

# Research Progress on Workplace Violence and Protective Measures for Pediatric Nursing Interns

Qin Jianhua<sup>1,a</sup>, Peng Meiyue<sup>1,b</sup>, Chen Jing<sup>1,c</sup>, Zhang Xipin<sup>1,d,\*</sup>

<sup>1</sup>Children's Hospital, Shaanxi Provincial People's Hospital, Xi'an, Shaanxi, China

<sup>a</sup>506328452@qq.com, <sup>b</sup>1959130899@qq.com, <sup>c</sup>3237066840@qq.com, <sup>d</sup>418966501@qq.com

\*Corresponding author

**Abstract:** Pediatric nursing interns, as a distinct group in clinical practice, are particularly vulnerable to workplace violence due to their limited clinical experience, inadequate communication skills, and immature psychological coping abilities. In a work environment characterized by rapidly changing patient conditions and highly stressed parents, they face heightened risks. Workplace violence not only directly impacts interns' physical and mental health and learning progress but may also trigger long-term negative consequences such as crises in professional identity and altered career aspirations. This systematic review examines the types, influencing factors, and common assessment tools for workplace violence targeting pediatric nursing interns. It comprehensively explores pathways to develop systematic, multi-level protective strategies across policy regulations, organizational management, and educational training dimensions. The aim is to provide evidence-based guidance for nursing education administrators, clinical teaching hospitals, and relevant departments to jointly foster safe, supportive internship environments, thereby promoting stable nursing talent cultivation and professional healthy development.

**Keywords:** nursing interns; pediatrics; workplace violence; occupational protection; review

## 1. Introduction

Workplace violence (WPV) refers to incidents such as verbal abuse, threats, or physical attacks experienced by staff while performing their duties or in related situations, encompassing behaviors that pose direct or potential challenges to their safety, well-being, or health<sup>[1]</sup>. Due to the unique nature of pediatric care recipients, nurses frequently encounter children who cry incessantly and struggle to articulate their symptoms clearly, as well as parents experiencing anxiety or agitation. Pediatric nursing is characterized by high difficulty, intensity, and risk, making pediatric nurses more susceptible to WPV<sup>[2]</sup>. Nursing interns, during clinical placements, often face heightened hospital violence risks due to unfamiliarity with the environment, procedures, and protocols, coupled with their still-developing clinical skills<sup>[3]</sup>. Research confirms nursing students are a high-risk group for WPV. For instance, a UK survey revealed that 42.8% of nursing students had experienced bullying or harassment, while another quarter had witnessed such incidents<sup>[4]</sup>. After experiencing violence, interns often develop negative emotions such as anger, fear, and helplessness, which may weaken their professional identity and influence future career choices<sup>[5]</sup>. Therefore, as the future reserve force of the nursing workforce, managing WPV targeting nursing interns is receiving increasing attention<sup>[6]</sup>. This article reviews the current status of WPV among nursing interns and protective measures, aiming to provide references for reducing the incidence of WPV in this group.

## 2. Current Research on Workplace Violence Among Pediatric Nursing Interns

### 2.1. Types of Workplace Violence

According to the World Health Organization's definition, WPV is primarily categorized into two types: (1) Physical violence, which involves using physical force to attack others, including hitting, kicking, slapping, shoving, biting, pinching, using weapons to cause injury, and sexual assault; (2) Psychological violence, which involves intentional verbal or nonverbal harm, encompassing verbal abuse, threats, accusations, intimidation, racial discrimination, and sexual harassment<sup>[7]</sup>.

While recent domestic and international workplace violence surveys have increasingly included

healthcare professionals such as physicians, nurses, and hospital administrators, specialized studies on interns remain insufficient. Particularly scarce are concrete, detailed survey data regarding pediatric nursing interns. Research indicates that patients or their family members and friends are the primary perpetrators of WPV against nurses<sup>[8]</sup>. A survey by Chen Zuhui et al. of pediatric nurses in 10 general hospitals in Guangzhou revealed that 68.8% of nurses experienced psychological violence and 16.1% experienced physical violence within the past 12 months<sup>[9]</sup>. Overall, nurses face a high incidence of psychological violence in the workplace, while physical violence also occurs at a significant rate, often resulting in varying degrees of physical injury.

