

# Workplace Violence and its Associated Factors among Nurses

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## ABSTRACT

**Background:** Workplace violence among nurses is prevalent worldwide. If nurses become aware of the workplace violence and its risk factors then only they can protect themselves. This study assessed the prevalence of workplace violence and its associated factors among nurses in Pokhara, Nepal.

**Methods:** A hospital-based descriptive cross-sectional study was conducted in Pokhara. The required sample size of the study was 200 nurses. We adopted self-administered questionnaire developed by International Labor Office, International Council of Nurses, World Health Organization (WHO), and Public Services International. Out of 21 hospitals of Pokhara, we selected five hospitals using simple random sampling method. The number of nurses in each hospital was fixed proportionately considering the total number of employed nurses. Individual nurses were selected on the first meet first basis to gain the required number.

**Results:** Two-thirds (64.5%) nurses experienced some type of violence in the last six months at their workplace. The proportion of verbal violence was higher (61.5%) compared to the physical (15.5%) and sexual violence (9%). Most perpetrators of the violence were the relatives of patients and hospital employees. Age of nurses and working stations had statistically significant association with workplace violence ( $p$ -value  $< 0.05$ ).

**Conclusions:** Workplace violence among nurses is a noteworthy problem in Pokhara whereas nearly two-thirds of nurses faced some type of violence in last six months. It is an urge to widen awareness level of nurses on the violence thus, they can take precaution themselves and ask hospital administration and other stakeholders to address the workplace violence.

**Keywords:** Nurses, physical violence, sexual violence, workplace violence, verbal violence

## INTRODUCTION

Violence is any aggressive behavior aimed at inflicting harm on other people.<sup>1,2</sup> Workplace violence (WPV) is defined as an incident whereas staff members are abused and threatened in their work.<sup>3</sup> Most nurses experienced some type of violence in developing as well as developed countries.<sup>4,5</sup> Workplace violence is regarded as being a problematic and significant issue for the nursing profession worldwide.<sup>6-8</sup>

Studies showed that nurses are three times more likely to experience violence than any other professional group.<sup>9</sup> International Council of Nurses (ICN) claimed that globally more than two-thirds nurses did not feel safe at the workplace in 2004. Nearly 22% of nurses experienced frequent violence with patients and their relatives in European countries as well.<sup>10</sup> It varied from place to place ranged from 10 to 95 percent in many countries worldwide.<sup>3,7,11-15</sup> Thus this study aimed to

assess the prevalence of workplace violence and its associated factors among nurses in Pokhara, Nepal.

## METHODS

We conducted an institution-based cross-sectional descriptive study for assessing the prevalence and factors associated with workplace violence among nurses in Pokhara, Kaski, Nepal from July to December 2016. We calculated sample size considering 87.2% prevalence of workplace violence among nurses,<sup>16</sup> 95% desired level of confidence and 5% acceptable margin of error. The required sample size was 192; however, we rounded this figure and decided to interview 200 nurses from different hospitals. Amongst 21 hospitals of Pokhara Sub-Metropolitan, we selected five hospitals using simple random sampling technique. The numbers of nurses from each hospital were fixed using proportionate sampling technique and the individual nurse was selected on the

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first meet first basis.

We collected data using the self-administrative questionnaire which was developed and validated by World Health Organization (WHO), International Council of Nurses (ICN), International Labor Office (ILO) and PSI in 2003. Ethical clearance was obtained from the Institutional Review Committee (IRC) of Pokhara University. We also requested each hospital administration and obtained written permission prior to conduct studies. We took a written consent from each respondent before participation. We distributed a self-administered questionnaire and requested for filling it in the presence of enumerator. The questionnaire includes personal and workplace-related information, prevalence of violence incidents viz. physical, verbal and sexual violence with the characteristics of respective violence. The English version of the questionnaire was translated into Nepali language and the translated version was pretested in a hospital of Pokhara Sub-metropolitan which was not included in this study. We finalized the translated version of the questionnaire with minor modification considering the results of the pretest.

We reviewed, coded and entered all collected data in Epi-data 3.1 version and transferred to SPSS 20.0 version for further analysis. First, we performed the descriptive analysis the prevalence of WPV, socio-demographic and occupational characteristics of nurses. We further applied *Chi-square* test to assess the association between WPV and related factors.

## RESULTS

Most nurses faced some type of violence in their workplace. However, it varied regarding their demographic and socio-economic characteristics and workplace. There was also heterogeneity of demographic and socioeconomic characteristics and workplace condition of the respondents (Table 1-3).

