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Women Empowerment and Spousal Violence in Northern and Southern Regions of India: Insights from NFHS

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ABSTRACT

Introduction: Evidence regarding the relationship between married women's empowerment and risk of spousal violence remains mixed. Moreover, studies examining the contribution of specific aspects of women's empowerment in influencing the risk of spousal violence using measures of different empowerment domains that incorporate its dynamic nature are rare. Objective: The main objective of this paper is to find out the association of women empowerment and spousal violence in northern and southern regions of India during last one decade (2005-2006 to 2015-2016). Data & Methods: Secondary data is used in the paper. The currently married women who interviewed and completed domestic violence module drawn from two linked studies: (National Family Health Survey- 3rd round) NFHS-3, conducted during 2005-06 and (National Family Health Survey- 4th round) NFHS-4 carried out during 2015-2016 were used for this article. Four dimensions of empowerment were used; Non-justification of wife beating by husband, social independence, freedom of movement, and household decision-making constructed through principal component analysis combining fifteen empowerment related indicators. Spousal violence was measured as experience of physical or sexual or emotional violence by wife done by their husband in the year prior to the year of surveys. Results & Conclusion: Findings indicate the protective effects of non-justification of wife beating, social independence and household decision making for reducing the risk of spousal violence in the overall model in both NFHS-3 and NFHS-4 data. Furthermore, region-wise analysis revealed that in more gender equitable settings of south India, freedom of movement did not exerted a protective influence on risk of spousal violence in both NFHS-3 and NFHS-4 data. However, in the more gender-stratified settings of north India, freedom of movement were found to have a protective effect on women's risk of spousal violence in NFHS-4 only. Women's attitude towards non-justification of wife beating was more likely associated with their justification towards sexual refusal and women having freedom to move were more likely justifying sexual refusal in north whereas the result was less likely in southern regions for NFHS-4. Involvement in decision making does not show any significant association on women's sexual refusal in NFHS-3 for both study areas but a highly and positive association was found at the time of NFHS-4.

Introduction

Despite various efforts for empowering women and girls, violence against women by their husbands is a problem for women worldwide. Spousal violence in the form of physical, sexual, and emotional violence is experienced by women in all socio-demographic and cultural groups, across the globe (Montalvo et al., 2009). Spousal violence can have both immediate and long-term physical and psychological impairments for the woman and for any children in her household (Pico-Alfonso et al., 2006; Campbell et al., 1998). Mostly research on the relationship between spousal violence and empowerment has focused on the women status in society, such as income and education, or decision making in their households (Chandra et al., 2012; Rocca et al., 2009; Krishnan et al., 2008; Schuler et al., 1998). These comparative studies indicate that there is little uniformity across cultures as to how

aspects of empowerment are associated with violence (VanderEnde et al., 2012; Abramsky et al., 2011; Hindin et al., 2008).

India is a complex country where people have developed various types of customs, traditions and practices through centuries. On one hand, women are worshiped as female goddesses and given a special place and every religion teaches to treat women with respect and dignity; but at the same time, well-known for treating their women badly both inside and outside their homes. Someway, the society has so developed that various types of ill practices, both physical and mental, against women have become a norm since ages. Many social histories and news record violence against married women in India by their husbands. Spousal violence has also a wide-ranging effect on the physical, reproductive, sexual and

psychological health of women. Various previous studies indicated that 35 to 75 percent of married women in India face verbal, physical or sexual violence from their partners or other men familiar to them (Visaria, 2000; Jejeebhoy, 1998). Sexually transmitted disease and suicide attempted are two adverse women's health outcomes specifically associated as an independent risk factor for spousal violence. Public health and clinical programs targeting these outcomes must specifically address spousal violence (Chaudhary et al., 2008). These studies conducted with small samples and the findings could not be generalized in whole country. However, the National Family Health Survey (NFHS) provide a few questions related to spousal violence to assess the attitude of women in a large survey. Historically, spousal violence is a serious consequences and scope of the problem and has been referred to as a "silent crisis". The spousal violence is defined as tough behaviour by a spouse or intimate partner to gain power and control over their spouse.

Sexual rights are the important part of reproductive rights and include "the right to sexual freedom". It also includes the right to sexual equity and sexual pleasure (Ali et al., 2003). Women empowerment seems impossible without the realization of sexual rights. Although there are growing evidences of a women's empowerment in the country, but women are still less privileged in terms of their sexual rights (Singh et al., 2018).

The present paper has mainly focused to find out the association of women empowerment and spousal violence in northern and southern regions of India during last one decade (2005-2006 to 2015-2016). Additionally, this paper aims to explore how women's empowerment is influencing violence against women including their perceived sexual rights.

