



ISSN: 0975-833X

RESEARCH ARTICLE

SOCIO-DEMOGRAPHIC CORRELATES OF INTIMATE PARTNER VIOLENCE (IPV) IN CHANDIGARH (UT), NORTHERN INDIA

<sup>1</sup>Dinesh Kumar, <sup>2</sup>Raj Bahadur, <sup>1</sup>Sharma, M. K. and <sup>\*</sup><sup>1</sup>Ravleen Kaur Bakshi

<sup>1</sup>Department of Community Medicine, Government Medical College and Hospital, Sector-32, Chandigarh, India

<sup>2</sup>Ex. Director Principal and Professor of Orthopaedics, Government Medical College and Hospital, Sector-32, Chandigarh, India

ARTICLE INFO

Article History:

Received 20<sup>th</sup> March, 2015  
Received in revised form  
07<sup>th</sup> April, 2015  
Accepted 15<sup>th</sup> May, 2015  
Published online 27<sup>th</sup> June, 2015

Key words:

Intimate Partner Violence (IPV),  
Physical,  
Sexual,  
Psychological.

ABSTRACT

Domestic violence particularly, Intimate Partner Violence (IPV) is a universal phenomenon with deep rooted socio-cultural causes having regional differentials in its potential correlates.

**Objectives:** (1 To ascertain the prevalence and patterns of intimate partner violence (IPV) in study area.2) To investigate socio-demographic risk factors of IPV.

**Methods:** Community-based survey conducted among 624 married women in the reproductive age selected by WHO-30 cluster sampling.

**Results:** About 24% women sometimes during married life suffered from intimate partner violence. Lower age, working of women, nuclear family and having no male child were found significant risk factors of IPV. Maximum respondents reported to suffer from sexual (11.5%) violence of some forms followed by physical violence (10.9%) by their respective intimate partners. Among 149 (23.9%) IPV victims of all 624 women, percentage of sexual violence victims was found to be 48.3% and 18.1% of IPV victims suffered from some form of psychological violence sometimes since marriage.

**Conclusions:** Intimate Partner Violence (IPV) should be dealt with as a public health problem and some psycho-social interventions are also desired to combat with IPV apart from medical interventions for wellness of reproductive lives.

Copyright © 2015 Dinesh Kumar et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Citation:** Dinesh Kumar, Raj Bahadur, Sharma, M.K and Ravleen Kaur Bakshi, 2015. "Socio-Demographic correlates of Intimate Partner Violence (IPV) in Chandigarh (UT), Northern India", *International Journal of Current Research*, 7, (6), 16979-16983.

INTRODUCTION

The World Health Organization defines domestic violence as "the range of sexually, psychologically and physically coercive acts used against adult and adolescent women by current or former male intimate partners"(WHO, 1996). It is a worldwide phenomenon, rooted deep in its tradition most pervasive and yet the least recognized human rights abuse in the world. The Declaration on the Elimination of Violence against women, adopted by the United Nations General Assembly in 1993 defines violence against women as "any act of gender-based violence that results in, or is likely to result in physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life"(Heise, 1998). Violence against women at home by an intimate partner has many forms including physical aggression, psychological abuse, forced intercourse, emotional abuse, economic deprivation and other forms of sexual coercion, and various

controlling behaviors (WHO, 2002). Domestic violence occurs in all countries and transcends social, economic, religious and cultural groups. There are possible linkages between domestic violence and a range of adverse physical, mental, and reproductive health outcomes also (Campbell, 2002; Heise et al., 1999; Moore, 1999). In 48 population based surveys from around the world, 10-69% of women reported being physically assaulted by an intimate partner at some points in their lives (WHO, 2002). Lifetime intimate partner violence is reported to be 43% in China (Xu et al., 2005).

