) (Marshall, 1992), two questions from the Abuse Assessment Scale (McFarlane, 1995), and two questions from another screening instrument validated in emergency departments (Abbott, 1995) (Appendix A). These women were contacted by phone and invited to participate in a follow-up interview; 57.7% (n=90) were successfully contacted and completed the in-depth interview.

In addition, to augment the sample size of abuse cases, posters were placed throughout the hospital settings and other community agencies to recruit specifically women with recent abuse. Seventy-eight women were recruited through this method.

After data were collected from index women, a control group of women (n=141) who had a male partner in the last 12 months but who had never experienced any domestic violence was selected from the pool of those who had provided contact information.

Women who had a tubal ligation or hysterectomy (n=67) or who were over 50 years old (n=9) were excluded from all analyses. Eight additional women for whom violence status was not confirmed were excluded, resulting in a final sample size of 225 women, 115 abused women and 110 control women.

This study was conducted with the Institutional Review Board approval of the Harvard School of Public Health and all affiliated health care settings. Women were interviewed at a private office away from the health care settings, and the interviews lasted approximately two hours. Transportation was provided to and from the interviews and the women were offered $25 as compensation for their time.

*Measures*

Women were asked several questions about sociodemographic information, including age, race/ethnicity, immigrant status (i.e., born outside the U.S.), educational attainment, and relationship or marital status, whether they had children, and whether they had ever had an induced abortion. As part of the study criteria, women were required to have had a male partner in the 12 months prior to interview, so relationship status is categorized as: (1) married; (2) living with but not married to partner; (3) involved, but not living with or married to partner. Women were also asked about frequency of sexual relations in the past month (not at all, once, two or three times, about once a week, two or three times a week, four or more times a week). Women were also asked about a usual source of health care and whether their partner had ever prevented them from accessing health care services.

Use of contraception

Women were provided with a list of several forms of birth control and were asked to check those that they had used in the past 12 months. The list included: birth control pills; condom; diaphragm or cervical cap; foam, jelly or cream; female condom, vaginal pouch; emergency contraception; natural family planning such as the rhythm method, safe period by calendar, safe period by temperature or cervical mucus test; withdrawal/pulling-out; IUD, coil, loop; Norplant; Depo-Provera; and have not used birth control in the past year. Although women were allowed to indicate more than one method, for purposes of this analysis, women who used more than one method of contraception in the past 12 months were classified by the most effective method they used, consistent with the methodology of the National Survey of Family Growth (Mosher, et al.,2004). Women were then asked if they ever had a tubal ligation or hysterectomy.

Discrepancy between actual and preferred methods of contraception

Finally, women were asked what form of birth control they would most prefer to use, even if it was not the method they were currently using or available to them (i.e. they may prefer oral contraceptives but were unable to afford the prescription). Because women indicated only one preferred method, a discrepancy between preferred and actual contraceptive use was defined as not using the preferred method of contraception. Women were coded as experiencing a contraceptive discrepancy if they did not report using their preferred method of contraception in the last 12 months. Women who did not indicate a preferred method of contraception were coded as not experiencing a contraceptive discrepancy.

Intimate Partner Violence

The main independent variable is intimate partner violence in the last 12 months, based on the in-person interview. Women were classified as abused if they indicated *any one* of the following: one of the minor Conflict Tactics Scale (CTS; Strauss, 1996) items happened at least 3 times in the past 12 months; one of the severe CTS items happened at least once in the past 12 months; any injury as a result of IPV in the past 12 months; or a score of at least 18 on the Women's Experience with Battering (WEB) Scale, which is a measure of emotional abuse (Smith et al., 1999) (see Appendix A). The designations "minor" and "major" items of the CTS were indicated by the original authors of the measure. Violence status was further categorized by the presence of emotional abuse on the WEB Scale, resulting in three groups (no abuse, physical abuse only, or physical and emotional abuse). Finally, the subset of abused women who experienced sexual violence was examined separately using two items from the CTS: 1) insist on sex when you did not want to (but did not use physical force) and 2) use force (like hitting, holding down, or using a weapon) to make you have sexual intercourse.

*Statistical Analyses*

The associations between demographic characteristics, intimate partner violence and contraceptive behavior were measured using Pearson $X^2$ tests.

Multiple logistic regression was used to develop a model of the relationship between intimate partner violence and nonuse of contraception. A second multiple logistic regression model of the relationship between intimate partner violence and contraceptive discrepancy was estimated.

