



## Review

# Workplace violence in healthcare settings: The risk factors, implications and collaborative preventive measures

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## ARTICLE INFO

## Keywords:

Healthcare settings  
Implications  
Preventive measures  
Risk factors  
Workplace violence

## ABSTRACT

Violence at work refers to acts or threats of violence directed against employees, either inside or outside the workplace, from verbal abuse, bullying, harassment, and physical assaults to homicide. Even though workplace violence has become a worrying trend worldwide, the true magnitude of the problem is uncertain, owing to limited surveillance and lack of awareness of the issue. As a result, if workplace violence, particularly in healthcare settings, is not adequately addressed, it will become a global phenomenon, undermining the peace and stability among the active communities while also posing a risk to the population's health and well-being. Hence, this review intends to identify the risk factors and the implications of workplace violence in healthcare settings and highlight the collaborative efforts needed in sustaining control and prevention measures against workplace violence.

## 1. Introduction

Violence affects people at all levels of society and can occur anywhere; at home, on the streets, in schools, workplaces, and institutions. Violence had previously been overlooked as a Public Health issue due to the lack of a clear definition, undeniably a complex and diffused matter. It is not as simple as relating violence to scientific facts to define it; instead, it is a matter of judgment of appropriate and acceptable behaviors influenced by culture, values, and social norms. Violence is determined by the World Health Organization (WHO) as the deliberate use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that has consequences or has a high probability of resulting in injury, death, mental distress, mal-development, or deprivation.

Occupational Safety and Health Administration (OSHA) defines workplace violence as any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at work [1]. While physical violence (which includes beating, biting, kicking, pushing, slapping, stabbing, and shooting) in the workplace has been acknowledged, little has been done to address the presence of psychological violence until recent years [2]. Psychological violence is the intended use of power, including the threat of physical force against

another person or group with the potential to impair the affected individual's physical, mental, spiritual, moral, or social development [2]. Besides, harassment which is also categorized as a type of violence, is defined as any behavior that degrades, humiliates, irritates, alarms, or verbally insults another person, including abusive words, bullying, gestures, and intimidations [3]. This review aims to determine the risk factors and consequences of workplace violence in healthcare settings, as well as emphasizing the joint efforts required to enhance the control and preventative measures of workplace violence.

## 2. Workplace violence in healthcare settings

Although violence in the workplace affects almost all sectors and groups of workers, it is apparent that violence in healthcare settings provides a significant risk to public health and an occupational health issue of growing concern. The healthcare and social service industries have the greatest rates of workplace violence injuries, with workers in these industries being five times more likely to be injured than other workers [4]. In addition, workplace violence in the health sector is estimated to account for about a quarter of all workplace violence [5]. Workplace violence is constantly on the rise in the health industry due to rising workloads, demanding work pressures, excessive work stress,

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<https://doi.org/10.1016/j.amsu.2022.103727>

Received 26 February 2022; Received in revised form 27 April 2022; Accepted 3 May 2022

Available online 13 May 2022

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deteriorating interpersonal relationships, social uncertainty, and economic restraints [5].

Healthcare workers accounted for 73% of all nonfatal workplace injuries and illnesses due to violence in 2018 [4]. According to World Health Organization (WHO), it is estimated that between 8% and 38% of health workers suffer physical violence at a certain point in their careers. At the same time, many more are exposed or threatened with verbal aggression [6]. Most violent cases are committed by patients' family members or friends and followed by patients themselves [4,7]. Violence in healthcare settings worsens when there is a crisis, emergency, or disaster which involves large groups of people who are even more overwhelmed with panic attacks, shock, uncertainties, fears, and worries of the conditions they or their family members are going through [6]. As a result, healthcare workers become the targets to vent their anger or frustrations. The most vulnerable healthcare workers victimized are staff at emergency departments, especially nurses and paramedics, and staff directly involved with in-patient care [5,6].