Domestic Violence Act, 2005 came into effect from October 2006 for protecting Indian women. The main objective of this act is to enable women to negotiate non-abusive and non-violent matrimonial relationships. In Indian context, some studies (Agarwal et al., 2008; ICMR, 2006; Khosla et al., 2005; Martin et al., 1999; Mishra et al., 2014; Muthal-Rathore et al., 2002; Peedicayil et al., 2004; Rao, 1997) conducted mostly in hospital set-up gave varied results in different populations on violence against women. About 40% married women in the reproductive age suffered from violence mainly by their husbands in peri-urban area of UT Chandigarh, India

**\*Corresponding author: Ravleen Kaur Bakshi,**  
Department of Community Medicine, Government Medical College and Hospital, Sector-32, Chandigarh, India.

(Agarwal *et al.*, 2008). Although the pervasiveness of domestic violence against women in India has been reported, specific risk factors are not well understood. Moreover, risk factors show regional variations. The present community-based study is proposed to obtain the extent of intimate partner violence (IPV) and its associated factors. Present community-based study was conducted with the following objectives:

### Objectives

- To ascertain the prevalence and patterns of intimate partner violence in study area.
- To investigate psychosocial and other epidemiological risk factors of the violence

### MATERIALS AND METHODS

This cross-sectional study was conducted in Urban, Rural and Slum population of Chandigarh (UT), India during October 2008- September 2010. A total of 624 married women in reproductive age 15-49 years within selected households were included as study subjects. Optimum sample size was calculated on the basis of pilot survey results. WHO-30 cluster sampling technique was used. Sample comprised of minimum 20 study subjects from each of 30 selected clusters, selecting five from each geographical quadrants within clusters. Women giving consent to participate in the survey were only included. Verbal consent from respondents was taken and confidentiality of individual responses was ensured following Ethical Guidelines of Helsinki (ICMR, 2006). Respondents were interviewed in privacy giving assurance of confidentiality and they were free to withdraw at any stage of interview if they wish. Non-respondents arising mainly due to shyness and hesitation in sharing problems were replaced by new respondents. A number of non-respondents women were observed mainly due to hesitation in giving answer thinking it as a personal issue and reporting it against social norms.

### Study Variables

Information was collected using a pre-designed interview schedule consisting of background characteristics of women and their spouses like age, age at marriage, type of family, literacy, occupation, socio-economic status etc, and various aspects of violence like frequency and type of violence experienced during last one year, perceptions regarding reasons of being victim of domestic violence coping mechanism, perceived consequences of domestic violence, feeling of depression and other psychological adverse consequences, coping mechanisms adopted by female and male partners etc. Interviews were conducted in privacy.

### Statistical Analysis

Data were analyzed using Student's t-test, Chi square test, and Odds ratios along with their confidence intervals to assess the risk association. Logistic regression model was also used for predicting risk factors of violence. Data were analyzed using SPSS -16 Software.

### Outcome Measures

Experiences of women regarding suffering from any form of domestic violence by their intimate partners since marriage

and also within past one year were recorded. Frequency and type of IPV ever experienced since marriage were reported. Prevalence rate and patterns of IPV and Odds Ratios of factors influencing IPV were used as outcome measures along with their 95% confidence intervals were used as outcome measures.

### RESULTS

Table-1 presents IPV in relation to socio-demographic characteristics. There were 624 respondents including 475(76.1%) women who never suffered from IPV since marriage and 149(23.9%) women who suffered at least once from IPV since marriage. Overall mean age of surveyed women was  $33.48 \pm 8.57$  years with no significant difference ( $P= 0.11$ ) between mean ages of IPV victims ( $34.45 \pm 7.54$  years) and non-victims ( $33.17 \pm 8.85$  years). Overall prevalence of IPV was found to be 23.9% Maximum prevalence of IPV being 29.8% found among women aged 36-45 years.

Suffering from IPV was more likely among women married at higher age ( $21.79 \pm 2.83$  years) as compared to non-victims married at lower mean marital age ( $19.31 \pm 3.68$  years). Higher percentage of IPV (24.6%) victims was observed among urban women as compared to that among rural women (21.6%).