Variables that were significant at $p \leq 0.10$ were selected for inclusion in adjusted models. Non-significant variables that were not confounders were removed from the model due to limited statistical power in both multiple logistic regression models. Confounding was established if the addition of a variable to the model changed the coefficient of the main exposures of interest (i.e. IPV) by more than 10% (Grayson, 1987). All analyses were conducted using SAS Statistical Software (Version 9, Cary, NC: SAS Institute Inc., 2003).

**RESULTS**

Demographic characteristics of the sample by abuse status are shown in Table 1. Several of the demographic characteristics are significantly associated with IPV. Abused women were older than non-abused women, were less likely to be white, and were less likely to have graduated high school or attended any college. Women who had experienced IPV were slightly less likely to be married, were more likely to have children, were more likely to have had an abortion, and reported less sexual activity during the past month.

Table 2 shows the distribution of actual and preferred contraceptive methods used by abuse status. Approximately 14% of the sample used no form of contraception during the preceding year. More abused women reported not using any contraception than controls (17.4%

vs. 10.9%), although the group difference failed to reach statistical significance (p=0.16). The most common methods of contraception were birth control pills, condoms, and depo-provera. In unadjusted analyses, abused women were less likely to report having used birth control pills in the last 12 months and were more likely to report using condoms. Abused women were also less likely to prefer using birth control pills, although there was no difference in preference of condoms between abused and non-abused women.

Of the women who reported no use of contraception in the last 12 months, only 25% reported that they preferred to be using no contraception. Almost 30% did not report a preferred method of contraception, but 22% preferred using birth control pills and 19% preferred using condoms. Intimate partner violence was unrelated to using any contraception in the last 12 months in this sample (OR: 1.7, 95% CI: 0.8-3.7) (Table 3). The additional measures of abuse (the three category variable incorporating emotional abuse and sexual violence) were also not associated with contraceptive nonuse. In unadjusted analysis, age, relationship status, and not having sex in the last 30 days were significantly associated with not using any birth control in the past year, and there was also borderline association with having any children. In the adjusted model, only age and relationship status remained significantly associated with contraceptive nonuse, with women 40-49 years old (OR: 5.0, 95% CI: 2.0-12.4) and married women (OR: 2.7, 95% CI: 1.1-6.7) being more likely not to have used any contraception. The indicator for whether women were recruited by posters was not significant in the adjusted model, and was not a confounder of the association between violence and contraceptive nonuse.

Finally, not using the preferred method of contraception was not associated with the crude measure of abuse (OR: 1.5, 95% CI: 0.8-2.9) or sexual violence (OR: 0.9, 95% CI: 0.4-1.7) (Table 4). However, women who were experiencing both physical and emotional violence were

significantly more likely to report a contraceptive discrepancy compared to women experience no abuse (OR: 1.9, 95% CI: 1.0-3.7). Age and not having sex in the last 30 days were also associated with not using the preferred method of contraception in unadjusted analysis. In the adjusted model, experiencing both physical and emotional violence was no longer significantly associated with contraceptive discrepancy (OR: 1.5, 95% CI: 0.7-3.1). Younger women were more likely to report not using the preferred method of contraception (OR: 2.2, 95% CI: 1.0-4.9). The indicator for whether women were recruited by posters was not significant in the adjusted model, and was not a confounder of the association between violence and contraceptive discrepancy.

Whether women reported a usual source of health care and whether their partner had ever prevented them from accessing health care services were also examined as possible explanations for those women not using contraception and reporting a discrepancy between their preferred and actual use. In this sample, most women (92.4%) reported they had a usual source of care, and having a usual source of care was not associated with either of the outcomes.

**DISCUSSION**

Contraceptive patterns do appear to differ by abuse status, with abused women reporting more use of condoms and non-abused women reporting more use of oral contraceptives. The finding that abused women were more likely to use condoms contradicted the original study hypotheses. One possible explanation was that abused women may be more likely to report condom use because they were less likely to be married or living with their male partners. Additional analysis showed that controlling for relationship status, there was no association between condoms and abuse (OR: 1.6, 95% CI: 0.8-2.9); women who were not married to their partner were significantly more likely to report using condoms.

Although there was a fairly high rate of not using contraception in this study (13.9%), abuse was not significantly associated with contraceptive nonuse, although the OR was elevated and likely would have been significant in a larger sample (power calculations indicate a sample size of 386 women would be necessary). The significant predictors of contraceptive nonuse, age and relationship status, are expected. Older women may be less likely to use any contraception because of a perceived low risk of pregnancy.

