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# Intimate Partner Violence and its Association With Contraceptive Use Among Women in Pakistan

### **Kashif Siddique**

Bahauddin Zakariya University

## Rubeena Zakar, Ra'ana Malik, Naveeda Farhat, and Farah Deeba

### University of the Punjab

The aim of this study is to find the association between Intimate Partner Violence (IPV) and contraceptive use among married women in Pakistan. The analysis was conducted by using cross sectional secondary data from every married women of reproductive age 15-49 years who responded to domestic violence module (N = 3687) of the 2012-13 Pakistan Demographic and Health Survey. The association between contraceptive use (outcome variable) and IPV was measured by calculating unadjusted odds ratios and adjusted odds ratios with 95% confidence intervals using simple binary logistic regression and multivariable binary logistic regression. The result showed that out of 3687 women, majority of women 2126 (57.7%) were using contraceptive in their marital relationship. Among total, 1154 (31.3%) women experienced emotional IPV, 1045 (28.3%) women experienced physical IPV and 1402 (38%) women experienced both physical and emotional IPV together respectively. All types of IPV was significantly associated with contraceptive use and women who reported emotional IPV (AOR 1.44; 95% CI 1.23, 1.67), physical IPV (AOR 1.41; 95% CI 1.20, 1.65) and both emotional and physical IPV together (AOR 1.49; 95% CI 1.24, 1.72) were more likely to use contraceptives respectively. The study revealed that women who were living in violent relationship were more likely to use contraceptive in Pakistan. Still there is a need for women reproductive health services and government should take initiatives to promote family planning services, awareness and access to contraceptive method options for women

Kashif Siddique, Department of Gender Studies, Bahauddin Zakariya University, Multan, Pakistan

Rubeena Zakar, Ra'ana Malik, Naveeda Farhat, and Farah Deeba, Institute of Social and Cultural Studies, University of the Punjab, Lahore, Pakistan.

Correspondence concerning this article should be addressed to Kashif Siddique, Department of Gender Studies, Bahauddin Zakariya University, Multan, Pakistan.Email: kashif.siddique@bzu.edu.pk

to reduce unintended or mistimed pregnancies that occurred in violent relationships.

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Intimate Partner Violence (IPV) is a universal phenomenon, affecting millions of women every year. Around the world, approximately one out of every five women has experienced IPV and 35 percent women have experienced physical or emotional violence (Garcia-Moreno, Heise, Jansen, Ellsberg, & Watts, 2005). The prevalence of the IPV is more in the South Asian countries where one out of three women reports physical or sexual violence from her partner (García-Moreno, 2013). In Pakistan, many hospital based studies affirm that psychological IPV ranges from 43% to 97% and one third ever married females reproductive aged 15- 49 years experience physical violence (Ali, Asad, Morgen, & Krantz, 2011; Zakar, 2012).

In some cultures, violence is considered to be a routine or normal matter and may not affect women health (Arriaga & Oskamp, 1999). This perception is due to patriarchal social structures, the societal devaluation of females, husband's leading and commanding role in marital relationship, religious doctrine and lack of culturally competed laws and policies prohibiting IPV contribute to its widespread perpetration and acceptance (Ayyub, 2000; Mumtaz, Mitha, & Tahira, 2003; Niaz, 2003).

IPV is a major public health issue in Pakistan. Women with IPV have reported to have suffered from injuries, unintended pregnancies, and gynecological and psychological problems (Coker, Smith, Bethea, King, & McKeown, 2000). Most of the studies conducted in the world also document that IPV is associated with increased risk for unintended pregnancy among young women aged above 30 years due to poorer reproductive control (García-Moreno, 2013; McCleary-Sills, McGonagle, & Malhotra, 2012; Rahman, Sasagawa, Fujii, Tomizawa, & Makinoda, 2012).

Globally, four out of ten pregnancies are unintended and half of these pregnancies are resulting in induced abortions (Sedgh, Henshaw, Singh, Ahman, & Shah, 2007; Tsui, McDonald-Mosley, & Burke, 2010). Most of these unintended pregnancies happen in developing countries, including Pakistan where approximately 37% of all pregnancies are unintended (Sathar, Singh, & Fikree, 2007).

