Workplace Violence against Staff Nurses at Governmental Hospitals: A Comparative Study

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Abstract

Workplace Violence towards nursing staff has negative effects on their safety and quality of patient care delivered. **Aim**: This study aimed to examine the phenomena of workplace violence against staff nurses at Shebin Elkom city in Egypt and Arar city in Saudi Arabia. **Methods**: Descriptive comparative study was employed in conducting this study. **Sample**: a convenience sample of 438 staff nurses (236 from Shebin Elkom city and 202 from Arar city) was participated in this study. **Setting**: The study was carried out at three governmental hospitals at Shebin Elkom city, Egypt, and three hospitals at Arar city, Northern Border Region, Saudi Arabia that were chosen randomly. **Tool** A modified version of the workplace violence in the health sector questionnaire developed by International Labor Organization, International Council of Nurses, World Health Organization and Public Service International (2003) was used. **Results**: Exposure to workplace violence was more likely in Egyptian nurses at Shebin Elkom city than Saudi nurses at Arar city. (83.47% vs. 65.35%; P<0.001). The sources of violence were patients, patient's relatives/visitors, and co-workers among Egyptian nurses at Shebin Elkom city, while work supervisors were more likely among Saudi nurses at Arar city. The causes of practicing workplace violence as reported more by Egyptian nurses at Shebin Elkom city were weak hospital security, shortage of nurses, and an increased workload while coming to work late and delay in investigations of incidents were the most reported by Saudi nurses at Arar city. The response to violence was more likely by telling the person to stop, pretend it never happened, tried to defend oneself, telling a colleague, or telling friends/family in Egyptian nurses compared to Saudi nurses. Similarly, two third of Egyptian nurses reported taking no action compared to 45.54% of Saudi nurses. Egyptian nurses at Shebin Elkom city reported violent acts more. **Conclusion**: Workplace violence against nurses is an issue that has to be addressed in both Egyptian nurses at Shebin Elkom and Saudi nurses at Arar city. Nurses at Shebin Elkom city, Egypt, were more likely exposed to violence than those at Arar city, Saudi Arabia. **Recommendation:** There is an urgent need for developing strict policies and procedures concerning workplace violence incidence to protect health care workers against violence.

Keywords: Workplace Violence, Staff Nurse, Workplace

Introduction

Nurses are the primary care givers in hospitals, nurses are the hospital's first, and most available employees. Their involvement in stressful circumstances such as injuries, deaths, waiting to see a doctor, or moving patients to a unit, and are more likely to encounter violence because of the amount of time spent in direct contact with patient care. **(Arnetz et al., 2011 and Arnetz et al., 2015)**

Violence at the workplace is a larger issue for nursing staff all over the world. Violence against men and women nursing staff has become an important part of their everyday work **(Abu Wardeh et al., 2016)**. Workplace violence is described as any action in which a staff nurse is abused, harassed, insulted, or attacked in their workplace. Violence at the workplace is not limited to hospitals only, but also it can take place outside work at health workshops, or work-related social gatherings **(*Canadian Centre for Occupational Health & Safety*, 2017).**

The International Labor Organization (ILO) defined violence in the workplace as events of harassment, assault or attack that is related to work. There is evidence today those nurses are more subjected to violence at their workplace; which is now considered a major

occupational hazard all over the world related to their day-to-day exposure to difficult job conditions because of working with various types of patients, visitors, and their families **(Hahn et al., 2011 and Al-Omari, 2015)**.

Violence at the workplace includes physical assault, verbal abuse, bullying, sexual and racial harassment, and psychological abuse that can lead to serious negative consequences for the nurses and health care organization. The effects of workplace violence on nurses produce several conditions as fatigue, sleep problems, nightmares, feeling of stress, persistent headaches, muscles spasm, lack of self-confidence, disappointment, lack of appetite, excessive irrational fear, feeling of depression, and consumption of alcohol, smoking, and even suicide. Violence toward nursing staff at the workplace will affect their job satisfaction and performance. Which in turn, it can lead to a shortage of nursing staff **(Zampieron et al., 2010; Spector, 2014 and Higazee and Rayan, 2017)**.

As a result of witnessing workplace violence, a nurse may decide to transfer to another health care facility within an organization or may leave nursing altogether. Violence also influences the quality of care given to patients. It also reduces public health services, creates an unsafe work atmosphere, and promotes inappropriate social behaviors. It also raises health costs and raises nurses' turnover and absenteeism **(Higazee and Rayan, 2017).**

Significance of the Study

Workplace violence toward nurses is a serious issue and increased in prevalence **(Kuehn, 2010)**. Annual physical violence rates against nursing staff vary from 3.1% to 11-25% **(Kamchuchat et al., 2008)** or even higher (35-71%) **(Hahn et al., 2010)**. Non-physical violence rates are much more difficult to assess; appraisals vary from 38% to 90% over a one year **(Zampieron et al., 2010).** Research suggests that although patients, their relatives, and friends are the main perpetrators, co-workers and managers are responsible for much of the violence encountered by health care workers **(Magnavita and Heponiemi, 2011)**. Therefore, the inability to pay attention to this issue can provoke a dysfunction between nursing staff and potentially dangerous situations for both patients and caregivers **(Roussel, 2017)**. As a result, it can lead to nursing shortage and undermine the quality of health care services **(Hsketh, 2003)**.

