Original Research

A Comparative Study Of Workplace Violence Against Nurses In Zahedan Hospitals, South East Of Iran: A Cross-Sectional Survey

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Abstract
Background: Among hospital staff, nurses are at greater risk of violence than other staff. Therefore, it is very important to study the status of violence in nurses' workplaces. The aim of this study was to determine the level of violence in the workplace of nurses working in the emergency department of selected teaching hospitals of Zahedan University of Medical Sciences (Ali Ibn Abi Talib, Khatam Al-Anbia, Bouali, Al-Zahra and Baharan hospitals) in 2021.
Method: In this descriptive cross-sectional study, 60 nurses working in selected teaching hospitals of Zahedan University of Medical Sciences were studied. Data collection tool is an information form in which the information needed for study by nurses will be recorded. This information includes nurse age (year), nurse gender (male / female), work experience (year), level of education (bachelor / master), cause of violence (clinical / non-clinical), history of physical violence (physical) and history of verbal violence It was in the last 12 months. After data collection, the data were analyzed by SPSS software version 24.
Results: The findings of the study showed that 26.7% of the nurses had a history of physical violence and 81.7% had a history of verbal violence at work. Also, 85% of the nurses working in selected teaching hospitals of Zahedan University of Medical Sciences in 2021 had a history of violence in the workplace. In addition, the cause of nurse workplace violence was non-clinical in 50% and clinical in 35%. Male variables and low work experience were the predictors of physical violence.
Conclusion: Finally, it can be said that the incidence of workplace violence against nurses is high and it is recommended to increase hospital security, hold targeted anger management courses and increase self-esteem and resilience for nurses and working students to reduce violence. It is also necessary to promote the culture of reporting incidents of violent violence and to establish the necessary mechanisms to report and follow up on medical staff complaints.
Keywords: Workplace Violence, Nurses, Emergency Department.

Introduction

Workplace violence (WPV) is a significant issue of concern within the global public health domain, and is receiving growing attention because of its impact on the health of workers both in the short and long term(1). Nurses serve as primary care providers and constitute the largest task force operating in diverse working environments. However, they are frequently subjected to WPV attacks(2, 3). Research indicates that nurses employed in emergency departments are at a higher risk of experiencing violence compared to their counterparts in different departments within healthcare facilities. This heightened vulnerability can be attributed to the increased prevalence of WPV in emergency departments, as opposed to other areas of the healthcare sector(4). Several factors play a role in increasing the likelihood of workplace violence within emergency departments. These factors exhibit associations with the overall work setting of the emergency department, the attributes of the nursing personnel, and the status of the patients(5). According to the World Health Organization, violence encompasses a range of behaviors such as physical assault, homicide, verbal abuse, bullying/mobbing, as well as sexual and racial harassment(6). According to studies, workplace violence is related to factors such as patients' stress from illness, long waiting time, lack of staff, shift changes and changing staff and their high expectations. Also, the lack of training of employees on recognizing and managing violent and agitated patients, low clinical skills, lack of necessary facilities for patient care and treatment, shortage of ambulance staff and overcrowding of attendants at the patient's bedside are other related factors. The existence of major psychiatric disorders and not accepting treatment, personality disorders, having a bad history, a history of hospitalization due to assault, a history of violence in the family, and the availability of weapons are among the causes related to patients and their families, which can intensify threats and violence against employees. and health care workers(7, 8).

In the end, it can be said that, unfortunately, despite the great importance of workplace violence and its destructive effects on the morale of the medical staff, the peace of the hospital and the provision of services to other patients, etc., this problem has not been taken seriously in the health system of our country as it should be. In addition, despite the investigation of this issue in other parts of the country, violence in the working environment of health workers in Zahedan city has not been investigated, and considering that clarifying this issue can play a role in the approach of related departments in the security and training of nurses; This study was conducted with the aim of investigating the level of violence in the work environment of nurses working in the emergency department of selected teaching hospitals of Zahedan University of Medical Sciences in 2021.

Methods

Design

The current project employs a cross-sectional approach by conducting a survey in zahedan hospital emergency wards. The study was conducted in 2021.

Sampling and setting

Considering the confidence level (α-1) equal to 95%, the estimation error (d) equal to 5% and the prevalence of violence 96% based on the study of Imani et al.(9), the number of 60 emergency nurses was required. Also, all qualified nurses were selected from the studied hospitals in an easy and accessible way. The sampling method in this study was randomly.

Data collection sheet

The data collection tool is an information form in which the information required for the study was recorded by the nurses. This information was nurse's age (years), nurse's gender (male/female), work experience (years), level of education (bachelor's/master's), cause of violence (clinical/non-clinical), history of physical violence (physical) and history of verbal violence.

