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Workplace violence against nurses in the emergency departments of three hospitals in Riyadh, Saudi Arabia: A cross-sectional survey☆

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ABSTRACT

Background: Emergency department nurses are continuously exposed to violence on the job.
Objectives: This study sought to identify the prevalence and pattern of workplace violence and the consequences of violence on nurses working in emergency departments in Riyadh.
Design: Cross-sectional survey conducted from April to May 2015.
Setting: Emergency departments of three hospitals in Riyadh.
Participants: Nurses participated voluntarily and anonymously.
Methods: Nurses were recruited by advertisement. A self-administered questionnaire with 23 items was given to participants by a head nurse. Violent acts were classified as physical or nonphysical. Descriptive statistics are presented and statistical comparisons were made to evaluate differences by gender, nationality, age, experience and other demographic variables.
Results: Of 150 questionnaires distributed, 121 were returned (80.6%). One hundred were females (82.6%) and 71 (58.7%) had worked in nursing for less than or equal to 5 years. Most participants (n=108, 89.3%) had experienced a violent incident in the past 12 months. Eighty (80/108, 74.1%) of those who had experienced violence had experienced verbal abuse and 20 (20/108, 18.5%) had faced verbal and physical violence during the past year. The type of violence was associated with gender and educational level. Patients (89/108, 82.4%) and their relatives (70/108, 64.8%) were the most common instigators of violence. Most nurses (78/108, 72.3%) expressed dissatisfaction with the manner in which incidents were handled.
Conclusion: Workplace violence was pervasive in the emergency departments of these three hospitals in Riyadh. The data are consistent with other reports of workplace violence in emergency departments in Saudi Arabia and in other countries.
Recommendations: Suitable strategies to deal with the issue include establishing workplace violence management teams and creating appropriate rules and regulations that can improve workplace safety for nurses, while improving patient care quality. Security systems and formulation of violence prevention policies and procedures are mandatory measures in emergency departments. In addition, training programs are needed to help support, teach and provide nurses with the knowledge and skills needed to manage violent situations in the workplace.

1. Introduction

Violence in healthcare systems is one of the most common forms of workplace violence. ("Violence in the Workplace: OSH Answers," 2016) The Emergency Nurses Association in The United states reported that workplace violence in the healthcare setting is 3.8 times higher than all private industry, and that the emergency department is a particularly vulnerable setting (Emergency Nurses Association, 2008; Gacki-Smith et al., 2009). The Centers for Disease Control and other governmental organizations in the United States and other countries, have long been aware that violence is a well-recognized occupational hazard of working in hospitals ("CDC – NIOSH Publications and Products – Violence Occupational Hazards in Hospitals (2002-101)," n.d.). As the front door to the hospital for many patients, especially those with the most emergent needs, the emergency department (ED) is where the violent encounter most often occurs. The ED is open at all hours and the nurse is usually the first healthcare provider encountered by the patient. The high rate of victimization among clinical nurses has not abated over time, and remains a key reason for losses from the workforce and an inability to attract new nurses (Chapman & Styles, 2006; Lee,

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Gerberich, Waller, Anderson, & McGovern, 1999).

More than half of healthcare workers have experienced violence in the workplace. (Librarian, n.d.; Lin & Liu, 2005) Stirling and colleagues systematically reviewed studies up to 1996 and found a high prevalence of violent encounters in surveys of hospitals in the UK (Stirling, Higgins, & Cooke, 2001). In a survey of 300 nurses, only 9.1% had never experienced physical violence. In the largest hospital in Dublin, only 27 nurses (7%) were not worried about physical assault (Rose, 1997). The findings of surveys are similar throughout the world. A recent cross-sectional study of EDs in Palestine, in the West Bank and Gaza, the majority of nurses and physicians reported violence in the past year (76.1%), with non-physical assaults predominating (71.2%). At an urban inner-city tertiary care center in Vancouver, most (76%) had witnessed verbal abuse and physical threats or assaults (86%).(Fernandes et al., 1999) Pourshaikhian and colleagues systematically reviewed violence against personnel in the prehospital setting in Iran (Pourshaikhian, Abolghasem Gorji, Aryankhesal, Khorasani-Zavareh, & Barati, 2016).

