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"Fish In A Barrel": Workplace Violence and Posttraumatic Stress Symptoms Among Psychiatric Nurses

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“FISH IN A BARREL”: WORKPLACE VIOLENCE AND PSYCHIATRIC NURSES’ POSTTRAUMATIC STRESS SYMPTOMS

by

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Dedication

I dedicate this document, first of all, to my Lord and Savior Jesus Christ, who faithfully sustained me throughout this journey, from beginning to end. When my physical and mental capabilities were waning, You always gave me strength to carry on. I also dedicate this work, and everything that came with this journey, to my husband of 14 years, David Michael Herrera. You are my backbone and you endured the struggles that came with this journey. You supported all my endeavors and I could never match your selfless nature. My joy was your joy and my challenges became your challenges. "Two are better than one, because they have a good return for their labor; If either of them falls down, one can help the other up" (Ecclesiastes 4:9-10NIV). I am truly blessed because you were always there to help me up. I also dedicate this work to my children: Dessa, Emmanuel, and Shenina. There is nothing impossible if you put your heart and your best efforts to it. May you strive for excellence in everything you do.

I also dedicate this work to all psychiatric nurses from every corner of the world. I know our job is challenging and dangerous, and yet we choose to go back and do it all over again. I hope one day we will have a voice in the place where it will matter, and we will be heard. Each one of you matters and your lives count. I hope one day we will have a new normal where violence against us will truly have zero tolerance.

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"Alone, we can do so little; together, we can do so much."

Helen Keller

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thousands of psychiatric nurses who silently suffer the consequences of exposure to workplace violence.

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Abstract

"FISH IN A BARREL": WORKPLACE VIOLENCE AND POSTTRAUMATIC STRESS SYMPTOMS AMONG PSYCHIATRIC NURSES

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This work explores the psychiatric nurses' experiences of workplace violence perpetrated by psychiatric patients. Working with patients with psychiatric disorders can be challenging. Violent behaviors can sometimes escalate and lead to coercive measures such as physical restraint or seclusion. The first manuscript in this portfolio, *To Use or Not to Use: Physical Restraint in Adult Psychiatry*, will present evidence for and evidence against the nurse's conscientious objection to follow the doctor's order to restrain the patient after the patient immediately stopped the aggressive behavior. The second manuscript, *Workplace Violence Interventions for Psychiatric Nurses*, discusses different interventions for psychiatric nurses to mitigate workplace violence. The third manuscript, *"Fish in a Barrel": Workplace Violence and Psychiatric Nurses' Posttraumatic Stress Symptoms*, presents the research conducted. An exploratory, descriptive, cross-sectional study was conducted to explore the relationships between demographic factors and professional characteristics, workplace violence exposure, levels of perceived stress, social support, and levels of posttraumatic stress symptoms. An open-ended question was used to explore psychiatric nurses' perceptions on workplace violence

against nurses perpetrated by psychiatric patients; responses to this question are presented in Chapter 5. Chapter 6 presents a summary and recommendations.

Chapter 1 Overview of the Research

Overall Purpose of the Study

Workplace violence (WPV) against psychiatric nurses by patients is a serious occupational hazard that is gaining global attention (Basfr, Hamdan, & Al - Habib, 2019). According to the World Health Organization (2020), nurses are three times more likely to be exposed to workplace violence compared to other professional groups. Psychiatric nurses have twenty times higher risk to experience physical aggression than other nursing specialties (Magnavita & Heponiemi, 2012). Approximately 24% to 80% of acute care psychiatric staff have been exposed to physical aggression at some point in their career (d'Ettorre & Pellicani, 2017). The wide range in rates might be attributed to actual variations in rates between units, the definition of workplace violence, research methodology, length of evaluations, and underreporting of violent incidents (Iozzino, Ferrari, Large, Nielssen, & de Girolamo, 2015). Reasons for underreporting of workplace violence include the perception that violence is considered part of the job (Lanza, 1988), absence of injury, tedious process of reporting (Arnetz et al., 2015; Lanza & Campbell, 1991), lack of a clear definition of assault (Lanza, 1988), and the belief that reporting will not cause change (Arnetz et al., 2015).

Exposure to workplace violence has physical, emotional, and psychological effects on the psychiatric nurses. Organizational effects have also been reported. Interventions to prevent and manage patient aggression are vital to provide a safe environment for patients and staff. Staff perception of threat can sometimes lead to the use of coercive techniques such as restraint, seclusion, and compelled medication (d'Ettorre & Pellicani, 2017). Psychiatric nurses often feel

responsible for making the right decisions and struggle with emotional conflicts whether to act or not to act to prevent the situation from escalating. The decision to use proactive measures to decrease risk was considered acceptable among psychiatric nurses (Jeffery & Fuller, 2016).

Introduction of Manuscripts

The first manuscript *To Use or Not to Use: Physical Restraint in Adult Psychiatry*, presents a case where a psychiatrist orders physical restraint for a patient who immediately stopped aggressive behavior after assaulting the psychiatrist and the psychiatric nurse exercises conscientious objection to the psychiatrist's order. Legal and moral ramifications of using physical restraint in psychiatry and evidence for and against the assertion that a psychiatric nurse does not have the duty to obey a doctor's order to initiate physical restraint on a patient who immediately stopped aggressive behavior without staff intervention after assaulting the psychiatrist are discussed.

The second manuscript, *Workplace Violence Interventions for Psychiatric Nurses*, discusses interventions to mitigate workplace violence. Background information related to workplace violence against psychiatric nurses by patients including prevalence rates of WPV, risk factors for WPV, the effects of WPV and a literature review on interventions to decrease WPV are presented. The manuscript, *Workplace Violence for Psychiatric Nurses*, was submitted for publication to *Issues in Mental Health Nursing* and is currently being revised. An email confirmation of submission is found in Appendix A.

The third manuscript, *"Fish in a Barrel": Workplace Violence and Psychiatric Nurses' Posttraumatic Stress Symptoms*, presents an exploratory, descriptive, cross-sectional study that examined the prevalence and identified the predictive factors for the development of

posttraumatic stress symptoms among psychiatric nurses. This study was guided by the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) with permission from the author (see Appendix B). An open-ended question was used at the end of the survey to explore psychiatric nurses' perceptions of workplace violence against nurses by patients; responses to the open-ended question appear in Chapter 5.

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Chapter 2

To Use or Not to Use: Physical Restraint in Adult Psychiatry

Abstract

Aggression among psychiatric patients is a global issue in healthcare. The use of physical restraint to manage aggression and violence in psychiatry is a controversial issue due to the legal and ethical ramifications. Nurses have the duty to protect the patient's dignity and promote safety. The nurse also has the duty to preserve his or her own safety and that of others. In the event of a violent situation, the nurse must balance these duties for a therapeutic outcome. This manuscript addresses the issue of a nurse's conscientious objection to follow a doctor's order to initiate physical restraint on a psychiatric patient who immediately stopped the aggressive behavior after assaulting the psychiatrist. The objective of this paper is to present evidence for and evidence against the assertion that a psychiatric nurse does not have the duty to obey a doctor's order to initiate physical restraint on a patient who immediately stopped the aggressive behavior without staff intervention after assaulting the psychiatrist.

Keywords: Aggression, conscientious objection, physical restraint, psychiatric patient, safety

To Use or Not to Use: Physical Restraint in Adult Psychiatry

One of the most important priorities of acute inpatient psychiatric treatment is patient and staff safety and this goal can be threatened by aggressive and violent patient behaviors (Bowers et al., 2003; Bowers, 2005; Papadopoulous et al., 2012). Aggression among psychiatric patients is a problem faced by healthcare worldwide (Gaynes et al., 2017; Vermeulen et al., 2019). When verbal assault escalates to physical aggression, it can be aimed at other patients, objects, and/or staff (Papadopoulous et al., 2012). Psychiatric nurses have the highest risk of exposure to patient violence due to the amount of time spent during assessments and treatments (Fujimoto et al., 2017). However, when the best efforts to de-escalate a violent situation fail, the use of physical restraint might be implemented to promote safety for the patient and others (Moylan, 2009). A restraint is defined as "any manual method, physical, or mechanical device, material, or equipment that immobilizes or reduces the ability of a patient to move his or her arms, legs, or head freely" (Centers for Medicare and Medicaid Services [CMS], 2008, p. 96).

The use of physical restraint to manage aggression and violence in psychiatry is controversial due to legal and ethical ramifications (Moylan, 2009; Petrini, 2013). CMS (2008) set legally mandated regulations on the use of restraint and seclusion. Non-compliance with CMS regulations can cause discontinuation of government funding (Hudson, 2007). Psychiatric patients who display aggressive behaviors are restrained to avert injury to self and others (Noorani, 2016). When a patient is restrained, it causes ethical and legal predicament to balance patient's rights, ethical principles, and therapeutic benefits (Ye et al., 2018). The nurse has the duty to preserve his or her own

safety and that of others and at the same time has the ethical duty to protect a patient's dignity and safety (American Nurses Association, [ANA], 2015). In the event of a violent situation, the nurse must balance these duties for a therapeutic outcome (Moylan, 2009).

Restraining a psychiatric patient creates a conflict between respect of ethical values of autonomy, justice, beneficence, and non-maleficence (Petrini, 2013). Autonomy refers to the individual's capacity to make a choice based on their personal beliefs (Ye et al., 2018). When a psychiatric patient is physically restrained, it takes their freedom away; therefore, contradicting the patient's autonomy. Beneficence is the caregiver's moral responsibility to act for the well-being of the patient and non-maleficence means cause no harm, avoid harm, eliminate harm, and promote good (Mohr, 2010). Physical restraints are applied with the intention to keep the patients and staff safe; however, restraints can be harmful and even fatal (Mohr, 2010; Ye et al., 2018). Justice means to treat patients as human beings, free of stigma, *i.e.*, being "insane", and not stripped of their basic rights (Ye et al., 2018). When caregivers indiscriminately restrain aggressive patients, there is a failure to understand the patient as a human being (Ye et al., 2018). The paradox of using forceful measures to keep patients safe is a complex moral issue in a psychiatric setting. At times, caregivers may defy conventional principles of professional code of ethics when restraining a patient is inevitable and safety is a prevailing concern (Mohr, 2010).

In the event a psychiatric nurse is ordered to initiate physical restraint on a psychiatric patient who immediately stopped the aggressive behavior after assaulting the

psychiatrist, does the nurse have the duty to obey the order? Conscientious objection in healthcare is defined as non-compliance of any healthcare team member to engage in some facet of patient care for the reason of conscience (Dickens, 2001). This paper addresses the issue of conscientious objection to the use of physical restraint after a psychiatric patient immediately stopped the aggressive behavior after assaulting the psychiatrist. The objective of this paper is to present evidence for and against the assertion that a psychiatric nurse does not have the duty to obey the doctor's order to initiate physical restraint after a patient immediately stopped aggressive behavior after assaulting a psychiatrist. An assertion is defined as a proposal conferred as valid or alleged to be valid (Weiner, 2019). First, background information regarding restraint use is introduced. Second, factors that influence the decision to restrain are discussed. Third, the assertation or argument for not restraining the patient and supporting evidence is offered. Evidence against the assertation, or why the patient should be restrained and supporting evidence is presented. An example of the moral dilemma related to restraint use follows.

Restraint Use

Physical restraints are considered a violation of patient rights and a safety risk for patients. Despite efforts to decrease the use of restraints, studies suggested minimal to no change in the frequency of restraint use in psychiatry (Beghi et al., 2013; Staggs, 2015). A retrospective study of 438 adult psychiatric units suggested restraint was used after 31.4% of assaults with injuries between 2007 and 2013; furthermore, restraints were employed more frequently in 2013 (31.4%) compared to 2007 (29.8%; Staggs, 2015).

Warning signs to violent episodes may occur but can be challenging to identify and discern; oftentimes, these warning signs may be recognized only in retrospect (Owen et al., 1998).

Risk factors for violent and aggressive behavior are multifactorial and include patient characteristics, clinician skills, physician characteristics, unit setup, and organizational regulations (Lavelle et al., 2016). Most aggressive episodes in in-patient psychiatric settings were caused by staff-patient interaction (Papadopoulous et al., 2012). However, a clear understanding of antecedents to aggression is lacking since studies reported only staff perspectives and lacked patient input (Papadopoulous et al., 2012).

Factors Influencing Decision to Restrain

Factors influencing mental health nurses' decision-making for restraint use varied. Factors in favor of restraint use included avoiding immediate injury, punitive and educational purposes, preventing elopement, patient confusion and disorientation, and no other alternative available except restraint (Eskandari et al., 2017; Vedana et al., 2018). An integrative review suggested that safety for both patients and nurses was the prominent reason mental health nurses used restraint which occurred as a "last resort" (Riahi et al., 2016). However, physical restraint as a last resort was not clearly defined and difficult to scrutinize or dispute; therefore, clarification is needed (Deveau & McDonnell, 2009; Riahi et al., 2016). Staff and patient determination as to when physical restraint was necessary were inconsistent (Fish & Culshaw, 2015). Staff believed patients were responsible for their aggressive behavior while patients believed

staff did not try other alternatives such as quiet time or verbal de-escalation (Fish & Culshaw, 2015). Debriefing between staff and patients after an incident is needed to better understand the experience (Fish & Culshaw, 2005).

Ethical Dilemma: Does a psychiatric nurse have the duty to obey the psychiatrist's order to physically restrain a patient who immediately stopped the aggressive behavior after assaulting the psychiatrist?

The Assertion

The assertion: A psychiatric nurse does not have the duty to obey the doctor's order to physically restrain a patient who immediately stopped the aggressive behavior after assaulting the psychiatrist. When violent and threatening behavior breaks out on a unit, everyone's emotions escalate. Nurses must be knowledgeable regarding institutional policies and act competently and judiciously in these situations (Moylan, 2009). The guideline instituted by CMS (2008) regarding restraint or seclusion states:

> All patients have the right to be free from physical or mental abuse, or corporal punishment. All patients have the right to be free from restraint or seclusion, or any form, imposed as a means of coercion, discipline, convenience, or retaliation by staff. Restraint or seclusion may only be imposed to ensure the immediate physical safety of the patient, a staff member, or others and must be discontinued at the earliest possible time. (p. 90)

The decision to restrain a patient should be made after all therapeutic interventions using the least restrictive approach failed to de-escalate the patient's violent

behavior (Moylan, 2009). If a psychiatric patient physically assaulted the psychiatrist then walked away, there is no ongoing threat that required a coercive intervention such as physical restraint. The patient stopped the aggressive behavior on their own. Restraining the patient after he or she walked away will appear punitive or retaliatory and is inappropriate. The appropriate nursing intervention in this situation would be verbal de-escalation or one-on-one interaction with the patient to assess the antecedents to the behavior and, if possible, a resolution.

Evidence for the Assertion

Psychiatric patients and their families depend on the professionals' ability and integrity to keep vulnerable patients safe (Mohr, 2010). Trust is an important component of the patient-provider relationship and devotion to trust is appropriately commendable. Due to the adverse and sometimes fatal consequences of physical restraint, it is important that caregivers carefully consider if restraint use is congruent with the standards set in the professional code of ethics (Mohr, 2010). Evidence will be presented on the benefits of de-escalation and the harm caused by physical restraint to support the assertion that psychiatric nurses do not have a duty to obey the psychiatrist's order to physically restrain a patient who immediately stopped the aggressive behavior after assaulting the psychiatrist.

De-escalation. De-escalation refers to complex verbal and non–verbal communication skills intended to stop the assault cycle during the escalation period (Clinical Resource Audit Group, 1996). Verbal de–escalation is "a complex, interactive process in which the patient is redirected toward a calmer personal space" (Stevenson,

1991, p. 6). An expert consensus of clinical expertise and integrative review of literature recommended use of verbal de-escalation and environmental adaptation techniques as the basic alternatives for managing psychiatric agitation and use of physical restraints as last resort (Garriga et al., 2016). Environmental adaptation techniques include a quiet room, portable furniture, double exit doors, removal of potentially hazardous objects, and decrease of sensory stimulation (Garriga et al., 2016). De-escalation offers a less forceful alternative to conventional confinement methods such as physical restraint, seclusion, rapid tranquilization, or intensive supervision (Lavelle et al., 2016). De-escalation should be applied early on to stop the aggression from mounting to violence or to avoid use of physical restraint (Price et al., 2015). Approximately 60% of de-escalations in acute care inpatient settings were successful in preventing the progression of conflict or restraint (Lavelle et al., 2016). The most commonly used preventive measures to maintain a calm environment and prevent escalation of aggressive behaviors are risk assessment scales (Zeller & Rhoades, 2010), sensory-based approaches such as sensory room (Champagne & Stromberg, 2004), staff de-escalation training (Price et al., 2015), and improved staffing levels (McKeown et al., 2019).

The most frequently reported trigger in the majority of violent or aggressive incidents in in-patient psychiatric settings was staff-patient interaction (Papadopoulous et al., 2012; Renwick et al., 2016). Most patients in in-patient psychiatric setting experienced de-escalation during the first two weeks of hospitalization (Lavelle et al., 2016) which suggests it is vital for psychiatric staff to develop skills to decrease violent and aggressive episodes (Price & Baker, 2012). Good de-escalators spent a lot of time

knowing their patients as individuals to build trusting relationships (Berring et al., 2016; Duperouzal, 2008). Tingleff et al. (2017) conducted a systematic review of patient perceptions of the use of coercive measures. Their findings suggested that staff competence and readiness to communicate has a strong influence on patients' perceptions of their experience as positive or negative (Tingleff et al., 2017).

Harm caused by physical restraint. It is well-known that, ironically, the use of physical restraint to prevent harm can cause serious and even fatal injuries (Kersting et al., 2019). Death was the most common adverse outcome resulting from cardiopulmonary arrest, followed by asphyxia secondary to strangulation (Kersting et al., 2019). Most patients perceived the use of restraints as traumatic, delaying recovery (Knowles et al., 2015; Lanthen et al., 2015), demeaning, insulting, and caused by staff's poor communication skills (Tingleff et al., 2017). Short-term negative consequences of physical restraint were nightmares and difficulty sleeping (Lanthen et al., 2015; Tingleff et al., 2017). Long-term negative consequences included low self-esteem and low self-image (Knowles et al., 2015; Tingleff et al., 2017).

The negative impact of restraints was recognized at the individual nurse and organizational levels. Psychiatric inpatient nurses reported feeling worried, fatigued, tense, sad, and emotionally hurt when a patient was physically restrained (Vedana et al., 2018). Restraint was viewed by psychiatric nurses as challenging and potentially dangerous to the patient, staff, and others (Vedana et al., 2018). Coercive measures can negatively affect the quality of therapeutic relationships between psychiatric patients and their physicians (Hofer et al., 2015). Agitation and use of restrictive measures negatively

impacted the organization and the workforce and were correlated to increased expenses and services due to increased length of stay, higher readmission rates, and increased medication use (Rubio-Valera et al., 2015).

Evidence Against the Assertion

The use of physical restraint is controversial and yet there are situations where the use of physical restraint is the only option to keep a violent or incoherent patient from harming themselves or others (Chien et al., 2005; Mohr, 2010). Physical restraint use can be therapeutic to patients who are incapable of controlling their actions and emotions (Chien et al., 2005). Fisher (1994) suggested that although physical restraint has adverse consequences, inpatient programs dealing with acutely ill patients found it inconceivable to function without any type of physical restraint. Lack of evidence to support effectiveness of de-escalation techniques and benefits of physical restraint will be presented as evidence against not using physical restraint.

Lack of evidence to support effectiveness of de-escalation techniques. Psychiatric staff has the potential to keep inpatient psychiatric wards safe via de-escalation, yet de-escalation is under-researched (Berring et al., 2016; Lavelle et al., 2016). A systematic review of 17 comparative studies of de-escalation techniques in adult inpatient acute care psychiatric patients (1991-2016) suggested evidence regarding intervention alternatives is inconclusive (Gaynes et al., 2017). Research on how to best de-escalate violent or aggressive behavior in acute care settings is needed (Gaynes et al., 2017). Nurses are required to attend mandatory de-escalation training programs many of which are not evidence-based (Inglis & Clifton, 2013). Lavelle et al. (2016) suggested

that nurses may need more confidence in using de-escalation techniques and evidence-based training to improve confidence.

Benefits of physical restraint. The only acceptable justification for using restraint is to protect a patient from harming himself/herself and others when all therapeutic interventions failed (CMS, 2008). Studies on the association of restraint use and frequency of violent episodes are scarce (Khadivi et al., 2004). Khadivi et al. (2004) suggested a multimodal intervention created to decrease seclusion and restraint use was effective in decreasing restraint use; however, violent episodes on patients and staff significantly increased. Staff did not receive specific training in management of violent behavior which might have decreased their ability to respond appropriately (Khadivi et al., 2004).

Patients identified benefits to restraint use. Patients' perceptions of positive therapeutic experiences included feeling safe from hurting themselves and/or others, feeling calm or cared for, having psychological support and respect (Chien et al., 2015; Lanthen et al., 2015; Tingleff et al., 2017). Patients acknowledged that staff's attitude and frequent interactions had significant effect on whether their experience with physical restraint was positive or negative (Chien et al., 2005; Lanthen et al., 2015).

