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Workplace Violence Experienced by Nursing Staff at a Tertiary Hospital in Urban Nepal

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ABSTRACT

Background: Violence of varying types and degrees occurs in healthcare workplaces. This study assessed the prevalence of violence experienced by nursing staff at a tertiary hospital in urban Nepal.

Methods: A self-administered, cross-sectional survey was distributed to all the members of nursing staff (N=146) currently working at a cardiac center as part of a large teaching hospital in Kathmandu. The types of violence ascertained included verbal abuse, general harassment, physical assault, and sexual violence. Descriptive and logistic regression were applied to the data analysis.

Results: Overall, 68% of all the respondents reported having experienced any type of violence at any point in time, and 47% reported having experienced it in the last 12 months. General harassment was the second most commonly experienced; 44% reported having experienced it any time in the past and 28% reported having experienced it in the last 12 months. Married nurses were more likely to experience violence compared to single nurses.

Conclusion: The development of workplace standards, orientation for all staff members, and the establishment of an effective monitoring and enforcement system are needed to minimize workplace violence at the study site, and most likely elsewhere in Nepal as well.

BACKGROUND

Workplace violence is recognized as a global issue. Violence in the workplace can include verbal/emotional abuse, physical assault, sexual violence, and/or general harassment. The perpetrators of the violence may differ depending on the workplace. Cross-national surveys have shown that the issue is prevalent across many high-income and low-income countries[1]. It has been suggested that healthcare workers in particular face the highest risk of experiencing workplace violence, most likely related to stressful work situations[1,2]. Workplace violence is also linked to post-traumatic stress disorder[1], and can adversely affect the quality of care rendered, productivity, job satisfaction, and staff turnover[3]. To address the issue of workplace violence, multifaceted strategies including legislative, institutional, societal, and individual-level interventions have been recommended by multinational organizations such as the International Labour Organization and the World Health Organization[1,4].

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Nursing staff are but one cadre of the health workforce that may be affected by workplace violence. In a 2015 paper, Ahmad et al.[3] reviewed the literature covering a ten-year period focusing on violence against nurses perpetrated by patients and their families. They found that the majority of the nurses had experienced either verbal or physical violence at least once during their practice and that these experiences adversely affected the quality of care or job satisfaction. Similarly, other systematic reviews[5,6] have also highlighted other dimensions of the issue of workplace violence directed towards nurses.

In Nepal, research on violence against the health workforce has been emerging in recent years. Two studies have assessed violence specifically, as experienced by nursing staff at hospitals. A 2016 study that assessed violence against 200 nurses working at five hospitals in Pokhara, the second-largest city in Nepal, found that 65% of the nurses surveyed had ever experienced some type of violence against them[7]. Another study focusing on sexual harassment was undertaken in 2012, at four hospitals in the same district (where Pokhara is located). The study found that 40% of the nursing staff (among 134 members) had ever experienced sexual harassment[8]. Two other studies have focused on various other cadres of health workers, selected from different health institutions and hospitals[9, 10] The latter study[10] included 100 respondents selected from various hospitals in the eastern region of Nepal and inquired about the existence of any institutional policies regarding violence, or programs aimed at preventing certain forms of violence. Just over 40% of the respondents reported that they were aware of policies aimed at preventing physical violence at their workplace.

Information from various institutions and geographical locations regarding the extent of workplace violence, the severity, and related details is warranted in order to gain a better understanding of the scope and nature of the issue of workplace violence in Nepal. The previous two studies focusing specifically on nursing staff were limited to just one district. However, data from a wider range of geographic areas and institutions are clearly warranted, so that they can also be utilized in country-specific systematic reviews and meta-analysis. Further, none of the previous studies included healthcare institutions based in Kathmandu, the capital city, where the greatest concentration of healthcare facilities exists[11, 12]. With the objective of contributing towards the evidence base on workplace violence against nurses in Nepal, the present study was undertaken at a large tertiary hospital in Kathmandu. In this paper, we present data on the prevalence, perpetrators, and post-incidence experience among nursing staff at the hospital.

METHODS

In September 2018, a self-administered, cross-sectional survey was distributed to all nursing staff (N=146) currently working at an 80-bed cardiac center with 30 doctors. (All the nurses were female since nearly all nurses in Nepal are female). The cardiac center was established in 2009 and is part of a large, semi-public teaching hospital located in Kathmandu (Tribhuvan University Teaching Hospital), a facility with a total of 600 beds and 300 doctors. The study protocol was approved by the institutional review board of the Institute of Medicine, Maharajgunj Nursing Campus, Tribhuvan University.

