

# Verbal and Physical Violence in Emergency Department and Strategies for Reduction: A Cross-Sectional Study in Iran

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## Abstract

**Background:** Workplace violence is any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site that is increasingly known as a problem in health care system. **Objective:** The present study aimed to investigate the occupational exposures with verbal and physical violence and the strategies for reducing violence against medical personnel working in Emergency Department. **Method:** A cross-sectional and descriptive design was used for the purpose of this study. To this aim, 108 medical personnel working in emergency department of educational hospitals in Arak City were asked about the verbal and physical. **Ethical considerations** The existence of workplace violence can have a negative impact on job productivity. By creating a safe environment, the quality of work and the satisfaction of staff and patients can be improved. **Results:** In the present study, the amount of exposure to physical violence was 28.7% and verbal violence was 77.7%. In addition, from the viewpoint of the medical personnel participating in the study, crowded ward is the most frequent cause of violence, and patients' justification by triage personnel about the possible time waiting for visit by physician and the presence of police force and guard in the ward are the most important strategies for preventing and reducing the violence. **Conclusion:** The results indicated high prevalence of violence, especially verbal violence against emergency personnel and destructive aspects of this phenomenon have adverse effect on the efficiency and productivity of emergency personnel. In the same vein, proper management, appropriate protective measures and public education are effective strategies to avoid violence.

**Keywords:** Emergency Department, Medical Personnel, Occupational Violence

## Introduction

Workplace violence is one of the main concerns for medical personnel working in the emergency department, leading to the discomfort or injury to the victims (Harorani et al., 2017; Li et al., 2017; Talas et al., 2011). Based on the statistics, the prevalence of occupational violence has tripled during the past decade (Jabbari-Bairami et al., 2013). The early studies demonstrated that healthcare staff experience workplace violence 16 times more than the other staff (Vogel, 2016). In a study conducted in the United States and England, violence in many medical centers has been a troubling factor, as 2 million cases of workplace violence in the United States of America, and 649,000 cases in England were reported in 2014 (Hopkins et al., 2017) As the emergency department of the hospital is the first stage of the patient's confrontation with the medical environment and violence and aggression are one of the mechanisms of dealing with the nuisance, the emergency personnel experience the most occupational violence (Nikathil et al., 2017; Gillespie et al., 2010; Findorff et al., 204) in a study reported that working in the ICU, Psychiatry and Emergency departments has important risk factors for being exposed to violence. On the other hand, the nature of the emergency department and contact with a variety of patients such as drug and alcohol abusers, patients with

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mental problems, ill patients, patients' entourage, and unpredictable factors such as sudden crowding, followed by long waiting periods

for visiting and many other factors predispose violence to the emergency personnel (Harorani et al., 2017). Violence has many physical and psychological complications among staff like physical injuries including brief bruising or fractures, migraine headache, vomiting, anger, fear, depression, anxiety, guilty feeling, and reducing self-confidence (Zhao et al., 2017; Hsieh et al., 2016; Choi & Lee, 2017) Ensuring the safety of the workplace is the guarantor of the provision of services and violence against personnel is not consistent with the effective healthcare provision. Obviously, the fear of those who are being cared for is always accompanied by a reduction in the care quality (Kowalenko et al., 2013) Therefore, the safe environment is essential for personnel working in the medical centers, especially for emergency personnel to provide optimal therapy services.

An overview of databases indicates that workplace violence in the medical centers is not specific to a special stratum or place, and numerous studies have been conducted on the frequency of occupational violence and its types (Yousefi et al., 210; Ghodsbin et al., 2009; Copeland & Henry, 2017) However, comprehensive studies are not conducted in the emergency department of educational hospitals and on all medical personnel, along with the necessary strategies for controlling occupational violence. Therefore, due to the importance of this issue, the present study aimed to examine the degree of exposure and causes of the occurrence of violence as well as the appropriate strategies for controlling violence against medical personnel working in the emergency department of selected educational hospitals in Arak city.

