

Prevalence and Determinants of Workplace Violence among Physicians and Nurses at Emergency Department in Ministry of Health Hospitals, Jeddah 2019

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Abstract Background: Emergency healthcare workers (HCWs) have a high risk of exposure to violence with negative personal consequences. Violence is an occupational hazard in hospitals. Occupational researches have gradually shifted focus from traditional, visible environmental risk factors, such as physical, chemical, biological exposure or ergonomic problems, to the invisible, psychological harm that maybe present in the workplace. For example, violence in the workplace is a possible cause of stress, and can contribute to a greater morbidity of asthma. In addition, it can lead to a shortage of health care workers and undermine the quality of health services; study in Riyadh showed that the prevalence of violence among HCWs was 47.8%, which was considerably lower than 89.3% in nurses in the EDs in 3 public hospitals in Saudi Arabia. Because of the increased risk factors associated with violence, the US Department of Labor Occupational Safety and Health Administration (OSHA) has made an effort to establish guidelines for the prevention of workplace violence. **Aim of the study:** To explore the prevalence of physical and verbal workplace violence among physicians and nurses in emergency department at Ministry of Health Hospitals, Jeddah 2019. **Method:** Cross-sectional analytical study has been conducted at emergency departments (EDs), Ministry of health hospitals in Jeddah city, during data collection period 2019, the total sample has been (175) physicians and nurses. **Results:** age the highest age was (42.0%) were (30-35) years and the data ranged from (23-50) by mean \pm SD (32.55 \pm 5.331), (61.1%) were females (38.9%)while males. (63.4%) Saudi, the majority of participated nursing were(70.3%). Regarding age, marital status, place of work, Years of experience in ER department results show a significant relation between Physical or Verbal violence and age, marital status, place of work, Years of experience in ER department. **Conclusion:** Workplace violence was prevalent, and verbal abuse was the commonest type among HCWs in emergency departments of hospitals. Workplace violence, a possible cause of job stress, has recently become an important concern in occupational health. Almost half of the ED physicians and nurses experienced one or more WPV incident. Encouragement to report violent incidents and raising awareness among HCWs about violence reporting systems are important strategies to improve workplace safety.

Keywords: prevalence, determinants, emergency department, physicians, nurses, violence, Saudi Arabia

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1. Introduction

Workplace violence, a potential reason for work pressure, has as of late become a crucial worry in related occupational health. The prevalence of Workplace violence fluctuates with the occupational setting, as does the as does the type of violence. For national case studies conducted in Australia, Brazil and Bulgaria as a rule emergency clinics [1,2]. The World Health Organization (WHO) indicated that violence is the purposeful utilization of power that makes dangers to people or gatherings, which may bring about injury, psychological harm, or death [3]. In the studies, the expression

"violence" was frequently utilized interchangeably as "aggression" and will in general happen along a continuum from verbal to physical attacks [4] found that the yearly pervasiveness paces of physical violence (PV) went from 3% to 17%, boisterous attack (VA) 27.4% to 67%, bullying/mobbing (BM), which is characterized as a reshaped, unreasonable behavior directed toward a worker, 10.5% to 23%, sexual harassment (SH) 0.7% to 8%, and racial harassment (RH) 0.8% to 2.7% [2]

Workplace violence has important consequences to the staff within the style of physical injury, emotional distress, and diminished feelings of safety and employment satisfaction. [5] all emergency department occupations, but studies show nurses feel least safe. There are additionally critical results to the business as expenses for

clinical/mental consideration, lost work days, diminished profitability, work turnover, laborer's remuneration, and litigation. [6] Violence could be verbal, physical or mental. Verbal abuse through words, way or tone, leaves the beneficiary inclination actually or professionally humiliated, attacked or devalued. [7]

Psychological violence is outlined as: Intentional use of power, together with threat of physical force against another someone or group. It includes verbal abuse, bullying/mobbing, harassment, and threats. Physical abuse is the utilization of actual power against someone else or group, which brings about physical, sexual or psychological harm. It includes beating, kicking, slapping, cutting, shooting, pushing, gnawing, and squeezing, among others. [3]

There are different expected causes behind why the ED is at especially high danger for violence against healthcare workers. These danger factors incorporate, yet are not restricted to the accompanying: intoxicated patients and visitors, psychiatric and cognitive disorders, open access, high stress environment (for patients and laborers), overcrowding, absence of protection, significant delay times, and deficient security. [8]

However a significant factor that might be neglected is worker training on how to recognize and deal with the potentially violent patient/family. [9] Gates D, et al (2011) disclosed under 50% of staff underwent any training. [10]

Patients may have character and conduct issues, for example, alcoholism and drug abuse while some hospital members of employees have poor angle and approach in relating with patients. [9]

Animosity might be more a lot of serious at the accident and emergency unit.

Policy and methodology tending to workplace violence in the healthcare setting has been recorded in several developed countries [11] however is nearly non-presence in developing. Many violence and harassment against the health professionals go frequently unreported officially. [12,13]

1.2. Rationale

- Globally, workplace violence toward health care workers are an area of concern based on literature review.
- Many of studies done showed nurses followed by physicians are at high risk of violence, and as emergency department is the point of first contact with the hospital wards health care worker, workers at ED have a high risk of workplace violence.
- ED workplace violence needs to be addressed urgently through continued research as up to the researchers knowledge there are few studies on workplace violence among physician and nurses In Jeddah.
- Because of a lack of standardized measurement and reporting mechanisms for violence in ED settings, data are scarce particularly in Saudi Arabia.

