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Prevalence and associated factors of violence against women among undergraduate female students in Pokhara metropolitan, Nepal: A cross-sectional study

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Abstract

Background: Violence against women is a public health concern, affecting the well-being of women, children, and families worldwide. Despite young girls facing significant risks, research on this issue in Nepal remains limited. This study aimed to identify the prevalence and associated factors of violence against women among female undergraduate students in Pokhara, Nepal.

Methods: A cross-sectional study was conducted in 13 undergraduate colleges involving 325 female students, selected through simple random sampling. Data were collected using a self-administered questionnaire, including the WHO-approved Gender-based Violence assessment tool, and analyzed using IBM SPSS version 23.

Results: A study of female undergraduate students, with mean age (±SD) of 20.23 ± 1.45 years, found that the majority of them were Brahmin/Chhetri which is regarded as an upper-caste group and more than half (60%) lived with their family. Nearly three-quarters (74.2%) of the students had experienced some form of violence, with psychological violence being the most common (52.3%), followed by sexual (43.4%) and physical violence (21.2%). Intimate partner violence was reported by 36.6% of participants having partners, while 68.5% experienced non-partner violence. Students in their 3rd and 4th years were three times more likely to experience violence (AOR = 3.867; 95% CI 1.55-9.68, p<0.01). Witnessing physical violence against their mothers increased the likelihood of experiencing violence (AOR = 8.198; 95% CI 2.397-28.033, p<0.01) on themselves including intimate-partner (COR= 4.471; 95% CI 1.656 – 12.072, p<0.01), and Sexual violence (AOR=4.883; 95% CI 2.342-10.183, p<0.001)

Conclusion: The study highlights the urgent need for targeted interventions to address and prevent violence against women among young female students in Nepal.

Background

Violence against women is a pervasive global issue with severe consequences for women's well-being. Over the past three decades, global efforts, such as the 1993 UN Declaration and the 1995 Beijing Platform, have highlighted its impact on women's health and rights. According to a 2018 WHO analysis, nearly one in three women worldwide have experienced physical and/or sexual violence, with Southern Asia and Sub-Saharan Africa showing particularly high prevalence rates.(1) Article 38 of Nepal's 2015 Constitution prohibits all forms of violence against women and mandates legal punishment for offenders, with victims entitled to compensation.(2)

In Nepal, over 25% of women and girls experience gender-based violence, but only about one-third seek help, highlighting a critical barrier to gender equality and sustainable development. (3) Nepal Police reports an alarming rise in crimes against women and girls, with 21,568 cases recorded between July 2021 and July 2022. (4) Nearly one-quarter of women aged 15-49 have experienced physical violence, and over half of married women have faced some form of abuse from their spouses and victims of violence do not seek help. (5)

The Sustainable Development Goals (SDGs), adopted by the UN in 2015, aim to eradicate poverty, protect the environment, and promote peace by 2030, with a focus on advancing marginalized populations, especially women and girls.(6)Nepal has committed to gender equality as part of the Sustainable Development Goals. Despite efforts and commitment to international human rights standards, violence against women remains a persistent issue in Nepal. (7,8)

Despite a rise in violence against women and girls, such incidents are often underreported. Research on violence against undergraduate female students, particularly in Pokhara Metropolitan, is scarce. This study aims to identify the prevalence of violence against women and identify the factors associated with it among undergraduate female students.

Materials and Methods

Study area

The study area was Pokhara, a city of Nepal with 38 undergraduate colleges/universities of which 13 undergraduate colleges/universities were selected following simple random sampling technique.

Study population

The study population was undergraduate female students of the selected colleges/universities of Pokhara.

Study design

This was a descriptive cross-sectional study conducted across one-third of the undergraduate colleges within Pokhara University, involving 13 institutions. The prevalence of violence was assessed using different forms of violence such as physical, psychological and sexual violence.

