

The Research Review on Prevention and Control of Workplace Violence on the Health Industry

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Abstract: As a social security problem, workplace violence (WPV) widely occurs in various industries. According to statistics, the incidence of WPV in the health industry is about 25%, and violence in the health industry is widespread in all countries and all positions in the health industry. WPV not only harms medical staff's physical health but also causes psychological problems. To understand and analyze the current situation of WPV in the health industry, the main measures of prevention and control management, and to put forward corresponding measures for the current prevention and control of WPV. CNKI, Wan-Fang Data, Pubmed, Cochrane Library, Medline, Web of Science, Embase, and other 8 Chinese and English databases were searched by computer, and relevant literature on prevention and control of WPV in hospitals was searched. The contents were extracted and summarized. Prevention and control management can be carried out before and after the occurrence of WPV. The prevention and control management before the violence mainly includes the identification of high-risk situations of WPV, policy formulation, workplace environment setting, violation-related course training, and scenario exercise. Studies have shown that the main places of WPV are the emergency department, psychiatric department, pediatric department, etc., and the main forms of violence are verbal violence in psychological violence. In the prevention and control management of WPV, prevention, and control can be carried out according to the above characteristics of violence, and the response resources and inducing factors of WPV can be started. To construct the management mechanism, management mode, and management effect of WPV.

1. Introduction

Workplace violence(WPV) was defined by the World Health Organization in 2002 as a situation

in which a worker is verbally abused, threatened, or assaulted in his or her workplace in a way that creates an explicit or implicit challenge to his or her safety, well-being or health, and includes both physical and psychological harm [1]. WPV as a social safety issue occurs widely across industries. According to statistics, the incidence of WPV in the health sector is around 25%, and violence in the health sector is spreading in all countries around the globe and in all positions in the health sector [2]. WPV not only endangers the physical health of healthcare workers but also causes a series of psychological problems [3]. A cross-sectional survey from 23 hospitals in China of 1502 caregivers who suffered from WPV showed that 25.01% incidence of moderate burnout after suffering from WPV, job satisfaction decreased to 50%, and even triggered a rise in adverse nursing events [4]. Frequent WPV not only directly disrupts the normal order of hospital diagnosis and treatment, but also affects the quality of healthcare services and the willingness of medical staff to work [5-6]. Therefore, it is important to strengthen the prevention and control of WPV in hospitals, identify the situational triggers of WPV, and formulate effective prevention and management strategies based on the pattern of occurrence and influencing factors, to gradually reshape the trust and cooperation between doctors and patients and to provide a basis for the effective management of occupational violence in the workplace.

2. Current status of Violence in the Workplace

2.1 The main places where WPV occurs

WPV occurs at different rates in various departments, so it is important to summarize the high-risk places where WPV occurs and to focus prevention and control on high-risk departments to achieve an effective and rational allocation of resources. Emergency department medical staff are more likely to suffer from WPV, mainly because of patients waiting too long for treatment or illness or under the influence of alcohol or drugs [7]. On the other hand, the main reason is that the communication ability and business ability of young medical personnel are deficiencies, and the majority of medical personnel on the night shift work position for young people, which increases the risk of night shift WPV; at the same time, the tension of human resources, the heavy work is easy to cause the medical staff of the irritability of the mood [8]. A systematic review of WPV suffered by healthcare workers in the emergency department found that 77% of healthcare workers suffered from WPV in the work routine, with 9,072 cases of WPV in the ED; 6,575 (72%) cases involved verbal violence and 1,639 (18%) were related to physical abuse [9]. Whereas, people with mental illness are unable to control their behaviors on their own and are prone to emotional outbursts and attacks on medical staff [10]. A study by American scholars Hesketh et al. found that 20% of psychiatric nurses were physically assaulted, 43% were threatened with physical assault, and 55% were verbally assaulted at least once in the equivalent of one work cycle [11]. A study by a Chinese scholar, Hu Chuanfen, showed that 81.8 percent of psychiatric nurses suffered from violence in the workplace, with rates of verbal assault, physical assault, and sexual harassment of 79.7 percent, 58.5 percent, and 15.2 percent, respectively [12].