1.3. Aim of the Study

To explore the prevalence of physical and verbal workplace violence among physicians and nurses in emergency department at Ministry of Health Hospitals, Jeddah 2019.

1.4. Specific Objectives

1.4.1. Primary Objective

- To estimate the prevalence of physical and verbal workplace violence among physicians and nurses in emergency department at Ministry of Health Hospitals, Jeddah 2019.
- To identify determinants of physical and verbal workplace violence among physicians and nurses in emergency department at Ministry of Health Hospitals, Jeddah 2019.

1.4.2. Secondary Objective

- To assess the outcome of physical and verbal workplace violence among physicians and nurses in emergency department at Ministry of Health Hospitals, Jeddah 2019.

2. Literature Review

The National Institute for Occupational Safety and Health (NIOSH) characterized workplace violence as "act or danger of violence, going verbal abuse to physical assaults directed toward people at work or on the job" [14]

The following is outline of the foremost important studies in Saudi Arabia:

As of late in Riyadh (2017), Alharthy N and her studies group researched the prevalence of workplace violence about emergency medical services laborers. They reasoned that the prevalence of workplace violence was 65%. Concerning the type, verbal abuse was the commonest (61%). Most of the perpetrators were patients' family members relatives (80%) followed by patients themselves (51%). More youthful (<30 years), lower experienced staff (≤ 10 years) had fundamentally higher violent incidents than their partners. Reporting the incidents the occurrences to a more significant position authority was referenced by just 10% of the victims. [8]

At a university hospital, Eastern area (Khobar), Al-Shamlan et al (2017) gauges the prevalence of verbal abuse about nurses. Over a time of one year, the pervasiveness of verbal abuse was 30.7% about nursing. Greater part of them didn't report the incidents; Majority because they believed that reporting would yield no positive results. Male nurses, nurses in the emergency department, and those who indicated that there were procedures for reporting violence in their workplace were more likely to have verbal abuse. [15] This study is limited by the fact that they included all nursing staff not only those working in emergency departments and also it focused on nurses only.

2.1. International Studies

In Bahrain, Rafeea F, et al (2017) completed a cross-sectional at the ED of the Bahrain Defense Force to assess frequency of violence in the workplace. Results uncovered that the most regular frequent reported type of violence in the past 12 months was verbal abuse (78%), trailed by physical abuse (11%) and sexual abuse (3%). most than half (53%) of instances of violence happened

during night shifts, while physical abuse was accounted for to happen during all the shifts.

An extensive extent (40%) of the staff didn't know about the strategies against workplace violence, and 26% of the staff thought about finding employment elsewhere. The most elevated reasons of violence revealed by the staff were long holding up time and patient expectations. [16] However, this research's was directed in one healthcare facility which could influence the generalizability of its outcomes.

In USA, Kowalenko et al (2013) have implemented a longitudinal study to estimate the incidence and distinguish the determinants of violence in ED working staff more than nine months. The normal violence insult affront rate per individual per nine months was 4.15. Physical violence rate was 3.01 per individual. Men executed 52% of physical assaults. There was a significant difference between physicians and nurses and patient. The nurses felt less safe than the physicians. The physicians felt additional assured than the nurses in managing violence situations. The nurses were more possible to possess acute stress than the physicians. [17]

Brunetti and Bambi (2013) completed a survey concerning the greatness of violence affronts towards attendants working in EDs and violence the results of these abuses on casualties and medical services associations. The prevalence rate of verbal abuses among ED nurses varied between 50% and 100% whereas that of physical violence ranged from 16.7% to 72% .

Patients and family members were the primary culprits, trailed by doctors, and, at long last by medical attendants associates. Liquor, drugs misuse, and congestion in EDs were the fundamental encouraging elements for brutal abuses. Under-announcing of affronts came to the 80%, and a few examinations report that medical caretakers consider savagery functions as a typical aspect of their responsibilities. [18]

3. Methodology (Materials and Methods)

3.1. Study Design

Cross-sectional analytical study design has been adopted.

3.2. Study Area

The study has been conducted at emergency departments (EDs), Ministry of health hospitals, Jeddah city, which is the largest city in Makkah Province, the largest seaport on the Red Sea, and with a population of about four million people, (as of 2017 estimation).(26) In Jeddah, there are 10 hospitals belonging to Ministry of health and include emergency departments, where the study has been carried out.

3.3. Study Population

All physicians and nurses working at EDs of MOH hospitals in Jeddah (males and females) have been included in the study.

3.4. Eligibility Criteria

Inclusion criteria:

- All physicians and nurses working at EDs of MOH hospitals in Jeddah .
- Male and female .
- All nationalities.

Exclusion criteria:

- No exclusion criteria.

