Nurses' Perception Toward Workplace Violence at Dammam Medical Tower, Saudi Arabia

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ABSTRACT

Context: Male and female nurses face violence in their workplace because of daily exposure to challenging situations as a result of dealing with different types of patients, visitors, and their families.

Aim: The study aimed to assess nurses' perceptions toward workplace violence at Dammam Medical Tower, Saudi Arabia.

Methods: A quantitative descriptive cross-sectional design was used to conduct this study. The sample size consisted of 300 nurses working at Dammam Medical Tower using a convenient sampling technique from January to March 2019 and using a modified tool obtained from 'Survey on Workplace Violence' by Massachusetts Nurse's Association.

Results: The most common workplace violence for the last two years was verbal abuse and threatening. Additionally, sexual assault was less violent in the workplace. Around one-third of nurses reported all incidents to management, and less than half of them stated that the management was supportive and tried to find a solution. However, only 10% of them underwent related training regarding workplace violence prevention. Also, more than a quarter of nurses reported that a clear policy and procedures addressing violence are needed to combat violence in the workplace. There is a significant difference between nurses who work in outpatients or emergency department and total violence incidents.

Conclusion: Verbal abuse and threatening are deemed to be the most common violence being occurred in the workplace, while patients and relatives are the commonest offenders. The administration of the workplace should develop a clear policy to address the violent act in work and enhance the violence concept in the orientation courses.

Keywords: Workplace violence, perception, nurses

1. Introduction

Violence is a broader problem worldwide for workers in different work environments. Violence against male and female nurses becomes a part of their daily work as a part of their experiences or perceptions *(Abu Wardeh et al., 2018)*. Violence is defined as any behavior where a worker is abused, threatened, intimidated, or assaulted in the workplace. Workplace violence (WPV) is not only limited to the workplace. It can occur outside working days, at health conferences, or at social events related to work *(Canadian Centre for Occupational Health & Safety, 2017)*.

Nurses face violence in their work more than average workers, because of their daily exposure to challenging situations at work as an outcome of dealing with different types of patients, visitors and their families *(Al-Omari, 2015)*. Nurses are exposed to various types of violence, including physical and psychological violence. *World Health Organization (WHO, 2003)* is defined as physical violence as any force of attack like hitting, pushing, slapping, and shooting, kicking, stabbing, pinching, or biting. Psychological violence is defined as the deliberate use of power against another person or group that can result in harm to physical, mental, spiritual, moral, or social development. Psychological violence includes verbal abuse, incivility, bullying/mobbing, sexual and racial harassment.

Workplace violence is a global problem that may cause immediate and often long-term disruption to interpersonal relationships, the organization of work, and the overall working environment *(Di Martino, (2003)*. Violence affects nursing care quality. It also reduces health services available to the public, creates an unhealthy work environment, and increase improper societal behaviors. Also, it increases health costs, and deterioration of staff health, increase turnover and absenteeism of nurses *(Higazee & Rayan, 2017)*.

Male and female nurses in Saudi Arabia, similar to many areas around the world, are facing workplace violence more than other healthcare workers. Perhaps most important to ending workplace violence and bullying is that nurses themselves must recognize that verbal abuse, incivility, and bullying are not just part of their job *(Marquis, 2017)*.

Besides, to decrease violence incidences, many changes have occurred in the workplace. The most common reported change was "Increased staff numbers," which was reported by 23.4% of participants. Training to prevent violence should be developed and disseminated with consideration of different levels to ensure training

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efficiency (Higazee & Rayan, 2017).

2. Significance of the Study

Violence is a serious problem for nurses. The lack of attention to this phenomenon can create dysfunction between staff members and a potentially dangerous situation for both patients and staff *(Roussel, 2017)*. Recently, violence against nurses in Saudi Arabia is a phenomenon that takes the concern of the Saudi ministry of health and society at all. Accordingly, on August 19, 2017, the Ministry of Health (MOH) worked with the competent authorities to criminalize violent acts "any assault against health care worker is punishable by imprisonment up to ten years and the financial penalty could be reached up to 1000,000 Saudi Riyal" *(Aseer newspaper, 2017)*

Violence against health care staff in Saudi Arabia continues even with sanctions, within less than four months in 2018, three violent cases against nurses and healthcare workers in different places in Saudi Arabia. On May 04, 2018, a private hospital in Al-Medina Al-Monawara witnessed the exposure of a Filipino technical nurse to a stab with a sharp instrument by the patient *(Alweeam news, 2018)*. On July 10, 2018, the Saudi nurse (Nayef Mahdi Al-Yami) was the second violent victim. Nayef died of a gunshot wound at King Salman Hospital *(Alyaum, 2018)*. Besides, the third case on August 20, 2018, in Alahsaa, one doctor and two nurses working in the primary health care center were subjected to verbal and physical violence *(Alyaum, 2018).* Moreover, there are more and more cases of workplace violence are not reported.

This research has implications not only for nurses' health and safety but also in the broader sense, for the profession's ability to attract and retain nurses within the health care system, which will improve the quality of patient care. It is hoped from this study to implement effective solutions to decrease workplace violence in Saudi Arabia and to adopt clear policies for the protection of healthcare professionals to minimize workplace violence and apply suitable strategies to deal with the issue.

3. Aim of the study

The aim of this study to assess nurses' perception toward workplace violence at Dammam Medical Tower, Saudi Arabia, and to determine ways to improve work conditions related to violence.

