

Risk of Violence among Nurses in Emergency Departments at Baghdad City Hospitals: The Mediating Role of the Work Environment

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Abstract

Background: Workplace violence is a problem of international healthcare among the workers in all departments of the healthcare systems, but more severe at the emergency departments. Nurses in the emergency departments are working on the front lines of violence. This study aims to examine risk of violence among nurses in the emergency departments and to find out the association between nurses' age, years of working in nursing, years of working in emergency departments, work hours, violent events by patients, violent events by coworkers, likelihood of exposure to violence in the future, work environment, intention to leave the job, and risk of violence.

Method: A descriptive predictive study design has been carried out. A non-probability (convenience) sample of (380) nurses from the emergency departments of (12) hospitals in Baghdad city center were selected to participate in the study.

Data were collected through a self-report instrument that includes nurses socio-demographic data, the employment data, general information about the violent events, Intention to Leave the Job Scale, Risk of Violence Scale, Violent Events by Patient Scale, Violent Events by co-workers Scale, Likelihood of Exposure to Violence in the Future Scale and the Nursing Work Environment Scale. The data were analyzed using the Statistical Package for Social Sciences (SPSS) version 26.

The study results revealed that a half of the nurses described the risk of violence they can expose to in the workplace as average. There is a statistically significant inverse correlation between nurses' age, years of experience in nursing, years of experience in EDs and their exposure to violent event by the coworkers, and risk of violence. The researcher concluded that the younger the nurses, the less the experience they have in nursing, the less the experience they have in the EDs, the greater the exposure to violence by coworkers, and risk of violence.

Keywords: Workplace Violence, Work Environment, Emergency Department, Turnover Intention.

Introduction

More than 5 million United States (US) hospital workers from many occupations are exposed to many safety and health hazards, including violence. Healthcare workers are more likely to be attacked at work than police officers or prison guards⁽¹⁾. Now days, hospital violence against health care providers, especially nurses, is a significant concern in every health care setting in the world⁽²⁾. World Health Organization (WHO) defines violence as the intentional use of threatened or actual

force against a person or a group which may cause physical or psychological trauma⁽³⁾. There are three forms of violence, emotional violence, physical violence, and sexual harassment⁽⁴⁾. Emotional violence comprises verbal abuse, in the practice of punitive words, swearing, talking in a hostile style, or an upraised voice bullying, mobbing, and written or verbal intimidations that do not cause physical harm⁽⁵⁾. Physical violence can be defined as every type of assault that has a physical element⁽⁶⁾. And involves the use of physical strength against another

individual⁽⁷⁾. Sexual harassment as any unwanted, unwelcome and unreciprocated act of a sexual nature that is offensive to the person⁽⁸⁾. In the Middle East, workplace violence (WPV) reported variedly according to the type of violence, the verbal threat was the most common forms, with a frequency range between 19.6% and 98.6%, which was three to six times higher than physical violence⁽⁹⁾. Additionally, violence is knowingly under reported in a hospital setting, particularly relative to the nonphysical type of violence⁽¹⁰⁾. Many reasons for the under reporting of violence, including an absence of time and refusal to fill in forms⁽¹⁵⁾. The emergency departments (EDs) are typically a stressful environment across the 24-hours of the day and involves a great turnover of nurses⁽¹¹⁾. Emergency departments nurses' presence in stressful situations exposes them to more abuse or harsh behavior from patients or their colleagues than other hospital staff⁽¹²⁾. Additionally, the risk of violence between nurses in the EDs distribution is not consistent, significant variances are found in relation to age, marital status, kind of service, hospital characteristics, work shift, and position in the profession⁽¹³⁻¹⁴⁾. There are many factors making the nursing staff at risk of workplace violence in EDs. These factors are related to the emergency department work environment, nursing staff characteristics, and patient's condition⁽¹⁶⁾.

Method

A descriptive predictive study design was used in this study from period of December 24th, 2019 to February 23th, 2020. During the study, the total population of interest include (853) nurses who work in the emergency departments of (18) hospitals in the Baghdad City center. Of those, only (380) nurses were selected from the emergency departments of (12) hospitals to participate in the study. The response rate for the study is (76%). A non-probability (convenience) sample was used to recruit study subjects. Data were collected through a self-report instrument that includes the socio-demographic data, the employment data, general information about the violent events, the Intention to Leave the Job Scale, Risk of Violence Scale, and Likelihood of Exposure to Violence in the Future Scale, Violent Events by Patient Scale, Violent Events by Coworkers Scale and Nursing Work Environment Scale. The validity of the

questionnaire were verified by presenting it to (15) experts. Descriptive and inferential statistics were used to analyze the results of the study using the Statistical Package of Social Sciences (SPSS) version 26

Results

Table 1. Participants' Socio-demographic Characteristic

Variable	Frequency	Percent
Age (Years)		
19-29	190	50.0
30-39	119	31.3
40-49	50	13.2
50-60	21	5.5
Mean (SD)	31.73	8.73
Gender		
Male	205	53.9
Female	175	46.1
Marital Status		
Not married	137	36.1
Married	194	51.1
Divorced	18	4.7
Separated	25	6.6
Widower	6	1.6
Educational Qualification		
Nursing High School	116	30.5
Diploma	157	41.3
Bachelor's Degree	107	28.2