**Table 1. Demographic characteristics of nurses (n=200).**

Characteristics	No.	Percent
Age (n=192)		
Less than 25 years	114	59.4
26 to 30 years	45	23.4
31 to 35 years	13	6.8
36 to 40 years	8	4.2
41 to 45 years	9	4.7
Above 45	3	1.6
Caste		
Dalits	14	7

Disadvantaged Janajati	31	15.5
Disadvantaged non-Dalit-Terai caste	2	1
Relatively advantaged Janajatis	51	25.5
Advantaged caste	102	51
Marital status		
Single	90	45
Married	104	52
Separated/Divorced	1	0.5
Widow	5	2.5
Position of respondents		
ANM	28	14
Senior ANM	11	5.5
Staff Nurse	153	76.5
Senior Staff Nurse	8	4

**Table 2. Socio-economic characteristics of nurses and their working place information (n=200).**

Characteristics	No.	Percent
Professional experience		
Less than 10 years	169	84.5
More than 10 years	31	15.5
Experience in current institution		
Less than 5 years	157	78.5
More than 5 years	43	21.5
Type of organization		
Public	70	35
Private	74	37
Non-Governmental	56	28
Job status		
Permanent	124	62
Temporary	76	38

**Table 3. Workplace information for Nurses (n=200).**

Characteristics	No.	Percent
Nature of job		
Full time	190	95
Part-time	10	5
Nature of duties		
Rotation	195	97.5
Fix	5	2.5
Working between 6 pm to 7 am		
Yes	188	94
No	12	6
Currently working wards		
General surgery	23	11.5

Psychiatric	5	2.5
Emergency	22	11
Operating room	9	4.5
Intensive care unit	13	6.5
Specialized unit	24	12
Maternity	38	19
Medical	21	10.5
Gynae	9	4.5
NCU	9	4.5
CCU	7	3.5
Post-operative	6	3
ENT	5	2.5
Others (Cardiac, dialysis, elderly, private ward)	9	4.5

The majority of nurses (64.5%) were reported some type of violence in their workplace. The prevalence of verbal violence (61.5%) was higher than the prevalence of physical violence (15.5%) and sexual violence (9%) respectively (Figure1). Physical violence and verbal violence among nurses are mostly perpetrated by the relatives of patients whereas sexual violence is mostly perpetrated by the in-house employees. (Table 4)

Three-fourths (75%) of the nurses of age group 36-40 years were found to be more exposed to WPV. The separated, divorced and singled nurses were found more exposed to workplace violence than married nurses. ANMs and staff nurses were working in the similar settings and also reported being a victim of WPV in the similar ratio (67.9%, 66%). Nurses working in non-governmental hospitals (75%) were more exposed to workplace violence than nurses at private and public hospitals. The table also presents that nurses less than 10 years of experience (65.1%) had experienced more WPV. Part-time nurses (80%) were more exposed to WPV. More than two-thirds (68.4%) of temporary nurses had experienced workplace violence. Nurses having fixed duties had reported being a victim of WPV compared with the rotation duties. The majority of the nurses who worked at the time of 6 pm to 7 am (75%) and in the intensive care unit (84.6%) had experienced more WPV. Almost equal (64.2%, 64.9%) of respondents had experienced verbal violence who were working in the institution which has reporting procedures for violence and institution that did not have reporting procedures. No significant association was found between the workplace violence and any of the socio-demographic and occupational factors (Table 5 and 6).