An Example of a Moral Dilemma Related to Restraint Use

Morality is defined as "principles concerning the distinction between right and wrong, or good and bad behavior," (Oxford Dictionary, 2019). The scenario: Pt X, an acute care psychiatric inpatient diagnosed with bipolar disorder and borderline personality, was meeting with Dr H in her room one morning. Pt X asks Dr H if she can

be discharged soon and Dr H informs Pt X that an order for protective custody was filed in court that day. An order of protective custody is a transient court-ordered commitment to a psychiatric hospital up to 90 days where the psychiatrist decides when the patient's condition is safe for discharge (Texas Department of Family and Protective Services, 2020). Upon hearing this, Pt X runs towards Dr H, scratches Dr H's face, then sits on her bed. Dr H abruptly ends the conversation and looks for Nurse Q. Dr H gives Nurse Q an order to physically restrain Pt X because of Pt X's aggressive behavior. Nurse Q, who clearly sees the superficial scratches on the Dr H's face, runs to the patient's room and finds Pt X quietly and calmly sitting on her bed. Nurse Q initiates the conversation and asks Pt X if she was okay and if she needed anything. Pt X calmly responds she was fine, and she did not need anything. Pt X further states she will take a nap because she was tired. Nurse Q returns to the office and finds Dr H waiting.

Dr H repeats the order to physically restrain Pt X for scratching his face. Nurse Q explains to Dr H that Pt X appeared calm and was not agitated anymore, so Nurse Q thinks it is unnecessary to physically restrain Pt X at this point. Dr H insists that Nurse Q follows his order to physically restrain the patient anyway. Dr H becomes agitated when Nurse Q does not move quickly to follow his orders. What should Nurse Q do?

The nurse has the duty to protect the patient's dignity and promote patient safety (ANA, 2015). The patient has the right to be free from duress, punishment, revenge, or abuse (CMS, 2008). Applying physical restraint on a patient who is not in imminent risk of harming herself or others, such as Pt X who was getting ready to take a nap, is not ethically or legally appropriate. The use of physical restraint generally has more negative

impact on both the patient and staff; therefore, the use of the least restrictive approach is recommended. The nurse should inform her supervisor of the incident and follow the organization's policy regarding the matter.

The nurse also has the duty to preserve his or her own safety and others (ANA, 2015). In the event of a violent situation, the nurse faces a dilemma to balance these duties for a therapeutic outcome (Moylan, 2009). The nurse has the responsibility to promote safety for others around her, including the psychiatrist. The patient's violent act of scratching the psychiatrist's face jeopardized the psychiatrist's safety and can potentially cause negative psychological outcomes for the psychiatrist. The nurse's act of not following the psychiatrist's order to physically restrain the patient who assaulted him potentially jeopardizes their professional relationship. The nurse in this case can encourage the psychiatrist to visit the health employee nurse and follow the organization's policy regarding patient assault.

Conclusion

The care of psychiatric patients is a complex and challenging task. The psychiatric nurse is charged with the responsibility to protect the patient's rights and safety, and at the same time, to maintain her own safety and of everyone around her (ANA, 2015). The use of physical restraint to manage aggression among psychiatric patients is a difficult, yet necessary tool only when all least restrictive therapeutic interventions fail. Two arguments on the issue of conscientious objection to physically restrain a psychiatric patient who immediately stopped the aggressive behavior after assaulting the psychiatrist were presented. In support of not restraining mental health

patients, evidence suggests that restraint use is harmful to patients, nurses and the organization. In support of restraint use, evidence suggests patients feeling safe and cared for. Psychiatric patients are vulnerable individuals and the use of physical restraint is not intended to be used for punishment or retaliation (CMS, 2008). It is the nurse's duty to be the patient's advocate when the patient is not able to defend herself/himself.

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Chapter 3

Workplace Violence Interventions for Psychiatric Nurses

Abstract

Workplace violence committed by patients against healthcare workers, although not widely discussed in the research literature, is a global occupational issue that has serious implications for patients and staff. Approximately 24% - 80% of psychiatric nurses reported exposure to one type of violent act at some point in their career. Workplace violence can have negative physical and emotional effects on psychiatric nurses. This manuscript discusses interventions for psychiatric nurses to mitigate workplace violence.

Keywords: psychiatric nurse, mental health nurse, workplace violence and interventions, PTSD

Workplace Violence Interventions for Psychiatric Nurses

Workplace violence (WPV) committed by patients against healthcare workers is a global occupational issue that has serious implications for patients and staff (d'Ettorre & Pellicani, 2017; Flannery et al., 2014); and has become a prominent research topic over the past 25 years (Yragui, Demsky, Hammer, Van Dyck, & Neradilik, 2017). Workplace violence is defined as "the act or threat of violence, ranging from verbal abuse to physical assaults directed towards persons at work or on duty" (National Institute for Occupational Safety and Health, 2017, para 1). Although workplace violence can occur in a variety of healthcare settings, physical violence was reported as most common in the emergency departments, geriatric units, and psychiatric wards (Spector, Zhou, & Che, 2014). The U. S. Department of Justice (2011) reported that from 1993-2009, mental health occupations had the second highest average annual rate of workplace violence with 21 violent crimes for every 1,000 employees following law enforcement's 48 violent crimes per 1,000 employees. Psychiatric nurses frequently experience workplace danger because of violence committed by patients. Approximately 24% - 80% of psychiatric nurses have reported exposure to at least one violent act at some point in their career. Verbal abuse is the most common, reported by 46%-76.8% of psychiatric nurses (d'Ettorre & Pellicani, 2017). In a systematic review and meta-analysis, Iozzino and colleagues (2015) found that almost one in five psychiatric acute inpatients committed a violent act. Workplace violence has negative consequences on psychiatric nurses. It is important to implement interventions to mitigate workplace violence against psychiatric nurses. The purpose of

this manuscript is to discuss interventions to decrease, if not prevent, workplace violence committed by patients against psychiatric nurses.

Risk factors for Workplace Violence

Certain risk factors instigate workplace violence against psychiatric nurses and can be classified as internal or external. Internal factors include patient characteristics; such as male gender (Iozzino et al., 2015), young age (d' Ettorre & Pellicani, 2017), lifetime history of violence (d' Ettorre & Pellicani, 2017; Giarelli et al., 2017; Nguluwe et al., 2014; Stevenson et al., 2015), a history of drug and alcohol abuse (d' Ettorre & Pellicani, 2017; Giarelli et al., 2017; Iozzino et al., 2015; Nguluwe at al., 2014; Stevenson et al., 2015), a diagnosis of schizophrenia (d'Ettorre & Pellicani, 2017; Giarelli et al., 2017; Iozzino et al., 2015; Nguluwe et al., 2014; Stevenson et al., 2015), involuntary admission (Iozzino et al., 2015), and hostile-dominant interpersonal styles (d' Ettorre & Pellicani, 2017) that have been shown to be strong predictors of violence. The external factors encompass all other factors unrelated to the patient and have been divided into three classifications: nursing staff factors (Van Wijk et al., 2014), environmental factors (Van Wijk et al., 2014), and organizational factors (Binil, Sudhaker, & Hegde, 2016). Nursing staff factors included nurses who were tyrannical, prejudiced, consistently inflexible, and rude (Van Wijk, Traut, & Julie, 2014). Environmental factors included poor living conditions in the hospital (dirty surroundings, poor quality and quantity of food, high noise levels, locked doors and sealed windows, seclusion, limit-setting, and lack of structured activities) and atmosphere in the unit (lack of respect for patients' culture, religion, and rights; use of restrictive interventions as

punishment, smoking habits of other patients, and not feeling safe on the unit (Van Wijk et al., 2014). Organizational factors that can trigger violence in the workplace included inexperienced staff, frequent change of staff, lack of training (Binil et al., 2016), and higher non-RN staffing (Staggs, 2015). The complex interaction of these internal and external factors heightens the risk of a psychiatric nurse to be exposed to patient violence (Giarelli et al., 2017).

Effects of Workplace Violence

Workplace violence can have negative physical, emotional and other effects on psychiatric nurses. Physical effects include bruises, abrasions, cuts, eye injuries, fractures, back injuries (Moylan & Cullinan, 2011), or death (Centers for Disease Control and Prevention, 2012). Graham (2017) described a registered nurse's experience of a violent attack:

> During the admission process, the patient grabbed her, threw her several feet into the air until she hit a wall. As she fell to the floor, the patient repeatedly punched Jocelyn's (pseudonym) face and head. The assault resulted in multiple fractured teeth, a concussion, and later, a diagnosis of post-traumatic stress disorder (PTSD; p. 81).

Victims of workplace violence also suffer from emotional repercussions. Emotional responses to workplace violence included fear, anger, anxiety, guilt, helplessness, shame, resentment, and despair (Jeffrey & Fuller, 2016; Nguluwe et al., 2014; Stevenson et al., 2015; Vatne, 2017). Long-term effects of workplace violence include symptoms of PTSD (Graham, 2017; Zerach & Shalev, 2015), secondary

traumatization (Zerach & Shalev, 2015), heightened sense of awareness, hypervigilance (Stevenson et al., 2015), and avoidance behavior (Jeffrey & Fuller, 2016). A PTSD-related symptom that can become a major problem is disturbance in the sleep pattern. Bonner and McLaughlin (2007) described Anne's (pseudonym) experience after being violently attacked by a patient:

> Anne was particularly distressed with a recurring nightmare which involved her waking with her attacker's hands around her throat. The nightmare happened most nights and Anne had difficulty in bringing herself back to reality, feeling as if she was still experiencing the event even though she was awake in her own bedroom. Her sleep was greatly affected, and she saw this as one of her main problems. (p. 812)

Other consequences of health care workplace violence were decreased job satisfaction, lower morale, increased burnout, increased intent to leave, and job turnover (Lanctot & Guay, 2014). A participant described the impact of a violent incident:

> I'm not completely healed but I'm back at work, so I'm a little scared that just one, one little knock or something could permanently injure me, and then my livelihood would change. And I'm seriously thinking, is it really worth it? (Kindy, Petersen, & Parkhurst, 2005, p. 173)

Secondary traumatic stress is an indirect exposure to trauma that occurs by hearing about another person's traumatic experience (Figley Institute, 2012). Symptoms of secondary traumatization (ST) include decreased intrusive thoughts, avoidance of

triggers, hypervigilance, emotions of fear, and inability to function (Figley Institute, 2012). The only study found on violence exposure among psychiatric nurses and ST was conducted by Zerach and Shalev (2015). Subjects included 196 Israeli nurses, divided into two groups: 90 inpatient psychiatric nurses and 106 community clinic nurses. Inpatient psychiatric nurses had higher levels of PTSD and ST symptoms compared to community nurses. Findings also suggested that 24.1% of psychiatric nurses met the criteria for ST (Zerach & Shalev, 2015).

The negative effects of workplace violence on the physical and emotional well-being of healthcare workers affect quality of care and lead to financial loss (World Health Organization, 2020). Behavioral Health had the highest RN turnover rate at 23.1% in 2018. The average cost of bedside RN turnover ranged from $40,300 to $64,00, resulting in hospital losses of $4.4 M to $6.9 M a year (Nursing Solutions, Inc., 2019). The annual cost of workplace violence against 2.1% nurses employed in an urban community hospital was $94,156 (Speroni, Fitch, Dawson, Dugan, & Atherton, 2014).

Methods

A search of the literature was conducted using the electronic databases Cumulative Index to Nursing and Allied Health Literature (CINAHL) and PubMed. The keywords used were *psychiatric nurse*, *mental health nurse*, *workplace violence* and *interventions* and were combined, for example, *"psychiatric nurse", "workplace violence",* and *"intervention"*. The search was limited to articles written in the English language, published between 2000 and 2019, and pertaining to psychiatric nurses or

mental health nurses and workplace violence interventions. The search of the literature resulted in a total of 58 articles, and after removal of duplicates and irrelevant topics, six were retained for review.

Findings

Current methods of preventing WPV in the psychiatric setting included restraints and pharmacological methods which can negatively impact patient health outcomes (Snorrason & Biering, 2018). Interventions were divided into two categories: interventions to prevent WPV and interventions to address WPV aftermath.

Interventions to prevent WPV

Arbury, Zankowski, Lipscomb, and Hodgson (2017) conducted a review of 12 commercial WPV prevention training programs for health care workers. The authors used the Occupational Safety and Health Administration's (OSHA) *Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers* when evaluating the literature. The objectives of the review were to understand what training topics should be included, examine the topics in comparison to a criterion, and identify program gaps. There was a wide variation in the key components used across programs. De-escalation of potentially intense incidents was the only component found in every program. Components found in 11 of the 12 training programs were: train the trainer approach, restraints and holds, the team approach, avoidance and rescue with practice, and de-escalation exercise. The gaps in the training elements were: (1) lack of facility-specific information on risk assessment; (2) lack of information on the facility's policies and procedures; (3) safety issues when working alone were not addressed in nine of the

programs; (4) follow-up of workers exposed to violent incidents were addressed by five training programs; (5) none of the training program specified that workers can complain about violent workplaces to state agencies or Occupational Safety and Health Administration (OSHA) and that workers are covered from employer retaliation by whistle-blower protection laws. Regarding restraints and holds, the programs failed to mention that there is not enough evidence to support one type of restraint over another. There was a lack of evaluation of the training programs using a standardized data-based approach. The authors suggested that workplace violence training programs acquired from outside vendors need to be complemented with tailored training on the facility's organizational policies and procedures, facility risk assessment, communication, emergency action plans, post-incident debriefing, and policies regarding follow-up and audits (Arbury et al., 2017).

An umbrella review of intervention research in general psychiatric patients, mentally disordered offenders, and forensic psychiatric patients was located (Wolf, Whiting,& Fazel, 2017). An umbrella review is defined as bundles of systematic reviews that analyze different interventions for the same condition or disease (Ioannidis, 2009). Inclusion criteria were reviews that investigated the effects of interventions to prevent violence in all psychiatric patients, mentally disordered offenders or forensic psychiatric patients. Outcome measures were police or hospital documented violence, reincarceration, or felon violence. One meta-analysis (Kisely & Campbell, 2014) and one systematic review (Victoroff, Coburn, Reeve, Sampson, & Shillcutt, 2014) on included interventions to prevent violence among psychiatric patients. A meta-analysis

of adults with psychiatric disorders found two randomized controlled studies on compulsory community treatment (CCT) and found that patients on CCT did not commit any more violent acts than patients receiving standard care (Kisely & Campbell, 2014). A systematic review found two non-randomized studies on the effects of pharmacological agents on repeated aggression among patients diagnosed with schizophrenia (Victoroff et al., 2014). One study found a decline in hostility and aggression, while the other did not find a difference.

Isaak et al. (2017) conducted a 3-day workshop on personal safety, communication, and organizational learning. The sample included 112 multi-disciplinary staff from four maximum security departments of an Israeli psychiatric hospital who completed the Offshore Safety Questionnaire [OSQ] (Mearns, Whitaker, & Flin, 2003) on the first day of the workshop. Eighty-five participants completed the OSQ (Mearns et al., 2003) six months after the workshop. The OSQ is a 21-item questionnaire used to measure safety climate. The three subscales were: Communication (six items), commitment (seven items), and written rules and procedures (eight items). Participants answered all items on a 7-point Likert scale (1=completely disagree and 7=completely agree). The questionnaire was valid and reliable with the following Cronbach's α: Communication (.70), Commitment (.60), and Written Rules and Procedures (.88). Results showed improvement in communication about safety issues, procedures and safety reporting, and perceived management commitment to safety. There was a decline in the number of violent incidents and employee injuries after the intervention program.

Gabrovec and Lobnikar (2014) conducted workshops to teach nurses modified physical restraint techniques to handle aggressive behavior. The sample included approximately 450 nursing employees from five psychiatric hospitals, three psychiatric homes, and two special education work and care centers. A survey was conducted before and after the workshop using a structured questionnaire that was valid, reliable and had high internal consistency (Cronbach Alpha = 0.82). Results showed improvement in expertise, assertiveness, and organization after the training program. Nurses reported no change in fear. Authors suggested that fear was not affected because the survey was completed immediately after the program (Gabrovec & Lobnikar, 2014).

Interventions to address WPV aftermath

Two studies were located addressing WPV aftermath. A randomized controlled trial by Inoue, Kaneko, and Okamura (2011) evaluated the effectiveness of a group intervention to decrease the stress levels of psychiatric nurses exposed to verbal abuse or violence. The sample included 62 psychiatric nurses working in five psychiatric hospitals in the Chugoku and Kyushu districts of Japan. Thirty nurses were assigned to the group intervention and 32 in the control group. The intervention included group discussion of coping mechanisms, stress management, and behavioral therapy once a week for four weeks. Surveys were completed pre- and post-intervention, and six weeks and three months after the intervention. Two instruments evaluated psychological impact and stress. The Impact of Event Scale-Revised [IES-R] (Weiss & Marmar, 1996) is a 22-item scale designed to measure the effect of psychological trauma. The Japanese version of this instrument was valid and reliable with Cronbach's α of 0.859. The authors also

used the Profile of Mood States [POMS] (McNair, 1971) questionnaire to measure temporary emotional states. The Japanese version was valid and reliable (Cronbach's α = 0.775). The authors found that a group intervention approach improved the psychiatric nurses' mental health. Symptoms of intrusion, hyperarousal, avoidance, anxiety and depression were significantly decreased after the group intervention.

Nhiwatiwa (2003) conducted a randomized controlled study to examine the effectiveness of an educational booklet in decreasing the distress levels among nurses exposed to workplace violence. The sample included 40 nurses from four inpatient acute care psychiatric hospitals in England and Wales. Samples were assigned to an education group and control group using stratified block randomization. The intervention comprised an educational booklet on the aftermath of trauma and coping skills. Both groups completed the Impact of Events Scale [IES] (Horowitz, Wilner, & Alvarez, 1979) and General Health Questionnaire-28 [GHQ-28] (Goldberg & Hillier, 1979) at baseline. The internal reliability of IES was valid with Cronbach's α of 0.78 for intrusion and 0.82 for avoidance. Test/retest reliability for intrusion was r = 0.89 and 0.79 for avoidance (Nhiwatiwa, 2003). The overall Cronbach's α for GHQ-28 scale was 0.9 and test/retest reliability was 0.58 (Malakouti, Fatollahi, Mirabzadeh, & Zandi, 2007). The education group read the booklet and both groups were re-evaluated after three months. There was no significant difference with the baseline scores among the control and education group; in fact, the control group had lower distress scores after the physical assault compared to the education group. The education group had increased levels of distress at three months compared to their baseline scores. One possible explanation for the results would

be that both groups were in different stages of stress reaction. The education group was aware of their symptoms and was adjusting to the aftermath, therefore, an increase in distress level was expected before the process is complete. The decrease in distress levels among the control group could possibly be caused by the participants' denial of the symptoms at the time of reassessment. Another explanation could be that education is not an effective intervention after a violent incident but would be appropriate as a preventive measure. Limitations for the study were small sample size, lack of pre-trauma data, and use of self-rating measures. Recommendations were use of a larger sample size, better control of the educational intervention, and longer interval before follow-up (Nhiwatiwa, 2003).

Implications for Psychiatric Nursing Practice

Prevention and management of violent and aggressive behavior by psychiatric patients on nurses is a priority because of the serious consequences (Van Wijk et al., 2014). Rigorous studies should examine the impact of interventions to prevent workplace violence against psychiatric nurses. In addition, research to identify the most effective methods of managing repercussions of violent acts at the hands of patients is necessary. Efforts will improve patient outcomes, nurses' health, and potentially promote improved retention.

Summary

The rate of workplace violence by patients against psychiatric nurses is steadily rising. The physical and psychological effects of workplace violence affect not only the health and well-being of the psychiatric nurse, but also the quality of patient care and

healthcare costs. Preventive measures such as training programs and workshops are necessary to equip psychiatric nurses with the knowledge and skills to effectively de-escalate potentially violent situations. It is essential to the profession and patient outcomes that psychiatric nurses' health and well-being after a traumatic event caused by patient aggression are priorities. Evidence that will alleviate the effects of workplace violence are also required. Research regarding interventions aimed at WPV and psychiatric nurses included prevention and alleviation of WPV aftermath; however, findings were inconclusive. There is a need for rigorous studies on interventions to prevent WPV and to alleviate WPV effects.

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Chapter 4

"Fish in a Barrel": Workplace Violence and Psychiatric Nurses' Posttraumatic Stress Symptoms

Abstract

Psychiatric healthcare workers suffer from posttraumatic stress disorder (PTSD) symptoms. Predictors of posttraumatic stress symptoms among psychiatric nurses are unknown. An understanding of contributing factors will help identify psychiatric nurses at higher risk for posttraumatic stress symptoms after exposure to workplace violence. The purposes of this descriptive correlational study were to examine the prevalence of and predictive factors for posttraumatic stress symptoms among psychiatric nurses. The Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) guided the study. Participants were recruited from the researcher's professional colleagues and a nursing organization using convenience and snowballing sampling. Data were collected using online surveys including the Perceptions of Prevalence of Aggression Scale, Perceived Stress Scale-10, Social Support Questionnaire-6, and Impact of Event Scale-Revised. Data were analyzed using the chi squared test to determine relationships between categorical variables and independent samples *t*-test for continuous variables. Binary logistic regression model was used to determine which factors significantly predicted the development of posttraumatic stress symptoms. Demographic and professional characteristics were not significantly related to posttraumatic stress symptoms; however, significant relationships were found between workplace violence exposure, levels of perceived stress, social support, and levels of posttraumatic stress symptoms. Perceived

stress was the best predictor of posttraumatic stress symptoms. Findings for the open-ended question were categorized into five major themes.