Data and Methods

Settings

In the past ten years, comparable cross-national studies in a large number of developing countries have been performed. These studies, known as Demographic and Health Surveys (DHS), contain large samples and make it possible to carry out an empirical examination of some of these arguments. The basic data used in this paper has been taken from India based DHS data, National Family Health Survey third and fourth round under the stewardship of Ministry of Health and Family Welfare, Government of India. Randomly selected currently married women age 15-49 years were interviewed in both rounds of the survey. The information on different women's empowerment domains has been collected from approximately 55133 and 61058 women aged 15-49 years from NFHS-3 and NFHS-4 respectively. To account for the socioeconomic and cultural differences among the Indian states and to capture the contextual influences, a regional analysis has done, with the states Rajasthan, Uttar Pradesh, Bihar and Madhya Pradesh constituting the northern region and Andhra Pradesh, Karnataka, Kerala and Tamil Nadu constitute the southern region.

Dependent variables

Violence against women has been assessed through their reported experience of spousal violence and perceived sexual rights. The NFHS domestic violence questions are based on the greatly shortened and modified Conflict Tactics Scale (CTS-2; Douglas, 2004&Strauss, 1990), which includes questions on whether the woman ever experienced emotional, physical, and sexual violence. The questions on domestic violence and the use of the Conflict Tactics Scales were informed by World

Health Organization (WHO, 2001) guidelines on collection of such sensitive information and by research on valid and reliable measurement of domestic violence (Hindin et al., 2008). Violence was defined by self-reports of **Physical violence**: less severe or more severe (Ever been pushed, slapped, strangled or burnt, punched with fist or hit by something harmful, threatened with knife/gun or other weapon); **Emotional violence**: (Ever been humiliated by or been insulted or made to feel bad) and **Sexual violence**: (Ever been physically forced into unwanted sex or been physically forced to perform sexual acts respondent didn't want to by husband/partner). In this study the indicator 'Perceived sexual rights' is computed on the basis of three variables combined together i.e., whether a woman has a right to refuse sex to husband: if she knows that he is suffering with STI, if she knows he is having relationship with other women and if she says she is not having a mood for sex.

Independent variables

A number of controlled variables includes age of women, age at cohabitation, husband age, husband education(illiterate, some primary or middle school education, middle school complete or higher), religion, caste(scheduled caste/ scheduled tribe, other backward caste, and general caste), residence, wealth status(defined by using the standard of living index-low, medium, or high), living children (no child, 1-2 children, 3 or more children) and work status were included in the demographic characteristics.

In the paper, the husband's characteristics and behaviors are also controlled that were previously found to be correlated with women's risk of experiencing violence in some articles (Jejeebhoy, 2014; Babu & Kar, 2010; Ackerson et al., 2008; Bates et al., 2004; Jejeebhoy & Cook, 1997), including age (less than 24 years, 25-34 years and 35-49 years); educational level (illiterate, less than middle school, middle school complete, or higher), alcohol use (whether the husband ever consumed alcohol). In the Indian subcontinent, control of wives by their husbands is a salient social custom (Gupta et al., 2012). To assess the relationship between a husband's controlling behavior and violence against his wife as well as their sexual rights, the respondent were asked the following six questions: husband jealous if she talks to other men, husband accuses her of unfaithfulness, husband does not permit her to meet her female friends, husband tries to limit her contact with her family, husband insists on knowing where she is, and husband does not trust her with monetary affairs. Along with this, woman's family history was also assessed by asking: "Did her father ever beat her mother?" These eight variables were taken as additional variables for this study.

Methodology

The models included all four dimensions of women's empowerment obtained through principal component analysis. The factors obtained through principal component analysis have an index value comprises both positive and negative values in terms of women's empowerment. With an average value of zero for combined data of country India, states with positive average values are faring better than the Indian average and negative average values are worse than the Indian average for both rounds separately. It is rather complex to compare the index mean values for both rounds and for each state separately. Therefore, it was transformed to 0-1 scale by mathematical computations method to make it easy to interpret.