## **2.2. Factors Influencing Pediatric Nursing Interns' Exposure to Workplace Violence**

The factors contributing to workplace violence (WPV) among pediatric interns can be analyzed at three levels: individual, organizational, and sociocultural. (1) Individual level: Age is one influencing factor, with younger interns having less relevant experience and relatively weaker abilities to recognize and prevent WPV. Being an only child and having a lower educational attainment are both independent risk factors for hospital violence incidents. This may relate to communication deficits and heightened self-awareness among only children<sup>[10]</sup>. Lower educational attainment may result in insufficient professional knowledge and clinical skills, making it harder to gain patient and family recognition and trust. Female interns experience WPV more frequently than males, potentially linked to traditional gender roles in nursing and the female-dominated workforce, with young, inexperienced, and single female interns facing heightened sexual harassment risks<sup>[11]</sup>. Communication proficiency strongly correlates with WPV exposure, and interns with sensitive personality traits experience more adverse consequences after WPV incidents. (2) Organizational level: Factors such as inadequate hospital management systems, lack of systematic WPV training, and departmental work overload readily trigger WPV against nursing interns<sup>[12-14]</sup>. Pediatrics emerges as a high-incidence department for WPV, primarily due to the acute onset, rapid progression, and swift changes in pediatric conditions. Compounding this, many pediatric patients are only children, and parents—often lacking medical knowledge—frequently hold disproportionately high expectations of healthcare providers during treatment. Their psychological tolerance for waiting times is shorter than the actual waiting duration, leading to a tendency to blindly blame, question, or even vent frustration onto medical staff<sup>[15]</sup>. (3) Sociocultural factors: Interns from economically underdeveloped regions are more susceptible to bullying, potentially due to heightened feelings of inferiority and difficulty adapting to new environments<sup>[16]</sup>. Nursing staff shortages may lead to interns being assigned excessive non-clinical duties, fostering latent bullying behaviors<sup>[13]</sup>. Additionally, societal factors such as strained healthcare resources and patients' excessively high expectations for treatment outcomes further heighten the risk of nurse-patient conflicts and WPV<sup>[17]</sup>.

## **2.3. WPV Assessment Tools**

Currently, the most commonly used tool for assessing workplace violence is the Workplace Violence Frequency Scale (WVS), jointly developed in 2003 by organizations including the World Health Organization. This self-administered questionnaire comprises five core sections covering demographic information, experiences of physical violence, experiences of psychological violence, institutional policies and measures addressing WPV, and individual perceptions and attitudes toward WPV, totaling 92 items. The total scale score ranges from 0 to 15, with higher scores indicating greater WPV frequency. The scale has demonstrated good reliability and validity for measuring WPV in healthcare settings<sup>[18]</sup>. It has been introduced to China and adapted into the Chinese-language Hospital Workplace Violence Survey Questionnaire (Revised Edition), which is widely used in domestic research<sup>[19]</sup>.

## **2.4. Impact of Workplace Violence on Interns' Professional Identity**

Medical interns represent the reserve force of healthcare talent. The strength of their professional identity not only affects their future work commitment but also has potential implications for the stability and sustainable development of the healthcare workforce<sup>[20]</sup>. Zhang Xin et al. studied 165 nursing interns and found that the quality of the clinical internship environment significantly influences their professional identity<sup>[21]</sup>. When the actual environment exceeds expectations, professional identity strengthens; conversely, it weakens. Experiencing or witnessing WPV incidents makes nursing interns acutely aware of the physical risks inherent in the medical profession, leading to significant psychological burdens. Chen Lilian et al. found that most nursing students experiencing hospital WPV

exhibited negative psychological reactions including inferiority, tension, anxiety, and even panic<sup>[22]</sup>. Chu Jing's research further revealed a positive correlation between nursing students' self-esteem levels and their professional identity; low self-esteem tends to trigger doubts about their chosen profession, significantly reducing work motivation and learning initiative, thereby diminishing professional identity<sup>[23]</sup>. Intern physicians face similar challenges, with some even directly altering their original career plans after personally experiencing or witnessing WPV during their training. Given this, it is crucial for clinical instructors to provide timely and effective psychological intervention and support following hospital WPV incidents to minimize the negative psychological impact on interns.