Furthermore, the Healthcare Crime Survey conducted by International Association for Healthcare Security and Safety Foundation's (IAHSSF) in 2019 reported the assault rates against healthcare workers increased from 9.3 incidents in 2016 to 11.7 per 100 beds in 2018, which is the highest rate that IAHSSF has ever recorded since 2012 [8]. 85% of workplace violence occurrences were classified as National Institute for Occupational Safety and Health (NIOSH) Type II Customer/Client Workplace Violence, which involves violence directed at employees by customers, clients, patients, students, inmates, or anybody else for whom an organization provides services [9]. According to a meta-analysis of 47 observational studies, the overall prevalence of workplace violence against healthcare professionals was 62.4%, with verbal abuse accounting for the highest majority (61.2%), followed by psychological violence (50.8%), threats (39.5%), physical violence (13.7%), and sexual harassment (6.3%) [10].

Even though some institutions may have a proper formal incident reporting system, there are still many incidents, especially in the forms of bullying, verbal abuse, and harassment, unreported [11]. Lack of reporting guidelines or policy, lack of trust in the reporting system, and fear of retaliation are among the many reasons for underreporting [12, 13]. For example, in Malaysia, with the launching of the guidelines and training modules to address and prevent violence against healthcare workers, more cases were reported with a drastic 159% increase from 167 cases in December 2017 to 432 cases in December 2018 [14]. The Emergency Department and the Psychiatry and Mental Health Departments were high-risk areas, as they were in other countries, with the most common perpetrators being patients, their relatives, or visitors [14]. While verbal violence, physical assault, intimidation, and sexual harassment were among the types of workplace violence documented [14], cyberbullying has been on the rise in recent years, with humiliation, defamation, and unlawful video recording in healthcare settings.

### 3. Risk factors of workplace violence in healthcare settings

The etiology of workplace violence can be pretty complex, and many risk factors are related to both the perpetrators and the healthcare workers assaulted. The environments under which care and services are provided in healthcare settings contributed to healthcare workers being more prone to occupational violence. Many studies were conducted, and some of the risk or associating factors that contributed to the amplified incidence of violence towards healthcare workers over the recent years are: (i) attitudes and behaviors of patients, family members, friends, or visitors who are often under intense emotional charge and expectations [15–17]; (ii) healthcare workers and work factors which include shortage of staffs, inexperienced or anxious staffs, poor coping mechanism and lack of training [18–22]; and (iii) system or environmental factors (overcrowded areas, long waiting hours, inflexible visiting hours, lack of information as well as difference of language and culture) [15,17, 19,20,23,24].

### 4. Effect of workplace violence in healthcare settings

Violence against healthcare workers in any situation is inexcusable, especially when they are working around the clock to ensure that everyone receives the best treatment possible. The effect of violence harms healthcare employees' physical and psychological well-being of healthcare workers [6]. Victims of violence are more likely to experience demoralization, depression, loss of self-esteem, ineptitude as well as signs of post-traumatic stress disorders like sleeping disorders, irritability, difficulty concentrating, reliving of trauma, and feeling emotionally upset [7,17,24,25].

Furthermore, the negative implications of such widespread violence in healthcare sectors have a significant impact on the delivery of health care services, including a decline in the quality of care delivered, increased absenteeism, and health workers' decision to leave the field [5,15,17,19,25]. As a result, the number of health services available to the general public will be limited, resulting in increased healthcare costs due to resource constraints. In addition, if healthcare workers leave their employment due to harassment and threats of violence, equal access to primary health care would be threatened, particularly in developing countries where the number of healthcare workers is insufficient to meet the needs and demands of the population.