The instigating factor in most cases seems to be a failure to meet patient expectations, which may be unrealistically high. Outbursts of verbal or physical violence directed toward the staff are the consequence. What are patients expectations? Morrison summarized expectations of the patient and the family: "The provision of information, accessibility to a wide range of services and after-hours service, good discharge planning, a caring and compassionate approach, the time to listen to the patient, patient involvement in decision-making, and quality, timely medical care were priority items. Additional in-hospital expectations included the need to respect privacy, to provide adequate pain management and to keep the family informed (Morrison, 1999). This failure to meet expectations was reflected in a 2016 survey of 227 nurses in Jordan, where nurses reported that the most common reasons for verbal and sometimes physical violence were waiting times, overcrowding and a failures to meet patient and family expectations (ALBashtawy & Aljezawi, 2016).

Because the topic is not well studied in our part of the world, our aim was to determine the frequency and pattern of workplace violence and consequences of violent incidents among nurses in emergency departments in Riyadh, Saudi Arabia.

2. Methodology

The study was a questionnaire-based cross-sectional survey. The target population for this study were emergency department nurses from three hospitals: Al-Yamamah Hospital (310 beds), National Guard Hospital (690 beds), and King Saud Hospital (200 beds) in Riyadh, Saudi Arabia. Nurses were recruited by advertisements and volunteered to participate. Participation was anonymous. The study was conducted from April to May 2015 . A questionnaire for self-administration was designed by the researcher based on similar questionnaires from research into workplace violence (Appendix). (Lin & Liu, 2005). The questionnaire contained 23 questions, 22 closed questions and one open-ended question. The survey tool consisted of three parts: The first part included demographic information such as age, gender, nationality, educational level, years of experience, and training or lack thereof in dealing with violence. The second part consisted of items that addressed the frequency and pattern of workplace violence (frequency of violence, sources of violence, type of violence, place, time and reaction to violence) and the third part consisted of items that addressed the consequences of violent incidents and satisfaction with incident handling.

Types of violence were classified broadly into physical and non-physical assault. Physical assault was defined as deliberate use of force (hitting, kicking, slapping, choking, biting, or pushing). Non-physical assault included verbal harassment and abuse (including threats and sexual comments), including any humiliating and undignified comment based on age, sex, race, colour, disability, language, religion, and economic or social status. Sexual harassment was defined as any unwelcome and verbal or physical gestures of a sexual nature. Respondents were also asked to identify their reaction to the violence.

After obtaining consent from the hospitals and then from the nurses, the researcher described the study and the data collection process with the head nurses before giving the questionnaire to participating nurses. The questionnaire contained contact information if the participant had questions. Nurses were informed that participation was anonymous and voluntary. The nurses were given one week to complete the questionnaire. Data were collected over a period of three weeks. The Ethical Approval for this study was obtained from King Abdullah international Medical Research Center.

Seeking to minimize the sample size because of time and budget constraints yet ensure that the sample size was reasonable, we based the desired sample size on the fact that the margin of error for a sample of 150 is 8% (.98/sqrt(n) (for a confidence level of 95%), and that 8% is considered a reasonable margin of error in surveys.

Statistical analysis was done using SPSS (IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp). Descriptive statistics are presented and Pearson's chi square test was used for statistical comparisons of demographic data.

3. Results

Of 150 questionnaires distributed, 121 were returned (80.6%). One hundred were females (82.6%) and 71 (58.7%) had worked in nursing for 5 years or less (Table 1). Most were under 30 years of age (n=75, 62%). About half of nurses were non-Saudi (50.4%) and the non-Saudis were from the Philippines and India. Most respondents were unmarried (62.8%). The largest proportion had a bachelor's degree (n=94, 77.7%) followed by a diploma in nursing (n=25, 20.7%) while only two respondents had a master's degree in nursing. One hundred respondents (82.6%) reported that they had not received any training in handling violence.