The self-administered questionnaire included the instruction that the participation of respondents in the survey was completely voluntary and anonymous. An envelope was provided along with instructions for returning the completed survey. The respondents were given the option either to have completed surveys collected by the principal author or, alternatively, to drop survey forms (sealed in the envelopes provided) at the designated reception desk at the study hospital (center).

Four categories of violence were asked about in the survey: verbal/emotional abuse, physical assault, sexual violence, and general harassment. In the paper, the lexicon 'violence' is used to refer to all these various categories of violence interchangeably. Further, because a respondent may have experienced violence more than once in the reference period, we use the term 'prevalence' instead of 'incidence'.

The specific questions relating to the first three categories of violence–verbal/emotional abuse, physical assault, and sexual assault–were adapted from the questions used in the 2016 Nepal Demographic and Health Survey[13]. The questions in this survey were also used in an earlier round of the survey (in 2011), and the module has been administered to thousands of women nationally in Nepal. Emotional violence was defined as including any three specifically defined elements -- saying or doing something to humiliate her (i.e., the respondent) in front of others, threatening to hurt or harm her, or insulting/making her feel bad about herself. Physical violence included any of seven experiences: any person in the workplace–pushing, shaking, or throwing something at her; twisting an

arm or pulling hair; punching with the perpetrator's fist or something that could hurt her; kicking, dragging, or beating; choking or burning; and threatening or attacking with a knife or any other weapon. Sexual violence was ascertained with only a simple question: if anyone tried to touch her private parts (genital area, breasts, or buttocks). This measure did not ask specifically about sexual intercourse, threats, or acts. The measure of general harassment in the workplace included any of seven specific situations, including forced kissing; sharing sexual jokes or showing pornographic materials; inappropriate touching; or inappropriate comments regarding clothes and appearance.

The respondent was asked whether she had ever experienced any specific form of violence at any time in the past (i.e., life-time experience) and then was asked if she had experienced it any time in the past 12 months (current). By definition, the latter is a subset of the former measure. Following this, the respondent was asked who the perpetrator was for each type of violence, and what she experienced post-incident. The background characteristics ascertained in the survey included the following: age, marital status, highest level of education already completed, duration of employment at the current place of work, awareness of any reporting mechanism in case violence is experienced, and whether the respondent had received any orientation regarding the workplace code of conduct/ethics (not necessarily limited to violence).

One question in the survey was open-ended and asked whether the respondent had specific suggestion/s for addressing violence that they may have known about, heard about, or experienced herself at the current workplace. The responses were coded at the time of the data checking and entry.

The potential respondents were given about a week to return the completed questionnaire. A total of 114 or 78% of the potential respondents returned the completed questionnaire anonymously. Several of the respondents commented that they were pleased that research was being conducted on the particular topic. Aside from the survey among the nurses, in-depth interviews were also conducted with three senior administrators at the same facility. The administrators were purposely selected based on their seniority, particularly those staff members who could potentially play a pivotal role in introducing policy interventions in the future. The purpose of these interviews was specifically to ascertain what policies and guidelines pertaining to workplace violence, if any, may exist at the hospital at large, and at the study site in particular. Descriptive and correlation statistics and logistic regression were applied to the data analysis.

RESULTS

In-depth interviews with the senior authorities indicated that, as of the survey time, no specific standards or policies with respect to workplace violence existed at the hospital in general, or at the particular center where the study was conducted. Newly recruited staff (including nurses) were generally provided a one-day orientation on hospital policies, and an orientation may also be given to the other staff in case of any new policies. However, none related specifically to workplace violence. A complaint reporting mechanism existed, but it was often limited to verbal reporting. No effort had been made to address the issue of workplace violence, most likely because, in the words of one senior authority (as mentioned in the in-depth interview), "complaint reporting in writing by the staff has been sporadic" at the hospital.

Table 1 shows the distribution of the study participants by selected background characteristics. Ages ranged from as young as 19 to 60, and the median age was 26. About two in five respondents were married. In terms of educational background, 44% of respondents had completed a Bachelor of Science in nursing degree, and nearly one-fourth had completed a Proficiency Certificate Level (PCL) course, which is a three-year nursing course following 10th-grade schooling. Among the respondents, the median number of years spent working was 4.5 years. About two in five respondents were aware that their current workplace had a reporting system for any type of a complaint. Overall, 16% had attended an orientation program regarding general workplace policies (but not specific to workplace violence).