Many healthcare employees mistakenly feel that workplace violence is just part and parcel of their jobs [26,27] and that they were unlucky enough to be in the wrong location at the wrong time. Many employees believe no action will be taken against the perpetrators [28], or they refuse to endure the stigmatization and the inconvenience of filing reports and following through on legal proceedings [29,30]. They are typically concerned that if they speak up about what has occurred to them, they will be shamed or labeled incompetent with a lack of supervisory support [12,29]. Furthermore, the harassed healthcare workers are even more concerned that the offenders may inflict additional harassment, violence, or threats on them and their family members if reports are made [31].

Hence, it further implies the need for proper awareness and recognition followed by clearly defined control and prevention measures of workplace violence in healthcare settings to prevent the negative impact of workplace violence to both the healthcare staffs and services. These measures are also vital to ensure that all healthcare workers, especially the front liners, are well protected in a safe working environment so that health care services can be continued to run smoothly without any interruptions for the benefit of the community.

### 5. Collaborative efforts in prevention and management of workplace violence in healthcare settings

The detrimental effects, mainly the psychological impact of workplace violence on affected healthcare employees, are one of the most critical reasons it must be handled before it escalates to higher absenteeism rates or further affects healthcare workers' overall performance. It will have even more negative implications for the healthcare sector when staffing is already scarce, and patient loads continue to rise inexorably.

Nonetheless, there is still much room for improvement in workplace violence awareness and abilities. There is an essential need to have a strong collaborative effort, support, and commitment from top management and the workers to protect themselves. There is no single guideline that is suitable for all settings. Hence, the management of each healthcare setting needs to create or adapt and establish a practical, acceptable and sustainable workplace violence prevention program. It should be according to the needs of their respective environments, using the available guidelines or recommendations by WHO, ILO, DOSH, and evidence-based research.

In non-emergency settings, interventions to prevent violence against healthcare professionals focus on techniques to better manage aggressive patients and high-risk visitors while in emergency circumstances,

interventions are more focused on assuring the physical security of healthcare facilities [6]. Among some of the prevention and control measures in the sequence of effectiveness include; (i) substitution by transferring a client or patient with a history of violent behaviour to a more suitable secure facility or area [13]; (ii) engineering control measures which include installing barrier protection, metal detectors and security alarm systems, allocating conducive patients or visitors areas and clear exit routes [1,13]; (iii) administrative and work place practise controls which include implementing workplace violence response and zero-tolerance policies [1,17,24,32], ability to resolve conflict situation [33], establishing mandatory timely reporting system [34], ensuring employees are not working alone [35], flowchart for assessing and response in emergency situations [1,35]; (iv) post-incident procedures and services that include trauma-crisis counselling, critical-incident stress debriefing and employee assistance programs [35]; (v) safety and health training in order to ensure that all staff members are aware of potential hazards and how to protect themselves and their co-workers through established policies and procedures [32, 35,36].

Aside from that, international or regional professional organizations, councils, and associations play essential roles in supporting, participating in, as well as contributing to initiatives and mechanisms aimed at minimizing and eliminating the potential risks of workplace violence in healthcare settings [5,37–39]. It includes but is not limited to (i) actively advocating on the awareness and training for workplace violence; (ii) incorporating in their codes of practice, codes of ethics, and clauses concerning the unacceptance of any form of workplace violence; (iii) integrating accreditation procedures in healthcare institutions on the requirement of measures aimed at preventing workplace violence; (iv) establishing workplace violence surveillance by mandatory and guided data collection procedures on the incidents of violence in all healthcare settings; and (v) offering support for victims of workplace violence, specifically in the form of legal aid if necessary.

In addition, participation and contribution from community groups, non-governmental organizations (NGOs), as well as business corporations in terms of technical support and financial assistance, play an essential part in curbing and preventing workplace violence in the healthcare settings [5,35,37–39]. Among the initiatives and activities which are highlighted include (i) creating and maintaining a strong network of information and expertise in workplace violence; (ii) assisting in promoting awareness of the risks of workplace violence; (iii) participating in training and educational programs; (iv) assisting in the support structure for the prevention and management of workplace violence; as well as (v) incorporating and emphasizing the importance of good communication skills and coping mechanism among the healthcare workers.

