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Unmasking the silent epidemic: Prevalence of workplace violence against healthcare workers in wad Madani hospital, Gezira, Sudan (2023)

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Abstract

Introduction: Workplace violence (WPV) against healthcare workers (HCW) is a globally recognized issue with significant implications for both the well-being of staff and the quality of patient care. Studies have shown that healthcare workers are at a higher risk of experiencing workplace violence compared to other professions due to the nature of their work, which involves direct patient care and often high-stress situations. This study investigates the prevalence and impact of workplace violence against healthcare workers at Wad Madani Hospital, Gezira state, Sudan.

Methodology: Utilizing a hospital-based cross-sectional design, data was collected from 120 participants, including physicians, nurses, and support staff, through a well-structured questionnaire.

Results: There were 120 participants, females were predominant, 88 participants (73.3%), and 30% of the respondents were between 25-29 years old. Most of the participants were either doctors (60.8%) or nurses (17.5%). In the last 12 months, 45 (37.5%) had been subjected to violence in the workplace while 75 (62.5%) had not. Physical violence was reported by 22 (48.9%) out of 45 who were subjected to violence and psychological was reported by 23 (51.1%) and the majority of perpetrators were relatives of patient (40.0%) and 22.2% were patients themselves. 51.1% took time off from work after. No action was taken against the perpetrator in 40% of them. 45.8% of the participants witnessed physical violence during the past year. 58.3% of the participants reported that, there were no procedures for reporting WPV. The findings revealed a significant incidence of workplace violence,

Conclusion: The study concluded that WPV incidence was high in Wad-Medani Teaching Hospital and the violence was mostly physical and psychological. The majority of perpetrators were either patients or their relatives and no action was taken against most of them. No clear reporting system for the violence incidents. There is an urgent need for comprehensive strategies, including robust reporting mechanisms, support systems, and preventive measures, to address workplace violence. Collaborative efforts from healthcare institutions, policymakers, and the community are essential.

Keywords: Workplace violence; Healthcare workers; Wad-Medani Hospital; Sudan

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1. Introduction

In the hallowed halls of healthcare institutions, where the pursuit of healing and well-being is paramount, a disturbing undercurrent threatens the very fabric of the noble profession - workplace violence against healthcare workers (1). Sudan, with its unique geopolitical challenges, socio-economic disparities, and historical intricacies, warrants a meticulous examination of the factors contributing to the prevalence of WPV in healthcare settings. WPV against healthcare workers is a pervasive and critical issue that poses significant challenges to the well-being of those dedicated to providing essential medical services. In accordance with the World Health Organization (WHO), workplace violence refers to incidents in which employees are abused, threatened, or assaulted during work hours, including while traveling to and from work, in a way that threatens their health, safety, or well-being [2]. Lanctot and Guay divide the workplace violence effects faced by workers into following categories, which are: physical, emotional, psychological, work functioning, quality of care, relation with patients, social, general, emotional and financial [3]. Out of this seven categories, the most important effects were the psychological effects (including PTSD and depression), emotional (which include feelings of anger, fear and disappointment) and the effects on work functioning (feelings of dissatisfaction in the workplace). [3] As a result of their unreported nature, prevalence, and persistence, workplace violence in the health care sector is an issue that has been tolerated and largely ignored for a long time. [1] Healthcare workers, comprising doctors, nurses, paramedics, and support staff, are the backbone of any functional healthcare system. Their commitment to alleviating human suffering often places them in the line of fire, subject to a range of workplace violence manifestations and aggression from patients, their families, and even colleagues that extend beyond physical assaults to encompass verbal abuse, threats, and systemic issues fostering an environment of fear and insecurity. There were at least nine attacks on healthcare workers or hospitals in Sudan between 28 June and 11 July, according to a report by Insecurity Insight, which tracks attacks on health systems in conflicts. [4]. 53 instances of violence against or obstruction of medical care in Sudan were reported by the Safeguarding Health in Conflict Coalition (SHCC) in 2022; this figure is comparable to 52 in 2021. The ability of healthcare providers to maintain safe staffing levels and patient care was impacted by these episodes, which resulted in the deaths of 11 health workers and the injuries of 22, as well as at least 22 raids or forced entries into hospitals. [5] According to prevalence of health care workers (HCW) in Sudan 6.7% of them were reported exposure to physical violence and 56.7% reported exposure to verbal violence. 90.5% of HCW who report verbal violence and 63.6% who report physical violence didn't seek investigation [6]. Which will make those HCW vulnerable more for depression and therefore suicidality, according to a study conducted in the People's Republic of China, more healthcare workers (HCWs) had depression when they experienced physical forms of workplace abuse. [7] Another study done in china found that HCW subjected to workplace violence have a higher suicide rate. [8] According to a random effect meta-analysis published in October of 2018, 61.9% of participants reported experiencing workplace violence in some form, while 42.5% reported experiencing nonphysical violence. With 57.6% of the cases reporting verbal abuse, threats were found in 33.2% of the cases and sexual harassment was found in 12.4% of the cases. [9] Among the 54 countries in Africa, only 10 have conducted research on the topic, and among those ten, the response rate is also overwhelmingly low, making it difficult to have an accurate prevalence figure, which is why it is estimated to be between 9% and 100% with no precise number, making this an underreported problem. Regarding Sudan, it was not included in the ten countries who have conducted research on the topic, making it an unexplored area [10].

