Original Article

Nurses' Experiences of Workplace Violence in Kashan/Iran: A Qualitative Content Analysis

Tayebeh Hashemi-Dermaneh, Negin Masoudi-Alavi, Masoumeh Abedzadeh-Kalahroudi

Trauma Nursing Research Center, Kashan University of Medical Sciences, Kashan, Iran

ORCID:

Tayebeh Hashemi Dermaneh: 0000-0002-3522-7008

Negin Masoudi Alavi: 0000-0001-9519-0051

Masoumeh Abedzadeh Kalahroudi: 0000-0002-7318-6294

ABSTRACT

Background: Nurses are at a high risk of workplace violence (WPV). This phenomenon is largely dependent on the sociocultural conditions. **Objectives:** This study explained the experiences of nurses about the WPV in medical, surgical, and emergency departments of a general hospital in Kashan, Iran, in 2017. **Methods:** In a qualitative content analysis, 13 nurses who had the experience of WPV were invited to participate in semi-structured interviews. The interviews were analyzed through conventional qualitative content analysis using the method suggested by Graneheim and Lundman. **Results:** Four themes were extracted from the interviews. The themes were: "violent behaviors," "antecedents of violence," "violence management," and "violence outcomes". **Conclusion:** WPV had many forms, antecedents, and consequences. Training the personnel and developing a committee for evaluating the incidents can prevent the occurrence of the violence.

KEYWORDS: *Workplace Violence, Nurses, Qualitative research*

INTRODUCTION

Workplace violence (WPV) has been defined as "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."[1] Nurses are especially at higher risk of violence because of their close interaction with patients and their relatives in critical moments.[2,3] Employees in the field of health care are 16 times more likely to experience WPV than other employees.[4] According to the International Council of Nurses, the probability that nurses experience violence is higher than that of prison guards or police officers.[4] In a meta-analysis, 6.25%–89.7% of nurses had suffered WPV during their career.[5] The annual incidence of occupational violence against nurses was 80% in Palestine[6] and 63% in Brazil.[7] In a systematic review in Iran, the occupational violence against nurses was reported to be between 60.3% and 98.6%, which was often in the form of verbal abuse.[8] The prevalence of physical, verbal, and sexual violence against health workers has been 23.5%, 74.7%, and 4.7%, respectively, in Iran.[4,9]

WPV may have serious consequences for nurses including job dissatisfaction, absence from work and leaving the nursing profession, mental health risks, physical harms, and poor quality of work life.[10] In Iran, more than half of the nurses did not report the incidences of WPV and believed that reporting was useless.[9] In a survey conducted in Jordan, despite a good reporting framework, 19.6% of the staff were worried about the violence in their workplace.[11]

Most of the studies have focused on the prevalence of WPV, and the experiences of nurses have not been investigated adequately. In a qualitative study in Ireland, environmental and communication factors were identified as the main causes of violence against nurses.[12] Canadian nurses working in psychiatry departments had accepted violence as a part of their career, and most of them stated a contradiction between their care responsibilities and protection of

Address for correspondence: Prof./Dr. Negin Masoudi-Alavi, Trauma Nursing Research Center, Faculty of Nursing and Midwifery, Kashan University of Medical Sciences, Ghotb Ravandi Highway, Kashan, Iran.
E-mail: masudialavi_n@kaums.ac.ir, alavi.negin@yahoo.com

Access this article online

Quick Response Code:

Website:
www.nmsjournal.com

DOI:
10.4103/nms.nms_53_18

themselves.[13] In a qualitative study in Gorgan province of Iran, nurses reported a wide range of disrespectful behaviors that have led to many psychological stresses.[14] In a phenomenological study conducted in Kerman in a psychiatric department, violent acts were often patient initiated and due to their unreasonable demands or the nature of their illness. Researchers introduced four main categories of lack of adequate support, risk management weakness, outcomes of violence, and humanitarian tendencies.[15] In another study in the psychiatric department of Ahwaz city, the researchers achieved four main themes, including harm caused by violence, predisposing or enabling factors for the incidence of violence in hospitalized patients, contagious nature of the violence, and various forms of violence and different control strategies.[16]