2.2 Types of violence and incidence

WPV in the medical field is mainly divided into three forms: physical violence, psychological violence, and sexual violence. Physical violence refers to behaviors such as kicking, hitting, stabbing, pushing, biting, etc., which are taken by the patient against the medical staff; psychological violence refers to behaviors such as verbal abuse, threatening, and insulting behaviors committed by the patient against the medical staff; and sexual violence refers to behaviors such as verbal sexual harassment and somatic sexual harassment and rape [13]. Varghese A. et al. in a

meta-analysis that included 42, 222 nurses from 43 countries found that the overall prevalence of WPV was 58%, with verbal abuse, threatening behaviors, and physical violence making up the top three: 64%, 30%, and 23% respectively [14]. A national survey of 10,457 emergency departments in 31 provinces in China found that Chinese emergency physicians suffered from WPV verbal violence and physical violence as high as 81.81% and 27.63% [15]. This shows that the form of violence is mainly dominated by verbal violence in psychological violence.

3. WPV Prevention Management

3.1 Effective identification of WPV situations

The World Health Organization (WHO) has affirmed in a global report [16] that WPV can be pre-identified and controlled. Therefore, the effective identification of WPV is an important part of violence management, and healthcare workers should strengthen the training of relevant courses on violent situations and take relevant countermeasures before the occurrence of violent situations. Given that violence is often in a state of dynamic development and change, the primary identification is through situational identification. A commonly used tool for violence assessment is the WPV Aura Assessment Tool (STAMP), developed by Luck's team based on violent situational events. The STAMP is employed to assess the occurrence of WPV aura behaviors, with a total of five items: S-eyes, T-tone of voice, A-anxiety, M-mode of speech, and P-gait. The specific characteristics of each behavior imply the likelihood of WPV. By Belk's situational theory, Chinese scholars have identified 11 high-risk situations in which nurses are at risk for WPV. These include instances where the affected party is an alcoholic patient, where the mental state is abnormal, where environmental or institutional elements are present, where there is dissatisfaction with the hospital's general environment, and where there is dissatisfaction with the hospital's consultation system or process. Contextual elements are the triggers of violence, and thus it is essential to effectively identify WPV situations.

3.2 WPV Response Resources

3.2.1 Policy support

WHO released the Health Worker Safety Pact on 19 July 2020, which proposes five steps to protect health workers from WPV, including implementing policy mechanisms, developing a culture of "zero tolerance" for violence against health workers, and reviewing and improving relevant laws and regulations. These include implementing relevant policy mechanisms, developing a culture of "zero tolerance" for violence against health workers, reviewing and improving relevant laws and regulations, and establishing enforcement mechanisms such as ombudspersons and helplines, especially a clearer reporting mechanism for WPV. The United States, the United Kingdom, and other countries have put forward a "zero tolerance" policy to support WPV, so that patients and their families can not be unscrupulous violence against medical staff, thus reducing the occurrence of WPV [19]. Since the introduction of the Saudi government's Law on the Protection of Healthcare Personnel, WPV has been reduced [20]. The Chinese government has incorporated the personal safety and human dignity of healthcare workers into its laws and enacted the relevant law, the Law of the People's Republic of China on Basic Medical Care and Health Promotion. The formulation of these policies has not only ensured the safety of healthcare workers and formed a favorable environment for medical treatment, but also imposed constraints on WPV in the medical industry.