3.5. Sample Size

The hospitals belonging to MOH are classified into 3 categories, general hospitals (n=5), psychiatric hospitals (n=2) and non-general, non-psychiatric hospitals (n=3). Using Roasoft online sample size calculator and assuming the number of physicians and nurses working at emergency departments, Ministry of health hospitals is 846.

The prevalence of workplace violence at emergency department 50% [8]. At 95% confidence of interval and 5% accepted margin of error, the sample size is 265 physicians and nurses. This figure has been increased by 10% to compensate for none or incomplete response, thus the total sample has been(175) physicians and nurses.

3.6. Sampling Technique

Multistage sample technique.

Stage I: Stratified sampling techniques (selection of the hospitals)

The Ministry of Health hospitals has been divided into strata :general hospitals (n=5), psychiatric hospitals (n=2) and non-general, non-psychiatric hospitals (n=3)

From each stratum one hospital has been selected by simple random technique.

The selected hospitals are: King Abdul-Aziz hospital, Al Aziziyah hospital, Alamal hospital .

Stage II: selection of health workers

The total number has been taken from each selected hospital based on proportion to sample size. Then the health workers) has been divided into two strata. Doctors and nurses.

From each stratum the sample has been calculated based on proportion to size.

3.7. Data Collection Tool

A self-administered questionnaire distributed to all working physicians and nurses in the EDs departments, MOH hospitals chosen for the study. The questionnaire was mainly developed from literature review and the WHO survey questionnaire about violence in health care settings. [19] validity has been taken by 3 consultants.

The first section of questionnaire includes demographic data of the respondents (age, gender, nationality, job title, qualification, marital status and years of experience).

The second section has been consist of questions to estimate physical abuse , how many time ,during which shift, type and place of violence, source of violence, reasons, outcome of violence, reported or not, if reported to whom and if not why .

The third section has been consist of questions to estimate verbal abuse, how many time ,during which shift, type and place of violence, source of violence , reasons , outcome of violence, reported or not, if reported to whom and if not why.

3.8. Data Collection Technique

The researcher has been visit the chosen EDs, MOH hospitals in Jeddah after getting official permissions to conduct the study.

They have been explaining the purpose of the study to the ED head in each setting. Then, the questionnaire has been distributed on physicians and nurses after explaining the purpose of the study and how to fill the questionnaire to them.

3.9. Study Variables

Dependent variable: Insult of workplace violence

Independent variables: Age, gender, nationality, job title, qualification, marital status, years of experience and shift time.

3.10. Data Entry and Analysis

Data has been collected, reviewed, coded and entered into the personal computer. Data has been presented in the form of frequencies and percentages. Chi-squared test (χ^2) has been used for comparing qualitative data. Other statistical tests has been applied whenever appropriate. Statistical significance has been considered at p-value ≤ 0.05 . Analysis has been done using SPSS program version 25.

3.11. Pilot Study

A pilot study on 10% of physicians and nurses in one of the non-selected hospitals has been conducted to test the feasibility of the methodology and wording of the questionnaire as well as to estimate the average time to complete it. A necessary modification has been done, based on pilot study results. Their results has been not included in the final report.

3.12. Ethical Considerations

- Approval from the Research and Ethical Committee Joint Program of Family Medicine was taken.
- Approval from the director of Ministry of health in Jeddah has been obtained.
- All collected data has been kept confidential and will not use except for research purposes.

3.13. Relevance & Expectations

- The researcher expects from the study, present of workplace violence.
- Physicians and Nurses at Emergency Department.
- The researcher expects from the study, low level of reported about the violence.
- The researcher expects to raise the importance of reporting violence.

3.14. Limitations

- The researcher expects there may be limitation in time.

3.15. Budget

- The research will be self-funded.

Table 1. Distribution of Socio-demographic characteristics of the studied population (175)

	N	%
Age		
<30	54	30.9
30-35	74	42.3
>35	47	26.9
Range	23-50	
Mean\pmSD	32.55 \pm 5.331	
Gender		
Female	107	61.1
Male	68	38.9
Nationality		
Non-Saudi	64	36.6
Saudi	111	63.4
Marital status		
Single	43	24.6
Married	98	56.0
Widowed	11	6.3
Divorced	23	13.1
Working at		
Al Aziziyah Maternity and Children hospital	50	28.6
King Abdulaziz Hospital	103	58.9
Alamal Hospital	22	12.6
Job title		
Doctor	52	29.7
Nurse	123	70.3
Your qualification is		
Diploma	22	12.6
Bachelor	85	48.6
Resident	36	20.6
Specialist	13	7.4
Master	16	9.1
Consultant	3	1.7
Years of experience in ER department		
Under 1 year	39	22.3
1 - 5 years	91	52.0
6 - 10 years	39	22.3
11 - 15 years	4	2.3
16 - 20 years	2	1.1

Regarding the age the highest age was (42.0%) were (30-35) years and the data ranged from (23-50) by mean \pm SD(32.55 \pm 5.331), (61.1%)were females (38.9%) while males. (63.4%) Saudi while (36.6%) non-Saudi. Approximately more than half of participant married (56.0%) and (24.6%) were single. The majority of the participated had working at King Abdul-Aziz Hospital were (58.9%), followed Al Aziziyah Maternity and Children hospital were (28.6%) but the Alamal Hospital were (12.6%). the majority of participated nursing were (70.3%), followed by doctor were (29.7%). Regarding the qualification the majority of participated heave Bachelor were (48.6%) followed by Resident (20.6%), the participated experience in ER department from 1-5 years were (52.0%) while duration from 6-10 years and under 1 year were (22.3%).