Sample size

The sample size was calculated based upon infinite population formula;

$$n=\frac{z^2\times pq}{d^2}$$

Where,

Z= Standard normal variable at CI=95%, Z = 1.96

d= Margin of error where d=5% i.e., d=0.05

p=26% (for physical, sexual, and emotional violence, as reported by the NDHS. (5))

hence, n=295

Using 10% of non-response rate,

n = 325

Thus, total sample size is 325

Sampling technique

Simple random sampling was employed at multiple stages. Initially, 13 out of 38 undergraduate colleges/universities in Pokhara Metropolitan were randomly selected. Then, one faculty from each selected college was chosen randomly. Subsequently, two batches from these selected faculties were randomly selected. Finally, female students from each selected year were selected based on their proportion in the female population. This method emphasizes a stratified and simple random sampling approach to ensure a representative sample.

Study tool

The tool was acquired from studies conducted in a similar population setting with necessary modifications as per the national context. Quality control involved pretesting tools on 10% of the sample size from different colleges, ensuring reliability and validity through literature review and tool modifications that fits the national context including GBV assessment tool approved by the WHO(9,10)

Data collection

The data collection process was emphasized with establishing rapport with college authorities at first, ensuring they were informed through detailed briefings about the research goals, procedures, and its potential benefits. After obtaining consent from college authorities for the research, participants were briefed about the same. Then, participant's consent was secured through

an informed consent form and ensuring their privacy, data were collected from June to July 2023 using self-administered, structured questionnaires.

Statistical analysis

After being checked for completeness, data was entered into Epi Data 3.1, and IBM SPSS version 23 was used for analysis. The results of the descriptives were presented as frequencies, percentages, mean, median and standard deviation. The bivariable analysis was carried out using chi-square test to determine the association of each independent variable with the outcome variable. After conducting the initial bivariate analysis of all forms of violence and identifying significant risk factors, these factors were included in the subsequent multivariable logistic regression.

Results

A total of 325 data was collected through simple random sampling technique.

Among the total of 325 female students, the majority (60.9%) were from age group of ≤20 years with the mean age (±SD) of 20.23 ± 1.45 years. Nearly two-thirds (62.5%) of participants were from non-health science background and nearly half (41.8%) of the participants were first year students followed by second, fourth and third years. More than half (57.2%) of the respondents were brahmin/chhetri with majority (88.3%) of them following Hindu religion. Most of the students (74.8%) were single and (60%) were living with their family. Most (59.7%) of the students were never partnered and the majority of participants' parents had an education level of basic education or higher and had average parenting style.(Table 1)

Nearly one fifth (17.2%) of the participants witnessed physical violence on their mother and three fourth (76.3%) of them witnessed physical violence on others. One fifth (20.6%) of the total participants witnessed sexual violence on others.(Table 2)

More than one third (35.1%) of ever partnered women face psychological violence directed by their partners. Small proportion (7.6%) of ever partnered women faced physical and sexual violence by their partner. Consequently more than one third (36.6%)of the ever partnered women had experienced at least one of the physical, psychological and sexual violence directed by their partners. (Table 3)

Nearly one-third (30.4%) of the participants with no partners had experienced physical violence and nearly two-thirds (63.9%) of them had experienced psychological violence. Subsequently, nearly two-thirds (63.2%) of the perpetrators of non-partner violence accounts for family members/relatives from the total cases of non-partner violence followed by more than half (54.9%) of the perpetrators of friends with nearly half (44.4%) of them being teachers and nearly one-third (30.8%) of them others. The other perpetrators of non-partner violence include village boys, village peoples and street boys. Consequently, more than two-thirds (68.5%) of the participants had experienced at least one of physical and psychological violence.(Table 4)

Nearly half (42.5%) of the participants had experienced any one form of given sexual violence. And, nearly two thirds (65.2%) of the victims of sexual violence had experienced the violence being less than 16 years of age. Strangers (76.8%) were the most common perpetrators of sexual violence followed by Family/relatives, friends and teachers. Out of those who experienced sexual violence nearly two-third (61.6%) of them gave no immediate reaction. Anxiety(68.1%) and fear(53.6%) were the most common psychological consequences experienced by victims followed by self-blame (25.4%) and Suicidal ideation (11.6%). (Table 5)

Among 325 participants, more than half (52.3%) of the respondents had experienced psychological violence and followed by sexual violence(43.4%) and physical violence (21.2%). Nearly three fourth (71%) of the participants in the study had ever experienced any one of the violence. (Table 6)

Bivariate logistic regression was conducted to identify the variables found to be associated with different experiences of violence i.e Violence against women, Intimate Partner Violence, Non-partnered violence and sexual violence. Then, multivariate logistic regression was employed for the Factors associated with different experiences of violence.

