Socio-demographic factors associated with domestic violence in urban slums, Mumbai, Maharashtra, India

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Background & objectives: Domestic violence is identified as a public heath problem. It is associated with adverse maternal health. This study examined the prevalence and determinants of domestic violence among women in urban slums of Mumbai, India.

Methods: A community based cross-sectional household survey was carried out among eligible women for the study during September 2012 to January 2013. A total of 1137 currently married women aged 18-39 yr with unmet need for family planning and having at least one child were selected using cluster systematic random sampling from two urban slums. Information on socio-demographic, reproductive and domestic violence was collected through face-to-face interview using a pretested structured questionnaire after obtaining informed written consent. Bivariate and multivariate analyses were carried out to find the socio-demographic factors associated with ever experienced domestic violence among women.

Results: The prevalence of women ever experiencing domestic violence in the community was 21.2 per cent. Women whose husband consumed alcohol [RR: 2.17, (95% CI: 1.58-2.98)] were significantly at an increased risk of ever experiencing domestic violence than their counterparts. Risk of domestic violence was twice [RR: 2.00, (95% CI: 1.35-2.96)] for women who justified wife beating than women who did not justify wife beating.

Interpretation & conclusions: The findings showed that domestic violence was prevalent in urban slums. Factors like early marriage, working status, justified wife beating and husbands use of alcohol were significantly associated with domestic violence.

Key words Domestic violence - husband's alcohol consumption - unmet need of family planning - urban slums

Violence against women by their husband is a pervasive public health and human rights problem¹. In India, 34 per cent of women of reproductive age group have ever experienced physical domestic violence². Women in slum areas (22.9%) in Pune were more likely to have experienced domestic violence than women in non-slum area (14%)³. Globally, the

negative impact of violence on health of women has been recognized. Domestic violence increases the incidence of unintended pregnancies⁴⁻⁷ and abortions⁴, and reduces the contraceptive use^{8,9}. Domestic violence during pregnancy increases the risk of infant and child mortality¹⁰⁻¹³. Women experiencing domestic violence during pregnancy are less likely to get antenatal

care^{14,15}. Sexual violence associated with vaginal, anal or urethral trauma leads to risk of infection and sexual health problems^{16,17}. Not only physical but mental health of the women is also affected due to domestic violence^{18,19}.

Various studies have identified factors associated with the likelihood of domestic violence among women. Underlying factors of domestic violence are the failure to perform duties and responsibilities²⁰, economic stress, hierarchical gender relations²¹, lower household income, illiteracy, belonging to lower caste²², not having male child23, age at marriage, number of living children, women employment²³ and dowry^{21,23,24}. Studies also showed a link between husband's alcohol consumption and domestic violence²¹⁻²⁴. A few studies have also explored the relationship between domestic violence and contraceptive use in India^{25,26}. However, the social determinants of domestic violence in urban slum community in India remain limited. Hence, the objective of this study was to know the prevalence of domestic violence and to understand the sociodemographic factors associated with it in urban slums of Mumbai, Maharashtra, India.

Material & Methods

This study was a part of the main study which aimed for intervention to increase the contraceptive use among women with unmet need for contraception during 2012-2015. The eligibility criteria for the main study included currently married women aged 18-39 yr, staying with their husbands; having at least one child and having unmet need for contraceptives. A community based household survey was conducted in two similar slum communities namely Kajupada and Tunga villages under the jurisdiction of the health post of Municipal Corporation of Greater Mumbai (MCGM), Mumbai. The population of reproductive age group women was approximately 9000 to 11806 in Kajupada and Tunga villages, respectively. The prevalence of women experiencing domestic violence was reported as 27 per cent1. In order to estimate this prevalence with the precision of 5 per cent (marginal error) with 95% confidence interval (CI), and adjusting for 20 per cent non- response rate and 1.5 as design effect, the sample size needed was 568 eligible women from each community. Each community was divided into four equal clusters on the basis of equal number of households. From each cluster 142 eligible women were identified using systematic random sampling

procedure. First household was selected randomly and then every 6th household was visited to screen for the eligible women through a rapid assessment survey questionnaire which included information on age, number of children, future pregnancy intention, and current use of contraceptive methods. Following this detailed information on socio-demographic- economic characteristics. reproductive characteristics violence experienced by women from their husbands was collected by face-to-face interview using pretested structured questionnaire after obtaining informed consent during September 2012 to June 2013. The questions measuring domestic violence are based on the National Family Health Survey-32, which measured violence by husband, using a greatly shortened and modified Conflict Tactics Scale (CTS)²⁷.