Table 2 shows data on the main outcome measure of this study. Among the four categories of violence assessed, emotional (i.e., verbal abuse) ranked as the highest. Among all the respondents (nursing staff currently employed at the facility studied), 55% reported having ever experienced verbal abuse; and 32% reported having experienced it at any time in the last 12 months. General harassment was the second most commonly experienced of the four types of misconduct. Just over two in five respondents (44%) reported having experienced it at any time in the past; and 28% reported to have experienced general harassment in the last 12 months. Nearly two in five respondents (18%) reported having experienced physical misconduct any time in the past; and one in 10

respondents (10%) reported having experienced it in the past 12 months. Of all the types of violence ascertained in the survey, sexual violence was the least experienced: 12% of respondents experienced it at any time in the past, and 8% experienced it in the last 12 months. Overall, just over two-thirds (68%) of all the respondents reported having experienced any type of violence at any time in the past; and nearly half (47%) reported having experienced it any time in the past 12 months.

TABLE 1: Distribution of the characteristics of the study sample (nursing staff currently working at Manmohan Cardiothoracic Vascular & Transplant Center), Kathmandu, 2018

Characteristics	Median (Range)	Percent Distribution	No. of Cases
Age (median and range)	26 (19-60)	na	114
Current marital status			
Single		61.4	70
Married		38.6	44
Highest level of education completed			
Bachelor of Science in Nursing (BScN)		43.9	50
Bachelor of Nursing Science (BNS)		30.7	35
Proficiency Certificate Level (PCL)		23.7	27
Master of Nursing (MN)		1.8	2
Duration of years worked (median and range)	4.5 (0-39)	na	114
Awareness of complaint reporting mechanism			
Yes		42.1	48
No		34.2	39
Unsure/don't know		23.7	27
Workplace orientation received			
Yes		15.8	18
No		84.2	96

Note: The total for each variable equals to 100 unless affected by rounding. na=not applicable

TABLE 2: Prevalence of workplace violence experienced nurses currently working at Manmohan Cardiothoracic Vascular & Transplant Center, Kathmandu, 2018

	Yes		No	
Category	%	Cases	%	Cases
Emotional abuse				
Any time in the past	55.3	63	44.7	51
In the past 12 months	31.6	36	68.4	78
General harassment				
Any time in the past	43.9	50	56.1	64
Any time in the past 12 months	28.1	32	71.9	82
Physical assault				
Any time in the past	18.4	21	81.6	93
In the past 12 months	9.6	11	90.4	103
Sexual harassment				
Any time in the past	12.3	14	87.7	100
In the past 12 months	7.9	9	92.1	105
Any of the above (emotional, general, physical or sexual)				
Any time in the past	67.5	77	32.5	37
Any time in the past 12 months	46.5	53	53.5	61

The data in Table 3 show that among those who experienced any form of emotional, general, or physical violence, the respondents were likely to have experienced violence from multiple perpetrators. A doctor was the most commonly mentioned perpetrator of general and physical violence, and the senior nurse was commonly mentioned for emotional violence. Patient relatives were also commonly reported perpetrators of both emotional and general violence. Patients and doctors were the most commonly reported perpetrators of physical violence.

Overall, 61% of the respondents said that they had talked about the incident/s with somebody they could trust. However, of those who had experienced physical violence, only 16% had done so. Further, only about one in five respondents had reported any of the incidents to a higher authority in the system. However, reporting was higher among those who experienced emotional violence than other groups (14% v. 7-9%).

TABLE 3: Perpetrator identification, awareness, and post-incident experience among nursing staff who experienced workplace violence, Manmohan Cardiothoracic Vascular & Transplant Center, Kathmandu, 2018

Variables	Types of Violence§			
	Emotional	General	Physical	Any Three
Perpetrator	†	†	†	†
Doctor	54.8	73.3	52.4	68.8
Senior nurse	59.7	11.1	9.5	50.6
Relative of the patient	45.2	35.6	4.8	45.5
Patient	21.0	15.6	33.3	24.7
Administrative staff	12.9	4.4	0.0	10.4
Other	3.2	2.2	0.0	3.9
Talked to someone about incident‡				
Yes	46.5	36.0	15.8	61.4
No	53.5	64.0	84.2	38.6
Reported incident to authority‡				
Yes	13.5	7.2	9.0	20.2
No	86.5	92.8	91.0	79.8
Post-incidence experience	†	†	†	
Felt reduced job satisfaction, less interest in the job, or felt like quitting job	86.4	79.5	90.0	84.7
Fear/anxiety at work	50.8	66.7	50.0	56.9
Sleeplessness/loss of appetite	22.0	15.4	20.0	22.2
Sustained physical injuries	1.7	2.6	0.0	2.8
Other	3.4	2.6	0.0	4.2
Total				
Percent of violence ever experienced case	56.1	43.9	18.4	67.5
Number of violence ever experienced cases	64	50	21	77
All cases	114	114	114	114

