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Workplace Violence Among Nurses and Nursing Assistants in Texas

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Walden University

College of Health Sciences

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Tamala Norris

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> > Walden University 2018

Abstract

Workplace Violence Among Nurses and Nursing Assistants in Texas

by

Tamala Norris

MHA, Walden University, 2014 BSN, South University, 2008

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Healthcare Administration

Walden University

August 2018

Abstract

Workplace violence (WPV) is ranked as one of the leading causes of occupational injury in the United States and is common in health settings. Nurses have the highest rate of violent victimization reported in the U.S., thus presenting a significant issue for healthcare leaders. Various researchers focus on prevalence rates of WPV among nurses discussing types of violence, location, and the setting where the WPV occurred. Less information exists regarding time taken off work and factors associated with WPV among nurses versus nursing assistants (NAs). This information is important due to the impact on safe work environments for nursing employees. The research questions for the study examined the prevalence of WPV and time taken off work among nurses compared to NAs. The study employed a retrospective secondary analysis of data collected by the Bureau of Labor Statistics, from 2011 to 2014, of nurses and NAs in the State of Texas. Multivariate analysis, partial correlation statistical test, and partition of the sum of squares (ANOVA) determined that NAs experienced more incidents of WPV and spent more time away from work due to injuries than nurses. The study was limited because the data did not provide clear indications of environmental factors that led to the injuries, nor did data related to the culture of the working environments and injuries exist. A recommendation for future research is evaluation of the impact of WPV on productivity, patient safety, and quality of care when nurses continue to work or return to work after experiencing WPV. Results of the study reveal the differences in injuries between the two groups and factors impacting the injuries. This information is important for social change as healthcare leaders evaluate opportunities to create a safe working environment for their staff and provide additional resources for nurses to prevent WPV incidents.

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Dedication

This study has been dedicated to my grandmother, Mae Bell Hickman, who has always been my biggest supporter. She encouraged me to continue to pursue my dreams and seek success in all my educational endeavors. The love she shared for her patients sparked my desire to become a healthcare provider. The passion she had for her work was the driving force behind my advocacy for nurses. I will forever be grateful for her dedication to my academic and professional growth.

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I would like to acknowledge Dr. Suzanne Richins who served as my committee chair and mentor. She stood by me throughout this entire journey encouraging me to stay the course. Her gentle guidance and words of wisdom were invaluable. Dr. Richins made significant contributions to my growth as a Walden scholar and researcher.

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Section 1: Foundation of the Study and Literature Review

Problem Statement

According to Findorff, McGovern, Wall, Gerberich, and Alexander (2004), WPV is ranked as one of the top three leading causes of occupational injury fatality and the second leading cause of death for women in the workplace in the United States. The issue of WPV is common in health settings and thereby presents a significant issue to healthcare providers. Among all healthcare workers, nurses have the highest rate of violent victimization with over 30,000 reported incidents of violence reported in the United States (Harrell, 2011). Nurses suffer in their personal and professional lives from these episodes of abuse (Gates, Gillespie, & Succop, 2011). In 2014, 21% of registered nurses and nursing students in addition to more than 50% of healthcare providers suffered from physical assault and verbal abuse (American Nurses Association, 2014). Other forms of reported violence among the nurses include emotional abuse (one-third), threats (14%), physical violence (20%), while some hospital units reported 65% more cases of abuse than other units in the hospital (Roche, Diers, Duffield, & Catling-Paull, 2010). Pich, Hazelton, Sundin, and Kable (2010) found that 60% to 90% of nurses experienced verbal and /or physical violence as a result of close interaction with patients or their families.

WPV causes diverse effects on employees' mental and physical health as well as their social interactions at work and their ability to perform on the job (Gates, et al., 2011). Violence may also result in other less obvious effects such as caregiver fatigue, injury, or stress, which eventually may lead to increased medication errors or patient

infection risks (Rogers, Hwang, & Scott, 2004). A high turnover of 27% was also reported among novice nurses within 3 years of initial employment partly due to direct bullying behaviors (one third of the departures), particularly from nurse leaders or staff nurses (Bullen, 2013). For health service organizations, these consequences may potentially jeopardize employee retention and the teamwork on the nursing unit that is required to deliver quality care for patients. Job satisfaction and retention, absenteeism, and presenteeism are other potential results of WPV (Agnew, Kanga, Messing, Campbell, Kub, Fitzgerald, Sheridah, & Bolyard, 2008). Presenteeism is the act of attending work while sick (Agnew et al., 2008). This research study assessed the current prevalence rate of WPV among nurses or nursing assistants in Texas, time off taken from work, and factors associated with WPV. This information is important due to the potential impact to quality of care and patient safety in health service organizations.

Background

Nurses face complex and persistent violent situations in the workplace in the form of intimidation, harassment; and stalking as well as beatings, stabbings, and shootings, among other assaults (Gates, et al., 2011). Various authors have focused on prevalence rates of WPV among nurses, including Spector, Zho, and Xuan Che (2014), Johnson (2009), and Simons (2008). Spector et al. (2014) completed a quantitative study on nursing violence to determine exposure rates by geographical area, the settings in which the violence occurred, types of violence, and source. The researchers found that "36.4% of nurses reported being physically assaulted, with 67.2% reported being non-physically assaulted, 37.1% report being bullied, 27.9% reported sexual harassment and 50.5%

reported general violence not broken down by type" (Spector, et al., 2014). Despite the finding that exposure to horizontal violence was observed in all settings, physical violence was the most frequent form of violence in the emergency department, psychiatric units, and geriatric settings. By contrast, nonphysical violence occurred more frequently compared to physical violence across all settings except for geriatric departments.

Consistent with the findings by Spector et al. (2014), previous reports by Johnson (2009) and Simons (2008) identified prevalence rates from 5% to 38% across

Scandinavia, the United States, and the United Kingdom, while a Turkish study reported a prevalence of 86.5%. The American Nurses Association conducted a health and safety survey study in 2001 and repeated the same in 2011. The aim was to compare any notable differences in nurses' workplace environments. The findings showed improvements in access of nurses to safe lift devices and needless devices of patients; however, there was increased stress in the acute care setting and increased chronic complications in the patient population receiving care, rising from 70% to 74% from 2001 to 2011 (American Nurses Association, 2014). There was also notable increase in job assaults from 25% to 34% during the same time-period (American Nurses Association, 2014). This study also determined the current prevalence rates in Texas and how they compared among nurses and nursing assistants.

A qualitative study conducted by Roche et al. (2010) explored the relationship between self-rated perceptions towards violence in medical-surgical units and nursing working environment with patient outcomes. The researchers employed cross sectional

design to collect data in 94 nursing wards across 21 hospitals in two states. The results showed that a third of nurses experienced emotional abuse, threats (14%), and actual violence (20%); however, there were variations, with some units reporting abuse rates 65% higher than others (Roche et al., 2010). The study results showed an association between violence and various variables, including unit operations and unanticipated changes to wait times and delayed tasks, as well as increased medication errors. The study found that perceptions towards emotional or actual violence influenced nurses to quit their jobs (Roche et al., 2010). The study contained various limitations such 7 days for data collection; this short length of time for data collection did not allow adequate patient adverse outcomes to be observed (Roche et al., 2010). In addition, the study limited data collection to medical surgical units rather than a mix of units. The study concluded that perceptions towards WPV may affect employees' job satisfaction.

The number of incidences of assault may be as much as 80% higher than what has been reported because research suggests that individuals in the healthcare arena underestimate the incidence of violence they experience while on duty (Clark, 2015). A study conducted by Hader (2008) surmised that 80% of those surveyed from the United States, Afghanistan, Taiwan, and Saudi Arabia had experienced violence in the work setting. The study also noted that 25.8% experienced physical violence, with the vast majority of respondents being female at 92.8%, which is consistent with the national percentage (Hader, 2008). Out of the reported episodes of violence, 53.2% were committed by patients towards nurses (Hader, 2008). Literary evidence suggests that WPV in nursing is under reported (Clark 2015).

A study of more than 4,700 Minnesota nurses revealed that only 69% of physical episodes of violence were reported (Gerberich et al., 2004). Findorff, McGovern, Wall, Gerberich, & Alexander (2004) identified that 60% of nonphysical acts of violence were never reported, and when violent incidents were reported, 86% of those incidents were verbal reports only and did not consist of adequate follow-up (Findorff, McGovern, Wall, Gerberich, & Alexander 2004). The nonreporting shown by evidence contributes to the problem of violence in healthcare and it's the impact on nurses (Clark, 2015). Research has indicated that in the aftermath of violence in the workplace, nurse responses to the incidents include blame, punishment, fear, poor morale, vigilance, and distrust of the organization (Kindy, Peterson, & Parkhurst, 2005). This provides insight into some possible causes of nonreporting of WPV by nursing professionals (Clark, 2015). Facility culture may also be a factor in underreporting of WPV. Nurses often feel unsupported by management in relation to WPV (Clark, 2015). A survey conducted by the Massachusetts Nursing Association concluded that for the majority of incidents of violence that were reported to management, nothing had been done on the case; in 6% of the reported cases, nurses felt management intimidated or discouraged them from reporting the incident to the police, and in 4% of the cases, the management blamed the nurses themselves for the incident (Commonwealth of Massachusetts, Board of Registration in Medicine, 2001). The lack of reporting provides some insight into the magnitude of the impact of WPV on nurses.

