

## Workplace Violence Against Doctors and Nurses in Public Healthcare Services in AL- Majmaah City, Saudi Arabia

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### Abstract

Workplace violence raises a significant concern in healthcare settings, with healthcare workers being at risk of physical and emotional harms. This phenomenon is, however, rarely investigated in Al-Majmaah city, Saudi Arabia. This study sought to estimate the prevalence of workplace violence against doctors and nurses working in public healthcare facilities in Al-Majmaah city. A cross-sectional study was conducted in public health facilities in Al-Majmaah city, Saudi Arabia, from June to August 2022. Healthcare workers were recruited to participate in a self-administered online questionnaire, which collected data on sociodemographic information, workplace violence exposure, and attitudes towards violence. Of the total participants, 41.9% reported experiencing workplace violence. The majority of incidents occurred in health institutions, with 92.3% involving verbal abuse, 2.6% physical violence, or both. Patients' families were responsible for 48.7% of the violence, followed by the patients themselves (43.6%). In response to violence, healthcare workers reported various coping mechanisms, including pretending the incident never happened (23.1%), attempting to stop the perpetrator (23.1%), and protecting themselves (18%). Regarding system satisfaction, 14% remained indifferent, 16% were dissatisfied, and 2% were satisfied. Furthermore, 15.1% of participants experienced disturbed thoughts or images of the attack, 14% avoided thinking or talking about incidents, and 11.8% were unaffected. Workplace violence is a significant problem affecting healthcare workers in public healthcare facilities in Al-Majmaah city, Saudi Arabia. The high prevalence of verbal abuse and physical violence highlights the need for effective prevention and intervention strategies to ensure a safe working environment for healthcare workers.

**Keywords:** Al-Majmaah city, healthcare workers, public healthcare facilities, Saudi Arabia, workplace violence

### Introduction

Workplace violence has been an increasing threat in healthcare settings across the globe with serious psychological, physical, and social repercussions for both healthcare providers and the health system.<sup>1-3</sup> Most of the workplace violence (WPV), according to the Occupational Safety and Health Act (OSHA), occurs in

environments connected to healthcare services.<sup>4</sup> World health organization (WHO) defines violence: "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation".<sup>5</sup> Moreover, it psychologically and physically impacts the healthcare providers. As a result, low self-esteem, increased absenteeism, low productivity, may result in medical errors and interfere with the quality of care. It may jeopardize the efficiency and enthusiasm of healthcare workers. Thus, it

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has the potential to decline healthcare quality and expose health care workers to vulnerability and, as a result, impact the health sector's financial status.<sup>2</sup> It financially affects the facility through worker compensation and managing staff shortages.

As stated by WHO, violence includes physical violence such as beating and psychological violence such as verbal abuse and bullying.<sup>5</sup> Workplace violence could be one of these four types: Type I incidents usually occur with a criminal motive, such as robbery, by the perpetrator who has no professional relationship with the healthcare providers or health care system which often can go to the extent of murder. Type II occurs when a patient or visitor poses as the attacker; this situation can occur in any department, more specifically in a mental health care facility.

Type III is related to interpersonal or work conflicts and involves a workfellow as a perpetrator. Type IV is a perpetrator who is not connected to the workplace professionally but has a personal relationship with the staff member outside of it.<sup>1,4</sup> The incidence of workplace violence varies depending on the department; emergency, geriatric, and mental health departments are susceptible to violence, according to OSHA.<sup>4</sup>

Factors that increase the probability of violence vary depending on the workplace, such as presence of individuals with a track record of aggression or drug abuse, working alone without others assistance, transferring patients, working in dimly lit corridors, improper communication, a lack of training programs and policies to deal with violence, a lack of security, or a long wait time in the workplace.<sup>2,6</sup> The highest incidence of workplace violence injuries occurs in the healthcare and social service domains, wherein employees are five times more likely to sustain an injury than other workers.<sup>7</sup> Furthermore, it is believed that workplace violence in the health sector accounts for about a quarter of all workplace violence.<sup>8</sup> The World Health Organization (WHO) states the figure is estimated to be between 8% and 38% of healthcare providers who suffer physical violence at some point in their professional lives. At the same time, many more suffer from or are threatened with verbal violence.<sup>2,5</sup>