Respondents were asked to identify the numbers of times they were exposed to violent incidents in the last 12 months. Among 121 nurses, 108 (89.3%) reported being exposed to workplace violence within the last 12 months, including 23 (21.3%) more than four times (Figure 1). The incidence of violence was the highest in the evening shift (55.6%) and lowest in the day shift (27.8%); only 33 (30.6%) respondents reported workplace violence in the night shift (Table 2). Respondents were asked to identify the perpetrator in the most recent incident of

Table 1
Sociodemographic data on participants (n=121).

	n (%)
Age (years)	
Younger than 30	75 (62.0)
30 to 40	39 (32.2)
40 and older	7 (5.8)
Nationality	
Saudi	60 (49.6)
Non-Saudi	61 (50.4)
Work experience (years)	
≤5	71 (58.7)
6–9	35 (28.9)
≥10	15 (12.4)
Marital status	
Married	45 (37.2)
Other	76 (62.8)
Sex	
Male	21 (17.4)
Female	100 (82.6)
Educational status	
Diploma degree	25 (20.7)
Bachelor degree	94 (77.7)
Master degree	2 (1.7)

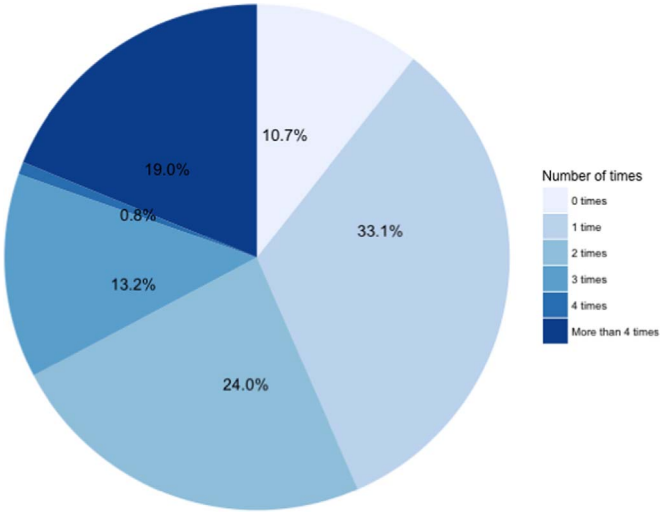

Fig. 1. Number of times workplace violence was reported by respondents (n=121) in the past 12 months.

violence experienced. The identity of the perpetrator was the patient in 89 cases (73.6%) while relatives of patients were identified in 70 cases (57.9%). Violent incidents occurred near the nursing station most frequently (37.0%) and in the waiting room area (33.3%). Forty-nine respondents (45.4%) reported the incident to a senior staff member. Other respondents (29.6%) reported that they told the person to stop. A number of respondents reported that they told a colleague (16.7%) or took no action (14.8%). Most nurses did not report the incident (59.3%). Some of the respondents felt that reporting an incident was useless (47.2%); a few (15%) believed it was not important, and 6 respondents felt too ashamed to report the incident (Table 2).

Respondents were asked to identify the type of violence that they had experienced in the last 12 months. Verbal violence was most common (74.1%) and sexual violence was least common (1.9% for females) (Table 3). Female nurses reported a higher level of verbal violence and sexual violence than male nurses, while male nurses reported a higher level of physical violence ($P < 0.001$). Moreover, experience with incidents of workplace violence differed by educational background. Nurses with a bachelor's degree reported a high level of nonphysical violence and both physical and verbal violence as compared to the nurses with diploma and master's degree (P=0.026). Nationality, marital status, age of the nurse and length of work experience had no association on the type of violence experience.

In response to the question about action taken to investigate the causes of violence, only 29 (26.9%) reported that they investigated the cause (Table 4). The most common cause was misunderstanding (54.6%). Most of the nurses (39.8%) believed that head nurses had the most important role to play in investigating incidents of violence. Most of the nurses (47.2%) who experienced an incident of workplace violence reported that nothing happened to their abusers. After violent incidents, the majority of the respondents (39.8%) had an opportunity to speak about the incident or report it. Some of the nurses received consultation (13.9%), and some received other kinds of support from their employers or supervisors (20.4%). (Table 4).

Most of the participants were dissatisfied with the ways that hospital management handled the incident (72.3%). However, nurse satisfaction with the manner in which the incident was handled differed significantly among Saudi and non-Saudi nurses (Table 5).

Lastly, for the open-ended questions that inquired about preventive strategies for avoiding workplace violence, the following suggestions were made by the nurses: need for a truly impartial counselor, stricter rules and policies for patient care, a need for action codes for immediate responses to violent situations, a limit to the number of relatives inside patient rooms, and a requirement that male patients be handled by male nurses. Some mentioned a need for public awareness and training for the staff to increase awareness of self-defense.

Table 2
Frequency and pattern of workplace violence.

