

Intimate Partner Violence and use of Family Planning Methods in India: Results from National Family Health Survey- 5

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Abstract

Background: Intimate partner violence (IPV) has several impacts on women's mental, sexual, and reproductive health. It is likely that women experiencing IPV use more contraception to avert pregnancy under unfavourable conditions or vice-versa. Present study evaluated the association between IPV and use of family planning methods among married women in India.

Methods: This study is based on the secondary data derived from the National Family Health survey-5 (NFHS- 5, 2019-21). A total of 53,151 married women aged 15- 49 years selected for domestic violence survey were included in the study. Data was analysed using statistical software SPSS version 28.0. Complex sample logistic regression was used to see the effect of intimate partner violence (IPV) on use of family planning methods.

Results: Results indicated that 26.2% of the women suffered from one or other form of IPV in past one year. Female methods (52.9%) were found to be most commonly used methods of family planning. Women suffered less severe physical violence by intimate partner were 1.2 times more likely to adopt family planning methods. Severe physical violence, sexual violence and emotional violence were not found to be associated with use of family planning methods.

Conclusion: Women who experienced less severe physical violence were more likely to adopt family planning methods. Intervention efforts should focus on screening for IPV, improving access to assistance for women who have experienced spousal violence, and providing greater accessibility to female-controlled contraception.

Keywords: NFHS-5, Intimate partner violence, family planning methods

Introduction

Violence against women is increasingly recognized as a significant public health and human

rights concern¹. Intimate partner violence(IPV) is one of the most common forms of violence against women that includes physical, sexual, and emotional

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abuse and controlling behaviours by an intimate partner. Violence against women has several impacts on women's mental, sexual, and reproductive health². According to **National Family Health Survey (NFHS-4)**, 23% of ever-married Indian women reported past-year physical IPV, while 5% of ever-married women nationwide reported past-year sexual IPV³. IPV affects women's reproductive health both directly, through injury and constrained access to healthcare and nutrition and indirectly through stress and trauma⁴. It is likely that women experiencing IPV use and seek less contraception out of fear of additional violence from their partners. On the other hand, women who experienced IPV may be more willing to use contraception to avoid pregnancy and born a child into abusive marriages or relationships.

In the low-and-middle income-countries, which account for almost all maternal and infant mortalities in the world,⁵ optimum utilization of family planning services is regarded as a pivotal strategy for attaining the sustainable development goals 3 and 5. IPV itself is an independent risk factor for unintended pregnancy globally⁶ and around half (48%) of the pregnancies are reported to be unintended in India⁷.

Various studies have explored the possible impact of IPV on contraceptive use among the sufferers. In the Indian context, IPV has been found to be associated with decreased likelihood of modern contraceptive use^{8,9}. However, studies conducted in other settings have found that IPV and contraceptive use are positively associated¹⁰. Purpose of this study is to evaluate the association between IPV and use of planning methods among married women aged 18-49 years old in India using the secondary data from the National Family Health Survey (NFHS-5, 2019-21).

Materials and Methods

Sources of data

Present study is based on the secondary data derived from National Family Health Survey (NFHS-5, 2019-2021) conducted in India. NFHS- 5 was conducted in 2019-21 in total 36 states and Union territories.

Study Participants:

A total of 72,320 women (never-married 8,469,

currently in union or married 60,480 and others 3371) aged 15-49 years were interviewed to assess the intimate partner violence during NFHS-5 survey. Women who were currently in union or married were included in the present study. Women who were pregnant and whose uterus had been removed were excluded. After applying national domestic sample weight and inclusion-exclusion criteria final sample size reduced to 53,151.

Dependent Variables:

Family planning method currently adopted by study participant was taken as dependent variable. It was categorized into two categories; a) Not using any method and, b) using any method either traditional or modern.