Theoretical Framework

This study used the theoretical perspective by Freire (2003) who postulated that living in an oppressed situation obstructs individuals from living their lives freely based on their unique beliefs and values, which can be changed to avert imbalanced social structure because the oppressed situations are not a result of fate. Freire (2003) posited that oppressed individuals internalize their situations by minimizing their beliefs and values in favor of those of the dominant group. Consequently, they tend to behave like their oppressors and become submissive to them. With continued alignment with the oppressor, the oppressed individuals develop hatred against their own group and eventually oppress their group or each other, which sometimes results in violence (Freire, 2003). The oppressed individuals are afraid of fighting for freedom for fear of more violence from their oppressors, who are at risk of the oppressed struggling to overcome oppression (Freire, 2003). According to Freire (2003), the oppressed individuals experience duality of yearning for freedom yet also fearing it. This duality splits the group, and thereby limits them from gaining freedom.

Based on Freire and other theorists work, Roberts (1983) postulated that nurses began working in an oppressive situation in the early 1900s because their working environment was controlled by male physicians as well as male administrators. Evidence of this situation prevails to date because nurses are responsible for caring for patients but have little power over the behavior of physicians and male administrators (Garman, Leach, & Spector, 2006). According to Roberts (1983), nurses internalize the physician's dominant values at the expense of nursing values, including recognition of the medical

rather than the nursing model. Oppressed nurses exhibit poor self-esteem, inferiority feelings, aversion for women nurses, dissatisfaction with their profession, disunity, or mistaken professional identity (Freire, 2003). The current study was informed by the oppression theory to explore on WPV among nurses and nursing assistants in Texas and recommend appropriate measures to address this situation.

Research Questions and Hypotheses

RQ1: What is the prevalence rate of WPV among nurses in Texas?

RQ2: What is the prevalence of WPV among nursing assistants in Texas?

RQ3: How does the prevalence of WPV against nurses compare to that of nursing assistants in Texas?

 H_03 : There is a statistically relevant difference between the prevalence rate of WPV among nurses and nursing assistants.

 H_a 3: There is no statistically relevant difference between the prevalence rate of WPV among nurses and nursing assistant.

RQ4: How does the time taken off work for violence to nurses compare to that of nursing assistants in Texas?

 H_04 : There is a statistically relevant difference between time taken off work for injuries obtained by nurses and nursing assistants.

 H_a 4: There is no be a statistically relevant difference between time taken off work between nurses and nursing assistants.

RQ5: What are the factors associated with WPV among the nursing staff in Texas?

Definition of Terms

The following terms are defined for the purpose of this study:

Emotional abuse: Any act including confinement, isolation, verbal assault, humiliation, intimidation, infantilization, or any other treatment that may diminish the sense of identity, dignity, and self-worth. This includes insults and attempts to scare, isolate, or control an individual (Vancouver Coastal Health, 2016).

Horizontal violence: The hostile and aggressive behavior by an individual or group members towards another member or groups of members of the larger group. This has been described as intergroup conflict (Duffy, 1995).

Nursing: The professional practice that alleviates suffering, promotes health, and provides interventions and advocacy in health promotion for individuals, families, and communities (American Nurses Association, 2014b).

Nursing staff: Includes nurses (registered nurses and licensed vocational nurses) and nursing assistants.

Physical assault: The undesirable physical contact with the potential to cause bodily or emotional injury, pain, and/or distress. The physical assault involves the use of force and may involve the use of a weapon, including objects such as pens, chairs, or equipment, and includes actions such as hitting, punching, pushing, poking, or kicking (U.S. Department of Labor, 2010).

Residents: A physician (one who holds the degree of M.D., D.O., or MBBS, MBChB, or BMed) who practices medicine usually in a hospital or clinic under the direct

or indirect supervision of an attending physician (American Academy of Family Physicians, 2017).

Workplace violence (WPV): Verbal, written, or physical aggression that is intended to control or cause death or serious bodily injury to self or others or damage to property. WPV includes abusive behavior, intimidating or harassing behavior, and threats (U.S. Department of Labor, 2010).

Assumptions

The following are assumptions were made in this study as being true.

- the assumption that the data collected by the Bureau of Labor Statistics on WPV injuries was reported precisely and correctly,
- 2. the assumption that the information regarding time from work by role was submitted to the Bureau of Labor statistics accurately, and
- 3. the assumption that the injuries suffered by those impacted by WPV were addresses by the healthcare organization's employee health programs.

Scope and Delimitations

The scope of the study was to understand the difference between the prevalence of workplace injuries between nurses and nursing assistants in Texas. Nurse and nursing assistants work within the patient's personal space providing care. They are the most visible individuals of the healthcare team for the patient and their family and are likely to be first in line when patients or their relatives become aggressive and possibly violent (Paton, 2016). Nurses often receive additional training in de-escalation practices, but

there is very little evidence that this same education is provided to nursing assistants (Paton, 2016)

In this study I also discuss the time taken off work for both groups related to the injuries received from episodes of WPV. While there is reported data of the injuries and time away from work, there is little evidence regarding how this time off work or the injuries sustained impact productivity and patient safety of the nursing staff returning to work. There is also limited literature that addresses the experience of returning to the workplace after an assault from the perspective of the victim (Clark, 2015).

Boundaries of the study include the inability to address the impact of productivity on nursing staff returning to work who have experienced WPV. This study is important for healthcare leaders as they evaluate managing loss of employee work hours due to employee injuries and, more importantly, injuries received from incidences of WPV.

Significance

Nursing staff, which consist of nurses and nursing assistants, make up the largest population of employees in the healthcare system (American Nurses Association, 2014). Employees suffering WPV in a healthcare setting experience harm that ranges from psychological injuries to emotional trauma and physical injuries (Whitmore, 2011). Violence against this group may leave injuries that lead to time off for the impacted nursing staff. Nursing staff productivity and ability to work at full capacity is imperative to providing quality patient care in a safe manner (Gates et al., 2011). This topic is a part of the broader system of the workplace environment and social interactions in the workplace.

Nurses who experience WPV suffer from posttraumatic stress symptoms including distressing emotions, difficulty forming thoughts and thinking clearly, resignation in caring for patients, absenteeism, and job changes (Gates et al., 2011). The violence suffered at work in the healthcare environment can lead to work related stressors that include intent to leave the profession, employee disengagement, and poor job satisfaction (Winstanley & Whittington, 2002).

This study provides insight on current WPV among nurses and nursing assistants in Texas. Insight into WPV prevalence is important because it could inform ecological changes towards (a) improving workplace safety, (b) teaching behaviors to diffuse adverse situations before they escalate to violence, and (c) providing support for employees who have been violated while working. Moreover, the study could contribute new knowledge to the current literature on current WPV among nurses or nursing assistants in Texas.

Literature Review

Nursing Workforce

An increase in life expectancy and the aging Baby Boomer population have expanded demands for healthcare services. Services for the growing aging population are projected to increase more than two-fold by 2050 (Department of Health and Human Services & Department of Labor, 2003). Nursing staff, which consists of nurses and nursing assistants, make up the largest population of employees in the healthcare system (Roche et al., 2010). Sources revealed that nursing assistants (e.g. orderlies and patient care technicians) provided about 72% of the direct care workforce in nursing homes and

23% of the direct care workforce in the hospital setting (Bureau of Labor Statistics, 2008). The Bureau of Labor Statistics (2008) projected an increase in the nursing workforce by 18% between 2006 and 2016, and the actual nursing workforce increased by 16% as of 2016. The increased demand for healthcare services became a critical policy priority to ensure that healthcare organizations improve retention rates of all nursing staff (Department of Health and Human Services & Department of Labor, 2003).

Violence against nurses and nursing assistants continue to be a complex and persistent workplace hazard in healthcare settings; yet, the workforce is mandated to care for people (Pich et al., 2010). Nurses appear to be the most at risk of assault of all the healthcare providers (Pich et al., 2010). In most cases, nurses are at risk of violence from patients and their families, visitors, and other healthcare providers. The reported incidences of violence against nursing staff included intimidation, harassment, stalking, beatings, stabbing, shootings, as well as other forms of assault.