IPV affects the choice of contraceptive use among women. Previous studies from various regions have mixed results. Some research's found that women facing IPV are less likely to use contraception (McCleary-Sills et al., 2012; Salam, Alim, & Noguchi, 2006; Stephenson, Jadhav, & Hindin, 2012; Zakar, Zakar, Mikolajczyk, & Krämer, 2012). However, the recent studies from South Asia are indicating that women are experiencing IPV is more likely to use women-controlled contraception methods (Dalal, Andrews, & Dawad, 2012; Das et al., 2013).

Socio-demographic and economic factors also influence contraceptive use. A study mentions that women education, economic opportunity and level of husband-wife communication about family planning (FP) are the major contributing factors in the use of contraceptive in Pakistan (Mahmood & Ringheim, 1996). But on the other side, this situation is more crucial in contraceptive use when women suffer from IPV. There are almost no researches that indentify the use of contraceptive in violent relationship among married women in Pakistan. Therefore, the research hypothesis of the study is women who have experienced IPV are less likely to use any contraceptive as compared to women who have not experienced IPV in Pakistan.

### Method

The secondary data used in the current study came from third Pakistan Demographic Health Survey (PDHS) that was publicly available. The survey was conducted by National Institute of Population Studies Islamabad, Pakistan and ICF International, Calverton, Maryland between October 2012 and March 2013. PDHS chose a national representative sample in different regions of Pakistan. The data using a cross-sectional design and were originally collected, and used a 2-stage, stratified, random sampling design as part of the PDHS. The detailed survey design, data collection, and management method have been elaborated elsewhere (Demographic, 2015).

14,569 ever married women were selected out of them 13,558 were interviewed successfully. Overall response rate was 93%. In the PDHS design, Azad Jammu and Kashmir, restricted military areas and Federally Administered Tribal Areas were excluded. At the time of survey, the sample was only for the married female aged 15-49 years who had engaged in domestic violence module. Regarding domestic violence among the complete PDHS sample, one in every three households was preselected to be interviewed regarding domestic violence. To keep confidentiality, from each household, one woman was randomly selected by using the Kish grid method. Out of 3743 eligible women, 3687 women were able to complete the domestic violence module. Through face-to-face interviews with trained female

interviewers, domestic violence data were collected (Demographic, 2015).

In this present study, the outcome variable was "Has she ever used contraceptive" (family planning methods- modern, folkloric & traditional)? The outcome variable was defined and measured as 'a married woman who reported that she did not ever use any contraceptive' was considered as "no" and 'a married woman who reported that she had ever used any contraceptive' was considered as "yes".

About the exposure variables in the study respondents were asked if they had ever experienced physical IPV, emotional IPV and both emotional and physical IPV together in their marital life. Physical IPV was defined as ever been pushed, shaken or had something thrown at by husband, slapped, punched with fist or hit by something harmful by husband and arm twisted or hair pulled by husband, ever been kicked or dragged by him, strangled or burnt by him and threatened with knife/gun or other weapon by him. Physical IPV had two categories as "no" (for the women who experienced no physical violence) and "yes" (for the women who experienced physical violence). Emotional IPV was defined as 'they had ever been humiliated, threatened, or insulted by their husbands'. Emotional IPV was measured as "no" if she did not experience emotional violence and "yes" if she experienced emotional violence. The researcher used grouped emotional IPV variable that was built in PDHS. The both emotional and physical IPV was measured by computing physical IPV and emotional IPV.

Other socio-demographic variables were woman age, woman education, wealth index, type of residence and every respondent was asked if had a say in choosing her husband, age at marriage, number of living children, her earning more than her husband, her father ever had beaten her mother, she was afraid of her husband, ever had terminated pregnancy, wanted pregnancy when had become pregnant, who person was usually decided of respondent's health care, if ever she had visited any service of FP, knowledge about FP, husband desired a child, husband controlled women and husband drank alcohol.

Descriptive statistics for socio-demographic variables, intimate partner violence (any violence, emotional violence and physical violence) and contraceptive use were presented as frequency distributions and percentages. The associations between contraceptive use and IPV was measured by Chi-square test and two-tailed p value of less than .05 was considered statistically significant.

Association between women's ever contraceptive use and sociodemographic variables and intimate partner violence were assessed by calculating unadjusted Odds Ratios (OR) and adjusted odds ratios (AOR) with 95% Confidence Interval (CI). A simple binary logistic regression analysis was carried out to assess the relationship between ever contraceptive use and the socio-demographic and IPV variables. In the multivariate logistic regression analysis, the inclusion of sociodemographic and IPV variables was based on a significant level of p < .05. The AOR was obtained by adjusting woman age; women education and wealth index were significant at p < .05 in bivariate analysis.