The odds of experiencing violence amongst 3rd and 4th year female students were three times more likely than that of 1st and 2nd year students (AOR = 3.867; 95% CI 1.55-9.68). Students from strict families were more likely to experience violence (AOR=3.753; 95% CI 1.011-13.931). Likewise, those females who witnessed physical violence on their mother (AOR = 8.198; 95% CI 2.397-28.033) and others (AOR= 2.457; 95% CI 1.383-4.366) were more likely to experience any form of violence on themselves. (Table 7)

Female students who witnessed physical violence on their mother were four times more likely to experience violence from their intimate partners (COR= 4.471; 95% CI 1.656 – 12.072). (Table 8)

The female students in 3rd and 4th year were twice more likely to experience non- partner violence than that of 1st and 2nd year (AOR=2.969 95% CI 1.122-7.856). Similarly, students who witnessed physical violence on others (AOR=2.616; 95% CI 1.276-5.365) were twice more likely to experience Non partnered violence. (Table 9)

The 3rd and 4th year female students were two times more likely to experience sexual violence than that of 1st and 2nd year students (AOR=2.201; 95%CI 1.206-4.015) . Those students with partner or ever partnered (AOR= 3.284; 95% CI 1.937-5.57) and those who witnessed physical violence on mothers(AOR=4.883; 95% CI 2.342-10.183) and witnessed physical violence on others(AOR=2.641; 95% CI 1.365-5.11) as well as sexual violence on others (AOR=2.196; 95% CI 1.171-4.117) were more likely to experience sexual violence on themselves.(Table 10)

Discussions

Violence against women stands as a significant issue in public health and a breach of women's fundamental human rights(11). This study revealed nearly three-fourth (71%) of the prevalence of the participants who had experienced some form of violence. A cross-sectional study on Proportion of Gender Based Violence among Female College Students in Kottayam District, India had found similar findings with 79.6% of participants experienced some form of GBV (12). This highlights the widespread commonality of the problem. This study discovered more than one-third (36.6%) of prevalence of IPV and as per WHO estimates, 27% of women between the ages of 15 and 49 who have been in a relationship have been the victim of physical or sexual abuse by their intimate partner.(11) A study conducted at Kathmandu University School of Medical Sciences, Dhulikhel also revealed the prevalence of IPV of 44%(13) This demonstrates the pervasiveness of intimate partner violence (IPV) in various geographic contexts.

Psychological violence was the most common form of violence experienced by female students which accounts with nearly half (52.3%) among the respondents. Consistent with this study a study in Harihar town eastern Ethiopia (14), Ilorin, Nigeria (15) and eastern cape, South Africa(16) had similar findings of psychological violence being the most common form of violence experienced by women. These results draw attention to the stigma associated with psychological violence as well as the disregard it receives in different parts of the world. The studies conducted in Harihar town, eastern Ethiopia(14), and Eastern cape, South Africa(16) had found prevalence of physical violence to be more than one third among the participants where we found the prevalence of physical violence to be one fifth (21.2%). Such little discrepancy could include variations in cultural norms and social demographics. Likewise, a little less than half (43.4 %) prevalence of sexual violence was found in this study. A study done in Enugu; Nigeria (17) and a study in Kathmandu; Nepal (13) had found more than half prevalence of sexual violence in their study. Such slight variation may be attributed to differences in sample size and study location.

