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Physical Violence against Nurses in Hospital

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ABSTRACT

Health care workers are among the groups with high frequently of exposure to workplace violence and the real dimensions of this problem have not yet been clearly defined. The aim of this study was to review the exposure of nurses to physical violence. In this cross sectional descriptive study, a total 450 nurses completed a standard questionnaire. The survey elicited demographic information and various aspect of personal experience of violence. Data collection lasted for about six months (September 2006 to March 2007) in three academic hospitals of Baqiyatallah University of Medical Sciences in Iran. Ninety six nurses (21.3%) reported at least one exposure to physical violence during one year ago. Exposure was more among nurses with more than 10 years of work experience. Most of the invasions were done by patients' fellows. In internal wards violence exposure had been occurred more than other ones. Sections of employment and types of employment had statistical differences among exposure or non-exposure groups (*P*=0.03). Due to some doubt of nurses in expressing violence experiences and recalling bias, explanation of relative low prevalence of violence exposure should be done cautiously. It is necessary that some comprehensive and screening researches be implemented and preventive program as well as proper management plus reporting system be designed.

Keywords: *Nursing, Violence, Workplace.*

INTRODUCTION

Violence in workplaces is an alarming exposure worldwide. Some forms of this type of violence are physical assault, homicide, verbal abuse, bulling/mobbing, sexual and racial harassment as well as psychological stress [1]. It has its own physical, mental and economic outcomes and can deeply harm individuals and working environments. Meanwhile, we have not any clear and unique definition for this "crisis of civility" [2,3]. By our opinion the most comprehensive and specialized definition of violation that has ever been presented is as follows: "Incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well- being or health". This phenomenon is divided to physical and mental ones [1]. In this regard numerous effects of workplace violence on health care workers such as loss of confidence, lower morale, anger, burn out, absenteeism, disability, job stress, decrease of productivity and so on [4-9] are main reasons that some authors mention it as a well recognized concern in health care workers [10]. On the other hand, mortality rate due to violence among nurses is more prevalent than infections [1]. Studies have shown that 67% of nurses of emergency wards have experienced physical violence [11]. Real dimensions of violence among health care centers are higher and some authors have mentioned that results of the studies are just like the top of a huge hidden iceberg [12].

All researches in the field of violence have been done on children, students, pregnant women, and some other groups. Nurses have been neglected in this regard. Since nurses experience violation, more than any other health professionals and reports of authorized sources

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Table 1. Position distribution of nurses

Administrative position	Number	Percent
Ordinary nurses	36	8
Section managers	231	51.4
Senior managers	30	6.7
Nursing students	114	25.3
Non responding	39	8.7
Total	450	100

confirm anisotropy in violent events occurrence among different groups of health care workers [9].

This research was designed to describe the physical violence experienced by nurses during the 12 months before data collection time.

MATERIALS AND METHODS

This cross sectional study was conducted on 493 nurses of three academic hospitals of Baqiyatallah University of Medical Sciences (Baqiyatallah Hospital, Jamaran Hospital, Najmieh Hospital, Tehran, Iran) employed at least one year ago. By means of employment, the nurses were divided into three groups: 1) Official nurses with fulltime employment 2) The nurses with contractual employment 3) The nurses with part time employment. They were selected by a simple randomized sampling (number of subjects from each ward was proportionate to the total number of nurses working at them). Data gathering was done during September 2006 to March 2007.

Data were gathered using a questionnaire with 43 multichoice questions, which was derived from a standard questionnaire prepared in 2003 by cooperation of International Labor Office, WHO, International Council of Nurses, and International Society of Public Services. Our collecting instrument which had been used for the first time in Iran had two main parts. Part one included demographic and working questions and part two included questions about exposure to physical violence. The practical definition of physical violence against nurses (that sometimes called as invasion in this study) was as follows: "Exposure of nurses to physical violence by patients, patients fellows, and/or colleagues, in the form of insulting, beating, whipping, slapping, knife stabbing, shooting, pushing, biting and so on at least one time during the last year".

The main related factors assessed in this study were age, sex, marital status (as non occupational variables) also service record, working contract condition, place of work, and night shift working (as occupational variables).

In order to validate, the survey questionnaire was developed with the results of focus group discussions consisted of one professor in psychology, one assistance professor in occupational medicine and one associated professor in epidemiology.

After obtaining approval from the Ethics Committee for Research Council at Baqiyatallah University of Medical Sciences, Iran, the questionnaire was revised using the results of a pilot study of 50 nurses who did not participate in the study.