Keywords: Workplace violence, psychiatric nurses, posttraumatic stress symptoms, PTSD, social support, perceived stress

Significance Statement

Workplace violence committed by patients against healthcare workers is a global occupational problem that has serious implications for patients and staff (d'Ettorre & Pellicani, 2017) and has become a prominent research topic over the past 25 years (Yragui, Demsky, Hammer, Van Dyck, & Neradilek, 2017). Workplace violence (WPV) is defined as "the act or threat of violence, ranging from verbal abuse to physical assaults towards persons at work or on duty" (National Institute for Occupational Safety and Health [NIOSH], 2017, para 1). Approximately 24% - 80% of psychiatric healthcare workers experienced violence by a patient at some point of their careers (d'Ettorre & Pellicani, 2017) while 10% of assaulted psychiatric healthcare workers suffered from posttraumatic stress disorder (PTSD) symptoms (Jacobowitz, 2013).

Posttraumatic stress disorder is a mental health condition that occurs after witnessing or experiencing a distressing event such as a natural disaster, a horrific accident, terrorism, war, sexual assault, or other aggressive personal attack (American Psychiatric Association [APA], 2019). Symptoms must persist for more than 30 days and usually linger for months and even years (APA, 2019). Because a comprehensive psychological assessment by a qualified professional is required to diagnose PTSD, this study will focus on posttraumatic stress symptoms.

Workplace violence has negative emotional and professional effects. After exposure to a violent incident, psychiatric nurses are left with emotions that linger after the incident. Negative emotions after exposure to workplace violence range from fear, worry, and anxiety to anger and guilt (Jeffery & Fuller, 2016; Yosep, Mediani, Putit,

Hazmi, & Mardiyah, 2019). Effects of exposure to workplace violence extend to the home environment in the form of emotional intolerance towards members of the household, rumination on the incident, and use of alcohol (Jeffery & Fuller, 2016). Professionally, one common reaction to exposure to patient aggression is avoidant behavior. Some psychiatric nurses choose to avoid communicating or interacting with the aggressive patient days after the incident (Jeffery & Fuller, 2016; Yosep et al., 2019). The psychiatric nurse's avoidant behavior creates a dilemma because communication is a very important tool to prevent verbal and physical aggression among patients. Establishing a mutual relationship based on trust is key to preventing violence and keeping the environment safe for the patient and healthcare staff (Hylen et al., 2019).

There is paucity of research focused on PTSD or posttraumatic stress symptoms among psychiatric nurses. An understanding of predictive factors for posttraumatic stress symptoms among psychiatric nurses after exposure to workplace violence is needed. Knowledge may lead to development of tailored interventions to minimize development of posttraumatic stress symptoms among psychiatric nurses.

Purpose of the Study

The purposes of this exploratory study were to investigate the prevalence and examine the predictors of posttraumatic stress symptoms (age, sex, nursing education level, length of nursing experience, exposure to workplace violence, perceived stress, and social support) and explore psychiatric nurses' perceptions of workplace violence perpetrated by patients.

Theoretical Framework

The Transactional Model of Stress and Coping by Lazarus and Folkman (1984; see Appendix C) guided this study. The Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) which originated in psychology, suggests that a situation or event leads to appraisal, and stress occurs if coping is insufficient. The Model has been used to study childbirth–related PTSD (Haagen, Moerbeek, Olde, van der Hart, & Kleber, 2015), PTSD after unsuccessful cardiopulmonary resuscitation among critical care nurses (McMeekin, Hickman, Douglas, & Kelley, 2017), and posttraumatic distress in telecommunicators (Dillard, 2019). No study was located on workplace violence-related PTSD or posttraumatic stress symptoms among psychiatric nurses using Transactional Model of Stress and Coping (Lazarus & Folkman, 1984).

The model has three concepts: Stress, appraisal, and coping (Lazarus & Folkman, 1984). Stress occurs when an individual's perceived environmental demand exceeds the perceived ability to cope with that demand. Theoretical concepts applied to this study include environmental demand, represented by workplace violence perpetrated on psychiatric nurses by a patient, coping represented by social support, immediate effect represented by perceived stress and long-term effect represented by posttraumatic stress symptoms (See Table 1 for conceptual and operational definitions). Appraisal will not be operationalized in this research.

Appraisal is the mediating process where the individual evaluates the significance of what is happening that may affect their well–being and influences the individual's response to a stimulus (Lazarus & Folkman, 1984). Coping is defined as all efforts to

handle internal and external demands that are appraised as burdensome regardless whether it is effective or not. Social support is a coping resource that is accessible in the social setting but must be developed and used (Lazarus & Folkman, 1984).

The theory suggests that exposure to workplace violence leads to appraisal of the situation that could influence how the nurse would respond to the violent incident. Social support as a coping resource could mediate the short-term and long-term effects of workplace violence. The result of the event is the nurses' health outcome, posttraumatic stress symptoms. Understanding the relationships between different factors and identifying the predictive risk factors for posttraumatic stress symptoms among psychiatric nurses using the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) can add scientific knowledge on the development of posttraumatic stress symptoms.

Table 1

Conceptual and Operational Definitions

Concept / Study Variable	Conceptual Definition	Operational Definition
Environmental Demand / Workplace violence	"the act or threat of violence, ranging from verbal abuse to physical assaults directed towards persons at work or on duty" (NIOSH, 2017)	➢ Perceptions of Prevalence of Aggression Scale ([POPAS] (Oud, 2000; see Appendix E) ➢ Self–report questionnaire that measures the prevalence of experiences with aggressive behaviors ➢ 15 items; 5–point Likert scales (1 = "never" to 5 = "frequently") ➢ Cronbach's α is 0.86 (Nijman et al., 2005)
Stress / Perceived Stress	Occurs when an individual's perceived environmental demand exceeds the perceived ability to cope with that demand (Lazarus & Folkman, 1984)	➢ Perceived Stress Scale – 10 [PSS-10] (Cohen, Kamarck, & Mermelstein, 1983; Cohen & Williamson, 1988; See Appendix G) ➢ Self-report questionnaire that measures the degree to which circumstances in one's life are being appraised as stressful ➢ 10 items on 5–point Likert scale (0 = "never" o 4 = "very often") ➢ Items 4, 5, 7, and 8 are positively stated so the scores are reversed ➢ Cronbach's α is 0.78 (Cohen & Williamson, 1988) ➢ Test-retest reliability is > 0.70 (Lee, 2012)

Coping / Social Support	"having people from whom one receives emotional, informational, and/or tangible support" (Lazarus & Folkman, 1984)	➢ Social Support Questionnaire-6 [SSQ–6] (Sarason et al., 1987; See Appendix H). ➢ Two parts: Numbers and satisfaction ➢ Number or Perceived Availability Score: Measures the number of individuals the participant perceives will be available in times of need and consists of questions such as, "Whom could you count on to help you if you had just been fired from your job or expelled from school?" ➢ Satisfaction: Measures the participant's level of satisfaction with the perceived support by using a 6–point Likert scale (1 = "very dissatisfied" to 6 = "very satisfied"). ➢ Cronbach's α is 0.9 to 0.93 (Sarason et al., 1987)
Negative stress / Posttraumatic stress symptoms	Symptoms of a mental health condition (posttraumatic stress disorder; PTSD) after witnessing a traumatic event (APA, 2019). Four categories of PTSD: (a) intrusive thoughts; (b) avoidance of reminders; (c) negative thoughts and feelings; (d) arousal and reactive symptoms (APA, 2019).	➢ Impact of Event Scale–Revised [IES–R] (Weiss & Marmar,1996; See Appendix I). ➢ Self – report of levels of distress in the past seven days as a reaction to a specific traumatic event ➢ 22-item scale with 5-point Likert scale (0 = "not at all" to 4 = "extremely")

	➢ 3 subscales: Intrusion (8 items; α = 0.94); avoidance (8 items; α = 0.87); hyperarousal (6 items; α = 0.91 (Creamer, Bell, & Failla, 2003) ➢ Cronbach's α for total scale 0.96 (Creamer et al., 2003)

Review of Literature

A review of the literature was conducted using the databases Cumulative Index for Nursing and Allied Health Literature (CINAHL) and PubMed. The keywords used were *psychiatric nurses, mental health nurses, workplace violence, posttraumatic stress disorder, posttraumatic stress symptoms, risk factors, predictive risk factors, perceived stress, stress,* and *social support.* The keywords were methodically combined to search the literature. The search was limited to full–text articles written in English and published in the previous five years.

Definition of Workplace Violence and Risk Factors for Workplace Violence

A systematic review (d' Ettorre & Pellicani, 2017) of patient violence against healthcare staff working in inpatient psychiatric wards revealed inconsistencies in the definition of the term "workplace violence" (WPV). Some studies evaluated physical violence only and other studies evaluated physical and verbal violence; therefore, the incidence of workplace violence may be minimized. For the purposes of this study, the WPV definition by NIOSH (2017) to investigate physical and verbal abuse was adopted. The most common sources of workplace violence in the acute care and outpatient settings

were patients (Al-Azzam, Al-Sagarat, Tawalbeh, & Poedel, 2017; Basfr et al., 2019; Basogul, Arabaci, Buyukbayram, Aktam, & Uzunoglu, 2019; Kocabiyik, Yildirim Turgut, Turk, & Ayer, 2015; Niu et al., 2019; Tonso et al., 2016). The healthcare professional most frequently exposed to workplace violence were nurses (Drori, Guetta, Natan, & Polakevich, 2017; Kocabiyik et al., 2015; Ridenour et al., 2015).

The risk factors for WPV can be classified as internal or external factors. Internal factors are patient characteristics that predict violence. The internal factors found to be strong predictors of violence included: (a) psychiatric diagnosis (Al–Azzam et al., 2017; Bekelepi, Martin, & Chipps, 2015; d'Ettorre & Pellicani, 2017) and personality disorders (Ridenour et al., 2015), (b) history of aggression (Al-Azzam et al., 2017; d'Ettorre & Pellicani, 2017), (c) young age, (d) alcohol use, (e) drug abuse, and (f) hostile dominant personality (d'Ettorre & Pellicani, 2017). External factors encompass all other factors unrelated to the patient and have been further divided into three classifications: (a) nursing staff factors such as short staffing (Al-Azzam et al., 2017; Basfr et al., 2019), poor communication skills, and lack of experience (Al-Azzam et al., 2017; Hylen et al., 2019); (b) environmental factors such as physical and social environment, overcrowding, unfamiliar environment, and loss of privacy (Bekelepi et al., 2015); and (c) organizational factors such as lack of firm of policy, futile response to violent incidents, inadequate resources (Al-Azzam et al., 2017), and lack of organizational support (Basfr et al., 2019; Hylen et al., 2019).

Effects of WPV

WPV has physical and psychological effects on psychiatric nurses. The most frequently reported psychological consequences of exposure to WPV among psychiatric nurses were PTSD symptoms (Fujimoto et al., 2017; Hilton, Ham, & Dretzkat, 2017; Zerach & Shalev, 2015), burnout (Zaczyk et al., 2018), stress (Basfr et al., 2019; Hylen, Kjellin, Pelto-Piri, & Warg, 2018; Itzhaki et al., 2015; Itzhaki et al., 2018), anxiety (Basfr et al., 2019; Zhao et al., 2018) and depression (Zhao et al., 2018). Psychiatric nurses also reported worse subjective health and work ability than non–psychiatric nursing groups (Pekurinen et al., 2017) and other acute care psychiatric ward staff (Renwick et al., 2019). Other negative consequences of exposure to WPV among psychiatric nurses were job dissatisfaction (Al-Azzam et al., 2017; Olashore, Akanni, & Ogundipe, 2018), intent to leave their job, lack of interest to go back to work (Basfr, 2019), and increased number of sick days (Tonso et al., 2016).

Psychiatric Nurses and Underreporting

Psychiatric nurses have the highest prevalence of assault among all nursing specialties due to the amount of time spent during face–to-face interactions and proximity to patients with behavior problems secondary to anxiety, agitation, and violence (Fujimoto et al., 2019; Niu et al., 2019; Wang et al., 2015). Almost one in five patients admitted in acute care psychiatric wards have the potential to commit a violent act (Iozzino et al., 2015). Although workplace violence is a serious occupational hazard in a psychiatric setting, it is well-documented that assaults are underreported (Arnetz et al., 2015; Lanza, 1992). Reasons for underreporting of assault include inconsistencies with

the definition of workplace violence (Arnetz et al., 2015; Lanza, 1988; Lanza, 1992; Sato et al., 2013); perception that violence is "part of the job" (Arnetz et al., 2015; Gerberich et al., 2004; Lanza, 1992); minor injury (Arnetz, 1998; Gerberich et al., 2004; Sato et al., 2013); lack of support from management (Arnetz et al., 2015; Gerberich et al., 2004; Sato et al., 2013); and time-consuming paperwork (Arnetz, 1998; Arnetz et al., 2015; Lanza, 1988; Lanza, 1992). In a study comparing self-report and actual incident reports of violence, Arnetz et al. (2015) suggested 88% of hospital employees who self-reported an assault in the past year did not file an incident report in the electronic system.

Perceived Stress

Nursing has been described as a vocation with high stress levels and psychiatric nurses have the highest level of stress perception compared to other nursing specialties (Masa'Deh, Alhalaiqa, AbuRuz, Al-Dweik, & Al-Akash, 2017). Stress among psychiatric nurses was associated with unpredictable mental health structure and service (Hasan, Elsaved, & Tumah, 2018), high turnover rates (NSI Nursing Solutions, 2019), increased nursing shortage (American Association of Colleges of Nursing, 2019), and longer shifts (American Nurses Association, 2017a). Factors causing high stress levels among psychiatric nurses were physical and verbal abuse from patients and others (Hasan et al., 2018), increased workload (Kurjenluoma et al., 2017), and low pay (Nemec & Trifkovic, 2017). Job stress and its negative impact on psychiatric nurses was associated with higher incidence of patient aggression (Pekurinen, Valimaki, Virtanen, Kiyimaki, & Vahtera, 2019), decreased professional quality of life (Itzhaki et al., 2018), higher levels of depressive symptoms (Hasan et al., 2018; Wang et al., 2015; Yoshizawa et al., 2016)

and intent to leave the job at six months due to patient assault (Ontiveros-Hanohano, 2017). Interventions that alleviated stress among psychiatric nurses were Mindfulness-Based Stress Reduction (MBSR) therapy (Yang, Tang, & Zhou, 2018), stress management program (Sailaxmi & Lalitha, 2015), and yoga (Anderson, Mammen, Paul, Pletch, & Pulia, 2017; Lin, Huang, Shiu, & Yeh, 2015).

Social Support

Social support is a multidimensional concept that is divided into three classifications: social embeddedness, perceived social support, and enacted support (Barrera, 1986). Perceived social support, the focus of this study, is the cognitive appraisal that one is strongly connected with others (Barrera, 1986). Social support can come from work (colleagues, supervisor or organization) and non–work sources (family and friends; Adams, King, & King, 1996). Researchers have suggested that nurses who perceived high levels of support from their social networks reported better well–being (Kelly, Fenwick, Brekke, & Novaco, 2017; Van der Heijden, Mulder, Konig, & Anselmann, 2017; Yragui et al., 2017), improved self–efficacy and resilience (Wang, Tao, Bowers, Brown, & Zhang, 2018), improved mental health (Gu, Hu, Hu, & Wang, 2016), positive attitude towards evidence–based interventions (Rye, Friborg, & Skre, 2019), increased intent to stay (Halter et al., 2017), decreased work stress (Lawal & Idemudia, 2017), and decreased psychological stress (Van der Heijden et al., 2017). A cross-sectional study by Yoshizawa et al. (2016) identified social support from a supervisor as a significant protective factor against depressive symptoms among psychiatric nurses in Japan. Yragui et al. (2017) suggested high levels of family specific

behaviors (FSSB) buffered the effects of patient physical aggression towards psychiatric nurses.

Posttraumatic Stress Symptoms

Stressful environments and exposure to traumatic events may have adverse effects on nurses' mental health and cause post–traumatic stress disorder. However, not all individuals who experience trauma will develop posttraumatic stress symptoms (Cho & Kang, 2017; Guan, Gao, Lou, Chang, & Ge, 2019). Exposure to patient aggression (Guan et al., 2019), high levels of stress (Lee, Daffern, Ogloff, & Martin, 2015), acute stress reactions (Marin et al., 2019), ineffective coping strategies (McMeekin et al., 2017), older age (Carmassi et al., 2018; Hamama-Raz et al., 2016), female gender (McMeekin et al., 2017), type D personality (Cho & Kang, 2017), age and length of nursing experience (Mealer et al., 2009), and a graduate degree (Mealer, Jones, & Meek, 2017) were found to be associated with development of posttraumatic stress symptoms. While the prevalence of PTSD among US adults was approximately 6.8% (National Institute of Mental Health, 2017), Jacobowitz' (2013) literature review suggested that most studies reported approximately 9%-10% of assaulted psychiatric nurses developed posttraumatic stress symptoms. There was significant correlation between exposure to patient violence and development of posttraumatic stress symptoms among psychiatric healthcare workers (Fujimoto et al., 2017; Lee et al., 2015; Marin et al., 2019; Olashore, Akanni, Molebatsi, & Ogunjumo, 2018; Zerach & Shalev, 2015).

Design Statement with Rationale

An exploratory, descriptive correlational, cross-sectional study was used to describe and explore the relationships between (a) demographic factors, (b) workplace violence exposure, (c) levels of perceived stress, (d) social support, and (e) levels of posttraumatic stress symptoms among psychiatric nurses. Exploratory research examines all the attributes of the phenomenon, the ways it is exhibited or expressed, and other components with which it is associated (Polit & Beck, 2017a). Exploratory research is the systematic analysis of correlations among two or more variables to infer the impact of one variable to another and to investigate relationships guided by scientific theory (Portney & Watkins, 2009a). Exploratory research design is appropriate to investigate the prevalence and predictive factors for posttraumatic stress symptoms among psychiatric nurses since knowledge on the topic is scarce. Descriptive correlational research describes correlations between variables (Polit & Beck, 2017b) and the researcher collects data at a single point in time in a cross-sectional design (Polit & Beck, 2017c). An open-ended question was used at the end of the survey to explore psychiatric nurses' perceptions of workplace violence against nurses perpetrated by psychiatric patients. Open-ended questions are helpful in gaining insights on participants' perceptions and attitudes, without prejudice or restraints enforced by the researcher (Portney & Watkins, 2009b).

Methods

Research Questions

The research questions addressed in this study were: (a) What is the prevalence of workplace violence exposure, levels of perceived stress, social support, and levels of posttraumatic stress symptoms among psychiatric nurses? (b) What are the relationships between age, gender, nursing education level, length of nursing experience, and levels of posttraumatic stress symptoms? (c) What are the relationships between workplace violence exposure, levels of perceived stress, social support, and levels of posttraumatic stress symptoms among psychiatric nurses? (d) What are the best predictors of posttraumatic stress symptoms? The research question for open-ended responses was "What are psychiatric nurses' perceptions of workplace violence against nurses perpetrated by psychiatric patients?"

Sample

A convenience sample of psychiatric nurses was sought. Convenience sampling involves using the most easily available individuals as participants (Polit & Beck, 2017d). In addition to convenience sampling, snowball sampling was employed. Snowball sampling is a variation of convenience sampling where early participants will be asked to refer other individuals who meet the inclusion criteria to participate in the online survey (Polit & Beck, 2017d). Inclusion criteria for this study were: (a) adult, ages 18 and older, (b) licensed practical and registered nurses for at least one year, (c) currently employed full or part–time in an adult acute care inpatient psychiatric facility, adult outpatient

psychiatric clinic, psychiatric emergency services, adult long-term care psychiatric facility (such as the state hospital), chemical dependency treatment facility, dual diagnosis treatment center, community mental health center, adult psychiatric home health agency or adult psychiatric visiting nurse agency or residential mental health facility, (d) able to read English, and (e) access to a computer and the Internet. Exclusion criteria include participant's self-report of posttraumatic stress disorder diagnosis in their lifetime.

The researcher sent invitations to participate in the survey (Appendix J) to professional colleagues through personal e-mail. IRB approved modification to the study (Appendix K) to send invitations via text message, Facebook messenger (Appendix L), and social media (Appendix M). A professional nursing organization gave permission to post survey information on the organization's discussion forum; a survey invitation with an embedded anonymous web link to Qualtrics was posted on social media.

Sample Size

Power analysis was used to estimate the sample size to investigate the relationships between the following variables: (a) age, (b) gender, (c) education level, (d) years of nursing experience, (e) workplace violence exposure, (f) levels of perceived stress, (g) social support, and (h) levels of posttraumatic stress symptoms. No previous study on similar topic was found to compare effect size. There were seven (7) predictors in this study. For confidence interval of 80%, margin of error of 5%, and small/medium

size effect (OR = 2.10), target sample size was calculated at 100 using the G*power calculator.

