

Prevalence of workplace violence against nurses in Iran and its related factors

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Research

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Abstract

Background: Workplace violence is a relatively common problem in most jobs. The medical personnel especially nursing staff has been exposed to a great deal of violence from patients, companions, and colleagues, and it is necessary to determine its frequency by controlling it. The aim of this study was to investigate the prevalence of workplace violence against nurses.

Materials and Methods: This study was a descriptive study which was performed among 200 qualified nursing staff working in Imam Hossain Hospital in Shahroud of Iran. In this study, after selecting individuals and obtaining informed consent, demographic and workplace violence questionnaires in health sector were collected.

Results: Of the 200 participants, 177 (88.5%) were female and the rest were male. The mean age of the participants was 35.8 ± 13.5 years. 81.5% of who were nurses. Also, was showed that psychological violence with the prevalence of 68.5% during the last year was the most violent occurrence against the nurses working in this center. Workplace violence variables were significantly associated with job of nurses ($p < 0.033$), work experience of less than 5 years ($p < 0.027$), work of service in emergency ward ($p < 0.029$), work shift of nurses in circulate shirt ($p < 0.001$), violent male sex ($p < 0.036$) and time of violence in discharge time ($p < 0.011$).

Conclusion: The results of this study showed that the incidence of violence against nurses was relatively common and the most frequent was psychological abuse. Although it is not easy to accurately calculate violence against medical staff, it is important to carefully examine the same.

Introduction

An incident that abuses, mistreats, threatens or harasses employees in their workplace so that their health, well-being and safety are threatened is called workplace violence (1). Violence includes both physical and non-physical dimensions. Types of violence can be defined physical violence (quarreling, killing, inflicting physical harm, etc.), verbal violence (abuse, bullying, verbal abuse, etc.), psychological violence and sexual violence. Today, health professionals are more exposed to the dangers of violence than ever before. Treatment staff in hospitals often encounters people who have recently had a crisis or problem with their loved ones. In this situation, the patient and his or her companions face different tensions, and since aggression is one of the most common human reactions in critical situations, violence is likely at any time (2). Previous studies reported that employees in the health system experience 16 times more violence than other employees (3–5). According to the US Bureau of Labor Statistics, there are two million non-fatal occupational violence incidents annually. Workplace violence is the third leading cause of death in America from occupational injuries and injuries, and the second leading cause of death in the workplace is women. For example, nurses in different occupational situations, including outpatient departments, inpatient departments, special departments such as psychiatric, emergency departments, and when providing home care services may also be violent (4).

Violence in the workplace reduces employees' satisfaction with their jobs, reduces useful functioning, and increases the feeling of fatigue in individuals, ultimately leading to increased personal errors and reduced responsibility, resulting in increased health care costs. In some cases, these violations can cause legal problems for staff and increase the anxiety of the aggrieved person, causing more aggression and dissatisfaction (7). As a major occupational hazard in the United States, workplace violence kills 900 people annually and causes 1.7 million non-fatal serious injuries. In 2007, about 15 percent of work-related facilities were devoted to violent acts and threats (6). The findings of a systematic review of workplace violence showed that despite cultural differences in countries, nurses' responses to violence included anger, fear or anxiety, symptoms of traumatic stress syndrome, self-blame, guilt, and shame. These psychological effects can persist for months or years and change the mental health, social life and mental image of nurses in relation to their careers. Violence can also be a deterrent to nursing care and may lead to job abandonment (7–8). According to a study in Iran, 21.3% of nurses have been physically assaulted at least once, in 25% of which has resulted in injury to nurses (9).

Introducing new rules and creating greater security in the hospital environment will require increased awareness of the types of violence, conditions leading to violence, and greater understanding of staffing problems (10). Obtained statistics can draw the attention of officials to the status of personnel by providing appropriate rules and holding conferences and meetings to teach them how to manage anger and control stressful situations (10–11). Also by establishing counseling and referral centers for injured personnel, they can promote the health of the medical community and improve the quality of patient care (12). Therefore, the present study, considering the lack of implementation of this research in Shahroud, this study was conducted to evaluate the frequency of violence against patients and nurses in Imam Hossain hospital of Shahroud.