§=Sexual violence is excluded, since it was not asked in the survey. †=The total for this variable may exceed 100 due to multiple responses. ‡The total equals to 100.

Table 3 also shows data on the respondents' recall of post-incident experience. The overwhelming majority (85%-90%) of those who had been exposed to emotional, general, or physical violence felt reduced job satisfaction, wherein some even felt like quitting their jobs. Similarly, 60% of them felt continued fear and anxiety while at work. Among all the respondents, 2.8% had experienced sustained physical injury.

Table 4 shows the respondents' ever experience of workplace violence by their selected background characteristics. A higher proportion of the relatively older group experienced violence as compared to the younger group (58% v. 42% for any form of violence) across all forms of violence. The proportion of the relatively older group that experienced violence was considerably higher, especially for emotional and physical violence (over 65%). Similarly, single nurses experienced more violence than married nurses, with the exception of those who experienced physical violence. Over 85% of those who experienced sexual violence were single nurses. About 29% of those who had experienced physical violence also reported having received an orientation regarding general policies and practices. However, the overwhelming majority of nurses who experienced workplace violence had not received any orientation in recent years. Between 12% and 29% of the nurses who had experienced any form of violence were unsure of any reporting mechanism in the case of any workplace issues, including violence. Only about 31% to 52% of the respondents reported being aware of the existence of a reporting mechanism for any complaints.

TABLE 4: Workplace violence ever experienced by currently working nursing staff, by selected background factors, Kathmandu, 2018

	Types of Violence Experienced (%)				
Factors	Emotional	General	Physical	Sexual	Any
Age					
19-25	34.9	46.0	33.3	50.0	41.6
26-60	65.1	54.0	66.7	50.0	58.4
Marital status					
Single	52.4	60.0	42.9	85.7	54.5
Married	47.6	40.0	57.1	14.3	45.5
Orientation received					
Yes	19.0	18.0	28.6	0.0	16.9
No	81.0	82.0	71.4	100.0	83.1
Aware of reporting mechanism					
Yes	42.9	36.0	52.4	28.6	44.2
No	39.7	52.0	28.6	42.9	37.7
Unsure	17.5	12.0	19.0	28.6	18.2
Total					
Percent of violence ever experienced cases	56.1	43.9	18.4	12.3	67.5
Number of violence ever experienced cases	64	50	21	14	77
All cases	114	114	114	114	114

Note: The percent distribution of each variable except age in the table equals to 100 unless affected by rounding.

A binary logistic regression was also performed to assess the odds ratio (OR) of selected co-variates with respect to the various forms of violence included in the surveys. In consideration of the rather small sample size, the OR, based only on bivariate logistic regression, is presented in Table 5. Among those who experienced emotional violence, the odds of experiencing the violence were 2.5 times higher among the married nurses (compared to single nurses). Similarly, as compared to their younger counterparts, the relatively older respondents were 2.4 times more likely to have experienced emotional violence. Among those who experienced physical violence, the odds of having experienced it were 2.5 times higher if they were married, and 2.7 times higher among those who had received any orientation (compared to their counterparts). In contrast, being married was also a significant deterrent (OR=0.23) for those who had experienced sexual violence. Marital status remained a significant covariate for the respondents who experienced any form of violence. The effects of other variables were diluted for the pooled sample.