The observed continuous values obtained through analysis referred as old values and these old minimum values and old maximum values were rescaled to a range with new minimum value of 0 to new maximum value of 1 by the following formula:

$$\text{Value}_{\text{new}} = \frac{((\text{Value}_{\text{old}} - \text{Min}_{\text{old}}) * (\text{Max}_{\text{new}} - \text{Min}_{\text{new}}))}{(\text{Max}_{\text{old}} - \text{Min}_{\text{old}}) + \text{Min}_{\text{new}}}$$

Logistic regression was calculated with all the variables included in the model to assess the contribution of these variables in predicting exposure to domestic violence. Three models were used to access the predictors of spousal violence. Model I looked at regression analysis of the four variables, thus, attitude towards non-justification of wife beating, social independence, freedom of movement and participation in decision-making and the outcome variable. Model II looked at regression analysis between empowerment variables controlled for husband’s alcohol behaviour, family violence history and husband’s control issues which assumes to be a predictor for

spousal violence. Model III adjusted for age of women, age at cohabitation, age at first birth, husband age, husband education, religion, caste, residence, wealth status, living children and work status by including them in the model together with all the other independent variables. This was done to find the association between all the independent variables, including empowerment variables and the outcome variable. All frequency distributions were weighted while the weight command in SAS was used to adjust for the complex sampling structure of the data in the regression analyses. All results of the logistic analyses were presented as odds ratios (ORs) with 95% confidence intervals (CIs).

Results

Table 1 presents the mean scores of women’s empowerment by using four dimensions specified under principal component analysis across all four states of Northern India and four states of Southern India for NFHS-3 and NFHS-4.

Table 1: Mean Scores for Empowerment Index, NFHS-3 and NFHS-4

Regions	States	Non-justification towards wife beating		Social independence		Freedom of movement		Involvement in decision making	
		NFHS -3	NFHS -4	NFHS -3	NFHS -4	NFHS -3	NFHS -4	NFHS -3	NFHS -4
Northern	Rajasthan	0.723	0.809	0.335	0.366	0.533	0.468	0.513	0.677
	Uttar Pradesh	0.781	0.728	0.366	0.357	0.500	0.442	0.641	0.681
	Bihar	0.781	0.702	0.326	0.307	0.517	0.471	0.594	0.626
	Madhya Pradesh	0.800	0.753	0.393	0.359	0.536	0.438	0.583	0.694
	Andhra Pradesh	0.648	0.591	0.430	0.428	0.567	0.545	0.623	0.662
Southern	Karnataka	0.634	0.660	0.431	0.448	0.507	0.414	0.574	0.640
	Kerala	0.673	0.676	0.575	0.599	0.583	0.295	0.662	0.738
	Tamil Nadu	0.608	0.563	0.471	0.485	0.697	0.603	0.685	0.697

As mentioned in the methods section, states with higher average values are far better than the lower average values states in terms of women’s empowerment. Though India follows the tradition of patriarchal system of society where empowerment must be measure by multi-dimensional factors, mean value from table reveal the status of states for each empowerment domains. Among the states measured for attitude towards non-justification of wife- beating, each southern state i.e., Andhra Pradesh, Tamil Nadu, Kerala and Karnataka remained at bottom whereas Madhya Pradesh in NFHS-3 and Rajasthan in NFHS-4 were the top states. Kerala remained at top for addressing social independence of women

over time followed by Karnataka, Tamil Nadu and Andhra Pradesh with a slight improvement in Rajasthan and all considered northern states have comparatively lower mean values than southern states. Result also shows a decline in freedom of moving outside in all states of India considered here with a highest decline found in Kerala. Tamil Nadu in NFHS-3 and Kerala in NFHS-4 top the indicator in the number of currently married women who usually participate in household decisions whereas all the states considered in the interest for addressing this indicator of empowerment improved a lot over time period of ten years.



Figure 1 (a): Violence against women aged 15-49 years

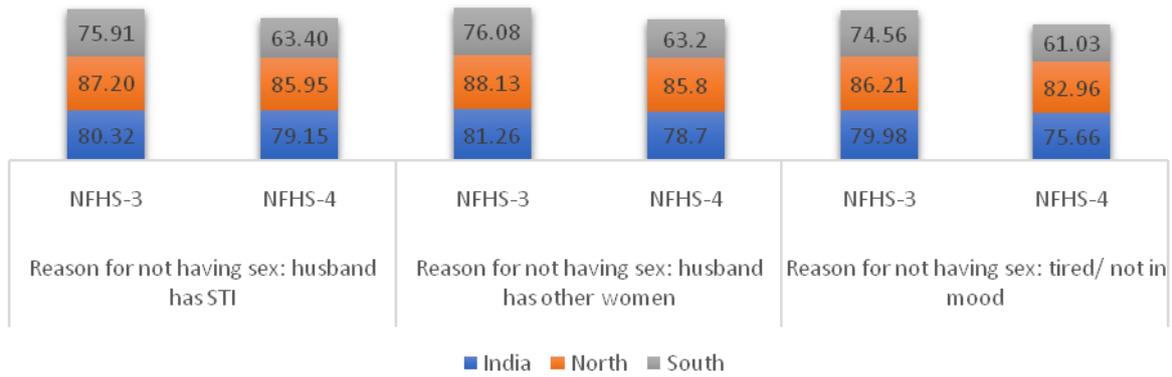


Fig 1 (b): Perceived sexual rights in different circumstances among women aged 15-49 years