After selecting subjects and signing informed consent by them the questionnaires were presented by a trained physician. Subjects had enough time for completing the questionnaire. Writing name was not mandatory.

Statistical comparisons were done using χ^2 test (for qualitative variables) and significant level (P value) was considered as less than 0.05.

For proper analysis of data, hospital wards were merged and finally six sections were considered in the study as follows:

Section1: Internal wards including cardiology, neurology, pediatrics, and physical medicine rehabilitation;

Section2: Surgery wards including general surgery, gynecology, ophthalmology, renal transplantation, and orthopedics;

Setion3: Emergency rooms and clinics;

Section4: ICU and CCU;

Section5: Medical diagnosis units including medical laboratory, echocardiography and radiology;

Section 6: Administrative nursing units.

RESULTS

Four hundred fifty out of the total 493 nurses of studied hospitals were entered the study (91%). Mean age of them was 38±3.2 yr and 276 (61.3%) of subjects were equal or older than 35 yr old. The number of women was 222 (49.6%). The biggest job group of subjects from administrative point of view was employees (44.5%) (Table 1). The highest number of subjects was nurses of internal wards (130 nurses), and then surgery wards (123 nurses) (Fig. 1). In addition,

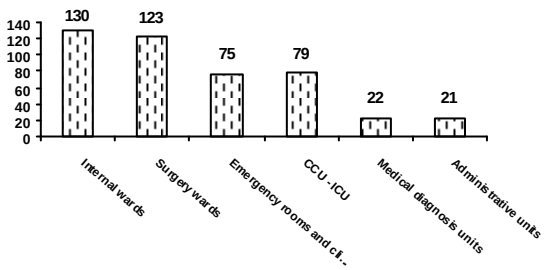

Figure 1- Distribution of nurses(whole parcipitants) acording to their worksite

Table 2. Distribution of violence experience due to violent persons

Violent person	Number	Percent
Patient	36	37.4
Patients Fellows	45	46.8
Coworkers	6	6.4
Managers	0	0.0
Non Responding	9	9.2
Total	96	100

261 subjects (58%) had more than 10 years of work experience, 97.3% had direct contact to patients and their fellows and the remained 2.7% had worked alone. Official nurses had significantly more night working shifts than part time nurses did (P=0.03).

Sixteen percent of subjects were seriously concerned about violation in their workplace and 39% were moderately too. In this regard, men and women responses had no difference. It was observed that, 47.1% of subjects reported that there was no reporting system after violence occurrence and 87% declared that there was no encouragement in their organizations for reporting.

Ninety six subjects of this study (21.3%) mentioned that they had been exposed to physical invasion during last year. The following information was presented by victims about the last invasion.

Six subjects said that they had been invaded by a weapon, 24 cases (25%) experienced body injury and 9 of them (9%) necessitate medical treatment. Twelve nurses (12.5%) mentioned that they had experienced physical violence out of their workplace (in the route to work and home).

Among victims, 50 nurses (11.1%) declared that, physical violence was a usual issue in their worksite with more at emergency and surgery wards (P=0.03). Men believed it more than women did (P=0.025).

According to Table 2, invasions were mostly done by patients' fellows (P=0.021). Among the invaded subjects, 21.2% mentioned that they had no reaction and 18.2% told that they had reflected the event to their friends and families. 15.2% declared that they left the events place. No one of the violation victims of this study pursued the incident.

Statistical analysis showed that there was a significant relation between exposure to physical violence and age of nurses more than 35 years old, more than 10 years of work experience, section or ward of employment and various types of employment (Table 3).

DISCUSSION

Reviewing studies about workplace violence we understood that the violence experience by nurses is increasing and under researched [13-16].

Frequency of exposure to physical violence was

Table 3. Physical violence experienced by nurses, by occupational, and non-occupational variables