Despite the widespread nature of the problem, a few qualitative researches have been conducted in medical and surgical wards about WPV in Iran, and no qualitative research was found in Kashan. The WPV is largely dependent on the sociocultural conditions. Investigating the experiences related to this phenomenon can provide a better understanding of its nature and causes. Besides, the nature of the WPV is different in medical and surgical wards compared to that of psychiatric wards. Hence, there is a need for qualitative studies in different settings.

Objective

The aim of this study was to explain the WPV experiences of nurses working in medical, surgical, and emergency departments of Shahid Beheshti Hospital of Kashan in 2017.

METHODS

Study design and setting

This research was carried out through conventional qualitative content analysis in medical, surgical, and emergency departments of Shahid Beheshti Hospital of Kashan, Iran. This hospital has 400 beds and it is the only governmental general hospital in Kashan city and provides health care for about 300,000 inhabitants. The sampling was purposeful. The nurses who had the experience of WPV were included in the study. Data saturation was achieved after interviewing 13 participants.

Data collection

At first, the nurses who had reported WPV to nursing office were invited. Then, they were asked to introduce other colleagues who had the same experiences. There were also announcements in departments that nurses who had experienced WPV could contact research team to share their experiences.

The data were collected through semi-structured interviews. The interviews were held from June 2017 to January 2018 in a private room in the hospital. The interview began with general questions followed by more precise questions [Table 1]. All the interviews were recorded by a voice recorder and saved in audio files in mp3 format.

Data analysis

To analyze the data, the method suggested by Graneheim and Lundman[17] was used. For this study, the content of interviews was completely and literally transcribed. In order to get a general idea of the interview, the researcher read interviews several times. Then, the text about the participants' experiences of WPV was extracted and divided into meaning units. The condensed meaning units and codes were extracted. These codes were studied and reviewed several times to maximize closeness with the content of the participant. Different codes were compared based on the differences and similarities among them. Subcategories and categories were formed, which constitute the manifest content. The tentative categories were discussed by two researchers and revised. Finally, the underlying meaning was formulated into themes. For example, the codes of "humiliation," "insulting," and "using vulgar words" were placed in the subcategory of the verbal violence and category of violence presentation and theme of violent behaviors. An example of the analysis is summarized in Table 2.

Data trustworthiness

The Lincoln and Guba method explained by Cypress was used for trustworthiness of this study.[18] The credibility was assured by inviting the nurses with various genders, ages, and work experiences who had the lived experience of WPV in different settings. In-depth interviews were used as data collection method for increasing the credibility of the study. For transferability of the data, the selected interviews along with codes and categories were shared with two nurses other than participants, and they agreed that these codes represent their real experiences. The vigorous presentations of the findings and quotations have been provided to enhance the transferability of the study. For confirmability, the findings were sent to the participants, and they confirmed that the findings could show their real experiences. The dependability of the

Table 1: Interview guide questions

"What do you call violence?"

"Please describe your experience of workplace violence."

"How do you feel about the violence that happened to you?"

"Have you witnessed violence against your colleagues in the workplace? Please explain"

"What have been the consequences of violence on your work?"

Table 2: An example of steps in data analysis

Meaning units	Codes	Subcategory	Category	Themes
He threw the chart to my face, I guard my hand and the chart broke my nail	Throw the objects	Physical violence	Violence presentation	Violent behaviors
	Physical injury	Physical violence		
	The angry companion	External violator	Violator	
I was fearful and did not know what to do	Fears	Psychological effects on nurse	Effects on nurse	Violence outcomes
	Insecurity			
Other patients and my colleague came and controlled him	Helplessness			
	Anxiety			
It was so terrible. I was so scared that even now when I see the patient and angry companions, I hide in the station and do not answer the patient	Not answering patients	Effects on nursing care	Effects on patients	
	Not providing care			
	Colleague support	Organizational policies	Violence-reducing strategies	Violence management
	Work experience	Individual factors	Nurse source violence	Antecedents of violence

study was confirmed by open dialog about data analysis within the research team. A researcher familiar with the qualitative study approved the steps of analysis.