### Results

There were 3687 women who completed the violence module of PDHS survey 2012-13. The characteristics of the respondents were shown in Table 1. Of the total respondents, 1262 (34.4%) were aged between 29-37 years, 2051 (55.6%) women had no education, 1605 (43.5%) women had high wealth index, 1092 (29.6%) women were living in Punjab, and more than half 1953 (53%) women were living in rural areas of Pakistan. Majority of the women 2979 (80.9%) had a say in choosing their husbands, 2001 (54.3%) women were married aged 18-27 years, and 1857 (50.4%) women had two children. 2597 (76.1%) women had a family history of their mothers' being beaten by their father, and 1631 (44.5%) women were not afraid of their third 1325 (35.9%) women had terminated husbands. One pregnancies, 1604 (78.7%) had intended pregnancy (wanted then), mostly both husband and wife 1427 (40.3%) took their health care decisions, mostly 1240 (52.2%) women had never visited FP clinics and 2668 (72.4%) women had no knowledge about FP methods. 1808 (62.8%) respondents and their husbands had desire for the next children, one third 1213 (32.9%) respondents' husbands had a control over them, and only 218 (5.9%) respondents' husbands had drunk alcohol (see Table 1).

More than half 2126 (57.7%) women had ever used contraceptive in their marital life. Approximately one third 1402 (38%) women reported any IPV, 1154 (31.3%) women reported emotional IPV 1154 (31.3%) and 1045 (28.4%) women reported physical IPV respectively. In a Chi-square test, significant associations were observed among women who had ever used contraceptive and IPV (both IPV together,  $p < .00, \chi^2 = 13$ ; emotional IPV,  $p < .00, \chi^2 = 9.35$ ; and physical IPV, p $< .05, \chi^2 = 4.77$ ). There were also significant associations observed between socio-demographic variables and women's ever using contraceptive (see Table 1).

### Table 1

| Variables   | f(0/)               | Women had ever used<br>Contraceptive |             | 2                  |
|---|---------------------|--------------------------------------|-------------|--------------------|
|   | f(%)                |                                      | 1           | $\chi^2$ -test     |
|   |                     | No                                   | Yes         |                    |
|   |                     | ( <i>n</i> =1561)                    | (n = 2126)  |                    |
|   |                     | f(%)                                 | f(%)        |                    |
| Age   |                     |                                      |             | 113.73**           |
| 15-28   | 1170 (31.7)         | 643 (55)                             | 527 (45)    |                    |
| 29-37   | 1262 (34.4)         | 443 (35.1)                           | 819 (64.9)  |                    |
| 38-49   | 1255 (34)           | 475 (37.8)                           | 780 (62.2)  |                    |
| Respondent education                                      |                     | (1,1,2)                              | , ( )       | 129.29**           |
| No education  | 2051(55.6)          | 1035 (50.5)                          | 1016 (49.5) | 127.27             |
| Primary   | 530 (14.4)          | 186 (35.1)                           | 344 (64.9)  |                    |
| Secondary   | 654 (17.7)          | 211 (32.3)                           | 443 (67.7)  |                    |
| Higher  | 452 (12.3)          | 129 (28.5)                           | 323 (71.5)  |                    |
| Wealth Index  |                     |                                      | ( )         | 208.97***          |
| Low   | 1398 (37.9)         | 784 (56.1)                           | 614 (43.9)  | 200077             |
| Middle  | 684 (18.6)          | 296 (43.3)                           | 388 (56.7)  |                    |
| High  | 1605 (43.5)         | 481 (30)                             | 1124 (70)   |                    |
| Area  |                     |                                      |             | 91.37***           |
| Urban   | 1734 (47)           | 591 (34.1)                           | 1143 (65.9) |                    |
| Rural   | 1953 (53)           | 970 (49.7)                           | 983 (50.3)  |                    |
| Women have a say in cho                                   |                     |                                      |             | 7.48 <sup>**</sup> |
| No  | 705 (19.1)          | 331 (47)                             | 374 (53)    |                    |
| Yes   | 2979 (80.9)         | 1230 (41.3)                          | 1749 (58.7) |                    |
| Age at marriage   |                     |                                      |             | 4.60               |
| 10-17   | 1562 (42.4)         | 682 (43.7)                           | 880 (56.3)  |                    |
| 18-27   | 2001 (54.3)         | 819 (40.9)                           | 1182 (59.1) |                    |
| 28-48   | 124 (3.4)           | 60 (48.4)                            | 64 (51.6)   |                    |
| Number of children  |                     |                                      |             | 20.0***            |
| No child  | 1338 (36.3)         | 624 (46.6)                           | 714 (53.4)  |                    |
| Having 2 children   | 1857 (50.4)         | 721 (38.8)                           | 1136 (61.2) |                    |
| More than 2 children                                      | 492 (13.3)          | 216 (43.9)                           | 276 (56.1)  |                    |
| Respondents earning in comparison to husband( $n = 694$ ) |                     |                                      |             | $8.28^{*}$         |
| More than him   | 66 (9.5)            | 18 (27.3)                            | 48 (72.7)   |                    |
| Less than him   | 548 (79)            | 237 (43.2)                           | 311 (56.8)  |                    |
| About the same  | 57 (8.2)            | 23 (40.4)                            | 34 (59.6)   |                    |
| Husband doesn't earn                                      | 23 (3.3)            | 13 (56.5)                            | 10 (43.5)   |                    |
| Respondent father ever be                                 |                     |                                      |             | 1.21               |
| No  | 2597 (76.1)         | 1096 (42.2)                          | 1501 (57.8) |                    |
| Yes   | 817 (23.9)          | 327 (40)                             | 490 (60)    |                    |
| Respondent is afraid of hu                                | usband $(n = 3666)$ |                                      |             | 10.30**            |
| Never afraid  | 1631(44.5)          | 650 (39.9)                           | 981 (60.1)  |                    |
| Most of the time  | 456 (12.4)          | 187 (41)                             | 269 (59)    |                    |
| Sometime  | 1579 (43.1)         | 716 (45.3)                           | 863 (54.7)  |                    |