Table 2. Distribution of the characteristic of experienced and type of workplace violence

	N	%
Have you ever experienced physical or verbal violence?		
Always	26	14.9
Sometimes	88	50.3
Rarely	42	24.0
Never	19	10.9
Which type of violence		
Physical	2	1.8
Verbal	92	80.7
Both	20	17.5

More than half of the participants were sometimes to physical or verbal violence and their percentage was (50.3%). Followed by rarely then always their percentage was respectively (24.0%, 14.9%). Regarding the type of violence most of violence were verbal their percentage was (80.7%). Followed by both physical and verbal was (17.5%).

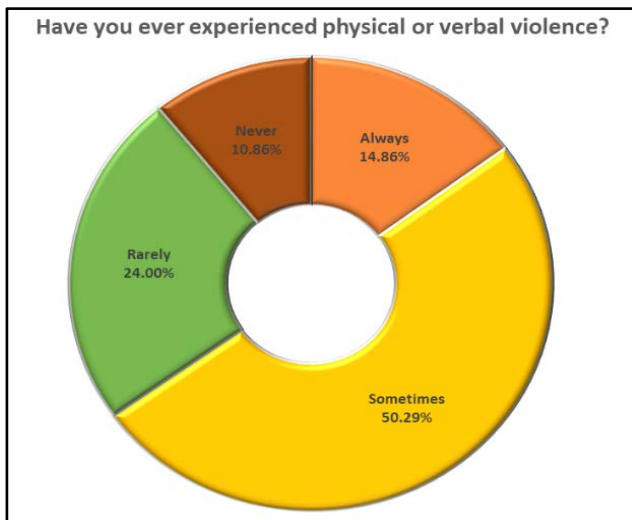


Figure 1. Distribution of the characteristic of experienced of workplace violence

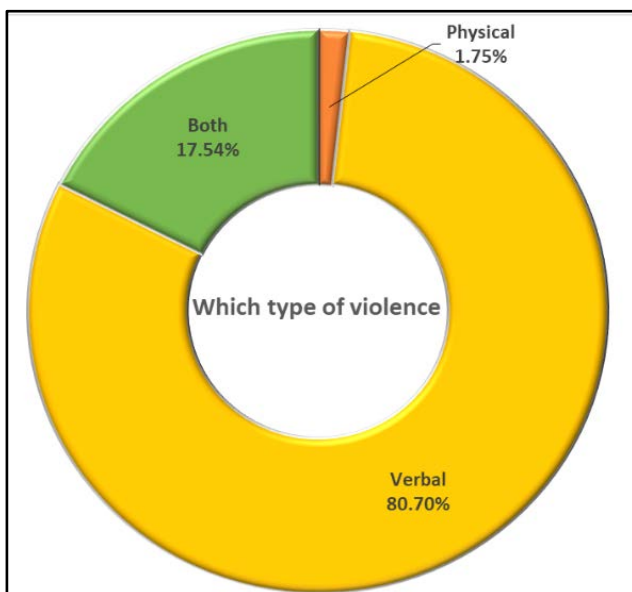


Figure 2. Distribution of the type of workplace violence

Table 3. Description the estimate physical of the workplace violence (How many time, during which shift, type and place of violence, source of violence, reasons, outcome of violence, reported or not if reported to whom and if not why)

	N	%
How many times did you face physical violence in the last 12 months		
Once	7	31.8
2-4 times	5	22.7
5-10 times	1	4.5
Several times a month	6	27.3
About once a week	1	4.5
Daily	2	9.1
Where did the physical violence occurred		
Inside your workplace	16	72.7
Both	6	27.3
The last time you were physically abused in your place of work, who physically abused you?		
Relative	8	36.4
Patient	14	63.6
The gender of the abuser		
Female	5	22.7
Male	17	77.3
Which time did it happen?		
04.00 pm - 12.00 Am	12	54.5
12.00 Am - 08.00 Am	10	45.5
Reasons of physical violence		
Excessive waiting time	10	43.5
shortage of staff	8	34.8
Unmet patient demands	5	21.7
poor organization of work	5	21.7
overcrowding	6	26.1
lack of security	13	56.5
Patient health condition	5	21.7
lack of patient or relative education	6	26.1
Outcome of physical violence		
minor or major physical injury	8	34.8
physical disability	3	13.0
Psycho-social trauma	13	56.5
reduces job performance	7	30.4
quitting of job	2	8.7
Did you report the event?		
No	11	50
Yes	11	50
To whom reported		
direct supervisor	9	81.8
head of department	1	9.1
hospital management	1	9.1
Any action taken		
No	4	36.4
Yes	7	63.6
If no, why not reported		
It was not important	3	27.3
Felt ashamed	1	9.1
felt guilty	2	18.2
Afraid of negative consequences	1	9.1
useless	2	18.2
Didn't know who to report	2	18.2

Regarding the how many times did you face physical violence in the last 12 months participants answer once times were (31.8%) follow by several times a month then 2-4 times were respectively (27.3%, 22.7%) during the past 12 months, regarding Where did the physical violence occurred, the most of violence inside your workplace occurred were(72.7%) but both were (27.3). Most of the violence were patients (63.6%), followed by relatives of patients (36.4%), the gender of the abuser both female and male the most of them male were (77.3), followed by female were (22.7%), most of the violent incidents happened in the 04.00 pm - 12.00 Am were (54.5%) but the number in the 12.00 Am - 08.00 Am were (45.5%).