Ethical considerations:

After the approval of the ethics committee and permission from the officials of selected hospitals

in Zahedan (Ali Ibn Abi Talib, Khatam Al-Anbia, Bouali, Al-Zahra and Baharan hospitals) (Ethical code:IR.ZAUMS.REC.1400.227), the researchers started the study in coordination with the nurses. Then the research units were included in the study based on the inclusion and exclusion criteria. The criteria for inclusion the study included working experience of at least one year in the emergency department, having at least a bachelor's degree in nursing and having direct contact with patients as a clinical nurse, and the exclusion criteria were unwillingness to participate in the study. At first, the researcher introduced himself to the nurses and after obtaining their informed consent, he explained the purpose of this study to them, and in order to comply with ethical principles, the study was conducted on nurses who were willing to cooperate and there was no coercion. The research units were told that participation in the study is voluntary and they can refuse to participate if they do not want to. It was also explained to them that the questionnaires do not contain identity information and the information obtained from the questionnaires was analyzed as a group. They were also assured that the information was confidential and that the results would be used in general in the form of a general medical thesis and that the information would not be used instrumentally.

Statistical analysis:

After collecting the data, the raw data was entered into the statistical software SPSS version 24. In the first step, the quality of the data was checked using graphical methods and the calculation of descriptive indices. Frequency distribution tables and common statistical charts (bar or circle) were used to describe the qualitative data. Also, to describe quantitative data, common central indices (mean and median) and dispersion indices (standard deviation and interquartile range) along with minimum and maximum were used. In addition, to estimate the amount of violence, point estimates and 95% intervals were used for proportions. Chi-square test or Fisher's exact test was used to compare the ratio between groups (checking the assumption of independence). In all analyses, $P < 0.05$ was considered as the level of significance.

Results

In In this study, 60 nurses working in selected hospitals of Zahedan University of Medical Sciences (Ali Ibn Abi Talib, Khatam Al-Anbia, Bouali, Al-Zahra and Baharan hospitals) were studied in 2021. The purpose of this study was to determine and compare the level of violence in the work environment of nurses working in the emergency department of selected teaching hospitals of Zahedan University of Medical Sciences. Based on the findings, the mean ± standard deviation of the age of the nurses studied was 33.62 ± 5.69 years. Also, the lowest age in the studied subjects was 23 years and the highest age was 47 years. Most of the participants in the study (35 people, 58.3%) were women and the rest (25 people, 41.7%) were men. Most of the nurses working in the teaching hospitals of Zahedan University of Medical Sciences (53 people, 88.3%) had a bachelor's degree and the rest (7 people, 11.7%) had a master's degree. The findings showed that the mean ± standard deviation of work experience in the studied subjects was 10.45 ± 6.14 years. Also, the lowest work experience in the studied subjects was 1 year and the highest work experience was 27 years. 59 people (85%) of the people studied had a history of violence at work. The reason for the violence of 30 people (50%) of the people studied was clinical, and the reason for the violence of 21 (35%) was non-clinical. Also, 9 people (15%) of the studied people did not mention the history of violence at work. Based on the findings of the present study, 16 people (26.7%) of the people studied had a history of physical violence and the rest (44 people, 73.3%) did not have a history of physical violence at work. According to the findings of the present study, 49 people (81.7%) of the people studied had a history of verbal violence and the rest (11 people, 18.3%) did not have a history of verbal violence at work. According to the chi-square test results, physical

violence has no statistically significant relationship with the cause of violence (clinical or non-clinical) (x2=0.13, df=1, p=0.72). The results of chi-square test showed that verbal violence has no statistically significant relationship with the cause of violence (x2=0.07, df=1, p=0.80). The results of chi-square test showed that gender had a statistically significant relationship with physical violence

(x2=5.27, df=1, p=0.02). The results of Fisher's exact test showed that verbal violence has no statistically significant relationship with gender (P=0.05). The results of Fisher's exact test showed that there was no statistically significant relationship between age and physical violence (P=0.75). The results of chi-square test showed that there is a statistically significant relationship between work history and physical violence (X2=4.55, df=1, p=0.03). The results of Fisher's exact test showed that there is no statistically significant relationship between verbal violence and work experience (P=0.22). The results of Fisher's exact test showed that there was no statistically significant relationship between physical violence and education level (P=0.31). The results of Fisher's exact test showed that there was no statistically significant relationship between verbal violence and education level (P=1).