Materials & Methods

This descriptive study was performed on all nursing staff of all departments and emergency departments in different shifts in Imam Hossain hospital in Shahroud (northeast of Iran) in 2019.

Inclusions criteria included at least one year of work experience in Imam Hossain hospital in Shahroud and willingness to participate in the study and exclusion criteria include: The questionnaire was incomplete or the survey participants were not satisfied.

After submitting the research letter to Imam Hossain hospital management and obtaining permission, a questionnaire was distributed among nursing staff who met the inclusion criteria. Nurses were provided with necessary explanations regarding the criteria for entering the study, ethical considerations and how to complete the questionnaire. Data collection tools included demographic information questionnaire and Workplace Violence in Health (WVH) questionnaire. The questionnaire was developed by the International Labor Office (ILO), the World Health Organization (WHO) and the International Council of Nurses (ICN) (13–14). The questionnaire consists of 58 questions in four sections: physical violence (18 questions), psychological violence (12 questions), sexual violence (12 questions) and racial violence (12 questions).

Questionnaires were collected and analyzed by SPSS 16 software using descriptive statistics, chi-square and independent t-test. Descriptive statistics, mean, absolute and relative frequency were also used to determine the types of violence.

Sample size using G. power 3.1.3 at a significant level of 5% and a power of 80%, equal to 250 nurses. This study has an ethics code number (IR.SHMU.REC.1398.032) from research deputy of Shahroud University of Medical Sciences. The essential information and the objectives of the study were explained to the patients, and written consent was obtained for participation in the plan.

Results

Of the 200 participants, 177 (88.5%) were female and the rest were male. The mean age of the participants was 35.8 ± 13.5 years and the age group of 30-35 years with 30.5% had the highest frequency. Also, the mean work experience of participants was 6.5 ± 12.5 years. The results of demographic and occupation information of participants are shown in Table 1.

The study showed that psychological violence with the prevalence of 68.5% during the last year was the most violent occurrence against the nurses working in this center and then physical violence with the prevalence of 28.5% was next. The results of the distribution of the status of different types of violence are presented in Table 2.

In this study independent variables with workplace violence were investigated in multivariate regression model. As shown in Table 3, workplace violence variables were significantly associated with job of nurses ($p < 0.033$), work experience of less than 5 years ($p < 0.027$), work of service in emergency ward ($p < 0.029$), work shift of nurses in circulate shift ($p < 0.001$), violent male sex ($p < 0.036$) and time of violence in discharge time ($p < 0.011$) and there was no significant relationship with other variables. The results of the multivariate logistic regression model are presented in Table 3.

Discussion

In this study, two hundred nursing staff working in Imam Hossain hospital in Shahroud participated in the study and completed the questionnaire. The results of this study showed that psychological violence with the prevalence of 68.5% during the last year was the most violent occurrence against the nurses working in this center. The results of this study are in line with other studies, like Olashore and Chen (15–16).

In a review study by Najafi et al., it was noted that among studies conducted using the WHO-designed Health Workplace Violence Questionnaire, questions about sexual and racial violence were excluded because of cultural sensitivity in the articles. In the present study, sexual violence was present in 1.5% of participants and racial harassment in 7%. It is likely that the reported cases of these two cases are less than the actual level due to the cultural issues prevailing in the community (17).

Eighty percent of nurses working at Imam Hossain hospital in Shahroud have suffered at least one type of occupational violence during the past year. As noted in other similar like Bjorkly, Peek-Asa and Ness studies, workplace violence is a serious and common problem among health care workers (18–20).