Research study done in Ismailia Governorate, Egypt was found that (27.7%) of nursing staff reported workplace violence of any kind, (69.5%) reported verbal abuse; and (9.3%) reported physical abuse **(Abbas et al., 2010).** Another study done also in emergency department in Ismailia, Egypt and found that workplace violence was reported by 59.7% of health care workers. Verbal violence was reported as the most type (58.2%), compared to physical violence (15.7**%) (Farouk, Salama, 2017).** A study that done in Beni-Suef Governmental Hospitals in Egypt was found that workplace violence against nurses was the most with a percentage of (92.5%) followed by doctors (80%) with reporting (56%) for verbal and psychological (%52) **(Anwar et al, 2016)**

Thus, this study was conducted to examine the phenomena of violence at workplace against staff nurses at Shebin El-Kom in Egypt and Arar city in Saudi Arabia.

Aim of the study

The current study aimed to examine the phenomena of violence at the workplace against staff nurses at Shebin El-Kom city, Egypt and Arar city, Saudi Arabia. This aim can be fulfilled through the following objectives:

1. Determine prevalence and types of workplace violence practiced against staff nurses in the last 12 months in two settings.
2. Identify causes and sources for practicing workplace violence against staff nurses, and their reactions against violence in two settings.
3. Determine the level of staff nurses' satisfaction with the handling manner of the violence incident in two settings.
4. Compare the phenomena of violence at workplace against staff nurses in two settings.
5. Identify preventive measures used to prevent violence at the workplace in two settings.

Subject and Method

Study design

A descriptive comparative design was used to achieve the aim of the study.

Setting

The study was conducted at three hospitals at Shebin El-kom, Egypt, and three hospitals at Arar city, Northern Border Region, Saudi Arabia that belongs to the Ministry of health. There are three general hospitals and one Psychiatric & Mental health hospital at Shebin El-Kom, Egypt. Two of the general hospitals were chosen randomly by the simple random sampling technique in addition to the Psychiatric & Mental health hospital. There are three general hospitals and Al- Amal Complex for Mental Health in Arar city at Saudi Arabia. Two of three hospitals were chosen randomly by the simple random sampling technique in addition to Al-Amal Complex for Mental Health. The study was conducted in the following departments: emergency department, adult intensive care unit, pediatric intensive care unit, neonatal intensive care unit, kidney unit, burn unit, and Psychiatric & Mental health departments.

Sample

Convenience sampling technique was used to recruit 438 staff nurses. 236 of them from governmental hospital at Shebin Elkom city, Egypt (Egyptian nurses), and 202 from governmental hospital at Arar city, Saudi Arabia (Saudi nurses) who accepted to participate in the study, worked in direct contact with patients and/or visitors, took different duty shifts and from the above-mentioned setting, with the exclusion of those who has work experience less than one year. The response rate was 87.6%.

Sample size:

The estimated sample size for two-group comparison of proportion was calculated using STATA STATA/SE version 11.2 for Windows (STATA Corporation, College Station, Texas). The minimal sample size for each group was 198 provided that the standard normal deviation at 5% type I error ($P<0.05$) was 1.96, the effect size (difference in proportions expected between the two groups) was assumed as 15%, and the power of the study was 90%.

Tools of data collection:

The tool developed based on workplace violence in the health sector survey questionnaire developed by the International Labor Organization, International Council of Nurses, World Health Organization (World Health Organization, 2003) and Public Service International for data collection, 2003, and modified by the researchers to be suitable to the current study. It was designed to obtain information and assess the level of workplace violence in the health sector. The questionnaire consisted of two main sections:

Section I: consisting of items related to staff nurses' demographic characteristics, and occupational characteristic (department, present position, years of work experience, work in shifts, number of coworkers in the same work area, attended any training about violence).

Section II: consisted of 10 items that addressed the characteristics of the violent acts practiced against the nurses (time, place, and frequency of violence), 11 items about reasons for violence (e.g., lack of security and absence of punishment), 13 items concerning reactions of staff nurses toward violence at the workplace, 8 questions related to the consequences for the offenders, reasons for not reporting violence incidence, and their satisfaction with the handling manner of the violence incident. Finally, 10 items concerning the procedures (measures) used at the workplace for dealing with the workplace violence against staff nurses. Every participant responded to each item with yes or no. The data were expressed in numbers and percentages.

Validity of the study questionnaire:

Regarding the validation of the questionnaire, it was translated into Arabic and was tested for its content validity and relevance five experts in the following specialty: family and community medicine, Nursing administration, and psychiatric nursing as well as researchers in the same field reviewed the questionnaire that was modified based on their suggestions. The modifications included deleting and adding some statements, changing other statements to be more clear, simple, and suitable for

participants where violence differ according to culture, educational level, and personal characteristics.

Reliability of the study questionnaire:

The questionnaire was piloted on 10% of volunteer staff nurses with very positive feedback. The questionnaire was re-administered after a week to the same staff nurses of the pilot study to check test–retest reliability. The correlation coefficient of the two administrations' violence questions was 0.95. The sample of the pilot study was excluded from the overall sample to assure the stability of the findings.