Healthcare workers who are involved in patient care, in particular paramedics, emergency department staff, and nurses, are the most vulnerable.<sup>2,5,9</sup> According to ILO, ICN, WHO and PSI joint program, nurses are in jeopardy

of workplace violence than other healthcare providers.<sup>5,10</sup> Doctors come as the second highest group facing workplace violence after nurses. Healthcare workers respond to violence at the workplace by remaining silent about the incident; that may lead to an underestimation of the magnitude of issue as some may believe it is a part of their job, they must embrace it and refrain from reporting any kind of violence they encounter.<sup>6</sup>

Most studies have shown that verbal violence is the most common form of workplace violence, followed by physical violence. A study conducted in China found that nurses working rotating shifts, in emergency departments, and in pediatric wards are at a significantly higher risk of experiencing workplace violence. Among these, emergency departments are particularly vulnerable. Much of the existing research has focused primarily on the prevalence of workplace violence among healthcare providers, often emphasizing a single profession—typically nurses. Despite the fact that workplace violence among healthcare workers in Saudi Arabia is not uncommon, there is a notable lack of comprehensive research in this area.<sup>6</sup>

Given this paucity of research, particularly in Al-Majmaah, Saudi Arabia, the present study aims to assess the level of awareness, preparedness, and responsiveness of doctors and nurses toward workplace violence. Specifically, it seeks to determine the prevalence and types of workplace violence encountered by these professionals in healthcare facilities in Al-Majmaah City, as well as to explore potential associations with sociodemographic factors..

## Methods

A descriptive cross-sectional study was conducted between June and August 2022 at public healthcare facilities in Al-Majmaah City, Saudi Arabia. The study encompassed all public primary healthcare centers (PHCs) in the city that are affiliated with King Khaled Hospital (KKH), including Faisaliah PHC, Faiha'a PHC, Yarmouk PHC, Mata'ar PHC, and Majmaah PHC. Private healthcare facilities and public health centers not affiliated with King Khaled Hospital were excluded from the study.

The study included male and female doctors and nurses, both Saudi and non-Saudi, aged 24 years and above, who were employed at public healthcare facilities. Medical students, interns, and other categories of healthcare workers were

excluded from the study.

The sample size was calculated using the formula:  $n = (z^2 \times p \times q) / d^2$ , where n is the sample size, z is the Standard Error taken as 1.96, d is taken as 0.05, and p is the prevalence in this study considered according to a previous study conducted in Macau which reported 57.2% of doctors and nurses were victims of violence. Based on this formula, the calculated sample size was 93 participants.

Data were collected using a self-administered online questionnaire consisting of 18 items. The questionnaire included sections on sociodemographic characteristics, exposure to workplace violence (type and duration), factors influencing the reporting of violence, and awareness of institutional policies addressing workplace violence. Participants were provided with a brief explanation of the study's purpose, and written informed consent was obtained from all respondents. Confidentiality and anonymity were assured. Prior to data collection, a pilot study was conducted to assess the validity and reliability of the questionnaire, resulting in a Cronbach's alpha of 0.7, indicating acceptable internal consistency.

The questionnaire consisted of 18 questions that collected sociodemographic information, as well as data on workplace violence exposure, factors related to violence reporting, and policies against violence. These constructs were measured using a combination of question types, including categorical, ordinal, and nominal questions.

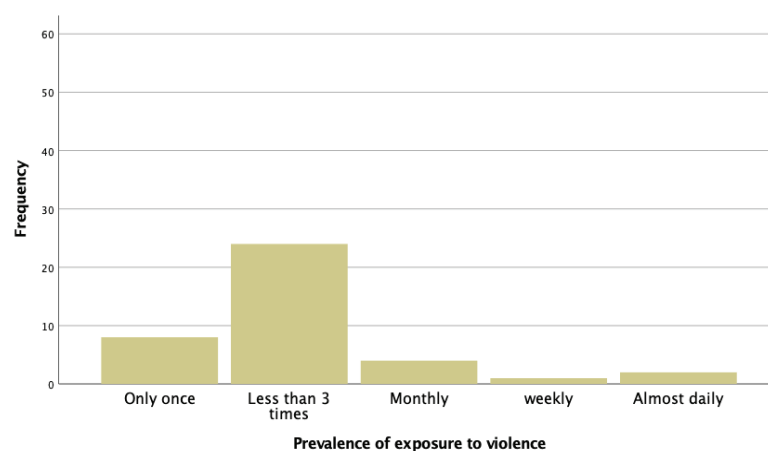
To ensure the reproducibility of the data