4.Subjects and Methods

4.1. Research design

A quantitative descriptive cross-sectional design was conducted. Cross-sectional designs involve the collection of data at one point in time. All phenomena under study are captured during one data collection period. The cross-sectional design is especially appropriate for describing the status of phenomena or relationships among phenomena at a fixed point. The main advantage of using a cross-sectional design is that they are economical and easy to manage *(Polit, 2010)*.

4.2. Research setting

The study was carried out at Dammam Medical Tower. It is the largest Ministry of Health hospital in Dammam, with 696 beds capacity divided into 12 departments. This hospital was purposively selected to represent hospitals in Dammam city. It included female medical, surgical and neurological ward, male medical, surgical and neurological ward, outpatient clinic, emergency department, operation department, endoscopy department, intensive care unit, and burn unit. This study included all departments that provided direct patient care by nurses.

4.3. Subjects

The total sample size consisted of 300 nurses collected according to the total number of population (staff nurses in Medical Dammam Tower N=1300) using Raosoft power analysis program with a margin of error 5%, response distribution 50%, at confidence level 95%. Using a convenient sample selected according to outline several criteria for inclusion and exclusion to obtain a representative sample. The criteria for inclusion are direct care provider nurses who work for more than one year. While the criteria for exclusion were nurses in administrative positions.

4.4. Tools of the study

Data was collected by using one tool.

4.4.1. Workplace Violence/Abuse Assessment Questionnaire

This tool consists of two parts.

First part: The researcher developed the socio-demographic data questionnaire. It aimed to assess the nurses' socio-demographic characteristics such as age, gender, nationality, marital status, current workplace experience, and the specialty unit.

Second part: Workplace Violence/Abuse Assessment Questionnaire to assess nurses' perceptions toward WPV and ways to improve working conditions for nurses. The questionnaire was initially developed in the English language by *Massachusetts Nurse's Association (MNA) (2005)*. It consisted of four main subsections; they were incidence of workplace violence/abuse, reporting and consequences, solutions, and last part about nurses' knowledge and legal rights.

Incidence of workplace violence/abuse subsection, including eight items about the nurses' perception toward workplace violence, including six multiple-choice questions and two categorical questions about frequency of workplace violence types. Reporting and follow-up subsection, including seven multiple-choice questions about reporting the workplace violence to management, responses from management.

Solutions subsection included the categorical question of 14 items about measures that are likely by nurses to help in improving work conditions concerning violence/abuse on three points rating scale as (not likely, somewhat likely, and

very likely). Besides, five multiple-choice questions were added about nurses' knowledge of legal rights related to workplace violence. The questionnaire was modified according to Saudi Arabia culture, no nursing union in Saudi Arabia, so change this item to the call center number (937), which is a MOH emergency call center to receive any comments or report an incidence of workplace violence *(Ministry of Health, 2019).*

4.5. Procedures

The tool is valid according to a study done by *Stephanie (2005)*, then after modification, the validity of tools tested for its content validity by five experts in the fields (two in the academic field and three in the clinical field) before distribution to the participants. The tool examined for its completeness and clarity of items. No modification has been made.

The pilot study was conducted on 10% of the participants (n=30 nurses) during two weeks from January 14, 2019, to January 24, 2019. The pilot sample is included in the final study because no change made on the data collection tool after the pilot study was done. The reliability of the tool based on Cronbach's alpha test was 0.977, which indicates excellent consistency. The current study applied self-reports questionnaire for data collection from January 2019 to March 2019,

Ethical approval obtained from the ethical committee of the Faculty of Nursing at King Abdul-Aziz University, Jeddah. Besides, all official requirements sent to the department of planning and research in the general directorate of health affairs, Eastern region, to get permission for conducting the study in target hospitals "Dammam medical tower."

Full information was provided to the participants. There was no potential risk to participants, and they were told that they have the right to withdraw from participation at any time. The questionnaire included informed consent and explanation of the study purpose to the participants to obtain their cooperation to answer the questionnaire. Data were collected anonymously, with no personal identification data from the participants known, and confidentiality was maintained.

4.6. Data analysis

The data analyses were carried out using Statistical Packages for Social Sciences (SPSS) version 20, Armonk, NY: IBM Corp., to analyze the data and interpret the responses, including descriptive analysis that presents the demographic characteristics of the study samples. The researcher used simple statistics, including numbers and percentage, mean, and standard deviations to describe item responses. Using a t-test to assess the significance in the relation between two variables of demographics and total violence incidents score. Total violence incidents calculated by sum the number of each type of violent incident. $P \leq 0.05$ was considered a significant level for all statistical tests.

5. Results

Table 1 represents the distribution of nurses, according to socio-demographic and work-related characteristics. The studied nurses' highest percentage was in the age group from 25 to 35 years old. Only 16.7% of them were above 35 years old. Females dominated the males (89.7% vs. 10.3%). More than two-thirds of them (71%) were married. Besides, more than one-third of nurses (44.0%) had 5–<10 years of work experience at the current units. More than half of them (54%) were working at inpatient units.

Table 2 shows the frequency and percentage distribution of nurses' perception of the incidence of workplace violence/abuse. 84.3% of respondents perceive that workplace violence included verbal abuse. Concerning the level of seriousness of workplace violence for the last two years, only 28% of nurses thought it was very serious, while 13.0% were not sure about it or considered it not too serious.