In the study of Hsieh et al., that was done 147 nurses, 87.7% of participants reported verbal violence and 23.1% physical violence. Patients' associates were also responsible for 89.8% of verbal violence and 23.8% of physical violence against nurses (21). In a cross-sectional study of AbuAlRub et al., which reported workplace violence over the past year using the WHO standard questionnaire on 183 nurses, 93.4 percent reported psychological violence and 71.6 percent physical violence against employed nurses. Racial and sexual violence was 19.1% and 5.5%, respectively (22). A study by Gillespie et al., conducted using WHO standard questionnaires on all nurses working in teaching hospitals, showed that 78.5% of nurses had been subjected to psychological violence by patients or their relatives at least once during the past year (23). In the present study, out of two hundred nurses, 126 (62%) stated that the most hospitalized area that experienced violence was hospitalized ward and 28.5% emergency ward. Therefore, there are many similarities between our study and those mentioned.

In a study by Bracken et al., it was noted that the highest rate of verbal violence occurred in the emergency, internal, surgical, and the lowest in the intensive care unit (24).

In a study by Salimi et al., which included 136 nursing staff working in Tehran hospitals, the most common site of violence was the emergency clinic and then the emergency department. 67.6% of those who had been subjected to psychological violence and 74% of those who had been subjected to physical violence reported that it occurred in the emergency department (25). These results are largely consistent with the findings of our study.

In the study of Shiao et al., 88 nurses were evaluated. The results of this study indicated that the highest rate of psychological violence was in emergency and internal wards (31.25%) and the lowest in the special wards (26).

In the study of Estry-Behar et al., that was done of 180 nursing students, the highest rate of physical assaults occurred by the patients themselves (66.7%) and the second degree by the patient's companions with 18.1% (27). In the study of Teymoorzadeh et al., a census of nurses working in one of the hospitals in Tehran, the most reported reports of violence by the patient's companions were 57% and the patients themselves 28% (28). In the study of Eriksen et al., which included 302 nursing colleagues, it was noted that the highest rate of violence against nursing staff occurred by patients' companions (29). In the present study, patient companions were responsible for 44% of cases of violence against nurses. This is a much higher rate of workplace violence than the studies mentioned above, which may be due to the geographical, cultural and economic conditions of the studies concerned.

The gender of the perpetrators was reported male in 75% of the cases. In the Kwok et al., study 45% of men were violent and the Gerberich et al., study 38% of men were violent which are less male than our study, probably related to the type of hospital and clients (30–31).

Also in the present study, the highest proportion of patients presenting at the hospital during the violence was 20% at discharge time. In the Erkol and Mireille studies, the most frequent violence was related to the time of referral and hospitalization. This discrepancy is probably related to the employment rate of the study centers and the cost of treatment (32–33).

Conclusions

The results of this study showed that the incidence of violence against nurses was relatively common and the most frequent was psychological abuse. Although it is not easy to accurately calculate violence against medical staff, it is important to carefully examine the same. Therefore, it is necessary to reduce occupational violence in health centers by increasing awareness of clients in hospitals, increasing hospital police forces, as well as better training of nurses in crisis management.

Limitation

The limitations of this study are the reluctance of some nurses to complete the questionnaire because it is time consuming. It is also a memory-based questionnaire and nurses may not remember everything. Also because of cultural issues in Iranian society, many people may be reluctant to report sexual and racial violence.

Declarations

- Ethical standards

This study has an ethics code number (IR.SHMU.REC.1398.032) from research deputy of Shahroud University of Medical Sciences.

- Informed consent

Informed consent was obtained from all individual participants included in the study

- Consent for publication

Consent for publication: All named authors have seen and agreed on the submitted version of the paper. All persons in the acknowledgments section have agreed to that inclusion.

- Availability of data and material

The dataset used and / or analyzed during the present study is available from the corresponding author upon reasonable request.

- Conflict of interests

The authors declared that they have no conflict of interest.

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Authors' contributions

SA did the initial brainstorming and design of the study and accompanied the draft manuscript. ZB was involved in designing the study and obtaining the necessary permits, and took the necessary steps to distribute the questionnaire among the staff.