Summary of the risk factors, effects as well as the collaborative efforts which are important in the control and prevention measures for workplace violence in healthcare settings are tabulated in Table 1.

**6. Conclusion**

It is undeniable that workplace violence needs to be addressed more comprehensively, involving shared responsibilities from all levels. These include (i) government’s legislations; (ii) healthcare management’s dedication, firm support, assurance, and clearly defined policy, reporting procedures, and training; (iii) the healthcare workers’ commitment to update their awareness and knowledge regarding workplace violence; and (iv) the provision of technical support and assistance from professional organizations, NGOs, and the community.

**Sources of funding**

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

**Table 1**

Summary of risk factors, effects and collaborative management of workplace violence in healthcare settings.

| Workplace Violence in Healthcare Settings   |   | Studies or References   |
|---|---|---|
| <b>1. Risk Factors of Workplace Violence in Healthcare Settings</b>                                       |   |   |
| a. Attitudes and behaviours of patients, family members & visitors  | <ul style="list-style-type: none"> <li>- Intense emotional charge</li> <li>- High expectations</li> </ul>   | <ul style="list-style-type: none"> <li>• Ferri et al., 2016</li> <li>• Fida et al., 2018</li> <li>• Stathopoulou, 2007</li> </ul>   |
| b. Work factors   | <ul style="list-style-type: none"> <li>- Shortage of staffs</li> <li>- Inexperienced or anxious staffs</li> <li>- Poor coping mechanism</li> <li>- Lack of training</li> </ul>  | <ul style="list-style-type: none"> <li>• Berlanda et al., 2019</li> <li>• Cashmore et al., 2016</li> <li>• Hahn et al., 2013</li> <li>• Hahn et al., 2010</li> <li>• Kumar et al., 2016</li> </ul>  |
| c. System or environmental factors  | <ul style="list-style-type: none"> <li>- Overcrowded areas</li> <li>- Long waiting hours</li> <li>- Inflexible visiting hours</li> <li>- Lack of information</li> <li>- Language and culture differences</li> </ul>   | <ul style="list-style-type: none"> <li>• Baig et al., 2018</li> <li>• Berlanda et al., 2019</li> <li>• Ferri et al., 2016</li> <li>• Hahn et al., 2013</li> <li>• Stathopoulou, 2007</li> <li>• Zainal et al., 2018</li> </ul>  |
| <b>2. Effects of Workplace Violence in Healthcare Settings</b>  |   |   |
| a. Negative physical and psychological well-being of healthcare workers                                   | <ul style="list-style-type: none"> <li>- Demoralization</li> <li>- Depression</li> <li>- Loss of self-esteem</li> <li>- Ineptitude</li> <li>- Post-traumatic stress disorders                             <ul style="list-style-type: none"> <li>• Sleeping disorders</li> <li>• Irritability</li> <li>• Difficulty concentrating</li> <li>• Emotionally upset</li> </ul> </li> </ul>   | <ul style="list-style-type: none"> <li>• Baig et al., 2018</li> <li>• Stathopoulou, 2007</li> <li>• Zafar et al., 2013</li> <li>• Zhao et al., 2015</li> </ul>  |
| b. Effect to delivery of health care services   | <ul style="list-style-type: none"> <li>- Decline in quality of care delivered</li> <li>- Increased absenteeism</li> <li>- Early retirement or leaving service</li> </ul>  | <ul style="list-style-type: none"> <li>• Berlanda et al., 2019</li> <li>• di Martino et al., 2002</li> <li>• Ferri et al., 2016</li> <li>• Stathopoulou, 2007</li> <li>• Zhao et al., 2015</li> </ul>   |
| <b>3. Collaborative Efforts in Prevention and Management of Workplace Violence in Healthcare Settings</b> |   |   |
| a. Healthcare Settings  | <ul style="list-style-type: none"> <li>- Substitution                             <ul style="list-style-type: none"> <li>- Transferring violent client or patient to other area</li> </ul> </li> <li>- Engineering control                             <ul style="list-style-type: none"> <li>- Barrier protection</li> <li>- Metal detectors</li> <li>- Security alarm systems</li> <li>- Conducive patients or visitors’ areas</li> <li>- Clear exit routes</li> </ul> </li> <li>- Administrative and work place practices                             <ul style="list-style-type: none"> <li>- Implementing workplace violence response and zero-tolerance policies</li> <li>- Ability to resolve conflict situation</li> <li>- Mandatory timely reporting system</li> </ul> </li> <li>- Employees not working alone</li> <li>- Flowchart for assessing and response in emergency situation</li> <li>- Safety and health training</li> <li>- Post-incident procedures and services</li> <li>- Trauma-crisis counselling</li> </ul> | <ul style="list-style-type: none"> <li>• OSHA, 2015a</li> <li>• OSHA, 2015a</li> <li>• OSHA, 2015b</li> <li>• Al-Shiyah &amp; Ababneh, 2018</li> <li>• Arnetz et al., 2018</li> <li>• Baig et al., 2018</li> <li>• OSHA, 2015a</li> <li>• OSHA, 2015b</li> <li>• OSHA, 2019</li> <li>• Sato et al., 2013</li> <li>• Stathopoulou, 2007</li> <li>• Swain et al., 2014</li> <li>• OSHA, 2019</li> </ul> |