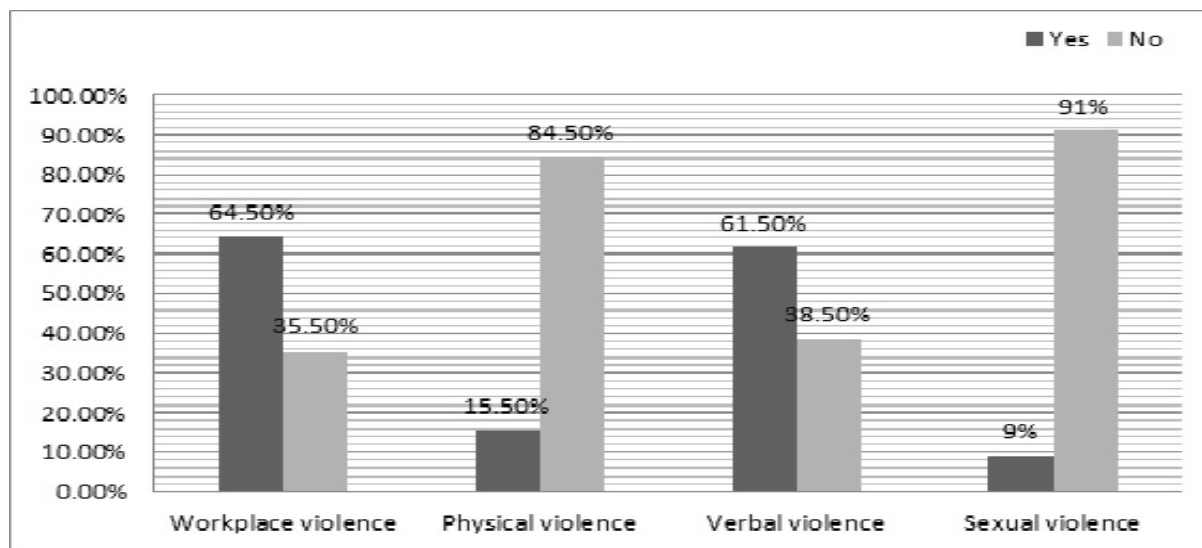


Figure 1. Prevalence of workplace violence.

Table 4. Perpetrators of workplace violence.

Types violence	Patients	Relatives of patients	Colleagues / staff	Management	External worker	In-house-employees	General Public
Physical	29%	41.9%	6.5%	15.1%	-	-	6.5%
Verbal	8.9%	51.2%	10.6%	2.4%	19.5%	7.3%	
Sexual	16.7%	22.2%	5.6%	22.2%	5.6%	27.8%	

**Table 5. Association between demographic characteristics of nurses and workplace violence.**

Characteristics	Workplace violence				Chi-square	p-value
	Yes		No			
	No.	Percent	No.	Percent		
<b>Age</b>						
Less than 25 years	80	70.2	34	29.8	5.084	0.079
26-35 years	36	62.1	22	37.9		
Above 35 years	9	45	11	55		
<b>Marital status</b>						
Single	65	72.2	25	27.8	4.482#	0.106
Married	61	58.7	43	41.3		
Separated/divorced/widow	3	50	3	50		
<b>Position of respondent</b>						
ANM	25	64.1	14	35.9	0.03	0.954
Staff Nurse	104	64.6	57	35.4		
<b>Type of organization</b>						
Public	39	55.7	31	44.3	5.060	0.080
Private	48	64.9	26	35.1		
Non-governmental	42	75	14	25		
<b>Job status</b>						
Permanent	77	62.1	47	37.9	0.823	0.354
Temporary	52	68.4	24	31.6		

**Table 6. Association between demographic characteristics of nurses and workplace violence.**

Characteristics	Workplace violence				Chi-square	p-value
	Yes		No			
	No.	Percent	No.	Percent		
<b>Professional experience</b>						
Less than 10 years	110	65.1	59	34.9	0.165	0.685
More than 10 years	19	61.3	12	38.7		
<b>Nature of job</b>						
Full time	121	63.7	69	36.3	1.206#	0.272
Part time	8	80	2	20		
<b>Nature of duties</b>						
Rotational	125	64.1	70	35.9	0.589#	0.443
Fixed	4	80	1	20		
<b>Work time between 6 pm to 7 am</b>						
Yes	120	63.8	68	36.2	0.648#	0.421
No	9	75	3	25		
<b>Currently working ward</b>						
Medical/ surgical/ psychiatric/ emergency/ specialized	59	62.1	36	37.9	1.845	0.605
Operating room/ post-operative/ ICU/NCU/CCU	28	63.6	16	36.4		
Maternity/gynae.	34	72.3	13	27.7		
Other wards/stations	8	57.1	6	42.9		
<b>Presence of reporting</b>						
Yes	79	64.2	44	35.8	0.010	0.919
No	50	64.9	27	35.1		

# Likelihood ratio, \* p-value significant at &lt;0.05

## DISCUSSION

Nearly two-thirds nurses experienced some types of violence in the workplace in last six months. The majority of nurses (61.5%) exposed to verbal violence in the workplace. The prevalence of physical violence and sexual violence in the workplace was reported 15.5% and 9% respectively. However, most factors such as age, marital status, position of respondents, type of organization, professional experience, nature of job, job status, nature of duties, working in night shift, working wards and presence of reporting procedure in the institution were not found significantly associated with the workplace violence viz. physical violence, verbal violence and sexual violence.

