Prevalence of workplace violence against nurses in psychiatric hospital in Medina region

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Abstract

This study aimed to assess the prevalence, types, and contributing factors of workplace violence (WPV) against nurses in a psychiatric hospital in the Madinah region of Saudi Arabia, addressing a gap in local research on this critical occupational hazard. A descriptive cross-sectional design was utilized, with data collected from 150 psychiatric nurses between November 1 and November 30, 2024, using the validated Workplace Violence in the Health Sector (WPVHS) questionnaire. The survey measured experiences of verbal and physical violence over the preceding 12 months, and data were analyzed using descriptive and inferential statistics to determine prevalence rates and examine correlations with demographic and workplace factors. Results indicated that 70.7% of nurses reported experiencing verbal abuse, and 54.7% experienced physical assault during their professional duties. Workplace violence is highly prevalent among psychiatric nurses in the Madinah region, posing substantial psychological and professional challenges. The findings highlight the urgent need for targeted interventions and robust reporting and support mechanisms. Healthcare institutions should therefore develop comprehensive policies to prevent WPV, implement regular staff training programs, and provide accessible psychological support for affected nurses, as these measures may enhance nurse safety, reduce staff turnover, and improve care quality in psychiatric settings.

Keywords: Physical assault, Psychiatric nurses, Saudi Arabia, Verbal abuse, Workplace violence.

1. Introduction

The prevalence of workplace violence in psychiatric hospitals in Saudi Arabia has been a subject of increasing concern within the healthcare community. Studies conducted in the region have highlighted a significant incidence of violence faced by healthcare workers, particularly in psychiatric settings [1]. emphasized that psychiatric healthcare professionals in Saudi Arabia experience a higher rate of both physical and verbal violence compared to their counterparts in other medical fields. The escalation of violence has been frequently identified by nurses as a primary factor influencing their decision to exit the nursing profession. Exposure to violence in the workplace poses a significant threat to the well-being of healthcare staff [2]. According to Al-Azzam, et al. [3] Compared to other healthcare workers, nurses are the most vulnerable to workplace violence because of the nature of their employment, which necessitates more frequent and prolonged interactions with patients or significant others. The definitions of workplace violence WPV vary; violence can result in serious injury or verbal abuse. However, Violence is defined by the World Health Organization in WRVH as "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". The risk of WPV increases in some hospitals, like psychiatric hospitals, particularly in emergencies and acute wards where the patients are mentally unstable, have unpredictable behaviors, and could be aggressive without explicit reasons to the staff. The studies show a high prevalence of WPV, for example 100% of nurses have experienced violence of some form at some point in their professional lives in Portugal. In Urmia, West Azerbaijan Province, 73.8% of nurses have experienced workplace violence committed by patients [2]. Therefore, the study aims to determine the prevalence and circumstances related to WPV among nurses in Medina psychiatric hospitals in Saudi Arabia.

2. Literature Review

Workplace violence (WPV) is a widespread issue that has detrimental effects on the physical and emotional well-being of healthcare professionals, as well as their ability to execute their jobs effectively [4]. The increase in recorded incidences of workplace violence (WPV) in healthcare facilities has emerged as a significant concern for healthcare providers globally, particularly among nurses. Nurses can suffer severe physiological and psychological effects because of being exposed to such abuse. However, previous studies in the sector rarely addressed differences among the various types of workplace violence, their origins, and their effects on nursing professionals [5].

The significance of WPV, including verbal & and physical violence in psychiatric hospitals and mainly in nursing professionals, has been frequently studied and highlighted in academic research. This literature review critically analyzes pertinent studies conducted in the last five years, focusing on the prevalence of WPV and its consequences, including multiple recommendations. These studies were carried out in a variety of global locations, such as China, Europe, and the Middle East. This critique compiles the insights derived from these studies, giving a comprehensive understanding of the present perception of this correlation. From a methodological perspective, the studies varied in their approaches and tools utilized.

In the study conducted by Bekelepi and Martin [6]. The findings revealed that verbal abuse is the most reported incident by respondents, and female nurses reported experiencing maximum violent incidents. Total physical violence 35 (34.3%) and verbal abuse 83 (83%) instances. Most women reported physical assault (74.2%, n = 26) and verbal abuse (72.2%, n = 60), with professional nurses responding 56.2%, n = 18. Years of work strongly predicted physical violence among nurses (p = 0.007).