Regarding the reasons of physical violence the most of the reasons were lack of security were (56.5%), followed by excessive waiting time were (43.5%) then shortage of staff were (34.8%) then lack of patient or relative education, overcrowding, Unmet patient demands, poor organization of work, Patient health condition were respectively (26.1%, 26.1%, 21.7%, 21.7%, 21.7%). The Outcome of physical violence were: psycho-social trauma (56.5%), minor or major physical injury(34.8%), reduces job performance (30.4%), regarding you report

the event the answer was the same were (50% Yes and 50% No), most of the reported to the direct supervisor were (81.8%), but to the head of department and hospital management were (9.1%), regarding the action taken most of participant answer yes action was taken were (63.6%) but no action taken were (36.4%). Why not reported about the violence incident one of the most important reasons It was not important were (27.3%), felt guilty, useless, Didn't know who to report were respectively (18.2%).

Table 4. Description the estimate verbally of the workplace violence (How many time, during which shift, type and place of violence, source of violence, reasons, outcome of violence, reported or not if reported to whom and if not why)

	N	%
How often have you been verbally abused in the last 12 months?		
All the time	15	13.4
Sometimes	59	52.7
Once	38	33.9
Where did the violence occurred?		
Inside your workplace	103	92.0
Outside your workplace	1	0.9
Both	8	7.1
The last time you were verbally abused in your place of work, who verbally abused you?		
Relative	61	54.5
Patient	37	33.0
Staff member	14	12.5
The gender of the abuser was		
Female	43	38.4
Male	69	61.6
Which time did it happen?		
08.00 Am - 04.00pm	20	17.9
04.00 pm - 12.00 Am	53	47.3
12.00 Am - 08.00 Am	39	34.8
Type of verbal abuse		
Threaten to physical harm	28	25.0
threaten to kill	2	1.8
curse	22	19.6
verbal insult toward you	45	40.2
verbal insult toward your service	56	50.0
verbal insult to institution	41	36.6
The reasons for verbal violence		
Excessive waiting time	39	34.8
shortage of staff	47	42.0
Unmet patient demands	22	19.6
poor organization of work	16	14.3
overcrowding	43	38.4
lack of security	36	32.1
Patient health condition	18	16.1
lack of patient or relative education	14	12.5
The outcome of verbal violence		
physical disability	0	0.0
Psycho-social trauma	85	75.9
reduces job performance	35	31.3
quitting of job	4	3.6
Did you report the event?		
No	77	68.8
Yes	35	31.3
If yes, to whom reported		
direct supervisor	22	62.9
head of department	8	22.9
hospital management	5	14.3
Any action taken		
No	18	51.4
Yes	17	48.6
If no, why not reported		
It was not important	20	26.0
Felt ashamed	2	2.6
Felt guilty	9	11.7
Afraid of negative consequences	17	22.1
useless	23	29.9
Didn't know who to report	17	22.1

More than half of the participants were sometimes often have you been verbally abused in the last 12 months and their percentage were (52.7%). Followed by once times then all the time percentage were respectively (33.9%, 13.4%), regarding Where did the verbally violence occurred, the most of inside your workplace occurred were (92.0%) but both were (7.1%). Most of the verbally abused were relative of the patients (54.5%), followed by patient (33.0%), the staff member were (12.5%), the gender of the abuser the most of them male were (61.6%), followed by female were (38.4%), most of the violent incidents happened in the 04.00 pm - 12.00 Am were (47.3%) but the number in the 12.00 Am - 08.00 Am were (34.8%).

Regarding the Type of verbal abuse the most of the verbal insult toward your service were (50.0%), followed by verbal insult toward you were (40.2%) then verbal insult to institution were (36.6%) then Threaten to physical harm, curse, threaten to kill were respectively (25.0%, 19.6%, 1.8%), regarding the reasons for verbal

violence the most of the reasons were shortage of staff were (42.0%), followed by overcrowding were (38.4%) then Excessive waiting time were (34.8%) then lack of security, Unmet patient demands, Patient health condition, poor organization of work, lack of patient or relative education were respectively (32.1%, 19.6%, 16.1%, 14.3%, 12.5%). The Outcome of verbal violence most of the Psycho-social trauma were(75.9%), reduces job performance were(31.3%), regarding you report the event the most answer was NO were (68.8%) and Yes were (31.3%), most of the reported to the direct supervisor were (62.9%), but to the head of department and hospital management were respectively (22.9%, 14.3%), regarding the action taken most of participant answer NO action was taken were (51.4%) but Yes action taken were (48.6%). Why not reported about the violence incident one of the most useless were (29.9%), It was not important, afraid of negative consequences, Didn't know who to report, felt guilty were respectively (26.0%, 22.1%, 22.1%, 11.7%).