			Exposure to physical invasion during last year		P value
			yes	no	
Non occupational					
Sex	Male	222(49.3%)	66(29.7%)	156(70.3%)	0.001
	Female	228(50.7%)	30(13.0%)	198(87.0%)	
Age	<35 years	174(38.7%)	19(11.0%)	155(89.0%)	0
	35 years≥	276(61.3%)	77(27.9%)	199(72.1%)	
Marriage	Yes	121(27.0%)	20(16.5%)	101(83.5%)	0.604
	No	329(73.0%)	76(23.1%)	253(76.9%)	
Occupational					
Administrative position		ordinary nurses 36(8%)	6(16.7)	30(83.3%)	0.11
		section managers 231(51.4%)	59(25.5%)	172(74.5%)	
		senior managers 30(6.7%)	5(16.6%)	25(83.3%)	
		nursing students1 114(25.3%)	26(22.8%)	88(77.2%)	
		non responding 39(8.7)			
Duration of employment	10years≤	189(42.0%)	21(11%)	168(89%)	0.004
	>10years	261(58.0%)	75(28.7%)	186(71.3%)	
Shift work	Yes	348(77.3%)	81(23.2%)	267(76.8%)	.0.340
	No	102(22.7%)	15(14.7%)	87(85.3%)	
Type of employment	Official	302(67.1%)	81(26.8%)	221(73.2%)	0.007
	Contractual	107(23.8%)	12(11.2%)	95(88.8%)	
	Part time	41(9.1%)	3(7.3%)	38(92.7%)	
Hospital wards*	Section 1	130(29.0%)	40(30.8%)	90(69.2%)	0.009
	Section2	123(27.3%)	17(13.8%)	106(86.2%)	
	Section3	75(16.7%)	23(30.6%)	52(69.4%)	
	Section4	79(17.5%)	9(11.3%)	70(88.7%)	
	Section5	22(4.9%)	3(15.7%)	19(84.3%)	
	Section6	21(4.6%)	4(19%)	17(81%)	

* Section1: Internal wards including cardiology, neurology, pediatrics, and physical medicine – rehabilitation.
Section2: Surgery wards including general surgery, gynecology, ophthalmology, renal transplantation, and orthopedics.
Setion3: Emergency rooms and clinics.
Section4: ICU and CCU.
Section5: Medical diagnosis units including medical laboratory, echocardiography and radiology.
Section 6: Administrative nursing units.

about 21.3% in our study. In a similar study in Minnesota of United Stated, 67% of nurses working at emergency ward had been exposed to physical violence [7] and also 86% in Vancouver of Canada had this experience [10]. Winstanley found that annually 27% of health care workers had been confronted to physical violence and 68% to verbal violence [17]. In New Zealand, one third of nurses experienced physical violence in the first year of their service [18]. In another study, exposure of nurses to violence in one year was about 13.2% [19]. Explanation of lower prevalence of violence in this study compared to similar studies should be done cautiously. Some of the reasons are as follows:

Patients in different countries are somewhat familiar with their rights and so, they may react different to similar attacks;

It seems, that due to some job security problems, some of participants (especially those with temporary job contract) refused to state their worries because of missing their jobs;

Similar to other studies [20, 21] we found that few cases of violence resulted in injury and this type of violence is deemed to exclude of reporting by nurses themselves;

In some studies, samples were selected just from high-risk wards such as emergency and it is obvious that their results are higher than our study with widespread occupational groups.

One important finding of this study was that, about 50% of nurses believed that there was not any arrangement for reporting of violence and 87% of them declared the unwilling of their organization for following the cases. While, about 70% of Australian nurses had confidence to controlling policies in the field of violence, including reporting violent attacks [12].

As it was mentioned already, there was a significant difference in experiencing violation between nurses with different job contract condition. It may have two reasons. First, permanent personnel expressed their violation exposure more conveniently, probably due to the higher job security they feel, and second that permanent personnel may have longer work time and more contact to patients and their fellows. In the study of Queensland, however, there was not any difference in expressing violence between nurses with different job condition [12].

In our study, most violence incidents were created by patients and their fellows, but in some similar studies, physicians and patients' fellows were who those mostly invaded nurses. However, most studies show that the most violation cases are done by patients [2, 3, 22, 23].

A notable finding of this study was distribution of victims among wards. Most violent incidents occurred at internal wards, emergency and clinics and few cases happened at diagnosis wards as well as administrative units. Of course, such a pattern does not exist in all studies, for instance, 50% of nurses of elderly care unit, 47% at general wards, and 29% at ICU experienced violation in Australia [12].

Considerable portion of our participants seriously worried about violence at their work place. Job satisfaction is associated with feeling of security [21] and feeling of insecurity at work place result in job stress and low decision making ability in nurses [24].

The main problem and limitation of this study was its data gathering method which was based on the recall of events by the subjects. Thus information and recall bias limitation were not avoidable. In addition, due to the small sample size of some wards at this study, we had to merge some wards and so, the results of some important wards such as psychology, did not access well. Meanwhile, since the name of hospital had not been asked in questionnaire, the discrimination of each hospital was impossible.

CONCLUSION

This study presented a picture of the dimensions of physical violence against nurses which may be the most workplace hazard in this job group. The scientific output of this study can be a base for future comprehensive studies (which review all kinds of violence) in other hospitals and health care centers of our country, and a tool in health planning programs for prioritizing violence management.

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