Workplace violence against nurses: A cross-sectional study

Liuyi Zhang[a,b], Anni Wang[b], Xia Xie[c], Yanhong Zhou[c], Jing Li[d], Lijun Yang[e], Jingping Zhang[b,*]

[a] Medical College, Hunan Normal University, No. 371 Tongzipo Road, Yuelu District, Changsha, Hunan, China
[b] Nursing Psychology Research Center of Xiangya Nursing School, Central South University, No. 172 Tongzipo Road, Yuelu District, Changsha, Hunan, China
[c] Intensive Care Unit of Thoracic Surgery, The Second Xiangya Hospital of Central South University, No. 139 Middle Renmin Road, Furong District, Changsha, Hunan, China
[d] School of Nursing, Wannan Medical College, No. 22 Wenchang Road, Wuhu, Anhui, China
[e] Department of Nursing, Tibet University, No. 36 Jiangsu Road, Lhasa, Tibet, China

ARTICLE INFO

ABSTRACT

Background: Workplace violence is a serious problem for clinical nurses, as it leads to a series of adverse consequences. However, little information is available on the prevalence and influencing factors of workplace violence in China.
Objectives: To determine the prevalence of workplace violence against Chinese nurses, and its influencing factors.
Design: A multi-center, cross-sectional study.
Settings: The seven geographical regions (i.e., northeast, north, central, east, south, northwest, and southwest) of China.
Participants: Four thousand one hundred and twenty-five nurses.
Methods: We randomly selected 28 hospitals, located in 14 cities over 13 provinces across the seven geographical regions. We distributed 4125 questionnaires between May 4 and September 23, 2014. The questionnaire included demographic information, the Workplace Violent Incident Questionnaire, the Jefferson Scale of Empathy-Health Professionals, and the Practice Environment Scale of Nursing Work Index. Workplace violence was assessed in terms of physical violence, non-physical violence, sexual harassment, and organized healthcare disturbances. We then performed descriptive analyses and logistic regressions on the collected data.
Results: The response rate was 92.97% (n = 3835). Additionally, we obtained valid questionnaires from 3004 individuals. Of these, 25.77% reported experiencing physical violence, 63.65% non-physical violence, 2.76% sexual harassment, and 11.72% organized healthcare disturbances. A logistic regression analysis revealed that nurses who have less experience, work a rotating roster, work in emergency rooms and pediatrics departments, have low empathy levels, and who work in poor nursing environments have greater odds of experiencing violence.
Conclusions: Experiences of workplace violence are prevalent among Chinese nurses, and several complex factors are associated with a greater risk of such violence, including nurses' personal characteristics, work settings, and work environments. Our results might help nursing managers understand their employees' work status. We recommend that nursing leaders provide and enhance education and support for high-risk groups to help protect Chinese nurses from workplace violence.

What is already known about this topic?

- Workplace violence is a common occurrence throughout the world, but there is little information on the overall prevalence in China.
- Workplace violence can be physical (e.g., hitting, striking), or non-physical (threats, verbal harassment).
- Risk factors for workplace violence include situational and environmental factors, organizational factors, and individual psychosocial factors.

What this study adds

This cross-sectional study demonstrates that:

- The prevalence of workplace violence against Chinese nurses is high.
- Organized healthcare disturbance is at a moderate level in China.

* Corresponding author.
E-mail address: jingpingzhang1965@163.com (J. Zhang).

- Nurses who work in the emergency room or pediatrics department appear to be more vulnerable to workplace violence.
- Nurses with low empathy levels or who are working in poor environments are high-risk groups.

1. Introduction

1.1. Workplace violence

Workplace violence is a widely-reported phenomenon among nurses, and the prevalence appears to be increasing (Sato et al., 2013; Warren, 2011). China, in particular, has recently reported a series of violent injuries to medical workers that has attracted worldwide attention (Yang et al., 2013). Acquiring a general knowledge of workplace violence is difficult because of regional and cultural differences or variations in definitions and reporting progress. Nevertheless, there is agreement thus far on the following five points: (1) workplace violence can be categorized as physical violence (i.e., violence involving physical contact, such as beating, kicking, slapping, and stabbing), verbal abuse (mistreatment through words or tone, such as disparagement and disrespect), threats (promised use of physical or psychological force resulting in fear of negative consequences), sexual harassment, and bullying (repeated offensive behaviors that attempt to humiliate an individual) (Boyle and Wallis, 2016); (2) the aggressors can be patients, caregivers or family members of patients, visitors, colleagues, and leaders (Spector et al., 2014); (3) human and environmental factors are important contributors to the occurrence of violence (Luck et al., 2008); (4) workplace violence can lead to tension in doctor–patient relationships (Lin et al., 2015) and negative patient outcomes (Roche et al., 2010); and (5) violence can result in physical and psychological deterioration and reduced job satisfaction and performance (Schat and Frone, 2011), and can increase nurses' intentions to leave their jobs (Jiao et al., 2015). Furthermore, workplace violence is costly (Speroni et al., 2014).