Figure 1(a) indicated a prevalence of physical violence of about 20 per cent in NFHS-3 and 22 per cent in NFHS-4 for whole India with about 6-7 per cent sexual violence and around 11 per cent emotional violence. Although, there has been an increase in physical but a slight decrease noticed in sexual violence experienced by women in India over the period of ten years. However, the percentage that has experienced emotional violence in the past 12 months remained almost same between the two surveys. Physical violence has increased in ten years among northern region with decrease in sexual and emotional violence but in southern region, a decline in percentage in each type of violence has been found from the data. Figure 1(b) shows the distribution of women in northern and southern India for NFHS-3 and NFHS-4 according to their percentage response in the three reasons for refusing sexual intercourse to husbands which indicate women’s perceived status of sexual rights. The chart revealed that more than 75 per cent currently married women interviewed during the survey for domestic violence module justified that it is right for women to refuse sexual intercourse with their husbands based on any of the given situations in India as a whole with a higher justifications of refusal marked by women at the time period of NFHS-3. In

the light of that, it can also be clearly observed that the percentage of refusal is more in northern states than in southern states as presented in the figure above. Among the three reasons stated, the justifications of women to refuse sex to husband is low in conditions for tiredness or not in being mood in comparison to reasons if husband have STD or other women. Figures 2(a) and 2(b) indicates the percentage distribution of any type of violence experienced in past 12 months and perceived sexual rights by states considered under interest. Physical violence, sexual violence and emotional violence may not occur in isolation; rather, women may experience a combination of different types of violence. On the whole, almost the same percentage (26 per cent) of currently married women age 15-49 in NFHS-3 and NFHS-4 have mentioned about the incidence of one or the other forms of violence in the country. Overall, about 31 per cent of women in NFHS-4 reported having any form of violence in North combined states in past 12 months, and about 32 per cent in NFHS-3. On the other hand, in southern combined states, NFHS-4 report about 31 per cent women having violence in past 12 months, increased by 9 percentage points from NFHS-3 (i.e., about 22 per cent).

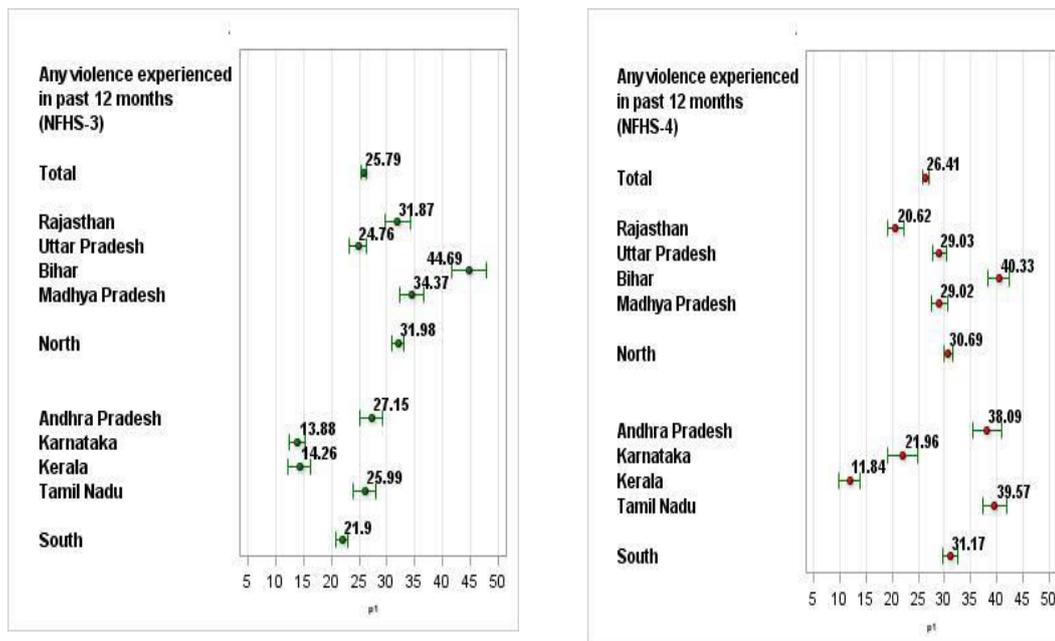


Fig 2(a): Any type of violence experienced in past 12 months, regionwise, NFHS-3 and NFHS-4

