ACAM

Reasons of Violence in Healthcare and Preventive Interventions

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Abstract

Introduction: There is scant information regarding healthcare workers' awareness of the rules pertaining to violence against them in Saudi Arabia. This study aims to examine the prevalence and types of violence faced by primary healthcare workers, along with any potential links to their work experience. Additionally, it explores healthcare workers' reactions and their understanding of the Ministry of Health's policies and regulations in Saudi Arabia.

Methods: Employing a cross-sectional study design, this research targeted healthcare workers in primary healthcare centers and outpatient departments of government hospitals from April to May 2022. The sample was divided based on the proportion of each profession according to the Ministry of Health statistics. A structured online survey was distributed to collect data on various study factors. Descriptive statistics, including frequencies and percentages, were used for nominal and ordinal data, and means, medians, and standard deviations or ranges for numerical data. The chi-squared test was utilized to assess the relationship between variables and outcomes.

Results: The study included 186 healthcare workers from primary health centers, with a majority being female. Doctors constituted 23% of the participants, nurses 45%, and the remainder belonged to other health professions. Workplace violence was reported by 46.7% of the workers, with verbal abuse being the most common form (90%), followed by intimidation (34.3%), and physical violence (3%). About 40.2% of workers were aware of a violence reporting system at their workplace, although 27.3% were unaware of its existence. Among those aware of the system, 47.3% did not know how to use it. Physical violence was more common in outdoor work settings than indoors.

Conclusions: Violence against healthcare workers is notably prevalent, with nearly half experiencing some form of aggression, especially verbal abuse. Furthermore, a significant proportion of workers are either unaware of the existence of a violence reporting system or do not know how to use it.

Keywords: ***Stress, Job satisfaction, Quality of Live, Violence.***

Introduction

Healthcare workers (HCWs), encompassing a wide array of professionals from physicians, pharmacists, and nurses to laboratory technicians, as well as those in administrative and support services, are integral to delivering care to patients [1]. The work environment for these individuals is fraught with various hazards, including biological, chemical, physical, and psychological risks, alongside musculoskeletal injuries and workplace violence [2, 3]. It is imperative that the working conditions for HCWs adhere to stringent safety protocols, procedures, and practices to mitigate these risks [4]. The implementation of a safe work environment and adherence to safety practices have been pivotal in decreasing the incidence of work-related injuries and in minimizing burnout among healthcare professionals [5-8]. Research on violence directed at healthcare workers in Saudi Arabia is scarce, with existing studies often focusing on specific subsets of workers, such as nurses, or particular types of violence [9-11]. There's a notable gap in knowledge concerning healthcare workers' awareness of the regulations aimed at preventing violence against them in Saudi Arabia. This study seeks to explore the prevalence and nature of violence encountered by primary healthcare workers, its potential correlation with their work experience, and their responses to such incidents, including their awareness of the Ministry of Health's policies and regulations in Saudi Arabia.

In addition to addressing these critical areas, this study underscores the necessity for comprehensive strategies that safeguard healthcare workers from the multifaceted risks present within their work environments. By identifying specific vulnerabilities and gaps in current safety protocols, the research aims to contribute to the development of more effective measures that not only protect HCWs from violence but also enhance their overall workplace safety. Understanding the extent of healthcare workers' knowledge about existing regulations and the effectiveness of these policies in preventing workplace violence is essential for crafting interventions that foster a culture of safety and respect within healthcare settings. This exploration is particularly pertinent in the context of Saudi Arabia, where the healthcare system is navigating through rapid expansion and transformation, necessitating a renewed focus on the well-being of its healthcare workforce.

Results

A total of 288 health workers in primary health centers were recruited in this study. The majority of the health workers were females (70.8%) and 78.3% were usually working with both male and female patients. About 23% of the health workers were doctors, while 45% were nurses. The vast majority of health workers were Saudis working in the morning shift usually with >10 coworkers. About 75.9% of the health workers have ≥ 6 years of work experience while only 2.8% have less than one-year experience (table 1).