Reponses Analysis for use of Contraceptives in Violence Module of PDHS 2012-2013 (N = 3687)

Continued...

| Variables                      | f (%)             |                     | Women had ever used |                |
|--------------------------------|-------------------|---------------------|---------------------|----------------|
|                                |                   |                     | ceptive             | $\chi^2$ -test |
|                                |                   | No                  | Yes                 |                |
|                                |                   | (n = 1561)          | (n = 2126)          |                |
|                                |                   | f (%)               | f(%)                |                |
| Ever have terminated pregna    | ncy               |                     |                     | 26.40***       |
| No                             | 2362 (64.1)       | 1074 (45.5)         | 1288 (54.5)         |                |
| Yes                            | 1325 (35.9)       | 487 (36.8)          | 838 (63.2)          |                |
| Wanted pregnancy when bec      | ame pregnant      |                     |                     | 31.40***       |
| Wanted then                    | 1604 (78.7)       | 657 (41)            | 947 (59)            |                |
| Wanted later                   | 190 (9.3)         | 51 (26.8)           | 139 (73.2)          |                |
| Wanted no more                 | 244 (12)          | 63 (25.8)           | 181 (74.2)          |                |
| Person who usually decides n   | respondent health | h care ( $n = 3544$ | )                   | 121.84***      |
| Respondent alone               | 420 (11.9)        | 139 (33.1)          | 281 (66.9)          |                |
| Respondent and husband         | 1427 (40.3)       | 482 (33.8)          | 945 (66.2)          |                |
| Husband alone                  | 1281 (36.1)       | 593 (46.3)          | 688 (53.7)          |                |
| Other                          | 416 (11.7)        | 252 (80)            | 164 (39.4)          |                |
| Ever visited any service of fa | mily planning (n  | n = 2376)           |                     | 519.11***      |
| No                             | 1240 (52.2)       | 656 (52.9)          | 584 (47.1)          |                |
| Yes                            | 1136 (47.8)       | 105 (9.2)           | 1031 (90.8)         |                |
| Knowledge about Family Pla     | nning             |                     |                     | $88.78^{***}$  |
| No                             | 2668 (72.4)       | 1256 (47.1)         | 1412 (52.9)         |                |
| Yes                            | 1018 (27.6)       | 305 (29.9)          | 714 (70.1)          |                |
| Desire for child $(n = 2877)$  |                   |                     |                     | 53.76***       |
| Both want the same             | 1808 (62.8)       | 706 (39)            | 1102 (61)           |                |
| Husband wants more             | 908 (31.6)        | 484 (53.3)          | 424 (46.7)          |                |
| Husband wants fewer            | 161 (5.6)         | 58 (36)             | 103 (64)            |                |
| Husband control over women     | n                 |                     |                     | 4.66*          |
| No                             | 2474 (67.1)       | 1017 (41.1)         | 1457 (58.9)         |                |
| Yes                            | 1213 (32.9)       | 544 (44.8)          | 669 (55.2)          |                |
| Husband drinks alcohol         |                   |                     |                     | .79            |
| No                             | 3467 (94.1)       | 1474 (42.5)         | 1993 (57.5)         |                |
| Yes                            | 218 (5.9)         | 86 (39.4)           | 132 (60.6)          |                |
| Emotional IPV                  |                   |                     |                     | 9.35***        |
| No                             | 2531 (68.7)       | 1114 (44)           | 1417 (56)           |                |
| Yes                            | 1154 (31.3)       | 446 (38.6)          | 708 (61.4)          |                |
| Physical IPV                   |                   |                     |                     | $4.77^{*}$     |
| No                             | 2641 (71.6)       | 1147 (43.4)         | 1494 (56.6)         |                |
| Yes                            | 1045 (28.4)       | 411 (39.5)          | 630 (60.5)          | ***            |
| Experienced both emotional     | and physical IPV  | T                   |                     | 13.0***        |
| No                             | 2283 (62)         | 1019 (44.6)         | 1264 (55.4)         |                |
| Yes                            | 1402 (38)         | 541 (38.6)          | 861 (61.4)          |                |