3.2.2 Strengthening relevant course training

Some studies have found that the strategic way to effectively manage WPV should give priority to WPV-related training courses, through which they can effectively identify violent situations, learn relevant laws, and learn to cope with violence [21]. Scholars in the United States through the violent situation simulation exercise course allow healthcare workers to be able to realistically feel the violent scene, through expert guidance to cope with violence situation methods and learn to cope with different situations [22]. Nancy Glass's team through computer-related courses to train family caregivers, after six months of course training found that the incidence of violence in the workplace has decreased significantly [23]. Some hospitals in Singapore minimized the harm suffered by nurses in violent incidents by implementing training on communication, restraint, and de-escalation techniques [24]. Chinese scholars have used Internet technology to construct a WPV prevention training platform based on the elements of high-risk situations to improve doctor-patient communication skills, the level of nurses' WPV coping resources, and innovate hospital WPV management, which is of good practicality and feasibility [25]. Some medical schools are also trying to add workplace violence-related content to the courses related to occupational medicine and healthcare workers' occupational health protection, to reduce the risk of WPV [26]. Therefore, hospital violence curriculum training is one of the important management tools to prevent the occurrence of WPV.

3.2.3 WPV Environmental Settings

In 2005, four international organizations, including the International Council of Nursing, Public Services International, the World Health Organization, and the International Labour Organization, developed the Training Manual for a Framework of Guidelines for Responding to Workplace Violence in the Health Professions [27], and one of the important elements of this manual is to sort out the detailed technical requirements for environmental interventions, including the design of the physical environment: noise, color, and odor; lighting; temperature; and ventilation, and the workplace design: entrance and exit spaces; waiting areas; rooms for laborers; parking areas; premises; fixtures; security and alarm systems. With the development of Internet technology, the installation of electronic access control systems and the upgrading of visitor management systems have also further enhanced the security level [28-29]. The University of Hong Kong Shenzhen Hospital has strengthened its hardware, and in addition to the installation of escape doors in key departments, alarm buttons have been installed underneath each consultation room table and in staff offices throughout the hospital's treatment area, and these initiatives have been effective in avoiding the occurrence of violent incidents [30].

3.2.4 Reporting and subsequent management of violence after it occurs

A meta-analysis by D'Ettorre G et al. showed that an important element of effective management of WPV incidents includes timely reporting of violence [7]. However, in a survey of Australian academics on nurses' experiences of WPV, 18% of nurses would take no action, despite 95% of nursing staff being required to report WPV [31]. The percentage of attacks against healthcare workers is high, but the statistics in the report show a much lower figure. Underreporting not only prevents access to accurate health surveillance data but also lacks the means to effectively assess the effectiveness of preventive interventions, naturally preventing timely first organizational support for healthcare workers [32]. Reasons for underreporting: some nurses report ineffectiveness, perpetrators are not punished, and other medical staff do not know the correct way to report [31]. This concern of medical staff was verified in a study of WPV among medical staff in the United

States, which showed that 17.7% of WPV incidents were investigated and 52.4% of the perpetrators did not receive any punishment [33]. Therefore, an active and effective reporting system should be developed so that medical staff are aware of the process of reporting violent incidents, the perpetrators of violence should be added to the hospital management system and forewarned in advance when they seek medical treatment again, and the organizers should proactively provide legal assistance to medical staff who have suffered from WPV. After the occurrence of violence, the hospital should actively encourage the reporting of violence, hospital administrative departments to form a support network to clarify their responsibilities, and continue to track the incident processing, to avoid inter-departmental shirking of responsibilities, so that the medical staff who suffered from violence can feel the hospital's considerate and caring [30], and also to let the other medical staff who suffered from violence in the workplace to build up the confidence to bravely report the violent incident. The reporting of adverse events can also help managers to identify management loopholes and reduce the occurrence of violence by optimizing management links and processes.

4. Symptomatic Treatment for the Main Causative Factors

4.1 Pay attention to patient complaints and optimize the medical process

Emergency department medical staff suffered from WPV in the first place for the reason that the consultation time is too long, triggering the occurrence of irritability and other emotions [7]. To address this situation, emergency department visits for critical illnesses open green channel, priority care; according to the condition of scientific triage, improve the speed and quality of patient consultation; emphasis on hospital multidisciplinary collaboration, shorten the patient emergency department stay time; stay in the observation room and other places where the waiting time is long, you can take distraction methods, such as: placing the disease popularization of related educational brochures, books, magazines, etc. [34]. When there is alcoholism, mental illness, and other patients, the treatment of the disease at the same time, strengthens the communication with the patient's family and, if necessary, arranges security personnel to prevent the occurrence of violence. The management of violence lies not only in prevention but also in diversion, so it is necessary to pay attention to the doctor-patient relationship, especially the reasonable demands. Therefore, the hospital needs to establish a communication bridge between doctors and patients and handle feedback on patients' complaints on time. At the same time, patients are encouraged to use reasonable, legal, and effective ways to express their demands to improve the doctor-patient relationship and increase satisfaction [30].