Globally, nurses account for significant hospital workforce and are the most exposed healthcare workers to verbal, emotional, physical, and sexual abuse (Gerberich et al., 2005; Islam, Edla, Mujuru, Doyle, & Ducatman, 2003). Due to their stressful working environment, nursing staff are exposed to more accidents, deaths, and abusive and harsh behaviors from waiting or transfer patients or their companions compared to other hospital staff (Kwak et al., 2006). Other issues that cause illogical or tense behaviors among nurses are working long hours, continuous control of conditions, hospital overcrowding, repeated requests for special privileges from patients and their companions, inadequate or lack of personnel, difficult or stressful situations, and repeated

exposure to harsh and insulting hospital-related behavior (Kwak et al., 2006). Kwak et al. (2006) argued that experiencing insults and rude behavior during work jeopardizes physical, emotional, and psychological health of nurses, ruins patient-nurse medical communication, and increases healthcare costs.

WPV constitutes a pressing concern to all nurses and may range from physical or sexual to verbal threats and abuse from peers or consumers. A 10-year longitudinal study of workplace rape cases in Washington State by Alexander, Franklin, and Wolf (1994) found that 11% of the rape cases were healthcare providers in hospital settings and other nursing facilities. In a study by Hatch-Maillette, Scalora, Bader, and Bornstein (2007), 63% of the respondents were female nurses who experienced sexual threat, while 84% were victims of physical or sexual assault.

Physical violence may cause physical injuries and even death of healthcare providers (Bergen, Chen, Warner, & Fingerhut, 2008; Hartley, Biddle, & Jenkins, 2005). There is evidence to link verbal violence with negative consequences such as anxiety, depression, and/or stress (Spector, Coulter, Stockwell, & Matz, 2007). Violence not only affects nurses, but all workers in other healthcare fields. A study by DuHart (2001) found that both physicians and nurses experienced WPV with varying prevalence: physical violence against physicians occurred at 16.2 times per 1,000 versus 21.9 per 1,000 for nurses. Other healthcare workers such as patient care assistants reported 8.5 assault cases for every 1,000 workers (DuHart, 2001). The current study explored risk factors of WPV against nursing workforce and preventive measures.

A Nursing Management Workplace Violence Survey of 1,400 respondents in the United States and across 17 other countries (e.g. Afghanistan, Taiwan, and Saudi Arabia) found that 1,377 subjects indicated that healthcare staff safety was woefully inadequate (Hader, 2008). Approximately 74% of respondents reported some form of violence in their workplace; of those respondents, 51% to 75% of them reported cases of bullying, intimidation plus harassment, and about 26% of the respondents reported physical violence. Use of weapons accounted for 5.6% to 7.5% of incidents. In terms of violence perpetrators against respondents, the study found that 53.2% were patients and 51.9% were colleagues, followed by physicians (49%) and visitors (47%), while other healthcare providers accounted for 37.7% cases.

A study by Manderino and Berkey (1997) found that about 90% of nurses sustained verbal abuse annually. According to a survey of nurses by the Joint Commission, over 50% of respondents experienced verbal abuse (as cited in American Nurses Association, 2014, page 16). Out of the 303 nurses surveyed, there 53% experienced bullying (Vessey, Demarco, Gaffney & Budin, in press).

Sources indicated that one-fifth of violent events occur in psychiatric settings (Mayhew, 2000). Injury-related violent acts among patients and staff are consistently reported, while non-injury physical violent acts and nonphysical violence occur unreported. Findorff, McGovern, Wall, and Sinclair (2005) demonstrated that 43% of physical violence as well as 61% of nonphysical violence were not reported. Low reporting incidences may be attributed to many factors including perception among victims that WPV was inseparable from their job (32% of assault and 8% of nonphysical

violent cases). The remaining cases felt they were "telling on" a coworker or were not sure of the reporting impact on working relationships.

Findorff, McGovern, Wall, Gerberich, and Alexander (2004) investigated individual and employment- related characteristics of WPV reporting as well as the relationship between reporting incidence and violent event the characteristics. The study found that 57% of the cases that experienced physical WPV reported the incidents to their employer versus 40% cases of nonphysical violence. The findings also showed a relationship between reporting tendency with frequency of assault plus severity of symptoms. Women sustained more adverse symptoms besides their higher reporting rates than men. Most reports were verbal (86%) as opposed to written ones.

Epidemiology, Prevalence, and Incidence of Workplace Violence

Globally, violence is recognized as a major public health issue and is identified among the leading causes of death for people aged 15–44 years. The prevalence of abuse against nurses varies in different countries and cultures. A growing body of evidence indicates that violence at work affects the lives of millions of people worldwide (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002; World Health Organization Geneva [WHO], 2003). In the US, violence ranks third most leading common cause of occupational death and the second most leading cause of death among working women. In 2001 alone, there were 639 work-related homicides (US Department of Labor, Bureau of Labor Statistics, 2002) with about two million non-fatal work-related violence annually (Warchol, 1998).

Studies show an increase in non-fatal work-related violence risk among healthcare workers (Toscano, 1996; LaMar, Gerberich, Lohman, et al., 1998; Carmel & Hunter,

1989). Other studies of workers in selected healthcare occupations revealed annual injury rates of 27 registered nurses, 88 licensed practical nurses, 116 medical managers, 222 occupational therapists, 289 nursing aides and 457 health aides per 100 000 persons versus 16.7 overall rate. It was also found that most of the physical healthcare violence was committed by patients/ clients (LaMar, Gerberich, Lohman, et al., 1998; Hashemi and Webster, 1998; Pane, Winiarski & Salness, 1991; Peek-Asa, Howard, Vargas et al., 1997; Williams, 1996; Gerberich, Church, McGovern, et. al., 2004; Hurrell, Worthington & Driscoll, 1996).

Types of Violence

Numerous studies demonstrate high workplace bullying prevalence. Simons (2008) performed a study on nurses in Massachusetts, which showed that 31% of them experienced bullying incidences. In another study by Johnson (2009), which involved Washington State Emergency Nurses Association members, 27% of them had experienced bullying incidences in the previous 6 months. Along with bullying, studies have shared physical assault, emotional abuse, and verbal abuse as other types of violence nurses have experienced (Clark, 2015).

Causes of Violence

Although workplace bullying is clearly prevalent among nurses, it may result in serious implications. According to the oppressed group theory, workplace hostility plus aggression are defensive mechanisms among the social equals and the oppressed group (Johnson 2009; Simons, 2008). The model posits that colleagues in the same carder experience aggression from their workmates in higher organizational hierarchy, leading

to low self-esteem as well as poor group identity. The abuse rendered by the organizational leaders compel the oppressed group to direct abusive behavior against one another (Hutchinson, Wilkes, Vickers, & Jackson, 2008). The concept of the recipients of abuse leading to poor group identity was support by Quine (2002), who found that high workplace bullying prevalence among junior doctors influenced junior doctors to be part of high workplace bullying incidences among women and minority ethnic groups and less against white men. Some studies showed that workplace bullying resulted from organizational factors, including tolerating bullying behavior, authority misuse, and lack of appropriate organizational measures (policies and procedures) for addressing the problem (Hutchinson, Vickers, Jackson, & Wilkes, 2006; Johnson, 2009). It is essential to explore factors contributing to WPV against nursing workforce to develop and implement appropriate interventions for eliminating the problem.

WPV among healthcare workers is not only underreported but also ubiquitous and a persistent, tolerated and largely ignored problem in the USA. The Joint Commission (2010) reported that formerly believed to be safe institutions are currently confronting rates of crime that are continuously increasing, including violent crimes such as assault, rape, and homicide. Although the healthcare sector statistically remains among the most violence-prone institutions in the United States (Harrell, 2011), there are no statistically significant and universally applicable risk reduction methods. Rather, most of the current studies focus on quantifying the problem as well as attempt to profile perpetrators plus their victims. Moreover, only few studies have explored on interventions aimed towards

violence reduction and they have shown lack of possibility to find a simple but one-sizefits-all solution for violence prevention.

According to Occupational Safety and Health Administration (2015), about an average of 24,000 workplace assaults occurred from 2011 to 2013 annually, with about 75% of them reported in hospitals. A nursing review by Heckemann, Zeller, Hahn, Dassen, Schols, and Halfens (2015) showed that nurses acquired more confidence and knowledge regarding risk factors after training with no change in the violence incidences perpetrated by patients. The findings highlighted scarcity of high-quality research as well as the gap in the current training to reduce WPV rates.