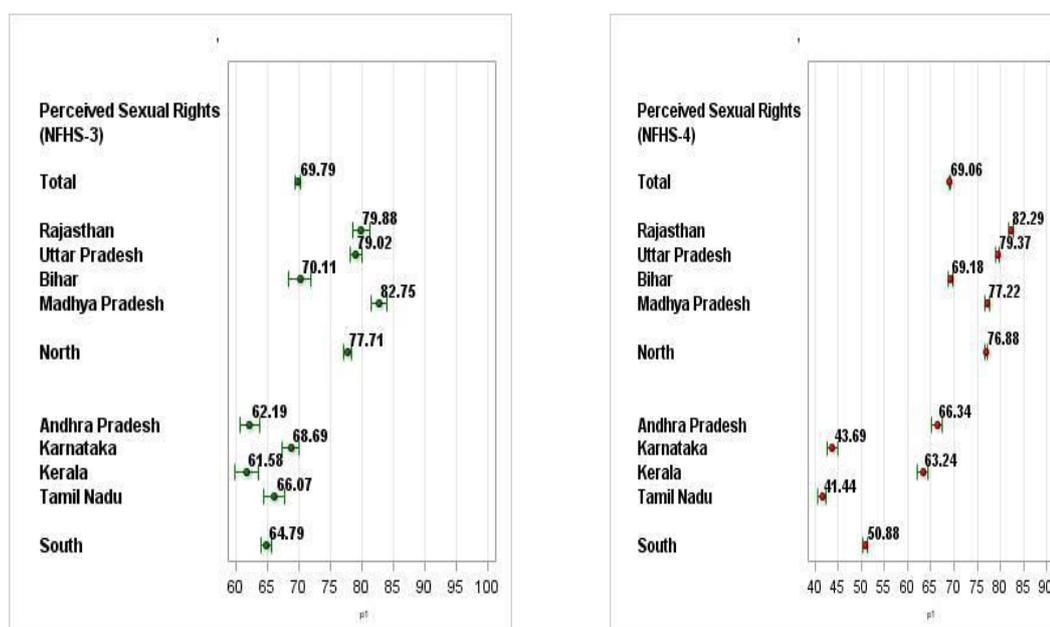


Fig 2(b): Perceived sexual Rights, regionwise, NFHS-3 and NFHS-4

Women experienced of violence has seen to be decreased in Northern states (Rajasthan, Bihar, and Madhya Pradesh) and the only one in Southern state under study i.e., Kerala. However, the violence has reported to be increase among women belonging to Uttar Pradesh, Andhra Pradesh, Karnataka and Tamil Nadu over the past 10 years.

From the figure 2(b), surprisingly it is found that the percentage of women perceiving about sexual rights has almost same in India as 70 per cent in NFHS-3 and as well as in NFHS-4. However, perceived sexual rights among women belong to the states has increased in Rajasthan (80 to 82 per cent), Andhra Pradesh (62 to 66 per cent) and Kerala (62 to 63 per cent) from 2005-06 to 2015-16. The decline in perceived sexual rights among women was found highest in Tamil Nadu and Kerala.

The potential risk factors associated with spousal violence reported by the respondents are discussed using logistic regression analysis in table 2. It shows the results of the logistic regression analyses where the odds ratios revealed that women’s empowerment in all aspects is protective against the risk of spousal violence when un-controlled and also after controlling with husband’s control issues and other factors in Model II and for a range of background variables in Model III.

Specifically, women who have negative attitude for justification of wife beating by their husband were reported 20 per cent significantly less likely to had experienced violence in both northern and southern regions of India in NFHS-3 and 20-30 per cent less likely in NFHS-4. Although, the odds ratio shows a comparatively less likely in southern as compare to northern region to experience violence who did not justified wife beating. In India, the differences in the experience of any form of violence are distinct with respect to the level of female literacy, age at marriage of girls, female work status, husband’s

characteristics and somehow the level of alcohol consumptions by their husband. The odds result from Model III revealed that, older men were less likely to have beaten their wives as well as to have ever used violence in past 12 months against their wives in southern states in NFHS-4 (not shown in the table). Not surprisingly, the odd of having ever been a victim of spousal violence decreases with female age in both northern and southern regions, although the result is not significant. Once marital duration with years of cohabitation is included in the specification, the coefficient on female age is no longer significantly different from zero.