Variables involving low levels of education, witnessing family violence, past history of exposure to violence, community norms that ascribe higher status of men and lower status of women are associated with violence against women (11). In this study, female students aged <20 years were more likely to experience violence (COR=1.894; 95% CI 1.129-3.177; p<0.05) which is consistent to the study in Harar town; eastern Ethiopia, Wolatia Sodo; Ethiopia, South west Ethiopia and Enugu, Nigeria (14, 17-19). Female students in their 4th year or above were significantly more likely to experience violence (AOR = 3.867; 95% CI 1.55-9.68; p < 0.01) including Non-partnered violence (AOR=2.969 95% CI 1.122-7.856; p < 0.05) and sexual violence (AOR=2.201; 95% CI: 1.206-4.015; p < 0.05) compared to those in their 2nd year and below ; which was contrast to the study in South west Ethiopia (19) , the difference could be attributed to various factors such as increased exposure to social settings, or different cultural and environmental contexts in Nepal that might increase vulnerability to violence in later years.

Female students who witnessed physical violence on their mothers were more likely to experience any form of violence (AOR = 8.198; 95% CI 2.397-28.033; p<0.01) including Intimate partner violence (COR=4.471; 95% CI 1.656 – 12.072; p<0.01), Non-partnered violence(COR=2.446; 95% CI 1.001- 6.529; p<0.05) and sexual violence(AOR=4.883; 95% CI 2.342-10.183; p<0.001). Likewise, those who witnessed physical violence on others were more likely to experience any form of violence (AOR= 2.457; 95% CI 1.383-4.366; p<0.01) including Non-partnered violence (AOR=2.616; 95% CI 1.276-5.365; p<0.01) and Sexual violence(AOR=2.641; 95% CI 1.365-5.11; p<0.01). These findings are consistent with the study in Nepal(13) , Ethiopia(18) and Nigeria (15).

Additionally witnessing sexual violence on others (AOR=2.196; 95% CI 1.171-4.117; p<0.05) and having a partner or having ever been partnered (AOR=3.284; 95% CI 1.937-5.57; p<0.001) increase the likelihood of experiencing sexual violence; which were in the studies (14,15,18).

This study demonstrated that participants with wholesome household environment may be at no risk of experiencing violence than with participants with high family conflicts. As in current study living arrangements, ethnicity and department of study was not associated with violence.

Strengths and Limitations

This study boasts several strengths, being its emphasis on a demographic that was previously neglected: Undergraduate females and their encounters with violence in 13 colleges of Pokhara Metropolitan that support the study's generalizability. Additionally, it stands out for its comprehensive examination of various forms of violence, rather than solely concentrating on one type. The study also prioritized ethical guidelines. The limitation of this study was its reliance on quantitative methods. Given the broad and multifaceted nature of violence against women, quantitative approaches may overlook contextual factors and fail to capture the full range of participants' experiences and perspectives on the topic. The data collected in this study were self-administered, which may introduce recall and response biases.

Conclusion

In conclusion, this study revealed a high prevalence of violence among undergraduate female students, with nearly three-fourths of the cases involving violence. Specifically, students in their third and fourth year of study, those with strict parenting styles, and those who witnessed physical violence on their mothers and others were significantly more likely to experience violence. National programs on gender-based violence (GBV) predominantly target married women and prioritize severe cases like rape. However, it’s crucial to prioritize young females who may encounter various forms of violence, spanning from their homes to their academic environments. This study offers valuable insights that can inform targeted interventions, such as comprehensive educational programs on healthy relationships, youth empowerment, and self-defense training among young female students.

Abbreviations

GBV
Gender based violence
VAW
Violence against women
IPV
Intimate partner violence
NPV
Non partner violence
SV
Sexual violence

Declarations

Ethical approval

Ethical approval was taken from Institutional Review Committee of Pokhara University (Reference number: 115/2080/81). Written consent was obtained from the administration of each of the 13 colleges included in the study. Additionally, informed written consent was secured from every female students prior to data collection.

Consent for publication

Not applicable.

Availability of data and materials

The datasets of the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interest

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Author's contributions

AP was responsible for concept development and design of research topic, proposal writing, data collection, management and Analysis, interpretation of result and manuscript writing. KJ supervised on research design, proposal writing, data collection process and data analysis and interpretation of results. DP supervised on data analysis, interpretation of results, manuscript review and editing. SP helped in tools editing and modification as per national context. All authors reviewed and approved the final manuscript.

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Tables

Tables 1 to 10 are available in the Supplementary Files section

Supplementary Files

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