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Original Article

Nurses' Perspectives on Risk Factors and Strategies to Control Workplace Violence: A National Survey in Vietnam

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Abstract

Background: We aimed to describe nurses' perspectives on risk factors and strategies to control workplace violence.

Methods: To accomplish the study objectives, an online cross-sectional questionnaire-based investigation was conducted. The scales were developed in accordance with the guidelines provided by reputable organizations such as the International Labour Office (ILO), International Council of Nurses (ICN), WHO, and Public Services International (PSI), as well as previous scholarly works. Prior to implementation, the validity and reliability of the Likert scales were rigorously tested. The survey, conducted from March to May 2022, encompassed 163 public hospitals in Vietnam and was completed by 2,280 nurses employed in these institutions.

Results: According to nurses' perceptions, several key risk factors contribute to workplace violence (WPV). These include low socio-cultural awareness among patients and their family members, overcrowding in hospitals, non-compliance with hospital regulations, unrealistic expectations regarding treatment outcomes, communication issues among staff members. To effectively control WPV, nurses propose a range of strategies. These include enhancing the quality of hospital services and the hospital environment, fostering a positive workplace culture, establishing a comprehensive system for reporting and responding to incidents of WPV and developing patient care protocols. These strategies are believed to mitigate the occurrence and impact of WPV, ensuring a safer and more secure work environment for nurses.

Conclusion: Workplace violence in healthcare settings is influenced by organizational, clinical, and environmental risk factors. Nurses adopt a multi-component approach to manage workplace violence. This study provides valuable insights for developing effective strategies to combat workplace violence in Vietnam.

Keywords: Coping with violence; Nurses; Risk factors of violence; Workplace violence

Introduction

Workplace violence (WPV) is an escalating global public health issue, garnered significant attention in recent years (1). Although violence can occur in any work setting, it is particularly pervasive within the healthcare sector (1). Extensive research has demonstrated that healthcare personnel, especially nurses, bear a disproportionate burden of this violence compared to other occu-

pational groups (2,3). This disparity can be attributed to the nature of nursing work, as nurses often engage in direct and prolonged interactions with patients and their families, rendering them more susceptible to acts of violence (4).

The variation in the prevalence of WPV in nursing seen between countries and regions. However, systematic reviews and meta-analyses indicate that the rate of violence against nurses normally ranges from 33% to 60% (5), (6). This rate might be even higher than that in COVID-19 pandemic (7,8). Workplace violence creates negative impacts on not only nurses' personal health but also the healthcare facilities where they are working (4, 9). To be more specific, exposure to workplace violence is detrimental to their mental and physical health. Nurses who experienced workplace violence reported their dissatisfaction or even considered leaving the profession or changing the work environment (3).

There are many risk factors of WPV, but from the nurses' point of view, WPV is mainly due to long waits for services, unmet expectations of patients, communication issues between healthcare providers and recipients, etc. (3). Nurses also said that effective strategies to reduce workplace violence could include: implementing security measures, improving surroundings, providing training programs, reducing time working alone, changing shifts, and restricting the movement of patients and their relatives in healthcare facilities (6, 10).

Vietnam, situated in Southeast Asia, is classified as a low-middle-income country. As of 2022, the estimated total number of nurses in Vietnam is 114,000. The majority of these nurses, approximately 80%, are employed in state health care facilities. Previous reports have indicated a concerning prevalence of WPV among nurses in Vietnam, with rates ranging from 47% to 75% (11, 12). Nevertheless, the existing studies conducted in Vietnam have primarily focused on documenting the frequency, impact, and responses of Vietnamese nurses to WPV. However, limited attention has been given to understanding the underlying causes of WPV and identifying effective prevention strategies. Given the gravity of the issue, the available data regarding WPV in Vietnam is insufficient to inform policy-making processes adequately. Consequently, the objective of this study was to provide a comprehensive exploration of nurses' perspectives on the risk factors associated with WPV and to identify effective strategies for its control.

Through this research, we aimed to fill the existing knowledge gap and contribute valuable insights to the field of WPV prevention and management in Vietnam.