Setting

Data was collected using an online survey**.**

Protection of Human Subjects

Approval from the Institutional Review Board (IRB) at The University of Texas at Tyler was obtained (Appendix N). Surveys began with informed consent (Appendix O). The purpose and methods of the study were clearly described and a warning that some items may be upsetting were included. In the event a participant experiences discomfort or emotional distress, the participant could stop anytime without repercussion. Participants were encouraged to contact their Employee Assistance Program (EAP) if available and needed. Telephone numbers for the National Suicide Prevention Lifeline and the Crisis Text Line were provided on every page of the survey. Additional mental health resources were provided for participants from Texas through an embedded link to the Texas Health and Human Services (see Appendix P). Participants were informed that participation was voluntary, and they could stop any time without repercussion. Participants were informed that the study was confidential, and all data were anonymous. Participants were also informed that individual responses would not be published; computerized data were stored on a password protected computer. Back up data were password protected and stored in an external hard drive secured in a safe location. Only the researcher, dissertation chair, and statistician consultant had access to the data. The

primary investigator and dissertation chair's human subjects training certificates appear in Appendix Q.

Instruments

Demographic and four questionnaires and an open-ended question were used: The Perception of Prevalence of Aggression Scale (POPAS) questionnaire (Oud, 2000), Perceived Stress Scale-10 (PSS-10) questionnaire (Cohen, Kamarck, & Mermelstein, 1983; Cohen & Williamson, 1988), Social Support Questionnaire-6 (SSQ-6) (Sarason et al., 1987), and Impact of Event Scale-Revised (IES-R) questionnaire (Weiss & Marmar, 1996).

Demographic Questionnaire. The demographic questionnaire used multiple choice type of questions asking for participant's age, gender, highest education level in nursing, and length of time employed as a nurse.

Workplace violence. The Perception of Prevalence of Aggression Scale (POPAS) questionnaire (Oud, 2000) appraises experiences with 15 forms of aggressive behavior. A description and example of every form of aggressive behavior was provided. Participants were asked to appraise how often they experienced the different forms of aggression in the past year by using a 5–point Likert scale (from 1 = "never" to 5 = "frequently") and the actual number of experiences with the behavior in the same time frame. Additional items on the questionnaire were number of days missed from work due to inpatient aggression and demographic information such as age, gender, level of nursing education, and length of nursing experience among others. Perceived aggression prevalence rates were obtained by calculating the mean frequency of each POPAS item

using the Likert response and the mean of the number of days of sick leave due to patient aggression (Nijman et al., 2005). The Cronbach's α was 0.86 (Nijman et al., 2005).

Perceived stress. Perceived stress was measured using the Perceived Stress Scale-10 (PSS-10; Cohen, Kamarck, & Mermelstein, 1983; Cohen & Williamson,1988). PSS-10 is a 10-item self–report questionnaire that measures the degree to which circumstances in one's life are appraised as stressful. The original scale had 14 items with acceptable psychometric qualities. Questions address the individual's feelings and thoughts about how unstable, unmanageable, and overwhelming their life has been in the past month. Items were rated on a 5-point Likert scale (0 = "never" to 4 = "very often"). Items 4, 5, 7, and 8 are positively stated so the scores were reversed. Scores were summed across all items and ranged from 0-40 with higher scores indicating higher stress. There are no cut-off scores for classifications of stress, only comparisons among samples (Carnegie Mellon University, 2014). Internal reliability of PSS-10 for the Harris poll sample was 0.78 and for the 2006 and 2009 eNation samples was 0.91 (Cohen & Janicki-Deverts, 2012). Test-retest reliability of the PSS-10 after evaluating four studies was > 0.70 (Lee, 2012).

Social support. Social support was measured using the Social Support Questionnaire-6 (SSQ-6; Sarason et al., 1987). SSQ–6 is a brief version of the 24-item Social Support Questionnaire (Sarason et al., 1983). Each SSQ–6 item has two parts each, Number and Satisfaction. The first part of the questionnaire, Number or Perceived Availability Score, measured the number of individuals the participant perceives will be available in times of need and consists of questions such as, "Whom could you count on

to help you if you had just been fired from your job or expelled from school?" The second part (Satisfaction) measured the participant's level of satisfaction with the perceived support by using a 6–point Likert scale (1 = "very dissatisfied" to 6 = "very satisfied"). To obtain the total N and S scores, the sum of N or S scores for all items is divided by the number of items (6). Higher mean scores suggest greater support. The internal reliabilities for both Number and Satisfaction ranged from 0.90 to 0.93 (Sarason et al., 1987).

Posttraumatic stress symptoms. Levels of posttraumatic stress symptoms were measured using the Impact of Event Scale–Revised (IES-R; Weiss & Marmar, 1996). Items correlate to 14 of 17 DSM-IV symptoms of PTSD (U. S. Department of Veterans Affairs, 2018). The IES-R measures an individual's self–reported distress in the past seven days as a reaction to specific traumatic event using a 5-point Likert scale (0= "not at all" to 4= "extremely"). A raw score of 33 and above was designated as the best cutoff for likely diagnosis of PTSD (Weiss & Marmar, 1996). Cronbach's α for the total scale was 0.96; for the intrusion scale 0.94; for the avoidance subscale 0.87; and for the hyperarousal subscale 0.91 (Creamer et al., 2003).

Open-ended question. At the end of the survey, an open-ended question was asked: "Has the researcher missed anything or do you have anything to add about workplace violence by patients against psychiatric nurses? If yes, please share in the space below."

Data Collection

Participants completed the online survey which required approximately 15-20 minutes to complete between February and March 2020.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences software (SPSS V22.0, Chicago, IL). Every participant was assigned a numeric code. Data for each variable was analyzed for missing values, precision of data entry, and normal distribution. Descriptive statistics were used to describe the demographic characteristics of the participants such as age, gender, level of nursing education, and length of nursing experience. Descriptive statistics included means, standard deviations (*SD*), and range for continuous variables and frequency and percentages (%) for categorical variables.

The data analysis plan was conducted in three phases. First, all study variables were presented using descriptive statistics, such as, means, standard deviation, and minimum/maximum values for continuous variables (Interval/Ratio level) and frequencies and percentages for categorical variables (Nominal/Ratio level). This descriptive analysis was used to answer Research Question 1.

Next, a series of bivariate tests were used to produce inferential findings. Specifically, bivariate tests were used to identify if the dependent variable likely PTSD diagnosis (Yes/No) was associated with the categorical variables reflecting social support, age, gender, level of nursing education, and length of nursing experience (via a chi-square analysis to examine Research Questions 2 and 3), as well as continuous scores reflecting levels of perceived stress and workplace violence exposure (via an

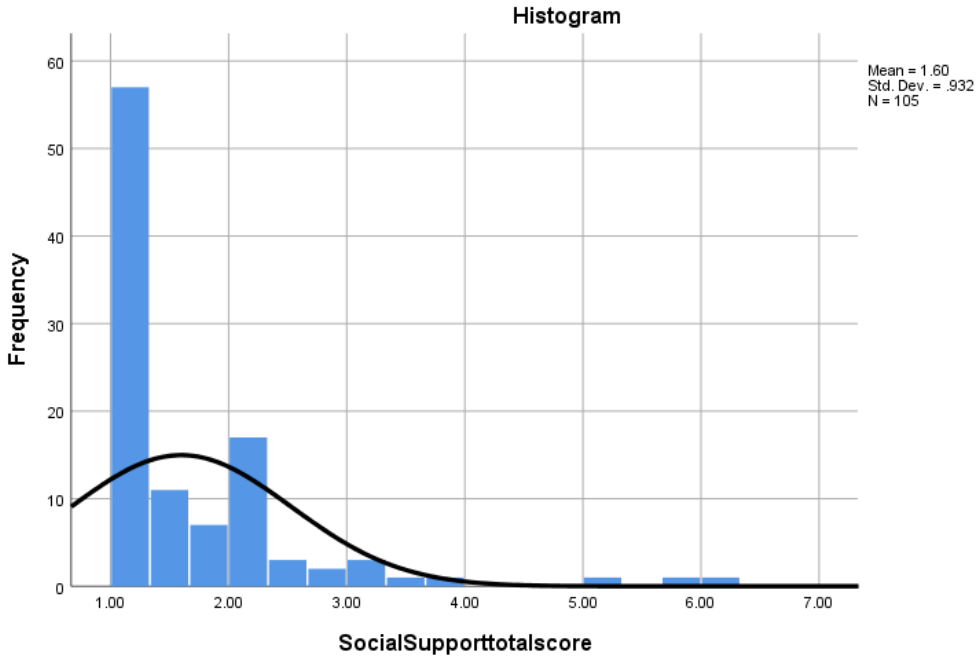
independent-samples t-test to examine Research Question 3), at a statistically significant level ($p < .05$). All explanatory variables associated with the dependent variable in bivariate analysis at a statistically significant level was included in the third phase of analysis, multivariate analysis.

Third, a multivariate model, specifically a binary logistic regression model was used to model the dependent variable as a function of all the variables significantly associated with the dependent variable at the bivariate level. The model was assessed in terms of overall statistical significance, as were the Odds ratio, 95% CI, and statistical significance of the individual predictors. The predictors that remain significant and evidenced the strongest odds ratio effect size, was recognized as the strongest predictor of likely PTSD diagnosis, which will answer Research Question 4.

Within the final inferential analysis presented, the assumption of multicollinearity was met for the binary logistic regression model. Regarding the chi-square analysis, the test assumption of having at least 5 study participants per cell was not met for several cells. Reading the parametric tests, overall, the test assumptions of normality, linearity, and no undue influence of outliers were met. The single issue that needed to be addressed was that the distribution of social support scores was non-normal. As indicated in the histogram in Figure 1, there was a bias in study respondents selecting the highest level of social support (Social Support = 1.0). To address this distribution, social support scores were trichotomized into high (scores from 1.00 - 1.50) medium (scores from 1.51 - 2.50), and low categories (scores from 2.51 - 6.00).

Figure 1

Distribution of Continuous Social Support Scores



There were originally 109 study participants, four were removed due to missing data and two were removed due to self-report of PTSD diagnosis for a final sample size of 103. Otherwise, there were complete data within the dataset and a complete case analysis was possible. All of the normed study instruments evidenced acceptable levels of internals consistency, including the Impact of Event Scale–Revised PTSD measure prior to being dichotomized into the likely PTSD diagnosis – Yes/No (Cronbach's alpha = .96), the Social Support Questionnaire–6 (Cronbach's alpha = .94), Perceived Stress Scale–10 (Cronbach's alpha = .89), and the exposure to workplace violence Perception of Prevalence of Aggression Scale (Cronbach's alpha = .84).

In terms of statistical power for the G*power software indicated that within a logistic regression model, a small/medium size effect (OR = 2.10) with power set at .80 and alpha set at .05, would be detectable with a sample size of 100 study participants. Thus, the current sample of 103 study participants would provide sufficient statistical power for the current analysis.

For the open-ended question, the researcher and dissertation chair separately read the transcribed text multiple times and identified themes derived from the data. Data were grouped according to themes and initial codes were identified. These codes were further sorted into major themes. Findings were compared until agreement was reached on major categories identified.

Findings

Demographics

Table 2 presents a descriptive analysis of categorical demographic/professional characteristics. Data indicated that the majority were female (*n* = 84, 81.6%), was between 25-43 years of age (*n* = 39, 37.9%), and had a highest education level of a Bachelor of Science in Nursing (*n* = 53, 51.5%). Most study participants reported a length of time employed as a nurse over 10 years (*n* = 59, 57.3%). Over three-quarters of study participants reported the type of psychiatric mental health facility employed as adult acute care inpatient psychiatric facility (*n* = 76, 73.8%).

Table 2

Descriptive Analysis of Demographic/Professional Characteristics

Variable	*N*	%
Gender		
Male	19	18.4
Female	84	81.6
Age		
18-24	2	1.9
25-43	37	35.9
44-55	34	33.0
56-74	29	28.1
Over 74	1	1.0
Highest Education Level in Nursing		
Licensed Practical Nurse or Licensed Vocational Nurse degree	3	2.9
RN diploma degree/ Associates in Nursing	28	27.2
Bachelor of Science in Nursing	53	51.5
Master of Science in Nursing	16	15.5
PhD or DNP	3	2.9
Psychiatric Mental Health Nurse		
Yes	103	100.0
No	0	0.0
Length of Time Employed as a Nurse		
0-2	8	7.8
3-5	12	11.7
6-10	24	23.3
Over 10 years	59	57.3

Table 2 (Continued)

Descriptive Analysis of Demographic/Professional Characteristics

Variables	*N*	%
Type of Psychiatric/Mental Health Facility		
Adult acute care inpatient psychiatric facility	76	73.8
Adult outpatient psychiatric clinic	8	7.8
Psychiatric emergency services	5	4.9
Adult long-term care facility (state hospital)	5	4.9
Chemical dependency treatment facility	1	1.0
Dual diagnosis treatment center	1	1.0
Adult psychiatric home health agency/psychiatric visiting nurse agency	1	1.0
Residential mental health facility	1	1.0
Total	98	95.4
Missing	5	4.6

Prevalence of workplace violence aggression

Table 3 presents a descriptive analysis of the prevalence rates for aggressive behavior described in each POPAS item, expressed by the Likert scores. Data suggested that all (n = 103, 100%) study participants were exposed to verbal aggression and passive aggressive behavior at least once in the past year. Threatening physical aggression and threatening verbal aggression appear to be prevalent in the psychiatric department, as reported respectively by 94.2 % and 91.3% of the study participants respectively. Over half of the study participants reported exposure to mild physical aggression *(*n = 72, 69.9%) and 16.5% (n = 17) reported exposure to severe physical aggression in the past year. Psychiatric nurses also reported being exposed to sexual intimidation or harassment (n = 86, 83.5%). More than half of the participants (n = 58, 56.3 %) reported taking sick leave due to workplace violence in the past year.

Table 3

Prevalence of Perceptions of Aggressive Behavior as Described on the POPAS Items

POPAS items	**Average Likert response** 1= "never", 2= "occasionally", 3= "sometimes", 4= "often", 5= "frequently" **Mean (*SD*, Min/Max)**	**Percentage of respondents experiencing the behavior at least once in the past year** ***N* (%)**
1. Verbal aggression	**4.06** (.958, 2-5)	**103 (100%)**
2. Threatening verbal aggression	**2.77** (1.095, 1-5)	**94 (91.3%)**
3. Humiliating aggressive behavior	**2.50** (1.018, 1-5)	**90 (87.4%)**
4. Provocative aggressive behavior	**2.32** (.866, 1-5)	**91 (88.3%)**
5. Passive aggressive behavior	**3.40** (1.051, 2-5)	**103 (100%)**
6. Aggressive splitting behavior	**2.90** (1.159, 1-5)	**92 (89.3%)**
7. Threatening physical aggression	**2.86** (1.155, 1-5)	**97 (94.2%)**
8. Destructive aggressive behavior	**2.36 (**1.037, 1-5)	**84 (81.6%)**
9. Mild physical violence	**2.02** (.950, 1-5)	**72 (69.9%)**
10. Severe physical violence	**1.21** (.536, 1-4)	**17 (16.5%)**
11. Mild violence against self	**2.70** (1.110, 1-5)	**92 (89.3%)**
12. Severe violence against self	**1.86** (.919, 1-5)	**66 (64.1%)**
13. Suicide attempts	**2.06** (1.178, 1-5)	**65 (63.1%)**
14. Successful suicides	**1.17** (.382, 1-2)	**18 (17.1%)**
15. Sexual intimidation/ harassment	**2.32** (1.012, 1-5)	**86 (83.5%)**
16. Sexual assault/rape	**1.07** (.253, 1-2)	**7 (6.8%)**
17. Sick leave	**1.44** (.498, 1-2)	**58 (56.3%)**

Prevalence of perceived stress

Table 4 presents a descriptive analysis of the means of perceived stress levels among study participants. Data suggested there was a slight difference with the stress levels between male (M = 1.43, SD = .795) and female nurses (M = 1.48, SD = .612). Data also indicated higher stress levels among psychiatric nurses between ages 25-43 years old (M = 1.58, SD = .632), those with RN diploma or Associates degree in Nursing (ADN; M = 1.61, SD = .663), and those with 6-10 years of experience (M = 1.55, SD = .646).

Table 4

Perceived Stress Scale-6 (PSS-6) Mean Scores

Variable	*N*	Mean	*SD*
Gender			
Male	19	1.43	.795
Female	84	1.48	.612
Age			
18-24 years old	2	1.25	.353
25-43 years old	37	1.58	.632
44-55 years old	34	1.60	.650
56-74 years old	30	1.19	.590
Highest Education Level in Nursing			
Licensed practical nurse (LPN) or Licensed vocational nurse (LVN)	3	1.16	.451
RN diploma Program/ Associates degree in Nursing (ADN)	28	1.61	.663
Bachelor of Science in Nursing (BSN) degree	53	1.45	.606
Master of Science in Nursing (MSN) degree	16	1.42	.761
PhD or DNP degree	3	1.10	.755
Length of Time Employed as a Nurse			
0-2 years	8	1.50	.600
3-5 years	12	1.40	.526
6-10 years	24	1.55	.678
Over 10 years	59	1.45	.646

Prevalence of social support

Table 5 presents a descriptive analysis of the social support satisfaction means among study participants. Data suggested higher social support satisfaction among female psychiatric nurses (*M* = 1.55, *SD* = .867), those who were 56-74 years old (*M* = 1.43, *SD* = 910), those with PhD or DNP nursing degrees (*M* = 1.0, SD = .000), and those with 0-2 years nursing experience (*M* = 1.48, *SD* = .949). Table 6 presents a descriptive analysis of the three levels of social support: high, medium, and low. Regarding social support satisfaction levels, about two-thirds (*n* = 66, 64.1%) of study participants were in the high category (Scores from 1.00 - 1.50), while about one-quarter (*n* = 27, 26.2%) were in the medium category (Scores from 1.51 - 2.50), and the remainder (*n* = 10, 9.7%) in the low category (Scores from 2.51 - 6.00).

Table 5

Social Support Questionnaire Satisfaction Mean Scores

Variable	*N*	M	*SD*
Gender			
Male	19	1.86	1.20
Female	84	1.55	.867
Age			
18-43 years old	39	1.46	.610
44-55 years old	34	1.93	1.18
56-74 years old	30	1.43	.910
Highest Education Level in Nursing			
Licensed practical nurse (LPN) or Licensed vocational nurse (LVN)	3	2.05	1.08
RN diploma Program/ Associates degree in Nursing (ADN)	28	1.62	.739
Bachelor of Science in Nursing (BSN) degree	53	1.63	1.02
Master of Science in Nursing (MSN) degree	16	1.54	1.05
PhD or DNP degree	3	1.00	.000
Length of Time Employed as a Nurse			
0-2 years	8	1.48	.949
3-5 years	12	1.83	.837
6-10 years	24	1.66	.992
Over 10 years	59	1.56	.949

Table 6

Social Support Satisfaction Levels

Social support Satisfaction	***N***	**%**
Likert scale: 1= "Very satisfied", 2 = "Fairly satisfied", 3 = A little satisfied", 4 = "A little dissatisfied", 5 = "Fairly dissatisfied", 6 = Very dissatisfied"		
High (1.00-1.50)	66	64.1
Medium (1.51-2.50)	27	26.2
Low (2.51-6.00)	10	9.7
Total	103	100

Prevalence of posttraumatic stress symptoms

Table 7 presents the posttraumatic stress symptom means and standard deviations for each demographic. Data suggested higher levels of posttraumatic stress symptoms among male respondents (M=17.58, *SD*=20.77), those 44-55 years of age (M=17.57, *SD*=15.75), those with RN diploma or Associates degree in nursing (M=17.57, *SD*=15.38), and those employed as a nurse for 6-10 years (M=16.75, *SD*=19.38). Lastly, Table 8 presents the descriptive analysis of participants who scored 33 and higher as cut off score for likely diagnosis of PTSD. Data suggested a little over ten percent of study participants evidenced a likely PTSD diagnosis (*n* = 11, 10.7%).

Table 7

Impact of Event Scale-Revised Means (PTSD Symptoms)

Variable	*N*	M	*SD*
Gender			
Male	19	17.58	20.77
Female	84	13.57	14.46
Age			
18-43 years old	39	14.18	17.22
44-55 years old	34	17.56	15.75
56-74 years old	30	10.80	13.39
Highest Education Level in Nursing			
Licensed Practical Nurse (LPN) or Licensed Vocational Nurse (LVN)	3	10.33	6.35
RN diploma Program/ Associates Degree in Nursing (ADN)	28	17.57	15.38
Bachelor of Science in Nursing (BSN) degree	53	14.11	16.02
Master of Science In Nursing (MSN) degree	16	9.94	15.88
PhD or DNP degree	3	14.67	23.69
Length of Time Employed as a Nurse			
0-2 years	8	9.25	8.76
3-5 years	12	13.33	10.22
6-10 years	24	16.75	19.38
Over 10 years	59	14.20	15.92

Table 8

Descriptive Analysis of Likely PTSD Diagnosis

Likely PTSD diagnosis	***N***	**%**
Yes	11	10.7
No	92	89.3

Table 9 presents a descriptive analysis of the workplace violence exposure and perceived stress. Data indicated that the average study participant scored 3.29 (*SD* = .53, MIN/MAX = 2.25-4.69) on the workplace violence exposure measure. Additionally, the mean of the perceived stress scores was 14.7 (*SD* = .65, MIN/MAX = 3.0-30.00). The distribution of all the scores were approximately normal as the skewness and kurtosis were not approximately two times each respective standard error of each.