Ethical considerations

This study was approved by the Ethics Committee of Kashan University of Medical Sciences with the code of IR.KAUMS.REC.1396.35. The objectives of the research were fully explained to the participants. Written consent was signed by all participants including the allowance to audio recording their voices. They were assured that only researchers would access the recorded files and after analyzing the data, audio files would be deleted. The participants were assured that, at any stage of the research, they could exit from the project, and their audio file would be deleted. Furthermore, in the final report, no name will be used.

RESULTS

The participants included a head nurse, 11 staff nurses, and one practical nurse. The average age of the participants was 32.60 ± 6.61 years, and their work experience was 10.00 ± 6.42 years [Table 3]. The length of the interviews was in the range of 25–45 min.

After analysis, 20 subcategories and 11 categories were extracted from the interviews that finally were formulated into four themes of "violent behaviors," "antecedents of violence," "violence management," and "consequences of violence" [Table 4].

Theme 1: Violent behaviors

Participants expressed that any kinds of disrespect or humiliation that might happen during their work could be considered as a violent behavior. The two categories of "Violence presentation" and "Violator" were obtained.

Violence presentation

Most participants in the study had experienced a variety of verbal and physical violence. Throwing things and pushing nurses were the common forms of physical violence. Insulting and humiliating were the common experiences. One of the participants said: *"I was in patient's room that I heard someone was shouting very dirty words loudly to my female colleague. I ran to the station to stop him. I was very embarrassed and my colleague was worse" (Participant 11).*

Another participant commented: *"The insulting, making fun of nurse, cursing, and humiliating are kinds of violence. It starts with the nagging and then shouting and then became more. Physical violence like attacking nurses with the knife also has been happened" (Participant 2).*

Violator

Participants noted that patients and their relatives and physicians and other colleagues could show violent behaviors. It was classified as internal and external sources of violence. Humiliation by physicians was an example of violent behavior initiated from the health team. A nurse said: *"One of our colleagues cannot hear well. One time doctor asked him a question and he didn't hear that; at second time he shouted loud in front of patients that are you deaf? He was really very sad and felt humiliated" (Participant 10).* However, most of the nurses cited patients' relatives as the main external source of violence. One of them said: *"Most of the conflicts in the emergency room are by the relatives, the patients are on the bed and just make sounds, but relatives are very aggressive sometimes" (Participant 4).*

Theme 2: Antecedents of violence

Various conditions and situations are involved in the occurrence of violence. The four categories of theme 2 are as follows: hospital and its management, nurse source violence, sociocultural conditions, and factors related to patients and relatives.

Hospital and its management

There were many factors related to hospital and its management that could predispose violence. The

Table 3: Characteristics of participants

	Gender	Age (years)	Work experience
Participant 1	Male	31	8 years
Participant 2	Male	29	6 years
Participant 3	Female	33	11 years
Participant 4	Female	28	4 years
Participant 5	Female	36	12 years
Participant 6	Male	32	7 years
Participant 7	Female	45	20 years
Participant 8	Female	27	2 years
Participant 9	Female	32	8 years
Participant 10	Male	42	19 years
Participant 11	Male	41	15 years
Participant 12	Female	24	4 months
Participant 13	Female	25	18 months