*Note.* IPV = Intimate Partner Violence; PDHS=Pakistan Demographic Health Survey; *p*-values were calculated using a chi-square ( $\chi^2$ ) test. \*p < .05. \*\*p < .01. \*\*\*p < .001.

In a simple binary logistic regression, the socio-demographic variables showed that women had significantly more likely to use contraceptive. The women who were afraid of husbands sometime (OR = .79; 95% CI = .69, .91), husband had desired more for the next

child (OR = .56; 95 % CI = .47, .65), and respondents' husbands had controlled women (OR = .85; 95 % CI = .74, .98) were significantly less likely to use contraceptive respectively. Women who had reported that they were experiencing emotional IPV (OR = 1.24; 95% CI = 1.08, 1.43), physical IPV (OR = 1.17; 95% CI = 1.01, 1.35) and both IPV together (OR = 1.28; 95 % CI = 1.12, 1.46) were more likely to use contraceptive (see Table 2).

Using multivariable logistic regression analysis, the data showed that women who had a say in choosing husbands (AOR = 1.28; 95%) CI = 1.08, 1.53), aged at marriage 10-17 years (AOR = 2.95; 95% CI: 1.97, 4.41), were having two children (AOR = 2.00; 95% CI = 1.69, 2.36), the respondents earned more than their husbands (AOR = 2.91; 95% CI = 1.02, 8.33), family history whether respondents' father had ever beaten their mothers (AOR = 1.32; 95% CI = 1.12, 1.57), and the respondents most of the time were afraid of their husbands (AOR = 1.32; 95% CI = 1.05, 1.65) were significantly more likely to use contraceptive respectively. Women had ever terminated pregnancy (AOR = 1.31; 95% CI = 1.13, 1.52), women had not wanted more children when they were pregnant (AOR = 1.89; 95% CI = 1.36, 2.63), and the respondents whose husbands drunk alcohol (AOR = 1.44; 95% CI = 1.07, 1.92) were significantly more likely to use contraceptive. Respondents who with their husbands had decided health care (AOR = 2.45; 95% CI = 1.92, 3.13), had ever visited any FP services (AOR = 10.87; 95% CI = 8.60, 13.74) and had knowledge of FP (AOR = 1.49; 95% CI = 1.26, 1.76) were significantly more likely to use contraceptive. Women whose husbands had desired for a child (AOR: .63, 95% CI: .53, .75) were less likely to use contraceptive. Women who had reported to have experience of emotional IPV (AOR = 1.44; 95% CI = 1.23, 1.67), physical IPV (OR = 1.41; 95% CI = 1.20, 1.65) and both IPV together (AOR = 1.49;95% CI = 1.24, 1.72) were more likely to use contraceptive respectively (see Table 2).