IPV prevalence rates were also found comparatively higher among uneducated women involved in sedentary activities and in case of employed, educated spouses and associations in each of these cases were found to be highly significant ( $P<0.001$ ). Education of spouses also played significant positive role ( $P<0.001$ ) in reduction of IPV. Additions of women as well as of their spouses played insignificant roles for IPV. Women with marital duration 1-5 years were maximum sufferers of IPV. Also women with no male child were reportedly more likely to suffer from IPV. An overall increasing trend in IPV rate was also observed with number of children ever borne. Prevalence and Nature of Intimate Partner Violence (IPV) ever suffered among women is presented in Table 2.

Maximum respondents reported to suffer from sexual (11.5%) violence of some forms followed by physical violence (10.9%) by their respective intimate partners. Among 149 (23.9%) of all IPV victims, percentage of sexual violence victims was found to be 48.3%. Whereas, 27 (18.1%) of all 149 respondents who were victims, were suffered from some form of psychological violence sometimes since marriage.

To predict the Risk Factors of IPV Ever faced, risk analysis was done by Logistic Regression Model and results are presented in Table 3. It was found that risk of IPV was lower in case of literate women above 25 years of age, housewives, joint families, and among those having at least one male child as compared to their counterparts.

Remaining variables like maternal activity literacy and employment status of spouses, no of children etc. found significant correlates on the basis of bivariate analysis presented in Table 1, lost their respective significance.

Table 1. Respondents by Intimate Partner Violence (IPV) since marriage and Socio-demographic Characteristics

Age In years	Victims of IPV	Non Victims of IPV	Total
18-25	18(14.8)	104(85.2)	122(100.0)
26-35	65(24.2)	204(75.8)	269(100.0)
36-45	54(29.8)	127(70.2)	181(100.0)
45-49	12(23.1)	40(76.9)	52(100.0)
Mean $\pm$ SD	34.45 $\pm$ 7.54	33.17 $\pm$ 8.85	33.48 $\pm$ 8.57 P= 0.11
Age at Marriage			
below18	0(0)	118(100.0)	118(100.0)
18-21	86(26.3)	241(73.7)	327(100.0)
22-25	54(35.3)	99(64.7)	153(100.0)
above 25	9(34.6)	17(65.4)	26(100.0)
Mean $\pm$ SD	21.79 $\pm$ 2.83	19.31 $\pm$ 3.68	19.90 $\pm$ 3.65 P<0.001
Background			
Urban	116(24.6)	355(75.4)	471(100.0)
Rural	33(21.6)	120(78.4)	153(100.0)
			P<0.001
Occupation of wife			
Employed	19(28.4)	48(71.6)	67(100.0)
Unemployed/Housewife	130(23.3)	427(76.7)	557(100.0)
			P=0.43
Occupation of husband			
Employed	140(26.3)	393(73.7)	533(100.0)
Unemployed/Housewife	9(9.9)	82(90.1)	91(100.0)
			P<0.001
Type of Maternal Activity			
Moderate/Heavy	12(6.3)	178(93.7)	190(100.0)
Sedentary	137(31.6)	297(68.4)	434(100.0)
			P<0.001
Education of Wife			
Illiterate/Primary	137(34.2)	264(65.8)	401(100.0)
Literate	12(5.4)	211(94.6)	223(100.0)
			P<0.001
Education of Husband			
Illiterate/Primary	146(31.0%)	325(69.0)	471(100.0)
Literate	3(2.0%)	150(98.0)	153(100.0)
			P<0.001
Addiction of Wife			
	137(23.1)	456(76.9)	593(100.0)
	12(38.7)	19(61.3)	31(100.0)
			P=0.17
Addiction of Husband			
	82(21.9)	293(78.1)	375(100.0)
	67(26.9)	182(73.1)	249(100.0)
			P=0.18
Age at First Delivery			
Below 18	3(5.8)	49(94.2)	52(100.0)
18 & Above	146(25.5)	426(74.5)	572(100.0)
			P<0.001
Marital Duration			
below 1 year	11(17.2)	53(82.8)	64(100.0)
1-5 years	34(36.6)	59(63.4)	93(100.0)
6-10	28(23.9)	89(76.1)	117(100.0)
11-15	70(22.8)	237(77.2)	307(100.0)
16-25	6(14.0)	37(86.0)	43(100.0)
			P=0.015
Male Children			
At least one	126(28.8)	312(71.2)	438(100.0)
None	23(12.4)	163(87.6)	186(100.0)
			P<0.001
Female Children			
At least one	50(12.1)	362(87.9)	412(100.0)
None	99(46.7)	113(53.3)	212(100.0)
			P<0.001
Total Children			
No child	3(5.1)	56(94.9)	59(100.0)
1-3	138(27.7)	361(72.3)	499(100.0)
above 3	8(12.1)	58(87.9)	66(100.0)
			P<0.001
Age of Youngest Child			
No Child	7(8.6)	74(91.4)	81(100.0)
Upto one year	15(17.9)	69(82.1)	84(100.0)
2-5	52(33.1)	105(66.9)	157(100.0)
6-9	25(25.5)	73(74.5)	98(100.0)
10-19	38(23.3)	125(76.7)	163(100.0)
above 19	12(29.3)	29(70.7)	41(100.0)
			P<0.001
Overall	149(23.9)	475(76.1)	624(100.0)