Traditional family planning methods: Standard Days methods, Lactational Amenorrhea Method, Rhythm Method, Withdrawal and other traditional methods

Modern family planning methods: Modern female Methods (Female sterilization, IUD, Pills, Female condoms, Injectables, implants, Emergency contraceptive and other female methods) and Modern male methods (Condoms, Male sterilization, other male methods)

Independent Variables

Intimate partner violence, Socio- economic and socio- demographic variables were taken as independent variables. Intimate partner violence was categorised as less severe physical violence, severe physical violence, sexual violence, and emotional violence. In NFHS-5 survey, following questions were asked to measure the different forms of intimate partner violence experienced by the respondent in past 12 months:

Less severe physical violence: (i) Pushed, Shaked or thrown something at respondent by Husband (ii) arm being twisted or hair being pulled (iii) Slapped (iv) Punched with fist or with something that could hurt.

Severe physical violence: (i) Kicked, dragged or beaten up (ii) Tried to choke or burn on purpose (iii) Threatened or attacked with a knife, gun, or any other weapon.

Sexual violence: (i) Physically forced to have sexual intercourse with even when she did not want to (ii) Physically forced to perform any other sexual acts she did not want to (iii) Forced with threats or in any other way to perform sexual acts she did not want to,

Emotional violence:(i) Said or did something to humiliate in front of others (ii) Threatened to hurt or harm her or someone close to her (iii) Insulted or made to feel bad about herself.

Data Analysis:

Data was analysed using statistical software SPSS version 28.0. Frequencies and percentages were computed to summarize qualitative data. Weighted counts were computed in order to take into account for the national domestic weights. In order to account

for the complex survey design during analysis, complex sample logistic regression was used to see the effect of domestic violence (IPV) on use of family planning methods. The results of regression analysis were presented as Adjusted odds ratios(AORs) along with their 95% CIs as an indicator of significance as well as the precision of the AOR values. All tests of hypothesis were 2-tailed, with a type -1 error fixed at 5%.

Results

After applying inclusion and exclusion criteria, total sample size was 53,151 married women aged 15-49 years. The details of Socio-demographic and socio-economic characteristics of the respondents is described in table 1.

Table 1: Distribution of Socio-demographic and socio-economic characteristics of respondents

Variables		Count (weighted)	Percentage
Respondent Age (in years)	15-24	7754	14.6%
	25-34	19506	36.7%
	35-49	25891	48.7%
Place of residence	Urban	16484	31.0%
	Rural	36667	69.0%
Religion	Hindu	41967	79.0%
	Muslim	8571	16.1%
	Christian	1355	2.5%
	Sikh	446	0.8%
	Others	812	1.5%
Wealth index	Poorest	10229	19.2%
	Poorer	11080	20.8%
	Middle	11199	21.1%
	Richer	10946	20.6%
	Richest	9697	18.2%
Respondent educational level	No education	14324	26.9
	Primary	7347	13.8
	Secondary	25301	47.6
	Higher	6179	11.6
Respondent's Type of earning	Not Paid	37732	71.0%
	Paid	15419	29.0%
Husband's education	No education	9526	17.9%
	Primary	8082	15.2%
	Secondary	27735	52.2%
	Higher	7808	14.7%

Variables		Count (weighted)	Percentage
Husband Working Status	Not working	6883	12.9%
	Working	46268	87.1%
Respondent earning more than husband	Not Earning/earning less	46980	88.4%
	Earning same or more	6171	11.6%
Living children	No child	3745	7.0%
	One son only	5554	10.4%
	Two sons only	5629	10.6%
	One daughter only	4669	8.8
	Two daughters only	3243	6.1
	One son and 1 daughter	11816	22.2
	More than 2 children	18495	34.8

Majority of the women (72.5%) were using family planning methods either traditional or modern while 27.5% women were still not using any family planning method (Figure 1). Analysis of NFHS-5 data

showed that 26.2% of the women experienced one or other form of violence during last twelve months. (Figure 2)