Home-based settings are also associated with risks since the working environment is comparatively uncontrolled. It is well established that 61% of healthcare providers in home-based settings report WPV each year (Hanson, Perrin, Moss, Laharnar, & Glass, 2015). Among the issues of concern is availability of weapons or drugs, family violence as well as robbery plus car theft (Gross, Peek-Asa, Nocera, & Casteel, 2013). Homicide is the second most leading cause of death among healthcare workers in these settings after motor vehicle crashes (Hoskins, 2006). Some hospital environments present greater risk of customer or patient inflicted WPV than other settings. Sources indicated that emergency department and psychiatric facilities rank the highest on violence cases in well-studied, hospital environments despite research paucity in other areas of hospital. Healthcare workers in these locations, including nurses, technicians, and other staff members are vulnerable to violence. Nurses and nursing assistants are the most at risk of assault due to their high contact time with patients (McPhaul & Lipscomb, 2004;

Kowalenko, Gates, Gillespie, Succop, & Mentzel, 2013; Lehmann, McCormick, and Kizer, 1999; Pompeii, Schoenfisch, Lipscomb, Dement, Smith, & Upadhyaya, 2015; Gates, Ross, & McQueen, 2006; Gerberich, Church, McGovern, et. al., 2004; Lanza, Zeiss, & Rierdan, 2006).

A nursing study by Gerberich, Church, McGovern, Hansen, Nachreiner, and Geisser (2005) in Minnesota found that the annual verbal assault incidence was 39% compared to physical assault incidence at 13%. The findings from another larger study showed that 46% of nurses experienced some WPV type in the most recent five shifts, with a third of them reporting physical assaults (Duncan, Estabrooks, & Reimer, 2000). The highest rate of verbal assault was reported by nurses in emergency department at 100% versus physical assault at 82.1% in previous year (May & Grubbs, 2002). It was also established that nursing aides are similarly at risk (Lehmann, McCormick, & Kizer, 1999) especially those who work in nursing homes with dementia units (Tak, Sweeney, Alterman, Baron, & Calvert, 2010), with 59% of them reporting weekly assault and 16% daily. Fifty-one percent of nursing assistants sustained physical injuries from patient, of which 38% required medical attention (Gates, Fitzwater, Telintelo, Succop, & Sommers, 2002).

All employees working in inpatient psychiatric settings are more vulnerable to targeted violence than those in areas (Kowalenko, Gates, Gillespie, Succop, & Mentzel, 2013; 25, Gerberich, Church, & McGovern, 2004; Hoskins, 2006; Gerberich, Church, McGovern, et. al., 2005). A study involving all forensic psychiatric hospital staff members reported annual verbal conflict incidence at 99% and physical assault at 70%

(Kelly, Subica, Fulginiti, Brekke, & Novaco, 2015). Psychiatric aides experienced WPV 69 times the national rate (Longton, 2015).

There is much evidence on high injury-related risk among nursing assistants due to workplace violent assault (Estryn-Behar, van der Heijden, Camerino, et al., 2008), which exceeds that of other health workforce (Gerberich, Church, McGovern, et al., 2004). According to Jackson, Clare, and Mannix (2002), the nursing personnel who experienced work-related violence at least a month expressed higher intent to quit nursing profession as well as change institutions. Nursing home-related organizational characteristics such as facility ownership together with chain membership, turnover among top management or registered nurses and/or staffing patterns or levels affect the nursing assistants' perceptions towards their job satisfaction, turnover and retention (Castle & Engberg, 2006).

The review of the literature demonstrates that aggressive and/or violent behavior occurs in healthcare (Novaco, 2015). Psychiatric aides experienced WPV 69 times the national rate (Longton, 2015). There is much evidence on high injury-related risk among nursing assistants due to care settings is caused by patients as well as visitors (Kamchuchat, Chongsuvivatwong, Oncheunjit, Yip, & Sangthong, 2008; Fernandes, Bouthillette, Rabound, Bullock, Moore, Christenson, et. al., 1999; Duncan, Hyndman, Estabrooks, Hasketh, Humphrey, Wong, et. al., 2001; Camerino, Estryn-Behar, Conway, Van Der Heijden, & Hasselhorn, 2008; Pich et al., 2011). Violence incidents against nurses affect job satisfaction, performance and care quality of patients, and the victims suffer from psychological harm (Arnetz, & Arnetz, 2001; Carroll, 2003; Nijman, Bowers,

Oud and Jansen, 2005; King, & McInerney, 2006). Other studies demonstrated violence-related psychological and emotional impact, particularly on nurses (Pai & Lee, 2011; Bonner & McLaughlin, 2007).

Risk Factors of Workplace Violence

Nurses are exposed to various risk factors of physical or verbal violence from both patients and visitors. Some of these risk factors include serving in public sector, handling money, transporting and delivering passengers/ items and working with more violent people or working in areas with high crime, working at nighttime and early in the morning, guarding valuables or working alone (The National Institute for Occupational Safety and Health[NIOSH], 1996). Many researchers cited various factors associated with WPV, including age, sex, education to job position and working hours as well as nurse-patient relationship (Gerberich, Church, McGovern, Hansen, et. al., 2005; Hodgson, Reed, Craig, Murphy, Lehmann, Belton, et. al., 2004; Kwak et al., 2006). The extent or intensity of abuse varies with different clinical situations (Gerberich, Church, McGovern, Hansen, et al., 2005; Winstanley & Whittington, 2004). Indigent patients' perceptions towards health services, changes or disturbances in mental states and prolonged exposure to physical and psychological discomforts are major contributing factors to hospital-based patient-initiated violence (Perrone, 1999). Individuals working on psychiatric units are at greater risk of WPV (Lee, Gerberich, Waller, Anderson, & McGovern, 1999; Lehmann, McCormack, & Kizer, 1999). A study by Hesketh, Duncan, Estabrooks, Reimer, Giovannetti, Hyndman, and Acorn (2003) indicated psychiatric

nurses experienced varying WPV with physical assault at 20%, threats of physical assault at 43%, and a minimum of one verbal assault at 55% in a period of one working week.

The literature is replete with studies on demographic risk factors of WPV in staff and perpetrator (Steinert, 2002; Flannery, Rachlin, & Walker, 2001; Woods, & Ashley, 2007). A case in point is given by Steinert (2002) who found that a violent episode history strongly correlated with certain patient demographics, including gender, age, diagnosis, as well as, alcohol abuse. According to Flannery, Rachlin, and Walker (2001) individuals with psychosis and/or violent episode history and drug misuse do not constitute major risk factors. Some authors concluded that demographic factors alone were inconsistent and not reliable enough for predicting violent episodes compared to clinical diagnoses such as schizophrenia, mania or some organic syndromes (Woods, & Ashley, 2007).

There is limited data on correlation between violence and diagnostic category (Tardiff, 1998; Dolan, & Vollm, 2009; Richard-Devantoy, Olie, & Gourevitch, 2009). The findings show that aggressive behaviors are more likely to be experienced with schizophrenia and personality disorder patients. As noted by Tardiff (1998), the most common psychological disorder associated with aggressive behavior is paranoid schizophrenia. There is also an association between aggressive behavior and anti-social personality disorders, including manipulative and exploitive (Dolan & Vollm, 2009; Richard-Devantoy, Olie, & Gourevitch, 2009).

Prevention of Violence Against Nursing Workforce

Lanza, Kazis, and Lee (2003) and Lanza, Kazis, Lee, and Ericsson (2003) to prevent WPV among psychiatric wards was developed based on the Violence Prevention Community Meeting [VPCM]- Delphi Approach (Beech, 1999). This approach involved initiating community-based interventional meetings that were familiar to staff, as well as patients in most psychiatric units. The researchers assessed its efficacy during pretreatment, treatment, and post-treatment design by use of a treatment sample. The pretest findings during treatment showed violence reduction of 30% and pretest to post-test day shift at 50% reduction (Lanza, Rierdan, Forester, & Zeiss, 2009).

Impact of Violence Against Nursing Workforce

Violence against nurses may result in psychological consequences such as fear, frustration, and mistrust in hospital administration as well as reduced job satisfaction. Early career nurses are the most affected since it may result in professional disillusionment. Violence affects the professional perspective of nurses, undermines recruitment as well as retention efforts which may eventually threaten patient care, particularly during pervasive nursing shortage.

Hostility due to workplace bullying among nurses may result in medical errors, poor satisfaction among patients plus higher healthcare costs. A study by the Joint Commission [JC] (2008) found that nursing retention rates correlate d with workplace bullying in hospital units. Among the various negative actions of bullying behavior are verbal abuse, threats as well as humiliation, intimidation plus job performance interference behaviors (Einarsen & Hoel, 2001). Bullying may also extent to allegations

of incompetence even with history of excellence, gossiping about co-workers, keeping pertinent patient care related information from other practitioners, feeling of constant stress and fear for more bullying events, remarks such as "get tougher skin" or "work out your differences" from a supervisor regarding bullying or screaming/ yelling at a colleague before others with the intention to besmirch him/her (Murray, 2009).

Workplace behaviors can demoralize and victimize an individual who may be experiencing bullying (Longo & Sherman, 2007).