Likewise, a study conducted by Schlup, et al. [7] included 1128 registered & and licensed practical nurses [LPN] working in 115 units of the 13 participating psychiatric hospitals, Results revealed that Almost 30% (328) of nurses had been exposed to severe forms of psychiatric inpatient violence during their professional lifetime. Of these, 271 (24% of the

total sample) had been physically attacked and 57 (5%) sexually assaulted with serious injuries requiring medical treatment .

In the same context, a study conducted by Lu, et al. [8] results showed Significant group differences were found in terms of gender, education, clinical specialty, the perceived anxiety level of WPV, and the WPV report system, The negative impact of the WPV will have a detrimental effect on nurses' well-being and will affect the quality of patient care and health-related costs.

Similarly, a systematic review by Konttila, et al. [9] demonstrated that the problem of violence in psychiatric outpatient settings has several dimensions. It is possible to identify the causes, manifestations, and effects of violence. revealed that more than three-quarters of mental health nurses experienced workplace violence during their work in mental health hospitals in Jordan in the last 2 years.

Furthermore, Alyousef and Alhamidi [10] accomplished a qualitative exploratory study indicates that as all recounted incidents involving violence, physical fights, and fights between nurses and patients, observations indicate MH hospital staff may have been sexually abused: The patient forced his hands on me and tried to lie down.

[10]. Exploring Experiences of Workplace Violence and Attempts to Address Violence Among Mental Health Nurses in the Kingdom of Saudi Arabia.

In line with previous studies another issue to be in consideration Nurses' mental health is affected by occupational violence, according to Ding, et al. [11] study that involved A total of 1,774 nurses were included in the statistical analysis, of whom 559 reported experiencing workplace violence in the past year, Nurses with workplace violence are more likely to have poor sleep quality, anxiety, depressive, loneliness, perceived cognitive deficits, poor resilience, and poor health.

Another comparative study aimed to examine the differences in the rate, associated factors, and post-traumatic responses to workplace violence between South Korean and Chinese nurses in Hong Kong among East Asian countries, results illustrate that Workplace violence decreased the mental health of nurses, especially South Korean nurses. Comparing research characteristics across groups exposed to workplace violence showed substantial variations in post-traumatic stress, coping methods, and negative emotional states [12].

Moreover, a descriptive study conducted by Samouei, et al. [2] in Isfahan Iran, the findings indicates that 58.9% of nurses have encountered physical violence, 81.4% verbal violence, 32.4% workplace bullying, and 7.3% racial and ethnic violence, most violence is committed by patients, families, or their companies.

On the other hand, Al Omar, et al. [13] emphasized the WPB's effects on stress, work performance, and staff communication disturbed participants significantly. A substantial negative correlation exists between care quality and WPB concern ($P < 0.001$).

Additionally, a cross-sectional study was conducted by Schablon, et al. [14] in different hospital departments in Germany, findings present that Over the last year, 94.1% of employees experienced verbal harassment and 69.8% physical antagonism. Aggression is common in hospitals and disabled housing. A third of workers were stressed by the accidents.

Rates of WPV exposure are found to vary according to world region, with the highest rates, Therefore, the purpose of this study is to investigate the prevalence of verbal and physical abuse among mental health nurses in the Madina region.

3. Methodology

This chapter outlines how this study is designed and conducted to examine the nurses' experiences with violent incidents at Psychiatric Specialized Hospital. This chapter includes research design, setting, description of the tool used, data collection methods, and data analysis.

3.1. Aim of the Study

The aim of this study is to examine the experiences of violent incidents encountered by nurses at the Psychiatric Specialized Hospital in Madinah region.

4. Research Design

This study employs a cross-sectional, descriptive design to examine the experiences of violent incidents by nurses at the Psychiatric Specialized Hospital. A descriptive cross-sectional design was used to help assess phenomena not previously explored in the same setting (Psychiatric Specialized Hospital in Medina, Kingdom of Saudi Arabia). Boswell and Cannon [15] argued that descriptive studies describe and explain existing conditions without necessarily clarifying the underlying causal factors. The use of a cross-sectional descriptive design in this study offers several advantages, including the fact that it is relatively quick, inexpensive, and simple to conduct (no long periods of follow-up). It Allows for the collection of data on all variables at a single point in time, as well as the ability to measure prevalence for all factors under investigation. It also allows for the study of multiple outcomes and exposures, which is useful for analyses and hypothesis generation [16].