**Table 2. Prevalence and Nature of Intimate Partner Violence (IPV) Ever Suffered By Women**

Nature of Violence Ever Suffered	No(%)
<b>Physical</b>	68 (10.9)
<b>Sexual</b>	72(11.5)
<b>Psychological</b>	27(4.3)
Overall	<b>149 (23.9)*</b>
Proportional Distribution of Women Ever Suffered from IPV (N= 149)	
<b>Physical</b>	68 (45.6)
<b>Sexual</b>	72(48.3)
<b>Psychological</b>	27(18.1)
Overall	<b>149 (23.9)*</b>

**Table 3. Logistic Regression Analysis of Risk Factors of IPV**

Variable	Risk Factor	B	Exp(B)	95.0% CI for EXP(B)		P Value
				Lower	Upper	
X <sub>1</sub>	Literate Wife	-1.351	.259	.112	.601	.002
X <sub>2</sub>	Literate Husband	-.987	.373	.090	1.545	.174
X <sub>3</sub>	Housewife	-.957	.384	.180	.818	.013
X <sub>4</sub>	Unemployment of Husband	17.283	.000	.000	.	.997
X <sub>5</sub>	Joint Family	-1.328	.265	.111	.634	.003
X <sub>6</sub>	Having Female Child	.068	1.070	.520	2.200	.854
X <sub>7</sub>	Having Male Child	2.294	9.914	5.357	18.348	.000
X <sub>8</sub>	Having more than 2 children	-1.036	.355	.107	1.181	.091
X <sub>9</sub>	Sedentary Work by Wife	1.752	5.765	2.740	12.127	.000
X <sub>10</sub>	Sedentary Work by Spouse	.525	1.690	.595	4.797	.324
X <sub>11</sub>	Age of Wife above 25 years	-1.533	.216	.095	.491	.000
X <sub>12</sub>	Rural or Slum Background	-.073	.929	.515	1.676	.808
X <sub>13</sub>	Age at First Delivery above 18 years	1.066	2.904	.570	14.797	.199
X <sub>0</sub>	Dummy Variable	-21.329	.000			.995