## Method

### *Sampling and data collection*

This descriptive cross-sectional study was conducted on 108 medical personnel working in the emergency department of educational hospitals in Arak who were included in the study by using census method from December to February in 2015. The inclusion criteria were the personal desire of the medical personnel with all grades and occupational categories and with one year of activity as shifts in circulation in the current ward. Further, the person could exclude from the study during the research. The emergency departments of Valiasr, Amir al momenin, Amir Kabir educational hospitals in Arak city were selected as the research context. Early studies indicated a higher incidence of violence in these centers, compared to the other medical centers in Arak city (Harorani et al., 2017).

### *Procedure*

All ethical considerations were observed in different stages of the current research. Therefore, the current study began to collect the required data after approval by the research council of Arak University of Medical Sciences in terms of scientific and ethical standards and obtaining permission from authorities of the university and hospital. Questionnaires were anonymous and individuals were justified about the nature and purpose of the study and they freely participated in the study.

### *Measures*

The data collection tool was a two-part questionnaire. The first part included demographic information and the second part of the questionnaire approved by the International Labor Office (ILO), World Health Organization (WHO), International Council of Nurses (ICN), and International Association of Public Services (Martino, 202) The questionnaire consisted of five different areas including personal and workplace information, physical violence, psychological violence, the policy of the employer system in dealing with violence, and individuals' suggestions and solutions for reducing violence and the cause of the violence at workplace. The questionnaire was modified based on the social and environmental conditions in Iran and Rafati Rahimzadeh et al. and Imani et al. evaluated its validity and reliability in two separate studies in the field of examining the degree of exposure of emergency nurses to the physical and verbal violence in the selected hospitals in Babol and Hamedan. In both of these studies, the reliability of the questionnaire was tested by the test-retest method which was equal to 0.8 (Imani et al., 2014; Rafati et al., 2011)

In the current study, the validity of the questionnaire was determined by the content validity, as the questionnaire was given to ten professors and experts to propose their corrective and suggestive ideas after studying the relevant resources. Finally, the proposed modifications were implemented. Further, the internal reliability was used for reliability of the questionnaire. Therefore, the internal consistency of the questionnaire completed by 10 samples was measured using SPSS software as well as the Cronbach's alpha coefficient, and the reliability coefficient was obtained to be 0.823.

The questions of the questionnaire were in such a way that the response of a number of questions was classified based on likert scale from "very high" to "very low", with a score of 1-5, along with a few multiple-choice questions.

### *Statistical analysis*

The data were analyzed by SPSS 21 software and descriptive statistical methods.

## Results

In the present study, the average age and work experience of the subjects were  $31.45 \pm 6.26$ , and  $5.85 \pm 5.09$ , respectively. In addition, the work experience in the emergency department was  $3.49 \pm 3.22$  years (Table 1).

Based on the results, 77.7% (84 subjects) of the medical personnel stated that they have been exposed to verbal violence and behaviors such as threats, insults, humiliation, intimidation, mockery, ridicule, bullying and obscenity during the last 12 months. According to 29.6% of the personnel, the frequency of verbal violence was more than 10 times in the past year and the degree of exposure to the physical violence was reported to be 28.7% (31 subjects) (Table 2). In the current study, the entourage of patients was the most contributing factors to physical violence (85.4%) and verbal violence (60.5%). In addition, the predisposing factors of violence in the emergency department from the viewpoint of medical personnel working in the emergency department are presented in Table 3.

The results indicated that from the perspective of the medical personnel, the justification of patients by triage personnel about the time waiting for visiting by physician and the presence of police force and guard are the most important strategies for preventing physical and verbal violence against the medical personnel working in the emergency department (Table 4).