4.2 Strengthening professional skills and improving communication ability

A survey on the predisposing factors of WPV shows that nurses with low seniority are more likely to suffer from WPV. The main reason is that nurses with low seniority lack clinical experience, operating skills proficiency, and clinical thinking ability is insufficient, and the patient's sense of comfort decreases in the process of nursing care [35]. Therefore, healthcare professionals should improve their professional skills, establish a good newcomer relationship with patients, and improve the satisfaction of the medical experience. Another important cause of WPV stems from the medical staff's lack of communication skills and poor humanistic care [36]. In a study of WPV suffered by pediatric medical staff, it was found that poor communication interpretation of information and communication skills of medical staff were important predisposing factors for the occurrence of WPV. In the process of consultation, once the medical staff's explanation, communication, service attitude, and privacy protection work are greatly lacking, patients will produce angry psychology or even aggressive behavior [37]. Therefore, hospitals can carry out

training courses such as communication skills to improve the humanistic quality of medical staff.

4.3 Optimizing resource allocation and improving management quality

In a meta-analysis that ultimately included 87 papers, Nicola et al. showed that insufficient staffing levels and increased workload were risk factors in WPV. The understaffing of the last decade or so has been exacerbated by the COVID-19 epidemic over the last two years, which has made many patients feel that their experience of healthcare is diminished and prone to WPV [38]. On the contrary, adequate staffing allows medical staff to have more energy to take care of more patients, and WPV decreases significantly [39]. Chinese scholars suggest that in some severely understaffed pediatrics departments, the serious shortage of pediatric healthcare can be solved by training social volunteers, delaying retirement, and rehiring. For medical personnel who are in emergencies and work at high intensity for a long period, hospital management should be able to help medical personnel create a good working environment through group psychological counseling and group cultural construction, to reduce work pressure, adjust work status, and reduce the occurrence of WPV.

5. Summary

WPV suffered by medical staff is a very common public safety problem faced in clinical work at present, which not only endangers the physical health of healthcare workers but also causes a series of psychological problems. The current study mainly focuses on the analysis of the incidence of WPV, and the relationship between work characteristics and WPV. In future research, it is recommended to build a mechanism for managing WPV, management methods, management effects, and other aspects of WPV from the perspective of WPV coping resources and predisposing factors.

References

- [1]Di Martino, V. *Relationship between Work Stress and Workplace Violence in the Health Sector*; ILO Geneva: Geneva, Switzerland, 2003.
- [2]International Labour Organization. *Ending violence and harassment against women and men in the world of work*. [2019-03-10]. http://www.ilo.org/ilc/ILCSessions/107/reports/reports-to-theconference/WCMS_553577/lang-en/index.htm
- [3]Al-Qadi MM. *Workplace violence in nursing: A concept analysis*. *J Occup Health*. 2021 Jan;63(1):e12226.
- [4]Liu J, Zheng J, Liu K, Liu X, Wu Y, Wang J, You L. *Workplace violence against nurses, job satisfaction, burnout, and patient safety in Chinese hospitals*. *Nurs Outlook*. 2019 Sep-Oct;67(5):558-566.
- [5] Ayasreh IR, Hayajneh FA. *Workplace Violence Against Emergency Nurses: A Literature Review*. *Crit Care Nurs Q*. 2021 Apr-Jun 01;44(2):187-202.
- [6]Lee J, Lee B. *Psychological Workplace Violence and Health Outcomes in South Korean Nurses*. *Workplace Health Saf*. 2022 May;70(5):228-234.
- [7]D'Ettorre G, Pellicani V, Mazzotta M, Vullo A. *Preventing and managing workplace violence against healthcare workers in Emergency Departments*. *Acta Biomed*. 2018 Feb 21;89(4-5):28-36.
- [8] Robinson I. *Prevention of Workplace Violence Among Health Care Workers*. *Workplace Health Saf*. 2019 Feb;67(2):96.