Table (1): Demographic and work characteristics of the respondents (n = 288)

Characteristics	*Frequency*	*Percent (%)*
Gender		
Male	84	29.2
Female	204	70.8
Marital status		
Single	40	13.9
Married	237	82.2
Divorced	11	3.9
Occupation		
Doctor	67	23.3
Nurse	130	45.0
Pharmacist	14	5.0
Technician	34	11.7
Clerk	27	9.4
Other	16	5.6
Nationality		
Saudi	281	97.5
Non-Saudi	7	2.5
Years of experience		
Less than 1 year	8	2.8
1-5 years	62	21.4
6-10 years	110	38.1
More than 10 years	109	37.8

Usual working shift		
Morning shift	286	99.4
Evening shift	10	3.6
Usual number of coworkers		
1 – 5	75	26.1
6 – 10	43	15.0
> 10	170	58.9
Usual patient gender		
Male	29	10.0
Female	34	11.7
Both	226	78.3

The prevalence of workplace violence among health workers was 46.7%, of them about 90% reported verbal violence, 34.3% have been intimidated, while 3% reported physical violence. The vast majority of violent incidences were inside workplace in the morning shifts. About 62% of the health workers reported that 62% of the offenders were male and 81% reported that age of offenders were 21-45 years old. Approximately, 3 quarters of the health workers reported that the violent event was by patients while 45% reported that the violence were by the companion of the patients. Regarding the reporting system, 40.2% of the health workers said their institute has reporting system of violence, but 27.3% said they don't know. Furthermore, among those who reported the presence of the system, 47.3% did not know how to use this reporting system. About 36% said that there is no encouragement to use this system in their institute, while most of them highlighted the preventable nature of the violent events (table 2).

Regarding risk factors of violence against health workers, the associations with general category of violence were not statistically significant. Only the patterns of violence showed significant associations with certain factors. The reported physical violence found to be associated significantly with location of violence, occupation of health workers, and age group of the offenders. The outside workplace was associated with higher percentage of physical violence than inside workplace. Similarly, the technicians, nurses are more susceptible to the violence than doctors and clerks. Pharmacists reported no physical violent events. Only 0.7% of health workers reported that offender age was 21-45 years old in comparison to 12.5% reported the offender age was from other age groups (table 3).

Gender, age, marital status, occupation, nationality, city and experience of health workers were not significantly associated with exposure to the workplace violence. However, some workplace characteristics were associated with violence such as availability of system for reporting violence and perceived effectiveness of the system (table 4). A prevalence of violence reported among those who said there is no reporting system for violence in the workplace (61.3%) than those reported presence of this system (41.7%). Similarly, the prevalence of violence was higher (80%) among those thought that the system is non-effective than among those who reported the effectiveness of the system (33.3%).

Table (2): Patterns of violence against healthcare workers and their awareness about regulations

Characteristics	*Frequency*	*Percent (%)*
Did you have any kind of work place violence over the past 12 months?		
Yes	135	46.7
No	151	52.5
I don't know	2	0.8
What type of violence did you have?		
Physical violence	4	3.0
Verbal violence	122	89.9
Intimidation	46	34.3
More than one type of violence	37	27.2
When was the attack?		
Morning shift	126	93.5
Evening shift	21	15.4
Where did the attack happened?		
Inside workplace	132	97.6
Outside workplace	5	3.6
Age of offender (offender) approximately?		
≤ 20 years old	10	7.1
21 – 45 years old	110	81.1
≥46 years old	38	27.8
Gender of the offender		
Male	84	62.1
Female	83	61.5
The offender was		
Patient	100	74.0

Colleague	9	6.5
Companion	62	45.6
Other	7	5.3
Is there a system for reporting violence in your institute?		
yes	44	32.5
no	54	40.2
I don't know	37	27.2
Do you know how to use the system of reporting? (n=55)		
Yes	23	52.7
No	21	47.3
Is there encouragement to report violence event? (n=55)		
Yes	21	47.3
No	16	36.4
I don't know	7	16.4

Discussion

In Saudi Arabia, the awareness of response to violence towards healthcare workers is low despite of high prevalence rate and significant impact on occupational health either in training or working status [11]. Working in healthcare setting is frequently associated with stress, anxiety, burnout and sometimes depression. The Saudi Commission for Health Specialties provides academic and psychological support system called DAEM which ensure the help with maintain of privacy and confidentiality. They provide interactive guidance to the residents during their training stage. Additionally, DAEM conducts periodic surveys to assess the magnitude and determinants of burnout among trainees. The effectiveness of this program has not been evaluated. The stress and work load among caregivers were found to be high either in the training or in the working stages [12].