According to The Institute for Safe Medication Practices (2004), negative workplace behaviors impacted widely on medication errors. For instance, about half of the subjects indicated that intimidating behaviors influenced unsafe medical administration. Approximately 7% of the subjects claimed to have committed medication errors because of bullying actions. In another study by Rosenstein & O'Daniel (2005), 54% of nurses indicated that workplace bullying influenced patient safety while 25% of them believed that bullying contributed to patient mortality. There is much evidence that workplace bullying may lead to low job satisfaction or increased job stress and absenteeism among nurses as well as low retention rates and increased intention to leave the job (JC, 2008; Johnson, 2009; Kivimakil, Elovainio, & Vahtera, 2000; Quine, 2002), which eventually results in the high shortage of nursing workforce.

Workplace bullying negatively impacts nurses, patients, and the overall healthcare system. Bullied nurses report symptoms such as weight loss/gain, hypertension, and cardiac palpitations as well as gastrointestinal disorders, headache to insomnia plus chronic fatigue (Bigony, Lipke, Lundberg, McGraw, Pagac, & Rogers, 2009). There also

reports of negative psychological effects such as higher levels of stress, low self-esteem, anxiety as well as depression plus suicidal ideation (Johnson & Rea, 2009; Quine, 2002). A study in Britain showed that 25% of nurses opined that workplace bullying impacted on their physical health (Quine, 2001). It is well established that nurses are more likely to perform poorly in stressful situations caused by workplace bullying (Farrell, 1997).

There is a body of evidence that abuse of nurses produces a range of negative effects from exhaustion, sleeping disorders and nightmares to stress, continuous headaches and chronic aches to spasm, loss of self-confidence and/or health to self-dissatisfaction, disappointment, short-temperedness and symptoms of amnesia after being hit, phobia, depression and alcohol consumption or smoking plus suicide. Physical violence may result in permanent physical problems, including backache, and even death (Anderson, 2002; Gates, Fitzwater & Mayer, 1999; Lee, Gerberich, Waller, Anderson & McGovern, 1999; Nolan, Soares, Dallendre, Thomson & Arnetz, 2001; Pejic, 2005; Rippon, 2000). Exposure of nurses during duty may cause loss of concentration, lack of attention to ethical guidelines, higher rates of errors, missing shifts, recurring absenteeism, lack of attention to patients, reduced job satisfaction, job dislike, and work refusal due to stressful wards. The result is significant increase in treatment cost to health facilities and community (Farrell, Bobrowski, & Bobrowski, 2006).

Back injuries plus back pain present a major concern to nursing staff as well as healthcare organizations. These injuries negatively impact on quality of life and overall well-being of the worker, and to organizational productivity (Gropelli, 2011). It is well established that healthcare workers are at risk of musculoskeletal disorder (MSD)

compared to construction mining and manufacturing workers (Centers for Disease Control [CDC], 2009). Recent study in the US showed that 52% of nurses reported chronic back pain (Association, American Nursing, 2012) despite a lifetime prevalence of up to 80% (Edlich, Winters, Hudson, Britt, & Long, 2004). According to the American Association of Nursing (2012), 38% of nurses had severe occupational-related back pain that warrant work leave. The condition appears to be ubiquitous among many nurses who accept it as part and parcel of their job (Gropelli, 2011). Twelve percent of nurses' attribute quitting their profession to back pain (American Association of Nursing, 2012) while 20% moved to different unit, position, or even different employment due to back pain (Li, Wolf & Evanoff, 2004). While the average compensation for a worker with back pain is estimated at \$10,698, nurses experience the highest compensation rates for back injuries (American Association of Nursing, 2012). For instance, nursing aides, orderlies plus attendants accounted for the highest MSDs incidence rates of 249 versus 34 in every 10,000 persons for all workers in all occupations (Bureau of Labor Statistics, 2012).

A study by Adriaenssens, et al. (2012) provided an analysis of 248 emergency room nurses who experienced WPV. The nurses all experienced traumatic events in their work and were found to have depression, anxiety, difficulty sleeping, and PTSD. The conclusion referenced how these traumatic events not only affect the nurses personally, but also impact quality of care (Adriaenssens, et al., 2012). A study by Agnew et al., (2008) consisted of 2,168 registered nurses and others in nursing service provided insight into job satisfaction, job retention, absenteeism, and presenteeism in individuals who

experienced WPV and those that had not. This study also explored the difference between psychological violence and physical violence this population.

These studies provide support of the impact of WPV on absenteeism and the potential impact to quality of care. It is important to understand the prevalence, incidence, types, causes, risk factors, and epidemiology of WPV so that healthcare leaders can help develop programs and to decrease WPV in the healthcare setting while focusing on improving safety for employees. The elements bring to light areas of possible intervention for leaders. These elements also have relevance for healthcare leaders as they examine ways to provide better post-violence care to employees. Provision of proper mental and physical care after employees suffer episodes of WPV may decrease the impact these incidents have on productivity and delivery of quality care. Nursing staff, identified as nurses and nursing assistants provide the majority of the direct care provided to patients in the healthcare setting (Bureau of Labor Statistics, 2008). Nursing staff is among the most exposed healthcare workers to verbal, emotional, physical, and sexual abuse (Gerberich, Church, McGovern, Hansen, Nachreiner, & Geisser, 2005; Islam, Edla, Mujuru, Doyle, & Ducatman, 2003). Thus, the prevalence, causes, types, and risk factors of WPV and the correlation to days missed from work is of particular importance to healthcare leaders. Productivity, patient safety, quality of care, and increase the need for other staff to work overtime can be impacted when nursing staff miss days (Farrell, Bobrowski, & Bobrowski, 2006).

Summary

The issue of WPV is common in healthcare settings, and thereby presents a significant issue to healthcare providers. There is a considerable body of literature that describes the incidence, interventions to prevent violence, and the impact that violence has on both nursing and healthcare organizations, there is little research that looks at the difference in the injuries incurred by nurses versus the injuries nursing assistants have received (Clark, 2015). The proposed research study will assess the current prevalence rate among nurses or nursing assistants, time off taken from work, and factors associated with WPV among nurses or nursing assistants in Texas.

Chapter 2 provides evidence of the impact and significance that WPV has on nursing staff working in healthcare organizations.

Section 2: Research Design and Data Collection

Research

This section describes the methods and procedures that will be used to perform the study, including the sampling technique, sample size determination of the case study, and data collection methods. In this chapter I explain how quality could be achieved.

A multivariate analysis approach was used in this research as it allowed for the investigation of more than two variables (Frankfort-Nachmias, Nachmias, & DeWaard, 2015). This analysis was based on a statistical principle used to interpret the relationship between more than one set of dependent variables and more than one set of independent variables (Frankfort-Nachmias et al., 2015). This type of analysis allows the investigator to examine the possible significance of a variable on behavior concurrently with the exclusive influence of that variable on behavior, which was demonstrated in a study by Gans, Burkholder, Riscia, and Lasater (2003) who evaluated fat-related dietary behaviors in various ethnicities in New England. Frequently, numerous variables are associated directly with the dependent variable. These independent variables allow a researcher to study multiple types of relationships between the dependent variable and the numerous independent variables (Frankfort-Nachmias et al., 2015). This type of analysis helps researchers avoid making inaccurate conclusions about the relationship between variables (Frankfort-Nachmias et al., 2015). For this research, I used the partial correlation statistical test. Partial correlation cancels the effect of the control variable on the dependent and independent variables (Frankfort-Nachmias et al., 2015). The original relationship between the independent and dependent variables is reassessed to determine

whether the relationship is a direct association despite the introduction of a third variable (Frankfort-Nachmias et al., 2015). This analysis could help determine if job performance is affected by episodes of WPV that are independent of job performance and the violence-affected nurses including potential posttraumatic stress disorder derived from suffering WPV.

Research Approach

A quantitative study method was used based on the literature review for determination of variables as well as content analysis. Quantitative studies involve the measurement and examination of data, which allows one insight into the relationship between dependent and independent variables (Sutcliffe, 2005). The quantitative method is advantageous due to the objectivity provided by use of this methodology. Research of this kind allows for the gathering of more insight on WPV and the associated factors than were previously understood (Ghauri & Grønhaug, 2010). According to Dash (2005), the quantitative research design is concerned with the cause and effect of social phenomena, which is based on critical interpretation and empirical observation. The quantitative research method was used to collect primary data through in-depth evaluation of interviews, observation, and questionnaires in light of the research questions.

Quantitative Content Analysis

Quantitative content analysis is defined by Hsieh and Shannon (2005) as a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns. With this method, the researcher usually analyzes observation-based field notes, data from

questionnaires, and information from surveys. According to Mayring (2000), content analysis refers to an empirical to methodological text-controlled analysis approach in view of their communication context, content analytic rules, as well as procedural models with careful quantification. Study findings for quantitative research can be generalized to the population about which information is required, structural factors that determine how inequalities (such as the differences in caregiver roles) are produced can be analyzed, and clear documentation can be provided regarding the application of the survey instruments so that other researchers can assess the validity of the findings (Patton, 2002).