Field work

A permission to conduct the study was obtained from the directors of Hospitals. The purpose of the study was explained to each participant, consent was obtained after staff nurses' acceptance to participate in the study, The questionnaires were distributed to the participants to answer the questions and the researchers were available for any clarification. Privacy was maintained during process of collecting data. The participants also were informed that their participation would be anonymous, the confidentiality of their responses would be respected, their participation in the study is voluntary and harmless. The participants were encouraged to fill out the questionnaire and return it anonymously on the same day or at most the next day. Each questionnaire took 15-20 minutes to be answered. Data was collected upon six months starting from the first of August 2019 until the end of January 2020. This was done two days per week at different hospitals in all shifts. Each day the researchers collect from 8-10 questionnaires.

Statistical analysis

All statistical analysis were carried out using STATA STATA/SE version 11.2 for Windows (STATA Corporation, College Station, Texas). All tests of significance were performed two-tailed and a P-value <0.05 was considered statistically significant. Categorical data were described as frequency and percentage and numerical data were described as means ± Standard Deviation (SD) and range. Comparisons between the study groups were carried out using the Chi-square test (x^2), Fisher Exact Test (FET), and the test of proportion (Z-test) as appropriate. The student t-test (t) was used to detect the mean differences between two groups and the one-way analysis of variance (F) was used to compare more than two groups regarding numerical data.

Results

Table (1): Distribution of the study subjects according to their sociodemographic characteristics. The proportion of department supervisors was significantly higher among Saudi nurses compared to Egyptian nurses (P<0.001). Egyptian nurses had more years of experience than Saudi nurses (11.88±5.08 *vs*. 8.54±1.15, P<0.001). The proportion of Saudi nurses who were trained on how to deal with incident violence was higher than Egyptian nurses (81.68% vs. 72.88%; P=0.029). Most Saudi nurses work with female patients most frequently, while the majority of Egyptian nurses works with both male and female patients (P<0.001).

Figure (1) demonstrates the frequency distribution of Egyptian and Saudi nurses regarding their academic qualifications, department, and the number of staff. More than half of Egyptian nurses (56.36%) had a master's degree, while 57.92% of Saudi nurses had a nursing diploma (P<0.001). There were significant differences between Egyptian and Saudi nurses for their department (P<0.001) and the number of staff they work with (P=0.04).

Comparison between Egyptian and Saudi nurses as regards workplace violence are shown in Table (2). Egyptian nurses were more likely exposed to violence in the last 12 months than Saudi nurses (P<0.001). Egyptian nurses were more frequently exposed to physical, psychological and sexual violence (P<0.001). Patients, patient's relatives/visitors, and co-workers were more likely sources of violence to Egyptian nurses, while work supervisors were a more likely source of violence to Saudi nurses (P<0.001). Most Egyptian nurses were exposed to violence at all shifts, while more than half of Saudi nurses were exposed to violence during evening shifts (P<0.001).

The frequency of exposure to the different kinds of violence among Egyptian and Saudi

nurses is shown in Figure (2). Egyptian nurses were more frequently exposed to all kinds of physical violence (P<0.001). Regarding the psychological violence, Egyptian nurses were more frequently exposed to verbal abuse and raised voices and shouting (P<0.001), while Saudi nurses were more frequently exposed to racial abuse (P=0.01). The proportion of Egyptian nurses who were exposed to sexual violence was higher than Saudi nurses (29.66% vs. 0.0%; P<0.001).

Table (3) shows Causes for practicing the violence at the workplace against studied subjects. Egyptian nurses were more likely to report lack of interest in the patient or work (P<0.001), lack of communication (P<0.001), weak hospital security (P<0.001), shortage of nurses, and increased workload (P<0.001), negligence in applying hospital regulations (P=0.0003), favoritism (P=0.002) and negligence in applying penalties (P<0.001). While Saudi nurses were more likely to report coming to work late (P=0.002) and delay in investigations of incidents of violence (P=0.001).