## DISCUSSION

This study reported an overall prevalence of IPV to be 23.9% since marriage. In a WHO study reporting 48 population based surveys from around the world, 10-69% of women reported being physically assaulted by an intimate partner at some points in their lives (WHO, 2002). domestic violence, either physical, sexual or emotional was reported in a earlier study (Mishra *et al.*, 2014) to be 47.2%. The lifetime and current prevalence of Domestic Violence (DV) was 32.2% ( $\pm 3.1\%$ ) and 22.4% ( $\pm 2.7\%$ ), respectively. Lifetime intimate partner violence is reported to be 43% in China (Xu *et al.*, 2005). In our study, maximum respondents reported to suffer from sexual (11.5%) violence of some forms followed by physical violence (10.9%) by their respective intimate partners. In United States, more than 40% women between the ages of 18 and 64 had experienced one or more forms of violence

including childhood abuse (17.8%), physical assault (19.1%), rape (20.4%) and intimate partner violence (34.6%) (Plichta and Falik, 2001).

In our study, prevalence rates of physical, emotional, sexual and economic domestic violence are observed to be 10.9%, 4.3% and 4.3% respectively. In a cross-sectional study in the study population of Gujarat, the overall prevalence of any form of violence as a whole was as high as 32.3% (Shah *et al.*, 2012). The prevalence of physical, emotional, and sexual and economic domestic violence was 16.3%, 25.3%, and 2% respectively. The overall prevalence of physical, psychological, sexual and any form of violence among women of Eastern India were 16%, 52%, 25% and 56% respectively and these rates reported by men were 22%, 59%, 17% and 59.5% respectively (Babu and Kar, 2009).

In our study, risk of IPV was lower in case of literate women above 25 years of age, housewives, joint families, and among those having at least one male child as compared to their counterparts. Whereas in Eastern Uttar Pradesh, Socio-economic characteristics like urban residence, older age, lower education and lower family income have significant association with occurrence of domestic violence (Babu and Kar, 2009). Early years of marriage, lower educational level of husband and wife, employed women, women with alcoholic husband were at significantly higher risk of domestic violence ("Kamat US, Ferreira A, Mashelkar K, Pinto NR, Pirankar S. Domestic Violence against Women in Rural Goa (India): Prevalence, Determinants and Help-Seeking Behaviour. IJHSR. 2013; 3(9): 65-71," n.d.). Our study has several potentially important implications related with public health policy and practices and aims at reducing IPV. It may be helpful in developing strategies to reduce violence against women but will also address several issues related with their reproductive health.

## Limitations

In spite of several strengths being a community based representative study using WHO -30 cluster sampling, this study has several limitations as mentioned below:

- Several aspects of IPV particularly sexual aspects could not be assessed correctly due to some difficulties faced in conducting interviews on such issues due to hesitation, shyness, reluctance and embarrassment felt in reporting such issues by respondents.
- Prevalence of physical violence reported in the present community-based study may suffer under-estimation as all the women could not recognize domestic violence as a problem and also due to under reporting of some sexual and other sensitive aspects of violence.
- Limitations are also present in terms of not studying partner related characteristics as potential correlates.
- Interrelations between different types of violence could not be established.
- Reasons of violence may also vary with episodes of violence whereas this study reports only the most common reasons. Timing of first episode of violence and its frequency also could not be asked.

## Conclusions and Suggestions

Some socio-demographic factors like lower age, working of women, nuclear family and having no male child were found significant risk factors of IPV. Intimate Partner Violence (IPV) should be dealt as a public health problem and some psycho-social interventions for both women and men coping with Indian situations are also desired to combat with IPV apart from medical interventions for wellness of reproductive lives. Further community based in-depth studies with more sophisticated interviewed techniques are desirable in order to have actual estimates of the problem and its adverse reproductive health outcomes.

