

Prevalence of Domestic Violence among Pregnant Women: A Cross-sectional Study from a Tertiary Care Centre, Puducherry, India

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ABSTRACT

Introduction: Domestic Violence (DV) during pregnancy is a serious public health issue which threatens maternal and foetal health outcomes. Routine antenatal care provides an opportunity for identifying women experiencing violence during pregnancy.

Aim: To evaluate the prevalence of DV among pregnant women so that foetal complications can be prevented and adequate measures can be taken to protect mothers from DV.

Materials and Methods: This cross-sectional study was conducted from 1st October 2016 to 30th November 2016 at the Outpatient Department (OPD) of Obstetrics and Gynaecology of Mahatma Gandhi Medical College and Research Institute, Puducherry, India. A validated modified version of Abuse Assessment Screen questionnaire was given to 200 pregnant women at their first hospital visit. A statistical analysis was conducted using Chi-square test and Fisher's-exact test in MS Excel 2007, version 12.0. A p-value of less than 0.05 was considered significant.

Results: A total of 200 consecutive pregnant women at the first visit to hospital were enrolled in the study. Prevalence of DV was reported to be 6.5%. Out of which, maximum (3%) reported verbal abuse. There was no reporting of sexual abuse. Educational status showed influence on DV. Economic status too had great influence on DV which was more prevalent among poverty stricken people (19.4%). There were 7.9% incidences for DV in the age group <25 year (p-value=0.3). Prevalence was slightly more in rural areas (8.7%) than in urban areas (4.2%) (p-value=0.198). With respect to education, women with high school and above had lower incidence of DV (4.8%).

Conclusion: The pregnant woman should be continually provided with a non judgemental, sensitive and supportive service during their pregnancies. The study establishes that women in the present environment experience DV during pregnancy and more in younger age group. This is also more common in women with lower literacy and with lower socio-economic status.

Keywords: Domestic abuse, Physical abuse, Pregnancy, Verbal abuse

INTRODUCTION

World Health Organisation (WHO) defined DV as psychological/emotional, physical, or sexual violence or threats of physical or sexual violence that are inflicted on a woman by a family member: an intimate male partner, marital/cohabiting partner, parents, siblings, or a person very well known within the family or a significant other (i.e., former partner) when such violence often takes place in the home [1,2]. The DV among pregnant women varies from 1.2 to 66% [3]. This variation may be due to the diversities across studies in populations, methodologies, definitions and cultural aspects, making it difficult to compare the outcomes [3,4]. The prevalence of DV is less prevalent in developed countries (13.3%) compared to developing countries (27.7%) [5]. The DV among pregnant women in India has been estimated about 18% [6]. National Family Health Survey-3 (NHFS) has reported a prevalence of 37% of DV in Tamil Nadu [7].

A systematic review has shown that abused pregnant women are 1.5 times more likely to deliver a low birth-weight baby and almost 1.5 times more likely to have preterm deliveries [8]. Moreover, abruptio placenta, uterine rupture, foetal trauma, inadequate weight gain by the mother during pregnancy and decreased levels of breastfeeding have also been reported.

Antenatal care provides a potentially important window of opportunity for identifying women experiencing violence during pregnancy and the antenatal care health workers should be aware of the possibility of this DV as the cause of the ill health of a woman during pregnancy. Prevalence of DV among pregnant women was studied only in few states in India like Tamil Nadu, Maharashtra, Odisha, in rural population of Puducherry etc. Most of these studies were

done at community level [7,9,10]. So this study aimed to evaluate the prevalence of DV among pregnant women in a hospital based survey so that foetal complication can be prevented and adequate measures can be taken to protect mother from DV.

MATERIALS AND METHODS

This cross-sectional study was done at the OPD of Obstetrics and Gynaecology of Mahatma Gandhi Medical College and Research Institute, Puducherry from 1st October 2016 to 30th November 2016. Study was approved by the Institutional Human Ethical Committee of Mahatma Gandhi Medical College and Research Institute (IEC No-ICMR-STs/2016/14).

Inclusion criteria: Antenatal women at any trimester within the age group of 19-40 years, who were willing to participate in the study were included.

Exclusion criteria: Those who were not willing and pregnant women with known mental illness were excluded from study.