### **3. Workplace Violence Prevention Measures**

#### **3.1. Government and Societal Support**

At the international level, numerous governmental and non-governmental organizations have issued a series of guidelines and policy regulations, providing direction and frameworks for preventing and controlling WPV. This not only safeguards the legitimate rights and interests of healthcare workers but also serves as a legal deterrent against potential violent acts. It is essential to organize training for interns on relevant legal provisions, ensuring they grasp key regulations and learn to utilize legal means to protect their own safety.

##### **3.1.1. Relevant Policy Guidelines**

In 2002, the World Health Organization and others jointly developed the Framework Guidelines for Addressing Workplace Violence in the Health Sector<sup>[24]</sup>. In 2005, a training manual was further released, covering WPV risk factors, prevention and response skills, and environmental intervention strategies. In 2016, the U.S. Occupational Safety and Health Administration revised and published the updated "Guidance on Preventing Workplace Violence for Health Care and Human Services Workers", advocating for the comprehensive integration of WPV prevention into institutional safety and health management systems<sup>[25]</sup>. The American Nurses Association adopted a "zero tolerance" stance toward WPV in 2015 and launched the "End Violence Against Nurses" campaign in 2017, emphasizing that safeguarding nurses' safety is fundamental to maintaining nursing quality and patient safety<sup>[26]</sup>. The Registered Nurses' Association of Ontario, Canada, published the Practice Guide for Preventing Violence, Harassment, and Bullying Against Health Care Workers in 2019<sup>[27]</sup>. China has yet to issue national-level unified guidelines, but the Chinese Guidelines for Preventing Violence in Healthcare Workplaces, drafted by the medical community, have been published on professional online platforms.

##### **3.1.2. Legal and Regulatory Framework**

China has established a legal framework centered on 8 laws, 2 administrative regulations, 2 departmental rules, and 15 local regulations. This framework explicitly safeguards healthcare workers' rights against WPV, providing a legal foundation for healthcare institutions to implement WPV prevention and control measures<sup>[28]</sup>. U.S. federal law grants employees the right to refuse work in unsafe conditions<sup>[29]</sup>. Additionally, multiple U.S. states, including Massachusetts and Minnesota, have enacted specific legislation to protect healthcare workers<sup>[30]</sup>. South Korea established special provisions addressing medical violence within its Medical Service Act and Emergency Medical Services Act, complementing penalties under civil and criminal law<sup>[31]</sup>. Victorian law in Australia explicitly criminalizes assaults on healthcare practitioners<sup>[32]</sup>. Canada expanded protections for nursing staff through 2019 legislation, providing nurses subjected to WPV with expedited access to compensation and support<sup>[33]</sup>. Saudi Arabia's Ministry of Health issued a decree in 2018 criminalizing verbal and physical abuse against medical personnel, with penalties including up to ten years' imprisonment<sup>[34]</sup>.

#### **3.2. Organizational Management Measures for Healthcare Institutions**

Ensuring a safe working environment for employees is a statutory responsibility of healthcare institution administrators. Institutions should establish efficient mechanisms to enhance the standardization of preventing and addressing violent incidents in healthcare settings.

##### **3.2.1. Implementing Humanistic Care**

Research by Xie Lin et al. applied a humanistic care group intervention model to nurses who experienced WPV<sup>[35]</sup>. By promoting emotional release, self-exploration, and the development of social support networks, this approach effectively alleviated the psychological impact of WPV and

strengthened nurses' psychological resilience. For interns, psychological support should be reinforced through in-depth analysis of WPV incidents, case-based teaching, and sharing successful coping strategies. Teaching hospitals should establish more robust support systems for interns, ensuring they receive timely and effective organizational assistance when confronting violence, thereby enhancing their sense of occupational security and belonging. When interns experience or witness WPV, timely encouragement, emotional guidance, and comfort from clinical instructors can serve as crucial psychological buffers. Therefore, systematic training for clinical instructors is necessary to enhance their capacity to provide psychological support to students.

### ***3.2.2. Establishing Long-Term Prevention Mechanisms***

Preventing WPV is more critical than post-incident management. It is recommended to widely install one-touch alarm systems across all levels of medical institutions nationwide, rigorously implement the police station deployment system, and promote the effective enforcement of WPV prevention laws and regulations to ensure rapid containment at the earliest stages of violence. For situations exhibiting precursors of verbal or physical violence, exploring judicial procedures such as initiating personal safety protection orders can prevent more severe violent consequences. In high-risk areas for medical disputes and violent incidents, increasing security personnel and safety detection equipment should be considered to maintain the safety and stability of clinical operations<sup>[36]</sup>.