In Sudan, there is a paucity of data on workplace violence against healthcare workers, making this study particularly important. Previous studies in other regions have identified several factors that contribute to workplace violence, including long working hours, inadequate staffing, and lack of security measures (7). Understanding these factors in the Sudanese context is crucial for developing targeted interventions. Sudanese social media is frequently reporting workplace violence among health workers, with little response from the national authorities. Sudan's healthcare system operates within a complex socio-political and economic context. The country has faced significant challenges, including political instability, economic sanctions, and conflict, which have impacted the healthcare sector. These challenges contribute to the stressful working conditions that healthcare workers experience, potentially increasing the risk of workplace violence. Understanding the broader context in which healthcare workers operate is essential for developing effective interventions to address workplace violence. There is very little data on this issue. So this hospital-based cross-sectional study aimed to investigate the prevalence of WPV and its impact on well-being of staff, and to assess the knowledge of healthcare workers about hospital policies on workplace violence and on reporting procedures. The research aimed to explore the different types of workplace violence experienced by HCW, including physical, assault, verbal abuse, threats, and harassment.

2. Material and method

This research was a hospital based, cross-sectional study conducted in the period of February to March 2023 at Wad-Medani Teaching Hospital which is the biggest hospital in Gezira state and serves as a critical healthcare facility in Gezira state and plays a pivotal role in delivering health care services to a diverse and dynamic population. Well-structured questionnaire based on the standardized world health organization / international labour organization (WHO/ILO questionnaire) had been developed to collect data from all health workers in Wad Madani Hospital and was modified according to the traditions of the community. The data included demographic characteristics (Age, gender, marital status, occupation), work time, types of violence which they faced, who perpetrated them, profession, speciality, long working hours and inadequate security measures.

120 participants (physicians, nurses, pharmacists, administrators, support staff, security, professions allied to medicine) were included in this study. All obtained data was processed and analyzed by the suitable statistical methods for quantitative and qualitative data. Data was analyzed using SPSS version 22.

2.1. Selection criteria for the study

Health care workers employed at Wad Madani Hospital who are willing to participate in the study and able to provide verbal consent.

Exclusion criteria: include health care workers not employed at Wad Madani Hospital, unwillingness to participate in the study or unable to provide verbal consent

2.2. Ethical considerations

The research was conducted within the ethical supervision the Faculty of Medicine, University of Gezira and Ministry of Health, Gezira state, ethical committee. Only those who consent to participate in the research following adequate explanation of aim, procedures, benefits and possible risks were included in the study. There will be no penalty for refusal or participate

3. Results

There were 120 participants, females were predominant, 88 participants (73.3%), and 30% of the respondents were between 25-29 years old (Table 1). Most of the participants were either doctors (60.8%) or nurses (17.5%) (Table 2). 84.2% of the participants work night shifts from 6 PM to 7 AM (Table 3). Regarding the patients, they encounter, 79.2% of them dealing with both sexes, and 54.2% of them were adults. (Tables1-3).