Sample size calculation: Sample size was calculated by using the formula: $\{z^2 \times p \times (1-p)\} / e^2$. Prevalence of 15% and precision of 5% was used and sample size was found to be 196 [11]. A total of 200 consecutive pregnant women at the first visit to hospital were enrolled.

Study Procedure

An anonymous and confidential questionnaire was given to women at the first visit. An informed consent was obtained from each participant. No pressure was given on the women to complete the questionnaire, and no checks were made to ensure it was completed. The process of filling the questionnaire was conducted

in a private room for about 15-20 minutes without their husbands or any relatives around them. The questionnaire used was a validated modified version of Abuse Assessment Screen [3,4]. It is divided into two parts: the first part was about the demographic data (age, parity, education, socio-economic status as per modified Kuppuswamy classification belongs to rural or urban area). Whether the woman had been physically or emotionally hurt by their 'partner or someone close to her' was also asked in the past or in the current pregnancy [12]. If the answer was 'yes' to any of these questions, they were asked to fill in the rest of the form that related to physical abuse (pushing, pulling hair, kicking, hitting, slapping or punching, attempted strangulation, using an object to harm or hit). They were questioned on the nature and severity of the abuse. The physical abuse which needed medical intervention was considered severe. Questions were also included sexual abuse. All the questions were open ended. There was no scoring system in the questionnaire.

STATISTICAL ANALYSIS

A statistical analysis was conducted by categorical variables using Chi-square test and Fisher's-exact test in MS Excel 2007, version 12.0. A p-value less than 0.05 were considered significant.

RESULTS

Out of 200 antenatal women participants, 13 women reported for DV which accounts for a total of 6.5%. Out of which, 2 (1%) reported for emotional abuse, 4 (2%) for financial abuse, 6 (3%) for verbal abuse and 1 (0.5%) for physical abuse (pushing without any injury and pulling hair). Among five multipara none of the women had experienced any kind of abuse in previous pregnancy. There was no reporting for sexual abuse. Educational status showed influence on DV. Among women who were educated upto high school, 5 (15.6%) reported DV whereas among the pregnant women who had more than high school qualification, only 8 (4.8%) had experienced it. Economic status too had great influence on DV.

Prevalence of DV was 7 (19.4%) among pregnant women belonging to lower socio-economic status but it was only 6 (3.7%) among women from other classes. Both educational and economic status showed a significant p-value of 0.038 and 0.003, respectively. There were 10 (7.9%) reportings for DV in the age group 19-25 year and 3 (4.1%) for 25-40 year which showed an insignificant p-value of 0.379. Prevalence was slightly more in rural 9 (8.7%) than in urban 4 (4.2%) which also showed an insignificant p-value of 0.198. Study showed that there is not much variation in DV percentage in women with parity index of one, 8 (6.5%) and more than one 5 (6.5%) showing an insignificant p-value of 0.998 [Table/Fig-1].

Variables		Victim of DV n (%)		Total	Chi-square	p-value
		Yes	No			
Age group (years)	19-24	10 (7.9%)	116 (92.1%)	126 (63%)	1.156 ^a	0.379
	25-40	3 (4.1%)	71 (95.5%)	74 (37%)		
Residence	Rural	9 (8.7%)	95 (91.3%)	104 (52%)	1.654	0.198
	Urban	4 (4.2%)	92 (95.8%)	96 (48%)		
Parity	1	8 (6.5%)	115 (93.5%)	123 (61.5%)	0.0001	0.998
	>1	5 (6.5%)	72 (93.5%)	77 (33.5%)		
Education	High school and below	5 (15.6%)	27 (84.4%)	32 (16%)	5.219 ^a	0.038 [*]
	Above high school	8 (4.8%)	160 (95.2%)	168 (84%)		
Economic status	Poverty (Lower socio-economic class)	7 (19.4%)	29 (80.6%)	36 (18%)	12.104 ^a	0.003 [*]
	Above poverty	6 (3.7%)	158 (96.3%)	164 (82%)		

[Table/Fig-1]: Comparison of all demographic variables.