The current study includes a content analysis to group common themes that emerge from study findings into subcategory, category, and main category to allow for analysis of the data with a view to answering the research questions.

To ensure credibility of the selected articles, I set eligibility criteria based on the author, publication year, and method of findings presentation. To ensure a focused content analysis, I formulated research questions in line with the research topic to guide the entire study. I developed the search strategy based on the framework by Kable, Pich, and Maslin-Prothero (2012) in order to ensure extraction of all relevant literature and data. Therefore, I structured the study based on the following sections in order to achieve readability and flow of the study.

Search Databases

I completed a systematic search of published articles from the various databases, including Medline, Central, PubMed to CINAHL, EMBASE, AMED, EBSCO Host, Cinahl Ebsco and Google scholar and Cochrane from 2000 to 2017. These databases were

selected because they have numerous peer-reviewed journals with credible and current information. Van Echtelt, Wynstra, Weele, and Duysters (2008) reported that peer-reviewed journal articles provide validated knowledge and give a good estimate of accepted topics and methodologies. The use of more than one database ensures that all relevant articles are included in the study as recommended by Crossan and Apaydin (2010). The aim for this procedure is to obtain credible information based on the search terms. The terms were extracted and grouped into subgroups, followed by linking the subgroups to the research questions. In order to achieve the research aims and objectives, I analyzed the data by deductive analysis of the findings from the literature review of the selected research studies.

Eligibility Criteria

All the selected articles had to meet the following search criteria:

Inclusion Criteria

Peer-reviewed journal articles based on the prevalence rate of WPV in the nursing workforce, time taken off work, factors associated with WPV, best nursing practices, and interventions that promote improved management of WPV in nursing workforce in Texas were included. Other inclusions were articles that were published in English on the research topic and articles published between 2000 and 2017 to obtain the most current developments pertinent to the study. I limited the search for the articles to the research topic, study purpose, research questions, and keywords. Among the key words were the prevalence rate of workplace violence in nursing workforce, factors associated with workplace violence, impact of workplace violence, and prevention strategies.

Exclusion Criteria

Peer-reviewed journal articles outside the topcis of prevalence rate of WPV in nursing workforce, time taken off work, factors associated with WPV, best nursing practice, and interventions that promote improved management of WPV in nursing workforce in Texas were excluded. Additional exclusions were articles that were published in languages other than English on the research purpose, articles published before 2000, and articles outside the research topic, study purpose, and research questions.

Search Terms

The search terms were developed from the research topic, research questions, and study purpose. A total of 42 articles of interest were gathered from the databases based on research topic, study purpose, research questions, each search term, and the overall selection criteria. The search was followed by an assessment of the articles for relevance based on the research topic, study purpose, research questions, and keywords as recommended by Bettany-Saltikov (2010). All of the articles were evaluated against the inclusion and exclusion criteria, starting with the titles. The aim of this assessment was to eliminate any article that did not meet the research rationale in the shortest time possible. After thorough review and analysis, nine articles were selected by the researcher for systematic review.

Quality Management

As noted by Popay, Hazelton, and Serronia (2006), quality assessment plays a critical role in ensuring accurate findings. Through the selection of only peer-reviewed and published academic articles, I completed a quality assessment.

Critical Review and Data Extraction

Critical review entailed data extraction, analysis, and synthesis of secondary data.

All relevant data was extracted from the selected articles based on eligibility criteria and search terms after assessing each article for relevant information.

Secondary Data

- Bureau of Labor Statistics surveys completed through the U.S Department of Labor and Occupational Injuries/Illness related workplace injuries for nurses and nursing assistants.
- CDC National Center for Health Statistics data sets and questionnaires on WPV.
- 3. Emergency Nurses Association research on WPV.
- 4. American Nurses Association research on WPV and injuries to nurses.
- 5. The Joint Commission Workplace Violence Prevention Resources.

Secondary data will be searched from the Bureau of Labor Statistics within the

U.S. Department of Labor and Occupational Injuries/Illness and Fatal Injuries Profile.

During the data collection process, triangulation of secondary data from corporate reports plus strategic plans was completed to complement data from the literature review.

Secondary data was collected from peer reviewed journal articles. The aim of

triangulation is to ensure reliability of the collected data (Saunders, Lewis & Thornhill, 2009). All the data extracted was analyzed to answer the research questions. The results were summarized and presented in narrative text, tables, and proportions.

Validity and Reliability

Valid research refers to study implementation using the right methods from the selection of research strategy to data collection and analysis (Biggam, 2011). Reliability was achieved through adherence to the selection criteria of credible sources, including peer reviewed and published academic articles. In addition, I complied with all the study processes by providing explanations and reasonable motivations without bias right from scientific literature review, selection of databases, search terms, and credible articles for data collection and analysis.

Reliable research describes the use of valid and appropriate strategies and techniques to study the objectives and detailed record about the research plan. The study of the objectives also includes review of interview transcript, questions within the article related to the study purpose, and how to address bias (Biggam, 2011; Yin, 1994). I employed a scientific literature review supported with data collection from various published articles. Validity and reliability in this study was achieved through organizing and documenting collected data from journal and academic articles and linking the data/information with the source (Yin, 2008).

In general, validity of content analysis was achieved by ensuring that the categories were linked to conclusions and generation of theory from the results. I carefully studied the selected published articles, collected relevant and corresponding

data to research questions, and grouped the data into various categories as explained before. The selected articles were obtained from reliable databases with credible scientific research work. The researcher neither employed previous experiences nor knowledge to influence the findings of this study.

Ethical Considerations

For this study I sought approval for implementation from the university; permission to use the selected articles was not a requirement because I used open source published peer-reviewed articles. Likewise, this study did not require consent for use from institutions and individuals that were involved because it involved retrospective systematic analysis of literature. All of the literature (ideas, words, and overall narrative texts) used in this study from the selected published literature were recognized through proper citation throughout the study.

Summary

The research design for this study was a quantitative research study. This method is advantageous to the researcher due to the objectivity permitted with use of this methodology that allows for the gathering of more insight on WPV and the associated factors than were previously understood. The selected research design for this study is content analysis through literature review. This design allows the researcher to evaluate the cause and effect of WPV on nurses. The analysis of the data was done through multivariate analysis to examine the possible significance of a variable on behavior concurrently with the exclusive influence of that variable on behavior. A partial correlation statistical test was used to cancel the effect of the control variable on the

dependent and independent variables. Section 3 provides the detailed results of the analysis of data.

Section 3: Presentation of the Results and Findings

For this study I reviewed published articles and databases that consisted of the Bureau of Labor Statistics, the Centers for Disease Control National Center for Health Statistics data sets and questionnaires on WPV, the Emergency Nurses Association research on WPV, the American Nurses Association research on WPV and injuries to nurses, and The Joint Commission Workplace Violence Prevention Resources.

Data Collection of Secondary Data Set

Secondary data was searched from the Bureau of Labor Statistics within the U.S. Department of Labor and Occupational Injuries/Illness and Fatal Injuries Profile and was used to evaluate the research questions. The population for the study was nurses and nursing assistants surveyed in Texas between 2011 and 2014.

- 11,890 participants total (nurses and nursing assistants)
- 9.8% Men, 80.2% Women
- Greater than 1-year length of service
- Nonfatal injuries
- Top responses by ethnicity
 - o White
 - Black or African American
 - Hispanic or Latino
- Largest reporting age group
 - o 25 to 44-year olds

Prevalence Rate of Workplace Violence in Nursing Workforce

This study found that the prevalence rate among nurses was 18.8% (n = 11890) compared to all employees in different occupations at 81.2% (n = 63230) experienced WPV. This is illustrated in the chart below (Figure 1).

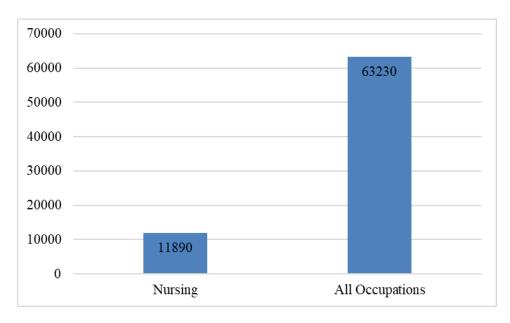


Figure 1: Workplace violence in nursing workforce versus all occupations.

Prevalence Rates of Workplace Among Nurses Versus Nurse Assistants

Out of a total of 63,230 employees, the results showed that the nursing workforce accounted for 7.9% (n = 4,970) compared to 10.9 % (n = 6,920) for the nursing assistants (Table 1).