Materials and Methods

Sample/Participants and Data collection

This cross-sectional study employed an online questionnaire through 'Kobotool Box platform. The subjects were nurses working at different levels of hospitals from district-level hospitals to central-level hospitals across Vietnam. Another criterion for subject selection was that respondents had to be nurses with at least 12 months of experience at the time of the survey. The study excluded nurses working in mental health sectors, such as psychiatric hospitals and hospital psychiatric departments. To ascertain the participation of nurses, a rigorous selection process was employed for the study sites. Specifically, a randomized approach was adopted, encompassing 10/25 Northern provinces, 8/19 Central provinces, and 8/19 Southern provinces in Vietnam. Considering the absence of central hospitals in each province, we proceeded to randomly select 3 central public hospitals in the North, 2 in the South, and 2 in the Central region from the comprehensive hospital list. Furthermore, within each chosen province, a further random selection was conducted, resulting in 1 grade I hospital, 2 grade II hospitals, and 3 grade III hospitals. Consequently, a cumulative count of 26 grade I hospitals, 52 grade II hospitals, and 78 grade III hospitals was achieved, yielding a total of 163 public hospitals. Approximately 18,000 nurses were employed across these aforementioned 163 hospitals.

Research invitations and tools were distributed to the selected hospitals via email in accordance

with established protocols. The nursing departments within each hospital were entrusted with the responsibility of disseminating these invitations and research tools to the respective nurses. Notably, to streamline the participation process for the nurses, Quick Response (QR) codes were incorporated into the survey questionnaire, thereby facilitating seamless engagement in the online survey. The data collection phase, spanning from Mar to May of 2022, witnessed active participation from a total of 2541 nurses. However, it is imperative to mention that only 2280 nurses successfully completed all the questions in the survey, thereby providing comprehensive data for analysis.

Questionnaire

The research instrument consists of 3 parts:

- General information about the research subjects: demographic information, job position, working seniority, working route.
- A scale to understand how nurses view risk factors of workplace violence was developed based on the guidelines of ILO, ICN, WHO, and PSI (13, 14) and previous studies (15). The scale consists of 3 parts: clinical risk factors, environmental risk factors, and organizational risk factors. The nurse's views on this issue are assessed through a 3-point Likert-Scale: Agree, Disagree or Do not respond, and Disagree.
- A scale to understand how nurses view workplace violence control measures was developed based on the research results of Shahjalal M and colleagues (15) and WHO guidelines (16). This 12-question scale is accompanied by 4 possible responses: High appropriate/effective, moderately effective, low effective, non-effective.

The instrument was initially developed in English and subsequently translated into Vietnamese by two bilingual nurse academics. These individuals possessed doctoral degrees in nursing from reputable institutions in Thailand and Hong Kong, had over 5 years of research experience, and had published their work in esteemed international journals. To ensure the content validity of the Vietnamese version of the instrument, it was reviewed by six experts who assessed its content validity index (CVI). All sub-items had an I-CVI value equal to or greater than 0.83, and the S-CVI/UA was 0.85. Furthermore, the reliability of the Vietnamese version of the instrument was assessed by administering it to 51 nurses. The results revealed a Cronbach's Alpha coefficient of 0.91 for the scale measuring nurses' understanding of risk factors for workplace violence, and a Cronbach's Alpha coefficient of 0.88 for the scale measuring nurses' understanding of workplace violence control.

Data analysis

The data collected was entered into IBM SPSS ver. 20.0 (IBM Corp., Armonk, NY, USA) for analysis. Descriptive statistics, such as frequency distribution tables and percentages, were employed to provide an overview of the demographic characteristics of the study subjects. Notably, previous studies have failed to specify a cut-off score for the scale, and instructions for determining it have been unclear. Consequently, in this study, we adopted the approach of utilizing the mean total score for each question to rank the risk factors associated with workplace violence (with higher mean scores indicating greater risk) as well as the effectiveness of various WPV control strategies (with higher average scores indicating greater efficacy).

Ethical considerations

The study commenced after obtaining ethical clearance from the Ethics Committee in Biomedical Research at Nam Dinh University of Nursing, with the assigned license number 473/GCN-HĐĐĐ and approval granted on 03/3/2022. Prior to participating in the survey, informed consent was obtained from all participants. They were assured of their right to withdraw from the study at any point, without the need for providing reasons, and the confidentiality of their personal information was strictly upheld. The data collection procedure adhered to the principles outlined in the Declaration of Helsinki in 1975, as revised in 2013.