Abuse and contraceptive discrepancy were significantly associated in unadjusted analysis, although the relationship was not significant when controlling for other variables. Younger women and women with children were significantly more likely to report a contraceptive discrepancy. Contraceptive discrepancy between a woman's preferred and actual contraceptive methods is a new concept explored in this paper. Unlike unmet need for contraception, contraceptive discrepancy also incorporates an individual's preferences for a contraceptive method. In countries such as the United States with fairly wide availability of contraception, understanding why women are not using their preferred method of contraception may be important to understanding discontinuation of and noncompliance with certain methods.

Women in this study were recruited in medical settings and therefore had relatively high access to care, limiting our ability to explore the contribution of access to care on contraceptive behaviors. Replicating this study in the general population may provide more information about the relationship between access to health care, intimate partner violence, and contraceptive use patterns.

*Strengths and Limitations*

To the best of our knowledge, this is the first study reporting quantitative data about the reversible contraceptive methods used by women experiencing intimate partner violence. This

study used several measures of violence exposure, which allowed for the evaluation of a relationship between contraceptive use patterns and different forms of violence, particularly the role of emotional abuse.

This was a fairly small study and did not have enough power to explore the question of discrepancy on each method of contraception, such as a difference between preferred and actual use of condoms. One limitation of this study is the cross-sectional nature, meaning that the causal direction cannot be determined. The hypothesis is that experiences with intimate partner violence would cause women to select different methods of contraception, but an alternate explanation may be that use of some methods of contraception may provoke violence, particularly if there are different opinions within the couple about having children. Partners' opinions about contraceptive use were not obtained.

Second, women were only allowed to select one preferred method of contraception, which limits complete exploration of discrepancies between preferred and actual use of contraception. We can only say whether or not women are using their preferred method, rather than also looking at women who are using methods they would prefer not to. For example, a woman may be using an IUD because of the long-term effect even though she would prefer to be using condoms but is unable to because of an unwilling partner.

Finally, unmeasured variables may be important to understanding the contraceptive behavior of abused and non-abused women. For example, we have no information on desire to become pregnant, which may help to explain the large proportion of women who were not using contraception in the past 12 months. The number of sexual partners is also unknown and may influence a woman's choice of contraception. This is particularly important because the abused women were less likely to be married to or living with their partners, and therefore may be more

likely to use condoms. Insurance status may be another important variable in contraceptive decision-making: women who may prefer to use oral contraceptives may actually use condoms if their insurance doesn't cover prescriptions.

*Conclusion*

This paper adds to the literature on women's contraceptive decision-making, as well as the discussion about unintended pregnancies and intimate partner violence. Although this was a fairly small study, there appears to be evidence suggestive of different contraceptive use patterns among abused and non-abused women that should be further explored in larger studies. Physicians need to consider how domestic violence may be influencing their patients' use of contraceptives.

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| Table 1. Demographic characteristics of Abused and Non-Abused Women (n=225) | | | | |
|---|---|---|---|---|
| | **Overall (%)** | **Non-Abused (%)** | **Abused (%)** | **p-value** |
| **Total** | | 35.9 (83) | 64.1 (148) | |
| | | | | |
| **Age** | | | | |
| 18-21 | 17.3 | 14.6 | 20.0 | 0.0356 |
| 22-39 | 67.6 | 75.4 | 60.0 | |
| 40-49 | 15.1 | 10.0 | 20.0 | |
| **Race** | | | | |
| White | 45.3 | 60.9 | 30.4 | <0.001 |
| Black | 39.6 | 27.3 | 51.3 | |
| Other | 15.1 | 11.8 | 18.3 | |
| **Born in the United States** | | | | |
| Yes | 77.8 | 71.8 | 83.5 | 0.0355 |
| No | 22.2 | 28.2 | 16.5 | |
| **Education** | | | | |
| Less than $12^{th}$ Grade | 16.4 | 9.1 | 23.5 | <0.001 |
| High School Graduate | 39.6 | 32.7 | 46.1 | |
| College or beyond | 44.0 | 58.2 | 30.4 | |
| **Relationship Status** | | | | |
| Not Married or Living Together | 59.1 | 52.7 | 65.2 | 0.0206 |
| Living Together | 19.6 | 18.2 | 20.9 | |
| Married | 21.3 | 29.1 | 13.9 | |
| **Any Children** | | | | |
| No | 49.8 | 60.6 | 39.3 | 0.0020 |
| Yes | 50.2 | 39.4 | 60.8 | |
| **History of Abortion** | | | | |
| No | 60.5 | 68.8 | 52.6 | 0.0135 |
| Yes | 39.5 | 31.2 | 47.4 | |
| **Sex in last 30 days** | | | | |
| Yes | 73.0 | 82.6 | 63.7 | 0.0016 |
| No | 27.0 | 17.4 | 36.3 | |
| | | | | |