Proposal and measures used in the study were reviewed and approved by the institutional review board of the National Institute for Research in Reproductive Health (NIRRH), Mumbai, Maharashtra, India. The objectives of the study were clearly explained to the participants. Written informed consent was obtained from participants before collection of data.

Variables under study

Dependent variable - Women ever experiencing violence from their husband was considered as dependent variable. To measure the violence from husband, women were asked questions related to physical, emotional and sexual violence as listed in Table I. A "yes" response to one or more of the above item(s) was considered as ever experience of violence by husband.

Independent variables - Information regarding socio-demographic, economic and reproductive characteristics was considered as independent variables. Variables under study were current age of women (<25, >25 vr), religion (Hindu, others), caste [Scheduled Caste (SC)/Scheduled Tribe (ST)], Other Backward Classes (OBC), general, age at marriage $(<18, \ge 18 \text{ yr})$, duration of marriage (<5, >5 yr), women's education (illiterate, literate), number of surviving children (1, 2 or more), currently working (yes, no), and husband's use of alcohol (yes, no). Further, if women responded positive to any of these items which measured justification of wife beating, viz., goes without telling husband, neglects the house or children, argues with husband, refuse to have sex

Table I. Percentage of currently married women having unmet need of contraceptives ever experienced various form of violence by their husband in urban slums, Mumbai

of violence by their husband in urba			
Type of violence	Percentage of women		
	ever experienced		
	violence (n=1137)		
Physical violence			
Any form of physical violence	16.8		
— Slapped her	16.7		
Twisted her arm or pull her	8.0		
Pushed her, shook her or throw something at herPunch her with his fist or	6.1		
hurt with something Kicked her, dragged her or	5.7		
beat her up	5.5		
Try to choke her or burn her on purpose	1.5		
Threaten or attack her with knife or weapon	0.7		
Emotional violence			
Any form of emotional violence	12.4		
Said or did something to humiliate her in front of others	11.3		
Threaten to hurt or harm her or someone close to her	6.4		
Insult her or made her to feel bad about herself	8.8		
Sexual violence	0.0		
Any form of sexual violence			
•	4.8		
— Physically forced her to have sexual intercourse with him even when she did not want to	4.7		
 Force her to perform any sexual acts she did not want to 	1.9		
Any form of physical or sexual			
violence or emotional violence	21.2		

with him, does not cook properly, husband suspects her being unfaithful, was considered to be positive towards 'justified wife beating'.

Statistical analysis: The association between socio demographic characteristics of women and domestic violence were explored using chi-square test. Generalized Liner Model (GLM) with log link function was used to calculate the adjusted relative risk instead of multiple logistic regression²⁸. The analysis was

carried out using STATA software (STATA 8.2, Stata Corp, USA). The adjusted risk ratios (RR) with 95% CI for significant variables were calculated.

Results

Prevalence of domestic violence among women having unmet need for family planning: Percentage of currently married women who have ever experienced various forms of violence by their husbands is presented in Table I. It was observed that 21.2 per cent [95% CI: 18.8-23.6] of women ever experienced any type of violence viz. physical (16.8%), emotional (12.4%), or sexual violence (4.8%). Most common act of violence observed was being slapped (16.7%) followed by humiliated in front of others (11.3%). A small percentage of women (1.9%) expressed that their husbands forced them to perform any sexual acts though they did not want to do.

Socio-demographic factors associated with domestic violence: The socio-demographic, economic and reproductive factors associated with domestic violence are presented in Table II. Women who got married before attaining 18 yr of age (26.8%) were significantly more likely to report prevalence of violence than women who got married after attaining 18 yr of age (18.2%). The prevalence of violence was higher among illiterate women though it was not statistically significant. For women whose marital duration was less than or equal to five years were less likely to report domestic violence than their counterparts. Significantly higher prevalence of domestic violence was observed for women belonging to SC/ST, working, having more than one child and who justified wife beating. About 21 percentage point difference in prevalence of domestic violence was observed among women whose husbands consumed alcohol as against who did not.

Table III summarizes the findings of multiple logistic regression analysis. After controlling for all independent variables (listed in Table II), age at marriage, number of children, working status, justified wife beating and husband consuming alcohol were found to be independent significant factors associated with domestic violence. Women who married early (<18 yr) were 37 per cent [RR=1.37 (95% CI: 1.01-1.89)] more likely to experience domestic violence than women who married lately (≥18 yr). Working women were 1.61 (95% CI: 1.07-2.41) times at risk to have experienced violence than non-working women. Higher risk of domestic violence was reported for women whose husbands consumed alcohol (RR: 2.17, 95% CI: 1.58-2.98) than women whose husbands

Table II. Percentage of women having unmet need of contraceptives ever experienced violence by their husbands	in urban slums,
Mumbai	