Table 1 Age distribution of health care workers in Wad Madani hospital (N=120)

		N	**%**
Age Group	**18-19 years**	**9**	**7.5**
	20-29 years	32	26.7
	25-29 years	36	30.0
	30-34 years	34	28.3
	35-39 years	1	0.8
	40-44 years	7	5.8
	55-59 years	1	0.8
	Total	120	100.0

Table 2 Job title of health care workers participants in the study

		N	%
JOB	Physician	73	60.8
	Nurse	21	17.5
	Pharmacist	3	2.5
	Administrator	1	.8
	Professions allied to medicine	1	.8
	Support staff	1	.8
	Kitchen/maintenance, security	2	1.7
	Other	18	15.0

Table 3 Current job description of healthcare workers that work in Wad Madani Teaching Hospital

		N	%
Do you work anytime between 18h00 (6 PM) and 07h00 (7 AM)?	Yes	101	84.2
	No	19	15.8
Age group of patients most frequently work with?	New-borns	1	.8
	Infants	1	.8
	Children	7	5.8
	Adolescents (10-18 years of age)	24	20.0
	Adults	65	54.2
	All	11	9.2
The sex of the patients you most frequently work with?	Female	8	6.7
	Male	6	5.0
	Both sexes	95	79.2
The number of staff present in the same work setting with you during most (more than 50%) of your work time	none	10	8.3
	5-1	36	30.0
	10-6	29	24.2
	15-11	21	17.5
	over 15	24	20.0

3.1. Incidence of violence

In the last 12 months, 45 (37.5%) had been subjected to violence in the workplace while 75 (62.5%) had not. Physical violence was reported by 22 (48.9%) out of 45 who were subjected to violence and psychological was reported by 23 (51.1%). Most of the HCW were perpetrated by relatives of patients 18 (40.0%) and 10 (22.2%) by patients themselves, staff member: 10 (22.2%), management/supervisor: 2 (4.4%), external colleague/worker: 3 (6.7%) and general public: 2 (4.4%). Most of the violence incidents, 22 (48%) occurred in the morning and afternoon time. The majority 17 (37.8%), took no action and 9 (20%) tried to pretend it never happened, 6 (13.3%) told the person to stop, 2 (4.4%) defended themselves physically, 3 (6.7%) sought counselling and told a colleague and only 1 (2.2%) told friends/family. Incident was reported to a senior staff member by 3 (6.7%) of the HCW. 35 (77.8%) reported that the incident could have been prevented. 7 (15.6%) had been extremely bothered by the incident,20 (44.4%) moderately bothered 5(11.1%) a little bit bothered and 9 (20%) did not bother at all and 4 (8.9%) were a bit quiet. 23 (51.1%) took time off

from work after the incident and 22 (48.8%) did not. No action was taken against the perpetrator in 18 (40%) of them, verbal warning for 7 (15.6%), patient care was discontinued by 9 (20%) of the HCW and only 3 (6.7%) were reported to police .5 (4.2%) did not know what happened to the perpetrator. For those who did not report the incidence 13 (41.9%) answered it was not important, 6 (16.1%) felt ashamed, 4 (12.9%) felt guilty, 3 (9.7%) were afraid of negative consequences, and 5 (16.1%) thought it was useless. (table 4). Nurses were more likely to be exposed to violent incidents than physicians ($p<0.001$). 55 (45.8%) of the participants witnessed physical violence during the past year and 42.4% of them witnessed it more than three times (Fig. 6), and the majority 85 (70.8%) did not report it (Table 5).

Table 4 Description of incidents of workplace violence against healthcare workers in Wad Madani Hospital

		Number	**%**
In the last 12 months, have you been candidate for violence in your workplace?	Yes	45	37.5
	No	75	62.5
How would you describe the incident?	Physical	22	48.9
	Psychological	23	51.1
Who attacked you?	Patient	10	22.2
	Relatives of patient	18	40.0
	Staff member	10	22.2
	Management / supervisor	2	4.4
	External colleague/worker	3	6.7
	General public	2	4.4
At which time did it happen?	before 13.00 h -h. 07.00	18	40.0
	before 18.00 h –h. 13.00	4	8.9
	before 24.00 –h. 18.00	5	11.1
	before 07.00h -h24.00	9	20.0
How did you respond to the incident?	Took no action	17	37.8
	Tried to pretend it never happened	9	20.0
	Told the person to stop	6	13.3
	Tried to defend myself physically	2	4.4
	Told friends/family	1	2.2
	Sought counselling	3	6.7
	Told a colleague	3	6.7
	Reported it to a senior staff member	3	6.7
Do you think the incident could have been prevented?	Yes	35	77.8
	No	10	22.2
Since you were attacked, how BOTHERED have you been ?	Not at All	9	20.0
	A Little Bit	5	11.1
	Moderately	20	44.4
	Quite a Bit	4	8.9
	Extremely	7	15.6
	Yes	23	51.1