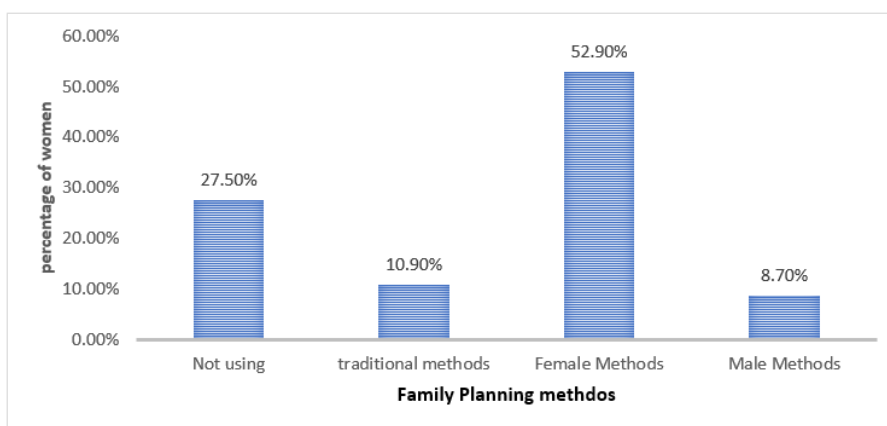


Figure 1. Distribution of Family Planning Methods

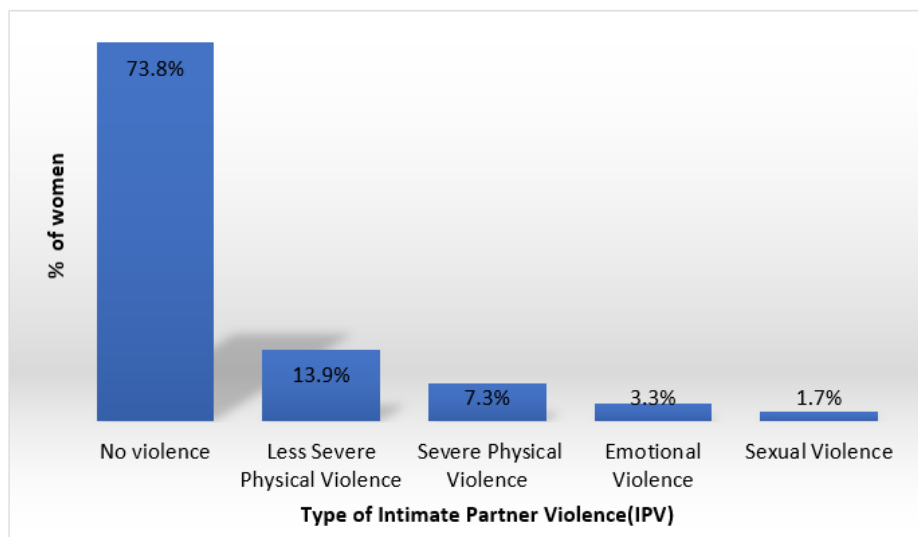


Figure 2: Prevalence of various types of Intimate Partner Violence among study respondents

Table 2 summarizes the logistic regression on the association between intimate partner violence and use of family planning methods taking into consideration the confounding socio- demographic and socio-economic variables. Odds of using family planning methods were found to be 1.25 ($p < .001$) more in women suffered from less severe physical violence than the women who did not suffer from the violence. On the other hand, severe physical violence, sexual violence and emotional violence were not found to be significantly associated with the use of family planning methods.

It was observed that odds of using family planning methods increased in married women with increase in age and wealth index. As compared to the women aged 15-24 years, women aged 25-34 years and women aged 35 years were 1.7 times ($p < .001$) and 2.1 times ($p < .001$) more likely to

use family planning methods respectively. Use of family planning methods was found to be 1.6 times ($p < .001$) more in respondents having richest wealth index as compared to women belonged to poorest wealth index. Women belong to other religion (Jain, Buddhist, Parsi, no religion) were 1.7 times more likely to use family planning methods followed by Hindu (1.4 times) as compared to women belonging to Muslim religion.