analysis, the collected data underwent a rigorous transposition process. First, the data was cleaned to address any errors, inconsistencies, or missing values. Next, the questionnaire responses were coded into numerical or categorical variables to facilitate analysis. For instance, categorical variables such as gender were coded as 0 and 1, respectively. The data was then transformed into a suitable format for analysis, with ordinal variables such as the duration of exposure to workplace violence converted into numerical variables.

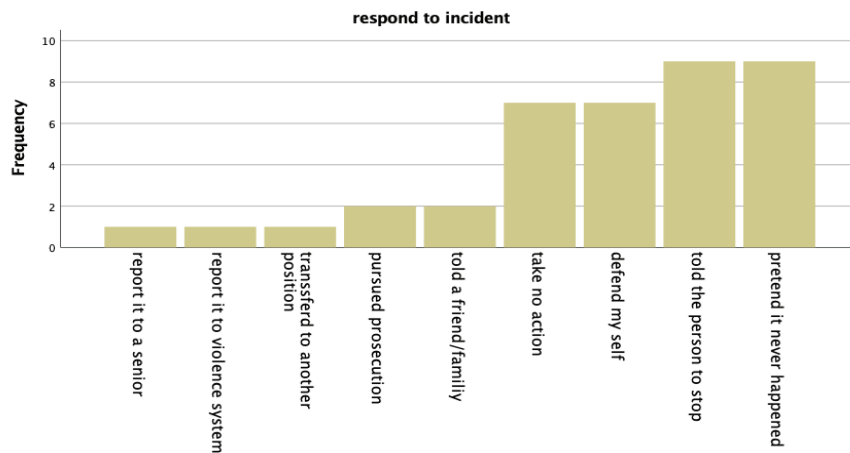
The present study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki and was approved by the Institutional Review Board of the Ministry of Health (IRB No: 21-IOE). Data were analyzed using IBM SPSS Statistics, version 25. Descriptive statistics, including frequencies and percentages, were used to summarize the data. The Pearson Chi-square test was applied to assess associations between categorical variables. A p-value of <0.05 was considered statistically significant.

## Results

A total of 93 healthcare workers participated in the study. Of these, 54% were male and 46.2% were female. All participants were aged 24 years or older, with the majority (26.9%) falling within the 31–35 age group. Nearly half of the respondents were married (48.8%), while 15.1% were single, and 2.2% were divorced. The majority of participants (75.3%) were of Saudi



**Figure 1** Prevalence of Exposure to Workplace Violence Among Healthcare Workers in Al-Majmaah, Saudi Arabia



**Figure 2 Summary of Participants' Responses to Incidents of Workplace Violence**

nationality. Most were employed at primary healthcare centers (PHCs) (46.5%). Among those working at King Khaled Hospital, 11.8% were from the emergency department, followed by the operating room (10.8%) and specialized units (8.6%). From the King Khalid Hospital 11.8% were from Emergency department followed by staff from Operating Room (10.8%), then specialized unit (8.6%). In terms of work experience, 31.2% had 6 to 10 years of experience, and 23.7% had 11 to 15 years. More than half of the participants (51.6%) reported working in shift.

In this study, 41.9% of healthcare workers reported being exposed to workplace violence. Almost all incidents occurred within healthcare institutions, with only one respondent indicating that the violence took place at a patient's home. About 26% reported experiencing violence fewer than three times, while 8.6% had experienced it only once in their careers. Additionally, 4.3%

reported monthly exposure to violence, and 2.2% indicated they faced violence almost daily (Figure 1).