- [9]Aljohani B, Burkholder J, Tran QK, Chen C, Beisenova K, Pourmand A. Workplace violence in the emergency department: a systematic review and meta-analysis. *Public Health*. 2021 Jul;196:186-197.
- [10]LI Da- yong, ZHANG He- nan, ZHANG Xue,et al. Prevention Strategies of Workplace Violence in Psychiatric Department. *Chinese Hospital Management*,2017 Oct;37(10):48-49
- [11]Ridenour M, Lanza M, Hendricks S, Hartley D, Rierdan J, Zeiss R, Amandus H. Incidence and risk factors of workplace violence on psychiatric staff. *Work*. 2015;51(1):19-28. [in Chinese]
- [12] Hu Chuanfen. Study on the Relationship among Workplace violence Organizational Commitment and Turnover Intention in Psychiatric nurses[D]. Shandong University.2014[in Chinese]
- [13] Zhang X, Li Y, Yang C, Jiang G. Trends in Workplace Violence Involving Health Care Professionals in China from 2000 to 2020: A Review. *Med Sci Monit*. 2021 Jan 8;27:e928393.
- [14]Varghese A, Joseph J, Vijay VR, Khakha DC, Dhandapani M, Gigini G, Kaimal R. Prevalence and determinants of workplace violence among nurses in the South-East Asian and Western Pacific Regions: a systematic review and meta-analysis. *J Clin Nurs*. 2022 Apr;31(7-8):798-819.
- [15]Meng Y, Wang J, Jiang N, Gong Y, Ye F, Li J, Zhou P, Yin X. Occurrence and correlated factors of physical and verbal violence among emergency physicians in China. *J Glob Health*. 2023 Jan 20;13:04013.
- [16]Krug G D L, Mercy Ja,Et Al. World report on violence and health[R]. Geneva: World Health Organization Press, 2002, 2: 15-16.
- [17]Jackson D,Wilkes L, Luck L. Cues that predict violence in the hospital setting:Findings from an observational study[J]. *Collegian*, 2014, 21(1): 65-70.
- [18]Cai JZ, Wang HF, Mao LF, et al. Qualitative Study on High-risk Scenarios of Workplace Violence among Nurses[J]. *Journal of Nursing*.2018 Apr;25(8): 1-4. [in Chinese]
- [19]Speroni KG,Fitch T, Dawson E, et al. Incidence and cost of nurse workplace violence perpetrated by hospital patients or patient visitors.*J Emerg Nurs*,2014,40(3) :218- 228; quiz 295.
- [20]Aljohani KA. Violence and abuse against nurses in Saudi Arabia: A narrative review. *J Nurs Manag*. 2022 Sep;30(6):1570-1576.
- [21]D'Ettoire G, Pellicani V, Mazzotta M, Vullo A. Preventing and managing workplace violence against healthcare workers in Emergency Departments. *Acta Biomed*. 2018 Feb 21;89(4-5):28-36.
- [22]Brown RG, Anderson S, Brunt B, Enos T, Blough K, Kropp D. Workplace Violence Training Using Simulation. *Am J Nurs*. 2018 Oct;118(10):56-68.
- [23]Glass N, Hanson GC, Anger WK, Laharnar N, Campbell JC, Weinstein M, Perrin N. Computer-based training (CBT) intervention reduces workplace violence and harassment for homecare workers. *Am J Ind Med*. 2017 Jul;60(7):635-643.
- [24] Tay GK, Razak ARA, Foong K, Ng QX, Arulanandam S. Self-reported incidence of verbal and physical violence against emergency medical services (EMS) personnel in Singapore. *Australas Emerg Care*. 2021 Sep;24(3):230-234.
- [25] Cai J, Qin Z, Wang H, Zhao X, Yu W, Wu S, Zhang Y, Wang Y. Trajectories of the current situation and characteristics of workplace violence among nurses: a nine-year follow-up study. *BMC Health Serv Res*. 2021 Nov 11;21(1):1220.
- [26]ZHANG Min. International consensus on workplace violence in the health sector and its meaning to practice in China[J]. *Chinese Nursing Management*, 2019, 19(6): 923-928.
- [27] The International Council of Nurses (ICN), the World Health Organization (WHO), Public Services International (PSI), the International Labour Organization (ILO). Framework