Table 9

Descriptive Analysis of Workplace Violence Exposure and Perceived Stress Scores

Variable	***M* (*SD*)**	**Minimum / Maximum**	**Skew (*SE*)**	**Kurtosis (*SE*)**
Workplace violence exposure	3.29 (.53)	2.25-4.69	.40 (.24)	-.03 (.47)
Perceived stress	14.7 (.65)	3.0-30.00	.45 (.24)	-.43(.47)

Relationships Between Demographic/Professional Characteristics and Likely PTSD Diagnosis (Bivariate Analysis)

Table 10 presents a chi-square analysis of the likely PTSD diagnosis (Yes/No) by demographic/professional characteristics and social support. Bivariate analysis indicated that likely PTSD diagnosis was not significantly related to age, $X^2(2, N = 103)=.957$, $p =$

.62, gender, $X^2(1, N = 103) = .64$, $p = .42$, highest education level in nursing, $X^2(4, N = 103) = 2.95$, $p = .56$, and length of time employed as a nurse, $X^2(3, N = 103) = 3.38$, $p = .34$.

Table 10

Chi-Square Analysis of the Likely PTSD Diagnosis (Yes/No) by Demographic/Professional Characteristics and Social Support

	Does the study participant have a likely PTSD diagnosis?			
Variable	**No** ***N* (%)**	**Yes** ***N* (%)**	**X^2(df)**	***p***
Age			**.957 (2)**	**.62**
18-43	36 (92.3)	3 (7.7)		
44-55	29 (85.3)	5 (14.7)		
56 or older	27 (90.0)	3 (10.0)		
Gender			**.64 (1)**	**.43**
Male	16 (84.2%)	3 (15.8%)		
Female	76 (90.5%)	8 (9.5%)		
Highest Education Level in Nursing			**2.95 (4)**	**.56**
Licensed Practical Nurse or Licensed Vocational Nurse	3(100%)	0 (0.0%)		
RN Diploma Program/ Associates degree	24 (85.7%)	4 (14.3%)		
Bachelor of Science	49 (92.5%)	4 (7.5%)		
Master of Science/	14 (87.5%)	2 (12.5.0%)		
PhD/DNP	2 (66.7%)	1 (33.3%)		
Length of Time Employed as a Nurse			**3.38 (3)**	**.34**
0-2 years	8 (100%)	0 (0.0%)		
3-5 years	12 (100.0%)	0 (0.0%)		
6-10 years	20 (83.3%)	4 (16.7%)		
Over 10 years	52 (88.1%)	7 (11.9%)		

Relationships Between WPV Exposure, Perceived Stress, Social Support, and Likely PTSD Diagnosis

Table 11 presents an independent-samples *t* -test analysis of likely PTSD diagnosis (Yes/No) by workplace violence exposure and perceived stress scores. Data indicated that likely PTSD diagnosis was significantly related to higher workplace violence exposure scores, $t(101) = -2.88$, $p = .005$, where likely PTSD diagnosis evidenced mean workplace violence exposure score of 3.70 (*SD* = .42) vs. a mean score of 3.23 (*SD* = .52) for no likely PTSD diagnosis. Additionally, higher perceived stress scores were significantly related to likely PTSD diagnosis, $t(101) = -5.06$, $p < .001$, where likely PTSD diagnosis evidenced mean perceived stress score of 2.31 (*SD* = .64) vs. a mean score of 1.37 (*SD* = .57) for no likely PTSD diagnosis.

Table 11

Independent Samples T-Test Analysis of Likely PTSD Diagnosis (Yes/No) by Workplace Violence Exposure and Perceived Stress Scores (*n*=105)

Variable	*N*	M (SD)	*t*(df)	*p*
Workplace Violence Exposure			**-2.88 (101)**	**.005**
Likely PTSD Diagnosis	11	3.70 (.42)		
No Likely PTSD Diagnosis	92	3.23 (.52)		
Perceived Stress			**-5.06 (101)**	**.000**
Likely PTSD Diagnosis	11	2.31 (.64)		
No Likely PTSD Diagnosis	92	1.37 (.57)		

Table 12 presents a chi-square analysis of the likely PTSD diagnosis (Yes/No) by social support. Analysis indicated that study participants in the low social support category evidenced a significantly higher rate of likely PTSD diagnosis (40.0%), relative to those in the high (7.6%) and medium (7.4%) groups. PTSD diagnosis was significantly related to social support, $X^2(17, N = 103) = 9.98$, $p = .007$.

Table 12

Chi-Square Analysis of the Likely PTSD Diagnosis (Yes/No) and Social Support

Social Support	**No**	**Yes**	**9.98(2)**	**.007**
High	61 (92.4%)	5 (7.6%)		
Medium	25 (92.6%)	2 (7.4%)		
Low	6 (60.0%)	4 (40%)		

Best Predictor for Likely PTSD diagnosis (Yes/No)

Multivariate Analysis

Table 13 presents a binary logistic regression analysis examining likely PTSD diagnosis (Yes/No) by workplace violence exposure, perceived stress, and social support. Data suggested that the overall model was statistically significant, X^2 (4) = 26.30, $p < .001$, and that 94.2% of all cases were categorized correctly. Furthermore, at the multivariate level, high level of social support was unrelated to likely PTSD diagnosis in reference to those with medium, B = -.880, SE = 1.08, $p = .41$, and low levels of social support, B = .20, SE = 1.07, $p = .85$. Additionally, workplace violence exposure was not significantly related to the dependent variable in the full model, B = 1.29, SE = .77, OR = 3.61, 95% CI = .81-16.2, $p = .093$. However, binary logistic regression did indicate that higher levels of perceived stress, B = 2.46, SE = .80, OR = 9.5, 95%

CI = 2.45-56.54, p = .002, was significantly related to likely PTSD diagnosis. Therefore, data suggested that the best predictor of likely PTSD diagnosis was levels of perceived stress.

Table 13

Binary Logistic Regression Analysis Examining Likely PTSD Diagnosis (Yes/No) by Workplace Violence Exposure, Perceived Stress, and Social Support

Variable	B (SE)	Wald X^2	Odds Ratio (95% CI)	*p*
Social Support				
High (Reference group)				
Medium	.880 (1.07)	.669	.41 (.05-3.41)	.41
Low	.20 (1.07)	.04	1.2 (.150-9.97)	.85
Workplace Violence Exposure	1.29 (.77)	2.82	3.61 (.81- 16.2)	.054
Perceived Stress	2.46 (.80)	9.5	11.76 (2.45-56.54)	.002

Open-ended Question Findings

An open-ended question was presented at the end of the survey asking participants to share their thoughts, feelings or ideas about workplace violence against psychiatric nurses and seventy-one responses were collected. Findings for the open-ended question were categorized into five themes: (1) contributing factors to patient aggression; (2) effects of WPV; (3) coping skills; (4) WPV strategies; and (5) opposing views on workplace violence as part of the job/not part of the job. The first theme,

contributing factors to patient aggression, was categorized into patient factors, environmental factors, and organizational factors. The second theme, effects of WPV, was further classified into physical effects, emotional effects, and organizational effects. Coping skills identified in the third theme were self-care, support from family and friends, and effective teamwork. The fourth theme, strategies, was divided into two classifications: strategies to prevent workplace violence and strategies to help with WPV aftermath. Detailed findings for the open-ended question will be presented in the next chapter.

Discussion

Prevalence of WPV exposure, perceived stress, social support, and posttraumatic stress symptoms

Findings from this study supported previous research that psychiatric nurses are at high risk for workplace violence. All participants in this study reported exposure to verbal aggression and passive aggressive behavior and 69.9% reported exposure to mild physical aggression. A systematic review and meta-analysis of workplace violence against healthcare workers estimated that the prevalence rate of verbal abuse was 51.8% to 63.4% and physical abuse was 22.4% to 26.4% worldwide (Liu et al., 2019). Findings in this study found a lower mean score of levels of perceived stress at14.7 (*SD* = 6.5) compared to PSS mean scores from previous studies at 31.89 (*SD*=6.09; Masa' Deh et al., 2017) and at 22.9 (*SD*=11.06; Ontiveros-Hanohano, 2017). Approximately two-thirds of the study participants (66%) reported high social support and 10 % received low social support. These findings were slightly lower compared to previous findings. Kelly et al.

(2017) reported that 72% of psychiatric staff exposed to violence found effective support and 28% did not receive adequate support after workplace violence exposure. Approximately 11% of study participants in this study reported likely PTSD diagnosis. Previous studies reported a range of PTSD symptoms among psychiatric staff between 6% (Fujimoto et al., 2017) and 24% (Hilton et al., 2017).

Relationships between likely PTSD diagnosis and age, gender, level of nursing education, and length of nursing experience

This study did not find significant relationships between likely PTSD diagnosis and age, gender, highest level of nursing education, or length of time employed as psychiatric nurse. Previous studies on psychiatric nurses and PTSD reported comparable results and did not find significant relationships between PTSD diagnosis and age, gender, and length of nursing experience (Fujimoto et al., 2017; Olashore, Akanni, Molebatsi, & Ogunjumo., 2018).

Relationships between likely PTSD diagnosis and WPV exposure, perceived stress and social support

This study found a significant relationship between likely PTSD diagnosis and workplace violence exposure which was comparable with existing studies (d'Ettorre & Pellicani, 2017; Fujimoto et al., 2017; Guan et al., 2019; Hilton et al., 2017; Lee et al., 2015; Olashare, Akanni, Molebatsi, & Ogunjumo, 2018; Seto et al., 2020). A significant association between likely PTSD diagnosis and perceived stress was observed. This finding was congruent with previous studies which reported a significant correlation between job stress and posttraumatic stress among nurses (Lee et al., 2015; Mealer et al.,

2017). Likely diagnosis of PTSD was inversely correlated with levels of social support and is congruent with previous studies that suggested social support had a protective effect on the development of posttraumatic stress symptoms among emergency room nurses (Adriaenssens, de Gucht, & Maes, 2012) and a moderator effect on alleviating posttraumatic stress symptoms among Army Nurse Corps Vietnam veterans (Stretch, Vail, & Maloney, 1985).

Best Predictor for likely PTSD diagnosis

This study found that levels of perceived stress was the best predictor for likely PTSD diagnosis. Previously, strong predictors for PTSD were severity of the trauma, absence of social support, and increased life stress (Brewin, Andrews, &Valentine, 2000) and peritraumatic dissociation (Ozer et al., 2003).

Open-ended Question Findings

Detailed findings and discussion of findings for the open-ended question are presented in the next chapter, Chapter 5.

Strengths and Limitations

The use of a theoretical framework provided direction for the relationships between the variables and helped predict or explain the outcome (Polit & Beck, 2017e). The findings of this study supported the theoretical framework. Findings in this study showed participants with low social support had the highest rate of likely PTSD diagnosis compared to those with high and medium social support. These findings support the theory that social support could mediate the short-term and long-term effects of

workplace violence exposure. Two instruments used in the study, the PSS-10 and the SSQ-6, are both grounded on the same theoretical framework. All the instruments have good validity and reliability. The use of an open-ended question at the end of the survey provided rich data on participant's perceptions on workplace violence committed by patients.

Limitations for the study included potential bias of self-selection by using convenience sampling. Psychiatric nurses who suffer from posttraumatic stress symptoms may not be included in the study. The use of self-report questionnaires and recall of events can potentially create recall bias. Other confounding factors such as shift work or type of recovery environment were not investigated in this study and may potentially be significant contributors to the development of posttraumatic stress symptoms among psychiatric nurses. The use of correlational design will not explain causality of relationships.

Recommendations

Workplace violence perpetrated by patients is highly prevalent and has serious negative effects on the psychiatric nurses. Recommendations for nursing education include a need to empower nursing students and psychiatric nurses to protect themselves through education on the negative impact of violence on their physical, emotional, and psychological health and the importance of reporting violent incidents. Findings from this study reinforce the necessity for follow-up support such as debriefing, specialized support groups, or counselling for psychiatric nurses after workplace violence exposure to decrease the development of posttraumatic stress symptoms. The relationship of

posttraumatic stress symptoms and other confounding factors such as shift work and nature of psychiatric unit should be explored. Future research on stress is needed to provide more insight on possible risk factors and effects on psychiatric nurses. Interventions to reduce workplace violence and alleviate levels of stress and posttraumatic stress symptoms among psychiatric nurses are called for. Workplace violence policy and legislation should provide more protection for psychiatric nurses.

Summary

This study aimed to investigate the prevalence and predictors of posttraumatic stress symptoms. Based on the findings of this study, workplace violence is highly prevalent among psychiatric nurses and 11% of psychiatric nurses have likely PTSD diagnosis. Demographic/professional characteristics were not significantly related to the development of posttraumatic stress symptoms, while significant relationships were found between workplace violence, perceived stress, social support, and development of posttraumatic stress symptoms. Perceived stress was the best predictor for development of posttraumatic stress symptoms.

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Chapter 5

Open-ended Question Findings

This chapter presents a detailed description of psychiatric nurse participants' responses to an open-ended question following four quantitative instruments. These findings were part of a larger study for which quantitative findings were presented in the previous chapter. Sixty-eight (68) participants responded to the open-ended question asking them to share any other thoughts, feelings, or ideas about workplace violence against nurses by psychiatric patients. Participants described their experience with workplace violence by patients as real, prevalent, and difficult. Patients verbally, physically, and sexually assaulted the nurses. Data were organized and classified into five themes: (1) opposing views on workplace violence as part of the job/not part of the job; (2) factors that contributed to patient aggression; (3) effects of WPV; (4) coping skills; and (5) strategies. Table 14 presents the themes and categories for the findings for the open-ended question.

Theme 1: Opposing views on WPV as part of the job/not part of the job

Participants expressed opposing views on WPV as part of the job and not part of the job.

WPV is part of the job. Some participants shared that WPV is expected and becomes part of the job. One participant shared, "I feel that violence in the workplace is accepted as commonplace for psychiatric nurses. It is considered acceptable and part of our job, even by our administrators." Another participant wrote, "Violence in the workplace is to be anticipated when working on a psychiatric unit or in a behavioral

health setting. We have to be aware of signs of possible violence and plan accordingly." Another participant shared how frequent exposure becomes part of the job:

> For some reason it has become "part of the job" so sometimes obvious workplace violence is not thought of as such. Sexual harassment by patients becomes so routine that we no longer pay attention to the degrading or obscene comments patients make. When a patient throws an object toward you but does not hit you, we don't even look back. I think think [*sic*] this attitude has been accepted by patients, family members, healthcare worker themselves, and sadly, administration. There is a tendency to forgive this type of behavior because patients are mentally ill, but the reality is that exposure to these events hurt healthcare workers.

Another participant shared perception of WPV as part of the job as reason for not reporting, "It is mostly underreported because it is kind of expected." Finally, one nurse pointed out:

> Workplace violence is expected in inpatient acute care facilities. That is why we nurses are required to be on SAMA/CPI or PMDB training accordingly in order to review, absorbed [*sic*] and apply what we have learned in dealing with aggressive patients.

WPV is not part of the job. Some participants expressed WPV is not part of the job and should not be tolerated. One participant stated, "Staff should not ever be a punching bag". Other participants said, "I don't think I should feel like I'm in danger at

work", "It should not be tolerated" and "I think it's important this it is not seen as 'part of the job' and just accept nurses are going to experience violence from patients". Another participant expressed:

> Some people said, violence by psych patients is part of the job. I beg to disagree! Workplace violence should be stop [*sic*] and no place [*sic*] in the workplace. Law should be created and pass [*sic*] to protect nurse from being violently attack [*sic*] by psych patients

One participant shared their perception why WPV is not part of the job, "Violence is not part of the job description. Our patients often use their diagnosis as a cop out or excuse for their behavior."

Theme 2: Contributing factors to patient aggression

Contributing factors to patient aggression identified by participants were categorized into three groups: (a) patient factors, (b) environmental factors, and (c) organizational factors.

Patient factors. Patient factors identified were lack of consequence for patient's aggressive behavior and a long history of violence.

Lack of consequence for patient's aggressive behavior. Most participants expressed concerns that patients were not held accountable for aggressive behaviors and that consequences to the behavior were lacking. A participant stated, "It seems that patients are not held accountable for their actions or behaviors towards nurses because of their specific diagnosis, which doesn't seem fair for those taking care of them". Another participant stated:

> I have found that most of the violence I have experienced comes from clients with behavioral issues who are not actively psychotic. The DA in my area does not prosecute the assaults. The clients will tell me that nothing happens to them, "what are you going to do about it?" They know they can assault and then spend time in seclusion and do it again.

One participant expressed similar concerns:

> However, for the patients that do understand and choose to assault staff, there is no accountability from the hospital or the law enforcement communities. If this same person assaulted me on the sidewalk and would be prosecuted, why does this not occur when I'm assaulted within the hospital walls?

Long history of violence. A participant described how a long history of patient violence is a predictor of aggression towards staff:

> Our acute care setting often receives patients with long violence history. We have mostly female employees. Many shifts are endured feeling as if on 'high alert,' just waiting for them to explode and hurt someone. Even our facility's security staff are 'hands off,' and arrive for panic calls as a 'show of numbers.' We're like fish in a barrel.

Environmental factors. Environmental factors contributing to patients' violent acts against nurses included the type and structure of the facility. Locked units and limited spaces were unit-related factors that contributed to patient aggression.

Type of facility. A participant stated, "In my present job, I have not experienced workplace violet [*sic*]. I think it's because of the type of facility I work in and the

patients feel they may loose [*sic*] a lot." Another participant stated, "Working out-patient there is less violence then [*sic*] inpatient but is often scarier as it's not as controlled environment [*sic*]. I often dealing [*sic*] with more sexually inappropriate behavior than violence in out-patient setting."

Structure of facility. One participant stated, "I very [*sic*] concerned that the facility is not engineered structurally for employee safety".

Organizational factors. Lack of support from administration, staff shortages, nurse characteristics, and lack of community support were organizational factors identified in the data.

Lack of support from administration. Most participants identified lack of support from administration as a major concern. One participant stated:

> The biggest problem I see is lack of support from our MH nurse executive. Staff had been warning the executives and managers about safety issues on my unit for months. But response from the executive level has always been to 'fill beds' with little concern for staffing levels and patient acuity.

Another participant shared similar concerns:

> Workplace violence is being more and more prevalent. There seems to be no intention from administration to deal with this issue at this facility. However, with the closure of numerous psychiatric facilities in this region the patient population in [*sic*] we deal with appears to be increasingly aggressive and violent.

One participant expressed perception of lack of support from physicians or providers and stated, "I feel physicians/providers often minimize the effects violent

patients have on nurses. I feel if they cared more about our well being [*sic*] they would make more of an effort to medicate appropriately and/or discharge ASAP."

Staff shortage. Staff shortages were perceived to cause an increased risk for patient aggression: "I feel that administration does not fully recognize how dangerous our job is. They are concerned with their budget which sometimes results in our unit being understaffed." Other participants shared, "Staffing ratios make all the difference" and "Staffing ratios perpetuate the issue, if ratios were better, then I feel nurses would have ample time to not only detect escalating behaviors but to also implement interventions in early detection which could eliminate the behavior all together".

Nurse characteristics. A participant voiced concerns about staff who are physically "at risk" to work in potentially aggressive work environments:

> I also am very concerned that staff on the floor are not physically able to deal with protecting themselves or other staff and patients on the floor from violent aggression as the staff on the floor hired are often tiny, skinny, older in age, pregnant, have illnesses like diabetes, lupus, morbidly obese, etc.

Another participant shared her views on staff personality traits as a nurse factor that can contribute to patient aggression:

> I believe it takes a certain type of personality i.e. traits, characteristics to endure and manage workplace violence and most definitely the ability to exhibit a high level of emotional intelligence. I believe individuals who seek to work in these areas should be screened intensively to promote strong, healthy and safe work environments for both staff and patients.

Lack of community support. Participants expressed concerns over lack of community support. One participant stated, "I have personally witnessed police dismissing violence to workers when it was reported". Other participants stated, "However, for the patients that do understand and choose to assault staff, there is no accountability from the hospital or the law enforcement communities", "We are told 'you know what you signed up for' after severe assaults by police. No community support at all", and "As a judge told a group of workers who were continually being attacked by one patient and tried to get the court to help, 'you knew this could happen when you decided to work there'".

Theme 3: Effects of WPV

Nurse participants reported that exposure to workplace violence had negative physical, emotional, and psychological effects, can lead to decreased job satisfaction and cause nurses to leave their jobs.

Physical effects. One participant witnessed a violent assault on a colleague and described the incident: **"**On Mother's Day Sunday, a colleague took a kung fu kick directly in the face, breaking her nose...blood spurted out from her face. It was awful! I felt so badly for her." Another participant stated, "I have been attacked and injured 3 times and spit on several times."