Did you have to take time off from work after being attacked?	No	22	48.9
What were the consequences for the perpetrator?	None	18	40.0
	Verbal warning issued	7	15.6
	Care discontinued	9	20.0
	Reported to police	3	6.7
	Aggressor prosecuted	3	6.7
	don't know	5	11.1
If you did not report or tell about the incident to others, why not?	It was not important	13	28.9
	Felt ashamed	6	13.3
	Felt guilty	4	8.9
	Afraid of negative consequences	3	6.7
	Useless	5	11.1
	Other	14	31.1
	it was not important	13	28.9

Table 5 Incidence of workplace violence occurring for Wad Madani Hospital HCWs in the last 12 months

		N	**%**
In the last 12 months, have you witnessed incidents of workplace violence in your workplace?	Yes	55	45.8
	No	65	54.2
If yes, how often has this occurred in the last 12 months?	Once	17	14.2
	times 4-2	21	17.5
	times 10-5	11	9.2
	Several times a month	5	4.2
	About once a week	1	.8
Have you reported an incident of workplace violence in the last 12 months?	Yes	35	29.2
	No	85	70.8
How worried are you about violence in your current workplace? (1 = not worried at all; 5 = very (worried	1	22	18.3
	2	16	13.3
	3	28	23.3
	4	22	18.3
	5	32	26.7

Table 6 Knowledge of Wad Madani Hospital HCWs towards reporting process

		N	%
Are there procedures for the reporting of violence in your workplace?	Yes	50	41.7
	No	70	58.3
Do you know how to use them?	Yes	43	35.8
	No	77	64.2
To whom do you report workplace violence?	Management/ employer	23	19.2
	Colleagues	9	7.5
	Union	7	5.8
	Own family/ friends	1	.8
	Other	10	8.3

Table 6 shows 50 (41.7%) wrote that there were procedures for the reporting of violence in their workplace while 70 (58.3%) reported that, there were no procedures for reporting WPV. The majority of participants 23 (19.2%) reported that they will report the incidence to managers, 9 (7.5%) to colleagues and 1 (0.8%) to own family or friends. (Table 6).

4. Discussion

This hospital based, cross-sectional study which was conducted at Wad-Medani teaching hospital in February- March 2023 to assess the incidence of workplace violence among health care workers in Wad-Medani teaching hospital, included 120 HCW showed that, females were predominant participants 73.3%, and 30% of the respondents were between 25-29 years old. Most of the participants were either doctors 60.8% or nurses 17.5%. the majority were looking after adult patients of both sexes. In the last 12 months, nearly more than one third (37.5%) of the participants had been subjected to violence in the workplace while 62.5% had not. Physical and psychological violence was the most reported incidents by the HCW and they were mostly perpetrated by relatives of patients or the patients themselves. The majority took no action towards the incidence. Incident was reported to a senior staff member by only 6,7% of the HCW. Over one third of the HCW were moderately bothered by the WPV and half of them took time off work after the incidence. No action was taken against the perpetrator in nearly over one third and very few were reported to police. Half of the participants witnessed physical violence during the past year more than once and the majority did not report it. Nearly two third of the participants (58.3%) reported that, there were no procedures for reporting WPV and if they were subjected to violence the majority of participants reported that they will report the incidence to managers.

Nurses were more likely to be exposed to violent incidents than physicians, this may be explained by excessive waiting time for the patient and shortage of staff epically at night.

In comparing the findings of this study with similar studies conducted in other regions, several noteworthy similarities and differences emerge. For instance, a study conducted in China by Zhao et al. (2016) found that healthcare workers experienced high levels of workplace violence, with significant psychological and physical impacts. Similar to the findings in Sudan, verbal abuse was the most common form of violence reported. However, the study in China also highlighted a higher incidence of physical violence compared to our findings, which could be attributed to differences in the healthcare environments and security measures in place (8). Another study in the United States by Phillips (2016) reported that workplace violence against healthcare workers was prevalent and had severe consequences on job satisfaction and mental health. The U.S. study emphasized the role of organizational support and effective reporting mechanisms in mitigating the effects of workplace violence, which aligns with the recommendations from our study (1). Furthermore, a meta-analysis by Liu et al. (2019) covering various countries reported that the prevalence of workplace violence against healthcare workers ranged widely due to differing cultural, social, and economic contexts. This meta-analysis underscored the importance of tailored interventions that consider the specific circumstances of each healthcare setting (9). In Africa, the systematic review by Njaka et al. (2020) revealed that workplace violence is an under-researched yet significant issue, with healthcare workers often facing violence from patients and their relatives. The review noted that the lack of research and data in many African countries, including Sudan, hampers the