With regards to the shift where most severe violence occurred, 46.3% of the nurses reported that violence occurred during the day shift, and 39.0% reported the evening shift. There were 30.3% of nurses feared anticipated workplace violence, which may or may not occur. When asked, "How concerned is the employer about safety at work?" only 18.7% of nurses thought the employer is very concerned about their safety. About the degree of control feeling over safety in the workplace, only 10.7% of nurses felt they had much control.

Figure 1 illustrates the percentage distribution of particular types of workplace violence /abused that experienced by nurses on Dammam Medical Tower within the last two years. The more frequently violent types of workplace violence were verbally abused by 57%, followed by verbally threatened 48%, while the least of them were strangled 14.7%.

Figure 2 shows the highest mean percentage of the perpetrator of violence was by the patient 21.4%, followed by 12.9% done by patients' family or friends of patients, while violence by peer is the least mean percentage.

Table 3 shows the frequency and percentage distribution of workplace violence reporting and consequences as perceived by the studied nurses in the last two years. Only 21.7% of them did not continue working after the incident. More than one third, 35.0% was offered relief so that they could stop working if they needed to. When asked about the abused incidents affecting work performance, 38.3% of participated nurses indicated difficulties in concentrating on the job; this is contrary to 33% who shows no effect.

In the course of reporting violence, 40.3% of nurses who exposed to violence did not report any of the incidents. Concerning the management action toward nurses reporting the incident, less than half 48.6% of nurses stated that management was supportive and tried to find a solution. Only 11.7% of nurses who experienced workplace violence were transferred to a new unit or worksite due to feeling unsafe related to violence.

Table 4 shows the frequency and percentage distribution of nurses' knowledge and legal rights regarding workplace violence in the last two years. Only a few participants surveyed 10.0% reported that they had training related to workplace violence prevention that was provided by their employers, of those who receive training for workplace violence prevention, (66.7%) of them reported that training was somewhat appropriate to deal with workplace violence.

There were 29.3% of participants knew their legal rights related to workplace violence, while 70.7% did not know their legal rights. Of those who knew their legal rights, 61.4% of them learn the legal rights from their employers, while 10.2% learned the legal rights from the training provided by the employer. Besides, reporting workplace violence procedures, more than half of participants, 55.3% were not knowledgeable about the procedures on reporting incidents of violence in the work setting.

Table 5 represents nurses' suggested solutions to workplace violence, which are likely to help improve working conditions concerning violence/abuse as perceived by the studied nurses. More than a quarter, 38.3% of nurses identified "Clear policy and procedures addressing violence" as a very feasible way to improve the work condition. Also, 33.7% of respondents suggested that "training on legal rights about violence" to improve working conditions. 32.7% of nurses suggested that "safety committees" improve work conditions and to help prevent workplace violence/abuse. Improving registered nurses (RN) ratio to the patient is the one solution identified by 31.7% of nurses for reducing violence incidents.

Table 6 reveals a significant relationship between total violence incidents and marital status. The single nurse had shown significantly more exposure to violence incidents (p=0.001), while those working at the emergency and outpatient's department are significantly higher of exposed to violence incidents (p=0.012). Other variables of demographic data were statistically insignificant to exposed violence incidents.

**Table (1): Frequency and percentage distribution of nurses according to socio-demographic and work-related characteristics.**

Study variables	Frequency	Percentage (%)
Age group in years		
<25 years	100	33.3%
25 – 35 years	150	50.0%
>35 years	50	16.7%
Gender		
Male	31	10.3%
Female	269	89.7%
Nationality		
Saudi	218	72.7%
Non-Saudi	82	27.3%
Marital status		
Single	87	29.0%
Married	213	71.0%
Work experience in the current worksite		
1< – <5 years	88	29.3%
5 – <10 years	132	44.0%
10 – <15 years	58	19.3%
≥15 years	22	07.3%
Specialty unit		
Inpatient	162	54.0%
Outpatient and Emergency ward	63	21.0%
Others	75	25.0%
Total	300	100%

Table (2): Frequency and percentage distribution of nurses' perception of the incidence of workplace violence/abuse (n=300).

Workplace violence parameters	Frequency	Percentage (%)
Workplace violence/abuse includes *		
Verbal abuse	253	84.3%
Physical violence without a weapon	143	47.7%
Sexual harassment	89	29.7%
Physical violence with a weapon	83	27.7%
Sexual assault	79	26.3%
The seriousness of workplace violence within the last two years		
Very serious	84	28.0%
Somewhat serious	81	27.0%
Not sure	39	13.0%
Not too serious	39	13.0%
Not at all serious	57	19.0%
The shift was the most severe violence occurred *		
Day shift	139	46.3%
Evening shift	117	39.0%
Night shift	69	23.0%
Weekend shift	43	14.3%
Holiday shift	17	05.7%
Nurses expectation of violent incidents in the workplace		
Yes	91	30.3%
No	209	69.7%
How concerned is the employer about nurses' safety at work?		
Not very concerned	111	37.0%
Somewhat concerned	133	44.3%
Very concerned	56	18.7%
Degree of control feeling over the safety in the workplace		
No control	105	35.0%
Some control	163	54.3%
Much control	32	10.7%