Emotional effects. Participants highlighted how exposure to workplace violence can lead to negative emotions such as fear, hypervigilance, and desensitization. After witnessing a colleague violently attacked by a patient, a participant expressed fear, "I just knew, I had to get out of there before something bad happened to me!" One participant

described feeling hypervigilant, “I feel that nurses should never get too comfortable around this patient environment. [*sic*] it can be dangerous to let our guards down.” Another participant expressed how frequent exposure to workplace violence can lead to desensitization, “After working in this environment for several years, one becomes desensitized to many of these negative aggressive behaviors.”

Organizational effects. Organizational effects of exposure to workplace violence which emerged from the data were time away from work and job turnover. A participant described her experience with workplace violence and its consequence: “I have been victim [*sic*] of violence in past [*sic*] and had to take time off work due to injury that occurred.” Participants shared, “I left a job in a psychiatric inpatient facility because, among other reasons, it was becoming too violent” and:

> A particular instance that impacted me so much that I changed my nursing job, happened a while back… I sadly feel that my instances have shortened my nursing career as I deal with daily discomfort, but no one is going to just hand me a paycheck, so I soldier on. If I had a dollar for every time a patient said, ‘you can’t do anything to me, I’m a psych patient’.

Theme 4: Coping skills

Participants shared their coping mechanisms to maintain emotional and psychological health such as self-care, support from family and friends, and effective teamwork.

Self-care. One participant described how she copes, “I have found self-care to be an extremely important modality”. Others shared, “Be gentle with all (including

yourself)" and "…to separate personal and work life. I don't talk about my home life at work or my work life at home".

Support from family and friends. A participant stated, "I have a wonderful support system with lots of friends and family, and I needed each and every one of them to get through." Another participant shared, "having support that listens and encourages thoughtful constructive insights on areas of opportunity for improvement, safer actions, increased awareness for future incidents and more positive outcomes".

Effective teamwork. Participants also shared that effective teamwork made a difference with the outcome of a negative experience. One participant shared, "I am happy that I work in a place where the team (doctors, nurses, CNAs and police/security officers) are working hand in hand during these times. I feel safe". Another participant also stated, "I feel supported by my team, my managers, and I truly love my job".

Theme 5: Strategies

Participants identified need for strategies to prevent workplace violence and strategies to help with WPV aftermath.

Strategies to prevent workplace violence. Strategies identified to prevent workplace violence include training, de-escalation techniques, medications, and security personnel.

Need for training. Participants expressed the importance of training in crisis prevention. One participant shared, "De-escaltion [*sic*] training and self-defense techniques should be part of any new hire orientation". A participant expressed, "I am further concerned that employees are not given crisis intervention techniques that

adequately deal with real violent attacks". One participant shared the struggle after the training, "We are trained in CPSI but when it happens it's hard to remember how to do some of those things".

Use of de-escalation techniques. One participant identified using de-escalation techniques as an effective strategy to prevent workplace violence, "I always apply my therapeutic verbal de-escalation and earned my patient's trust to make them feel safe and comforted". Another participant shared the importance of a nurse's interaction style:

> We have to tough through the hard stuff. And be very wary/watchful for our own safety and not be so prone to jump into a situation. Step back…Never lie to patients. Listen to them. Buried in that psychosis there is a grain of truth to find…Staff need the skills to reflect on their own interaction styles...Peplau for all. And if I have to explain that reference, that says it all about where we are as psychiatric nurses.

Use of medications. Some participants shared that sometimes medications can help prevent workplace violence. One participant wrote, "Appropriate medication administration when pts [*sic*] become agitated either verbally or non verbally[*sic*] before they become physically aggressive". Another participant shared, "When patient starts to act out, I make sure that I asked for help from my team and give PRN medications to help them calm down before starting to act out or injure themselves or others".

Need for security personnel. One participant expressed concerns, "Some hospitals don't have any security personnel, this is not acceptable to me (fortunately my hospital does)". Another participant stated:

> Employers need to provide safer staffing ratios and security on psych units as I have seen the desire to 'protect patients above all else' along with cutting corners to save pennies cause nurses and techs to get injured.

Strategies to help with WPV aftermath. Strategies to help with WPV aftermath included emotional support or counselling services, debriefing, and reporting.

Emotional support or counselling services. A recurring need that participants expressed was for emotional support after exposure to a violent incident. Participants shared, "I think there needs to be resources available to psych nurses to cope with daily trauma from work" and "Extreme need for counseling for themselves to process through what is happening to them and how it connects with life at home". Another participant expressed, "Facilities do next to nothing to assist employees after events. All they care about is the absence or presence of physical harm. Emotionally we are not assisted or cared for". Others shared "We are often expected to push through because the patient may not be in the right frame of mind. We should be treated with the same attention as any other victim" and "I feel there is not enough support resources for staff emotionally after being a victim of violence".

Debriefing. Participants identified the importance of debriefing after exposure to a violent incident. One participant expressed, "For me, it's important to process events with coworkers as they happen." Another participant stated, "Debriefing needs to be done after these events for the nurse."

Reporting. Some participants identified the importance of reporting workplace violence. One participant stated, "Workplace violence should be reported" and another shared:

> All people who work with patients who are [*sic*] struggling with mental health need to officially report all types of workplace violence so that, eventually, these types of environments can be staffed with the numbers [*sic*] of staff that is necessary.

Table 14

Themes and Categories for Open-Ended Question Findings

THEMES	CATEGORIES
1. Opposing views on WPV as part of the job/not part of the job	A. WPV is part of the job B. WPV is not part of the job
2. Contributing factors to patient aggression	A. Patient factors 1. Lack of consequence for patient's aggressive behavior 2. Long history of violence B. Environmental factors: 1. Type of facility 2. Structure of facility C. Organizational factors 1. Lack of support from administration 2. Staff shortage 3. Nurse characteristics 4. Lack of community support
3. Effects of WPV	A. Physical effects B. Emotional effects C. Organizational effects
4. Coping skills	A. Self-care B. Support from family and friends C. Effective teamwork
5. Strategies	A. Strategies to prevent WPV 1.Training 2. De-escalation techniques 3. Medications 4. Security personnel B. Strategies to help with WPV aftermath 1. Debriefing 2. Emotional support or counselling services 3. Reporting

Discussion

One of the most significant findings from the open-ended question was the conflicting views on workplace violence as part of the job versus not part of the job. This finding was comparable to a study by Stevenson et al. (2015) who reported that although psychiatric nurses perceived workplace violence by patients as inevitable, they did not want to tolerate this experience. The conflicting views on workplace violence as part of the job/not part of the job could signify a change towards increased awareness of the dangers of violence and that nurses are more motivated to speak up (Stevenson et al., 2015).

The contributing factors to patient aggression described by the respondents in this study were consistent with existing literature and included patient, environmental and organizational factors. Current findings were consistent with previous studies that suggested a long history of violence (d'Ettorre & Pellicani, 2017; Stevenson et al., 2015), locked units and limited spaces (Middelboe et al., 2001; Niu et al., 2019) contributed to patient aggression. A recurring theme throughout the data was lack of consequence for patient's behavior. Respondents expressed concerns that patients' diagnoses were used as excuses for the aggressive behavior and similar to previous evidence whereby aggressive behavior was tolerated and justified because patients were assumed incapable of controlling their actions (Niu et al., 2019; Stevenson et al., 2015). However, when respondents in the current study perceived patients as capable of controlling their behavior, lack of accountability and consequences for the aggressive behavior towards staff existed. Another recurring theme throughout the data was lack of support from

administration. Pekurinen et al. (2017) reported association between organizational justice and patient aggression. Organizational justice is defined as the employee's discernment of his or her institution's actions, resolutions, and responses and how these impact the employees' demeanors and conduct at work (Greenberg, 1987; Pekurinen et al., 2019). There is a need to explore the concept of organizational justice in the psychiatric setting.

The physical, emotional, and organizational effects described by respondents in this study were also comparable with current literature. Previous findings included physical consequences, including fractures, cuts, and bruises (d'Ettorre & Pellicani, 2017), and emotional effects such as fear, anger, and hypervigilance (Stevenson et al., 2015). Psychiatric nurses became desensitized to violence which often led to underreporting (Lanza, Zeiss, & Rierdan 2006). Consistent with previous literature (Edward et al., 2014), one respondent in the current study stated she left a position because of WPV.

Coping strategies described by respondents in this study were consistent with existing literature: self-care (American Psychiatric Nurses Association, 2020), social support (Zhao et al., 2015), and teamwork (Pekurinen et al., 2017). Respondents described a need for strategies to prevent workplace violence (training, de-escalation, medication, and security) and strategies to help with WPV aftermath (emotional support, debriefing and reporting). Previous literature reported a need for strategies such as target training for violence (Zhao et al., 2015) debriefing (Jefferey & Fuller, 2016), and improved reporting system (Niu et al., 2019). Another prevailing theme in the data was a

need for emotional support or resource in the aftermath of workplace violence exposure. Previous studies suggested strategies such as specialized support groups for workplace violence nurse victims (Moylan, McManus, Cullinan, & Persico, 2016) and crisis counselling (Lanza, 1992) to promote emotional and psychological healing among psychiatric nurses.

Summary

The open-ended question aimed to explore psychiatric nurses' perspectives on workplace violence perpetrated by patients. Findings from the data were categorized into five themes: (1) conflicting views on workplace violence as part of the job/not part of the job, (2) contributing factors of WPV, (3) risk factors for WPV, (4) coping skills, and (5) strategies for WPV. Findings from this study supported the high prevalence of workplace violence among psychiatric nurses and the severity of its negative effects. The open-ended responses also supported the theory that social support was recognized as important and necessary to cope. There is a serious lack of organizational support and resources after exposure to violent incidents. As one nurse pointed out when caring for psychiatric patients, nurses feel like fish in a barrel.

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Chapter 6

Summary Chapter

Findings from the quantitative study and the open-ended question reflected a high prevalence of workplace violence among psychiatric nurses which has serious negative consequences. Findings from the quantitative data suggested 11% of study participants have likely PTSD diagnosis. This finding was supported in the responses of the open-ended question as participants expressed negative emotions of fear, hypervigilance, and desensitization as aftermath to workplace violence. Some participants left their jobs and one participant left the nursing profession after exposure to workplace violence.

Current study findings showed two thirds of the study participants (66%) have high levels of social support. This finding was supported in the open-ended question as participants expressed that support from family, friends, and working as a team was important and helped in alleviating the effects of workplace violence exposure.

Recommendations

Recommendations for nursing education, practice research, and health policy are provided based on current study findings. Nursing educators can teach nursing students about workplace violence prevention. In addition to workplace violence training programs, facility educators can empower nurses by teaching therapeutic communication skills, de-escalation techniques, assessment skills, and interventions to decrease PTSD. Replication of the study on other members of the healthcare team in the psychiatric setting is recommended. Future studies should focus on exploring administration's perspectives on workplace violence by patients against psychiatric nurses. Intervention

studies on improving communication between administration and nursing staff are recommended. Legislation, guidelines, and policies to promote a culture of safety among psychiatric nurses are also imperative.

Summary

Working with psychiatric patients is a challenging task (Hylen et al., 2019). Exposure to workplace violence through verbal, physical, or sexual assault is a daily threat for nurses in a psychiatric setting (Fujimoto et al., 2017). The use of physical restraint is often used to control aggressive behavior as a last resort (Riahi et al., 2016). Due to the expanding literature on the negative effects of physical restraints, the Centers for Medicare and Medicaid Services ([CMS], 2008) set guidelines for organizations to reduce restraint use. When conditions are not met to qualify for restraint use, the intention for its use becomes an ethical issue for the psychiatric nurse. The use of physical restraint is not meant to discipline or retaliate against psychiatric patients (CMS, 2008).

A review of literature on interventions found two different approaches: interventions to prevent WPV and interventions to address WPV aftermath. Interventions to prevent WPV include WPV prevention training programs (Arbury et al., 2017), compulsory commitment treatment (Wolf et al., 2017); and workshop on personal safety, communication, and organizational learning (Isaak et al., 2017). Interventions to address WPV aftermath include group intervention to decrease stress levels (Inoue et al., 2011) and an educational booklet to decrease distress levels (Nhiwatiwa, 2003).

The current study aimed to investigate the prevalence and examine the predictors of posttraumatic stress symptoms and to explore psychiatric nurses' perceptions of workplace violence. Based on the findings of this study, there was a high prevalence of exposure to verbal abuse, passive aggressive behavior, and mild physical abuse among psychiatric nurses. Most of the participants had high levels of social support and lower levels of perceived stress. Approximately 11% of study participants had likely PTSD diagnosis. There was no significant association between demographic and professional characteristics (age, gender, highest level of nursing education, and length of nursing experience) and likely PTSD diagnosis. Workplace violence exposure, levels of social support, and perceived stress were significantly associated with likely PTSD diagnosis, and perceived stress was the best predictor of likely PTSD diagnosis. Five themes emerged from the open-ended question: opposing views on workplace violence is part of the job/not part of the job, contributing factors of WPV, risk factors of WPV, effects of WPV, and strategies for WPV.

Based on the findings of this study, workplace violence by patients against psychiatric nurses is a growing problem in healthcare with serious consequences such as posttraumatic stress symptoms. Future research should focus on stress among psychiatric nurses and intervention studies to alleviate stress and posttraumatic stress symptoms. Studies exploring administration's perspectives on workplace violence committed by patients against nurses and ways to improve communication between administration and nursing staff are recommended. Intervention studies on emotional aftercare or support services after exposure to patient aggression are needed.

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Appendix A

Email Confirmation of Manuscript Submission

(Workplace Violence Internventions for Psychiatric Nurses)

Issues in Mental Health Nursing <onbehalfof@manuscriptcentral.com>
Fri 5/18/2018 6:19 PM
To: Sheila Herrera; sheila_herrera7@yahoo.com

Dear Mrs Herrera:

Your manuscript entitled "Workplace Interventions for Psychiatric Nurses" which you submitted to Issues in Mental Health Nursing, has been reviewed. The reviewer comments are included at the bottom of this letter, along with those of the editor who coordinated the review of your paper.

The reviewer(s) would like to see some revisions made to your manuscript before publication. I encourage you to attend carefully to their feedback. I believe that their suggestions, if followed, will result in a better paper. Please bear in mind that the recommendations of reviewers are guides, not necessarily "orders." To cite another editor whom I greatly admire (Peggy Chinn): "Reviewers represent a range of perceptions similar to those of the journal's readers, and therefore reflect different responses to your ideas and presentation....Revisions should be made consistent with your own judgment concerning the merits of the reviewers' comments."

When you revise your manuscript please highlight the changes you make in the manuscript by using the track changes mode in MS Word or by using bold or colored text.

To submit the revision, log into https://mc.manuscriptcentral.com/umhn and enter your Author Center, where you will find your manuscript title listed under "Manuscripts with Decisions." Under "Actions," click on "Create a Revision." Your manuscript number has been appended to denote a revision. Please enter your responses to the comments made by the reviewer(s) in the space provided. You can use this space to document any changes you made to the original manuscript (or chose not to make). Please be as specific as possible in your response to the reviewer(s).

Alternatively, once you have revised your paper, it can be resubmitted to Issues in Mental Health Nursing by way of the following link:

*** PLEASE NOTE: This is a two-step process. After clicking on the link, you will be directed to a webpage to confirm. ***

https://mc.manuscriptcentral.com/umhn?URL_MASK=b1862b0896e841c9bacbe5803100eae2

IMPORTANT: Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.

Because we are trying to facilitate timely publication of manuscripts submitted to Issues in Mental Health Nursing, your revised manuscript should be uploaded as soon as possible. Do keep me informed regarding your progress in attending to the revisions requested. If you cannot complete the revisions within 60 days of receiving this letter, I will consider the manuscript as a new submission.

Once again, thank you for submitting your manuscript to Issues in Mental Health Nursing and I look forward to receiving your revision.

Sincerely,
Dr Thomas
Editor in Chief, Issues in Mental Health Nursing
sthomas@utk.edu

Appendix B

Consent to use theoretical schematization of stress, coping and adaptation

(Lazarus & Folkman, 1984)

Folkman, Susan Susan.Folkman@ucsf.edu

Sun 11/24/2019 9:27 PM

To: Sheila Herrera <sherrera2@patriots.uttyler.edu>

Permission granted. Best wishes with your research.
Susan Folkman

Appendix C Transactional Model of Stress and Coping (Lazarus & Folkman, 1984)

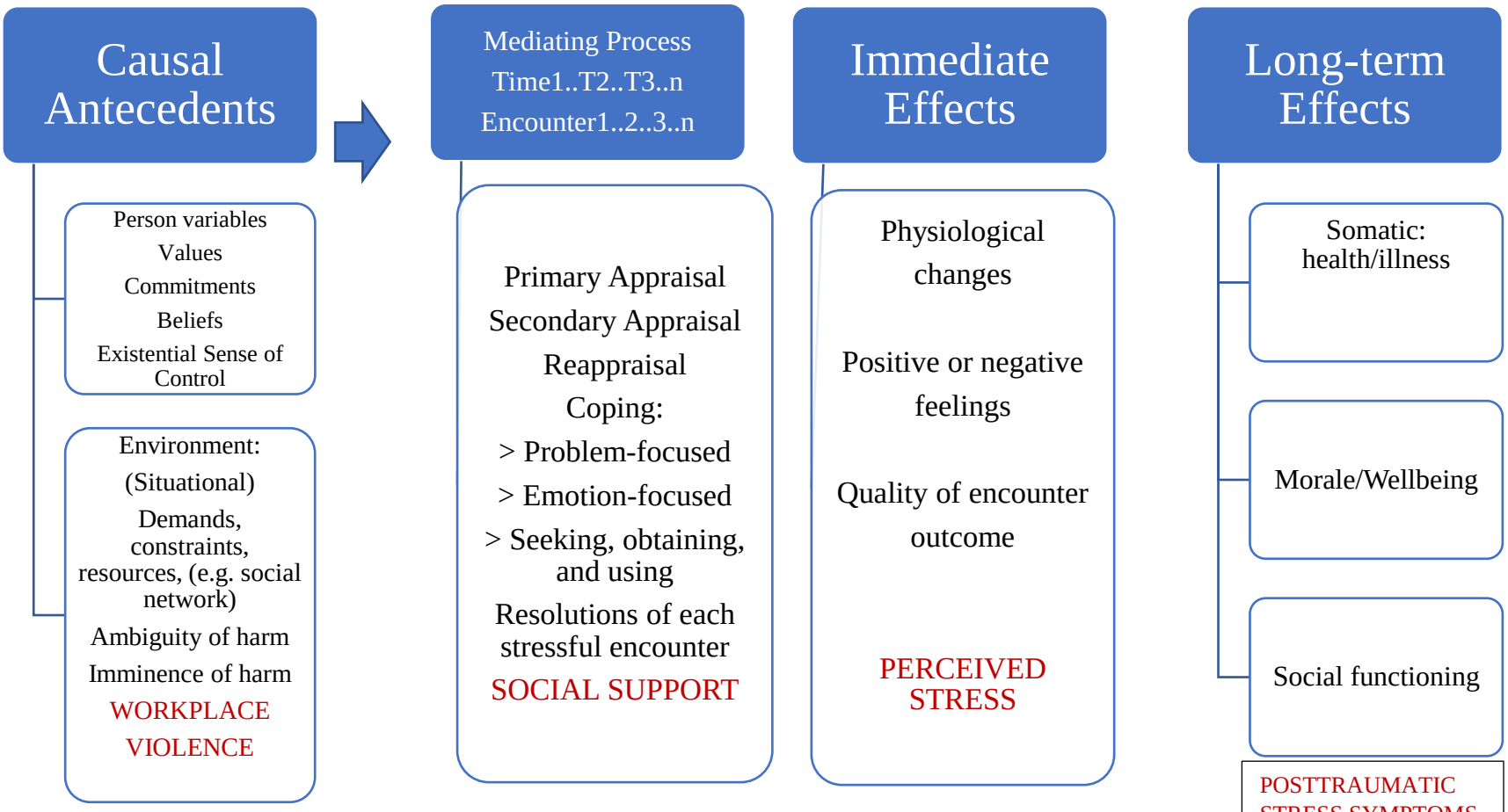

Figure 1. A theoretical schematization of stress, coping, and adaptation (Lazarus & Folkman, 1984, used with author's permission)

Appendix D

Permission to use POPAS (Oud, 2000)

Nico Oud <nico.oud@freeler.nl>
Mon 10/14/2019 3:01 AM
To: Sheila Herrera
Cc: Nijman, Henk H.Nijman@fivoor.nl

Dear Sheila,

Thank you very much for your mail regarding the POPAS

I feel honored by your request to use the POPAS for your research.

I hereby grant you permission to use the POPAS for that matter, however I would like to be kept updated about the research process itself if possible.

Further if possible, I would like to be involved at a later date with possible publications about the results of your project.

I copy this mail also to Prof. Henk Nijman who is my mentor for this matter here in the Netherlands.

I also will send you some material about the POPAS, of which I think might be a support for your research project.