Table 4: The main themes - categories and subcategories

Themes	Categories	Subcategories
Violent behaviors	Violence presentation	Verbal violence
		Physical violence
	Violator	Internal violator
		External violator
Antecedents of violence	Hospital and its management	Management factors
		Structural factors
	Nurse source violence	Individual factors
		Organizational factors
	Sociocultural conditions	City culture
		Social habits
	Factors related to patients and relatives	Disease
		Patients and entourage
Violence management	Occupational violence follow-up	Guidelines and instructions
		The actual process of follow-up
	Violence-reducing strategies	Organizational policies
		Training the staff
Violence outcomes	Effects on patient	Effects on nursing care
		Psychological effects
	Effects on nurse	Occupational effects
		Psychological effects

weakness of hospital security and the structure of the emergency wards that let the free passage of the people were the factors mentioned by nurses. One of them said: *"The emergency room is always very crowd and full of people. We cannot manage the patients and their numerous companions at the same time"* (Participant 3). Another nurse said: *"The guards of the hospital don't engage in violent situations. We call them for help but they come late when the conflict is over and we have managed it. I understand them because they don't feel safe themselves"* (Participant 6).

Some nurses believed that nursing managers had a poor perception of clinical nursing situations and work-related violence, so they would not take it as a serious issue. A nurse stated: *"Most of our managers don't have*

sufficient clinical working experience. Did they work in emergency room with aggressive patients? Did they work in long shifts when they are exhausted? Did they have been beaten by the patients? Unfortunately no" (Participant 6).

The kind of ward, the time of the shift, nurse shortage, and the perquisites of educational hospital were other antecedents of the violent incidents. A nurse with 7-year work experience said: *"In emergency department the workload is high, and the number of nurses is not sufficient. All of a sudden they bring 4 injured patients in a vehicle accident. Kashan is a small city and patients' relatives and families come all together. The companions see only their own patients but we should manage all the patients. There are lots of tensions"* (Participant 6). Another participant commented: *"It is an educational hospital; many times we should wait until an intern visit the patient then attends should confirm the order, and this makes patients angry"* (Participant 2).

Nurse source violence

Some of the factors that led to violence were related to the nurses. A nurse stated: *"To be honest our services are not good many times. We miss the orders frequently mostly because there is not adequate nurse in the ward"* (Participant 3).

The participants stated that gender of the nurse, his/her work experiences, and communication skills were influential in dealing with the violence. One participant said: *"In the shifts that a male nurse is present, the patients behave better. They don't dare to shout. But when there are just female nurses patients increase their voice"* (Participant 4).

Sociocultural conditions

Culture of the city and social habits could increase the violent behaviors. Participant 7 said: *"Some people have low culture, and they think they can say everything or if they shout they will receive more attention."* Another participant said: *"We have patients that come from Tehran, they are very nice and thank us for our services, but when people from Kashan come they are angry and they have named the hospital as slaughterhouse, maybe because this is the only general hospital in the city and everybody has some negative memories here"* (Participant 7).

Factors related to patients and relatives

Addict persons and those who had pain, or lost their loved ones in the hospital, were more prone to show violent behaviors. A nurse said: *"A young patient came with his parents because of pain in his stomach. Suddenly his heart arrested; we tried to resuscitate him but we lost him. Their relatives were very angry and*

they broke everything in the station" (Participant 9). Another nurse commented: *"The addict patients and their companions are the worst. When they come I am sure we will have a scary-comic movie in the ward (Said with laughing)" (Participant 1).*

Theme 3: Violence management

This theme had two categories of "occupational violence follow-up" and "violence-reducing strategies."

Occupational violence follow-up

The participants believed that, if the violent cases were followed up adequately, it would be possible to prevent the occurrence of similar cases in the future. Participants indicated that there was no efficient and adequate follow-up system in WPV incidents. The reactions to the violence that could be mentioned were "incuriosity," "getting used to," and at the end "appeasement." Participant 2 said: *"We report the violence, it is a routine, the supervisors and the guards sign it, but we know that nothing happens, nobody follows it up."*