%	n (%)	
Working shift		
27.8	30 (27.8)	Day
55.6	60 (55.6)	Evening
30.6	33 (30.6)	Night
Perpetrator		
73.6	89 (73.6)	Patient
57.9	70 (57.9)	Relatives of patients
13.2	16 (13.2)	Others (staff member, manager or supervisor, external colleague)
Place		
25.0	27 (25.0)	Beside patient' s bed
33.3	36 (33.3)	Waiting room
23.1	25 (23.1)	Treatment room
37.0	40 (37.0)	Nursing station
27.8	30 (27.8)	Others
Initial reaction of nurse		
14.8	16 (14.8)	No action
8.3	9 (8.3)	Pretended it never happened
29.6	32 (29.6)	Told the person to stop
1.9	2 (1.9)	Tried to defend self physically
13	14 (13.0)	Told friends/family
1.9	2 (1.9)	Sought counseling
16.7	18 (16.7)	Told a colleague
45.4	49 (45.4)	Reported to senior staff member
4.6	5 (4.6)	Transferred to another position
12	13 (12)	Completed incident or accident form
Reported incidents		
40.7	44 (40.7)	Yes
59.3	64 (59.3)	No
Reasons for not reporting the incident		
14.8	16 (14.8)	It was not important
5.6	6 (5.6)	Felt ashamed
0.9	1 (0.9)	Felt guilty
12	13 (12)	Afraid of negative consequences
47.2	51	Useless (nothing would be done)
3.7	4	Did not know whom to report to

Some nurses may have reported more than one incident.

4. Discussion

The high incidence of workplace violence found in this study (89.3% overall and 74.1% for verbal abuse) is similar to that reported in other surveys and summarized in systematic reviews. In a survey in Turkey, verbal violence was experienced at least once in a year by 91.4% of 255 survey respondents.(Pinar & Ucmak, 2011) In another study in Turkey, Ergun and Karadakovan found that verbal violence (98.5%) was reported considerably more often than physical violence (19.7%). (Senuzun Ergün & Karadakovan, 2005) Esmaeilpour and colleagues reported that 91.6% of nurses had experienced some form of verbal abuse in the past year (Esmaeilpour, Salsali, & Ahmadi, 2011).

We found that male nurses reported physical violence more often than their female counterparts while females reported more verbal abuse. Moreover, nurses with bachelor's degree reported higher rates of

Table 3
Type of violence by gender, nationality, marital status, age, education, work experience (n=108).

%	n (%)	
Working shift		
27.8	30 (27.8)	Day
55.6	60 (55.6)	Evening
30.6	33 (30.6)	Night
Perpetrator		
73.6	89 (73.6)	Patient
57.9	70 (57.9)	Relatives of patients
13.2	16 (13.2)	Others (staff member, manager or supervisor, external colleague)
Place		
25.0	27 (25.0)	Beside patient' s bed
33.3	36 (33.3)	Waiting room
23.1	25 (23.1)	Treatment room
37.0	40 (37.0)	Nursing station
27.8	30 (27.8)	Others
Initial reaction of nurse		
14.8	16 (14.8)	No action
8.3	9 (8.3)	Pretended it never happened
29.6	32 (29.6)	Told the person to stop
1.9	2 (1.9)	Tried to defend self physically
13	14 (13.0)	Told friends/family
1.9	2 (1.9)	Sought counseling
16.7	18 (16.7)	Told a colleague
45.4	49 (45.4)	Reported to senior staff member
4.6	5 (4.6)	Transferred to another position
12	13 (12)	Completed incident or accident form
Reported incidents		
40.7	44 (40.7)	Yes
59.3	64 (59.3)	No
Reasons for not reporting the incident		
14.8	16 (14.8)	It was not important
5.6	6 (5.6)	Felt ashamed
0.9	1 (0.9)	Felt guilty
12	13 (12)	Afraid of negative consequences
47.2	51	Useless (nothing would be done)
3.7	4	Did not know whom to report to

Data are number and percentage
Chi-square test results:
Gender: Chi2=29.38014 d.f. =3 p=1.863131e-06
Nationality: Chi2=4.942604 d.f. =3 p=0.1760485
Marital status: Chi2=4.258964 d.f. =3 p=0.2348243
Age: Chi2=12.04881 d.f. =6 p=0.06088868 (Fishers: p=0.09376169)
Education: Chi2=14.32977 d.f. =6 p=0.02616168
Work experience: Chi2=5.614691 d.f. =6 p=0.4677046

verbal and physical violence than nurses with master's or diploma degrees. Relationships with demographic factors are reported in many studies. As in our study, other studies physical violence is more commonly associated with male patients and verbal violence with female patients (Adib, Al-Shatti, Kamal, El-Gerges, & Al-Raqem, 2002; Algwaiz & Alghanim, 2012; Esmaeilpour et al., 2011; Ryan & Maguire, 2006; Senuzun Ergün & Karadakovan, 2005). However, other studies have shown that less professional experience and younger age are associated with more incidents, which is contrary to our findings. Nevertheless, we found associations with gender and educational level with type of violence, but not with other demographic variables.