| Table 2. Contraceptive use and preference by experiences with violence (N=225) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Actual Use** | | | | **Preferred Use** | | | |
| | **Overall (%)** | **Abused (%)** | | **p-value** | **Overall (%)** | **Abused (%)** | | **p-value** |
| | | No | Yes | | | No | Yes | |
| **Contraceptive Method** | | | | | | | | |
| No Contraception | 14.2 | 10.9 | 17.4 | 0.1641 | 7.6 | 6.4 | 8.7 | 0.5082 |
| Birth Control Pills | 36.9 | 46.4 | 27.8 | 0.0040 | 31.1 | 43.6 | 19.1 | <0.001 |
| Condom | 27.1 | 20.9 | 33.0 | 0.0407 | 20.4 | 16.4 | 24.4 | 0.1377 |
| Depo-provera | 14.7 | 14.6 | 14.8 | 0.9599 | 12.4 | 10.0 | 14.8 | 0.2773 |
| IUD, Coil, Loop | 3.4 | 4.6 | 2.6 | 0.4329 | 3.4 | 3.6 | 3.5 | 0.9490 |
| Other | 3.4 | 2.7 | 4.4 | 0.5117 | 5.3 | 3.6 | 7.0 | 0.2679 |
| No Preference | | | | | 19.6 | 16.4 | 22.6 | 0.2378 |
| | | | | | | | | |

| Table 3. Demographic characteristics and violence indicators by nonuse of contraception in last 12 months (N=225) | | | | | |
|---|---|---|---|---|---|
| **Variable** | **No** | **Yes** | **p-value** | **Unadjusted OR (95% CI)** | **Adjusted OR (95% CI)** |
| **Total** | 85.8 | 14.2 | | | |
| | | | | | |
| **Abused in last 12 Months** | | | | | |
| No | 50.8 | 37.5 | 0.1641 | REF | |
| Yes | 49.2 | 62.5 | | 1.7 (0.8-3.7) | |
| **Type of abuse in last 12 Months** | | | | | |
| No Abuse | 50.8 | 37.5 | 0.3293 | REF | |
| Physical Abuse only | 15.0 | 15.6 | | 1.4 (0.6-4.3) | |
| Physical and Emotional Abuse | 34.2 | 46.9 | | 1.9 (0.8-4.2) | |
| **Sexual Violence** | | | | | |
| No | 74.1 | 68.8 | 0.5267 | REF | |
| Yes | 25.9 | 31.2 | | 1.3 (0.6-2.9) | |
| **Age** | | | | | |
| 18-21 | 19.7 | 3.1 | <0.001 | 0.2 (0.03-1.6) | 0.3 (0.03-2.0) |
| 22-39 | 70.0 | 53.1 | | REF | REF |
| 40-49 | 10.4 | 43.8 | | 5.6 (2.4-13.0) | 5.0 (2.0-12.4) |
| **Race** | | | | | |
| White | 45.6 | 43.8 | 0.8374 | REF | |
| Black | 38.9 | 43.8 | | 1.2 (0.5-2.6) | |
| Other | 15.5 | 12.5 | | 0.8 (0.3-2.7) | |
| **Born in the United States** | | | | | |
| Yes | 76.7 | 84.4 | 0.3324 | REF | |
| No | 23.3 | 15.6 | | 1.6 (0.6-4.5) | |
| **Education** | | | | | |
| Less than 12$^{th}$ Grade | 16.6 | 15.6 | 0.9393 | 0.9 (0.3-2.6) | |
| High School Graduate | 39.9 | 37.5 | | 0.9 (0.4-2.0) | |
| College or beyond | 43.5 | 46.9 | | REF | |
| **Relationship Status** | | | | | |
| Not Married or Living Together | 61.1 | 46.9 | 0.0029 | REF | REF |
| Living Together | 21.2 | 9.4 | | 0.6 (0.2-2.1) | 0.5 (0.1-2.0) |
| Married | 17.6 | 43.8 | | 3.2 (1.4-7.4) | 2.7 (1.1-6.7) |
| **Any Children** | | | | | |
| No | 52.2 | 35.5 | 0.0851 | REF | |
| Yes | 47.8 | 64.5 | | 2.0 (0.9-4.4) | |
| **History of Abortion** | | | | | |
| No | 60.4 | 61.3 | 0.9264 | REF | |
| Yes | 39.6 | 38.7 | | 1.0 (0.4-2.1) | |
| **Sex in last 30 days** | | | | | |
| Yes | 75.8 | 56.3 | 0.0213 | REF | REF |
| No | 24.2 | 43.7 | | 2.4 (1.1-5.3) | 2.0 (0.8-4.7) |
| | | | | | |
| **Poster** | | | | | |
| No | 82.4 | 68.8 | 0.0717 | REF | |
| Yes | 17.6 | 31.3 | | 2.1 (0.9-4.9) | |
| | | | | | |