### ***3.2.3. Optimizing the Healthcare Service System***

Hospital management must strive to streamline patient visit procedures and enhance the overall healthcare experience for patients and their families, avoiding dissatisfaction caused by complex processes<sup>[37]</sup>. Concurrently, continuous professional skill training for medical staff should be strengthened to improve diagnostic, treatment, and nursing standards. By improving the healthcare environment, efforts should balance and meet the reasonable needs of both medical staff and patients. Addressing the shortage of frontline clinical human resources is crucial to reduce the workload and stress on medical personnel.

## ***3.3. Targeted Training for Nurses and Interns***

Systematic education and training form a core component of healthcare institutions' WPV prevention strategies. Providing specialized training for nurses and interns in violence recognition, prevention, and response enhances their confidence in handling situations, improves their coping strategies and skills, and boosts communication, self-efficacy, and empathy capabilities. This effectively prevents conflict escalation.

### ***3.3.1. Conflict De-escalation Skills Training***

Conflict de-escalation training is a set of skills designed to prevent conflicts from escalating through emotional management and self-regulation techniques. It serves as the primary strategy for on-site handling of WPV. A domestic study on de-escalation training for psychiatric nurses revealed that training content encompassed establishing therapeutic relationships, communicating with potentially aggressive patients, early warning signs of WPV, experience sharing, and standardized response protocols. This training significantly enhanced nurses' confidence and competence in addressing WPV while reducing their occupational burnout<sup>[38]</sup>. BAIG et al. implemented de-escalation training for healthcare workers in Pakistan, primarily covering<sup>[39]</sup>: (1) WPV fundamentals; (2) nonverbal communication techniques; (3) recognition and management of post-traumatic stress; (4) active listening and empathy skills training. Results demonstrated that the training enhanced healthcare workers' confidence in confronting patient violence and enriched their response toolkit.

### ***3.3.2. Comprehensive Education and Training Programs***

Research indicates that the vast majority of interns hold positive attitudes toward receiving WPV prevention training and anticipate benefiting from it<sup>[40]</sup>. To reinforce interns' risk awareness, nursing safety education activities—such as mini-lectures and safety knowledge competitions—can be regularly organized. Additionally, training can be strengthened through: incorporating WPV-related modules into nursing school curricula and pre-service training, with a focus on practical prevention and response techniques; enhancing interns' humanistic literacy education using scenario simulations and case video analysis to improve self-protection and emergency response capabilities. When interns enter new departments, facilitate their rapid adaptation by helping them familiarize themselves with the environment, procedures, and specialty disease knowledge. During practice, advocate for the implementation of the “Seven Voices, Six Hearts, Four Actions, Three Diligences” quality service

philosophy: “Seven Voices” (greeting, farewell, addressing, thanking, inquiring, apologizing, greeting), “Six Hearts” (enthusiasm, compassion, patience, attentiveness, responsibility, empathy), “Four Proactives” (proactive introduction, proactive assistance, proactive feedback solicitation, proactive feedback), and “Three Diligences” (diligent observation, diligent hands-on practice, diligent communication).

#### 4. Summary

Due to their novice and learner status in clinical settings, nursing interns are more susceptible to becoming targets of violent behavior from patients and their families<sup>[41]</sup>. Healthcare administrators must enhance reporting, response, and support protocols for violent incidents, improve response efficiency, and systematically cultivate interns' capacity to prevent violence<sup>[42]</sup>. Clinical instructors should proactively monitor interns' psychological well-being and internship experiences, strengthen daily communication, prioritize post-incident psychological counseling, and guide interns to view negative experiences constructively. Concurrently, reinforcing clinical skills and communication training can fundamentally reduce the risk of WPV occurrence.