Table 1

Prevalence Rates of Workplace Among Nurses Versus Nurse Assistants

	Count	Percentage
Nursing	4,970	7.86%
Nursing assistant	6,920	10.94%
All occupations	63,230	100%

Moreover, further analysis of the prevalence rates for nursing and the nursing assistants using Analysis of Variance (ANOVA) found that the mean number of nurses was 1,242.50 while that of nurses' assistants was 1,730.00, implying that the latter group experienced more WPV than the former group. The ANOVA test showed that there was significant difference between WPV and nursing workforce (nurses and nurse assistants), p = 0.022 < 0.05 (Table 2).

Table 2
Significance of Workplace Among Nurses Versus Nurse Assistants

ANOVA					
	Sum of squares	Df	Mean square	F	Sig.
Between groups	475312.500	1	475312.500	9.498	.022
Within groups	300275.000	6	50045.833		
Total	775587.500	7			

Time Taken Off Work by Nurses Versus Nursing Assistants/ Patient Care Technicians

ANOVA indicated that there was no significant difference between time taken off by nursing and nursing assistants except for cases involving 1 day (p = 0.035 < 0.05), 2 days (p = 0.047 < 0.05), and 6-10 days (p = 0.047 < 0.05).

Table 3

Time Taken Off Work by Nursing Workforce

		ANOVA				
		Sum of squares	df	Mean square	F	Sig.
Cases involving 1 day	Between groups	19012.500	1	19012.500	7.372	.035
	Within groups	15475.000	6	2579.167		
	Total	34487.500	7			
Cases involving 2 days	Between groups	24200.000	1	24200.000	10.560	.017
•	Within groups	13750.000	6	2291.667		
	Total	37950.000	7			
Cases involving 3-5 days	Between groups	6050.000	1	6050.000	1.124	.330
·	Within groups	32300.000	6	5383.333		
	Total	38350.000	7			
Cases involving 6- 10 days	Between groups	28800.000	1	28800.000	6.227	.047
	Within groups	27750.000	6	4625.000		
	Total	56550.000	7			
Cases involving 11-20 days	Between groups	3200.000	1	3200.000	2.743	.149
	Within groups	7000.000	6	1166.667		
	Total	10200.000	7			
Cases involving 21-30 days	Between groups	2812.500	1	2812.500	3.462	.112
	Within groups	4875.000	6	812.500		
	Total	7687.500	7			
Cases involving 31 or more days	Between groups	1800.000	1	1800.000	1.263	.304
	Within groups	8550.000	6	1425.000		
	Total	10350.000	7			

The findings showed that nursing assistants had a mean difference of 287.5 days compared to 190 days for nurses for cases involving 1 day; 267.50 days versus 157.50 days for cases involving 2 days; and 267.50 days versus 167.50 days for cases involving 6–10 days in nursing assistants versus nurses respectively. Overall, nursing assistants took more time off the work compared to nurses in cases that had significant difference (Table 4).

Table 4

Mean Difference in Time Taken Off Work by Nursing Workforce

Number of days off	Occupation	Mean
Cases involving 1 day	Nursing	190.00
	Nursing assistant	287.50
Cases involving 2 days	Nursing	157.50
	Nursing assistant	267.50
Cases involving 6 -10 days	Nursing	167.50
	Nursing assistant	267.50

Factors Associated With Workplace Violence in Nursing Workforce

Regarding the factors influencing work place violence among nurses, the results showed that overexertion and bodily reaction was the most common factor with a mean of 726.25, followed by falls/slips/trips with 375, and falls on same level with 303.75. Other factors include violence and other injuries by persons or animals and overexertion in lifting or lowering with 175 each, contact with object equipment with 145, intentional injury by other person with 102.5, struck by object with 81.25, slips/trips without fall

with 50, and injury by persons unintentional or with intent unknown with 33.75 (Table 5).

Table 5

Factors Associated With Workplace Violence in Nursing Workforce

Factors associated with workplace violence	N	Mean
Overexertion and bodily reaction	8	726.25
Falls slips trips	8	375
Fall on same level	8	303.75
Violence and other injuries by persons or animal	8	175
Overexertion in lifting or lowering	8	175
Contact with object equipment	8	145
Intentional injury by another person	8	102.5
Struck by object	8	81.25
Slips trips without fall	8	50
Injury by person unintentional or intent unknown	8	33.75

Note. Mean = Annual average number of nursing workforce exposed to a certain factor.

Mean = Nursing workforce experiencing a certain factor annually.

Summary

The data showed that of the population reviewed, more nursing assistants experienced WPV compared to nurses by 3%. Analysis of the prevalence rates for nursing and the nursing assistants using ANOVA found that the mean number of nurses was less than that of nursing assistants, implying that the latter group experienced more

N = 8 = 4 years for Nursing + 4 years for Nursing assistants.

WPV than the former group. The ANOVA test showed that there was significant difference between WPV and nursing workforce (nurses and nurse assistants). The analysis also revealed that nursing assistants spent more days from work than nurses for the same timeframes. Of the top 10 factors impacting violence in the workplace, WPV was the fourth highest factor identified in the data. In Section 4 I address the application to professional practice and implications for social change.

Section 4: Application to Professional Practice and Implications for Social Change

The nursing profession has a mission to care for people; yet, these professionals experience the most prevalent problem of WPV. Nurses are among the most assaulted healthcare workers. Evidence shows WPV experienced by nurses is complex and persistent (Sharma & Sharma, 2016). The purpose of the study was to bring additional awareness to the issue of WPV among nursing staff in healthcare organizations. The study was also conducted to evaluate whether differences existed in injuries obtained by nurses versus those of nursing assistants and whether differences existed in time off for injuries received at the workplace were different for the two groups. Data from the Bureau of Labor Statistics (BLS) revealed that nursing assistants experienced more episodes of WPV and spent more time away from work because of injuries from these episodes of violence.

Interpretation of the Findings

A study by Tak, Sweeney, Alterman, Baron, and Calvert (2010) found that 30% of the nursing assistants indicated that they previously experienced physical injuries from aggression by residents. A strong association was found between mandatory overtime (odds ratio [OR] of 1.65 at 95% confidence interval [CI] was 1.22, 2.24) and lack of adequate time to help residents with their daily living activities (OR of 1.49 at 95% CI was 1.25, 1.78) with assault injuries. Similarly, Sharma and Sharma (2016) reported that the nurses frequently experience violence, particularly, from patients and their families, visitors, and other healthcare providers; they vary from intimidation, harassment, stalking to beatings, stabbings, shootings or other forms of assault.

Janzekovich (2016) reported various common nonphysical behaviors contributing to horizontal violence such as gossip and aggressive verbal communication as well as environmental manipulation. The environmental evaluation by registered nurses (RNs) revealed that the status of Magnet hospitals supports positive outcomes despite its unforeseen negative need of nurse administrators who can ensure bedside RNs deliver satisfactory outcomes based on benchmarks; however, this move may cause inward fighting between the nursing workforce and potential horizontal violence results.

Other findings observed in this study revealed less horizontal violence (HV) in Critical Care, Medical Surgical, and Perioperative Divisions than in the emergency department for Magnet recognized hospitals. Moreover, the Maternal Child Health Division, as well as, nurses with equal or below 7 years' experience in both environments showed no difference in horizontal violence. According to a study by Tak, Sweeney, Alterman, Baron, and Calvert (2010), nursing assistants engaged in Nursing home with Alzheimer care units had greater risk of experiencing injuries such as being bitten by their clients. The study concluded that reduction of mandatory overtime and taking less demanding workload were likely to reduce WPV related risk. This reduction of mandatory overtime could include targeted preventive activities at nursing homes involved in providing care for patients with cognitive impairment.

Sharma and Sharma (2016) identified psychological consequences associated with violence, including fear, frustration, and loss of trust in hospital management as well as decreased job satisfaction. Notably, early nursing career violence incidences are more problematic because they cause disillusionment in their profession. Moreover, violence

may undermine nurses' recruitment and retention, which may eventually threaten patient care during pervasive nursing shortages. Dakeita (2012) examined whether changes in WPV in medical-surgical units in hospitals compared with that of the emergency department. The results showed that the emergency departments reported more frequent physical violence in emergency departments. On the other hand, the medical-surgical nurses experienced more intimidation and emotional violence than WPV.

Another study to explore experiences plus responses to HV cases and their effects on job performance among 78 hospital nurses, the participants indicated that manager, staff support plus workplace education helped the most to reduce horizontal violence (Elizabeth, 2014). The principal factors that promoted HV were workload, stress and encouraging HV on the unit were the key factors that promoted HV. The nurses continued with their jobs following incidences of HV and coping behaviors for addressing HV. This study recommended the need for studies to test effective interventions for reducing WPV among nurses.