1.2. Extent of the problem

Clinical nurses reportedly face workplace violence more often than do other occupations (US Department of Justice, 2011); one literature review of the overall violence exposure rates of nurses found a rate of 57.3%, ranging from 24.7% to 88.9% in the last 12 months (Spector et al., 2014). Furthermore, the exact prevalence of workplace violence varies by country and department; for instance, in the US, UK, and Ethiopia, the prevalence rates of workplace violence against nurses were 3.9% (US Department of Justice, 2011), 36% (National Health Service, 2014), and 29.9% (Fute et al., 2015), respectively. The rate was notably worse among nurses working in emergency departments, ranging from 55.5% to 81% (Wei et al., 2016; Crilly et al., 2004; Gates et al., 2006; Ryan and Maguire, 2006). Geriatric and psychiatric facilities also reported prevalent violence against nurses (Spector et al., 2014).

1.3. The situation is more complex in China

There is little information available on the prevalence of workplace violence in China. To our knowledge, the only study to have examined the prevalence rate in China did so for one Northern Province. Researchers surveyed 588 nurses and found that rates of physically and nonphysically violent experiences were 7.8% and 71.9%, respectively (Jiao et al., 2015). Compared to other countries, the situation in China is somewhat more complex because of the phenomenon of organized healthcare disturbances. In Chinese, this phenomenon is called "Yinao"—which combines the words "yi" (i.e., "doctor," "medical care," "hospital," etc.) and "nao" ("a disturbance" or "acting violently")—and has been used to refer to healthcare disturbance events or the criminal gangs behind such events. The gangs' aims are

to intimidate hospitals into paying compensation for perceived malpractice, to cause disruption, and negatively affect profits (Hesketh et al., 2012). Organized healthcare disturbances disturb normal medical activities in various ways; for instance, the perpetrators might build a "mourning hall" (i.e., setting off firecrackers, drumming, and conducting memorial activities, such as crying, praying, and burning paper money) in the hospital, destroy medical equipment, set up barriers to stop other patients from receiving medical treatment, follow and beat medical staff, or occupy the doctors' offices and the nurse stations to pressure hospitals into giving them compensation. These events have been increasing in recent years (The Lancet, 2012), and some people skilled in these activities have even attempted to commercialize it (Hesketh et al., 2012) by travelling between hospitals to obtain "business opportunities" (e.g., employment by patients' families to pursue disturbance activities) for financial benefit.

1.4. Risk factors

Many factors contribute to workplace violence. These can include the following: (1) situational and environmental factors such as settings (e.g., emergency or intensive care units), long waiting times, frequent interruptions (Estryn-Behar et al., 2008), uncertainty regarding patient treatment (Camerino et al., 2008), and heavy workloads (Gallagher et al., 2014; Park et al., 2015); (2) organizational factors such as inefficient teamwork, organizational injustice (Neumann and Baron, 1998), lack of aggression management programs (Pich et al., 2011), and distrust between colleagues (Park et al., 2015); or (3) individual psychosocial factors such as being younger and inexperienced (Wei et al., 2016; Weaver, 2013), previous experience with violence (Campbell et al., 2011), and lack of either communication skills or awareness of how to interpret aggressive situations (Nau et al., 2007). A particularly important individual factor is empathetic communication skills, which refers to nurses' ability to understand patients' wishes, suffering, and concerns. High empathy among nurses has been found to be associated with greater patient satisfaction (Hojat et al., 2015), cooperation, and treatment adherence (Kim et al., 2004).

1.5. Only child is particular factor in China

China has had a high rate of only children since the implementation of the Family Planning Policy. We also wanted to know if the workplace violence suffered by these children differed from the experience of others.

1.6. Aims of the study

The above background indicates that workplace violence has a notable impact on nursing staff, not only disrupting the normal medical care order but also dampening their enthusiasm and facilitating both the intention to leave and emotional exhaustion. This makes it important for nurse leaders to understand their subordinates' working status and take measures to reduce the risk factors for workplace violence. However, as noted above, there is little understanding of the prevalence of workplace violence in China, or the associations among empathy, work environment, and workplace violence. As such, the aims of this study were to (i) determine the prevalence of workplace violence against Chinese nurses and (ii) identify the risk factors of workplace violence.

2. Methods

2.1. Study design

This was a multi-center, descriptive cross-sectional study investigating the prevalence of workplace violence experiences, work environment factors, and empathy levels among Chinese nurses using a