#### Acknowledgement

Shaanxi Provincial People's Hospital 2021 Scientific and Technological Development Incubation Fund Project (Project No.: 2021HL-11)

#### References

- [1] SISAWO E J, OUEDRAOGO S, HUANG S L. *Workplace violence against nurses in the Gambia: mixed methods design*[J]. *BMC Health Serv Res*, 2017, 17(1): 311.
- [2] LIU Y Y, CHEN J. *The moderating effect of Big Five personality between workload and professional quality of life in pediatric nurses*[J]. *Journal of Nursing*, 2022, 29(20): 44-49.
- [3] International Council of Nurses. *Prevention and management of workplace violence*[EB/OL]. <https://www.icn.ch/nursing-policy/position-statements>.
- [4] TEE S, ÜZAR ÖZÇETİN Y S, RUSSELL-WESTHEAD M. *Workplace violence experienced by nursing students: a UK survey*[J]. *Nurse Education Today*, 2016, 41: 30-35.
- [5] JACK K, LEVETT-JONES T, YLONEN A, et al. “Feel the fear and do it anyway” ... nursing students' experiences of confronting poor practice[J]. *Nurse Educ Pract*, 2021, 56: 103196.
- [6] LU D Y, ZHU L Y, HU S L. *A qualitative study on the experience of workplace violence management among nursing interns*[J]. *Chinese Journal of Modern Nursing*, 2019, 25(23): 3014-3018.
- [7] GILLESPIE G L, FISHER B, KENNEBECK S, et al. *Leveraging a public health framework and community advisory board to innovate workplace violence intervention strategies*[J]. *Adv Emerg Nurs J*, 2019, 41(4): 357-371.
- [8] NOGA P M, DERMENCHYAN A, GRANT S M, et al. *Developing statewide violence prevention programs in health care: An exemplar from Massachusetts*[J]. *Policy Polit Nurs Pract*, 2021, 22(2): 156-164.
- [9] CHEN Z H, LIN J R, SUN S Y. *Epidemiological characteristics of workplace violence against pediatric nurses*[J]. *Modern Preventive Medicine*, 2011, 38(10): 1810-1811.
- [10] ZHANG P, CHENG L. *Impact of workplace violence on professional identity among nursing interns*[J]. *Modern Nurse*, 2015(8): 14-16.
- [11] SNYDER J A, SCHERER H L, FISHER B S. *Social organization and social ties: Their effects on sexual harassment victimization in the workplace*[J]. *Work*, 2012, 42(1): 137-150.
- [12] JIANG L. *A study on workplace violence against nursing interns and related factors*[D]. Nanjing: Nanjing University of Chinese Medicine, 2017.
- [13] FANG J, LU R, FAN H M, et al. *Investigation on horizontal violence experienced by nursing students during clinical practice*[J]. *Journal of Medical Theory and Practice*, 2014, 27(14): 1845-1847.
- [14] WANG Q H, PANG L M, ZHANG F F, et al. *Survey on verbal violence experienced by undergraduate nursing students in the early stage of clinical practice in a tertiary hospital of Binzhou City*[J]. *Journal of Qilu Nursing*, 2016, 22(4): 53-54.
- [15] XU J X, ZHANG S C, ZHANG L, et al. *Causes and countermeasures of violent incidents against pediatric nurses during unsuccessful infusion puncture: a review*[J]. *Journal of Nursing*, 2015(4):

15-17.