## Discussion and Conclusion

The results of the present study indicated a high rate of physical and verbal violence against the medical personnel, which are consistent with the study conducted in South Korea on 358 nurses in which 95.5% of the personnel encountered with the violence at least once in the past year (Choi & Lee, 2017; Kamchuchat et al., 2008), in their study in general hospitals of Thailand, found that the medical personnel experienced 45.9% verbal violence and 6.4% physical violence. Another study conducted in Jordan on 227 emergency nurses indicated that the prevalence of any type of violence against the emergency department personnel was 75.8% (Albashtawy, 2013). The results of these studies are in line with the findings of the present study. Therefore, the occurrence of workplace violence for the emergency department personnel is relatively inevitable, due to the nature and characteristics of their occupation.

The results of another study indicated that the most contributing factor for violence is the patient's companions with 85.4% of physical violence and 60.5% of verbal violence (Rafati et al., 2011). In other similar studies, the most frequent causes of violence against the medical personnel were patients and their companions. For example, Talas in another study in Turkey concluded that 98% of the violence is committed by the patients' companion and subsequently, the patient oneself. The findings of some studies indicated that the patients' relatives caused the majority of the various types of violence, which is congruent with the results of the present study (Pejic, 2005; May & Grubbs, 2002; O'Connell, 2000).

In addition, occupational stressors among the staff were underestimated in another study conducted on occupational violence against staff working in the treatment sector.

Further, the predisposing factors of occupational violence among the staff were underestimated based on the study results of occupational violence against staff working in the medical ward. Furthermore, based on the emergency personnel's viewpoints, the main causes of violence in the emergency department are related to overcrowded ward, leading to 76.4% verbal violence and 85.7% physical violence, while the low number of personnel, leading to 52.8% verbal violence and 51.8% physical violence. Other cases are related to the lack of timely visits by the doctor, lack of hospital facilities, and the like. Additionally, the results of a study done in eastern Azerbaijan demonstrated that the low number of nurses compared to the patients, the lack of timely security facilities, and the lack of training programs were the predisposing factors of occupational violence (Rahmani et al., 2009), which are in line with the results of the current study.

The recognition of the successful strategies in dealing with violence is essential. Based on the results of the present study, according to the medical personnel, the lack of the justification of the patient by triage personnel on the time waiting for visiting by physician (80%), the presence of police force (51.5%), the presence of guardian (44%) and personnel training (36%) were the most important strategies for preventing physical and verbal violence against emergency personnel. In the same vein, the results of the current study are consistent with the qualitative study conducted in Australia and personnel stated that the creation of a safe environment, personnel's professionalism and the presence of guardian are regarded as violence prevention strategies (Cashmore et al., 2016).

In addition, an accurate report on violence is another preventive strategy and managers should encourage staff to present accurate report on violence in order to root out the cause of violence and prevent other similar cases. Even if the managers cannot resolve the issues at the same time of occurrence, they should support the staff and assure them that they will follow the report from the correct path (Phillips, 2016).

Based on the level of the triage, patients are expected to be visited in a certain period of time. For instance, a level one should be immediately visited the level two within 5-15 min, the level three within 15-45 min, the level four within 1-2 hours and the level five within four hours.

In the same vein, the failure to visit the patients with high and non-acute level of the triage by the physician is the frequent cause of the violence among the patients against the emergency personnel. However, the medical team is treating the patients suffering from more severe pain with lower-level triage and the lack of the justification of the patients during triage about the probable waiting time and expecting immediate visit by patient and his companion leads to the patient's violence against the personnel ( Aggression towards medical personnel in the emergency department is committed by those who consider themselves as important people in the community and expect their health care to be special and different from the ordinary people. Otherwise, their behavior leads to the mental harassment and the lack of security among the emergency personnel although they often do not cause physical violence to personnel. Although these individuals are not in acute level of triage, they force personnel to put them at risky triage level and consequently cause the dissatisfaction of the real risky patients and pave the way for aggression and physical violence. In addition, although personnel can legally complain about the aggression of the patients, they are not actually supported by the hospital, and the pursuit of affairs should be carried out in a personalized manner in crowded jurisdictions, which is impossible for most of the personnel, due to their high shifts.