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Table 1 (continued)

| Workplace Violence in Healthcare Settings  | Studies or References  |   |
|--|--|---|
| e. Professional organizations, councils and associations                             | <ul style="list-style-type: none"> <li>- Critical incident stress debriefing</li> <li>- Employee assistance programs</li> <li>- Advocacy and training for workplace violence</li> <li>- Incorporating zero-tolerance to workplace violence in codes of practice, ethics and clauses</li> <li>- Mandatory workplace violence surveillance</li> <li>- Support for victims of workplace violence</li> </ul> | <ul style="list-style-type: none"> <li>• di Martino, 2002</li> <li>• ILO, ICN, WHO, PSI, 2002</li> <li>• Morphet et al., 2018</li> <li>• NIOSH, 2004</li> </ul>                       |
| f. Community groups, Non-Governmental Organizations (NGOs) and business corporations | <ul style="list-style-type: none"> <li>- Strong network of information and expertise in workplace violence</li> <li>- Promoting awareness of workplace violence</li> <li>- Participation in training and educational programs</li> <li>- Assisting in Support structure</li> <li>- Incorporating good communication skills and coping mechanism</li> </ul>   | <ul style="list-style-type: none"> <li>• di Martino, 2002</li> <li>• ILO, ICN, WHO, PSI, 2002</li> <li>• Morphet et al., 2018</li> <li>• NIOSH, 2004</li> <li>• OSHA, 2019</li> </ul> |

### Ethical approval

No ethical approval is required for this review.

### Consent

Not applicable as it is a review and does not involve any new data collection from healthcare workers.

### Author contribution

Mei Ching Lim drafted the initial manuscript and was involved in the literature search. Mohammad Saffree Jeffree was responsible for conceptualizing the study, facilitating manuscript writing, and approving the final manuscript. Saihpudin @ Sahipudin Saupin, Nelbon Giloi, and Khamisah Awang Lukman contributed expert input in literature search and facilitated manuscript writing. All authors have seen and approved the final manuscript.

### Registration of research studies

Not applicable as it is a review and does not involve any new data collection from healthcare workers.

### Guarantor

Dr Mei Ching Lim.

### Provenance and peer review

Not commissioned, externally peer-reviewed.

### Declaration of competing interest

The authors report no conflict of interest nor proprietary or commercial interest in any product mentioned or concept discussed in this article.

### Acknowledgements

None.

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