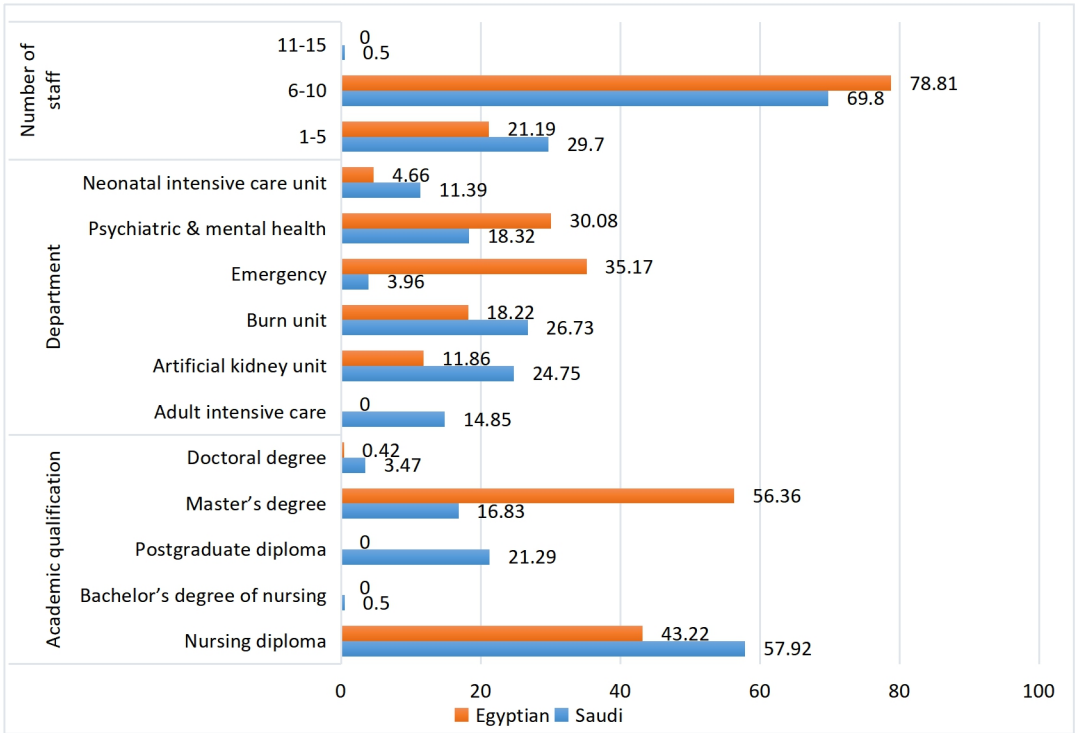
The reaction of staff nurses toward violence incidence at the workplace was demonstrated in Table (4). Egyptian nurses were more likely to report telling the person to stop (P<0.001), pretend it never happened (P<0.001), tried to defend themselves (P<0.001), telling a colleague (P=0.002), or telling friends/family (P=0.01) compared to Saudi nurses. Similarly, two thirds of Egyptian nurses reported taking no action (P<0.001), compared to 45.54% of Saudi nurses who reported took no action

Table (5) Percentage of reporting an incidence of violence at the workplace. The vast majority of Saudi nurses reported that violence can be prevented compared to 37.71% of Egyptian nurses (P<0.001). The reporting of incident violence at the workplace was significantly higher among Egyptian nurses compared to the Saudis (P=0.005). Egyptian nurses were more likely to report the following reasons for not reporting incident violence; “it was not important” (P=0.0001), “feeling shy” (P=0.002), “nothing will happen if reported” (P=0.0004), “do not know to whom to complain” (P<0.001) compared to Saudi nurses. Violence to Egyptian nurses was more frequently reported by the management/employer than the Saudi nurses (P=0.003). The vast majority of Saudi nurses reported that a verbal warning was issued to the abuser (P<0.001). The proportion of Egyptian nurses who received support from management was higher than the Saudi nurses (P<0.001). There was a significant difference between Egyptian and Saudi nurses regarding their satisfaction with the manner the incident was handled, and the majority of Egyptian nurses reported that there is no satisfaction with the manner of violence handled at workplace (P<0.001).

Figure (3) shows preventive measures used toward workplace violence. Good communication, and an increased number of nursing staff were more frequently reported by Egyptian nurses. Improving the surrounding environment (P=0.001), training on how to deal with incident violence (P=0.002) and spending less time with the patient (P<0.001) were more frequently reported by Saudi nurses.

Table 1: Distribution of the study subjects according to sociodemographic characteristics (n=438)

Sociodemographic characteristics		Saudi (no.=202)		Egypt (no.=236)		Test	P
		no.	%	no.	%		
Position	Department supervisor	47	23.27	22	9.32	$X^2 = 21.61$	<0.001
	Staff Nurse	154	76.24	203	86.02		
	Nursing director	1	0.5	11	4.66		
Years of experience	Mean ± SD; (range)	8.54±1.15; (3-12)		11.88±5.08; (5-18)		t= 9.80	<0.001
Work in shift	Yes	202	100.0	236	100.0	-	-
Direct contact with patients	Yes	202	100.0	236	100.0	-	-
Training on ways to deal with incidents of violence	No	165	81.68	172	72.88	$X^2 = 4.75$	0.029
	Yes	37	18.32	64	27.12		



T: independent t-test; x^2: Chi-square test

Figure 1: Frequency distribution of the studied groups regarding the number of staff, their departments and their academic qualification (n=438).

Table 2: Comparison between Egyptian and Saudi nurses as regards workplace violence (n=438)

Items		Saudi (no.=202)		Egypt (no.=236)		Test	P
		No.	%	No.	%		
Exposure to violence in the last 12 months	No	70	34.65	39	16.53	$X^2 = 19.13$	<0.001
	Yes	132	65.35	197	83.47		
Frequency of exposure to violence	None	70	34.65	39	16.53	X^2=165.72	<0.001
	Rarely	97	48.02	22	9.32		
	Sometimes	19	9.41	22	9.32		
	Always	16	7.92	153	64.83		
Types of violence*	None	70	34.65	39	16.53	Z=4.37	<0.001
	Physical violence	23	11.39	153	64.83	Z=11.37	<0.001
	Psychological violence	125	61.88	197	83.47	Z=5.10	<0.001
	Sexual violence	0	0.0	70	29.66	Z=8.44	<0.001