* Variable with multiple answers.
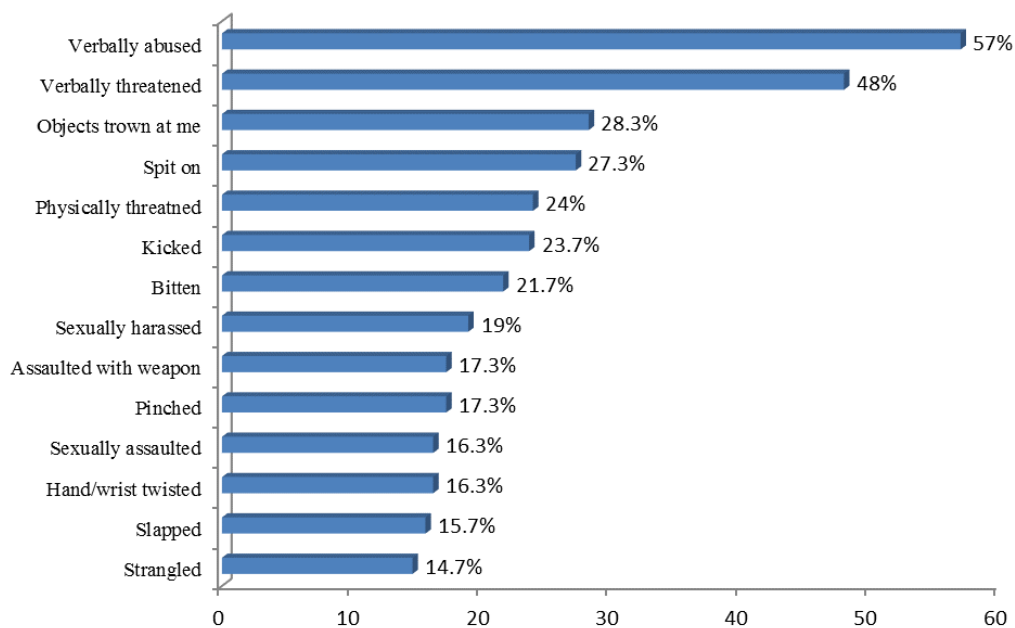
Figure (1): Percentage of particular types of experienced workplace violence /abuse on Dammam medical tower within the last two years (2019).
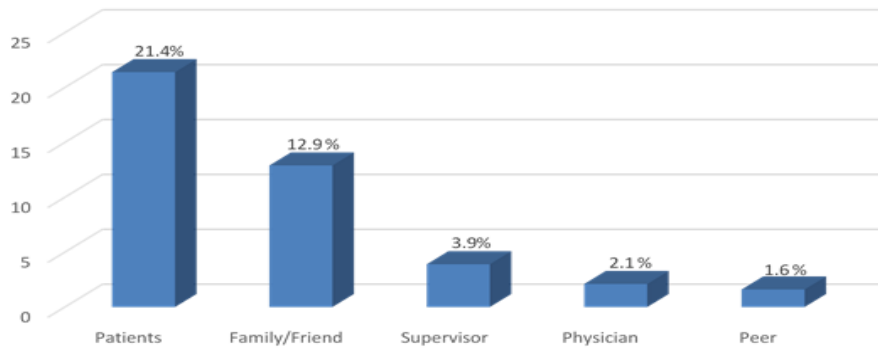
Figure (2): Mean percentages perpetrator of violence/abuse experienced by nurses in Dammam Medical Tower within the past two years.

Table (3): Frequency and percentage distribution of workplace violence reporting and consequences as perceived by the studied nurses in the last two years.

Workplace violence consequences	Frequency	Percentage (%)
Leaving work after the worst incident within the last two years		
Yes	235	78.3%
No	65	21.7%
Providing relief for victim nurse so could leave after the incident		
Yes	105	35.0%
No	195	65.0%
Effect of violence on work performance[*]		
Difficulty concentrating on the job	115	38.3%
No effect	99	33.0%
"Difficulty working in an environment that reminds me of the past incident."	70	23.3%
Physical symptoms such as headaches or stomach aches	55	18.3%
Psychological symptoms such as fear	54	18.0%
Hypervigilance easily startled	24	08.0%
"Not fearful, but physical injuries have decreased my ability."	16	05.3%
Reporting the violence to the management [†]		
"I reported all incidents to management."	104	34.7%
"I reported some incidents."	70	23.3%
"I did not report any incidents."	121	40.3%
Management response toward the violence attack [†]		
Management was supportive and tried to find solutions	87	48.6%
Management was supportive, but nothing was done to solve the problem	52	29.1%
Management was neither supportive nor blaming	28	15.6%
"Management intimidated or discouraged me from reporting incidents."	04	02.2%
"Management harassed or blamed me when I reported the incident."	03	01.7%
Reporting incidents of violence [*]		
Police or district attorney	66	36.9%
Lawyer	16	08.9%
937 Center[$]	12	06.7%
Others (Colleges, social worker and security department)	20	11.2%
Transferred to a new unit or worksite because of feeling unsafe related to a violence/abuse		
• Yes	35	11.7%
• No	265	88.3%

[†]*Only those who reported incidents of abuse were included in the analysis.*
[$] *(937 Center is MOH emergency call center to receive any comments or report an incidence of workplace violence)*

Table (4): Frequency and percentage distribution of nurses' knowledge and legal rights regarding workplace violence in the last two years.

Workplace violence parameters	Frequency	Percentage (%)
Availability of training regarding workplace violence prevention		
Yes	30	10.0%
No	270	90.0%
Appropriateness of training to deal with workplace violence †		
Very appropriate	08	26.7%
Somewhat appropriate	20	66.7%
Not appropriate	02	06.7%
Nurses know their legal rights in cases of workplace violence		
Yes	88	29.3%
No	212	70.7%
Source of information about nurses' legal rights †		
"From my employer."	54	61.4%
From employer-provided training	09	10.2%
From co-workers	23	26.1%
Other	02	02.3%
Nurses' knowledge of incident reporting procedures		
Yes	134	44.7%
No	166	55.3%

†*Only those who underwent training related to workplace violence prevention and those who know legal rights "were included in the analysis.*

Table (5): Nurses suggested solutions to workplace violence.