Please have also a look at: http://oudconsultancy.nl/Oslo_11_ECVCP/index.html

Kind regards, and wishing you all the best

Drs. N.E. Oud (Nico Oud)
Hakfort 621
1102 LA Amsterdam
The Netherlands
Tel: ++ 31 (0)20 409 0369 (private)
Tel: ++ 31 (0)20 409 0368 (office)
Fax: ++ 31 (0)20 409 0550
E-Mail: nico.oud@freeler.nl

Appendix E

The Perception of Prevalence of Aggression Scale (POPAS) questionnaire

Dear colleague,

This questionnaire has been developed to assist individuals in identifying the frequency with which they have been confronted with aggressive or violent behaviour during the last year in the course of their professional work as a health care worker in psychiatry. There are in total 17 questions.

Please, estimate how often you have been confronted with the various kinds of aggressive and or violent behaviour.

Each question has two parts, the first requires a tick and the second a figure on the dotted line.

For example:

Public Libraries

To what extent have you visited your local **public library** during the last year?

( ) never

( ) occasionally

( ) sometimes

() often

( ) frequently

What are the estimated number of time in the past year

15

……. times

1. Verbal aggression

For example: patients making loud noises, shouting, cursing, yelling personal insults, however not being perceived as a clear threat by you.

To what extent have you been confronted with **ordinary verbal aggression** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

()

What will be the estimated number of times in the past year?

…… times

2. Threatening verbal aggression

For example: patients cursing viciously, using foul language in anger, making clear verbal threats of violence towards you, having angry outbursts, threatening hearth and home in the future (I will visit you later at home, I will get to your children-family, etc..), and which is perceived by you as frightening and threatening with emotional distress as a result.

To what extent have you been confronted with **threatening verbal aggression** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

()

What will be the estimated number of times in the past year?

…… times

3. Humiliating aggressive behaviour

For example: patients expressing clear personal insults, abusive cursing, calling names, making discriminating remarks/gestures, spitting, which is all perceived as making an impression on you and brings down your pride and self-esteem, in other words you feel humiliated ... (if perceived as sexual intimidation or harassment, see question 17)

To what extent have you been confronted with **humiliating aggressive behaviour** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

What will be the estimated number of times in the past year?

…… times

3

4. Provocative aggressive behaviour

Provocative behaviour is used if you perceive that the patient has the intention to fasten a quarrel upon you or a person in order to bring forth a social negative response. In other words you feel provoked by the behaviour of the patient(s) to response with actions or remarks which in principle are not being experienced as socially acceptable for you.

To what extent have you been confronted with **provocative aggressive behaviour** during the last year in the course of your work?

() never
() occasionally
() sometimes
() often
() frequently

What will be the estimated number of times in the past year?

…… times

---

5. Passive aggressive behaviour

Passive aggressive behaviour is behaviour that is being perceived by you as irritant, annoying, resistive, and counteractive, without at one moment being openly aggressive. Superficially and apparently the patient seems to show co-operative behaviour, however the underlying behaviour is perceived as being the total opposite. The patient is trying to be a saint, but…..

To what extent have you been confronted with **passive aggressive behaviour** during the last year in the course of your work?

() never
() occasionally
() sometimes
() often
() frequently

What will be the estimated number of times in the past year?

…… times

---

6. Aggressive splitting behaviour

For example: patients who are dividing you, others or a group in two opposite poles (negative or positive) and playing you off against other staff and tending to influence other, more vulnerable clients to join their 'war' against staff, which created conflict or disharmony among staff members.

To what extent have you been confronted with **Aggressive splitting behaviour** during the last year in the course of your work?

() never
() occasionally
() sometimes
() often
() frequently

What will be the estimated number of times last year?

…… times

4

7. Threatening physical aggression

For example: patients throwing objects to you (without direction and no injury), slamming doors, scattering clothes, making a mess, marking the wall, urinating on the floor, making threatening gestures, grasping clothes, threatening approaches, threatening of violence with a knife, pistol or other dangerous weapon towards you, throwing objects down, kicking furniture without breaking it, swinging at people, and which is perceived by you as threatening.

To what extent have you been confronted with **threatening physical aggression (by means of objects or behaviour)** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

What will be the estimated number of times last year?

…… times

---

8. Destructive aggressive behaviour

For example: patients breaking objects, smashing windows, setting fires, throwing objects dangerously, smashing the TV, kicking around, causing damage.

To what extent have you been confronted with **destructive aggressive behaviour** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

What will be the estimated number of times last year?

…… times

---

9. Mild physical violence

For example: patients kicking, hitting, pushing, punching, scratching, pulling hair, biting, attacking you, etc..., however all with no real harm or injury as a result or only minor injuries as a result (bruises, sprains, welts).

To what extent have you been confronted with **mild physical violence** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

What will be the estimated number of times last year?

…… times

10. Severe physical violence

For example: patients attacking you with severe injuries as a result (broken bones, deep lacerations, internal injuries, loss of teeth, loss of consciousness) and therefore in need of medical treatment or hospitalisation.

To what extent have you been confronted with **severe physical violence (with major injury as result)** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

()

What will be the estimated number of times last year?

…… times

---

11. Mild violence against self

For example: patients picking or scratching their own skin, hitting themselves, pulling their own hair, banging their head, hitting fist into objects, throwing self onto floor or into objects, hurting themselves (with minor injury, small cuts or bruises, or minor burns as a result).

To what extent have you been confronted with **mild violence against self (no suicide attempt and with minor injury as a result)** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

()

What will be the estimated number of times last year?

…… times

---

12. Severe violence against self

For example: patients mutilating themselves, causing deep cuts, bites that bleed, cigarette burns, with serious injury as a result (cuts or major burns, internal injury, fracture, loss of consciousness, loss of teeth and therefore in need of medical treatment or hospitalisation).

To what extent have you been confronted with **severe violence against self (no suicide attempt and with major injury as a result)** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

()

What will be the estimated number of times last year?

…… times

13. Suicide attempts

For example: patients taking tablets, cutting wrists, jumping from buildings, etc.., however not leading to a successful suicide.

To what extent have you been confronted with **suicide attempts** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

What will be the estimated number of times last year?

…… times

---

14. Successful suicides

To what extent have you been confronted with **a successful suicide** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

What will be the estimated number of times last year?

…… times

---

15. Sexual intimidation/harassment

For example: patients making obscene gestures, showing intrusive behaviour or exhibitionistic behaviour, asking for sexual contact, requesting to go out together, making sexual remarks, chasing, calling, writing, also privately, threatening with assault or rape, showing sexist behaviour, confronting you with pornographic material, drawing sexual representations on the wall.

To what extent have you been confronted with **sexual intimidation/harassment** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

What will be the estimated number of times last year?

…… times

16. Sexual assault/rape

For example: patients assaulting you direct physically with the aim of having sex with you without consent or sexual raping you by penetrating a body hole.

To what extent have you been confronted with **sexual assault/rape** during the last year in the course of your work?

() never

() occasionally

() sometimes

() often

() frequently

What will be the estimated number of times last year?

…… times

---

17. Sick leave

Have you been on **sick-leave** during the last year in the course of your work?

() yes

() no

What will be the estimated number of times / days off due to sick-leave last year?

…… times

---

18. What will be the estimated number of times / days off due to aggression or violence last year?

…… times

Thank you for completing our questionnaire

Please return to:

CONNECTING – partnership for Consultancy & Training, Hakfort 621, 1102 LA Amsterdam, the Netherlands

For comparison and further analysis the following data could be asked for

Personal data:

Age

Gender

(Nursing) Education (level)

(Nursing) Practical Experience

Appointment

Aggression Course

Ward data:

Type of hospital / institution

Type of Ward

Name of Ward

Total admissions per year

Average length of stay

Frequency of involuntary admissions

Number of involuntary admissions per year

Number of open beds

Number of closed beds

Number of seclusion's per year

Average length of seclusion's

Appendix F

Permission to use PSS-10 (Cohen & Williamson, 1988)

PERMISSION FOR USE OF THE PERCEIVED STRESS SCALE

I apologize for this automated reply. Thank you for your interest in our work.

PERMISSION FOR USE BY STUDENTS AND NONPROFIT ORGANIZATIONS: If you are a student, a teacher, or are otherwise using the Perceived Stress Scale (PSS) without making a profit on its use, you have my permission to use the PSS in your work. Note that this is the only approval letter you will get. I will not be sending a follow-up letter or email specifically authorizing you (by name) to use the scale.

PERMISSION "FOR PROFIT" USE: If you wish to use the PSS for a purpose other than teaching or not for profit research, or you plan on charging clients for use of the scale, you will need to see the next page: "Instructions for permission for profit related use of the Perceived Stress Scale".

QUESTIONS ABOUT THE SCALE: Information concerning the PSS can be found at https://www.cmu.edu/dietrich/psychology/stress-immunity-disease-lab/index.html (**click on scales on the front page)**. Questions about reliability, validity, norms, and other aspects of psychometric properties can be answered there. The website also contains information about administration and scoring procedures for the scales. Please do not ask for a manual. There is no manual. Read the articles on the website for the information that you need.

TRANSLATIONS: The website (see URL above) also includes copies of translations of the PSS into multiple languages. These translations were done *by other investigators*, not by our lab, and we take no responsibility for their psychometric properties. If you translate the scale and would like to have the translation posted on our website, please send us a copy of the scale with information regarding its validation, and references to relevant publications. If resources are available to us, we will do our best to post it so others may access it.

Good luck with your work.

Sheldon Cohen
Robert E. Doherty University Professor of Psychology
Department of Psychology
Baker Hall 335-D
Carnegie Mellon University
Pittsburgh, PA 15213

Appendix G

Perceived Stress Scale–10 (PSS–10; Cohen & Williamson, 1988)

Perceived Stress Scale- 10 Item

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate with a check how often you felt or thought a certain way.

1. In the last month, how often have you been upset because of something that happened unexpectedly?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

2. In the last month, how often have you felt that you were unable to control the important things in your life?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

3. In the last month, how often have you felt nervous and "stressed"?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

4. In the last month, how often have you felt confident about your ability to handle your personal problems?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

5. In the last month, how often have you felt that things were going your way?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

6. In the last month, how often have you found that you could not cope with all the things that you had to do?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

7. In the last month, how often have you been able to control irritations in your life?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

8. In the last month, how often have you felt that you were on top of things?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

9. In the last month, how often have you been angered because of things that were outside of your control?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

__0=never	___1=almost never	___2=sometimes	___3=fairly often	___4=very often

This scale can be found in:

Cohen, S., Kamarck, T., Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385-396. https://www.cmu.edu/dietrich/psychology/stress-immunity-disease-lab/scales/pdf/globalmeas83.pdf

Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the United States. In S. Spacapam & S. Oskamp (Eds.), *The social psychology of health: Claremont Symposium on applied social psychology*. Newbury Park, CA: Sage. https://www.cmu.edu/dietrich/psychology/stress-immunity-disease-lab/scales/pdf/cohen,-s.--williamson,-g.-1988.pdf

Appendix H

Social Support Questionnaire-6 (Sarason, Sarason, Shearin, & Pierce, 1987)

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Healthy Families Program

SSQ

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NIDA - CFS - 0008	ASSESSMENT DATE: __ / __ / ____ (mm/dd/yyyy)
NODE: 07	PHASE: O Baseline O Post Randomization
SITE ID: 01 - 00	SEGMENT: SEQUENCE: 01
PARTICIPANT ID:	FORM COMPLETED BY:
RELATION: 01 - 01	FORM COMPLETION LANGUAGE: O English O Spanish O Both
☐ FORM COMPLETION STATUS	1=Form completed as required 4=Not enough time at the visit 2=Participant refused 5=Participant did not attend visit 3=Responsible person did not complete 6=Other (specify: _____)

INSTRUCTIONS: The following questions ask about people in your life whom provide you with help or support. Each question has two parts. For the first part, I will ask you to tell me all the people you know, except for yourself, whom you can count on for help or support in the manner described. Give the person's initials (first name/last name), relationship to you (see example) and their birth year if you know it. Please ignore the last box, labeled "code." Do not list more than 9 people.

For the second part, tell me how satisfied you are with the overall support you have.

If you have had no support for a question, check the words "No one", but still tell me your level of satisfaction.

Here is an example of the questions I will be asking. Please answer all questions best you can. All your responses will be kept confidential.

INSTRUCCIONES: *Las siguientes preguntas les preguntaran acerca de personas en su vida las cuales les ayudan y le dan apoyo. Cada pregunta tiene dos partes. Para la primera parte, le preguntaré sobre las personas que usted concoce, aparte de usted, con las cuales puede contar para que la ayuden y le den apoyo en la manera descripta. Dé las iniciales de esa persona (nombre y apellido), parentesco (vea ejemplo) y su año de nacimiento si usted lo sabe. Por favor ignore la última casilla etiquetada "codigo". No enumere más de 9 personas.*

En la segunda parte, dígame cuán satisfecho/a está usted con el apoyo general que usted tiene.

Si para alguna pregunta usted no tiene apoyo, marque las palabras "nadie", pero de todas maneras déjeme saber su nivel de satisfacción.

Aquí tiene un ejemplo de las preguntas que le haré. Por favor conteste todas las preguntas lo mejor que pueda. Todas las respuestas se mantendrán confidenciales.

Comments: *Comentarios:*

Version 1.05 08/09/2004

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Healthy Families Program
SSQ

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SITE: 01 - 00 | PART ID: ____ | RELATION: 01 - 01 | ASSESS DATE: __/__/____

Example:
Who do you know whom you can trust with information that could get you in trouble? ○ No One *Nadie*

Ejemplo:
¿ En quién puede usted confiar con información que le puede meter en problemas?

Initials *Iniciales*	Relationship *Parentesco*	Relationship Code	Year Born *Año de Nacimiento*
1) TN	sister	__ - __	1979
2) LM	mother	__ - __	1950
3) RA	spouse	__ - __	1975
4) TN	friend	__ - __	1977
5) LS	daughter	__ - __	1991
6)		__ - __	
7)		__ - __	
8)		__ - __	
9)		__ - __	

(example continuation) How satisfied? *(cont. de ejemplo) ¿ Cuan satisfecho/a?*

○ Very satisfied *Muy satisfecho* ○ Fairly satisfied *Algo satisfecho* ○ A little satisfied *Un poco satisfecho* ● A little dissatisfied *Un poco insatisfecho* ○ Fairly dissatisfied *Algo insatisfecho* ○ Very dissatisfied *Muy insatisfecho*

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Healthy Families Program
SSQ

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SITE: 01 - 00 | PART ID: ___ | RELATION: 01 - 01 | ASSESS DATE: __/__/____

1. Who can you count on when you need help? ○ No One
¿Con quién puede usted contar cuando usted necesita ayuda? *Nadie*

Initials *Iniciales*	Relationship *Parentesco*	Relationship Code	Year Born *Año de Nacimiento*
1)		-	
2)		-	
3)		-	
4)		-	
5)		-	
6)		-	
7)		-	
8)		-	
9)		-	

How satisfied? *¿Cuan satisfecho/a?*

○ Very satisfied *Muy satisfecho* ○ Fairly satisfied *Algo satisfecho* ○ A little satisfied *Un poco satisfecho* ○ A little dissatisfied *Un poco insatisfecho* ○ Fairly dissatisfied *Algo insatisfecho* ○ Very dissatisfied *Muy insatisfecho*

2. Whom can you really count on to help you feel more relaxed when you are under pressure or tense? ○ No One
¿Con quién puede usted contar para ayudarle a relajarse cuando usted se siente bajo presión o tensión? *Nadie*

Initials *Iniciales*	Relationship *Parentesco*	Relationship Code	Year Born *Año de Nacimiento*
1)		-	
2)		-	
3)		-	
4)		-	
5)		-	

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SSQ

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SITE: 01 - 00 | PART ID: ☐☐☐ | RELATION: 01 - 01 | ASSESS DATE: __/__/____

Initials *Iniciales*	Relationship *Parentesco*	Relationship Code	Year Born *Año de Nacimiento*
6) ☐☐		☐☐ - ☐☐	☐☐☐☐
7) ☐☐		☐☐ - ☐☐	☐☐☐☐
8) ☐☐		☐☐ - ☐☐	☐☐☐☐
9) ☐☐		☐☐ - ☐☐	☐☐☐☐

How satisfied? *¿Cuan satisfecho/a?*

O Very satisfied *Muy satisfecho* | O Fairly satisfied *Algo satisfecho* | O A little satisfied *Un poco satisfecho* | O A little dissatisfied *Un poco insatisfecho* | O Fairly dissatisfied *Algo insatisfecho* | O Very dissatisfied *Muy insatisfecho*

3. Who accepts you totally, including both your worst and your best points? *¿Quién le acepta totalmente, incluyendo sus puntos buenos y malos?* O No One *Nadie*

Initials *Iniciales*	Relationship *Parentesco*	Relationship Code	Year Born *Año de Nacimiento*
1) ☐☐		☐☐ - ☐☐	☐☐☐☐
2) ☐☐		☐☐ - ☐☐	☐☐☐☐
3) ☐☐		☐☐ - ☐☐	☐☐☐☐
4) ☐☐		☐☐ - ☐☐	☐☐☐☐
5) ☐☐		☐☐ - ☐☐	☐☐☐☐
6) ☐☐		☐☐ - ☐☐	☐☐☐☐
7) ☐☐		☐☐ - ☐☐	☐☐☐☐
8) ☐☐		☐☐ - ☐☐	☐☐☐☐
9) ☐☐		☐☐ - ☐☐	☐☐☐☐

How satisfied? *¿Cuan satisfecho/a?*

O Very satisfied *Muy satisfecho* | O Fairly satisfied *Algo satisfecho* | O A little satisfied *Un poco satisfecho* | O A little dissatisfied *Un poco insatisfecho* | O Fairly dissatisfied *Algo insatisfecho* | O Very dissatisfied *Muy insatisfecho*

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Healthy Families Program
SSQ

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SITE: 01 - 00 | PART ID: ☐☐☐ | RELATION: 01 - 01 | ASSESS DATE: __/__/____

4. Who can you really count on to care about you, regardless of what is happening to you? O No One
¿Con quién puede usted contar realmente para cuidarle a pesar de lo que le esta sucediendo? *Nadie*

Initials *Iniciales*	Relationship *Parentesco*	Relationship Code	Year Born *Año de Nacimiento*
1) ☐☐		☐☐ - ☐☐	☐☐☐☐
2) ☐☐		☐☐ - ☐☐	☐☐☐☐
3) ☐☐		☐☐ - ☐☐	☐☐☐☐
4) ☐☐		☐☐ - ☐☐	☐☐☐☐
5) ☐☐		☐☐ - ☐☐	☐☐☐☐
6) ☐☐		☐☐ - ☐☐	☐☐☐☐
7) ☐☐		☐☐ - ☐☐	☐☐☐☐
8) ☐☐		☐☐ - ☐☐	☐☐☐☐
9) ☐☐		☐☐ - ☐☐	☐☐☐☐

How satisfied? *¿Cuan satisfecho/a?*

O Very satisfied *Muy satisfecho* | O Fairly satisfied *Algo satisfecho* | O A little satisfied *Un poco satisfecho* | O A little dissatisfied *Un poco insatisfecho* | O Fairly dissatisfied *Algo insatisfecho* | O Very dissatisfied *Muy insatisfecho*

5. Whom can you really count on to help you feel better when you are feeling generally down in the dumps? O No One
¿Con quién puede usted realmente contar para ayudarle a sentirse mejor cuando usted tiene el ánimo por los suelos (se siente decaído/a)? *Nadie*

Initials *Iniciales*	Relationship *Parentesco*	Relationship Code	Year Born *Año de Nacimiento*
1) ☐☐		☐☐ - ☐☐	☐☐☐☐
2) ☐☐		☐☐ - ☐☐	☐☐☐☐
3) ☐☐		☐☐ - ☐☐	☐☐☐☐
4) ☐☐		☐☐ - ☐☐	☐☐☐☐
5) ☐☐		☐☐ - ☐☐	☐☐☐☐

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Healthy Families Program
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SITE: 01-00 | PART ID: ☐☐☐ | RELATION: 01-01 | ASSESS DATE: __/__/____

Initials *Iniciales*	Relationship *Parentesco*	Relationship Code	Year Born *Año de Nacimiento*
6) ☐☐		☐☐-☐☐	☐☐☐☐
7) ☐☐		☐☐-☐☐	☐☐☐☐
8) ☐☐		☐☐-☐☐	☐☐☐☐
9) ☐☐		☐☐-☐☐	☐☐☐☐

How satisfied? *¿Cuan satisfecho/a?*

O Very satisfied *Muy satisfecho* O Fairly satisfied *Algo satisfecho* O A little satisfied *Un poco satisfecho* O A little dissatisfied *Un poco insatisfecho* O Fairly dissatisfied *Algo insatisfecho* O Very dissatisfied *Muy insatisfecho*

6. Who can you count on to console you when you are very upset? *¿Con quién puede usted contar para consolarle cuando esta muy disgustado/a?* O No One *Nadie*

Initials *Iniciales*	Relationship *Parentesco*	Relationship Code	Year Born *Año de Nacimiento*
1) ☐☐		☐☐-☐☐	☐☐☐☐
2) ☐☐		☐☐-☐☐	☐☐☐☐
3) ☐☐		☐☐-☐☐	☐☐☐☐
4) ☐☐		☐☐-☐☐	☐☐☐☐
5) ☐☐		☐☐-☐☐	☐☐☐☐
6) ☐☐		☐☐-☐☐	☐☐☐☐
7) ☐☐		☐☐-☐☐	☐☐☐☐
8) ☐☐		☐☐-☐☐	☐☐☐☐
9) ☐☐		☐☐-☐☐	☐☐☐☐

How satisfied? *¿Cuan satisfecho/a?*

O Very satisfied *Muy satisfecho* O Fairly satisfied *Algo satisfecho* O A little satisfied *Un poco satisfecho* O A little dissatisfied *Un poco insatisfecho* O Fairly dissatisfied *Algo insatisfecho* O Very dissatisfied *Muy insatisfecho*

Version 1.05 08/09/2004

Appendix I

Impact of Event Scale-Revised

(Weiss & Marmar, 1996)

IMPACT OF EVENTS SCALE-Revised (IES-R)

INSTRUCTIONS: Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to _____ _____(event) that occurred on _____(date). How much have you been distressed or bothered by these difficulties?