This result is consistent across samples of both regions considered. As seen in Table 2, alcohol consumption of men is positively and significantly associated with a history of violence. The assumption on a link between male alcohol consumption and recent episodes of violence is clear.

The results are consistent with previous findings in NFHS-3 and same in NFHS-4 in both northern and southern regions with comparatively higher odds in NFHS-4 of northern states in comparison to NFHS-3. Considering social independence over the study period of ten years were less likely to report recent experiences of spousal violence and the odds are almost same irrespective of the region.

However, there was not any effect seen about the freedom of movement on women’s experiences of spousal violence. The region-specific analysis reveals that the effect of women’s empowerment on their experience of violence does not varied much according to the region of residence. Among women residing in the southern region, it was found a strong protective influence of empowerment on the risk of experiencing spousal violence, even after controlling for the effects of important socio-demographic correlates of violence and other dimensions of autonomy.

Table 2: Odds ratios and 95% CI for women who experienced any form of violence in past 12 months aged 15-49, NFHS-3 and NFHS-4

Indicators	Regions	NFHS-3			NFHS-4		
		OR (95% CI) Model I	AOR (95% CI) Model II	AOR (95% CI) Model III	OR (95% CI) Model I	AOR (95% CI) Model II	AOR (95% CI) Model III
Attitude towards Non-justification of wife beating	North	0.80(0.78-0.83)***	0.87(0.84-0.9)***	0.86(0.83-0.9)***	0.76(0.74-0.78)***	0.85(0.82-0.88)***	0.86(0.83-0.89)***
	South	0.80(0.77-0.84)***	0.83(0.79-0.87)***	0.84(0.8-0.88)***	0.66(0.63-0.68)***	0.78(0.74-0.81)***	0.79(0.75-0.82)***
Social Independence	North	0.66(0.64-0.69)***	0.78(0.74-0.82)***	0.79(0.73-0.85)***	0.67(0.65-0.7)***	0.75(0.72-0.78)***	0.89(0.84-0.95)***
	South	0.65(0.61-0.68)***	0.75(0.71-0.81)***	0.86(0.77-0.95)***	0.68(0.65-0.71)***	0.75(0.71-0.79)***	0.85(0.78-0.91)***
Freedom of movement	North	1.01(0.97-1.04)	1.00(0.97-1.04)	1.02(0.98-1.06)	0.96(0.93-0.99)**	0.97(0.94-1.01)	0.95(0.91-0.98)**
	South	1.1(1.05-1.16)***	1.1(1.04-1.16)**	1.11(1.05-1.18)***	1.21(1.16-1.27)***	1.15(1.09-1.21)***	1.1(1.04-1.16)***
Household Decision making	North	0.90(0.88-0.93)***	0.91(0.88-0.94)***	0.91(0.88-0.94)***	0.85(0.82-0.87)***	0.88(0.85-0.91)***	0.86(0.83-0.89)***
	South	0.92(0.87-0.96)***	0.89(0.84-0.94)***	0.90(0.85-0.95)***	0.86(0.82-0.89)***	0.87(0.83-0.92)***	0.88(0.83-0.92)***
Husband's consume alcohol (Ref: No)	Yes North		1.9(1.75-2.05)***	1.83(1.69-1.99)***		2.81(2.6-3.04)***	2.74(2.53-2.97)***
	South		2.85(2.54-3.19)***	2.85(2.53-3.2)***		2.2(1.99-2.43)***	2.09(1.89-2.32)***
Family violence history (Ref: No)	Yes North		2.31(2.12-2.52)***	2.26(2.07-2.47)***		2.43(2.22-2.65)***	2.44(2.23-2.67)***
	South		2.09(1.86-2.34)***	2.04(1.81-2.29)***		2.9(2.63-3.2)***	2.92(2.64-3.22)***
Husband jealous if respondent talks with other men (Ref: No)	Yes North		2.34(2.16-2.53)***	2.37(2.18-2.57)***		1.78(1.64-1.93)***	1.77(1.63-1.92)***
	South		3.01(2.6-3.5)***	2.93(2.52-3.41)***		1.89(1.69-2.12)***	1.9(1.69-2.14)***
Husband accuses respondent of unfaithfulness (Ref: No)	Yes North		2.15(1.88-2.47)***	2.16(1.89-2.48)***		2.62(2.32-2.96)***	2.55(2.25-2.89)***
	South		2.67(2.12-3.35)***	2.66(2.11-3.36)***		2.34(1.95-2.82)***	2.37(1.96-2.86)***
Husband does not permit respondent to meet her girlfriends (Ref: No)	Yes North		1.06(0.94-1.19)	1.05(0.93-1.19)		0.93(0.85-1.01)	0.94(0.85-1.02)
	South		1.31(1.02-1.68)*	1.32(1.03-1.7)*		1.26(1.08-1.47)**	1.24(1.06-1.45)**
Husband tries to limit respondent's contact with family (Ref: No)	Yes North		1.31(1.16-1.48)***	1.31(1.16-1.48)***		1.38(1.25-1.52)***	1.39(1.26-1.53)***
	South		1.4(1.1-1.78)**	1.37(1.07-1.75)*		2.04(1.76-2.36)***	2.05(1.76-2.39)***
Husband insists on knowing where respondent is (Ref: No)	Yes North		1.85(1.65-2.08)***	1.9(1.69-2.14)***		1.29(1.18-1.4)***	1.3(1.19-1.41)***
	South		1.07(0.82-1.4)	1.1(0.84-1.44)		2.02(1.73-2.37)***	2.1(1.79-2.47)***
Husband doesn't trust respondent with money (Ref: No)	Y North		1.17(1.04-1.3)**	1.16(1.04-1.3)**		1.29(1.19-1.4)***	1.29(1.18-1.4)***
	South		1.08(0.86-1.35)	1.09(0.87-1.37)		1.72(1.44-2.05)***	1.76(1.47-2.11)***