In the present study, The prevalence of workplace violence among health workers was 46.7%, of them about 90% reported verbal violence, 34.3% have been intimidated, while 3% reported physical violence. A recent review, which included 20 studies, postulated that violence influences commonly frontline caregivers such as nurses and physicians [13]. This lead to an increased prevalence of burnout among health workers peaks to the level of epidemic with more than 50% affected health workers [14-16].

In the present study, the awareness about reporting system, in case of violence, was low among healthcare workers as 40.2% of the health workers said their institute has reporting system of violence, but 27.3% said they don't know. Furthermore, among those who reported the presence of the system, 47.3% did not know how to use this reporting system.

DAEM initiative by the SCFHS and only 14.9% have ever tried to contact DAEM support program. These low awareness and utilization rates are pointing to a window of improvement in support programs of medical professionals. Improvement of DAEM initiative in terms of accessibility, feasibility, and capacity is important for promotion of occupational and psychological health of the residents. The level of emotional exhaustion is much higher than that reported by family medicine residents recruited from Madinah city by Aldubai e al., [17]. as only 33.3% had high emotional exhaustion with mean score of 22.5 ± 12.8. Similarly, lower levels of emotional exhaustion and depersonalization were reported among orthopedic residents in different regions in Saudi Arabia with 50% and 39.4% had high emotional exhaustion and depersonalization, respectively [18].

Limitations in the present study are mainly related to a cross-sectional design, as an alternative prospective design is recommended to assess the variation in the violence status with time. In the future, a surveillance data from Ministry of Health could be used to assess the incidence and determinants of violence against healthcare workers in the training programs. Moreover, testing the appropriate methods for intervention would be conducted using data of case management from the Ministry of Health.

Conclusions:

The prevalence of violence among healthcare workers is high as a slightly less than a half of the workers was exposed to some sort of violence, particularly verbal violence. Regarding the reporting system, more than one quarter of the health workers did not know if their institute has a reporting system of violence or not. Physical violence was significantly associated with location of violence, occupation of health workers, and age group of the offenders. Technicians and nurses were more susceptible to the violence than doctors and

clerks, while pharmacists reported no physical violent events.

