INTRODUCTION

Domestic Violence (GBV) is a public health issue and is recognized as a serious violence of human right worldwide. It is an ongoing social injustice to women. The impact of domestic violence on pregnant women is increasingly recognized as an important public health issue that has serious consequences for their physical and mental health. Thus, the present study aimed to explore prevalence and predictors of Gender Based violence.

Worldwide, it has been estimated that violence against women is as serious a cause of death and incapacity among women of reproductive age as cancer, and a greater cause of ill-health than traffic accidents and malaria combined. In a patriarchal society like Nepal, women’s lives are often controlled by male family members.

In developing countries like Nepal, being young, being multifarious, having no or little education, having a husband with no or little education, having an unemployed husband, having a familial preference for a male child, living in an extended family, and having a minority ethnic background increases a woman’s risk of DV during pregnancy. The impact of domestic violence on pregnant women is increasingly recognized as an important public health issue that has serious consequences for their physical and mental health. Thus, the present study aimed to assess the prevalence of domestic violence in pregnant women attending Antenatal clinics (ANC) of a maternity facility in Madi Municipality, Chitwan, in Province -3 of Nepal.

METHODS

A cross-sectional study was conducted among 12 to 36 weeks pregnant women attending the antenatal clinic in health facilities of the Madi Municipality, Chitwan District, Nepal. Madi is situated southern part of Chitwan district hence the development milestone of this municipality is relatively low as compare to other municipalities of Chitwan.

The sample size was determined using the formula $n=\frac{Z^2pq}{d^2}$ where $n$ is calculated sample size, $d$ is degree of accuracy which is 0.07, $z$ is the confidence interval (1.96) and $p$ is the proportion which is 50%. Sample size of this study was 215 including 10% non-response rate. The required number of pregnant women were selected by consecutive sampling method. Women between 12 and 36 gestational weeks pregnant were included for the study. Pregnant women who were visually, mentally disabled and severely ill, or could not understand the study were excluded.

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RESULTS

Among 215 pregnant women attending Antenatal clinics there were 68.4% (147) pregnant women who faced any kind of domestic violence (either sexual or physical or emotional). Result shows that the domestic violence among pregnant women differ significantly with age group ($\chi^2=6.46, p = 0.039$), education level of respondent ($\chi^2=12.45, p = 0.002$), occupation ($\chi^2=11.3, p =.001$), family income ($\chi^2=13.4, p = 0.014$), presence of own property ($\chi^2=6.8, p = 0.033$), interest for pregnancy ($\chi^2=14.03, p < 0.001$), husband's consumption of alcohol ($\chi^2=25.94, p<0.001$).

CONCLUSIONS

Prevalence of domestic Violence among pregnant women was found unacceptably high which ultimately foster risk to the mother and fetus health. Factors like age, educational level of the pregnant, family income, husband drinking alcohol habit and interest of the pregnancy among couple had profound relationship with domestic violence.
speak or hear or understand Nepali language, were excluded from the study.

Study was conducted between September 2019 and December 2019. Semi structure questionnaire was developed by reviewing previous literature and consulting with expert who had previously work on GBV. Data was collected by using face to face interview. A pilot study was conducted on 10% of the sample size in Shivanagar PHC, Chitwan district. Necessary modification had made on tools. The Nepali languages were used for face-to-face interviews.

Collected data were manually checked and entered in IBM SPSS 20.0 version (IBM SPSS Version 20; IBM Corp, Armonk, NY, USA). Descriptive as well as inferential analysis was done using this software. The domestic violence among pregnant women is assessed by the descriptive analysis of the collected information. Significant Factors associated with Domestic violence among pregnant women were identified by using Pearson chi-square test.

This study protocol received ethical approval from the Institutional Review Board of Chitwan Medical College. Additional permission for the study was obtained from the All-Healthcare Centre of Madi Municipality of Chitwan district. Verbal informed consent was taken from the participant before interview. Anonymity and confidentiality of the individual were maintained.

RESULTS

Out of 215 pregnant 68.4% (147) were facing any kind of Domestic Violence or at least one type of violence (either physical or sexual or emotional) and other rest 31.6% (68) were not facing any kind of violence in their current pregnancy. In this study, three fourth i.e. 111(75.5%) pregnant women experienced emotional violence, approximately two - third 99(67.3%) pregnant women faced physical violence and more than fifty percent i.e. 88(59.9%) pregnant women experienced Sexual Violence (Table 1).