Table 2

Association Between Contraceptive Use, Socio-Demographic Variables and IPV(N=3687)

| Variables | Women had ever used<br>contraceptive<br>OR with 95% CI               | Women had ever<br>used contraceptive<br>AOR with 95% CI |
|-----------|--|---|
| Age       |  |   |
| 15-28     | 1  | -   |
| 29-37     | 2.25 (1.91, 2.65)****  |   |
| 38-49     | 2.25 (1.91, 2.65) <sup>***</sup><br>2.00 (1.70, 2.35) <sup>***</sup> |   |

Continued...

| Variables   | Women had ever used<br>contraceptive<br>OR with 95% CI  | Women had ever<br>used contraceptive<br>AOR with 95% CI                      |
|---|---|--|
| Education<br>No education<br>Primary<br>Secondary<br>Higher   | 1<br>1.88 (1.54, 2.29) ***<br>(1.77, 2.57) ***<br>(2.04, 3.18) ***                            | -  |
| Wealth Index<br>Low<br>Middle<br>High<br>Area   | 1<br>1.67 (1.39, 2.01) <sup>***</sup><br>2.98 (2.56, 3.46) <sup>***</sup>                     | -  |
| Urban<br>Rural<br>Women have say in choosing h  | 1.90 (1.67, 2.18) ***<br>1<br>usband  | 1.15 (.98, 1.36)<br>1  |
| No<br>Yes   | 1<br>1.25 (1.06, 1.48) <sup>**</sup>  | 1<br>1.28 (1.08, 1.53) <sup>**</sup>   |
| Age at marriage (in years)<br>10-17<br>18-27<br>28-48   | 1.21 (.83, 1.74)<br>1.35 (.94, 1.94)<br>1   | 2.95 (1.97, 4.41) ***<br>2.42 (1.64, 3.58) ***<br>1                          |
| Number of children<br>No children<br>Having 2 children<br>More than 2 children<br>Respondent earning in compari | 1<br>1.37 (1.19, 1.58) <sup>***</sup><br>1.11 (.90, 1.37)<br>son to husband ( <i>n</i> = 694) | 1<br>2.00 (1.69, 2.36) ***<br>1.83 (1.45, 2.32) ***                          |
| More than him<br>Less than him<br>About the same<br>Husband don't earn<br>Respondent father ever beat her       | $3.46 (1.29, 9.29)^*$<br>1.70 (.73, 3.95)<br>1.99 (.72, 5.11)<br>1<br>mother ( $n = 3414$ )   | 2.91 (1.02, 8.33) *<br>1.84 (.75, 4.49)<br>1.93 (.67, 5.52)<br>1             |
| No<br>Yes<br>Respondent afraid of husband   | 1<br>1.09 (.93, 1.28)   | 1<br>1.32 (1.12, 1.57) <sup>**</sup>   |
| Never afraid<br>Most of the time<br>Sometime<br>Ever had terminated pregnancy                                   | 1<br>.95 (.77, 1.17)<br>.79 (.69, .91)**  | 1<br>1.32 (1.05, 1.65) <sup>*</sup><br>1.01 (.87, 1.17)                      |
| No<br>Yes<br>Wanted pregnancy when becam  | 1<br>1.43 (1.25, 1.64) ***<br>he pregnant   | 1<br>1.31 (1.13, 1.52) ***   |
| Wanted then<br>Wanted later<br>Wanted no more<br>Person who usually decides on                                  | 1<br>1.89 (1.35, 2.64) ***<br>1.99 (1.47, 2.70) ***<br>respondent health care                 | 1<br>1.64 (1.15, 2.34) **<br>1.89 (1.36, 2.63) ***                           |
| Respondent alone<br>Respondent with husband<br>Husband alone<br>Other   | 3.10 (2.34, 4.12) ***<br>3.03 (2.40, 3.77) ***<br>1.78 (1.42, 2.23) ***<br>1                  | 2.17 (1.60, 2.95) ***<br>2.45 (1.92, 3.13) ***<br>1.74 (1.36, 2.22) ***<br>1 |

Continued...