Violence-reducing strategies

Participants suggested establishing organizational policies and training courses, especially workshops about communication skills, as strategy to control the violence. Most participants mentioned that there was a need for educational courses for nurses and nursing students so that they would be prepared for WPV. Participant 6 stated: *"A while ago, they conducted a course about occupational violence that was very influential. But I told that it would be better if it was held practically in the real setting and we could see the reactions. I said that these classes should also be held for the authorities, because, most of them do not have adequate clinical work experiences."*

Nurses also had developed some personal strategies to prevent and manage WPV. One of them said: *"When I see that they bring a young man that has been stabbed with a knife and three of his friends are around him, I know that if I don't rush to the patient there will be a fight, even if he is not my patient. They should feel that you are doing something for them" (Participant 2).* Another participant said: *"When the patients and relatives are angry and make violent behaviors I leave the room and let them calm down" (Participant 11).*

Theme 4: Violence outcomes

According to the participants, tensions have destructive effects on nursing care. This main theme was divided into two categories of "effects on patients" and "effects on nurses."

Effects on patients

The greatest harm to patients was the lack of receiving proper care. Participant 2 described the impact of

violence in the care of the patient as follows: *"The influences are unconscious, when I have an argument with a patient; I tell my colleagues that I can't have this patient and ask them to replace me. I may not be able to do the right thing and then there might be a problem."*

Effects on nurses

Reducing self-esteem, feeling depressed, and thinking of leaving the job were destructive effects of the violence on nurses. Participant 2 said: *"When patients and companions say bad words and you have no respect in the hospital, you feel why I should bear this. Yes many times I think why I should stay in this job."* Participant 4 stated her feeling of remembering one of the cases in which she had been injured: *"It was so terrible. I was so scared that even now when I see the patient and angry companions, I hide in the station and don't answer the patient or ask a male colleague to help me, I do not dare to go to patient side."*

DISCUSSION

Participants believed that any disrespect such as insulting, shouting, or humiliation could be considered as violence. This is in line with the results of Ramezani who investigated nurses' experiences of occupational aggression in the psychiatric wards.[15] The forms of violence in the present study were similar to the types of violence in other studies.[1,8,19] Participants mentioned verbal abuse, threatening, and subsequent physical violence frequently. In a study in Babol hospitals, 58.9% of participants had the experience of verbal violence and 15.66% had experienced physical violence.[20] Similar to most of the previous studies,[3,4,7,21,22] participants commented that patients' relatives and companions were a source of violent behaviors in hospital. Kashan is a small city, with strong familial bounds. The relatives might be worried about the patient's condition, and they think that they are helping patients when they intervene in nursing care. In Iran, patients usually have numerous companions, which increase the chance of conflict in hospital departments. It seems that the companion management should be a part of violence control program.

According to interviews, female nurses with less work experience were more prone to violent behaviors. In a study by Sahebi, the prevalence of violence against younger and less experienced employees was higher and male employees had a higher chance of having physical violence than females.[19] In Egypt, occupational violence was more prevalent in male staff.[23] It seems that both genders are at the risk of violence, but may be their reactions are different. In female nurses, we noticed fear and anxiety, whereas male nurses show

more aggressive and self-assertive behaviors. This needs further investigation.

According to participants, sociocultural factors may influence the chance of violence. Violence is a cultural behavior.[24] In the previous studies, this aspect of violence has not been considered adequately. According to the participants, people of Kashan have bad memories from hospital especially because it is the only general hospital in the city. These negative views toward hospital need to be changed.

There were structural and management problems that could increase the occurrence of violence. Nursing shortage, delay in starting the treatments, weaknesses of guardians, and managers' indifference were mentioned by the participants. A research of Arnetz *et al*. showed that organizational factors could increase the WPV.[25] In a qualitative study, the unmet expectations of patients/relatives, inefficient organizational management, and inappropriate professional communication were reported as the antecedents of WPV in hospitals.[26] Hospital environment needs to be safe for everyone. If nurses do not feel secure, they cannot provide quality services. It must be a priority for hospital managers to prevent and control the WPV.