Table 4
Results of investigation and fate of the perpetrator.

	Verbal	Physical	Sexual	Verbal/ physical	P
Total	80 (74.1)	7 (6.5)	2 (1.9)	20 (18.5)	
Gender					
Male	6 (5.6)	5 (4.6)	0	9 (8.3)	<.001
Female	74 (68.6)	2 (1.9)	2 (1.9)	11 (10.1)	
Nationality					
Saudi	35 (32.4)	6 (5.5)	1 (0.9)	11 (10.1)	.176
Non-Saudi	45 (41.7)	1 (0.9)	1 (0.9)	9 (8.3)	
Marital status					
Married	28 (25.9)	2 (1.9)	0	11 (10.1)	.235
Other	52 (48.1)	5 (4.6)	2 (1.9)	9 (8.3)	
Age group (years)					
<30	50 (46.3)	5 (4.6)	1 (0.9)	11 (10.1)	.061
30–40	28 (25.9)	1 (0.9)	0	7 (6.5)	
>40	2 (1.9)	1 (0.9)	1 (0.9)	2 (1.9)	
Education					
Diploma	14 (13.0)	4 (3.7)	0	4 (3.7)	.026
Bachelors	65 (60.2)	2 (1.9)	2 (1.9)	16 (14.8)	
Masters	1 (0.9)	1 (0.9)	0	0	
Work experience (years)					
≤5	47 (43.5)	5 (4.6)	1 (0.9)	11 (10.1)	.468
6–9	26 (24.1)	0	1 (0.9)	6 (5.6)	
>9	7 (6.5)	2 (1.9)	0	3 (2.8)	

In Saudi Arabia, a cross-sectional survey in 2012 by Algwaiz and Alghanim of 600 physicians and nurses,(Algwaiz & Alghanim, 2012) found that nurses were more likely to be exposed to violence ($P < 0.001$) and verbal abuse was more common than physical abuse. As in our study, males, and less experienced and younger workers encountered violence more often. Alkorashy and Al Moalad surveyed 370 nurses and found that almost half had experienced some form of violence in the previous year, mostly verbal abuse (Alkorashy & Al Moalad, 2016).

The major perpetrators of violence are patients and the relatives of patients. Most studies, especially in developing countries, had the same findings (AbuAlRub, Khalifa, & Habbib, 2007; ALBashtawy & Aljezawi, 2016; Alkorashy & Al Moalad, 2016; Esmaeilpour et al., 2011; Gerberich et al., 2004; Hamdan & Abu Hamra, 2015; Pinar & Ucmak, 2011). In the tense atmosphere of a critical medical situation, discussion of the patient's condition by medical personnel in the presence of the patient and family members might result in verbal reactions of fear, anger, or frustration, which can include humiliating comments or gestures.

As in most other studies, we found that the nursing station was the most common site for violent encounters.(Esmaeilpour et al., 2011) Angland et al found that more incidents took place around the triage area.(Angland, Dowling, & Casey, 2014) We found that most incidents occurred in the evening and the least during day shifts, which is

Table 5
Nurse satisfaction with the manner in which incident was handled, by nationality.

Nationality	Very dissatisfied	Dissatisfied	Moderately satisfied	Satisfied	Very satisfied
Saudi	16 (30.2)	29 (54.7)	3 (5.7)	5 (9.4)	0
Non-Saudi	6 (10.7)	27 (48.2)	10 (17.8)	13 (23.2)	0

consistent with most other reports. (Crilly, Chaboyer, & Creedy, 2004; El-Gilany, El-Wehady, & Amr, 2010; Esmaeilpour et al., 2011) This may highlight the importance of establishing violence deterrents in EDs such as security personnel, cameras, alarms, or communication systems in the evening (Gacki-Smith et al., 2009; Mohamed, 2002; Ryan & Maguire, 2006).