Suggested Solution*	Frequency	Percentage (%)
Training on how to prevent violence	88	29.3
Training on the legal rights about violence	101	33.7
Improved RN to patient ratios	95	31.7
Better admission procedures that identify risks	82	27.3
More security guards	94	31.3
Adequate time to assess and intervene to prevent the crisis	80	26.7
Improved lighting	65	21.7
Controlled access system	66	22
Metal detectors at points of entry	73	24.3
Panic buttons	84	28
Closed-circuit TV monitors	92	30.7
Safety committees	98	32.7
Clear policy and procedures addressing violence	115	38.3

Variable with multiple answers.

Table (6): Relationship between total violence incidents and the socio-demographic characteristics of participants (n=300).

Factor	Total violence incidents [†]		*t*-test	*P*-value
	Mean	SD		
Age group in years				
≤25 years	2.26	1.68	0.816	0.415
>25 years	2.10	1.48		
Gender				
Male	2.06	1.44	-0.349	0.727
Female	2.17	1.56		
Nationality				
Saudi	2.21	1.57	0.907	0.365
Non-Saudi	2.02	1.49		
Marital status				
Single	2.67	1.70	3.722	<0.001
Married	1.95	1.43		
Current worksite work experience				
≤Ten years	2.15	1.56	-0.208	0.836
>10 years	2.19	1.53		
Specialty unit				
Inpatient	1.95	1.41	-2.518	0.012
Emergency and Outpatient	2.39	1.67		
The shift was the most severe violence occurred				
Day shift	2.31	1.62	1.590	0.113
Evening shift	2.14	1.55	-0.178	0.859
Night shift	1.89	1.27	-1.581	0.115
Weekend shift	2.44	1.64	1.306	0.193
Holiday shift	2.71	1.72	1.508	0.133

[†]*Total violence incidents were calculated by sum, all types of workplace violence incidents. Significant at p≤0.05 level.*

6. Discussion

Violence incidents are still present and threaten health workers in Saudi hospitals. There are many cases, as mentioned earlier, reported violence against health care workers (HCWs) when crime happens. Furthermore, violence still present because violence incidents reported if a crime occurs *(Alyaemni & Almudaithi, 2016)*. So, this study aimed to assess nurses' perception toward workplace violence at Dammam Medical Tower, Saudi Arabia, and to determine ways to improve work conditions related to violence

Three hundred nurses received the survey with a 100% response rate. The result shows that more than three-fourths of participated nurses perceive and agree that workplace violence (WPV) definition includes verbal abuse. This finding may be due to the nurses' belief that any violent incidents begin with verbal abuse, and verbal abuse has a significant impact on their psychological state.

This result is in agreement with *Alkorashy and Almoalad, (2016),* who found that nurses with violence experience defined WPV as verbal abuse, while nurses had not violence experience perceived WPV as a physical attack only. Recently, the American Nurses Association *(ANA) (2019)* reported that a lack of agreement on the definition of workplace violence was considered as a barrier to reporting violence incidents because a health care culture considered workplace violence as a part of the job and daily routine.

In this research studied nurses perceived and exposed to a high frequency of verbal violence. In the same line, different published studies addressed that most common type of workplace violence was verbal assaults *(Jiao et al., 2015; Al-Omari, 2015; Alyaemni & Alhudaithi 2016; Anwar et al., 2016; AL-Shamlan et al., 2017; Cheung & Yip 2017; Rafeea et al., 2017; Alsaleem et al., 2018; Boafo 2018; Pol et al., 2019)*. This finding indirectly may indicate that verbal violence occurred by patients and their families as communicating discomfort and delayed responses by nurses due to staff shortage or high patient ratios. On the contrary, *Berlanda et al., (2019)* found that physical violence more than verbal violence in the emergency department.

This study looked at nurses' perception regarding the seriousness of workplace violence; less than one-third of participants perceive violence as a very serious problem. This result could be explained in the light nurses sympathized with the patients and their health situation. For this reason's nurses considered violence as a normal act, not a serious problem during their interaction with patients. On the other hand, other researchers found that only less than a quarter of nurses considered WPV as a serious problem *(Alkorashy & Moalad, 2016; Al-Shamlan et al., 2017; Barbara, 2019)*.

The present result shows that workplace violence was increased in the day shift as nurses exposed and perceived. The result could be due to the busier work duty that causes delay responses to patient requirements and increasing waiting time. This finding supported by *Basfr et al. (2019)*, who found that nurses who worked in the day shift had a higher violence risk. While *Alyaemni and Alhudaithi (2016)*, detected that evening was the most common shift where violence occurred. However, they also reported that the least violence happened during the day. Conversely,

(Copeland & Henry, 2017; Bambi et al., 2019; Hien et al., 2019) detected that nurses working during the night shift were more exposed to WPV.