## Conclusion

The results of the present study demonstrated a high rate of violence against medical personnel in the emergency department and verbal violence had the highest rate. Therefore, authorities should take appropriate preventive strategies, proper management, appropriate protective measures and public education to minimize violence in the hospital environment. Based on the findings of the current study, the justification of patients about the probable time waiting for doctor's visits at the triage is an appropriate strategy to moderate the expectation of the patients with good general health. Further, the presence of police force and guardian can reduce the violence in the emergency department. In the same vein, the proper support, like, the presence of a legal expert to advise and track the aggression cases in the workplace, and create equal opportunities and facilities, irrespective of non-academic cases in treating the patients, leading to more decisiveness in law enforcement against violence and unusual expectations from the health team.

### *Limitations of the study*

The psychological and emotional condition of the units under study may affect the accuracy of their response when answering questions, which was uncontrollable.

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**Competing interests:** None declared

**Ethical approval:** The study protocol was approved by the Arak University of Medical Sciences ethics committee, as well as SBOC.

Table 1: Demographic characteristics of the study population (n = 108)

Variable		No%
Gender	Male	58(53.7)
	Female	50(46.3)
marital status	Single	44(40.7)
	Married	64(59.3)
Educational level	Diploma and Under diploma	14(12.9)
	Associate diploma	10(9.2)
	Bachelor and Master	70(64.9)
	P.H.D	14(13)
Profession	Nursing	68(63)
	Practical nurse	10(9.2)
	Medical	14(13)
	Others	16(14/8)

Table 2: Frequency distribution Exposure Rate with Violence

Variable		No%
Verbal violence	High	32(29.6)

	Moderate	31(28.7)
	Low	21(19.4)
	Non-exposure	24(22.3)
Physical violence	High	2(1.8)
	Moderate	5(4.6)
	Low	24(22.2)
	Non-exposure	77(71.4)

**High:** More than 10 times a year, **Moderate:** 5 to 10 times a year, **Low:** Less than 5 times a year

Table 3: Frequency distribution factors leading to violence

The factor leading to violence	Frequency of physical violence No%	Frequency of verbal violence No%
Shortage of Equipment		
Yes	15(26.8)	22(24.7)
No	41(73.2)	67(75.3)
Shortage of Personnel		
Yes	29(51.8)	47(52.8)
No	27(48.2)	42(47.2)
Overcrowding and Crowd Ward		
Yes	48(85.7)	68(76.4)
No	8(14.3)	21(23.6)
Physician		
Yes	16(28.6)	29(32.6)
No	40(71.4)	60(67.4)
medical team		
Yes	4(7.1)	6(6.7)
No	52(71.4)	83(92.3)
Patient or attendance		
Yes	13(23.2)	18(20.2)
No	43(76.8)	71(79.8)

Table 4: Frequency distribution Effective Strategies Preventing Violence from the Perspective of Medical Personnel

Effective Strategies		No%
presence of police force	Yes	52(51.5)
	No	49(48.5)
presence of guard	Yes	44(44)
	No	56(56)
Report Violence	Yes	19(19)
	No	81(81)
Existence of instructions on dealing with violence	Yes	24(23.8)
	No	77(76.2)
Education to Personnel	Yes	36(36)
	No	64(64)
Preventive measures such as punishment	Yes	15(15)
	No	85(85)
Separating judicial patients from other patients	Yes	11(11)
	No	89(89)
Separating addict patients from other patients	Yes	15(15)
	No	85(85)
Legal protection of personnel against violence	Yes	30(30)
	No	70(70)
Non-discrimination Between VIPs and ordinary people	Yes	35(35)
	No	65(65)
	Yes	80(80)

Patient justification by triage personnel in the field of possible waiting time until the visit by the physician	No	20(20)
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