Discussion

Workplace violence is a concern for everyone in any workplace and its rate is increasing(10, 11)Workplace violence is considered as one of the most important psycho-social risks that have multidimensional problems and negatively affects professional and personal life (12).Therefore, the well-being of employees, health care and a healthy work environment are considered key components of an effective health care system; Because the experience of violence in the workplace may reduce job satisfaction, quality of life, quality of work life, and productivity (13). It may also lead to feelings such as chronic fatigue, hot temper, increased employee turnover, occupational and psychological burnout, boredom and anger

towards patients, lack of sympathy towards them, and psychological or physical withdrawal from the patient (14).Although all hospital employees are exposed to physical and verbal violence, nurses are exposed to more danger due to direct contact with patients and patients' companions (15).Therefore, examining the situation of this social problem can help to clarify and improve our understanding of the current situation in Zahedan teaching hospitals and to think of solutions to solve the problems. Therefore, this study was conducted with the aim of investigating the level of violence in the work environment of nurses working in the emergency department of selected teaching hospitals of Zahedan University of Medical Sciences in 2021. In the following, we will examine the findings of the study and examine the findings of similar studies.

The first objective is to determine the frequency of verbal and physical violence in the workplace towards nurses working in the emergency department of selected teaching hospitals of Zahedan University of Medical Sciences in 2021

The findings of the study showed that 26.7% of the studied nurses had a history of physical violence and 81.7% had a history of verbal violence at work. Also, 85% of the nurses working in selected teaching hospitals of Zahedan University of Medical Sciences had a history of workplace violence in 2021. In the study of Khoshknab et al. (2013), who investigated the epidemiological investigation of workplace violence towards nursing students at Arak University of Medical Sciences in 2014; 74.9 and 7.38 percent of students had a history of verbal and physical violence, respectively(16). Shoghi and colleagues also conducted a study with the aim of determining the amount of verbal abuse to nurses working in hospitals across the country and the relationship between some personal and environmental factors. The findings of this descriptive-cross-sectional study, which was conducted on 1317 nurses in hospitals across the

country, showed that 87.4% of nurses had been verbally abused at least once in their work environment during the past 6 months. Most of the verbal abuses occurred by the patient's companions (64.4%). The findings showed that only 35.9% of cases of verbal abuse are reported by nurses (17).Rahmani and colleagues also conducted a study with the aim of determining the types of workplace physical violence against emergency medical personnel in East Azerbaijan province. The results showed that 37.7% of the respondents reported that they experienced physical violence at their workplace last year. The most common reaction of respondents to physical violence was to invite the attackers to calm down (52.9 percent) (18).The findings of these studies are consistent with the findings of our study. Surveys show that violence against Iranian nurses in their workplace is an undeniable fact, and even though it seems that these statistics are lower than the actual statistics. What is certain is that verbal violence has occurred in the past 12 months for the vast majority of nurses and %25 of nurses have experienced physical conflict; that these events can lead to leaving and changing jobs, migration of nurses and psychosomatic diseases and mental disorders of nurses and ultimately inflict irreparable blows on the health system of the country. Therefore, the provision of optimal nursing care must be accompanied by other factors that require mental, psychological and life security, and in this way, all members of the country's health body should work hand in hand.

The second objective is to determine the frequency of verbal and physical violence in the workplace towards nurses working in the emergency department of selected teaching hospitals of Zahedan University of Medical Sciences in 2021 according to the cause of violence.

Based on the findings of the present study, %85 of the people studied had a history of violence at work. The cause of violence was %35 of clinical nurses and half of them were non-clinical. In addition, 15% of nurses did not mention the history of violence (whether clinical or non-clinical) during the last 12 months. Also, physical and verbal violence had no significant relationship with the cause of violence.

The findings of the study by Aghajanloo and his colleagues, which was conducted under the title of exposure of nursing students of Zanjan University of Medical Sciences to workplace violence in clinical settings, showed that the most physical attack was by the patient (33.3%) and the patient's companions (33.3%). The most threats were reported by ward nurses (16.6 percent) and the most foul language was reported by nurses (28.5 percent) and patients' companions (25 percent) (19).The findings of Lin and Liu's study also stated that most of the physical attacks, threats and bad words were done by the patient and their companions(20).Sachdeva et al. (2019) conducted a study titled investigating the level of workplace violence in the emergency department. In this cross-sectional study that was conducted between January and December 2017, 235 people from the medical staff (123 doctors and 112 nurses) were evaluated. 67% of the research units experienced verbal violence and 17% of them experienced physical violence; While only 11% of these incidents were reported. Family members of patients were the main perpetrators (75% of verbal violence and 35% of physical violence(21).The findings of these studies were consistent with our study. Therefore, in general, it can be stated that the family members of the patients and then the patients were the most important agents of verbal and physical violence in healthcare settings. Therefore, the hospital officials should carefully plan and control the patients' companions in order to prevent any tension.

The third objective is to determine the frequency of verbal and physical violence in the workplace towards nurses working in the emergency department of selected teaching hospitals of Zahedan University of Medical Sciences in 2021 according to the cause of gender.