4.1. Research Setting

The current study was conducted at the Psychiatric Specialized Hospital in the Madinah region of Saudi Arabia. Data collection took place in multiple hospital departments, including the emergency department, inpatient wards and outpatient clinics.

4.1.1. Targeted Population

All levels of nursing staff with various qualifications who are working at the Psychiatric Specialized Hospital in the Madinah region of Saudi Arabia. Individuals who do not have direct interactions with patients were excluded in the study.

4.2. Instrument and Data Collection

Data was collected through a structured survey based on the Workplace Violence in the Health Sector Country Case Study Questionnaires (WPVHS), developed by the International Labor Organization (ILO), International Council of Nurses (ICN), World Health Organization (WHO), and Public Services International (PSI). The WPVHS questionnaire is designed to assess workplace violence in the healthcare sector and consists of four sections:

1 .personal and workplace data 2. physical workplace violence 3. psychological workplace violence (emotional abuse) (including verbal abuse, bullying/mobbing, sexual harassment, threats, and racial harassment), and 4. health sector employer. The Arabic version of the questionnaire, as used in Alhassan, et al. [17] was adopted without modifications for the present study

The data collection phase of the study took place over the course of a month (01/11/2024 to 30/11/ 2024) through an online survey. Before distributing the questionnaire, clear instructions were written in the survey to be read prior to the participant filling out the questionnaire. Ethical approval was obtained from the hospital administration prior to data collection.

4.3. Ethical Approval
4.3.1. Sampling Method

A convenience sampling technique was used to recruit nurses from Psychiatric Specialized Hospital The survey was distributed via email through the nursing administration to ensure maximum participation .

4.3.2. Sample Size

The required sample size for the study was calculated using Raosoft software, based on a 95% confidence level and a 5% margin of error. Given a total population of 270 nurses at the hospital, the recommended sample size was 159 nurses. The response rate achieved resulted in 150 completed surveys, yielding a final margin of error of approximately 3.53% .

4.4. Data Analysis Method

SPSS version 22 was used to analyze the gathered data. The participants' responses were collected using descriptive statistics, including means, standard deviations, frequencies, and percentages. Furthermore, correlations between important study variables were examined using inferential statistical tests. The investigation shed light on how often workplace violence is and how it affects nurses working in mental hospitals.

5. Results
5.1. Demographic Characteristics of Participants

One hundred and fifty male and female nurses participated in the study. Males constituted the majority (80%), while Saudis constituted 98%. The most represented age group was 40–44 years (28%), followed by 35–39 years (26.7%). In terms of professional classification, 48% of participants were nursing technicians, and 45.3% were nursing specialists. The majority of participants (86%) worked as nurses in departments, most of whom were inpatients (82.7%). 81.3% reported working shifts, while 83.3% reported having direct physical contact with patients. All participants interacted directly with patients in their daily tasks.

5.2. Prevalence of Workplace Violence

The results showed that 54.7% of the sample (n = 82) experienced physical violence, while 70.7% (n = 106) reported experiencing verbal violence within the past 12 months. These percentages reflect the high prevalence of violence in the workplace, particularly verbal violence as showed in Table 1.

Table 1.
Prevalence of Physical and Verbal Assault among Nursing Staff.

Spread	Answers	Frequency	Percent
Physical assault	Yes	82	54.7%
	no	68	45.3%
Verbal assault	Yes	106	70.7%
	no	44	29.3%

5.3. Factors Associated with Exposure to Physical Violence

Chi-square tests showed a statistically significant relationship between exposure to physical violence and several variables: - Years of experience: Nurses with 1–5 years of experience were more likely to experience physical violence (p = 0.015) as showed in Table 2.

Table 2. Demographic Factors and Physical Assault Incidence Among Nursing Staff.

Variables		Physical assault			Chi-test	P-value	Decision
		Yes	No	Total			
Age	20-24 years old	0	2	2	7.947a	.159	Not statistically Significant
	25-29 years old	17	6	23			
	30-34 years old	16	18	34			
	35-39 years old	24	16	40			
	40-44 years old	20	22	42			
	45-49 years old	5	4	9			
	Total	82	68	150			
Sex	Male	61	59	120	3.558a	.059	Statistically Significant
	Female	21	9	30			
	Total	82	68	150			
Nationality	Saudi	79	68	147	2.539a	.111	Not Statistically Significant
	Non- Saudi	3	0	3			
	Total	82	68	150			
Your professional classification	Nursing Technician	40	32	72	1.233a	.745	Not Statistically Significant
	Nursing specialist	37	31	68			
	Senior Nursing Specialist	5	4	9			
	Health assistant	0	1	1			
	Total	82	68	150			

- Working evening or night shifts (from 6 pm to 7 am): associated with an increased rate of physical violence (p = 0.016) as showed in Table 3.
- Regular physical contact with patients: associated with an increased rate of physical violence (p = 0.013) showed in Table 3.