One of the remarkable findings of this study is the nurses believed that the employer was not more attentive about safety at work. This result could be explained by a lack of human resources, e.g., less security at all department accesses and fewer nurses' number in each shift. This result supported by *(Anwar et al., 2016; Abdellah & Salama, 2017; Copeland & Henry, 2017).*

This study findings at Dammam Medical Tower showed that violence is a significant issue perpetrated by patients, followed by family and friends of the patient. This finding could be explained by delayed responses from nurses to patients while a patient under the stress of diseases or pain. Also, misunderstanding by patients was related to the language barrier, which leads the patient to deal with aggressive behaviors and verbal abuse toward the first line of caregiver, e.g., nurses. Patient and relatives were the most offenders as indicated from several published studies *(Jiao et al., 2015; Fasanya & Dada 2016; Al-Omari, 2015; Park et al., 2015; Alyaemni & Alhudaithi 2016; Anwar et al.,2016; Cheung & Yip 2017; Al-Shamlan et al., 2017; Rafeea et al., 2017; Nui et al., 2019).* The studies found that patients were the most perpetrators of WPV.

The nurse should provide clear information to their patients with appropriate communication techniques *(Alkorashy & Almolad, 2016; Llor-Estebana et al., 2017).* Furthermore, patients suffering from physical or psychological pain that increase nurses' risk of violent incidents. The raising of violence incidents by patients' needs an appropriate measure to create a safe and warm environment for nurses' work (*Boafo, 2018; Lakatos, 2019).*

This present finding reported that nurses who had experienced violence continued to work after the incidents, and the supervisor did not provide relief. This result may be due to staff nurses or supervisor reasons. Nurses believe that aggressive behaviors by the patient were a part of caregiver duty. This finding is in agreement with other studies by *Rafeea et al. (2017)* and *Niu et al. (2019),* who found that the majority of victim nurses continue work without took time off from work after the incident.

Moreover, workplace violence incidents were under-reported, as mentioned by nurses who participated in the current study. Only around one-third of violent incidents were reported. This finding is an alarming issue that could be due to nothing was done to solve the problem; a sense of shame by nurses, feeling humiliating by nurses, lack of knowledge related to legal rights, and unclear policy for addressing or reporting violent incidents. This study is in the same way with *(Al-Omari, 2015; Alyaemni & Alhudaithi, 2016; Cheung & Yip, 2017; Copeland & Henry, 2017; Higazee & Rayan, 2017; Rafeea et al., 2017; Al-Shamlan et al., 2017; Niu et al., 2019; Shea et al., 2018),* who found that the violence against nurses was under-reporting.

Besides, this study also looked at nurses training regarding WPV; the majority of nurses did not receive any training regarding violence, which consequently led to a lack of knowledge of their legal rights related to workplace violence. This result could be due to the under-reporting of violent incidents that become like a barrier to identify the nurses' needs and problem areas within the hospital to develop an appropriate measure to prevent violence. The result is compatible with the finding reported by *Basfr et al. (2019),* who found that there was a lack of professional training on how to diffuse WPV properly. Increasing training and education were essential to improve nurse's perception toward WPV *(Copeland & Henry, 2017; Al-Azzam et al., 2018; Lakatos et al., 2019).*

In order to address workplace violence, some policies and measures are imperative. In this study result, nurses elaborated on the need for clear policies and procedures addressing violence in the workplace, training on legal rights about violence and training on how to prevent violence are measures likely to help in improving working conditions. These measures could help nurses to handle violence situation and guide them to address or report incidents.

Together with *Alyaemni and Alhudaithi (2016),* who reported that nurses suggested the need for action codes for immediate responses to the violent situation while in Taiwan, the major strategies adopted by workplaces to prevent violence were security measures and training *(Nui et al., 2019).* They further emphasized that institutions should train staff to handle violence, provide a therapeutic environment, simplify the reporting process, and encourage reporting of all types of violence *(Lakatos et al., 2019).*

Regarding the characteristics of nurses who experienced violence, there was no significant difference between the total violent incidents according to their sex. This finding is supported by *Jiao et al. (2015)* and *Rafeea et al. (2017)*, who found the same result. While *Llor-Esteban et al., (2017); Abu Wardeh et al., (2018); Cheung and Yip, (2017); Al-Shamlan et al., (2017); Pol, (2019)* found that male nurses had more exposure to violence than female nurses. This result may be due to the small number of male nurses in Dammam medical tower so that it has an impact on the result. Additionally, it may be due to the nature of female nurses who find themselves unable to defend themselves in violent situations, especially when there is no clear policy for addressing violence.

Also, there is a significant difference between the total violence incidents according to a marital status where single nurses were more exposed to violence than a married one. The result could be due to the ability of the married nurse to deal with the other sex, especially in Saudi culture. Besides, this result disagreed with *Alyaemni and Alhudaithi (2016)*, which found no associations with marital status and violence incidents.

The study found that nurses working in emergency and outpatient departments are significantly higher in their exposure to violent incidents. The result may vary due to a shortage in the nursing staff, which is considered as the primary cause of increasing waiting time that leads to aggressive behaviors toward caregivers by patients and their families. Besides, patients in an emergency are always

coming in acute conditions or pain; it makes nurses at risk for violence. Likewise, *Hien et al. (2019)* and *Berlanda et al. (2019)* found that violence mostly occurred in the emergency department and outpatient clinics. Nurses working in the emergency department and outpatient clinic were more likely to suffer verbal abuses than those working in other departments.

Clear policies and procedures addressing violence were a vital way to help improving work conditions with violence/abuse following by other ways such as training on how to prevent violence, training on legal rights about violence, improved nurse to patient ratios, and more security guards.

7. Conclusion

Verbally abused and threatening are deemed to be the most common violence being occurred at day shift in the workplace while patients and relatives are the commonest offenders. Violence incidents were under-reporting in Dammam Medical Tower. Besides, lack of training regarding workplace violence prevention. The study suggests the need for the healthcare administration to address the increasing threat of workplace violence. Clear policy and procedures are necessary to address the violence in the work setting.