Results

The study involved 2280 nurses, wherein the female nurses accounted for approximately 4.3 times the number of male nurses. A significant majority of the participants fell within the age range of 30-39 yr. They had accumulated work experience of 11-20 yr. The majority of the subjects were married, constituting 79.12% of the sample. The proportion of nurses with college and university degrees was either comparable to or higher than that of nurses holding intermediate and graduate degrees, with figures standing at 39.17% and 38.11%, respectively (Table 1).

Table 1: Nurses' personal information (n=2280)

Variables	*Character*	*Frequency (n)*	*Percentage (%)*
Gender	Male	434	19.04
	Female	1846	80.96
Age group(yr)	18-29	538	23.60
	30-39	1288	56.49
	≥ 40	454	19.91
Marital status	Married	1804	79.12
	Single	423	18.55
	Divorced/Separated/Widowed	53	2.32
Qualification	Intermediate	344	15.09
	College	893	39.17
	Bachelor	869	38.11
	Post graduate	174	7.63
Level of healthcare service	Special grade Hospitals	597	26.18
	Grade I Hospitals	754	33.07
	Grade II Hospitals	545	23.90
	Grade III Hospitals	384	16.84
Working years	1-10	487	21.36
	11-20	1319	57.85
	≥ 20	474	20.79

Within the category of "Clinical Risk Factors," the nurses involved in the study identified "Patients/family members' low sociocultural awareness" as the primary risk factor contributing to WPV. Following this, "Patient/family member non-compliance with hospital rules" was ranked second, and "Patients' unmet expectations of care or repeated requests" was ranked third in terms of risk factors (Table 2).

Table 2: Nurses' views on Risk Factors for WPV derived from "Clinical Risk Factors" (n=2280)

Risk factors	*Mean scores*	*Standard deviation*	*Rankings*
Patients/family members have low socio-cultural awareness	2.52	0.76	1
Patients/family members do not follow hospital rules	2.48	0.78	2
The patient's expectations of care or repeated requests are not met	2.48	0.73	3
Psychological problems of the patients/family members	2.33	0.79	4
Patients/family members abuse alcohol, beer, drugs, stimulants	2.26	0.78	5
The patient is critically ill or is in severe pain	2.11	0.79	6

According to nurses, the primary risk of violence stemming from Environmental Risk Factors lies in the inadequacy of security and protection systems within the hospital. Furthermore, the unrestricted access granted to patients' relatives for visitation purposes poses a significant risk of violence (Table 3).

Table 3: Nurses' views on Risk Factors for WPV derived from "Environmental Risk Factors" (n=2280)

Risk factors	*Mean scores*	*Standard deviation*	*Rankings*
Problems or weaknesses in the hospital's security and safety system	2.44	0.72	1
Easy accessand poor visitor management	2.33	0.77	2
Hospital space is not suitable or disproportionate	2.31	0.76	3
Inexperienced and unqualified security staff	2.25	0.74	4

According to the perspectives of the participating nurses, the primary risk factors for WPV derived from the category of Organizational Risk Factors include hospital overload, communication problems between medical staff and patients/patient's family, delay in responding to or providing necessary services to the patient, lack of manpower, inadequate shift/team work, prolonged and continuous working hours, and burnout among medical staff (Table 4).

Table 4: Nurses' views on Risk Factors for WPV derived from "Organizational Risk Factors" (n=2280)

Risk factors	*Mean scores*	*Standard deviation*	*Rankings*
Hospital overload	2.51	0.70	1
Communication problems between healthcare workers and patients/patient's family	2.48	0.72	2
Delays in response and provision of needed services to patients	2.48	0.71	3
Staffing shortages, long and continuous shifts, and healthcare worker burnout	2.47	0.72	4
Cumbersome, drawn-out administrative process	2.42	0.72	5
Patients/family members were not clearly explained about the medical conditions or hospital rules at the time of admission	2.39	0.73	6
Nurses have not received training in workplace violence prevention	2.39	0.76	7
A lack of a proper system for workplace violence incident reporting	2.35	0.78	8
Hospitals do not have enough equipment for treatment and patient care activities	2.34	0.74	9
Hospital managers are not decisive enough to resolve workplace violence	2.28	0.78	10
Medical staff have little awareness of violence in hospitals	2.27	0.77	11
Underreporting or no reporting of incidents of violence to the hospital director	2.19	0.79	12

The group of "Organizational Risk Factors" emerges as the primary category of risk factors associated with WPV. Following this, the category of "Clinical Risk Factors" is identified as the

second leading group, while the group of "Environmental Risk Factors" ranks third in terms of their contribution to the occurrence of WPV (Table 5).