Although healthcare workplace-related bullying is recognized internationally, some institutions across the United States still perpetuate the practice through underreporting or use of insufficient as well as unproven interventions (Gaffney, DeMarco, Hofmeyer, Vessey, & Budin, 2012). Through my review I found that these deliberate, repetitive, aggressive bullying behaviors may cause psychological or physical harm to nurses, disrupt nursing care, or threaten patient safety and quality of care. Much of the literature focused on categories of bullying behaviors and nurse responses.

Although the findings showed that many nurses engaged in various effective and untested

strategies, they received little support from nursing colleagues while administrators often remained silent and inactive. The review recommended more qualitative studies to explore for a deeper understanding regarding the complexities associated with workplace bullying.

The literature reviewed showed that acute care psychiatric nurses are exposed to high violence rates perpetrated by patients. Stevenson (2014) demonstrated that patientrelated violence impacts negatively on nurses, patients, and the overall organization. The study found that this form of violence was considered as part and parcel of the job, while some nurses experienced role conflict with regard to their duty to provide care and individual duty required to provide care after a critical violence incident. Moreover, the results showed that power, control, plus stigma influenced the perception and responses of nurses to patient violence. Among the interventions used by nurses during their practice for safety, prevention, and management of patient violence are increased education, administrative and colleague support, and debriefing and/or improved working environment. According to Stevenson understanding the nurses' perspectives and experiences within acute inpatient psychiatry settings provides greater knowledge about patient violence and effective development of evidence-based nursing interventions for prevention and response to patient violence and support of nurses in these settings. The study highlighted the need to explore a clear definition of violence, factors hindering reporting of violence incidents, and development of violence-related best practice guidelines, particularly for patients (Stevenson, 2014).

Gerberich et al. (2005) reviewed significant issues associated with injury and safety for working nurses. Although there is great potential for prevention of these issues, many risk factors remain unaddressed. In addition, the review identified various benefits of improving nurse safety, including retention of nurses or attracting new ones into the profession. Notably, excessive work hours adversely affect the health of nurses with possible negative impact on patient care. While many facilities are investing heavily in healthcare and improving their systems to ensure patient safety, it is also imperative to improve workforce safety. The beneficial effects of this approach are healthier and effective for the workforce, and it thereby improved patient care.

Gacki-Smith, Juarez, Boyett, Homeyer, Robinson, and MacLean (2009) reported that about 25% of the nurses indicated that they experienced physical violence over 20 times within a span of 3 years, while about 20% indicated that they experienced verbal abuse over 200 times in the same period. It was also observed that those who suffered from frequent physical violence or verbal abuse expressed fear of retaliation as well as lack of hospital administration or emergency department management support during reporting WPV. Emergency department nurses were the most vulnerable to violence; however, commitment from the emergency department and the overall hospital management as well as hospital security are paramount to create a safer nursing workplace environment.

A report by the Department of Human Services in the State of Victoria (2005) found wide variation in underreported occupational violence among nurses. There were 2,662 potential and/or actual aggressive events during a period of 6 month and 14.6

events each day. In most cases, these events were propagated by client/patient, especially in instances of active hospital-wide security code. Among the factors associated with the aggressors were male gender, previous violent/ aggressive behavior, and use of drugs or alcohol. There were also significant differences between hospital locations together with code type with higher code black events within regional location compared to metropolitan area. Moreover, the code type was significantly associated with clinical area. The study also found that more than half of the internal security responses to actual or anticipated violence took place in the emergency department. This study provided insight on nursing related occupational violence. Code grey and/or black events are challenging and unpredictable with potential damages to patients, staff, or families. That is, they have multifactorial causes with multidisciplinary responses, which prompt clinicians, clinical agencies, and government to respond immediately to the complex and often poorly understood situations.

The injuries obtained by nursing staff members are often related to horizontal violence delivered by healthcare leaders, residents, and physicians. This type of violence ties into the oppressive theory shared by Freire. Freire discussed how the oppressed tend to behave like their oppressors and become submissive to them. With continued alignment with the oppressor, the oppressed individuals develop hatred against their own group and eventually oppress their group or each other, which results in violence (Freire, 2003). The oppressed individuals are afraid of fighting for freedom for fear of more violence from their oppressors. The oppressors are at risk of the oppressed struggling to overcome oppression. The horizontal violence and bullying displayed among nursing

staff could stem from the staff being oppressed and taking on the behavior of their oppressors. Mandatory overtime, lack of help when providing patient care, verbal aggression from leaders and coworkers, and being a victim of gossip can attribute to lack of trust in the leadership and decreased job satisfaction and increase the risk of injuries (Sharma & Sharma, 2016).

Data from the Bureau of Labor Statistics (BLS) revealed the injuries sustained by the nursing staff in Texas between 2011 and 2014 were caused by overexertion and bodily reaction as the most common factor with a mean of 726.25 out of 11,890 injuries reported, followed by falls/slips/trips with 375, and falls on same level with 303.75.

Other factors include violence and other injuries by persons or animals and overexertion in lifting or lowering (175), contact with object equipment (145), intentional injury by other person (102.5), struck by object (81.25), slips/trips without fall (50), and injury by person that is unintentional or the intent unknown (33.75). This data leaves me to question whether some of these injuries could have been prevented with staff aiding one another when providing patient care or if any of the injuries were related to bullying. It is the researcher's viewpoint that injuries such as overexertion and bodily reaction and overexertion when lifting and lowering are injuries that can be impacted by staff assisting one another with care.

The study was limited as the data did not provide clear indications of environmental factors that led to the injuries. The study was also limited by not having data related to the culture of the working environments and injuries influenced by healthcare leaders, residents, or physicians. Reliability was achieved through adherence

to the selection criteria of credible sources, including peer-reviewed and published academic articles. Validity and reliability in this study was achieved through organizing and documenting collected data from journal and academic articles and linking the data/information with the source. In general, validity of content analysis was achieved by ensuring that the categories are linked to conclusions and the generation of theory from the results. The selected articles were obtained from reliable databases with credible scientific research work.

Recommendations

WPV is a concerning issue for nursing staff given the evidence presented from the literature review. In evaluating the results of the study, a clear opportunity exists for future research to evaluate why nursing assistants experience more episodes of WPV than nurses. Exploration of the education provided to nurses versus nursing assistants related to de-escalation practices is a recommended topic of future research along these lines. An additional exploration would be the oppression and displays of WPV of nursing assistants by their direct supervisors, the nurses. Nurses have been described as an oppressed social group (Clark, 2015). This raises the question as to whether the nurses now oppress the nursing assistants and through what means would the oppression occur (physical violence, emotional abuse, horizontal violence, and/or neglect).

Another recommendation for future research is evaluation of the impact of WPV on productivity, patient safety, and quality of care when nurses continue to work or return to work after experiencing episodes of violence. Researchers could explore whether the injuries obtained by the staff impact their ability to perform their job duties and functions.

Implications for Social Change

All workers have a right to workplace safety, including healthcare employees.

Results of the study bring light to the differences in injuries between nurses and nursing assistants and to the factors impacting injuries. This information is important for healthcare leaders as they evaluate opportunities to create a safe working environment for their nursing staff. The results may inform healthcare leaders as to the need to provide additional support to nursing assistants to ensure their safety in the work place.

Other than use of evidence-based effective WPV prevention measures, alternative approaches may be considered to address violence at various levels. For instance, legislators may enact harsher penalties for violence against nurses and other healthcare workers. This would inform society of the government's stance and the importance of protecting healthcare workers that is visible similar to the protection of other public workers such as police officers and public officials.

The healthcare employers should be eager to promote safe working environments by reporting incidences of violence to protect complainants against retribution, promote comprehensive managerial support, and implement cost-effective, evidence-based solutions. The provision of education such as de-escalation techniques can improve interactions between nursing staff and patients, their families, and physicians.

In the light of professional practice, nursing staff can use the study to empower one another and work together to develop techniques to avoid incidences of WPV. The data can serve as a resource for nursing staff to evaluate their environment for potential safety issues and to bring the topic of WPV to the forefront in their healthcare

organizations. Nursing staff have identified that violence is "part of the job" (Clark, 2015). Healthcare organizations and leaders should recognize this thought process and provide the necessary resources to meet the needs of their employees who have experienced violence in the workplace; this would represent significant social change. The visible support from healthcare leaders and organizations can impact the ability of the nursing staff to speak up when episodes of violence occur.

Conclusion

While WPV is not a new phenomenon, it has become a very serious concern for healthcare workers. This study provided evidence of the significance of the topic of WPV for nursing staff. The results of the analysis provided evidence of higher incidence of WPV for nursing assistants compared to their nursing counterparts. This study provides relevant data for healthcare leaders and organizations as they evaluate how to improve safety in the workplace for nursing staff, thereby impacting social change in healthcare work environments.

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