The findings of the present study showed that men are significantly more exposed to physical

violence than women. However, verbal violence was unrelated to gender. In 2019, Afkhamzadeh and his colleagues investigated the evaluation of exposure to workplace violence and its related factors among nurses in teaching hospitals of Kurdistan University of Medical Sciences. In this descriptive-analytical study that was conducted with the presence of 309 nurses, the incidence of physical violence in men was significantly higher than in women. However, the incidence of verbal violence was not related to gender (22).Shoghi et al. and Zeng et al. also reached this conclusion in their studies (17, 23)The findings of these studies were consistent with our study. It is possible to say that the reason why men face more physical violence is that male nurses face more male patients, and this issue itself can increase the possibility of facing violence. On the other hand, cultural issues such as greater respect for privacy in dealing with women in our society can affect this issue.

The fourth objective is to determine the frequency of verbal and physical violence in the workplace towards nurses working in the emergency department of selected teaching hospitals of Zahedan University of Medical Sciences in 2021 according to the reason of age and work experience.

In the present study, no significant relationship was found between verbal and physical violence and the age of the studied nurses. In the study of Afkhamzadeh and his colleagues, no relationship was found between age and verbal and physical violence of nurses(22); This finding was consistent with the findings of our study. In addition, the findings of our study showed that people with a work experience of less than 10 years' experience verbal violence significantly compared to people with a work experience of more than 10 years. In Afkhamzadeh and Faraji's study, the increase in work experience causes a significant decrease in verbal and physical violence. Kitaneh and his colleagues(24) also reached this conclusion in a similar study Therefore, in justifying these findings, it can be said that younger age can mean less experience and, as a result, less work experience, and the possibility of getting less training in managing emotions and dealing with critical and stressful situations, and as a result, more exposure to workplace violence.

The fifth objective is to determine the frequency of verbal and physical violence in the workplace towards nurses working in the emergency department of selected teaching hospitals of Zahedan University of Medical Sciences in 2021 according to the reason of the level of education.

There was no significant relationship between the level of education and verbal and physical violence. The findings of the study by Afkhamzadeh and his colleagues confirm these findings(22).In addition, the findings of Aghajanloo et al.'s study showed that the increase in years of education in nursing students was not significantly related to the frequency of verbal and physical violence(19).The findings of these studies are also consistent with our study.

In the end, it can be said that it is obvious that it was not possible to completely eliminate all types of violence in hospitals; However, due to the high level of violence in selected teaching hospitals of Zahedan University of Medical Sciences, efforts should be made to reduce it urgently. To reduce the occurrence of violence and solve this problem, the first step is to discover the cause of the occurrence of violence, and to reduce it, all people working in the hospital must cooperate with each other. The findings of our study showed that patient companions and patients are the most important cause of violence in the hospital environment; Therefore, the visiting hours of patients' companions in each ward should be specified and only a limited number of companions should be allowed to enter by presenting them with companion cards. In addition, due to the high level of hospital violence, measures such as increasing the number of employees in each shift and increasing the salaries and bonuses of nurses should be considered so that the Achilles heel of the country's health system

does not suffer from job burnout. Also, it is necessary to hold targeted anger control courses and increase self-esteem and resilience for nurses and students working in the department in order to provide a healthier and safer environment for nurses to work by increasing the skills of nurses in anger control.

Conclusion

Finally, it can be stated that the incidence of workplace violence against nurses is high, and increasing hospital security, holding targeted anger management courses, and increasing self-esteem and resilience for working nurses and students are suggested in order to reduce violence. Also, the culture of reporting violent incidents should be promoted and the necessary mechanisms should be established to register the report and follow up the complaints of the treatment staff. It is suggested that in future researches, qualitative studies should be conducted to examine the opinions of nurses, patients and other people working in the hospital in order to find problems and plan to eliminate and prevent them.

Limitations of the study

The following are the limitations of the project:

1- Restrictions in the selection of nurses: such as the reluctance to cooperate in research, in order to solve this problem, the goals and benefits of participating in the project can be explained to research units and encouraged to participate in workshops and studies.

2- Nurses' time limit: Considering the nurses' duty, the time to fill out the questionnaire was chosen in such a way that the nurses were fully satisfied in terms of time.

3- Limitation in not completing or incompletely completing the information form: to solve this problem, the questionnaires that were completed in this way were excluded from the study.

Authors Contributions:
All authors contributed toward data analysis, drafting and revising the paper and agreed to be responsible for all the aspects of this work.

Ethical considerations:
The present thesis was carried out after receiving permission from the Ethics Committee of Zahedan University of Medical Sciences under the number IR.ZAUMS.REC.1400.227

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