8. Recommendations

Workplace violence in health care settings is a huge problem that needs a solution. Hence, Clear policy and procedure are necessary to address the violence in the work setting. This study provides ways to decrease violence incidents. Consequently, nursing managers and nursing educators must enhance professional nurses' safety in Saudi Arabia hospitals. Workplace violence in health care settings is a terrible problem that needs a solution.

Some recommendations for improving work conditions toward violence incidents include assessment of the nurses' concerns by healthcare administrators to address the triggers of increasing threats of workplace violence. In addition to forming a non-punishing work environment for violence reporting and proper investigation of all reported cases of WPV.

Recommendations for nursing practice involve fostering the daily discussions among managers, nurses, and other health care providers to drag the attention of violent incidents and improve the prevention system. While for the nursing education department, it is recommended to foster workplace violence prevention policies, provide continuous interprofessional educational courses regarding ways to improving work conditions toward violence, enhance the violence concept in the orientation courses for new staff and improve nurse's awareness about the reporting system and their legal rights. Future research is needed to identify the factors of workplace underreported workplace violence.

9. References

Abdellah, R. F., & Salama, K. M. (2017). Prevalence and risk factors of workplace violence against health care workers in the emergency department in Ismailia, Egypt. *The Pan African Medical Journal, 26,* 21. https://doi.org/10.11604/pamj.2017.26.21.10837

Abu Wardeh, Y. S., Al-Saqri, S., Al-Theban, A., & Abuwardeh M. (2018). Violence Against Nurses' in Critical Units at Governmental Hospitals in Jordan. *Journal of Health, Medicine and Nursing*, *32,* 2422-8419.

Al-Azzam, M., Al-Sagarat, A. Y., Tawalbeh, L., & Poedel, R. J. (2018). Mental health nurses' perspective of workplace violence in Jordanian mental health hospitals. *Perspectives in Psychiatric Care, 54*(4), 477–487. https://doi.org/10.1111/ppc.12250

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. https://doi.org/10.1111/inr.12242

Al-Omari, H. (2015). Physical and verbal workplace violence against nurses in Jordan. *International Nursing Review, 62*(1), 111-118. https://doi.org/10.1111/inr.12170.

Alsaleem, S. A., Alsabaani, A., Alamri, R. S., Hadi, R. A., Alkhayri, M. H., Badawi, K. K., & Al Bishi, A. M. (2018). Violence towards healthcare workers: A study conducted in Abha City, Saudi Arabia. *Journal of Family & Community Medicine*, *25*(3), 188–193. https://doi.org/10.4103/jfcm.JFCM_170_17

Al-Shamlan, N. A., Jayaseeli, N., Al-Shawi, M. M., & Al-Joudi, A. S. (2017). Are nurses verbally abused? A cross-sectional study of nurses at a university hospital, Eastern Province, Saudi Arabia. *Journal of Family & Community Medicine*, *24*(3), 173–180. https://doi.org/10.4103/jfcm.JFCM_45_17

Alweeam news, (2018). Retrieved from https://www.alweeam.com.sa

Alyaemni, A., & Alhudaithi, H. (2016). Workplace violence against nurses in the emergency departments of three hospitals in Riyadh, *Saudi Arabia: A cross-sectional survey. Nursing Plus Open, 2,* 35-41. https://doi.org/10.1016/j.npls.2016.09.001

Alyaum, (2018). Retrieved from https://www.alyaum.com

American Nursing Association (ANA). (2019). Retrieved from https://www.nursingworld.org › end nurse abuse › end abuse-issue-brief-final

Anwar, M. M., El-Shabrawy, E. M., Ewis, A. A., & Khalil, D. M. (2016). Patterns, prevalence, and impact of violence against health care workers in Beni-Suef Governmental Hospitals. *Egyptian Journal of Community Medicine*, *34(4).*

Aseer Newspaper, (2017). Retrieved from http://1asir.com/381612

Bambi, S., Guazzini, A., Piredda, M., Lucchini, A., De Marinis, M. G., & Rasero, L. (2019). Negative interactions among nurses: An explorative study on lateral violence and bullying in nursing work settings. *Journal of Nursing*

Management (John Wiley & Sons, Inc.), 27(4), 749–757. https://doi.org/10.1111/jonm.12738

Barbara, W. (2019). Workplace violence: A serious problem in healthcare. https://www.amnhealthcare.com/workplace-violence-a-serious-problem-in-healthcare/

Basfr, W., Hamdan, A., & Al-Habib, S. (2019). Workplace violence against nurses in psychiatric hospital settings: Perspectives from Saudi Arabia. *Sultan Qaboos University Medical Journal*, *19*(1), e19–e25. https://doi.org/10.18295/squmj.2019.19.01.005

Berlanda, S., Pedraza, M., Rizzoli, M., & de Cordova, F. (2019). Addressing risks of violence against healthcare staff in emergency departments: The effects of job satisfaction and attachment style. *Biomed Research International, 5430870*. https://doi.org/10.1155/2019/5430870

Boafo, I. M. (2018). The effects of workplace respect and violence on nurses' job satisfaction in Ghana: a cross-sectional survey. *Human Resources for Health*, *16*(1), 6. https://doi.org/10.1186/s12960-018-0269-9

Canadian Centre for Occupational Health & Safety (CCOHS). (2017). Retrieved from https://www.ccohs.ca