It was observed that the women whose husbands working were 1.2 times more likely to use family planning methods than the respondents whose husbands were not working. Odds of using family planning methods is 17 times ($p < .001$) more in women having two sons only and 15 times ($p < .001$) more in women having one son and one daughter than the women who did not have any child respectively.

Table 2: Logistic regression: Association of Intimate Partner Violence with use of Family Planning Methods

Independent variables		Use of Family planning methods [#]		Adjusted Odds Ratio	95% Confidence Interval		P value
		No(%)	Yes (%)		Lower	upper	
Less Severe Physical violence in past 12 months	No	28.7	71.3	1.000			Ref
	Yes	23.3	76.7	1.249	1.115	1.400	<.001**
Severe physical violence in past 12 months	No	27.7	72.3	1.000			Ref
	Yes	24.2	75.8	.880	.750	1.032	.128
Emotional violence in past 12 months	No	27.9	72.1	1.000			Ref.
	Yes	24.0	76.0	1.066	.937	1.213	.326
Sexual violence in past 12 months	No	27.6	72.4	1.000			Ref.
	Yes	25.4	74.6	1.079	.815	1.428	.597
Respondent age (in Years)	15-24	50.7	49.3	1.000			Ref
	25-34	27.1	72.9	1.734	1.535	1.958	<.001**
	35-49	20.8	79.2	2.086	1.840	2.364	<.001**
Place of residence	Rural	28.7	71.3	1.000			Ref.
	Urban	24.9	75.1	1.104	.996	1.224	.059
Religion	Muslim	32.4	67.6	1.000			Ref.
	Hindu	26.4	73.6	1.366	1.196	1.559	<.001**
	Christian	32.5	67.5	.918	.737	1.143	.442
	Sikh	23.6	76.4	1.470	.975	2.216	.066
	Others	25.5	74.5	1.705	1.067	2.723	.026*
Wealth Index	Poorest	32.2	67.8	1.000			Ref
	Poorer	28.2	71.8	1.210	1.084	1.351	<.001**
	Middle	27.3	72.7	1.285	1.147	1.441	<.001**
	Richer	25.5	74.5	1.483	1.304	1.686	<.001**
	Richest	24.2	75.8	1.647	1.392	1.948	<.001**

Independent variables		Use of Family planning methods [#]		Adjusted Odds Ratio	95% Confidence Interval		P value
		No(%)	Yes (%)		Lower	upper	
Respondent educational level	No education	25.8	74.2	1.097	.927	1.298	.281
	Primary	23.9	76.1	1.243	1.050	1.470	.011*
	Secondary	28.1	71.9	1.179	1.020	1.363	.026*
	Higher	32.9	67.1	1.000			Ref.
Respondent's type of earning	Not Paid	29.3	70.7	1.262	1.143	1.394	<.001**
	Paid	22.9	77.1	1.000			Ref.
Husband's education	No education	27.9	72.1	1.033	.871	1.224	.709
	Primary	23.6	76.4	1.286	1.083	1.527	.004**
	Secondary	27.6	72.4	1.047	.906	1.209	.534
	Higher	30.6	69.4	1.000			Ref.
Husband Working Status	Not working	31.5	68.5	1.218	1.089	1.362	<.001**
	working	26.9	73.1	1.000			Ref.
Respondent earning more than husband	Not Earning/ earning less	28.0	72.0	1.065	.919	1.234	.403
	Earning same or more	23.9	76.1	1.000			Ref.
Number of Living children	No child	78.9	21.1	1.000			Ref.
	One son only	38.9	61.1	5.576	4.639	6.704	<.001**
	Two sons only	16.2	83.8	16.909	13.903	20.565	<.001**
	One daughter only	44.3	55.7	4.425	3.596	5.445	<.001**
	Two daughters only	25.6	74.4	9.611	7.831	11.796	<.001**
	One son and 1 daughter	17.6	82.4	15.207	12.640	18.296	<.001**
	More than 2 children	19.5	80.5	14.753	12.465	17.462	<.001**