|   | XX7 1 1 1               | XX7 1 1                |  |  |  |
|---|-------------------------|------------------------|--|--|--|
| Variables                                   | Women had ever used     | Women had ever         |  |  |  |
| variables                                   | contraceptive           | used contraceptive     |  |  |  |
|   | OR with 95% CI          | AOR with 95% CI        |  |  |  |
|   |                         |                        |  |  |  |
| Ever visited any service of family planning |                         |                        |  |  |  |
| No  | 1                       | 1                      |  |  |  |
| Yes   | 11.03 (8.76, 13.87) *** | 10.87 (8.60, 13.74)*** |  |  |  |
| Knowledge about Family Planning             |                         |                        |  |  |  |
| No  | 1                       | 1                      |  |  |  |
| Yes   | 2.08 (1.78, 2.42)****   | 1.49 (1.26, 1.76) **** |  |  |  |
| Desire for child $(n = 2877)$               |                         |                        |  |  |  |
| Both want same                              | 1                       | 1                      |  |  |  |
| Husband want more                           | .56 (.47, .65) ***      | .63 (.53, .75) ***     |  |  |  |
| Husband want fewer                          | 1.13 (.81, 1.59)        | 1.09 (.76, 1.55)       |  |  |  |
| Husband control over women                  |                         |                        |  |  |  |
| No  | 1                       | 1                      |  |  |  |
| Yes   | .85 (.74, .98)*         | 1.03 (.89, 1.19)       |  |  |  |
| Husband drink alcohol                       |                         |                        |  |  |  |
| No  | 1                       | 1                      |  |  |  |
| Yes   | 1.00 (.98, 1.01)        | 1.44 (1.07, 1.92)*     |  |  |  |
| Emotional IPV                               |                         |                        |  |  |  |
| No  | 1                       | 1                      |  |  |  |
| Yes   | 1.24 (1.08, 1.43)**     | 1.44 (1.23, 1.67)**    |  |  |  |
| Physical IPV                                |                         |                        |  |  |  |
| No  | 1                       | 1                      |  |  |  |
| Yes   | 1.17 (1.01, 1.35)*      | 1.41 (1.20, 1.65) ***  |  |  |  |
| Experienced both emotional and physical IPV |                         |                        |  |  |  |
| No  | 1                       | 1                      |  |  |  |
| Yes   | 1.28 (1.12, 1.46)***    | 1.49 (1.24, 1.72) ***  |  |  |  |

*Note.* CI = Confidence Interval; OR = Odd Ration; AOR = Adjusted Odd Ration; IPV = Intimate Partner Violence; PDHS = Pakistan Demographic Health Survey. All the models were adjusted for women age, education and wealth index variables that were significantly associated (p < .20) with the exposure variables.

p < .00. p < .01. p < .01. p < .05.

### Discussion

The findings of this study indicated that women who reported emotional IPV, physical IPV and both IPV together were more likely to use contraception respectively as compared to women who did not report IPV. A study conducted in New Zealand also showed that women reported IPV were more likely to use contraceptive than women who had never experienced IPV (Fanslow, Whitehead, Silva, & Robinson, 2008). The higher level of contraceptive use among the abused women was also related to the fear to avoid pregnancy in unfavorable conditions. This demonstrates that women were likely to control their bodies in term of reproductive decision making. The results were consistent with a study which tells that women might be aware of the effect of their husbands' violence on them and perhaps might take initiatives to control the number of children born in the condition of violent relationships (Dalal & Lindqvist, 2012). It has been mentioned in the studies that women, who do not seek help against partners' violence, may actively seek help through other way; such as contraceptive use (Murshid, 2013; Naved & Persson, 2005; Naved, Azim, Bhuiya, & Persson, 2006).

The study results showed that women who had higher education, knowledge about FP, and ever visited any FP clinic were more likely to use contraceptive. The pervious researches suggested that women who had higher educational achievement were more likely to use contraceptive (Elfstrom & Stephenson, 2012; Kaye, 2006). This was because educated women were able to negotiate with their husbands better and knew their reproductive health and women's rights than less educated women (Dalal et al., 2012). This study reaffirms the findings of the similar studies conducted in Bangladesh, New Zealand and Africa (Alio, Daley, Nana, Duan, & Salihu, 2009; Dalal et al., 2012; Fanslow et al., 2008). Our result showed that there was a strong relationship between knowledge about FP and FP clinic visit with contraceptive use. FP centres could help women achieve their desired spacing goals by providing FP information and FP method options. The female who ever visited any service of FP center showed significant positive attitude towards contraceptive use. It might be due to the government's efforts to educate and facilitate women to use contraceptives. The government was facilitating women to contraceptive use through different schemes relating to FP in order to reduce the population size in the country (Steele, Curtis, & Choe, 1999).