Table 3.
Work-Related Factors Associated with Physical Assault Among Nursing Staff.

Variables		Physical assault			Chi - test	P-value	Decision
		Yes	No	Total			
Number of years of experience	Less than a year	0	1	1	14.036a	0.015	Statistically significant
	1-5 Years old	18	8	26			
	6-10 Years old	21	26	47			
	11-15 Years old	23	9	32			
	16-20 Years old	18	16	34			
	More than 20 years	2	8	10			
	Total	82	68	150			
Do you work anytime between 6pm and 7am	Yes	71	48	119	5.802a	0.016	Statistically significant
	no	11	20	31			
	Total	82	68	150			
Do you have regular direct physical contact (Washing, turning, carrying(with patients/clients?	Yes	74	51	125	6.220a	0.013	Statistically significant
	No	8	17	25			
	Total	82	68	150			

While there was no statistical significance in the relationship between physical violence and either job title (p = 0.831), department (p = 0.290), or gender (p = 0.209), the study found no statistical significance.

5.4. Factors Associated with Exposure to Verbal Violence
Statistically significant correlations were found between exposure to verbal violence and each of the following:
- Occupational classification: Nursing technicians were more exposed to verbal violence than other classifications (p = 0.011).
- Department: Emergency department workers recorded the highest rates of exposure (p = 0.046).
- There was no statistical significance between verbal violence and either gender, age, nationality, years of experience, shifts, or physical contact.

5.5. Psychological Impact of Violence on Nurses
Nurses reported their psychological impact after being exposed to violence, as follows:
- Physical Violence:

- "Constantly on alert": (Mean = 3.7, SD = 1.2)
- Feeling overwhelmed: ($\bar{x}$ = 3.2)
- Psychological Avoidance: ($\bar{x}$ = 2.6)
- Recurrent Disturbing Memories: ($\bar{x}$ = 2.7)
- Overall Mean: 3.0 (Moderate Impact)
- Verbal Violence:
- "Constantly on alert": ($\bar{x}$ = 3.1)
- Feeling overwhelmed: ($\bar{x}$ = 2.9)
- Disturbing Memories and Psychological Avoidance: ($\bar{x}$ = 2.5)
- Overall Mean: 2.7 (Moderate to Low Impact)

5.6. Nurses' Satisfaction with Management's Response to Incidents

The results showed a decrease Level of satisfaction with management's handling of incidents of violence:

- Physical violence: ($\bar{x}$ = 2.70 out of 5)
- Verbal violence: ($\bar{x}$ = 2.54)
- Bullying: ($\bar{x}$ = 2.07)
- Harassment: ($\bar{x}$ = 2.20)

This reflects an urgent need to improve response procedures and institutional support.

5.7. Injuries And Absence from Work Following Exposure to Violence

Among nurses exposed to physical violence:

- 41.5% sustained physical injuries.
- 26.8% of those injured required medical treatment.
- 17.1% were required to take leave from work. The distribution of absences was as follows:
- One day: 42.9%
- Two to three days: 28.6%
- One week: 21.4%
- Two to three weeks: 7.1%.

6. Discussion

Workplace violence incidents in psychiatric hospital settings pose a substantial issue to nursing professionals as results show that verbal abuse and physical assault appear most frequently. The research results show that nurses in psychiatric hospitals experienced both verbal abuse and physical assault at a prevalence of 70.7% and 54.7%, respectively. Similar research by Lu, et al. [8] showed that 79.3% of nurses received verbal abuse at work and 57.9% suffered physical violence thus validating the high prevalence rates found in this study.

6.1. Prevalence and Contributing Factors

The research findings show that verbal abuse occurs more frequently than physical violence which matches results from prior investigations [18, 19]. Psychiatric nurses frequently encounter difficult and stressful patient encounters leading to high rates of verbal abuse and physical violence

The study assessed the connection between workplace violence exposure and occupational and demographic characteristics. Male hospital workers experienced more physical assaults than female workers (p = 0.059). According to [20] overall workplace violence exposure occurs more frequently among male nurses (OR = 1.90, p = 0.004). A study by [21] has suggested that psychiatric settings show higher male

nursing staff numbers as one reason behind this observed pattern. On the other hand, male psychiatric nurses around the world face violence in their work since they spend extensive time treating these patients [22].