Table 5: Classification of Risk Factors causing Nurses' Workplace Violence (n=2280)

Group of risk factors	*Mean scores*	*Standard deviation*	*Rankings*
Organizational Risk Factors	2.38	0.52	1
Clinical Risk Factors	2.36	0.53	2
Environmental Risk Factors	2.33	0.57	3

The nurses' evaluations of all 12 proposed strategies for controlling workplace violence revealed a generally high level of perceived effectiveness, as indicated by the average score of the 12 measures approaching 4, which represents the maximum score on the scale. Notably, the strategies deemed most effective encompassed enhancing the quality of hospital services, fostering a positive office/workplace culture, establishing a responsive system for managing incidents of workplace violence (Table 6).

Table 6: Nurses' views on Effective Strategies to Control WPV (n=2280)

Measures	*Mean scores*	*Standard deviation*	*Rankings*
Improve the quality of health services	3.80	0.47	1
Build and maintain an organizational culture in hospitals	3.79	0.47	2
Have a proper system for reporting and responding to workplace violence incidents.	3.74	0.54	3
Develop patient- and family-centered policies and procedures	3.73	0.51	4
Improve the hospital environment	3.72	0.57	5
Train hospital workers in workplace violence prevention	3.70	0.54	6
Publicize penalties for workplace violence and penalize the perpetrators heavily	3.70	0.57	7
Increase penalty frame as a deterrent to would-be perpetrators t is necessary to raise the penalty frame to be enough to deter those who cause workplace violence	3.68	0.59	8
Recruit more hospital workers or appropriate employee transfer between departments/wards in the hospitals	3.67	0.57	9
Increase investment in human capital	3.65	0.61	10
Strengthen security measures	3.64	0.61	11
Restrict the areas patients and family can access to	3.38	0.75	12

Discussion

Risk Factors for Workplace Violence

Workplace violence is a complex issue with various causes, including factors related to perpetrators, assaults on medical staff, and hospital environments. The specific risk factors can differ between hospitals and in-home care settings, depending on factors such as location, size, and types of care provided (17). Recent studies have reported different categories of risk factors contributing to the increase in workplace violence against healthcare workers, especially nurses (9, 18). Building upon this existing knowledge, the

present study aims to explore nurses' perspectives on three main groups of risk factors for WPV: Clinical Risk Factors, Environmental Risk Factors, and Organizational Risk Factors.

Regarding "Clinical Risk Factors", nurses believe that non-compliance of patients and their family with hospital rules; patient's high expectations of care services or unmet, repeated requests; Psychological problems of patients and their family are the leading causes of violence. The findings in this study are consistent with a recent study in Iran (15), Jordanian (15) and China (19). These mentioned factors may have contributed to the reduced ability of the patient and their relatives to regulate aggressive crises, and thereby causing uncontrollable acts of violence (9). Crises can arise when there is a disagreement with a care plan, a denial of service or an unmet request, a conflict with a healthcare professional, a perception that the healthcare provider is rude, or nonchalant and lack of control over the ability to change health care outcomes (20).

In terms of "Environmental Risk Factors", this study found that problems of the hospital's security and safety system, and poor visitor management are the main risk factors for WPV. The findings thus consolidate previous research on WPV (21, 22). To be more specific, a lack of security measures has been found to be the primary cause in either Pakistan or India (15, 20). In fact, a lack of both appropriate security measures and an effective hospital visitor policy has put a strain on hospital capacity (which gives rise to hospital overload) and nurses.