TABLE 5: Effects of selected co-variates on specific form of violence experienced by currently working nursing staff, (odds ratio based on bivariate logistic regression), Kathmandu, 2018

Co-variate	Types of Violence Experienced				
	Emotional	General	Physical	Sexual	Any
Age					
19-25	1.00	1.00	1.00	1.00	1.00
26-60	2.46**	0.91	1.80	0.79	1.48
	(1.15-5.25)	(0.43-1.92)	(0.66-4.86)	(0.26-2.41)	(0.68-3.26)
Marital status					
Single	1.00	1.00	1.00	1.00	1.00
Married	2.40**	1.11	2.54*	0.23*	2.59**
	(1.09-5.29)	(0.52-2.37)	(0.99-6.67)	(0.05-1.08)	(1.08-6.22)
Orientation received					
No	1.00	1.00	1.00	1.00	1.00
Yes	1.77	1.34	2.70*	0.0	1.30
	(0.61-5.09)	(0.49-3.68)	(0.88-8.31)	(0.0-0.0)	(0.43-3.97)
Aware of reporting mechanism					
No	1.00	1.00	1.00	1.00	1.00
Yes	1.07	0.64	1.67	0.51	1.30
	(0.51-2.26)	(0.30-1.36)	(0.64-4.31)	(0.15-1.73)	(0.58-2.90)

*p≤.10, **p≤.05. Note: Confidence intervals are shown in parenthesis.

Of the total of 114 respondents, 95 (83%) also responded to an open-ended question as to what specific suggestions they might have in order to address the issue of violence at their workplace. Many respondents provided multiple responses. The most common suggestions included the following: develop and implement standards and guidelines; provide orientation to staff at all levels; create a good working and supportive system; enforce the reporting and complaint system; install a surveillance system in the workplace and inpatient wards; treat all patients equally; expand the equipment and facilities for the patients; introduce a functioning system for patient complaints; improve the patient-to-nurse ratio; take up and address complaints in a timely, impartial and satisfactory manner; and establish a counseling provision especially for those affected. We also note that some of these suggestions were similar to the suggestions provided by the senior authorities who participated in the in-depth interviews.

DISCUSSION

The present study is based on one particular cardiac-specialty facility with 80 beds, within a large teaching hospital system in Kathmandu, Nepal's capital city. The strength of the study is that nearly 80% of the potential respondents (i.e., nursing staff currently working at the facility) responded to the self-administered survey. Thus, the study provides a good representation of various forms of workplace violence ever or currently experienced by the nurses (all female, since male nurses are still rare in Nepal). We speculate that one reason for a relatively high response rate could have been because the principal researcher had served in the role of a student leader/advocate on behalf of nursing students within the same university system where the study was undertaken. The respondents may have been more willing to participate in the study and share their experiences with hope and anticipation that the problem of sexual violence could be addressed (when it is taken up by a person who is familiar with the system as opposed to being addressed by a person who is completely external to the system). However, this remains conjectural.

At the same time, this study is limited to just one facility, among many such facilities; furthermore, there were only 146 nurses in total working at the location, and this limited finer analysis with statistical tests. With larger samples, some of the patterns seen in the results could well turn out to be statistically significant. This limitation needs to be kept in perspective while drawing inferences from the data.

Notwithstanding the limitation, the study clearly showed that as high as 55% and 12% of the nurses had ever experienced emotional and sexual violence, respectively. Additionally, more than two-thirds (68%) of the respondents had experienced some form of violence in their lifetime. This level of prevalence of violence is

similar to the level (65%) reported by Pandey et al.[7] in their 2016 study, conducted among 200 nurses selected from five hospitals in Pokhara. Further, the prevalence found in this study is also similar to a 2013 study[9], undertaken among a different cadre of health workers in Baglung, the district adjoining the city of Pokhara. In contrast, the prevalence found in the present study is much higher than reported in a 2012 study among 134 nurses in Pokhara[8]. This is most likely because the 2012 study focused only on specific forms of sexual harassment. The level of prevalence of physical violence found in the present study is similar, but the prevalence of emotional violence is higher than reported in the study conducted in eastern Nepal[10]. Some of the differences across these studies are most probably due to sampling variability, variations in the specific measures of violence, and the reference time period that the incidence/prevalence referred to.

Beyond the lifetime experience of violence, the present study also found that about one-third of the respondents reported having experienced emotional violence in the 12 months preceding the survey. Further, nearly one in ten (8%) of all the nurses reported having experienced sexual violence in the 12 months preceding the survey. Nearly half of the respondents reported having experienced at least one form of violence in the last 12 months. Thus, these data provide support to the previous studies within Nepal suggesting that workplace violence remains a serious issue at healthcare facilities in the country.