Table 5. Description of the relation between Socio-demographic data and workplace physical violence

		Physical				Total		Chi-square	
		NO (n=153)		Yes (n=22)					
		N	%	N	%	N	%	X ²	P-value
Age	<30	52	34.0%	2	9.1%	54	30.9%	8.781	0.012*
	30-35	59	38.6%	15	68.2%	74	42.3%		
	>35	42	27.5%	5	22.7%	47	26.9%		
Gender	Female	102	66.7%	5	22.7%	107	61.1%	15.481	<0.001*
	Male	51	33.3%	17	77.3%	68	38.9%		
Nationality	Non-Saudi	61	39.9%	3	13.6%	64	36.6%	6.519	0.011*
	Saudi	92	60.1%	19	86.4%	111	63.4%		
Marital status	Single	40	26.1%	3	13.6%	43	24.6%	5.456	0.141
	Married	83	54.2%	15	68.2%	98	56.0%		
	Widowed	11	7.2%	0	0.0%	11	6.3%		
	Divorced	19	12.4%	4	18.2%	23	13.1%		
Working at	Al Aziziyah Maternity and Children Hospital	48	31.4%	2	9.1%	50	28.6%	19.605	<0.001*
	King Abdulaziz Hospital	93	60.8%	10	45.5%	103	58.9%		
	Alamal Hospital	12	7.8%	10	45.5%	22	12.6%		
Job title	Doctor	44	28.8%	8	36.4%	52	29.7%	0.516	0.473
	Nurse	109	71.2%	14	63.6%	123	70.3%		
Level of education	Diploma	16	10.5%	6	27.3%	22	12.6%	1.147	0.284
	Bachelor	78	51.0%	7	31.8%	85	48.6%		
	Resident	30	19.6%	6	27.3%	36	20.6%		
	Specialist	11	7.2%	2	9.1%	13	7.4%		
	Master	15	9.8%	1	4.5%	16	9.1%		
	Consultant	3	2.0%	0	0.0%	3	1.7%		
Years of experience in ER department	Under 1 year	35	22.9%	4	18.2%	39	22.3%	1.478	0.831
	1 - 5 years	80	52.3%	11	50.0%	91	52.0%		
	6 - 10 years	33	21.6%	6	27.3%	39	22.3%		
	11 - 15 years	3	2.0%	1	4.5%	4	2.3%		
	16 - 20 years	2	1.3%	0	0.0%	2	1.1%		

Regarding age results show a significant relation between Physical violence and age were X^2 8.781 and P-value=0.012, increase (in the age 30-35 answer Yes were 68.2%). Gender was significantly associated with Physical violence, with violence being more frequent for men(77.3%) than Female, show a significant relation were P-value < 0.001 and X^2 15.481. Nationality was significantly associated with Physical violence were X^2 6.519 and P-value=0.011 and was more frequent for

Saudis answer yes (86.4%) than non-Saudis (60.3%), regarding place of work results show a significant relation between Physical violence and working place were X^2 19.605 and P-value <0.001 increase (in the Alamal Hospital answer Yes were 45.5% %, but in King Abdul-Aziz hospital answer NO 60.8% were).

No significant relation between Physical violence and marital status, Job title, Level of education, Years of experience in ER department.

Table 6. Description of the relation between Socio-demographic data and workplace Verbal violence

		Verbal				Total		Chi-sqaure	
		NO (n=63)		Yes (n=112)					
		N	%	N	%	N	%	X ²	P-value
Age	<30	31	49.2%	23	20.5%	54	30.9%	23.181	<0.001*
	30-35	26	41.3%	48	42.9%	74	42.3%		
	>35	6	9.5%	41	36.6%	47	26.9%		
Gender	Female	39	61.9%	68	60.7%	107	61.1%	0.024	0.877
	Male	24	38.1%	44	39.3%	68	38.9%		
Nationality	Non-Saudi	22	34.9%	42	37.5%	64	36.6%	0.116	0.733
	Saudi	41	65.1%	70	62.5%	111	63.4%		
Marital status	Single	24	38.1%	19	17.0%	43	24.6%	12.528	0.006*
	Married	30	47.6%	68	60.7%	98	56.0%		
	Widowed	5	7.9%	6	5.4%	11	6.3%		
	Divorced	4	6.3%	19	17.0%	23	13.1%		
Working at	Al Aziziyah Maternity and Children Hospital	16	25.4%	34	30.4%	50	28.6%	3.164	0.206
	King Abdulaziz Hospital	42	66.7%	61	54.5%	103	58.9%		
	Alamal Hospital	5	7.9%	17	15.2%	22	12.6%		
Job title	Doctor	16	25.4%	36	32.1%	52	29.7%	0.891	0.345
	Nurse	47	74.6%	76	67.9%	123	70.3%		
Level of education	Diploma	8	12.7%	14	12.5%	22	12.6%	0.864	0.353
	Bachelor	33	52.4%	52	46.4%	85	48.6%		
	Resident	13	20.6%	23	20.5%	36	20.6%		
	Specialist	3	4.8%	10	8.9%	13	7.4%		
	Master	6	9.5%	10	8.9%	16	9.1%		
	Consultant	0	0.0%	3	2.7%	3	1.7%		
Years of experience in ER department	Under 1 year	29	46.0%	10	8.9%	39	22.3%	40.093	<0.001*
	1 - 5 years	29	46.0%	62	55.4%	91	52.0%		
	6 - 10 years	4	6.3%	35	31.3%	39	22.3%		
	11 - 15 years	1	1.6%	3	2.7%	4	2.3%		
	16 - 20 years	0	0.0%	2	1.8%	2	1.1%		