Family planning method used is dependent Variable: reference category = Not using any method; *Significant;

**Highly Significant

Discussion

The analysis of nationally representative survey

NFHS 5(2019-21) data revealed that among women chosen for domestic violence survey, still 27.5% of

women were not using any type of family planning method which is a huge number in absolute term. The main responsibility of family planning is on the females which is also evident from our study results as the female methods were found to be the most commonly used methods for family planning (52.9%). Use of male methods of family planning was far less prevalent as only 8.7% males were using modern contraceptive methods. Similar findings were also reported by study done by Ross, J., and Hardee K¹¹.

Use of family planning methods found to be two times higher among women aged 35–49 years than those aged 15–24 years probably because these couples would have completed their family and these results are similar to other studies^{12,13,14}.

Usage of family planning methods was significantly 1.4 times higher among women belongs to Hindu religion as compared to Muslim women. This result is consistent with the similar study done by Osborn JA et al¹⁵. Lower usage of family planning methods among the Muslim could be due to religious and cultural beliefs on family planning. Hence, religion still plays a predictor role on deciding the adoption of family planning methods.

In our study, contraceptive use was significantly higher among women who were earning as they are more likely to be educated and their socioeconomic status is supposed to be better than the non-earning women. This finding was similar to study done by Mukherjee et al¹⁶.

Present study found that with increase in wealth index, usage of family planning methods increased. This may be due to the fact that the higher socioeconomic status individuals have better accessibility and availability of contraception and they have better awareness regarding family planning methods. Similar results were found by Singh and Shukla¹⁷.

Number of living children had a significant impact on contraceptive usage. Women who had two more than two children were using contraception higher than the women having no child. This may be due to the fact that many couples decided to complete their family with two children and also female sterilization (after institutional deliveries) was

emphasized for women after they bear two children. Similar results were reported in the study done by Gothwal M, et al¹⁸.

Present study shows that a total of 26.2% of women had experienced one or other form of intimate partner violence in last 12 months. Physical violence (21.2%) was the most common form of IPV experienced by the respondents. And this finding is consistent with the study done by Garg P et al¹⁹. In India, prevalence of violence against women may be due to different reasons like acceptability of violence in the society, patriarchy society, women being financial dependent on male partners and unawareness of women regarding laws²⁰.

Our analysis revealed that intimate partner violence affects the contraceptive behaviour of the women. Women experienced less severe physical violence were more likely to use any method for family planning. Similar results were reported by other studies viz Fanslow J. et al¹⁰, Alio A et al²¹ and Dalal K et al²². Reason for this could be that increased availability of family planning services increases the options for these battered women to seek outside help and empowerment. Another reason could be that women did not want to give birth to child in an abusive relationship.

An important limitation of the present study was the inability to establish a temporal relationship between intimate partner violence and use of family planning methods because of the cross-sectional nature of the data rather they provide an indication of the associations between contraception and IPV. Another potential limitation of this study is the possible underreporting of intimate partner violence due to social stigma or, in the case of contraceptive use, overreporting given the respondent's awareness of the survey being done in the context of a family planning intervention.

Conclusion

The present study contributes to understanding of the impact of domestic violence on the adoption of family planning methods in India. The findings suggest at national level, married women aged 15–49 years who suffered less severe physical violence by intimate partner were significantly more likely

to adopt family planning methods. Women may purposely go out of their way to avoid pregnancies so their children are not born into unsafe home environments. Interventions should be made to prevent violence against women and programs should be implemented to create awareness against gender-based violence and gender equality aimed at preventing violence and promoting family planning programs.

Ethical Approval: This is a secondary analysis of a nationally representative survey dataset NFHS-5 (2019–21) which is freely available in public domain. The ethical approval for the NFHS-5 surveys were obtained from the ethics review board of the International Institute for Population Sciences, Mumbai, India. These surveys were reviewed and approved by the ICF International Review Board.

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Conflict of interest: None

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