PZ was involved in designing and collecting nursing and recorded in computer personnel information.

BD was involved in the initial brainstorming and coordination between executive agents.

MBS came up with the idea, participated in its design and coordination, participated in the preparation of the manuscript, and assisted in the editing of the article. All authors read and approved the final version.

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Tables

Table 1. The demographic and occupation information of participants

ographic & occupation information	Mean±SD/ Number (%)
year)	35.8 ±13.5
category	
years	109 (54.5)
) years	61 (30.5)
years	30 (15)
	23 (11.5)
le	177 (88.5)
ational status	
ma	15 (7.5)
iate and Bachelor Degree	146 (73)
er and PhD	39 (19.5)
visor and head nurses	17 (8.5)
es	153 (76.5)
s	30 (15)
experience	
ears	35 (16.7)
years	112 (56.1)
years	53 (25.2)
of Service	
gency	52 (26)
al wards	19 (9.5)
ial group wards	52 (26)
on group wards	45 (22.5)
s wards	32 (16)
age hours worked per month (hours)	180 ± 150.5
ing status	
lete with overtime	73 (36.5)
ime	90 (45)
	37 (18.5)
shift	
ing steady	38 (19)
ng or night steady	67 (33.5)
ng circulation	95 (47.5)
lace of violence	
ome	0 (0)
	19 (9.5)
gency ward	57 (28.5)
· Inpatient Sections	124 (62)
ent person	
atient	53 (26.5)
ompanions	88 (44)
ital Partners	50 (25)
s	9 (4.5)
at sex	
le	151 (75.5)
	49 (24.5)
ime of violence	
italization time	61 (30.5)
ted to ward	99 (49.5)
arge time	40 (20)

Table 2. Different types of violence in participants

Different types of violence	Number (%)*
No violence	39 (19.5)
Physical violence	57 (28.5)
Mental violence	137 (68.5)
Sexual violence	3 (1.5)
Racial violence	7 (3.5)

*: Because one person could have been subjected to multiple types of abuse, the percentage of different domains is more than 100 percent.

Table 3. Relationship between independent variables with workplace violence in multivariate logistic regression model

Independent variables		Odds Ratio	95% Confidence	P- Value
Age category of nurses	< 30 years	1.000		
	30- 50 years	0.812	1.082-0.0672	0.088
	> 50 years	0.821	1.051-0.0712	0.063
Sex of nurses	Male	1.000		
	Female	0.909	1.213-0.815	0.099
Educational status	Bachelor Degree	1.000		
	Diploma	0.923	1.985-0.856	0.091
	Master and PhD	1.175	2.435-0.962	0.073
Job	Supervisor and Head nurses	1.000		
	Nurses	1.282	1.448-1.011	0.033
	Others	1.105	1.208-0.825	0.063
Work experience	> 10 years	1.000		
	< 5 years	1.311	1.523-1.171	0.027
	5-10 years	1.109	1.285-0.855	0.076
Ward of Service	Clinic wards	1.000		
	Emergency	1.452	1.842-2.472	0.029
	Special wards	1.226	1.429-0.985	0.069
	Internal group wards	1.094	1.243-0.836	0.085
	Surgeon group wards	1.155	1.309-0.967	0.053
Work shift of nurses	Morning steady	1.000		
	Evening or night steady	1.251	1.454-1.056	0.052
	Shifting circulation	2.885	3.213-2.615	0.001
A violent person	The patient	1.000		
	Sick companions	1.355	1.654-1.206	0.045
	Hospital Partners	1.012	1.165-0.815	0.077
	Others	1.083	1.213-0.945	0.061
Violent sex	Female	1.000		
	Male	1.755	2.288-1.326	0.036
The time of violence	Hospitalization time	1.000		
	Admitted to ward	1.266	1.426-1.106	0.082
	Discharge time	1.803	2.144-1.583	0.011