Verbal abuse was the most common form of workplace violence, reported by 92.3% of affected participants. Physical assault alone was experienced by 2.6%, and 2.6% reported exposure to both physical and verbal violence. Another 2.6% reported other unspecified forms. Regarding the source of violence, 48.7% identified patients' relatives as the perpetrators, followed by the patients themselves (43.6%). A smaller proportion reported experiencing violence from staff members (2.2%) or supervisors (1.1%).

Reactions towards violence by the participants varied most of them tried to pretend it never happened (23.1%) while others stated they responded to the incidents by stopping the preparator from doing the violence (23.1%). While 18% stated they tried to defend themselves in response to violence and 17.9% stated they ignored the incident and took no action. Few of them reported the incident to their seniors, pursued prosecution, reported to violence system and got transferred (Figure 2).

Those who did not respond to violence (37.6%) stated various reasons for not reacting against violence. Most of them stated that it was useless to report the violence (48.7%) followed by 25.6% who revealed it was not important to report and 7.7% of them did not know where to report the violent incidents least they were afraid of negative consequences (2.6%) (Table 1). Regarding the satisfaction of handling of the violent incidents, 14% of the participants remained neutral, while 16% were not satisfied

**Table 1 Reasons for Not Reporting the Violence**

Reasons for Not Reporting About the Violence	Frequency	Percentage
It was not important	10	25.6
Felt ashamed	2	5.1
Useless	19	48.7
Afraid of negative consequences	1	2.6
Did not know who to report	3	7.7

**Table 2 Participants' attitudes Toward Violent incidents in the Workplace**

Questions	Frequency (Percentage)				
	Not at all	A little bit	Moderately	Quite a bit	Extremely
Repeated, disturbing memories, thoughts, or images of the attack?	11 (11.8 %)	14 (15.1 %)	5(5.4%)	5 (5.4%)	5 (4.3 %)
Avoiding thinking about or talking about the attack or avoiding having feelings related to it?	4 (4.3 %)	11 (11.8 %)	6 (6.5%)	5 (6.5%)	13 (14%)
Being "super-alert" or watchful and on guard?	6 (6.5%)	8 (8.6 %)	5 (5.4%)	13 (14%)	7 (7.5 %)
Feeling like everything you did was an effort?	7(7.5 %)	4(4.3 %)	6 (6.5%)	15 (16.1%)	7 (7.5%)

and only 2% were satisfied.

As for their attitude towards violence, 15.1% had disturbing memories or images of the attack, while 11.8% were not affected followed by 14% of them avoiding thinking or talking about the incident, and 14% remained super alert or watchful against the violence. Regarding those who were exposed to violent behavior, only 6.5% of them took vacation after the violent incident. Duration of vacation varied between a few days to one year (Figure 2). Out of 6 participants, three healthcare workers took three days' vacation while the remaining three took one month, 6 months and one-year vacations respectively. Most of the participants were aware that there

is a reporting system against workplace violence (37.6 %). About 23.7% of participants denied the existence of such a system while 37.6% did not know the answer (Table 2).

More than half of the participants (64.5%) reported that they did not know how to use the workplace violence reporting system, while 35.5% believed they knew how to use it. Most participants accepted workplace violence as part of their job and felt they had to adapt to it. Only 43% agreed that they had received training on how to deal with workplace violence, while nearly 86% stated they had not received any such training. Additionally, 11.8% of participants reported having received a training program on the issue, and only 2% mentioned that a training program was available at their workplace, though they were not interested in it. A statistically significant correlation was found between shift work and exposure to workplace violence, with 64.1% of shift workers reporting exposure to violent incidents. However, no significant correlation was found between exposure to workplace violence and sociodemographic factors such as age, gender, marital status, nationality, workplace, profession, division, or years of experience (Table 3).

## Discussion

Workplace violence is increasing in healthcare facilities against health care workers. Occupational Safety and Health Act (OSHA) reported that a high percentage of workplace violence occurs in healthcare work service settings.<sup>4</sup> Various factors contributed to

**Table 3 Inferential Analysis: Relationship Between Sociodemographic Factors and Prevalence of Workplace Violence**

Demographic Data	p-value
Age	0.75
Gender	0.66
Nationality	0.10
Marital Status	0.24
Work	0.45
Profession	0.2
Division	0.17
Experience	0.23
Shifts	0.04*

\*p<0.05 is significant



workplace violence in the health care institutions which can cause physical and mental trauma leading to absenteeism from work. Hence the present study investigated workplace among doctors and nurses at King Khalid Hospital and Primary health care centers at AL-Majmaah, Saudi Arabia.