a- Fisher's-exact test applied; *significant with p<0.05

DISCUSSION

The main objective of this study was to evaluate the prevalence of DV among pregnant women and to evaluate the type of abuse they had undergone and the factors influencing this DV. Recent global prevalence figures indicate that about 1 in 3 (35%) of women worldwide have experienced either physical and/or sexual violence in their lifetime [1]. The prevalence of DV against pregnant women varies widely in the literature, ranging from 1.2 to 66% [2]. In addition, a comparative analysis of Demographic and Health Survey (DHS) data from nine countries found that the percentage of ever partnered women who reported ever experiencing any physical or sexual violence by their current or most recent husband or cohabiting partner ranged from 18% in Cambodia to 48% in Zambia for physical violence, and 4% to 17% for sexual violence [13]. In a 10 country analysis of DHS data, physical or sexual Interpersonal Violence (IPV) ever reported by currently married women ranged from 17% in the Dominican Republic to 75% in Bangladesh [14].

The present study showed DV prevalence of 6.5% in current study population. But Gyuse AN et al., showed a higher prevalence of 12.6% in current pregnancy and 63.2% in previous pregnancy [15]. Similarly Ramalingappa P et al., showed 52.8% of DV prevalence among 800 pregnant women studied and Deshpande SS et al showed 12.6% of physical abuse among 560 women [16,17]. George J et al., did a community level study in rural area of Puducherry, where they found 56.7% DV prevalence among 310 participants which was very high as compared to the present study though both the studies were carried out in Puducherry [9]. But present study was done in semi-urban area. This wide range of difference in prevalence worldwide may be due to difference in geographical area, sociocultural environment and also variation in sample size. Prevalence of DV was seem to be more in developing countries (27.7%) as compared to developed one (13.3%) [18].

Present study reported DV more in less than 25 years age (7.9%) which was comparable to Deshpande SS et al., study (20-30 years) [17]. But Gyuse AN et al., showed more in 20-39 years of age [15]. Though present study reported 1% for emotional abuse, 2% financial abuse, 3% verbal abuse, 0.5% physical abuse and no case of sexual abuse, a recently published meta-analysis of 92 independent studies regarding prevalence and risk factors associated with DV among pregnant women showed an average prevalence of emotional abuse of 28.4%, and prevalence rates of physical abuse and sexual abuse were 13.8% and 8.0%, respectively [5]. NFHS-3 for the state of Tamil Nadu had reported physical violence of 41.9% which was very high in comparison to present study [7]. George J et al., also reported 51.3% psychological violence, 40% of physical violence, and 13.5% of sexual violence [9].

The diversity in socio-cultural norms such as acceptability of physical violence at the hands of husbands and lack of awareness, fear of reprisal could be the reason for these differences. Regarding emotional or psychological abuse, it is the least investigated and its associated factors have been studied very less as most women do not realise it as a form of abuse and also do not openly accept it. Though present study did not report any sexual violence, George J et al., reported 13.5% of sexual violence [9]. Similar prevalence estimates were reported in NFHS-3 and also the studies from Maharashtra [11,19]. But Ramalingappa P et al., and Deshpande SS et al., reported marginally higher prevalence of sexual abuse (22.8% and 23.8%). This rise may be due to more reporting of the same by the victims in the present times and also a larger population studied (990 and 800) [16,17].

Educational status also showed influence on DV. Present study reported 15.6% of DV among women having upto secondary education whereas Das S et al., showed 44% participants, who suffered from DV were having secondary education [19]. Women are often made to believe that they themselves are responsible for the violence they are exposed to. The beliefs associated with the

socio-cultural differences only make it more difficult for a woman to seek help and assistance. The challenge is thus making women believe that violence is not “normal”, that it is unacceptable and necessary measure can be done to stop the abuse.

Limitation(s)

As present study was an Indian Council of Medical Research (ICMR) project, the study period was very less resulting in small sample size. There should be a large study, at community level involving large number of pregnant women to find out the prevalence of domestic abuse, its associated factors and measures to protect women.

CONCLUSION(S)

The study establishes that women in the present environment experience DV during pregnancy and more in younger age group. This is also more common in women with lower literacy and with lower socio-economic status. So there is need to routinely screen for DV in pregnant women so as to prevent potential adverse pregnancy outcomes and to interrupt existing abuse. Well designed counseling options should be available in place and all these women should have the access for the same so that they get timely appropriate care, follow-up and support services. Women also should be empowered socially and economically so that they themselves can stand against the DV.

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