In our study, the most common causes or factors contributing to violent incidents, as determined by investigation, were misunderstandings, language barriers, and a lack of clearly specified patient rights. These findings are supported by several local studies (Algwaiz & Alghanim, 2012; Alkorashy & Al Moalad, 2016; El-Gilany et al., 2010; Mohamed, 2002) Most nurses did not want to report incidents (47.2%), considering it useless or unimportant (15%), and only 6 respondents felt ashamed to report. These findings are comparable to studies reported from different regions. In an Iranian study, participants felt that reporting was of little value since nothing would be done (Esmaeilpour et al., 2011). An American study reported the same finding (Erickson & Williams-Evans, 2000) A study from Iraq reported that most of the nurses found it useless to report the incident and were dissatisfied with the manner in which the incident was handled (AbuAlRub et al., 2007). Throughout the world, nurses and other health-care staff tend not to report aggressive behavior or take necessary action until there is an incidence of physical injury (Emergency Nurses Association, 2008; Kamchuchat, Chongsuvivatwong, Oncheunjit, Yip, & Sangthong, 2008) The reasons for this underreporting could be related to training on how to handle incidents of violence. In our study, 100 respondents (82.6%) reported that they had not received any training in handling violence, which may indicate a lack of any strategy to prevent violence in these hospitals . For Saudi nurses, cultural factors may hinder proper reporting, while for non-Saudi nurses the fear of losing the job could influence their tendency for not reporting an incident of workplace violence. According to the Ministry of Health about 59% of nurses in MOH hospitals are Saudi (MOH Portal Team, n.d.).

There are a few limitations in our study that suggest caution in interpretation of the findings. Generalizability might be limited since all three hospitals are in the eastern region of Riyadh. Recall of events up to a year since occurrence of the incident may contribute to recall bias. We feel that the number of respondents was adequate, but a larger sample would have resulted in a smaller margin of error, which would have been preferable. However, our results were not substantially different from larger surveys. Self-selection bias is a risk when advertising for respondents.

The results indicate a need to bring about a more positive work culture through the establishment of workplace violence management teams and creating appropriate regulations to improve workplace safety for nurses, which also improves the quality of patient care. Also needed are training programs to help support, teach and provide nurses with the knowledge and skills needed to manage violent situations in the workplace. Kamchuchat and colleagues found that training in violence prevention and control reduced the risk of becoming a victim (Kamchuchat et al., 2008).

Further research in all the emergency departments in Saudi Arabia is needed to investigate and identify the reasons for violent events. Special attention should be paid to the occurrence of violence by nationality, by age and by work, environment and related factors. Furthermore, the role of the hospital administration in controlling workplace violence should be explored.

5. Conclusion

Emergency department nurses are continuously exposed to violence on the job. This study sought to help identify the prevalence and pattern of workplace violence and the consequences of such violence. The results suggest that provision of security systems and formulation of violence prevention policies and procedures are mandatory measures in EDs. Raising the awareness of the community of the important role of the nursing profession is also needed.

Role of funding source

No role in conducting the study, as an authors I had a full access to all of the data in this study and I take full responsibility of integrity of the data and the accuracy of data analysis.

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Appendix

Questionnaire.
Section 1: Socio-demographic and professional characteristics of the nurses.

- Nationality:
- Saudi 2) Non-Saudi
- Marital status:
- Married 2) other
- Gender:
- Male 2) Female
- Age group:
- Under 30 years 2) 30–40 3) 40 years and above
- Educational status:

- Diploma's degree 2) Bachelor's degree 3) Master's degree
- the total career experiences:
- 0–5 years 2) 6–9 years 3) Ten years and above
- Have you received any training against violence?
- Yes 2) No

Section 2: Frequency and pattern of workplace violence.

- Have you ever exposed to violent incidents in the last 12 months?
- Yes 2) No

- How many times have you exposed to violent incidents in the last 12 months?
- Once 2) Twice 3) Three times 4) Four times

5) More than four times

- The type of violence that you have experienced in the last 12 months:
- Verbal 2) Physical 3) Sexual
- The workplace violence mostly occurred during:
- Day shift 2) Evening shift 3) Night shift
- The violence source was:
- Patient 2) Relatives of patients 3) Staff member

4) Manager or supervisor 5) External colleague

- Where was the violence place?