Cheung, T., & Yip, P. S. (2017). Workplace violence towards nurses in Hong Kong: Prevalence and correlates. *BMC public health*, *17*(1), 196. https://doi.org/10.1186/s12889-017-4112-3

Copeland, D., & Henry, M. (2017). Workplace violence and perceptions of safety among emergency department staff members: experiences, expectations, tolerance, reporting, and recommendations. *Journal of Trauma Nursing, 24*(2), 65–77. https://doi.org/10.1097/JTN.0000000000000269

Di Martino, V. (2003). Relationship between work stress and workplace violence in the health sectors. Workplace violence in the health sector. Geneva

Fasanya, B. K., & Dada, E. A. (2016). Workplace violence and safety issues in long-term medical care facilities: nurses' perspectives. *Safety and health at work*, 7(2), 97-101. https://doi.org/10.1016/j.shaw.2015.11.002

Hein, P. T., Phuc, D. N., Trang, L. T. T., & Quang, L. N. (2019). Workplace violence against healthcare nurses in the Vietnam National Children's Hospital: A cross-sectional study. *J Health Hyg, 3*(1), 2.

Higazee, M. Z. A., & Rayan, A. (2017). Consequences and control measures of workplace violence among nurses. *Journal of Nursing Health Study*, *2*(3), 22. https://doi.org/10.21767/2574-2825.100028

Jiao, M., Ning, N., Li, Y., Gao, L., Cui, Y., Sun, H., Kang Z., Liang L., & Hao, Y. (2015). Workplace violence against nurses in Chinese hospitals: a cross-sectional survey. *BMJ Open*, *5*(3), e006719. https://doi.org/10.1136/bmjopen-2014-006719

Lakatos, B. E., Mitchell, M. T., Askari, R., Etheredge, M. L., Hopcia, K., DeLisle, L., Smith, C., Fagan, M., Mulloy, D., Lewis-O., Annie; Higgins, M., & Shellman, A. (2019).

An interdisciplinary clinical approach for workplace violence prevention and injury reduction in the general hospital setting: SAFE response. *Journal of the American Psychiatric Nurses Association, 25*(4), 280–288. https://doi.org/10.1177/1078390318788944

Llor-Esteban, B., Sánchez-Muñoz, M., Ruiz-Hernández, J. A., & Jiménez-Barbero, J. A. (2017). User violence towards nursing professionals in mental health services and emergency units. *European Journal of Psychology Applied to Legal Context*, *9*(1), 33–40. https://doi.org/10.1016/j.ejpal.2016.06.002

Marquis, B. L., & Huston, C. J. (2017). Leadership roles and management functions in nursing: Theory and application. Bessie Lippincott Williams.

Massachusetts Nurses Association (MNA) (2008) Workplace Violence Prevention Materials Booklet. Available at: https://www.massnurses.org (accessed September 05, 2018).

Ministry of Health, Saudi Arabia. (2017). Retrieved from https://www.moh.gov.sa/ (accessed 2019)

Niu, S.-F., Kuo, S.-F., Tsai, H.-T., Kao, C.-C., Traynor, V., & Chou, K.-R. (2019). Prevalence of workplace violent episodes experienced by nurses in acute psychiatric settings. *PLoS ONE*, *14*(1), 1–13. https://doi.org/10.1371/journal.pone.0211183

Park, M., Cho, S.-H., & Hong, H.-J. (2015). Prevalence and perpetrators of workplace violence by nursing unit and the relationship between violence and the perceived work environment. *Journal of Nursing Scholarship*, *47*(1), 87–95. https://doi.org/10.1111/jnu.12112

Pol, A., Carter, M., & Bouchoucha, S. (2019). Violence and aggression in the intensive care unit: What is the impact of Australian National Emergency Access Target? *Australian critical care*, *32*(6), 502-508. https://doi.org/10.1016/j.aucc.2018.10.003

Polit, D. F., & Beck, C. T. (2010). Essentials of nursing research: Appraising evidence for nursing practice. *Lippincott Williams & Wilkins. P.222*

Rafeea, F., Al Ansari, A., Abbas, E. M., Elmusharaf, K., & Zeid, M. S. A. (2017). Violence toward health workers in Bahrain Defense Force Royal Medical Services' emergency department. *Open access emergency medicine: OAEM*, *9,* 113. https://doi.org/10.2147/OAEM.S147982

Roussel, L., Swansburg, R. C., & Swansburg, R. J. (Eds.). (2017). Management and leadership for nurse administrators. 7th ed. Jones & Bartlett Learning, Sudbury, Mass, p.240

Shea, T., Cooper, B., De Cieri, H., Sheehan, C., Donohue, R., & Lindsay, S. (2018). Post-incident support for healthcare workers experiencing occupational violence and aggression. *Journal of nursing scholarship, 50*(4), 344-352. https://doi.org/10.1111/jnu.12391

Stephanie, L. (2005). Massachusetts Nurses Association Congress on Health and Safety and Workplace Violence and Abuse Prevention Task Force, *University of*

Massachusetts-Amherst Amherst. Available at: https://www.massnurses.org › file 2004_WV_Research_Survey_results

World Health Organization (WHO). (2003). Workplace violence in the health sector country case studies research instruments. Survey questionnaire. English. Geneva https://www.who.int/violence_injury_prevention/violence/interpersonal/en/WVquestionnaire.pdf

World Health Organization (WHO). (2018). Retrieved from https://www.who.int