| Table 4. Table 3. Demographic characteristics and violence indicators by contraceptive discrepancy (N=225) | | | | | |
|---|---|---|---|---|---|
| **Variable** | **No** | **Yes** | **p-value** | **Unadjusted OR (95% CI)** | **Adjusted OR (95% CI)** |
| **Total** | 76.0 | 24.0 | | | |
| | | | | | |
| **Abused in last 12 Months** | | | | | |
| No | 51.5 | 40.7 | 0.1694 | REF | |
| Yes | 48.5 | 59.3 | | 1.5 (0.8-2.9) | |
| **Type of abuse in last 12 Months** | | | | | |
| No Abuse | 51.5 | 40.7 | 0.0988 | REF | REF |
| Physical Abuse only | 16.4 | 11.1 | | 0.9 (0.3-2.3) | 0.8 (0.3-2.2) |
| Physical and Emotional Abuse | 32.2 | 48.2 | | 1.9 (1.0-3.7) | 1.5 (0.7-3.1) |
| **Sexual Violence** | | | | | |
| No | 72.5 | 75.9 | 0.6212 | REF | |
| Yes | 27.5 | 24.1 | | 0.9 (0.4-1.7) | |
| **Age** | | | | | |
| 18-21 | 15.8 | 22.2 | 0.0338 | 1.9 (0.9-4.2) | 2.2 (1.0-4.9) |
| 22-39 | 71.9 | 53.7 | | REF | REF |
| 40-49 | 12.3 | 24.1 | | 2.6 (1.2-5.9) | 2.0 (0.9-4.8) |
| **Race** | | | | | |
| White | 47.9 | 37.0 | 0.1029 | REF | |
| Black | 35.7 | 51.9 | | 1.9 (1.0-3.7) | |
| Other | 16.4 | 11.1 | | 0.9 (0.3-2.4) | |
| **Born in the United States** | | | | | |
| Yes | 75.4 | 85.2 | 0.1331 | REF | |
| No | 24.6 | 14.8 | | 1.9 (0.8-4.3) | |
| **Education** | | | | | |
| Less than 12$^{th}$ Grade | 16.4 | 16.7 | 0.9708 | 1.1 (0.4-2.6) | |
| High School Graduate | 39.2 | 40.7 | | 1.1 (0.6-2.1) | |
| College or beyond | 44.4 | 42.6 | | REF | |
| **Relationship Status** | | | | | |
| Not Married or Living Together | 59.1 | 59.3 | 0.7582 | REF | |
| Living Together | 20.5 | 16.7 | | 0.8 (0.4-1.9) | |
| Married | 20.5 | 24.1 | | 1.2 (0.6-2.5) | |
| **Any Children** | | | | | |
| No | 52.2 | 42.0 | 0.2088 | REF | |
| Yes | 47.8 | 58.0 | | 1.5 (0.8-2.9) | |
| **History of Abortion** | | | | | |
| No | 62.7 | 53.7 | 0.2379 | REF | |
| Yes | 37.3 | 46.3 | | 1.5 (0.8-2.7) | |
| **Sex in last 30 days** | | | | | |
| Yes | 76..5 | 61.5 | 0.0339 | REF | REF |
| No | 23.5 | 38.5 | | 2.0 (1.0-3.9) | 1.8 (0.9-3.6) |
| **Poster** | | | | | |
| No | 83.0 | 72.2 | 0.0806 | REF | |
| Yes | 17.0 | 27.8 | | 1.9 (0.9-3.9) | |
| | | | | | |