Table 1: Domestic violence among pregnant women attending Antenatal clinics in Madi Municipality, Chitwan, Nepal (n=215)

| Variable | Frequency (%) |
|----------|---------------|
| Domestic Violence ** | 147(68.4%) | 68(31.6%) |
| Overall prevalence of Domestic Violence* | 99(67.3%) | 88(59.9%) | 111(75.5%) |

** denotes women who faced any kind of violence. * Multiple response

Out of 147 pregnant women, one fourth 36(24.4%) of respondents experienced all kind of domestic violence. A total of 19(12.9%) faced only physical violence followed by 11(7.4%) who faced sexual violence, and 26(12.09%) experienced only emotional violence respectively. More than half of the women 74(50.3. %) experienced physical and emotional violence, followed by 71(48.2%) who faced sexual and emotional violence, and 66(44.8%) of respondents experienced both physical and sexual violence. A total of 14(9.52%) pregnant women experienced either physical or emotional violence followed by 11(7.4%) who experienced either sexual or emotional Violence. A total of 6(4.08%) faced both (physical and emotional) violence respectively (Table 2).

Table 2: Prevalence of different forms of domestic violence among pregnant women (n=147)

| Form of violence | Frequency (%) |
|-----------------|---------------|
| Women who faced all (physical, Sexual, emotional violence) | 36(24.4%) |
| Women who faced both physical and sexual violence | 66(44.8%) |
| Women who faced both (physical and emotional) violence | 74(50.3) |
| Women who faced both sexual and emotional violence | 71(48.2) |
| Women who only faced Sexual violence. | 11(7.4) |
| Women who only faced emotional violence. | 26(17.6) |
| Women who only faced physical violence. | 19(12.9) |
| Women who faced only (physical and sexual) violence | 14(9.52) |
| Women who faced only (Physical and sexual) violence | 6(4.08) |
| Women who faced only (Sexual and emotional) violence | 11(7.4) |

Domestic violence among pregnant women differ significantly with age group ($\chi^2=6.46$, $p=0.039$), education level of respondent ($\chi^2=12.45$, $p=0.026$), occupation ($\chi^2=11.3$, $p=0.001$), family income($\chi^2=13.4$, $p=0.014$), presence of own property ($\chi^2=6.80$, $p=0.033$), interest for pregnancy ($\chi^2=14.03$, $p=0.001$), and husband’s consumption of alcohol ($\chi^2=25.94$, $p=0.001$) (Table 3).

DISCUSSION

Present study was conducted to investigate the prevalence and possible predictors associated with Domestic violence among the pregnant women of Madi municipality of Chitwan District with the application of chi-square test. In this study, More than half 68% (n=215) of the women have had experience GBV in their life time which clearly reflects that gender-based violence among pregnant women is a major public health problem in Madi, Chitwan. This finding is similar to the study conducted by Regmi Mc et.al 58.1%. Another similar study conducted in the Amhara regional state of Ethiopia shows that the prevalence of domestic violence was 78.0%. This study finding was more as compared to the prevalence of GBV among pregnant women of Paropakar Maternity and Women’s hospital, Kathmandu, where 46% experienced GBV. On the other hand, Amnesty International documented domestic
Table 3: Association between domestic violence with independent variables