The present study revealed that 41.9% had experienced workplace violence and the report was consistent with the findings of a study conducted by AL-Turki et al. in Riyadh (45.6%). While it was much lower in studies conducted by Alsmael et al in Al Khobar (30.7%) and Alsmael et al in Alhasa (28%).<sup>6,11</sup> In contrast to the present study the prevalence was much higher in studies conducted in Abha (57.5%), and in. Riyadh (67%).<sup>2,12</sup> The international studies reported violence ranging from 39% to 83% such as Karachi-44.9%; Macau -53.1%; Gondar, Ethiopia -58.2%; Palestine -80.4%; China -83%.<sup>13-17</sup>

A significant finding of this study was the lack of awareness and inadequate responsiveness to workplace violence among healthcare professionals. While 38.7% of participants were aware of the reporting system, a concerning 23.7% were unaware, and 37.6% responded with "I don't know." This lack of awareness reflects a critical gap in knowledge and highlights the need for improved communication and dissemination of information regarding reporting mechanisms. Furthermore, the study revealed that two-thirds of participants who experienced violence felt discouraged or unmotivated to utilize the reporting system. This finding underscores the need for healthcare institutions to foster a supportive and responsive environment that encourages reporting and addresses incidents of workplace violence effectively.

Regarding the type of violence, the present study reported verbal abuse was the most common violent behavior experienced by the participants (92.3%). Similar finding were reported by Alsaleem et al.<sup>2</sup> (90%), and Al-Turki et al.<sup>18</sup> (94%). El-Gilany et al.<sup>11</sup> (92.1%), Al Anazi et al.<sup>19</sup> (83%). In contrast, Alsaleem reported 55.9%. Most of the international studies reported ranging from 32.2% to 72.5%<sup>2,11,14,18,19</sup>

The present study reported physical violence rate to be 2.6% which was comparatively lower than other studies ranging between 3 to 21%.<sup>2,17</sup> Furthermore, both verbal and physical violence was 2.6%, and most of the participants/ healthcare providers who worked in shifts were exposed to violence (64.1%) as compared to those who worked normal working hours in the morning showed statistical significance between

exposure to violence and working in shifts the results were in consistent with other studies,<sup>11</sup> while in contrast, it was much higher in a study conducted by Alsaleem et al (99%).<sup>2</sup>

In this study, 23.1% of participants responded to violent incidents by pretending as if nothing happened to them. A similar study reported 46% which is higher than the present study. Another 23% told the perpetrator to stop the violence, 5.1% disclosed it to their family or friends; 2.6% got transferred to other positions. 2.6% reported to the violence system and 2.6% reported to their seniors. While another 17.9% defended themselves and 17.9% did not take any action, as they believed that it was of no use to complain. Similarly, a study conducted by Sahar et al reported that most of the nurses calm down the offenders or talk to colleagues or their families.<sup>10</sup> In contrast Alsaleem's study it was reported that 39% of participants reported the incidents.<sup>2,18,20</sup>

A statistically significant association was found between exposure to violence and shift work. Healthcare providers working in shifts were more likely to experience violence compared to those working regular daytime hours. This finding is consistent with previous studies and suggests that shift work may be a risk factor for workplace violence.<sup>18-22</sup>

When asked about the reason behind ignorance of the violent incidents 87.7% responded with different reasons the results were consistent with obtained from one study conducted in Europe (71.7%).<sup>21</sup> The most common reason for the ignorance of violence was the participants felt it was not important to report (25.6%) in contrast to the study conducted by Al Saleem (58%) and the European study (69.9%).<sup>2,21</sup> Regarding the satisfaction of handling the handling violent situations, of 93 participants 16% expressed they were not satisfied while 14% remained neutral while 2% were satisfied with system, the result consistent with other studies.<sup>2,18</sup>