Source of violence*	None	70	34.65	39	16.53	Z=4.37	<0.001
	Patient	44	21.78	134	56.78	Z=7.43	<0.001
	Patient's relatives/visitors	96	47.52	167	70.76	Z=4.95	<0.001
	Co-workers	23	11.39	60	25.42	Z=3.74	0.0002
	Supervisors at work	54	26.73	18	7.63	Z=5.38	<0.001
	other	0	0.0	36	15.25	Z=5.79	<0.001
Shift	None	70	34.65	39	16.53	FET	<0.001
	Afternoon	0	0.0	1	0.42		
	Evening	104	51.49	43	18.22		
	All shifts	28	13.86	153	64.83		

* More than one option was allowed

X^2: Chi-square test; z: test of proportion; FET: Fisher Exact Test

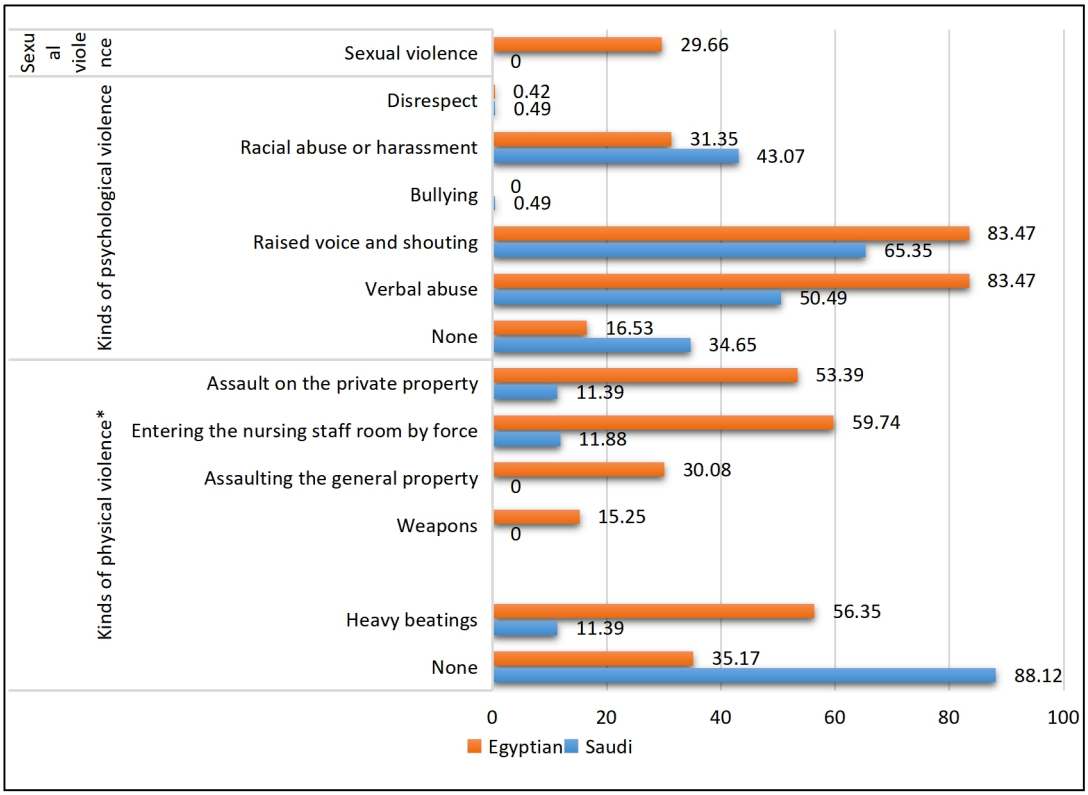


Figure 2. Frequency of the different kinds of violence at the workplace among studied groups (n= 438)

Table 3. Causes for practicing the violence at the workplace against studied subjects (n=438)

Causes of practicing violence*	Saudi (no.=202)		Egypt (no.=236)		z-test	P
	no.	%	no.	%		
Lack of interest in the patient or work	0	0.0	107	45.34	11.01	<0.001
Lack of communication	97	48.02	204	86.44	8.64	<0.001
Weak hospital security	162	80.20	225	95.34	4.92	<0.001
Shortage of nurses and increased workload	150	74.26	225	95.34	6.27	<0.001
Come to work late	76	37.62	56	23.73	3.16	0.002
Negligence in applying hospital regulations	149	73.76	206	87.29	3.60	0.0003
Delay in investigations of incidents	149	73.76	140	59.32	3.18	0.001
Favouritism	61	30.20	106	44.92	3.16	0.002
Negligence in applying penalties	88	43.56	185	78.39	7.50	<0.001
No apparent reason	108	53.47	70	29.66	5.06	<0.001

* More than one option was allowed.