Model I = unadjusted odds ratio with 95% confidence interval; Model II = empowerment indicators are adjusted with additional violence indicators; Model III= (full model) empowerment indicators are adjusted with additional violence indicators along with selected background characteristics (age of women, age at cohabitation, age at first birth, husband age, husband education., religion, caste, residence, wealth status, living children and work status); *** p < 0.001, ** p < 0.01, * p < 0.05; Ref= Reference category.

Table 3: Odds ratios and 95% CI for women who Perceived Sexual Rights, aged 15-49, NFHS-3 and NFHS-4

Indicators	Region	NFHS-3			NFHS-4		
		OR (95% CI) Model I	AOR (95% CI) Model II	AOR (95% CI) Model III	OR (95% CI) Model II	AOR (95% CI) Model II	AOR (95% CI) Model III
Attitude towards Non-justification of wife beating	North	1.26(1.22-1.31)***	1.26(1.21-1.31)***	1.26(1.21-1.31)***	1.23(1.19-1.27)***	1.2(1.16-1.25)***	1.18(1.14-1.23)***
	South	0.89(0.86-0.93)***	0.9(0.87-0.94)***	0.9(0.87-0.94)***	0.94(0.91-0.98)***	0.92(0.89-0.96)***	0.92(0.88-0.95)***
Social Independence	North	1.54(1.46-1.63)***	1.51(1.42-1.6)***	1.46(1.34-1.59)***	1.18(1.14-1.23)***	1.17(1.12-1.22)***	0.98(0.92-1.04)
	South	1.22(1.16-1.27)***	1.24(1.18-1.3)***	1.24(1.15-1.34)***	1.21(1.16-1.26)***	1.21(1.16-1.26)***	1.24(1.17-1.32)***
Freedom of movement	North	1.21(1.17-1.26)***	1.21(1.16-1.26)***	1.22(1.17-1.27)***	1.09(1.06-1.13)***	1.09(1.05-1.13)***	1.11(1.06-1.15)***
	South	1.06(1.01-1.1)**	1.05(1-1.09)*	1.07(1.02-1.12)**	0.95(0.92-0.99)	0.96(0.92-1)*	0.98(0.94-1.02)
Household Decision making	North	1.01(0.98-1.05)	1.01(0.98-1.05)	1.02(0.98-1.06)	1.09(1.05-1.12)***	1.08(1.05-1.12)***	1.09(1.05-1.13)***
	South	1.03(0.99-1.08)	1.03(0.98-1.07)	1.04(0.99-1.08)	1.12(1.08-1.16)***	1.12(1.08-1.16)***	1.12(1.08-1.17)***
Husband's consume alcohol (Ref: No)	Yes North		1.11(1.01-1.21)*	1.04(0.95-1.14)		1.00 (0.92-1.09)	1.02(0.94-1.12)
	South		1.24(1.13-1.36)***	1.26(1.15-1.39)***		0.98(0.9-1.06)	0.98(0.9-1.07)
Family violence history (Ref: No)	Yes North		0.9(0.82-0.99)*	0.91(0.83-1)		0.96(0.87-1.06)	0.97(0.88-1.07)
	South		1.08(0.98-1.19)	1.07(0.97-1.18)		1.15(1.05-1.25)**	1.19(1.09-1.29)***
Husband jealous if respondent talks with other men (Ref: No)	Yes North		0.93(0.85-1.02)	0.92(0.84-1.01)		1.1(1.01-1.2)*	1.1(1.01-1.21)*
	South		1.06(0.92-1.22)	1.08(0.93-1.25)		0.69(0.62-0.76)***	0.69(0.62-0.76)***
Husband accuses respondent of unfaithfulness (Ref: No)	Yes North		0.87(0.76-1.01)	0.9(0.78-1.03)		0.87(0.76-0.99)*	0.89(0.78-1.02)
	South		1.14(0.91-1.42)	1.15(0.92-1.44)		1.06(0.91-1.24)	1.1(0.94-1.29)
Husband does not permit respondent to meet her girlfriends (Ref: No)	Yes North		0.81(0.72-0.92)**	0.82(0.72-0.93)*		1.17(1.07-1.29)**	1.17(1.07-1.29)**
	South		1.25(1-1.55)*	1.25(1-1.56)*		0.6(0.53-0.69)***	0.61(0.53-0.7)***
Husband tries to limit respondent's contact with family (Ref: No)	Yes North		0.85(0.75-0.97)*	0.86(0.76-0.98)*		0.82(0.74-0.91)**	0.82(0.74-0.91)***
	South		0.92(0.74-1.15)	0.92(0.74-1.15)		1.22(1.07-1.4)**	1.19(1.04-1.36)*
Husband insists on knowing where respondent is (Ref: No)	Yes North		0.91(0.8-1.04)	0.91(0.8-1.04)		1(0.91-1.09)	1(0.91-1.1)
	South		0.52(0.41-0.65)***	0.52(0.41-0.66)***		1.02(0.88-1.17)	1.04(0.9-1.19)
Husband doesn't trust respondent with money (Ref: No)	Yes North		1.14(1.01-1.28)*	1.16(1.03-1.32)*		0.77(0.71-0.84)***	0.77(0.71-0.84)***
	South		0.88(0.73-1.07)	0.89(0.73-1.07)		1.05(0.91-1.23)	1.02(0.87-1.19)