Conflict of interests

The authors declared no conflict of interests

References

1. d'Ettorre, G. and V. Pellicani, Workplace violence toward mental healthcare workers employed in psychiatric wards. Safety and health at work, 2017. 8(4): p. 337-342.
2. Mohanty, A., A. Kabi, and A.P. Mohanty, Health problems in healthcare workers: A review. Journal of family medicine and primary care, 2019. 8(8): p. 2568.
3. Greenberg, N., Mental health of health-care workers in the COVID-19 era. Nature Reviews Nephrology, 2020. 16(8): p. 425-426.
4. Gershon, R.R., et al., Compliance with universal precautions among health care workers at three regional hospitals. American journal of infection control, 1995. 23(4): p. 225-236.
5. Huang, Y.-H., et al., Safety climate and self-reported injury: Assessing the mediating role of employee safety control. Accident Analysis & Prevention, 2006. 38(3): p. 425-433.
6. Strahan, C., B. Watson, and A. Lennonb, Can organisational safety climate and occupational stress predict work-related driver fatigue? Transportation research part F: traffic psychology and behaviour, 2008. 11(6): p. 418-426.
7. Ali, H., N.A.C. Abdullah, and C. Subramaniam, Management practice in safety culture and its influence on workplace injury: An industrial study in Malaysia. Disaster Prevention and Management: An International Journal, 2009.
8. Kitaneh, M. and M. Hamdan, Workplace violence against physicians and nurses in Palestinian public hospitals: a cross-sectional study. BMC health services research, 2012. 12(1): p. 1-9.
9. Al-Turki, N., A.A. Afify, and M. AlAteeq, Violence against health workers in Family Medicine Centers. Journal of multidisciplinary healthcare, 2016. 9: p. 257.
10. Alsaleem, S.A., et al., Violence towards healthcare workers: A study conducted in Abha City, Saudi Arabia. Journal of family & community medicine, 2018. 25(3): p. 188.
11. Algwaiz, W.M. and S. Alghanim, Violence exposure among health care professionals in Saudi public hospitals. Saudi medical journal, 2012. 33(1): p. 76-82.
12. IsHak, W.W., et al., Burnout during residency training: a literature review. Journal of graduate medical education, 2009. 1(2): p. 236-242.
13. Dugani, S., et al., Prevalence and factors associated with burnout among frontline primary health care providers in low-and middle-income countries: a systematic review. Gates open research, 2018. 2.
14. Shanafelt, T.D., et al., Burnout and career satisfaction among American surgeons. Annals of surgery, 2009. 250(3): p. 463-471.
15. Shanafelt, T.D., et al., Burnout and satisfaction with work-life balance among US physicians relative to the general US population. Archives of internal medicine, 2012. 172(18): p. 1377-1385.
16. Shanafelt, T.D., et al. Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. in Mayo Clinic Proceedings. 2015. Elsevier.
17. Aldubai, S.A., et al., Prevalence and associated factors of burnout among family medicine residents in Al Madina, Saudi Arabia. Journal of family medicine and primary care, 2019. 8(2): p. 657.
18. Alsheikh, K.A., et al., Burnout syndrome among orthopedic surgery residents in Saudi Arabia: A multicenter study. Journal of Musculoskeletal Surgery and Research, 2019. 3(2): p. 184.

Table (3): Significant determinants of physical violence occurrence on health workers

Characteristics	*Occurrence of physical violence among health workers*		*Chi-square*	*P value*
	No	**Yes**		
The location of violence				
Inside workplace	98.2%	1.8%	**31.9**	**0.004**
Outside workplace	50.0%	50.0%		
Occupation				
Doctor	92.9%	7.1%	**4.183**	**0.523**
Nurse	97.5%	2.5%		
Pharmacist	100.0%	0.0%		
Technician	100.0%	0.0%		
Clerk	100.0%	0.0%		
other	100.0%	0.0%		
Offender age				
Offender age 21-45	99.3%	0.7%	**12.7**	**0.005**
Other age groups	87.5%	12.5%		

Table (4): Association between workplace characteristics and occurrence of violence

Factors	*Violence*		*Chi-square*	*P value*
	No	**Yes**		
Usual working shift				
No	0.0%	100.0%	2.27	0.132
Yes	53.4%	46.6%		
Usual number of coworkers				
1 – 5	50.0%	50.0%	0.768	0.681
6 – 10	57.4%	42.6%		
> 10	53.3%	46.7%		
Usual patient gender				
Male	52.8%	47.2%	0.804	0.669
Female	59.5%	40.5%		
Both	52.1%	47.9%		
Availability of system for reporting violence				
Yes	58.3%	41.7%	13.35	0.001*
No	38.7%	61.3%		
I don't know	60.7%	39.3%		
Use of the system				
Yes	63.7%	36.3%	5.38	0.068
No	42.1%	57.9%		
I don't know	66.7%	33.3%		
Encouragement to use the system				
Yes	65.3%	34.7%	4.32	0.115
No	45.9%	54.1%		
I don't know	50.0%	50.0%		
Training on the system				
Yes	66.7%	33.3%	5.24	0.730
No	50.9%	49.1%		
I don't know	100.0%	0.0%		
Effectiveness of the system				
Yes	66.7%	33.3%	14.45	0.001*
No	20.0%	80.0%		
I don't know	60.7%	39.3%		


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