This study showed that nearly two-thirds of participants experienced workplace violence in last 6 months. This is lower than the findings of studies conducted in Palestinian hospitals (80.4%) which had the recall period of 12 months,<sup>15</sup> Hong Kong (76%) with recall period of 12 months<sup>8</sup> and higher than the studies conducted in Northwest Ethiopia,<sup>17</sup> Southern Ethiopia (29.9%)<sup>18</sup> and Egypt (27.7%).<sup>6</sup> This difference could be a lack of violence preventing strategies such as policy/procedures, training, adequate safety measures in hospitals and due to under-reporting of the violent incident.

In relation to the findings of the studies conducted in Southern Thailand,<sup>19</sup> Palestine,<sup>15</sup> Ghana,<sup>20</sup> Northwest Ethiopia<sup>17</sup> and Iran,<sup>21</sup> this study also showed that younger and single nurses had experienced more violence in their workplace. In this study, the nurses currently working in the maternity and gynecology wards were reported mostly exposed to workplace violence. This finding is different from the study conducted in European countries which showed the higher prevalence of violence in the psychiatric, geriatric and emergency ward.<sup>10</sup> The reason behind this difference could be that maternity and gynecology ward consists more critical patients and patients with greater pain, furthermore, the relatives of patients might have more chances to be close to the nurses in duty being possessive of their patients' condition.

This study revealed that less experienced nurses faced more workplace violence than experienced ones. Studies in Iran, Southern Thailand, and Palestine support the findings of our study.<sup>7,10,15,21,22</sup> The reason behind this could be that the nurses with less experience may commit mistakes and also they may lack sound communication skills. Our study shows that staff nurses had experienced more violence than ANMs which is paradoxical with the

findings of a study conducted in Iran and Jordan, which showed that nurses with lower position were exposed to workplace violence.<sup>7,23</sup> The difference in findings might be due to variation in age and working experience between nurses and ANMs. Unlike with this study results, a study conducted in Southern Thailand<sup>19</sup> showed that nurses working in rotating shifts experienced more violence than nurses in fixed shifts. However, in Southern Ethiopia<sup>18</sup> was not significant association ( $p$ -value $<0.05$ ) between the workplace violence and age, work experience, working ward and nature of duties. The reason behind this difference might be due to the nature of studies and varied in the sample size.

In this study, 15.5% respondents were found to be exposed to physical violence which was higher than the results of the study conducted in China (5.8%)<sup>24</sup>, Southern Thailand (3.1%),<sup>19</sup> Egypt(9.3%)<sup>6</sup> and lower than the study conducted in Iran (49.9%),<sup>7</sup> North of Iran (29.1%),<sup>25</sup> Palestine (20.8%).<sup>15</sup> Studies conducted in China<sup>22</sup> and Iran<sup>7</sup> showed that the perpetrators of the physical violence were mostly the relatives of patients.

This study showed the higher percent of verbal violence than the physical violence and sexual violence which is consistent with the result of other studies.<sup>16,18,19,24-26</sup> This difference may be due to cultural differences and the way in which violence is described. Similar findings were showed in Ghana.<sup>20</sup> This study also shows that patient's relatives were the main perpetrators of the verbal abuse.

This study further illustrates that nine percent of the respondents in the study were exposed to sexual violence at the workplace. Studies in Ghana,<sup>20</sup> Southern Ethiopia<sup>18</sup> and China<sup>24</sup> also revealed similar results about nurse's exposing to workplace sexual violence. A study conducted at Ghana<sup>20</sup> shows that the perpetrators of the sexual violence were mostly the doctors followed by relatives of patients.

Despite the institution based cross-sectional study, this research only included quantitative information. Violence is a comprehensive and subjective phenomenon thus quantitative information may need the qualitative explanation for the precise assessment. Similarly, due to constraints of time, and resources, we took minimum required sample size. Results are based on the reported information by the respondents. Considering the limited size of the target population at the hospital, we followed first come first methods for recruiting the respondents at the hospital.

## CONCLUSIONS

Workplace violence among nurses is a major problem and matter of concern in health care. The verbal violence is common compared with physical abuse and sexual harassment in most hospitals. However, the prevalence of violence varied with age of the nurses, marital status, the tenure of experience, position, nature of job/duties, working organization, working time, reporting procedures and working ward. Separated/divorced/widow and working in rotational shifts and in night shifts nurse experienced more violence i.e. physical verbal and sexual. Working and stations/wards were significantly associated with physical violence. Nurses need to do self-reporting of the violent incidents that occur in their working environment. Violence prevention policies and strategies, safety measures, education and training and adoption of protective factors such as an adequate number of security guards, alarm systems, restricted visiting times could reduce the incidence of workplace violence among nurses in the hospital. There is a need to increase awareness of problems among nurses, health service managers, and the general public.

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