The study showed nurses working for one to five years were more prone to physical attacks (p = .015). This matches previous research which linked novice nurses to increased risk of workplace violence [23].

6.2. Impact on Nursing Staff

Workplace violence events resulted in noticeable psychological and professional consequences according to nurses' post-attack reactions. ($\bar{x}$ =3.7) while exhaustion affected ($\bar{x}$ = 3.2) and avoidance behaviors ($\bar{x}$ = 2.6). following physical assaults according to Bhowmik, et al. [24] defines these psychological responses as stress. Research data reveals that workplace violence total scores showed a statistically significant positive relationship with perceived stress total scores [25].

The negative experiences of employees become more severe when they express dissatisfaction about how management handles incidents. Research results by Pérez Fuentes, et al. [26] support the findings that nurses reported very low satisfaction with physical assault management ($\bar{x}$ = 2.69) and verbal abuse management ($\bar{x}$ = 2.53). The research confirms the immediate need to build an extensive healthcare support system that will boost nursing satisfaction by minimizing the harmful consequences of workplace violence.

The study discovered important relationships between workplace situations and employee encounters with workplace violence. Rotating shift workers demonstrated higher odds of experiencing physical assault ($p = .016$) than other nurses, as shown by Zeng, et al. [19] research indicating that irregular hours expose staff to more violent incidents because of reduced staffing levels. Direct physical contact occurring regularly with patients demonstrated a significant relationship with physical violence ($p = .013$). Psychiatric patients potentially show higher violent tendencies than other patient groups, this is confirmed in the research conducted by Caruso, et al. [27] demonstrated that aggressive symptoms exist in 50% of patients with psychiatric disorders while this prevalence is less than 2% within the general population.

7. Recommendations

Psychiatric hospitals, by their very nature, handle patients with a range of mental disorders, particularly those that may lead to aggressive or violent behavior [28].

In the field of healthcare, underreporting of WPV incidents is not uncommon. Nurses might stay silent for several kinds of reasons, such as fear of punishment, the fact that they did not get harm, the difficulty of reporting, or a lack of management support [29]. The researchers [7] emphasized that when employees have experienced a violent environment, they actually need to feel protected and supported. Mental health promotion training nterventions or resilience training were found to have an advantageous impact on nurses' emotional management skills, occupational stress, and self efficacy which could offer an opportunity to interrupt the cycle of negativity. Developed support programs, such as clinical supervision, mentoring, regular and recurring agenda items in staff meetings that specifically allow team discussion about aggressive incidents (actual or potential) in the workplace, and quick debriefing procedures after the incident are all ways to achieve this. Employers may obtain information about the reasons for leaving staff and identify any areas of concern, such as issues with aggressive behavior, by conducting interview sessions with staff members. Organizations must advertise and notify employees about available training programs for handling verbal and physical hostility. These easily available and accessible programs can give the team the time and opportunity they need to ask for and accept assistance from other employees [30].

8. Conclusion

This study examined the prevalence and impact of workplace violence against nurses in a mental health hospital in the Medina region. The results revealed a high rate of verbal and physical violence, with 70.7% of nurses exposed to verbal abuse and 54.7% to physical assault. These results are in line with previous studies confirming that nurses in psychiatric hospitals are more vulnerable to violence because of their constant dealings with patients with mental disorders that may lead to aggressive behaviors. The study also identified demographic and occupational factors associated with increased exposure to violence, with male nurses, night shift workers, and less experienced nurses being more vulnerable to physical violence. Violence in the work environment also has noticeable psychological effects, as many nurses reported feeling increased anxiety, exhaustion, and emotional stress after being assaulted. In addition, The results showed a low level of nurses' satisfaction with the administration's handling of incidents, which indicates the need to improve the policies and procedures followed

Based on these findings, health institutions should implement comprehensive programs to reduce violence in the work environment, including enhancing security measures, training staff in patient calming techniques, and providing psychological support to nurses affected by violence. It is also recommended that future research focuses on the long-term psychological effects of violence in the work environment

In addition to evaluating the effectiveness of current violence prevention strategies. By addressing these issues, psychiatric hospitals can provide a safer and more supportive work environment, which reflects positively on nurses' mental health and the quality of care provided to patients.

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