## REFERENCES

- Agarwal, N., Kumar, D., Swami, H., Kumari, R., 2008. Correlates Of Gender-based Physical Violence In Peri-Urban Area Of Chandigarh. India. *The Internet Journal of Health*, 9.
- Babu, B.V., Kar, S.K., 2009. Domestic violence against women in eastern India: a population-based study on prevalence and related issues. *BMC Public Health*, 9, 129. doi:10.1186/1471-2458-9-129
- Campbell, J.C., 2002. Health consequences of intimate partner violence. *Lancet* 359, 1331–1336. doi:10.1016/S0140-6736(02)08336-8
- Heise, L., Ellsberg, M., Gottemoeller, M., 1999. Ending Violence Against Women. Population Reports, Series L, No. 11. Baltimore, John Hopkins University School of Public Health, Population Information Program.
- Heise, L.L., 1998. Violence against women: an integrated, ecological framework. *Violence Women* 4, 262–290.
- ICMR, 2006. Ethical guidelines For Biomedical research on Human participants. *Indian Council of Medical Research*.
- Kamat US, Ferreira A, Mashelkar K, Pinto NR, Pirankar S. Domestic Violence against Women in Rural Goa (India): Prevalence, Determinants and Help-Seeking Behaviour. . *IJHSR*. 2013; 3(9): 65-71, n.d.
- Khosla, A.H., Dua, D., Devi, L., Sud, S.S., 2005. Domestic violence in pregnancy in North Indian women. *Indian J. Med. Sci.* 59, 195–199.
- Martin, S.L., Tsui, A.O., Maitra, K., Marinshaw, R., 1999. Domestic violence in northern India. *Am. J. Epidemiol.* 150, 417–426.
- Mishra, A., Patne, S., Tiwari, R., Srivastava, D.K., Gour, N., Bansal, M., 2014. A Cross-sectional Study to Find out the Prevalence of Different Types of Domestic Violence in Gwalior City and to Identify the Various Risk and Protective Factors for Domestic Violence. *Indian J. Community Med. Off. Publ. Indian Assoc. Prev. Soc. Med.* 39, 21–25. doi:10.4103/0970-0218.126348
- Moore, M., 1999. Reproductive health and intimate partner violence. *Fam. Plann. Perspect.* 31, 302–306.
- Muthal-Rathore, A., Tripathi, R., Arora, R., 2002. Domestic violence against pregnant women interviewed at a hospital in New Delhi. *Int. J. Gynaecol. Obstet. Off. Organ Int. Fed. Gynaecol. Obstet.* 76, 83–85.
- Peedicayil, A., Sadowski, L.S., Jeyaseelan, L., Shankar, V., Jain, D., Suresh, S., Bangdiwala, S.I., IndiaSAFE Group, 2004. Spousal physical violence against women during pregnancy. *BJOG Int. J. Obstet. Gynaecol.* 111, 682–687. doi:10.1111/j.1471-0528.2004.00151.x
- Plichta, S.B., Falik, M., 2001. Prevalence of violence and its implications for women's health. *Womens Health Issues Off. Publ. Jacobs Inst. Womens Health* 11, 244–258.
- Rao, V., 1997. Wife-beating in rural south India: a qualitative and econometric analysis. *Soc. Sci. Med.* 1982 44, 1169–1180.
- Shah, S.H., Rajani, K., Kataria, L., Trivedi, A., Patel, S., Mehta, K., 2012. Perception and prevalence of domestic violence in the study population. *Ind. Psychiatry J.* 21, 137–143. doi:10.4103/0972-6748.119624
- WHO, 1996. WHO | Violence against women [WWW Document]. WHO. URL <http://www.who.int/mediacentre/factsheets/fs239/en/> (accessed 6.3.15).
- WHO, 2002. WHO | World report on violence and health [WWW Document]. WHO. URL [http://www.who.int/violence\\_injury\\_prevention/violence/world\\_report/en/](http://www.who.int/violence_injury_prevention/violence/world_report/en/) (accessed 6.3.15).
- Xu, X., Zhu, F., O'Campo, P., Koenig, M.A., Mock, V., Campbell, J., 2005. Prevalence of and Risk Factors for Intimate Partner Violence in China. *Am. J. Public Health*, 95, 78–85. doi:10.2105/AJPH.2003.023978

\*\*\*\*\*