- guidelines for addressing workplace violence in the health sector: The training manual. [2019-03-10]. <http://www.ilo.org/safework/info/instr/WCMS108542/lang--en/index.htm>.
- [28] International Association for Healthcare Security and Safety (IAHSS) Guidelines Council. *Security Design Guidelines for Healthcare Facilities*[M]. Chicago: International Association for Healthcare Security and Safety (IAHSS), 2012.
- [29] Zhang J, Xi JW, Construction of hospital safety management system - Responding to hospital violence [J]. *Chinese Journal of Woman and Child Health Research*. 2016, 27(S2):579-580. [in Chinese]
- [30] XU Xiaoping, JIA Meixia, LIN Manna et al. Hospital workplace violence management practice under the Shenzhen-Hong Kong model[J]. *China Nursing Management*, 2019 Apr; 19(04):494-497. [in Chinese]
- [31] Dafny HA, Beccaria G, Muller A. Australian nurses' perceptions about workplace violence management, strategies and support services. *J Nurs Manag*. 2022 Sep; 30(6):1629-1638.
- [32] Garc ía-P érez MD, Rivera-Sequeiros A, Sánchez-El ús TM, Lima-Serrano M. Workplace violence on healthcare professionals and underreporting: Characterization and knowledge gaps for prevention. *Enferm Clin (Engl Ed)*. 2021 Nov-Dec; 31(6):390-395.
- [33] OGUAGHA A C, CHEN J The incidence and management of workplace violence among medical professionals in the United States: a methodological pilot study [J] . *Journal of Hospital Administration*, 2019, 8 (1) : 56-64.
- [34] WANG Juzi, WANG Zhizhong, HOU Yongchao, et al . Early warning and countermeasures of workplace violence based on action research in emergency department [J]. *Chinese Nursing Research*, 2020, 34(18):3319-3323. [in Chinese]
- [35] Pandey M, Bhandari TR, Dangal G. Workplace Violence and its Associated Factors among Nurses. *J Nepal Health Res Counc*. 2018 Jan 1; 15(3):235-241.
- [36] Kumari A, Kaur T, Ranjan P, Chopra S, Sarkar S, Baitha U. Workplace violence against doctors: Characteristics, risk factors, and mitigation strategies. *J Postgrad Med*. 2020 Jul-Sep; 66(3):149-154.
- [37] Yan Chunmei, Li Zhe, Mu Yi et al. Inducing factors and management measures of workplace violence in children's hospital based on factor analysis[J]. *Chinese hospital*. 2018 Jan; 22(01):39-42. [in Chinese]
- [38] Pagnucci N, Ottonello G, Capponi D, Catania G, Zanini M, Aleo G, Timmins F, Sasso L, Bagnasco A. Predictors of events of violence or aggression against nurses in the workplace: A scoping review. *J Nurs Manag*. 2022 Sep; 30(6):1724-1749.
- [39] Zhao S, Liu H, Ma H, Jiao M, Li Y, Hao Y, Sun Y, Gao L, Hong S, Kang Z, Wu Q, Qiao H. Coping with Workplace Violence in Healthcare Settings: Social Support and Strategies. *Int J Environ Res Public Health*. 2015 Nov 13; 12(11):14429-44.