Regarding age results show a significant relation between verbal violence and age were X^2 23.181 and P-value <0.001, increase (in the age 30-35 answer Yes were 42.9%). Gender was no significantly associated with verbal violence, with violence being more frequent for female(61.9%) than male, show no significant relation were P-value 0.877 and X^2 0.024.

Nationality was no significantly associated with verbal violence were X^2 0.116 and P-value=0.733 and was more frequent for Saudis answer NO (65.1%) than non-Saudis

(34.9%), Marital status was a significantly associated with verbal violence were X^2 12.528 and P-value=0.006 and was more frequent for married answer yes (60.7%) than single, widowed, divorced.

No significant relation between verbal violence and working place, Job title, Level of education. Regarding Years of experience in ER department results show a significant relation between verbal violence and years of experience in ER department were X^2 40.093 and P-value <0.001 increase (in the 1-5 years Yes were 55.4%).

Table 7. Description of the relation between Socio-demographic data and workplace Physical or Verbal violence

		Physical or Verbal violence				Total		Chi-square	
		No (n=61)		Yes (n=114)					
		N	%	N	%	N	%	X ²	P-value
Age	<30	31	50.8%	23	20.2%	54	30.9%	23.472	<0.001*
	30-35	24	39.3%	50	43.9%	74	42.3%		
	>35	6	9.8%	41	36.0%	47	26.9%		
Gender	Female	38	62.3%	69	60.5%	107	61.1%	0.052	0.819
	Male	23	37.7%	45	39.5%	68	38.9%		
Nationality	Non-Saudi	22	36.1%	42	36.8%	64	36.6%	0.010	0.919
	Saudi	39	63.9%	72	63.2%	111	63.4%		
Marital status	Single	24	39.3%	19	16.7%	43	24.6%	13.595	0.004*
	Married	28	45.9%	70	61.4%	98	56.0%		
	Widowed	5	8.2%	6	5.3%	11	6.3%		
	Divorced	4	6.6%	19	16.7%	23	13.1%		
Working at	Al Aziziyah Maternity and Children Hospital	16	26.2%	34	29.8%	50	28.6%	6.819	0.033*
	King Abdulaziz Hospital	42	68.9%	61	53.5%	103	58.9%		
	Alamal Hospital	3	4.9%	19	16.7%	22	12.6%		
Job title	Doctor	16	26.2%	36	31.6%	52	29.7%	0.551	0.458
	Nurse	45	73.8%	78	68.4%	123	70.3%		
Level of education	Diploma	8	13.1%	14	12.3%	22	12.6%	3.849	0.571
	Bachelor	32	52.5%	53	46.5%	85	48.6%		
	Resident	13	21.3%	23	20.2%	36	20.6%		
	Specialist	3	4.9%	10	8.8%	13	7.4%		
	Master	5	8.2%	11	9.6%	16	9.1%		
	Consultant	0	0.0%	3	2.6%	3	1.7%		
Years of experience in ER department	Under 1 year	28	45.9%	11	9.6%	39	22.3%	37.265	<0.001*
	1 - 5 years	28	45.9%	63	55.3%	91	52.0%		
	6 - 10 years	4	6.6%	35	30.7%	39	22.3%		
	11 - 15 years	1	1.6%	3	2.6%	4	2.3%		
	16 - 20 years	0	0.0%	2	1.8%	2	1.1%		

Regarding age results show a significant relation between Physical or Verbal violence and age were X^2 23.472 and P-value <0.001, increase (in the age 30-35 answer Yes were 43.9%). Marital status was a significantly associated between Physical or Verbal violence were X^2 13.595 and P-value=0.004 and was more frequent for married answer yes (61.4%) than single, widowed, divorced, regarding place of work results show a significant relation between Physical or Verbal violence and working place were X^2 6.819 and P-value <0.003 increase (in the King Abdul-Aziz hospital answer Yes were 53.5% , but in King Abdul-Aziz hospital answer NO 68.9% were), regarding Years of experience in ER department results show a significant relation between Physical or Verbal violence and years of experience in ER department were X^2 37.265 and P-value <0.001 increase (in the 1-5 years Yes were 55.3%). No significant relation between Physical or Verbal violence and gender, nationality, job title, Level of education.

4. Discussion

Workplace Violence among Physicians and Nurses at Emergency Department is a serious phenomenon that affects the patient experience as well as the quality of practice for healthcare providers. The aim of this study was To explore the prevalence of physical and verbal workplace violence among physicians and nurses in emergency department at Ministry of Health Hospitals, Jeddah 2019. Our study showed that the age the highest age was (42.0%) were (30-35) years, (61.1%) were males. (63.4%) Saudi, married (56.0%).The majority of the participated had working at King Abdul-Aziz Hospital were (58.9%), the majority of participated nursing were (70.3%), heave Bachelor were (48.6%), the participated experience in ER department from 1-5 years (see Table 1).