Table 4. Reactions of staff nurses toward violence at the workplace (n=438)

Reaction to violence*	Saudi (no.=202)		Egypt (no.=236)		z-test	P
	no.	%	no.	%		
None	70	34.65	39	16.53	4.37	<0.001
Took no action	92	45.54	158	66.95	4.51	<0.001
Told the person to stop	125	61.88	189	80.08	4.21	<0.001
Tried to pretend it never happened	114	56.43	189	80.08	5.34	<0.001
Tried to defend myself	104	51.48	189	80.08	6.34	<0.001
Told a colleague	22	10.89	52	22.03	3.10	0.002
Reported it to a senior staff member	75	37.13	101	43.80	1.21	0.23
Told friends/family	28	13.86	55	23.30	2.51	0.01

* More than one option was allowed

Table 5. Percentage of reporting an incidence of violence at the workplace (n= 438).

		Saudi (no.=202)		Egypt (no.=236)		Test	P
		no.	%	no.	%		
Violence can be prevented	No	17	8.42	147	62.29	X^2 = 4.86	<0.001
	Yes	185	91.58	89	37.71		
Report of an incident of violence at your workplace	No	148	73.27	143	60.59	X^2 = 7.84	0.005
	Yes	54	26.73	93	39.41		
Reasons of not reporting* (no.=291)	It was not important	43	29.05	74	51.75	Z=3.95	0.0001
	I felt shy	51	34.46	75	52.45	Z=3.10	0.002
	I felt guilty	48	32.43	37	25.87	Z=1.23	0.22
	Nothing will happen if reported	78	52.7	104	72.73	Z=3.53	0.0004
	I don't know to whom to complain	0	0.00	20	13.99	Z=4.71	<0.001
Actions taken after reporting. (no.=147)	No	27	50.0	40	43.01	X^2 = 0.67	0.41
	Yes	27	50.0	53	56.99		
Reporting by whom	Management/employer	10	18.52	40	43.01	X^2 = 9.13	0.003
	Other	44	81.48	53	56.99		
Consequences for the abuser after reporting	Verbal warning issued	53	98.15	0	0.0	X^2 = 2.74	<0.001
	Don't know	1	1.85	93	100.0		
Support provided by management	An opportunity to talk about/report it	96	47.52	155	65.68	X^2 = 4.66	<0.001
	Other support	106	52.48	81	34.32		
Satisfaction with the manner the violence incident was handled	not satisfied	72	35.64	153	64.83	FET	<0.001
	Somewhat dissatisfied	73	36.14	44	18.64		
	Somewhat satisfied	56	27.72	39	16.53		
	Completely satisfied	1	0.5	0	0.0		

* More than one option was allowed

X^2: Chi-square test; FET: Fisher Exact Test; Z: test of proportion

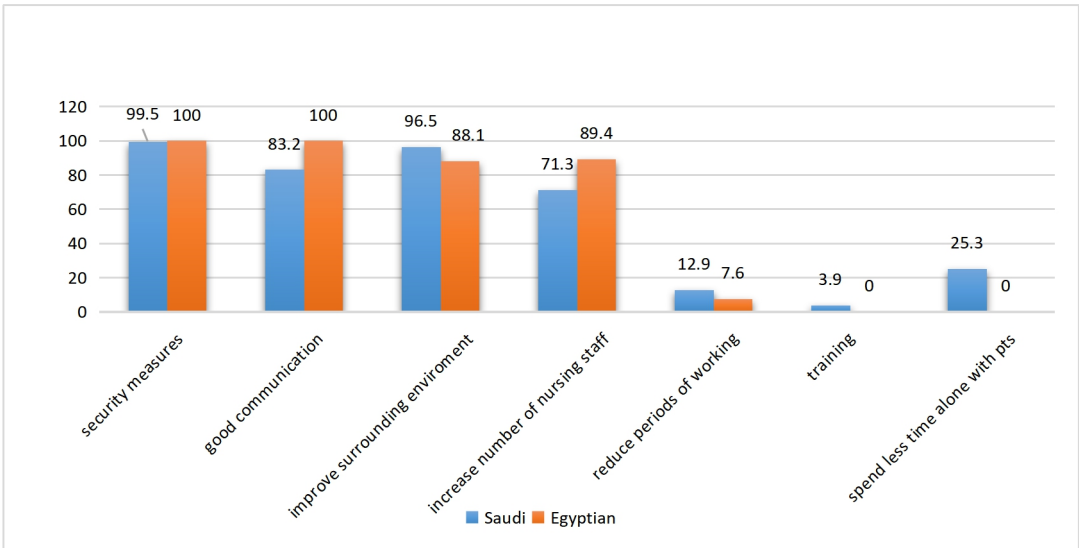


Figure 3. Preventive measures used to prevent violence at the workplace against staff nurses (n= 438)

Discussion

Today, there is an increasing evidence that nursing staff is at a high risk of exposure to violent behaviors in the workplace; it is now considered to be a major occupational hazard worldwide **(McPhaul, and Lipscomb, 2004)**. Therefore, the current study aimed to examine the phenomena of workplace violence against staff nurses in Egypt and Saudi Arabia. The study recruited 236 Egyptian nurses and 202 female Saudi nurses in Shebin El-Kom and Arar cirty, respectively.

The current study revealed that in the last 12 months, many of the studied Egyptian nurses were exposed to violence than Saudi nurses (83.47% & 65.35% respectively). The differences between groups may be due to differences in culture of two countries. Similarly, the study done by **Anwar et al., (2016)** mentioned that staff nurses were mainly experienced workplace violence by a percent of 92.5 % followed by doctors in a percent of 80% at the university hospital, with external violence becoming more prevalent.