Violence control strategies were the third main theme extracted from the participants' experiences. Many nurses stated that they were trying to protect themselves from violence by leaving the environment. Salavati *et al*. also found that nurses had reactions to violence incidents such as reporting it to the head nurses, leaving the place, and self-defending in cases of physical violence.[27] If nurse managers cannot find a way to control the violence, nurses themselves will develop ways that might not be professional, such as self-defense and showing aggressive behaviors. In this study, nurses had helpful recommendations that could decrease the occurrence of violence, such as training the personnel and proper follow-up of violent incidents.

Occupational violence had serious outcomes. In nurses, it could cause stress, fear, depression, and low self-esteem. In the study of Ramezani, the violent situation led to reactions such as frustration, difficulty in focusing attention, depression, anxiety, fear of being injured, and fear of interpellation.[15] Reduced sense of success in the profession, dissatisfaction with the job, and the feeling of inability to control the patient were mentioned as the consequences of occupational violence.[12] Hassankhani *et al*. also found that WPV had mental and physical health risks and could threat the professional and social integrity.[28] Moreover, as revealed in this study, WPV could adversely affect the nursing care.

This study had some limitations. First, it reflects the situation in a single hospital. Second, some nurses were reluctant to share their experiences with the research team. There were also some unanswered questions such as why female nurses expressed more anxiety and how the personnel could be protected. We recommend more studies on these issues.

CONCLUSION

To control violence, nurses should be allowed to report violence. If the cases are reported and then followed up, then similar situations could be avoided. Removing all the factors related to violence is out of the control of the staff. On the other hand, various situations related to the professional attitudes are manageable. It is necessary to enhance the personnel's communication skills by educational strategies.

In order to use the results of the study, it is suggested that, in each hospital, a committee be established to investigate and follow up the hospital violence. Strengthening the hospital security team and training the personnel appropriately are essential. It is recommended that more studies be done on the effects of interventions in reducing violence in hospitals and also the impact of hospital violence on professional self-esteem and the quality of nursing care.

Acknowledgment

Financial support and sponsorship

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Sisawo EJ, Ouédraogo SY, Huang SL. Workplace violence against nurses in the Gambia: Mixed methods design. BMC Health Serv Res 2017;17:311.

2. Fute M, Mengesha ZB, Wakgari N, Tessema GA. High prevalence of workplace violence among nurses working at public health facilities in Southern Ethiopia. BMC Nurs 2015;14:9.

3. Imani B, Nazari L, Majidi L, Zandieh M, Tajobi M. Investigation of the causes and solutions to violence in the workplace, emergency nurses in selected hospitals of Hamadan University of

Medical Sciences. Pajouhan Sci J 2014;12:64-74.

4. Fallahi-Khoshknab M, Oskouie F, Najafi F, Ghazanfari N, Tamizi Z, Afshani S, *et al.* Physical violence against health care workers: A nationwide study from Iran. Iran J Nurs Midwifery Res 2016;21:232-8.

5. Edward KL, Stephenson J, Ousey K, Lui S, Warelow P, Giandinoto JA. A systematic review and meta-analysis of factors that relate to aggression perpetrated against nurses by patients/relatives or staff. J Clin Nurs 2016;25:289-99.

6. Kitaneh M, Hamdan M. Workplace violence against physicians and nurses in Palestinian public hospitals: A cross-sectional study. BMC Health Serv Res 2012;12:469.

7. Pai DD, Lautert L, Souza SB, Marziale MH, Tavares JP. Violence, burnout and minor psychiatric disorders in hospital work. Rev Esc Enferm USP 2015;49:460-8.

8. Najafi F, Fallahi-Khoshknab M, Dalvandi A, Ahmadi F, Rahgozar M. Workplace violence against Iranian nurses: A systematic review. J Health Promot Manage 2014;3:72-85.

9. Fallahi Khoshknab M, Oskouie F, Najafi F, Ghazanfari N, Tamizi Z, Ahmadvand H, *et al.* Psychological violence in the health care settings in Iran: A cross-sectional study. Nurs Midwifery Stud 2015;4:e24320.