The psychological responses of participants exposed to workplace violence varied, ranging from no impact to being extremely affected, depending on the specific aspects assessed. A portion of participants (4.3% to 11.8%) reported experiencing repeated disturbing memories, thoughts, or images related to the violent incidents. Additionally, 4.3% to 14% avoided thoughts, feelings, or discussions about the events, even with relatives or friends. Hypervigilance was also noted, with 5.4% to 14% indicating they remained unusually alert or watchful in anticipation of future

incidents. Furthermore, 4.3% to 16% expressed feeling that even routine tasks required considerable effort, reflecting emotional strain. Similarly, a study conducted by Hogarth et al. found that many nurses accepted certain forms of violence as part of their job, particularly when the aggression originated from patients with medical or psychological conditions, and was therefore not perceived as intentional.<sup>22</sup>

Among those exposed to violence, 6 (15.4%) of them applied for vacation of which 3(2.6%) of them for 2–3 days, 1 (2.6%) each for one month, 2–6 months, and one year respectively. Lack of knowledge or absence of clear policies and training programs of identifying and managing hostile and violent behavior at the healthcare institution is thought to be cause of the workplace violence. Most of the participants in the present study were aware of the reporting system against violence (38.7%) while 23.7% were not aware for the remaining 37.6% of participants “I don’t know was the answer”. The results were similar to other studies.<sup>2</sup> Furthermore two third were not able to use the system. While the remaining one-third assumed they knew how to use the system. The results were consistent with studies conducted by Alsaleem et al and Al-Turki et al.<sup>2,18</sup> Similar study by K.M. Hogarth et al. showed the reason for not reporting Workplace violence was the system was complicated, there was no time to lodge a complaint, lack of clear policies and the institution did not encourage.<sup>22</sup>

NIOSH suggest that violence can be prevented by altering workers practice and training programs.<sup>23</sup> More than half of the participants who were exposed to violence revealed that they did not know how to use the system. Two thirds of the participants stated that they were not encouraged or motivated to use the system against violence. Similarly in a study conducted by Sahar et al., nurses neglected reporting violence due to lack of clear and explicit instruction on how to handle incidence. Among those who were exposed to violence most of them (37.6%) believed that it is a part of their job and they have to accept and adapt to the such an environment. This could be one of the important factors contributing to the underreporting and cause of workplace violence.<sup>1,23</sup> More than half of the total participants (57%) revealed that they did not receive any training program to deal with the workplace violence while 43% agreed that have received the same. And only 2 participants (2.2%) stated that they were aware of the training program, but they were not interested in the getting trained. In contrast a study conducted

in Abha reported 60% of healthcare workers received the training. In another study in Oman conducted among the nurses reported 80.6% received the training.<sup>2,24</sup> NIOSH recommended that an atmosphere of open communication should be created in which health care workers are provided with written procedures about how to respond to and how report workplace violence.<sup>23</sup>

Concerningly, 23.1% of participants responded to workplace violence by pretending it had not occurred, highlighting a troubling trend of underreporting. Other common responses included confronting the perpetrator (23%), disclosing the incident to family or friends (5.1%), and self-defense (17.9%). Additionally, 17.9% of participants reported taking no action, believing that filing a complaint would be futile. These findings underscore the need for healthcare institutions to implement clear policies and procedures for reporting and addressing workplace violence, thereby ensuring that healthcare workers feel supported and empowered to report such incidents.

A significant gap in training and prevention programs related to workplace violence was also identified. More than half of the participants (57%) reported not having received any training on managing violent situations in the workplace. This highlights an immediate need for comprehensive, institution-wide training initiatives that equip healthcare professionals with the necessary knowledge and skills to recognize, prevent, and effectively respond to workplace violence.

In conclusion, this study reveals a high prevalence of workplace violence against doctors and nurses in public healthcare facilities in Al-Majmaah City, Saudi Arabia. Approximately 42% of participants reported experiencing violence, primarily in the form of verbal abuse. Despite the severity of these incidents, responses varied widely, with a considerable proportion of healthcare workers choosing to ignore or minimize them. These findings emphasize the critical need for targeted interventions, robust support mechanisms, and tailored training programs to mitigate workplace violence, protect healthcare professionals, and improve the overall quality of patient care.

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