In Saudi Arabia, during 2011, A cross-sectional study among 258 HCWs working in two public hospitals in Riyadh was conducted. Its finding is consistent with the current finding which showed that 67% of HCWs experienced some sort of violence in the prior 12 months: 95% verbal, 12% physical, and 11% both **(Algwaiz, and Alghanim, 2012)**. However, smaller proportions were reported in Saudi Arabia. The study conducted in four centers in Riyadh, Saudi Arabia reported that 46% of primary health care workers were exposed to violence **(Al-Turki et al., 2016).** Additionally, less than half of HCWs in governmental health facilities in Arar City, Saudi Arabia were exposed to violence at least once in the past year **(Al Anazi et al., 2020)**.

In Egypt, the current result is in the same line with **Ewis and Arafa (2014)** who mentioned that most Beni Suef nurses (92.8%) were exposed to workplace violence at least one time during their work time. Another study conducted in Egypt showed that about 50 % of the study subjects were exposed to violence at their workplace in the last 12 months **(Higazee, and Rayan, 2017).** This is supported by the finding of a study conducted by **Ferri et al., (2016)** in Italia, the finding disclosed that nurses were most affected by violence (67%), followed by careers (18%).

Concerning the frequency of exposure to the different kinds of violence among Egyptian and Saudi nurses, the findings showed that Egyptian nurses were more frequently exposed to all kinds of physical violence than Saudis. Regarding the psychological violence, Egyptian nurses were more frequently exposed to verbal abuse and raised voices, and shouting. This agrees with the study conducted recently in Egypt by **Kabbash and El-Sallamy, (2019)**. on 340 physicians and nurses who works in Tanta university hospital to identify the prevalence of violence against health care workers at Tanta University Emergency Hospital. Their results revealed that nearly one-third of the study sample reported physical violence, and most of them reported verbal violence. While less than (4.7%) of the participants reported sexual violence.

In the same line, the study done by **Anwar et al., (2016)** reported the most common trend (82%) against nurses was outward verbal abuse, (56%) for verbal violence, and (52%) for psychological violence. Also, from the researchers' point of view, this may be explained by the fact that there is marked shortage of nursing in Egypt. Additionally, in the time of Covid-19, there is an increasing in the need for health care services with limited resources that leads to practice violence against nurses during work. Moreover, **Magnavita and Heponiemi, (2012)** found that nurses were more likely to encounter aggressive behavior due to the increased amount of time spent for caring patients.

While in Arar city, Saudi Arabia, nurses were more frequently exposed to racial abuse. This may be due to in Saudi Arabia many non-Saudi nurses are working in hospitals and are exposed to racial violence. Similarly, the study conducted by **Schablon et al., (2018)** who study the nature and frequency of violence and the handling of aggressive behavior by facility management in Germany. The study showed that a high percentage (94.1%) of the employees in their study had experienced verbal abuse and more than half of the sample

(69.8%) had experienced physical aggression in the previous twelve months.

It was suggested that female nurses are more prone to physical and sexual violence than males **(Jafree, 2017)**. As reported from the current study, sexual violence was reported by less than one-third of Egyptian nurses, while none of the Saudi nurses reported it. This may be due to the differences between Egypt and Saudi cultures. The Egyptian's life is recognized by openness than Saudi's life. Also, it may be due to the difference in customs and traditions between the two countries.

Regarding the sources of violence against nurses in the workplace, the participant nurses from both Egypt and Saudi Arabia reported that patients' relatives and visitors are commonly the sources of violence against nurses. This may be because the patients' relatives stay with patients inside the hospital during the patient's treatment period in which there is fear from them on their patients despite regulations. Also, because of the amount of time nurses spend providing direct patient care. Over and above that patient and their relatives may behave aggressively or violently either due to their medical conditions, side effects of their medications, or dissatisfaction with the services provided by the health care facilities.

This finding is similar to the finding of a study conducted at Tanta university hospital which revealed that the perpetrators of physical and verbal violence were mainly patients' relatives **(Kabbash, and El-Sallamy, 2019)**. The same finding was reached by **Cheung and Yip, (2017)**. This is true, compared with other groups of employees, people in healthcare are at a higher risk of being confronted with violence by patients/clients or relatives in the workplace.

The current study revealed that regarding shifts in which violence was done, the Saudi nurses reported that violence was done more frequently in the evening shifts but at all shifts for Egyptian nurses. This finding may be explained according to several reasons: first, there is not enough number of security personnel especially during night shifts, and long working hours. Second, the nurses did not train on how to deal with violent situations. Third, in the night shift, the decreased number of staff nurses in the hospital environment gives a chance to practice violence against nurses. Contradicted to the current findings is the study done in China which declared that most sexual violence against nurses occurred during the day shift **(Lei, 2017)**.