The "Organizational Risk Factors" are considered to arise from within the organization itself, including policies, procedures, work practices, and culture. In the context of this study, nurses identified several key risks associated with these factors, including hospital overcrowding, communication issues among staff, delays in healthcare services, staffing shortages, complex procedures, and inadequate patient information. A recent study conducted in Jordan also emphasized staffing shortages and poor communication as the primary causes of violence according to nurses' viewpoints (23). The identified factors have the potential to result in prolonged waiting times, excessive hospital workload, and heightened job-related stress. These factors play a significant role in triggering violent incidents. Consequently, the working conditions serve as the fundamental underpinning of workplace violence, rather than administrative protocols or the behavior of nurses themselves.

Nurses perceive multiple causes of WPV, with hospital overcrowding, communication problems among nurses, delays in service provision, and low social culture awareness of patients/family members being identified as the primary factors. According to nurses' perspectives, Organizational Risk Factors were deemed to be the primary contributor to WPV, followed by patient personality traits (Clinical Risk Factors), and finally, Environmental Risk Factors. However, the relationship between these groups of risk factors is complex and not easily delineated in many cases. Further research is needed to better understand the interplay between these factors and develop comprehensive strategies for preventing and addressing WPV in healthcare settings (18).

Protective Strategies for Healthcare workers

Mitigating WPV necessitates a comprehensive and multifaceted approach encompassing various components, including punitive measures for perpetrators, staff training initiatives, and active involvement of governmental bodies, law enforcement agencies, and healthcare institutions (24). Within the context of this study, effective strategies for addressing violence encompass the following: enhancing the quality of healthcare services, cultivating and sustaining an organizational culture within hospital settings, fortifying the system for reporting and responding to incidents of workplace violence, providing healthcare workers with comprehensive training in managing WPV, and improving the overall hospital environment. Conversely, less efficacious solutions were identified, such as bolstering security measures and implementing restrictions on patient and family access to certain areas within healthcare facilities. Nurses' views on effective coping strategies for violence are inconsistent

across studies. Effective responses described in Pakistan include training on de-escalation but also emphasize community engagement and hospital management (25). Effective strategies suggested in a study in India comprise improving communication between healthcare providers and patients, improving education of patients and society, improving hospital safety and security (24). Furthermore, training staff to refuse to care for perpetrators of violence, enhancing communication between organizations, and making employee transfer are effective solutions suggested by nurses in Canada (26). Meanwhile, implementing security measures and build comfortable and convenient waiting rooms for patients are what the nurses in Jordan recommend (10).

Nurses' perspectives on strategies to address WPV vary significantly across studies, reflecting differences in WPV severity and socio-economic contexts. However, a common theme is the adoption of a multi-faceted approach by nurses, which includes staff training and changes in management policies and the hospital environment. International organizations like the ILO, WHO, PSI, and ICN recommend interventions that encompass healthcare provider training, improved security measures, and the implementation of workplace violence prevention and management policies (1). Therefore, it is our contention that in order to address varying degrees of violence, the mitigation of violence should be embedded within the organizational framework rather than being solely placed upon the individuals who are, in fact, the victims in these circumstances. This approach, rooted in systems thinking, necessitates organizational-level interventions with well-defined policies and procedures.

Strengths and limitations

This study represents the inaugural investigation conducted at a national level in Vietnam, delving into the perspectives of nurses regarding risk factors and preventive measures for mitigating WPV. Notably, the inclusion of a substantial sample size greatly enhances the statistical robustness, thereby enabling more accurate extrapolation of findings to the broader population. However, the scope of this study may not encompass all potential risk factors and control strategies associated with WPV, as there may exist additional variables beyond those delineated within this research endeavor.

Conclusion

This study provides insights into the various causes of WPV as perceived by nurses. These causes can be categorized into Organizational Risk Factors, Clinical Risk Factors, and Environmental Risk Factors, with the Organizational Risk Factors being the most prevalent. Nurses also adopt a multi-component approach to address WPV, incorporating strategies such as training, strengthening security systems, and implementing workplace violence prevention and management measures and policies. Specifically, it is recommended to focus on strategies such as improving the quality of health services, fostering an organizational culture within hospitals, enhancing the reporting and response system for workplace violence incidents, developing patient- and family-centered policies and procedures, providing healthcare workers with training on WPV control, and improving hospital environments. The perspectives of nurses in this study provide valuable and useful data for the development of effective strategies to address WPV in Vietnam.

Journalism Ethics considerations

Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

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Conflict of interest

The authors declare that there is no conflict of interest.

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