- [16] HOU M, LIU Y X, YU L, et al. Workplace bullying among nursing interns and its influencing factors[J]. *Journal of Nursing Science*, 2020, 35(2): 81-84.
- [17] JIN L Y, CHEN Y M, XU X X, et al. Current situation of hospital violence experienced by nursing interns in Wenzhou area[J]. *Journal of Wenzhou Medical University*, 2020, 50(11): 922-926.
- [18] WANG P X. Investigation of violence in medical settings and development of a theoretical model[D]. Chengdu: Sichuan University, 2006.
- [19] CHEN Z H. Epidemiological study on workplace violence in hospitals in Guangzhou[D]. Guangzhou: Southern Medical University, 2011.
- [20] WANG C. Impact of hospital violence on professional identity among nursing interns[J]. *Chinese Nursing Research*, 2016, 30(12): 1517-1519.
- [21] ZHANG X, ZHANG H, ZHANG H, et al. Influence of clinical practice environment on professional self-efficacy and professional identity among undergraduate nursing students[J]. *Chinese Journal of Nursing Education*, 2015, 12(3): 167-171.
- [22] CHEN L L, SUN J P. The real feelings of nursing interns experiencing workplace violence in medical settings[J]. *Journal of Nursing Management*, 2015, 15(1): 35-37.
- [23] CHU J. Research on professional identity of nursing students during internship and construction of promotion strategies[D]. Shanghai: Second Military Medical University, 2014.
- [24] WHO. Framework guidelines for addressing workplace violence in the health sector[EB/OL]. (2002-01-02). <https://www.who.int/publications/i/item/9221134466>.
- [25] OSHA. OSHA updates its guidelines for protecting workers from workplace violence[EB/OL]. (2019-11-27). <https://osharegulationsblog.com/osha-updates-its-guidelines-for-protecting-workers-from-workplace-violence/>.
- [26] ANA. Addresses sexual harassment as part of end nurse abuse initiative[EB/OL]. (2018-02-01). <https://www.nursingworld.org/news/news-releases/2018/ana-addresses-sexual-harassment-as-part-of-end-nurse-abuse-initiative/>.
- [27] RNAO. Preventing violence, harassment and bullying against health workers[EB/OL]. (2020-06-22). <https://rnao.ca/bpg/guidelines/preventing-violence-harassment-and-bullying-against-health-workers>.
- [28] LIU T, ZHANG M, XU L H, et al. Review of laws and regulations system for the prevention and control of workplace violence in medical institutions in China[J]. *China Occupational Medicine*, 2017, 44(3): 290-296.
- [29] DERMENCHYAN A. Addressing workplace violence[J]. *Crit Care Nurse*, 2018, 38(2): 81-82.
- [30] JOHNSON-HOWELL J J, DERSCHEID D J. Implementation of a Preparedness program to address violent situations in healthcare[J]. *Nurs Leadersh (Tor Ont)*, 2020, 33(3): 45-54.
- [31] KYOUNGH E E. A legal study on the violence of patients and the protection for the healthcare workers in psychiatry area[J]. *Legislative Policy Studies*, 2019, 11(1): 285-310.
- [32] MORPHET J, GRIFFITHS D, BEATTIE J, et al. Managers' experiences of prevention and management of workplace violence against health care staff: A descriptive exploratory study[J]. *J Nurs Manag*, 2019, 27(4): 781-791.
- [33] TOWHARI A A, BUGIS B A. The awareness of violence reporting system among healthcare providers and the impact of new ministry of health violence penalties in Saudi Arabia[J/OL]. *Risk Manag Healthc Policy*, 2020, 13: 2057-2065. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7555365/>. DOI:10.2147/RMHP.S258106.
- [34] HEMATI-ESMAEILI M, HESHMATI-NABAVI F, POURESMAIL Z, et al. Educational and managerial policy making to reduce workplace violence against nurses: An action research study[J]. *Iran J Nurs Midwifery Res*, 2018, 23(6): 478-485.
- [35] XIE L, LUO J, DENG W F, et al. Impact of humanistic care group intervention on mental health of nurses after experiencing workplace violence in general hospitals[J]. *Chinese General Practice Nursing*, 2017, 15(26): 3218-3221.
- [36] MUIR-COCHRANE E, MULLER A, FU Y, et al. Role of security guards in Code Black events in medical and surgical settings: A retrospective chart audit[J]. *Nurs Health Sci*, 2020, 22(3): 758-768.
- [37] SEE J A, CATTERSON P. Can improving information to patients about emergency department processes reduce aggressive behaviour towards staff?[J]. *Emerg Med Australas*, 2017, 29(5): 597-598.
- [38] YE J, XIAO A, WANG C, et al. Evaluating the effectiveness of a CRSCE-based de-escalation training program among psychiatric nurses: A study protocol for a cluster randomized controlled trial[J/OL]. *BMC Health Serv Res*, 2020, 20(1): 642.
- [39] BAIG L, TANZIL S, SHAIKH S, et al. Effectiveness of training on de-escalation of violence and management of aggressive behavior faced by health care providers in a public sector hospital of

Karachi[J]. *Pak J Med Sci*, 2018, 34(2): 294-299.

[40] HUANG X F, ZHANG L M. Investigation on workplace violence experienced by undergraduate nursing interns[J]. *Chinese Journal of Nursing Education*, 2016, 13(10): 747-751.

[41] YANG Z, ZHANG H J, ZHANG C Q, et al. Status and influencing factors of vertical violence in workplace among nursing interns[J]. *Chinese Nursing Research*, 2021, 35(8): 1409-1413.

[42] JEONG Y, LEE K. The development and effectiveness of a clinical training violence prevention program for nursing students[J]. *Int J Environ Res Public Health*, 2020, 17(11): 4004.