The age mean is 31.73 ± 8.73 ; a half age 19-29-years ($n = 190$; 50.0%), followed by those who age 30-39-years ($n = 119$; 31.3%), those who age 40-49-years ($n = 50$; 13.2%), and those who age 50-60-years ($n = 21$; 5.5%). Concerning the gender, more than a half are males ($n = 205$; 53.9%) compared to females ($n = 175$; 46.1%). Regarding the marital status, more than a half are married ($n = 194$; 51.1%), followed by those who are Not married ($n = 137$; 36.1%), those who are separated ($n = 25$; 6.6%), those who are divorced ($n = 18$; 4.7%), and those who are widowers ($n = 6$; 1.6%). With respect to educational qualification, more than two-fifth hold a diploma degree ($n = 157$; 41.3%), followed by those who are nursing high school graduates ($n = 116$; 30.5%), and those who hold a bachelor of nursing ($n = 107$; 28.2%).

Table 2. Nurses' Employment Profile

Variable	Frequency	Percent
Years of experience in nursing		
1-5	171	45.0
6-10	88	23.2
11-15	45	11.8
≥ 16	76	20.0
Mean (SD)	9.32	8.57
Years of experience in emergency department		
1-5	235	61.8
6-10	67	17.6
11-15	38	10.0
≥ 16	40	10.5
Mean (SD)	6.05	5.38
Work hours		
7	174	45.8
18	204	53.7
24	2	0.5
Role in emergency department		
Clinical nurse	350	92.1
Supervisor	30	7.9

The years of experience in nursing mean is 9.32 ± 8.57; less than a half have 1-5-years (n = 171; 45.0%), followed by those who have 6-10- years (n = 88; 23.2%), those who have 16-years or longer (n = 76; 20.0%), and those who have 11-15-years (n = 45; 11.8%). The years of experience in ED mean is 6.05 ± 5.38; most have 1-5-years (n = 235; 61.8%), followed by those who have 6-10-years (n = 67; 17.6%), those who have 16-years or

longer (n = 40; 10.5%), and those who have 11-15-years (n = 38; 10.0%). Concerning the work hours, more than a half work for 18-hours (n = 204; 53.7%), followed by those who work for seven hours (n = 174; 45.8%), and those who work for 24-hours (n = 2; 0.5%). Lastly, the role of the majority of nurses in the ED is clinical nurse (n = 350; 92.1%) compared to supervisor (n = 30; 7.9%).

Table 3. Correlation among Study Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Age	-									
2. Years of experience in nursing	.907**	-								
3. Years of experience in ED	.786**	.871**	-							
4. Work hours	.078	.079	.061	-						
5. Violent Events by the Patient	.009	.024	-.016	.134**	-					
6. Violent Events by Coworkers	-.185**	-.137**	-.174**	-.001	.505**	-				
7. Likelihood of Exposure to Violence in the Future	.170**	.193**	.238**	.055	.396**	.035	-			
8. Work Environment	-.070	-.058	-.049	.168**	.210**	.046	.414**	-		
9. Intention to Leave the Job	-.145**	-.093	-.124*	-.069	.225**	.062	.195**	.185**	-	
10. Risk of Violence	-.200**	-.202**	-.204**	.179**	.401**	.341**	.202**	.251**	.092	-

There are statistically significant inverse correlations between nurses' age and their exposure to violent event by the coworkers, intention to leave the job, and risk of violence ($r = -.185$; at $p < 0.01$; $r = -.145$; at $p < 0.01$; $r = -.200$; at $p < 0.01$) respectively. On the other hand, there is a statistically significant positive correlation between nurses' age and their likelihood of exposure to violence in the future ($r = .170$; at $p < 0.01$). There are statistically significant inverse correlations between nurses' years of experience in nursing and their exposure to violent event by the coworkers and risk of violence ($r = -.137$; at $p < 0.01$; $r = -.202$; at $p < 0.01$) respectively. On the other hand, there is a statistically significant positive correlation between nurses' years of experience in nursing and their likelihood of exposure to violence in the future ($r = .193$; at $p < 0.01$). There are statistically significant inverse correlations between nurses' years of experience in ED and exposure to violent event by the coworkers, intention to leave the job, and risk of violence ($r = -.174$; at $p < 0.01$; $r = -.124$; at $p < 0.05$; $r = -.204$; at $p < 0.01$) respectively. On the other hand, there is a statistically significant positive correlation between nurses' years of experience in ED and their likelihood of exposure to violence in the future ($r = .238$; at $p < 0.01$). There are statistically significant positive correlations between nurses' work hours and their exposure to violent event by the patient work environment, and risk of violence ($r = .134$; at $p < 0.01$; $r = .168$; at $p < 0.01$; $r = .179$; at $p < 0.01$) respectively.