1) Beside patient's bed 2) Waiting room 3) Treatment room
4) Nursing station 5) Others

- What was your reaction to the violence?

1) Took no action 2) Tried to pretend it never happened
3) Told the person to stop 4) Tried to defend self physically
5) Told friends/family 6) Sought counseling
7) Told a colleague 8) Reported it to a senior staff member
9) Transferred to another position 10) Completed incident or accident form
11) Pursued prosecution 12) Completed a compensation claim

Section 3: Consequences of violent incidents.

- Did you submit a report of the incident to the administration?

1) Yes 2) No

- What are the reasons for not reporting the incident?

1) It was not important 2) Felt ashamed 3) Felt guilty
4) Afraid of negative consequences 5) Useless (nothing would be done)
6) Did not know who to report to

- Was there any investigation done to identify the causes of violence?

1) Yes 2) No 3) Don't remember

- What are the causes of violence?

1) Lack of explicit rights or procedure 2) Low of training nurses
3) Communication or Language barriers 4) Fault of oneself
5) Scapegoat for medical dispute 6) Drunk problem
7) Illness 8) Concern of patients
9) Personal problem of coworker 10) Misunderstanding

- It is investigated by whom?

1) Management/employer 2) Head nurse 3)Supervisor
4) Police/security office 5) others

- What are the consequences for the attacker?

1) None 2) Verbal warning issued 3) Care discontinued
4) Reported to police 5) Aggressor prosecuted 6) Don't know

7) Others	
•	What is the type of support that you had got from management?
1) Counseling	2) Opportunity to speak about or report it
3) Other support	
•	Rate your satisfaction with the manner in which the incident was handled in your hospital:
1) Very dissatisfied	2) Dissatisfied 3) Moderately satisfied
4) Satisfied	5) Very satisfied
•	Your recommendation in terms of preventive strategies for workplace violence:

References

AbuAlRub, R. F., Khalifa, M. F., & Habbib, M. B. (2007). Workplace violence among Iraqi hospital nurses. *Journal of Nursing Scholarship: An Official Publication of Sigma Theta Tau International Honor Society of Nursing/Sigma Theta Tau*, 39(3), 281–288.

Adib, S. M., Al-Shatti, A. K., Kamal, S., El-Gerges, N., & Al-Raqem, M. (2002). Violence against nurses in healthcare facilities in Kuwait. *International Journal of Nursing Studies*, 39(4), 469–478.

ALBashtawy, M., & Aljezawi, M. 'en (2016). Emergency nurses' perspective of workplace violence in Jordanian hospitals: A national survey. *International Emergency Nursing*, 24, 61–65.

Algwaiz, W. M., & Alghanim, S. A. (2012). Violence exposure among health care professionals in Saudi public hospitals. A preliminary investigation. *Saudi Medical Journal*, 33(1), 76–82.

Alkorashy, H. A. E., & Al Moalad, F. B. (2016). Workplace violence against nursing staff in a Saudi university hospital. *International Nursing Review*, 63(2), 226–232.

Angland, S., Dowling, M., & Casey, D. (2014). Nurses' perceptions of the factors which cause violence and aggression in the emergency department: A qualitative study. *International Emergency Nursing*, 22(3), 134–139.

CDC – *NIOSH publications and products – Violence occupational hazards in hospitals* (2002-101). (n.d.). From ⟨http://www.cdc.gov/niosh/docs/2002-101/default.html⟩ (Retrieved 08.06.16).

Chapman, R., & Styles, I. (2006). An epidemic of abuse and violence: Nurse on the front line. *Accident and Emergency Nursing*, 14(4), 245–249.

Crilly, J., Chaboyer, W., & Creedy, D. (2004). Violence towards emergency department nurses by patients. *Accident and Emergency Nursing*, 12(2), 67–73.

El-Gilany, A.-H., El-Wehady, A., & Amr, M. (2010). Violence against primary health care workers in Al-Hassa, Saudi Arabia. *Journal of Interpersonal Violence*, 25(4), 716–734.

Emergency Nurses Association (2008). *Position statement. Violence in the emergency care settings*. Retrieved from ⟨https://www.ena.org/SiteCollectionDocuments/Position%20Statements/ViolenceintheEmergencyCareSetting.pdf⟩.