Selected background characteristics	Ever experienced violence N (%)	Total N	P value
Age (yr)			
<26 26 or more	116 (21.3) 125 (21.1)	545 592	0.944
Religion			
Hindu Others	159 (21.4) 82 (20.8)	743 394	0.818
Caste			
Schedule Caste/Tribe Other Backward Class General category	65 (26.0) 81 (22.0) 95 (18.3)	250 368 519	0.045
Age at marriage (yr)			
<18 ≥18	107 (26.8) 134 (18.2)	400 737	0.001
Duration of marriage (yr)			
≤5 >5	81 (17.8) 160 (23.5)	456 681	0.020
Education			
Illiterate Literate	45 (25.3) 196 (20.4)	178 959	0.147
Number of children			
1 2 or more	77 (17.0) 164 (24.0)	453 684	0.005
Working status			
Yes No	44 (34.9) 197 (19.5)	126 1011	0.0001
Husband drinks alcohol			
Yes No	96 (37.1) 145 (16.5)	259 878	0.0001
Wife beating justified			
Yes No	46 (40.4) 195 (19.1)	114 1023	0.0001

did not consume alcohol. Women who justified wife beating were 2.00 (95% CI: 1.35-2.96) times more at risk of violence than women who did not justify wife beating.

Discussion

In the present study, a community based representative sample of 1137 currently married women aged 18-39 yr having at least one child and not using any family planning methods revealed that 21.2 per cent women ever experienced any form of violence

from their husbands. However, a community-based cross-sectional study among 274 married women in the age group of 18-45 yr residing in an urban slum area of Malwani, Mumbai, showed 36.9 per cent prevalence of verbal or physical violence in the past one year²⁹. A cross-sectional study conducted in slum area among married women of age 18-49 yr showed prevalence of physical violence in the past three months as 26.6 per cent in Goa²⁴, ever experienced any violence (physical, sexual and emotional) as 45.2 per cent in Pune³ and ever experienced physical or verbal violence as 54 per

Table III. Adjusted risk ratio of ever experienced violence in urban slums, Mumbai		
Selected background characteristics	Adjusted risk ratio (95% confidence interval)	
Age at marriage (yr)		
<18 ≥18	1.37 (1.01-1.89) 1.00	
Working status		
Yes No	1.61 (1.07, 2.41) 1.00	
Number of children		
1 2 or more	1.00 1.40 (0.96-2.05)	
Husband drinks alcohol		
Yes No	2.17 (1.58, 2.98) 1.00	
Wife beating justified		
Yes No	2.00 (1.35, 2.96) 1.00	
Included variables in the model were caste, age at marriage, duration of marriage, number of children, working status, justified wife beating; and husbands drinks alcohol		

cent in Kolkata²³. Further, a study conducted in slum areas of Bengaluru among 744 married women aged 16-25 yr reported 56 per cent physical violence in the past six months³⁰. It was observed that the prevalence of violence varied from place to place in India. The explanation could be the difference in the distribution factors in the populations studied such as age, issues in the definition and measurement of partner violence, and willingness to report their experience of violence.

Early marriage was associated with domestic violence from husbands and was consistent with the finding from other studies³¹⁻³³. The present study also showed that women who got married before attaining 18 yr of age were more likely to be victimized. The domestic violence also decreased a woman's ability to negotiate the timing of sex or use of contraceptive methods with their partners⁹.

Husband's consumption of alcohol was found to be a significant factor associated with violence. Evidence from other studies supported husbands/partners' alcohol consumption as a significant factor of domestic violence^{22-24,33} and might be because of reduced self-control of individuals due to excessive alcohol consumption³⁴.

Working women were more likely to experience violence than women who were not working as reported

earlier³⁵. Women who justified wife beating were more likely to experience violence than their counterparts. This may be because of intergenerational transmission of perception related to violence³⁶, *i.e.* when children grow up seeing their father abusing their mother; they start to accept or justify such behaviour as norm and replicate it in their marital life. Women who experience violence (in childhood, adolescence, or adulthood) may learn and/or rationalize that it is normal, or women who think that violence is acceptable may enter into or remain in relationships with an abusive partner.

Our study had several limitations. First, the data collected on ever experience of domestic violence were self- reported by respondents and, therefore, subject to recall bias, cultural values and willingness to report domestic violence. Secondly, it was a cross-sectional study so it was not possible to establish causal relationship between the socio-demographic factors studied and domestic violence. Further, the findings may not represent the whole slum communities of all women of reproductive age group.

In conclusion, the study demonstrated that domestic violence was prevalent in the urban slum community. Factors like early marriage, justified wife beating and husbands drinking alcohol habit were significantly associated with the domestic violence. There is a need to bring change in behaviour regarding the same in the community.

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