Our investigation showed that contraceptive use was found to be low 31.7% in the age group 15-28 years. At this age, women were entering into martial relationship and might not be aware of contraceptive options (Frost, Lindberg, & Finer, 2012). The contraceptive use in earlier period of marriage was considered taboo in Pakistani culture because family expectation from married woman was that she became mother and had children soon. The study results also reaffirmed that contraceptive use was more among women age group 29-37 years than age group 15-28 years. This was the age when women wanted to avoid unintended pregnancies. Unintended pregnancies were more likely to occur among women who were aged more than 25 years (Brown & Eisenberg, 1995). The more contraceptive use was linked with avoidance of pregnancies and not wanting more children among women who were living in unconducive and un-comfortable environment (Montes & Cruz, 2014).

Women economic status also influenced the contraceptive use. Women who were living in poverty and experienced violence, they were likely to bear more unintended pregnancies (Finer & Henshaw, 2006). The pervious literature supported that women having lower socioeconomic status had more children and less access to FP methods (Alvergne & Lummaa, 2014; Gakidou & Vavena, 2007; Khan & Kramer, 2014). Women economic empowerment supported women to use contraceptive. The study results supported that women who had higher wealth status, women who earned more than their husbands, women who had a say in choosing husbands and women who with her husband decided health care were more likely to use contraceptive as compared to women who had lower wealth status, whose husband did not earn and who did not have a say in choosing husbands and other decided respondents health care respectively. Most of the studies highlighted that economically empowered women had more autonomy and power to control their bodies and fertility. Women having economic resources were in a position to negotiate with their partners about their next child. A study mentioned that women economic empowerment and involvement in decision making were a protective factor against unintended pregnancies due to more contraceptive use (Jensen, 2012).

The study result showed that contraceptive use was more in urban areas of Pakistan. Women who were living in urban areas were more educated, having knowledge about FP methods and having easy access to reproductive health care services. Women who had two children were more likely to use contraceptive than women having no children. The more contraceptive use among these women was due to limited resources and the desire of family to invest more in fewer children (Khan et al., 2015). But on the other side, our investigation showed that husbands who wanted more children, their wives used fewer contraceptives than women who with husbands had the same desire. The main reason for less use of contraceptive among these women is sex preference particularly son. This is the major obstacle in contraceptive use among women (Mahmood, 1998).

Women who had ever terminated pregnancy; women whose last pregnancy was unintended (wanted later or wanted no more), women who had history of family violence, women who were afraid of their husbands most of the time and women whose husbands drank alcohol were more likely to use contraceptive in this study. These women had less control over their bodies and had more chances of pregnancies. A study mentioned that these unintended pregnancies occurred due to gender inequalities. The factors that contributed in unintended pregnancies among women were women's lower status, pregnancy pressure from their husbands and lack of decision making power, less contraceptive use and fewer economic resources (Miller et al., 2012). Unintended pregnancies might occur among women, who wanted a birth gap or wanted no more children. So, these women used contraceptive as a tool to control future pregnancies, mistimed pregnancies, increased child birth gaps and overcame unsafe abortion without their partners' knowledge or approval (Raj, McDougal, Reed, & Silverman, 2015).

### Conclusion

The study concluded that women who were living in violent relationships were more likely to use contraceptive to avoid unintended pregnancies and unsafe abortion in Pakistan. Most of the studies mentioned that women had more chances of unintended pregnancies in IPV. So, there is need to provide good FP services to married women in Pakistan. The government should take initiatives to improve FP services, increase awareness among women about available FP methods and work on women easy access to contraceptive methods. These government initiatives will enhance the capacity of women to use more contraceptive in violent relationship. They do it so that the prevalence of unintended pregnancies and unsafe abortion in violent relationship may be reduced in Pakistan. There is also a need that government should strictly implement violence-against-women laws to reduce violence on women in Pakistan.

### Limitations

There were noticeable limitations to our findings related to the PDHS data. As mentioned earlier, the data related to PDHS had noticeable limitations at the level of our findings. Our study was a cross-sectional study and the data disallow causal inference. Data are self reported and due to the sensitive nature of the data, the respondents were not asked questions about sexual violence. Most of the previous researches had strong evidences that sexual violence also affects on the contraceptive use among women (Chan & Martin, 2009; Elouard, Weiss, Martin-Hilber, & Merten, 2018;Gomez, 2011). For future studies, there is a need to collect data on sexual violence to understand contraceptive use among married women in Pakistan.

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