| Variables                        | Number(N) | Domestic violence | p-value |
|----------------------------------|-----------|-------------------|---------|
|                                  |           | Yes (%)           | No(%)   |         |
| **Ethnicity**                    |           |                   |         |         |
| Janajati                         | 91(42.3%) | 60(65.9%)         | 31(34.1%) | 0.109   |
| Dalit                            | 74(34.4%) | 57(77%)           | 17(23%)  |         |
| Others*                          | 50(23.3%) | 30(60%)           | 20(40%)  |         |
| **Religion**                     |           |                   |         |         |
| Hindu                            | 196(91.2%)| 133(67.9%)        | 63(32.1%)| 0.602   |
| Non-Hindu                        | 19(8.8%)  | 14(73.7%)         | 5(26.3%) |         |
| **Age**                          |           |                   |         |         |
| 15-20 years                      | 63(29.3%) | 46(73%)           | 17(27%)  | 0.039** |
| 21-26 years                      | 113(52.6%)| 81(71.7%)         | 32(28.3%)|         |
| Above 26 years                   | 39(18.1%) | 20(51.3%)         | 19(48.7%)|         |
| **Marriage Age**                 |           |                   |         |         |
| Teenage                          | 109(50.7%)| 74(67.9%)         | 35(32.1%)| 0.877   |
| Above teenage                    | 106(49.3%)| 73(68.9%)         | 33(31.1%)|         |
| **Occupation**                   |           |                   |         |         |
| Agriculture/housewife            | 139(64.7%)| 106(76.3%)        | 33(23.7%)| 0.001** |
| Other**                          | 76(35.3%) | 41(53.9%)         | 35(46.1%)|         |
| **Husband occupation**           |           |                   |         |         |
| Agriculture                      | 148(68.8%)| 106(71.6%)        | 42(28.4%)| 0.128   |
| Other than agriculture           | 67(31.2%) | 41(61.2%)         | 26(38.8%)|         |
| **Education level**              |           |                   |         |         |
| Just literate                    | 126(58.6%)| 94(74.6%)         | 32(25.4%)| 0.002** |
| Basic primary                    | 44(20.5%) | 32(72.7%)         | 12(27.3%)|         |
| Secondary and above              | 45(20.9%) | 21(46.7%)         | 24(53.3%)|         |
| **Husband education level**      |           |                   |         |         |
| Just literate                    | 39(18.1%) | 29(74.4%)         | 10(25.6%)| 0.082   |
| Basic primary                    | 55(25.6%) | 31(56.4%)         | 24(43.6%)|         |
| Secondary and above              | 121(56.3%)| 87(71.9%)         | 34(28.1%)|         |
| **Types of marriage**            |           |                   |         |         |
| Arrange                          | 131(60.9%)| 85(64.9%)         | 46(35.1%)| 0.17    |
| Love                             | 84(39.1%) | 62(73.8%)         | 22(26.2%)|         |
| **Types of family**              |           |                   |         |         |
| Nuclear                          | 51(23.7%) | 30(58.8%)         | 21(41.2%)| 0.093   |
| Joint                            | 164(76.3%)| 117(71.3%)        | 47(28.7%)|         |
| **Family income**                |           |                   |         |         |
| <=10000                          | 162(75.3%)| 118(72.8%)        | 44(27.2%)| 0.014** |
| >10000                           | 53(24.7%) | 29(54.7%)         | 24(45.3%)|         |
| **Husband consumed alcohol**     |           |                   |         | <0.001**|
| Yes                              | 99(46%)   | 85(85.9%)         | 14(14.1%)|         |
| No                               | 116(54%)  | 62(53.4%)         | 54(46.6%)|         |
| **Prefer child in family**       |           |                   |         |         |
| Son                              | 56(26%)   | 34(60.7%)         | 22(39.3%)| 0.22    |
| Daughter                         | 12(5.6%)  | 7(58.3%)          | 5(41.7%) |         |
| Any one                          | 147(68.4%)| 106(72.1%)        | 41(27.9%)|         |
| **Own property**                 |           |                   |         |         |
| Yes                              | 91(42.3%) | 73(80.2%)         | 18(19.8%)| 0.001** |
| No                               | 124(57.7%)| 74(59.7%)         | 50(40.3%)|         |
| **Interest to pregnancy**        |           |                   |         |         |
| Yes                              | 77(35.8%) | 65(84.4%)         | 12(15.6%)| <0.001**|
| No                               | 138(64.2%)| 82(59.4%)         | 56(40.6%)|         |
| **Induced Abortion**             |           |                   |         |         |
| Yes                              | 22(10.2%) | 13(59.1%)         | 9(40.9%) | 0.323   |
| No                               | 193(89.8%)| 134(69.4%)        | 59(30.6%)|         |

** denotes the statistically significant at 0.05 (Applying Pearson chi-square test for association at 5% level of significance).
* denotes Brahmin/chetri/newar., *** denotes service, wage(labour), Business.
violence in Nigeria to be on the increase with up to 33.3% of women experiencing violence in their lifetime. However, the prevalence of GBV violence in this study was lower than the study conducted in Hawassa, Ethiopia that reported 24.4%, and a result of a meta-analysis conducted in 2018.

In Nepal, since the early time of human Development, women are considered as second-class citizens in this patriarchal society. Thus, most of the families are headed by men and the women are treated as commodities. Women are affected unreasonably in different ways and condition in women than in men. Thus the chances of DV higher in the context of Nepal. In this study, the Prevalence of domestic violence on pregnant women who faced all (physical, sexual and emotional) violence was found to be 27.9%. This scenario properly reflects the social injustice prevalent in the Madi municipality. Such condition has paramount effects on the female health condition. It is almost similar to the finding of studies in two private hospitals Dhulikhel and Kathmandu Medical College in Nepal, which was 23.7 %, and 18.2% respectively.

The Possible reason behind high prevalence of all the form (Physical, social and emotional) Violence may be due the fact that Nepal has socially illogical practices towards female, deep-rooted stereotypes that discriminate against women remain entrenched in the social, cultural, religious, economic/political institutional, structures of Nepalese society. Shocking fact in the Nepal regarding Gender based violence is that violence against women is considered as a normal and hides within the four wall of the house. In this study, age group, education level of respondent, occupation, family income, presence of own property, interest for pregnancy, husband's consumption of alcohol were associated with Domestic Violence during Pregnancy. This finding was similar with a study conducted by Regmi Mct. al, age group was associated with Domestic Violence during pregnancy.

As pregnant women in Nepal commonly experience DV, there is a need to develop and implement various strategic intervention interventions that reduce its prevalence and harmful consequences to the society. There is also a need to provide training to healthcare personnel who are providing antenatal care, in order to identify and assist women who have experienced DV during pregnancy.

CONCLUSION

Pregnancy-related violence is a serious public health issue. The prevalence of domestic violence among pregnant women was found to be higher. This study indicates that the effective implementation and monitoring of the Domestic Violence Act of Nepal with a greater emphasis to rural women is needed, in addition to increasing community awareness about the consequences of Domestic Violence during pregnancy on maternal and child health outcomes.

CONFLICT OF INTEREST: None

FINANCIAL DISCLOSURE: None

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