10. Joolaee S, Jalili H, Rafiee F, Haggani H. The relationship between nurses' perception of moral distress and ethical environment in Tehran University of Medical Sciences. J Med Ethics Hist Med 2011;4:56-66.

11. AbuAlRub RF, Al Khawaldeh AT. Workplace physical violence among hospital nurses and physicians in underserved areas in Jordan. J Clin Nurs 2014;23:1937-47.

12. Angland S, Dowling M, Casey D. Nurses' perceptions of the factors which cause violence and aggression in the emergency department: A qualitative study. Int Emerg Nurs 2014;22:134-9.

13. Stevenson KN, Jack SM, O'Mara L, LeGris J. Registered nurses' experiences of patient violence on acute care psychiatric inpatient units: An interpretive descriptive study. BMC Nurs 2015;14:35.

14. Kalantary S, Ghana S, Hekmatafshar M, Sanagoo A, Jouybar LM. The experiences of nurses of uncivil behaviors in intensive care unit. J Ethics Cult Nurs Midwifery 2014;1:47-56.

15. Ramezani T. Nurses' experiences of occupational aggression in the psychiatric wards: Phenomenology approach. J Fund Ment Health 2011;13:27-314.

16. Moghadam MF, Pazargadi M, Khoshknab MF. Iranian nurses'

experiences of aggression in psychiatric wards: A qualitative study. Issues Ment Health Nurs 2013;34:765-71.

17. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. Nurse Educ Today 2004;24:105-12.

18. Cypress BS. Rigor or reliability and validity in qualitative research: Perspectives, strategies, reconceptualization, and recommendations. Dimens Crit Care Nurs 2017;36:253-63.

19. Sahebi L, Gholamzadeh Nikkjoo R. Workplace violence against clinical workers in Tabriz educational hospitals. Iran J Nurs 2011;24:27-35.

20. Rafati Rahimzadeh M, Zabihi A, Hosseini SJ. Verbal and physical violence on nurses in hospitals of Babol University of Medical Sciences. Hayat 2011;17:5-11.

21. Harorani M, Varvanifarahani P, Yazdanbakhsh SA, Pakniyat AG, Sadeghi H, Norozi M, *et al.* Evaluation of the vulnerable factors of occupational violence against practitioner medical personnel in the emergency units of the training hospitals of Arak city. Med Ethics J 2017;11:55-61.

22. Heydarikhayat N, Mohammadinia N, Sharifipour H, Almasy A. Assessing frequency and causes of verbal abuse against the clinical staff. Q J Nurs Manage 2012;1:70-8.

23. Abbas MA, Fiala LA, Abdel Rahman AG, Fahim AE. Epidemiology of workplace violence against nursing staff in Ismailia governorate, Egypt. J Egypt Public Health Assoc 2010;85:29-43.

24. Carroll S. Cultures of Violence. Interpersonal Violence in Historical Perspective. Houndmills: Palgrave Macmillan; 2007. ISBN 978 0 230 01945.

25. Arnetz J, Hamblin LE, Sudan S, Arnetz B. Organizational determinants of workplace violence against hospital workers. J Occup Environ Med 2018;60:693-9.

26. Najafi F, Fallahi-Khoshknab M, Ahmadi F, Dalvandi A, Rahgozar M. Antecedents and consequences of workplace violence against nurses: A qualitative study. J Clin Nurs 2018;27:e116-28.

27. Salavati S, Daraie M, Tabesh T, Aradoei Z, Salavati P. Workplace violence against nurses in Ahvaz educational hospitals. J Urmia Nurs Midwifery Fac 2015;12:1018-27.

28. Hassankhani H, Parizad N, Gacki-Smith J, Rahmani A, Mohammadi E. The consequences of violence against nurses working in the emergency department: A qualitative study. Int Emerg Nurs 2018;39:20-5.