development of effective policies and interventions (10). In a study conducted by Sawsan A. Omer etal in Kingdom of Saudi Arabia (KSA) in 2023, they found that only 22.6% of the participants stated that violence incidents have occurred to them in the last year, 22.6% of the violence victims stated that the violence was physical, 25.8% stated that it was psychological. The low incidence of WPV in KSA could be explained by the fact, that there is strict law and very high charge or prison for any perpetrator to HCW (11), unlike Sudan where there are no strict measures regarding WPV. In Congo a study conducted by Basiula Andre Muzembo etal in 2014 found a high incidence of WPV up to 80% and it was mainly verbal harassment and physical violence perpetrated mainly by the patient's relatives or the patients themselves (12). This was similar to this study although in both countries, doctors were traditionally highly respected but in Sudan in the past few years this respect is declining due to the negative effect of the social media against doctors This comparative analysis with similar studies from other regions underscores that workplace violence is a pervasive issue globally, with similar patterns observed in terms of the types and effects of violence. However, contextual differences, such as healthcare infrastructure and cultural factors, can influence the prevalence and nature of these incidents.

Overall, while the prevalence and types of workplace violence may vary across different regions, the consistent finding is that such violence poses serious challenges to the health and well-being of healthcare workers. Addressing these challenges requires a comprehensive approach that includes preventive measures, support systems, and effective reporting and response mechanisms.

5. Conclusion

This study has highlighted the significant prevalence of workplace violence against healthcare workers in Wad Madani Hospital, Gezira, Sudan. The findings reveal that a substantial proportion of healthcare workers, particularly nurses and younger staff, experience various forms of violence, including verbal abuse and physical assaults. The consequences of these violent incidents extend beyond physical injuries, impacting the psychological and emotional well-being of the workers and their ability to work. The study underscores the urgent need for comprehensive strategies to prevent workplace violence in healthcare settings. These strategies should include robust reporting mechanisms, support systems for affected workers, and preventive measures such as training and security enhancements. Addressing workplace violence requires coordinated efforts from healthcare institutions, policymakers, and the broader community to create a safe and supportive environment for healthcare workers. Future research should focus on longitudinal studies to establish causality, larger and more diverse samples to enhance generalizability, and the effectiveness of interventions aimed at reducing workplace violence. By continuing to investigate and address this critical issue, we can improve the safety and well-being of healthcare workers, ultimately leading to better patient care and outcomes.

Recommendations

Based on the findings of this study, several recommendations can be made to address workplace violence in healthcare settings: 1. Implement comprehensive workplace violence prevention programs that include training for healthcare workers on how to handle violent situations and de-escalation techniques. 2. Increase staffing levels and improve working conditions to reduce the stress and burnout that can contribute to workplace violence. 3. Enhance security measures within healthcare facilities, including the presence of security personnel and the use of surveillance systems. 4. Develop clear policies and procedures for reporting and responding to incidents of workplace violence, and ensure that all staff are aware of these procedures. 5. Conduct regular assessments of workplace violence and use the data to inform continuous improvement efforts.

Limitations of the Study

This study has several limitations that should be acknowledged. Firstly, the cross-sectional design of the study limits the ability to establish causality between the identified factors and workplace violence. Secondly, the study relies on self-reported data, which may be subject to recall bias and social desirability bias. Additionally, the sample size is relatively small, and the study is conducted in a single hospital, which may limit the generalizability of the findings to other healthcare settings in Sudan or other regions. Future research should aim to include larger and more diverse samples to enhance the generalizability of the results.

Implications for Future Research

Future research should aim to address the limitations identified in this study by including larger and more diverse samples, utilizing longitudinal designs to establish causality, and employing advanced statistical techniques to identify predictors of workplace violence. Additionally, research should explore the effectiveness of various interventions aimed at reducing workplace violence in healthcare settings. Collaborative efforts involving policymakers, healthcare

institutions, and researchers are needed to develop and implement comprehensive strategies to address this critical issue.

Compliance with ethical standards

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Disclosure of conflict of interest

All authors have no conflict of interest

Statement of ethical approval

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Statement of informed consent

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