Erickson, L., & Williams-Evans, S. A. (2000). Attitudes of emergency nurses regarding patient assaults. *Journal of Emergency Nursing: JEN: Official Publication of the Emergency Department Nurses Association*, 26(3), 210–215.

Esmaeilpour, M., Salsali, M., & Ahmadi, F. (2011). Workplace violence against Iranian nurses working in emergency departments. *International Nursing Review*, 58(1), 130–137.

Fernandes, C. M., Bouthillette, F., Raboud, J. M., Bullock, L., Moore, C. F., Christenson, J. M., & Way, M. (1999). Violence in the emergency department: A survey of health care workers. CMAJ. *Canadian Medical Association Journal=Journal Délelőtt l'Association Medicale Canadienne*, 161(10), 1245–1248.

Gacki-Smith, J., Juarez, A. M., Boyett, L., Homeyer, C., Robinson, L., & MacLean, S. L. (2009). Violence against nurses working in US emergency departments. *The Journal of Nursing Administration*, 39(7–8), 340–349.

Gerberich, S. G., Church, T. R., McGovern, P. M., Hansen, H. E., Nachreiner, N. M., Geisser, M. S., & Watt, G. D. (2004). An epidemiological study of the magnitude and consequences of work related violence: The minnesota nurses' study. *Occupational and Environmental Medicine*, 61(6), 495–503.

Hamdan, M., & Abu Hamra, A. 'a (2015). Workplace violence towards workers in the emergency departments of Palestinian hospitals: a cross-sectional study. *Human Resources for Health*, 13, 28.

Kamchuchat, C., Chongsuvivatwong, V., Oncheunjit, S., Yip, T. W., & Sangthong, R. (2008). Workplace violence directed at nursing staff at a general hospital in southern Thailand. *Journal of Occupational Health*, 50(2), 201–207.

Lee, S. S., Gerberich, S. G., Waller, L. A., Anderson, A., & McGovern, P. (1999). Work-related assault injuries among nurses. *Epidemiology*, 10(6), 685–691.

Librarian, I. (n.d.). *Workplace violence in the health sector: state of the art*. Retrieved from ⟨http://www.hrhresourcecenter.org/node/5341⟩.

Lin, Y.-H., & Liu, H.-E. (2005). The impact of workplace violence on nurses in South Taiwan. *International Journal of Nursing Studies*, 42(7), 773–778.

Mohamed, A. G. (2002). Work-related assaults on nursing staff in riyadh, saudi arabia. *Journal of Family and Community Medicine*, 9(3), 51–56.

MOH Portal Team. (n.d.). *Kingdom of Saudi Arabia – Ministry of health portal*. From ⟨http://www.moh.gov.sa/en/Pages/Default.aspx⟩ (Retrieved 22.06.16).

Morrison, L. J. (1999). Abuse of emergency department workers: An inherent career risk or a barometer of the evolving health care system? CMAJ: Canadian Medical Association Journal. *Journal Délelőtt l'Association Medicale Canadienne*, 161(10), 1262–1263.

Pinar, R., & Ucmak, F. (2011). Verbal and physical violence in emergency departments: A survey of nurses in Istanbul, Turkey. *Journal of Clinical Nursing*, 20(3–4), 510–517.

Pourshaikhian, M., Abolghasem Gorji, H., Aryankhesal, A., Khorasani-Zavareh, D., & Barati, A. (2016). A systematic literature review: Workplace violence against emergency medical services personnel. *Archives of Trauma Research*, 5(1), e28734.

Rose, M. (1997). A survey of violence toward nursing staff in one large Irish accident and emergency department. *Journal of Emergency Nursing: JEN: Official Publication of the Emergency Department Nurses Association*, 23(3), 214–219.

Ryan, D., & Maguire, J. (2006). Aggression and violence – A problem in Irish Accident and Emergency departments? *Journal of Nursing Management*, 14(2), 106–115.

Senuzun Ergün, F., & Karadakovan, A. (2005). Violence towards nursing staff in emergency departments in one Turkish city. *International Nursing Review*, 52(2), 154–160.

Stirling, G., Higgins, J. E., & Cooke, M. W. (2001). Violence in A & E departments: A systematic review of the literature. *Accident and Emergency Nursing*, 9(2), 77–85.

Violence in the workplace: OSH answers (2016). From ⟨http://www.ccohs.ca/oshanswers/psychosocial/violence.html⟩ (Retrieved 7.06.16).