Model I = unadjusted odds ratio with 95% confidence interval; Model II = empowerment indicators are adjusted with additional violence indicators; Model III= (full model) empowerment indicators are adjusted with additional violence indicators along with selected background characteristics (age of women, age at cohabitation, age at first birth, husband age, husband education., religion, caste, residence, wealth status, living children and work status); *** p < 0.001, ** p < 0.01, * p < 0.05; Ref= Reference category.

Table 3 shows the women's perceived rights about their sexual life where the result shows a highly significant association between women's social independence and their non-justification towards wife beating in both northern and southern region at both survey time periods. Women's attitude towards non-justification of wife beating was more likely associated with their justification towards sexual refusal in north whereas the result shows a less likely association in south between these the same. Women having freedom to move have 5 per cent or more chances for justifying sexual refusal in north whereas the result is less likely in southern regions for NFHS-4. Involvement in decision making does not shows any significant association on women's sexual refusal in NFHS-3 for both study areas but a highly and positive association was found at the time of NFHS-4. It is also found that husband's alcohol behaviour in south is significantly more likely to have women refusing sexual relation with them in NFHS-3 but the result is not significant for NFHS-4.

Conclusions

The paper has focused on association between women empowerment with women's experience of any type of violence undergone in past 12 months and their justification towards indicators shows their perceived sexual rights. The regional analysis done here to address the settings in two diverse settings: Northern and Southern states of India. Four components obtained through principal component analysis considered here to define the women's empowerment status in selected North and South states. Secondary data was used for analysis in the study which was obtained from two national surveys conducted in 2005-06 (NFHS-3) and in 2015-16 (NFHS-4) and currently married women of reproductive age (15-49) who had interviewed and completed the domestic violence module of NFHS designed questionnaire were included in the analysis. Findings from this study revealed that older men are less likely to beat their wives as an ever used violence in past 12 months against their wives in south states and alcohol consumption of men is positively and significantly associated with a history of violence in both regions. Non-justification towards wife beating and social independence were less likely associated with recent experiences of spousal violence and the odds are almost same irrespective of the region. However, freedom of movement does not having any effect on women's experiences of spousal violence. The region-specific analysis revealed the differentials in social and cultural settings of the two regions studied, it was observed that different socio-economic variables influencing the women's empowerment status in both regions and their association on spousal violence and sexual rights.

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