Regarding the causes of violent incidents from the perception of Egyptian nurses, the current study showed that the most frequent reasons for practicing violence against nurses in Egypt were weak hospital security, shortage of nursing staff and increased workload, lack of communication, negligence in applying hospital regulations, and negligence in applying penalties (95.34%, 95.34%, 86.44%, 87.29%, and 78.39% respectively).This is may be due to low economic conditions of governmental hospitals in Egypt. While from Saudi nurses, the current study showed that the most reasons were weak hospital security, shortage of nurses and increased workload, negligence in applying hospital regulations, delay in investigations of incidents (80.20%, 74.26%, 73.76%, and 73.76% respectively). This may be due to marked shortage in numbers of Saudi staff nurses especially at night as their families didn't allow them to be at hospital at night so the work load is increased on other non-Saudi staff nurses.

In the current study, the majority of the study sample (91.58%) in Saudi reported that violent incidents can be prevented, while more than half of the Egyptian participants reported that violence in the workplace cannot be prevented. Additionally, Both Egyptian and Saudi nurses did not report the incidence of violence at their workplace. As participant nurses chosen "Nothing will be happened if violence incident reported". This is may be due to the staff nurse beliefs that hospital administrators do their efforts to keep their positions by opinions of patients and their families regarding them so they try to make all patients and their families satisfied with care provided under supervision of the head nurses and hospital administrators. This finding is in the same line with **Al Anazi et al., (2020)** who disclosed that 83.6% of the study sample did not report violent incidents. In their study, the highest percentage (92%) were either anxious about negative consequences such as revenge of perpetrators or believed that it was useless to

report. Furthermore, **Ferri et al., (2016)** concluded that 84% of employees did not report incidents. The reporting only involved serious incidents as physical violence and the gender who less likely to report incidents were women.

Regarding reactions of staff nurses toward violent incidents, Egyptian nurses were more likely to report, telling the person to stop, pretend it never happened, tried to defend themselves, telling a colleague, or telling friends/family compared to Saudi nurses. Similarly, two-thirds of Egyptian nurses reported taking no action compared to less than half of Saudi nurses. The rationale may be that nurses perceived that nothing would happen if they reported to the hospital administration. So, they prefer to deal with the situation by themselves by telling a person to stop or tried to defend themselves. This is supported by **Moustafa and Gewaifel, (2013)** who informed no action was taken by the hospital administrators related to more than half of the reported violated events that leads to much frustration to female healthcare workers and raised questions about the worth of such reporting. Therefore, hospital administration must be supportive and be sure that violence is often traumatic, and it can be devastating to nursing career by rising job strain, lowing self-esteem, decreasing job satisfaction, lowing performance with poor outcomes of patient care.

Regarding staff nurses' satisfaction with the handling manner of the violence incident, there was a significant difference between Egyptian and Saudi nurses regarding their satisfaction with the manner the incident was handled with the majority of Egyptian nurses reported that they were not satisfied. The current finding was in the same line with **Higazee and Rayan, (2017)** who concluded that most of their participants were not satisfied in the way violence was handled.

Regarding the preventive measures used to prevent violence incidents at the workplace against staff nurses, encourage staff nurses to communicate in a good manner with others, and an increased number of nursing staff were more frequently reported by Egyptian nurses. This is may be due to increased workload and stress on them all time as result of low socioeconomic conditions to increase staff nurse number, so they need time to relax and communicate in a good manner. While improving the surrounding environment, training on how to deal with incident violence and spending less time with the patient were more frequently reported by Saudi nurses. This is may be due marked shortage of Saudi staff nurses and sometimes preference to work at primary health care centers where there are no patients and work So, work load increase on other non-Saudi staff nurse, and managers also didn't care of non-Saudi nurses. Where, the study conducted by **Higazee and Rayan, (2017)** revealed that the security measures (i.e., prevent unwanted visitors, establish clear policies regarding access to sensitive areas, and video surveillance) were the most frequently reported measures to deal with workplace violence.

Conclusion

Violence against nursing staff is a troublesome problem both in Egypt and Saudi Arabia. The current study concluded that staff nurses at Shebin El-kom, Egypt and Arar city, Saudi Arabia were exposed to workplace violence in the last 12 months. Exposure to violence was more likely in Egyptian nurses than Saudi nurses.

The causes of practicing violence as reported more by Egyptian nurses were weak hospital security, shortage of nurses, and increased workload while coming to work late and delay in investigations of incidents were the most reported by Saudi nurses. The majority of Egyptian nurses reported that they were not satisfied with the manner the incident handled.

Recommendation:

In the light of the current finding, the recommendations are:

- Conduct training programs for staff nurses and nurse managers that help them to apply strategies and techniques to protect themselves and their coworkers from workplace violence
- Violence phenomena and strategies for protection have to be included in nursing

curricula in different nursing education types

- Hospital administration must corporate a culture that treats violence incidence openly and systematically which encourages healthcare workers to report violence incidence and don't fear any penalty.
- Activate the role of security guards and aware them of policies and procedures concerning violence that enable them to prevent and control violence incidence through continuous training.
- Strict policies and procedures concerning violent incidence have to be established and announced that encourage staff nurses to report the incident rapidly.
- Improve the surrounding environment and installing a system for security as an alarming system and/or monitoring the surrounding by the camera that helps to handle the violence incidence early or rapidly.
- Further research should be done one large sample from different country in two setting to be representative and can be generalized.

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