The study showed that the prevalence of Workplace Violence was physical or verbal violence (50.3%) which was considerably lower than verbal violence more the violence verbal there was (80.7%) in the EDs in Ministry of Health Hospitals in, Jeddah at Saudi Arabia (see Table 2). However, result was closer to the prevalence of 57.5% in HCWs in 2 government hospitals and 10 primary healthcare centres in Saudi Arabia who experienced at least 1 violence incident [20] and similar to the prevalence of 45.6% among HCWs in 12 family medical centres in Riyadh [21]. Also, the results of our study are similar to a study that was conducted in KSA the findings provide evidence of a relatively high prevalence of WPV (physical, verbal, confrontations outside the workplace, or stalking), in the past 12 months against physicians and nurses working in 37 EDs (45% in total, 47% for the physician group, and 41% for the nurse group) in the three provinces in Saudi Arabia. [22]

Most studies have shown that psychological violence (especially verbal abuse) was higher than physical violence. [23,24] The number of incidents of verbal abuse was approximately 5-fold that of the number of incidents of physical violence among nurses in several EDs in Jordan

[25], which can be explained by the stress of acute illness experienced by patients and/or families at the time of the violent act. In the current study, verbal abuse in the last 12 months formed 52.7% of the violent incidents, while physical violence 27.3% Several times a month but once 31.8%. Similarly, a study in Macau revealed incidents of verbal abuse (53.4%) [26]. Verbal abuse was the most common form of violence because it was easy to perpetuate and could not be controlled by any sort of security measures. The majority (47.3%) 04.00 pm - 12.00 Am of verbal abuse incidents occurred in the morning, while physical violence the majority (54.5%) from 04.00 pm - 12.00 Am. Most of the Inside workplace violence (verbal and physical) was (92.0%, 72.7) and Relative were a major source (54.5%) of incidents in the Verbal abuse while physical violence the main source was the patient himself were(54.5%), which was similar to some previous studies [22,27,24], but contrary to others [28,29], in which the companions of the patients and patients relative were the main source of incidents. health care workers in emergency departments who experienced violence reported that it was caused by absence of action (51.4%), shortage of staff was the most common cause of verbal violence (42%), while lack of security were (56.5%) the most common cause of physical violence. as supported by management in the workplaces, following the rule "the patient is always right". Workplace violence had negative consequences on Physicians and Nurses at Emergency Department, which is supported by previous studies [11,21,28] (see Table 3, Table 4)

Relation between Socio-demographic data and workplace Verbal violence and Physical or Verbal violence are shown the age was significantly associated with verbal violence, and also with Physical or Verbal violence being more frequent for age (the age 30-35%)were respectively (P-value <0.001 and X^2 23.181 and X^2 23.472). Algwai et al. investigated the age as revealing that an age no significantly associated with verbal violence [29]. This is not consistent with this study, which found that age was not associated with an increased risk of violence against the ED healthcare provider.

Verbal and Physical or Verbal violence was significantly associated with married were respectively (60.7%, 61.4%) more than unmarried (were X^2 12.528 and P-value=0.006 and X^2 13.595 and P-value=0.004). which is consistent with a prospective cross-sectional survey reporting a similar prevalence of violence against married more than unmarried participants (79% vs. 75%) [8]. also show years of experience in ER department results show a significant relation between verbal violence and years of experience in ER department were X^2 40.093 and P-value <0.001 increase (in the 1-5 years Yes were 55.4%), show in our study also a significant relation between Physical or Verbal violence and years of experience in ER department were X^2 37.265 and P-value <0.001 increase (in the 1-5 years Yes were 55.3%).

In our study show No significant relation between verbal violence and working place, Job title, Level of education. alsoe No significant relation between Physical or Verbal violence and gender, nationality, job title, Level of education (see Table 5, Table 6, Table 7). Hogarth et al. noted that the solution to decrease workplace violence was encouragement by management to report violent incidents and to develop preventative measures. [30]

5. Conclusions

Managing the consequences of violence occurring external to the ED has always been a major part of the ED staff workload. However, violence is also committed in the cubicles and hallways of the ED presenting a risk to ED staff and their well-being.

Physical or Verbal violence was the commonest type. Creation of an environment that encourages HCWs to report violent incidents and raising awareness of HCWs about violence reporting systems in EDs are recommended. Ensuring the reporting of all violent incidents and follow-up of the appropriate actions are essential. Almost half of the ED physicians and nurses experienced one or more WPV incident during a 12-month period. Workplace Physical or Verbal violence remains a significant concern in healthcare settings in KSA.

Supporting programmers to help and provide HCWs with the knowledge to manage and control incidents are needed, should be prioritized to improve the working environment, the safety of healthcare providers, and the quality of practice in EDs.

Physicians and nurses who are at disproportionately high risk of WPV should strengthen their stress-coping strategies and foster their level of resilience to minimize the negative psychological consequences of violence that jeopardize their psychological and mental wellbeing.

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