The study also suggested that among the respondents, nursing staff over 25 years of age, married, and particularly those who were aware of potential violence were more likely to experience and report it. Having participated in an orientation, and having the awareness of a reporting mechanism (although not specific to workplace violence), may have helped the nurses to be comparatively more sensitive to any undesirable or unwanted incidences in the workplace. Similarly, particularly for married nursing professionals, the normative line is probably clearer than for single nursing professionals, as some of them may consider some less severe forms of abuse or violence as inevitable, or coming as part of the profession. This self-defined and perceived tolerance level probably affected the reporting of the experience in the survey, and also because of this fact, respondents who reported violence were most likely those with a somewhat different level of expectation or tolerance. However, this remains a hypothesis until more in-depth studies focusing on this aspect of the issue are carried out.

Cross-national surveys have suggested that workplace violence in stressful professions may also induce or aggravate post-traumatic stress disorder (PTSD) and that a significant majority of healthcare workers may suffer from PTSD[1, 2]. In the present study, many of the nurses who experienced a certain type of violence reported feelings of stress, and diminished interest in their job. As indicated by a review of other evidence, such stresses could adversely affect the quality of care or may result in staff turnover[3]. Although the present study was not designed to assess these aspects, some of the data may be indicative of such problems, particularly those that experienced severe forms of violence. However, in light of the fact that workplace violence is a common occurrence at the present study site and elsewhere, as evidenced in earlier studies, provisions regarding counseling and related post-violence services may be needed. However, these services could even be outsourced, and would not necessarily have to be set up at each and every institution.

The study also found that doctors and senior nurses from within the hospital system were the most commonly reported perpetrators, particularly for emotional forms of violence. Additionally, the relative/s of the patients or patients themselves were also reported to be the perpetrators of emotional, general, or physical violence. Strong correlations between stressful jobs and workplace violence have also been found[1]. Furthermore, long wait times encountered by patients and visitors (including relatives), along with inadequate capacity or supplies, have been noted to be some of the main reasons for violence being perpetrated, especially by patients or their relatives[3]. These factors may be applicable to the study site as well, though it was beyond the scope of the present study. Nonetheless, the international evidence provides clues for addressing some of these issues at an institutional/organizational level, as both preventive and protective measures.

Finally, it may also be noted that the hospital in which the present study was undertaken has approximately 800 nurses, working in various service departments and specialty centers. It is often regarded as one of the premier hospitals in the country. There is no a priori reason to assume that the evidence found in this study was limited to one specialty center within the hospital. If we were to apply the rate of violence experienced in the last 12 months to the whole nursing staff population, it would imply that as many as 400 members of the nursing staff may have experienced at least one form of violence, among the hospital's entire nursing staff population. In this respect, the issue of violence towards nursing staff at the hospital documented by the present study also underscores the importance of all stakeholders seriously addressing the issue.

CONCLUSION

The study clearly showed that workplace violence of various types directed towards nursing staff is pervasive at the study site, and possibly across departments or other centers within the hospital system. The study also found that the hospital still lacks any systematic approach for addressing the issue of workplace violence. The data provide support for initiating and implementing strategies aimed at minimizing workplace violence at the study hospital. These steps may include: reviewing and formulating workplace standards, ensuring that all staff members receive orientation regarding the standards and guidelines, and establishing effective monitoring and enforcement system across all the hospital's departments and centers. The patients and the public too would need to be made aware of the standards, and at the same time, have a mechanism for voicing their grievances. The data presented in this study may also contribute to systematic reviews and meta-analysis at the country level.

ABBREVIATIONS

PCL=Proficiency Certificate Level, PTSD=post-traumatic stress disorder, OR=odds ratio

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study protocol was approved by the Institutional Review Committee (IRC) of the Institute of Medicine, Tribhuvan University, Maharajgunj Nursing Campus, Kathmandu. The study employed a self-administered questionnaire with the instruction that the respondent's participation in the survey was completely voluntary and anonymous. An envelope was provided along with the instructions for returning the completed survey. The respondents were given the option either to have completed surveys collected by the principle author, or alternatively to drop survey forms, sealed in the envelop provided, at the designated reception desk at the study hospital.

COMPETING INTERESTS

The authors declare no conflict of interest.

FUNDING

No external funding was used for the study.

AUTHORS' CONTRIBUTION

BD co-conceptualized the research, prepared the study protocol, implemented the study, edited data, conducted in-depth interviews, and wrote some sections of the manuscript; PB verified, managed, processed and verified the data; CS reviewed the study instruments, supervised and coordinated the study; ST co-conceptualized the study, developed the data analysis plan, interpreted the data, and completed the manuscript; all authors have reviewed and approved the manuscript.

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