Discussion

Concerning the age, the study results revealed that the highest percentage of the study subjects within the age group (19-29) years, this finding consistent with ⁽¹⁷⁾ who reported that the highest percentage of the nurses in the emergency departments within age groups (19- 29) years. Concerning the gender, the study results revealed that the majority of the study subjects are males. This finding is consistent with that of ⁽¹⁸⁾ who reported that the majority of the nurses were males. Regarding the marital status, the study results revealed that the majority of the study subjects are married. This finding consistent with ⁽⁶⁾ who reported that the majority of the study participants are married. With respect to educational qualifications, the study results revealed that more than two-fifth hold a diploma degree of nursing. This finding is consistent with that of ⁽¹⁹⁾ who reported that the majority of the study subjects have a diploma degree in nursing. Relating to the years of experience in nursing, the study results revealed that less than a half of the study subjects have

1-5 years. This finding consistent with ⁽²⁰⁾ who reported that less than half of the study subjects have 1–5 years of experience in nursing. Regarding the years of experience in the emergency department, the study results revealed that the majority of the study subjects have 1-5 years of experience in the emergency department. This finding consistent with that of ⁽¹⁷⁾ who reported that the majority of the study subjects have 1-5 years of experience in the emergency department. Relating to the work hours in the workplace, the study results revealed that more than a half of the study subjects work for 18-hours. This finding consistent with that of ⁽²¹⁾ who reported that more than half of the study subjects working for 18-hour. Regarding the work shift in the workplace, the study results revealed that more than a half of the study participants work on the evening shift from 3:00 p.m. -8:00 a.m. This finding supported by that ⁽²⁰⁾ who found that more than half of the nurses work in the evening shift between 3:00 p.m. -8:00 a.m. Regarding the role in emergency department, the study results revealed that the majority of nurses in the ED are clinical nurse. This finding supported by that of ⁽¹⁷⁾ who reported that the majority of the study subjects was clinical nurses. The study results revealed that there were statistically significant inverse correlations between nurses' age and their exposure to violent event by the coworkers. This finding is consistent with ⁽²²⁾ who reported that there was a significant inverse relationship between the nurses' age and the occurrence of workplace violence by coworkers. The study findings indicated that there were statistically significant inverse correlations between nurses' age and intention to leave the job. This finding is supported by ⁽²³⁾ who reported that there was a significant negative correlation between nurses' age and intention to leave the job. The study findings revealed that there was a statistically significant inverse correlation between nurses' age and risk of violence. This finding is supported by ⁽²⁴⁾ who reported that there was a significant inverse correlation between nurses' age and risk of violence. The study findings revealed that there was a statistically significant positive correlation between nurses' age and their likelihood of exposure to violence in the future. This finding supported by that of ⁽²⁴⁾ reported that there was a statistically significant positive relationship between nurses' age and their likelihood of exposure to violence in the future. The study findings revealed that there was a statistically significant inverse correlation between nurses' years of experience in nursing and risk of violence. This finding supported by that of ⁽²⁶⁾ who reported that there was a statistically significant

inverse correlation between nurses' years of experience in nursing and risk of violence. The study results revealed that there were statistically significant inverse correlations between nurses' years of experience in the EDs and exposure to violent event by the coworkers. This finding is supported by that of ⁽²⁷⁾ who concluded that there was a significant negative correlation between nurses' years of experience in the EDs and exposure to violent events by the coworkers. There was a statistically significant inverse correlation between nurses' years of experience in the ED and intention to leave the job. This finding is supported by ⁽²⁸⁾ who concluded that there was a negative correlation between the years of experience in the ED and the turnover intention of nurses. The study findings revealed that there was a statistically significant inverse correlation between nurses' years of experience in the ED and risk of violence. This finding is supported by that of ⁽²⁹⁾ who concluded that there was a significant negative correlation between nurses' years of experience in the ED and risk of violence. There was a statistically significant positive correlation between nurses' years of experience in ED and their likelihood of exposure to violence in the future. This finding could be explained as that the longer the duration of work the nurses have in the ED, the greater the burnout they may experience. This finding is congruent with that obtained by ⁽³⁰⁾ who concluded that the majority of nurses had reported decreased job satisfaction which was mainly contributed by verbal violence (73%) of participants. There was a statistically significant positive correlation between nurses' work hours and their exposure to violent event by the patient. This finding is supported by that of ⁽³¹⁾ who concluded that there was a positive correlation between the work hours and exposure to violence by patients. There was a statistically significant positive correlation between nurses' work hours and risk of violence. This finding is supported by ⁽³²⁾ who concluded that there was a significant positive correlation between nurses' work hours and risk of violence.

Conclusions

1. The younger the nurses, the less the experience they have in nursing, the less the experience they have in the EDs, the greater the exposure to violence by coworkers and the risk of violence.
2. The younger the nurses age, the less the experience they have in the ED, and the greater the intention to leave the job.
3. The longer the work hours, the greater the exposure

to violent events by the patients, and the risk of violence.

Recommendations:

1. It is necessary for the top management in the hospitals to provide as optimal nursing staffing as possible in the emergency departments.
2. Offer training to nurses about predicting, recognizing, and managing assaults, resolving conflicts to increase their ability to deal and manage the workplace violence.
3. Working to improve the security precautions in the hospital; particularly in the EDs to minimize the violent events.

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