	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Any reminder brought back feelings about it	0	1	2	3	4
2. I had trouble staying asleep	0	1	2	3	4
3. Other things kept making me think about it.	0	1	2	3	4
4. I felt irritable and angry	0	1	2	3	4
5. I avoided letting myself get upset when I thought about it or was reminded of it	0	1	2	3	4
6. I thought about it when I didn't mean to	0	1	2	3	4
7. I felt as if it hadn't happened or wasn't real.	0	1	2	3	4
8. I stayed away from reminders of it.	0	1	2	3	4
9. Pictures about it popped into my mind.	0	1	2	3	4
10. I was jumpy and easily startled.	0	1	2	3	4
11. I tried not to think about it.	0	1	2	3	4
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	1	2	3	4
13. My feelings about it were kind of numb.	0	1	2	3	4
14. I found myself acting or feeling like I was back at that time.	0	1	2	3	4
15. I had trouble falling asleep.	0	1	2	3	4
16. I had waves of strong feelings about it.	0	1	2	3	4
17. I tried to remove it from my memory.	0	1	2	3	4
18. I had trouble concentrating.	0	1	2	3	4
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.	0	1	2	3	4
20. I had dreams about it.	0	1	2	3	4
21. I felt watchful and on-guard.	0	1	2	3	4
22. I tried not to talk about it.	0	1	2	3	4

Total IES-R Score:_____

INT: 1, 2, 3, 6, 9, 14, 16, 20
AVD: 5, 7, 8, 11, 12, 13, 17, 22
HYP: 4, 10, 15, 18, 19, 21

Weiss, D.S. (2007). The Impact of Event Scale-Revised. In J.P. Wilson, & T.M. Keane (Eds.) *Assessing psychological trauma and PTSD: a practitioner's handbook* (2nd ed., pp. 168-189). New York: Guilford Press.

AETR2N 22 1/13/2012

Revised Impact of Event Scale (22 questions):

The revised version of the Impact of Event Scale (IES-r) has seven additional questions and a scoring range of 0 to 88.

On this test, scores that exceed 24 can be quite meaningful. High scores have the following associations.

Score (IES-r) **Consequence**

24 or more	PTSD is a clinical concern.[6] Those with scores this high who do not have full PTSD will have partial PTSD or at least some of the symptoms.
33 and above	This represents the best cutoff for a probable diagnosis of PTSD.[7]
37 or more	**This is high enough to suppress your immune system's functioning** (even 10 years after an impact event).[8]

The IES-R is very helpful in measuring the affect of routine life stress, everyday traumas and acute stress

References:

1. Horowitz, M. Wilner, N. & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. Psychosomatic Medicine, 41, 209-218.
2. Weiss, D.S., & Marmar, C.R. (1997). The Impact of Event Scale-Revised. In J.P. Wilson & T.M. Keane (Eds.), Assessing Psychological Trauma and PTSD (pp.399-411). New York: Guilford.
3. Hutchins, E. & Devilly, G.J. (2005). Impact of Events Scale. Victim's Web Site. http://www.swin.edu.au/victims/resources/assessment/ptsd/ies.html
4. Coffey, S.F. & Berglind, G. (2006). Screening for PTSD in motor vehicle accident survivors using PSS-SR and IES. Journal of Traumatic Stress. 19 (1): 119-128.
5. Neal, L.A., Walter, B., Rollins, J., et al. (1994). Convergent Validity of Measures of Post-Traumatic Stress Disorder in a Mixed Military and Civilian Population. Journal of Traumatic Stress. 7 (3): 447-455.
6. Asukai, N. Kato, H. et al. (2002). Reliability and validity of the Japanese-language version of the Impact of event scale-revised (IES-R-J). Journal of Nervous and Mental Disease. 190 (3): 175-182.
7. Creamer, M. Bell, R. & Falilla, S. (2002). Psychometric properties of the Impact of Event Scale-Revised. Behaviour Research and Therapy. 41: 1489-1496.
8. Kawamura, N. Yoshiharu, K. & Nozomu, A. (2001) Suppression of Cellular Immunity in Men with a Past History of Post Traumatic Stress Disorder. American Journal of Psychiatry. 158: 484-486

Appendix J

Invitation Letter and Survey Instructions

Subject: Workplace Violence and Psychiatric Nurses, An Online Survey

Dear colleague:

My name is Sheila M. Herrera and I am a PhD candidate in the School of Nursing at the University of Texas at Tyler, Tyler, Texas. Workplace violence by patients towards nurses is a problem in today's healthcare setting. I am conducting a research study about factors that contribute to posttraumatic stress symptoms among psychiatric nurses after exposure to workplace violence. I invite you to be a part of the research and provide insight to help psychiatric nurses better understand and manage the problem. Your participation in the study is crucial as it represents the perspectives of a psychiatric nurse. This research is being supervised by Dr. Beth Mastel–Smith.

I would like for you to participate if you meet the following criteria:

1. **Age 18 and above**
2. **Have been a nurse for at least one year and you have a current license to practice**
3. **Currently employed full or part–time in an adult acute care inpatient psychiatric facility, adult outpatient psychiatric clinic, psychiatric emergency services, adult long-term care psychiatric facility (state hospital), chemical dependency treatment facility, dual diagnosis treatment center, community mental health center, or adult psychiatric home health agency, adult psychiatric visiting nurse agency, or residential mental health facility**
4. **Are able to read English**
5. **Have access to a computer and the Internet**

You are not eligible to participate in this survey if you were diagnosed with posttraumatic stress disorder in your lifetime.

Participation in this survey is completely voluntary. You do not need to answer a question if you do not want to and may stop answering the questions at any time. In the event you experience discomfort or emotional distress, you could stop anytime without repercussion. Contact your Employee Assistance Program (EAP) if available and needed. Telephone numbers for the National Suicide Prevention Lifeline and the Crisis Text Line will be provided on every page of the survey. Additional mental health resources will be provided for participants from Texas (see Appendix H).
This survey is strictly confidential. Your responses will be sent directly to Qualtrics and not to this researcher. All data will be anonymous when collected and password protected. Individual responses will not be published. The information you provide will be protected and will not be seen by anyone but the researcher and her dissertation chair and statistician consult. The data will only be used to investigate factors that contribute

to posttraumatic stress symptoms among psychiatric nurses. Completion of this survey indicates consent.
If you have any questions or need any assistance, please feel free to contact me or my advisor.

Sincerely,
Sheila M. Herrera
Doctoral Candidate at the University of Texas at Tyler
Sherrera2@patriots.uttyler.edu
Tel. No.: (210) 386-4744

Beth Mastel–Smith, PhD, RN (Dissertation Chair)
School of Nursing
The University of Texas at Tyler
3000 University Blvd
Tyler, Texas 75799
E-mail: bmastelsmith@uttyler.edu

Appendix K

IRB Approval for Study Modification

do-not-reply@cayuse.com
Thu 3/26/2020 2:11 PM
To:

- bmastel-smith@uttyler.edu;
- Sheila Herrera

Cc: dpearson@uttyler.edu

Mar 26, 2020 2:11 PM CDT
Sheila Herrera
Coll of Nursing & Health Sci, School of Nursing

Re: Modification - Spring 2020 4 Predictive Factors of Posttraumatic Symptoms Among Psychiatric Nurses Exposed to Workplace Violence

Dear Sheila Herrera:

University of Texas at Tyler Human Subjects Review Board has rendered the decision below for Predictive Factors of Posttraumatic Symptoms Among Psychiatric Nurses Exposed to Workplace Violence.

Decision: Approved

Findings:

Research Notes:

Internal Notes:

Sincerely,
University of Texas at Tyler Human Subjects Review Board

Appendix L

Text Message and Facebook Messenger Survey Invitation

I wanted to ask if you can help me with my dissertation project. I need 103 psych nurses to participate in my online survey on predictive factors of posttraumatic stress symptoms among psych nurses exposed to workplace violence by pts (S-Herrera Sp2020-04). Survey is mobile friendly. Please text me your personal email address if interested. Thank you.

Appendix M

Social Media Survey Invitation

I wanted to thank all my psych nurse friends for helping me with my survey. But for those who haven't heard of it yet, I wanted to invite all psychiatric registered nurses and psychiatric licensed vocational/practical nurses to participate in my dissertation study, "Predictive factors of posttraumatic stress symptoms among psychiatric nurses (S-Herrera Sp2020-04). Please click on the anonymous link below if interested. Please feel free to copy and paste this link to share with psych nurse friends too. Thank you.

UTTYLER.AZ1.QUALTRICS.COM

Predictive Factors of Posttraumatic Stress Symptoms among Psychiatric Nurses

Appendix N

IRB Approval for Study

January 31, 2020
Dear Ms. Herrera,
Your request to conduct the study: *Predictive Factors of Posttraumatic Symptoms Among Psychiatric Nurses Exposed to Workplace Violence,* IRB # Sp2020-04 has been approved by The University of Texas at Tyler Institutional Review Board as a study exempt from further IRB review, Category 2. While this approval includes a waiver of signed, written informed consent, please ensure prospective informed consent is provided unless special circumstances are indicated in the approval email. In addition, please ensure that any research assistants are knowledgeable about research ethics and confidentiality, and any co-investigators have completed human protection training within the past three years, and have forwarded their certificates to the Office of Research and Scholarship (research@uttyler.edu).
Please review the UT Tyler IRB Principal Investigator Responsibilities, and acknowledge your understanding of these responsibilities and the following through return of this email to the IRB Chair within one week after receipt of this approval letter:
• Prompt reporting to the UT Tyler IRB of any proposed changes to this research activity.
• **Prompt reporting to the UT Tyler IRB and academic department administration will be done of any unanticipated problems involving risks to subjects or others.**
• Suspension or termination of approval may be done if there is evidence of any serious or continuing
noncompliance with Federal Regulations or any aberrations in original proposal.
• Any change in proposal procedures must be promptly reported to the IRB prior to implementing any
changes except when necessary to eliminate apparent immediate hazards to the subject.
• Submit Progress Report when study is concluded.
Best of luck in your research, and do not hesitate to contact me if you need any further assistance.
Sincerely,
David Pearson, Ph.D.
Associate Professor
Department of Pharmaceutical Sciences
Ben and Maytee Fisch College of Pharmacy
Chair Institutional Review Board

The University of Texas at TYLER
Office of Research and Scholarship

INSTITUTIONAL REVIEW BOARD
uttyler.edu/research ▪ 903-565-5858

Appendix O

Informed Consent

THE UNIVERSITY OF TEXAS AT TYLER

Informed Consent (Online, Anonymous) to Participate in Research
Institutional Review Board # Sp2020-04
Approval Date: January 31, 2020

You have been invited to participate in this study, titled, Predictive Factors of Posttraumatic Stress Symptoms Among Psychiatric Nurses Exposed to Workplace Violence. The purpose of this study is to examine the prevalence and identify the predictive factors for the development of posttraumatic stress symptoms among psychiatric nurses. I would like for you to participate if you meet the following criteria:

1. **Age 18 and above**
2. **Have been a nurse for at least one year and you have a current license to practice**
3. **Currently employed full or part–time in an adult acute care inpatient psychiatric facility, adult outpatient psychiatric clinic, psychiatric emergency services, adult long-term care psychiatric facility (state hospital), chemical dependency treatment facility, dual diagnosis treatment center, community mental health center, or adult psychiatric home health agency, adult psychiatric visiting nurse agency, or residential mental health facility**
4. **Are able to read English**
5. **Have access to a computer and the Internet**

You are not eligible to participate in this survey if you were diagnosed with posttraumatic stress disorder in your lifetime.

Your participation is completely voluntary, and if you begin participation and choose to not complete it, you are free to not continue without any adverse consequences. The survey will take 15-20 minutes to complete.

<u>If you agree to be in this study, we will ask you to do the following things:</u>

- Select the most appropriate answer. Only one answer will be allowed per question.
- You may change your answer at any time.
- If at any point you find the questions upsetting, please feel free to stop.
- Should you become distressed, please contact the researcher at (210) 386-4744 or your Employee Assistance Program (EAP) as soon as possible if needed.

- Feel free to contact the National Suicide Prevention Lifeline at 1-800-273-8255 (Available 24 hours a day, 7 days a week) or text HELLO the Crisis Text Line at 741741 (Available 24 hours a day, 7 days a week). These phone numbers will be available at every page of the survey.
- Additional mental health resources will be provided for participants from Texas.
- All surveys should be completed by 03/31/2020.
- If you have any questions, or you need my assistance, please feel free to contact me at sherrera2@patriots.uttyler.edu or (210) 386-4744 or contact Dr. Beth Mastel-Smith at bmastelsmith@uttyler.edu.
- Thank you very much for your cooperation.

We know of no known risks to this study, other than becoming a little tired of answering the questions, or you may even become a little stressed or distressed when answering some of the questions. If this happens, you are free to take a break and return to the survey to finish it, or, you can discontinue participation without any problems. Potential benefits to this study are: (a) to increase awareness of posttraumatic stress symptoms after workplace violence exposure and find ways to avoid worsening of symptoms among psychiatric nurses, (b) to potentially avoid burnout and intent to leave job among psychiatric nurses, (c) to help identify psychiatric nurses who are high risk to develop posttraumatic stress symptoms after workplace violence exposure, and (d) to add scientific knowledge on the development of posttraumatic stress symptoms among psychiatric nurses.

I know my responses to the questions are anonymous. If I need to ask questions about this study, I can contact the principle researcher, Sheila M. Herrera at sherrera2@patriots.uttyler.edu, or (210) 386-4744, or, if I have any questions about my rights as a research participant, I can contact Dr. David Pearson, Chair of the UT Tyler Institutional Review Board at dpearson@uttyler.edu, or 903-565-5858.

I have read and understood what has been explained to me. If I choose to participate in this study, I will click "Yes" in the box below and proceed to the survey. If I choose to not participate, I will click "No" in the box.

☐Yes, I choose to participate in this study.

☐No, I choose not to participate in this study.

Appendix P

Mental Health Resources

National Suicide Prevention Lifeline: 1 – 800 – 273 – TALK (8255)
En Espanol: 1 – 888 – 628 – 9454
(Available 24 hours a day, seven days a week)

Crisis Text Line: Text "HELLO" to 741741
(Available 24 hours a day, seven days a week throughout the US)

Local Mental Health or Behavioral Health Authority for TEXAS (Texas Health and Human Services, n. d.)

Name of facility	Crisis Phone Number	Counties served
ACCESS	800 – 621-1693	Anderson, Cherokee
Andrews Center Behavioral Healthcare System	877 – 934 – 2131	Henderson, Rains, Smith, Van Zandt, Wood
Austin Travis County Integral Care	512 – 472 – 4357	Travis
Betty Hardwick Center	800 – 758 – 3344	Callahan, Jones, Shackleford, Stephens, Taylor
Bluebonnet Trails Community Services	800 – 841 – 1255	Bastrop, Burnet, Caldwell, Fayette, Gonzales, Guadalupe, Lee
Border Region Behavioral Health Center	800 – 643 – 1102	Jim Hogg, Starr, Webb, Zapata
Burke Center	800 – 392 – 8343	Angelina, Houston, Jasper, Nacogdoches, Newton, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, Tyler
Camino Real Community Services	800 – 543 – 5750	Atascosa, Dimmit, Frio, La Salle, Karnes, Maverik, McMullen, Wilson, Zaval
The Center for Health Care Services	800 – 316 – 9241or 210 – 223 – 7233	Bexar
Center for Life Resources	800 – 458 – 7788	Brown, Coleman, Comanche, Eastland, McCulloch, Mills, San Saba
Central Counties Services	800 – 888 – 4036	Bell, Coryell, Hamilton, Lampasas, Milam

Name of facility	Crisis phone number	Counties served
Central Plains Center	800 – 687 – 1300	Bailey, Briscoe, Castro, Floyd, Hale, Lamb, Motley, Parmer, Swisher
Coastal Plains Community Center	800 – 841 – 6467	Aransas, Bee, Brooks, Duval, Jim Wells, Kenedy, Kleberg, Live Oak, San Patricio
Community Healthcore	800 – 832 – 1009	Bowie, Cass, Gregg, Harrison, Marion, Panola, Red River, Upshur
Denton County MHHR Center	800 – 762 – 0157	Denton
Emergence Health Network	915 – 779 – 1800	El Paso
Gulf Bend Center	877 – 723 – 3422	Calhoun, DeWitt, Goliad, Jackson, Lavaca, Refugio, Victoria
Gulf Coast Center	866 – 729 – 2373	Brazoria, Galveston
Heart of Texas Region MHMR Center	866 – 752 – 3451 or 254 – 776 – 1101	Bosque, Falls,Freestone, Hill, Limestone, MsLennan
Helen Farabee Centers	800 – 621 – 8504	Archer, Baylor, Childress, Clay, Cottle, Dickens, Foard, Hardeman, Haskell, Jack, King, Knox, Montague, Stonewall, Throckmorton, Wichita, Wilbarger, Wise, Young
Hill Country Mental Health & Developmental Centers	877 – 466 - 0660	Bandera, Blanco, Comal, Edwards, Gillespie, Hays, Kendall, Kerr, Kimble Kinney, Llano, Mason, Medina, Menard, Real, Schleicher, Sutton, Uvalde, Valverde
Lakes Regional MHMR Center	877 – 466 - 0660	Camp, Delta, Franklin, Hopkins, Lamar, Morris, Titus
Life Path Systems	877 – 422 – 5939	Collin
StarCare Specialty Health System	806 – 740 – 1414 or 800 – 687 - 7581	Cochran, Crosby, Hockley, Lubbock, and Lynn
MHMR Authority of Brazos Valley	888 – 522 - 8262	Brazos, Burleson, Grimes, Leon, Madison, Robertson, and Washington
The Harris Center for Mental Health and IDD	866 – 970 - 4770	Harris

Name of facility	Crisis phone number	Counties served
Behavioral Health Center of Nueces County	888 – 767 - 4493	Nueces
My Health My Resources (MHMR) of Tarrant County	800 – 866 - 2465	Tarrant
MHMR Services for the Concho Valley	800 – 375 - 8965	Coke, Concho, Crockett, Irion, Reagan, Sterling, and Tom Green
North Texas Behavioral Health Authority (NTBHA)	866 – 260 – 8000	Dallas, Ellis, Hunt, Kaufman, Navarro, and Rockwall
Texoma Community Center	877 – 277 – 2226	Cooke, Fannin, and Grayson
Pecan Valley Centers for Behavioral and Developmental HealthCare	800 – 772 – 5987	Erath, Hood, Johnson, Palo Pinto, Parker, and Somervell
PermiaCare (formerly Permian Basic Community Centers)	844 – 420 – 3964	Brewster, Culberson, Ector, Hudspeth, Jeff Davis, Midland, Pecos and Presidio
Spindletop Center	800 – 937 – 8097	Chambers, Hardin, Jefferson, and Orange
Texana Center	800 – 633 – 5686	Austin, Colorado, Fort Bend, Matagorda, Waller, and Wharton
Texas Panhandle Centers	800 – 692 – 4039 or 806 – 359 – 6699	Armstrong, Carson, Collingsworth, Dallam, Deaf Smith, Donley, Grey, Hall, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Potter, Randall, Roberts, Sherman, and Wheeler
Tri – County Behavioral Healthcare	800 – 659 – 6994	Liberty, Montgomery, and Walker
Tropical Texas Behavioral Health	877 – 289 – 7199	Cameron, Hidalgo, and Willacy
West Texas Centers	800 – 375 – 4357	Andrews, Borden, Crane, Dawson, Fisher, Gaines, Garza, Glasscock, Howard, Kent, Loving, Martin, Mitchell, Nolan, Reeves, Runnels, Scurry, Terrell, Terry, Upton, Ward, Winkler, and Yoakam

Appendix Q

Investigator and Dissertation Chair CITI Training Certificates

CITI PROGRAM

Completion Date 30-Aug-2019
Expiration Date 29-Aug-2022
Record ID 31944865

This is to certify that:

Beth Mastel-Smith

Has completed the following CITI Program course:

Social & Behavioral Research - Basic/Refresher (Curriculum Group)
Social & Behavioral Research (Course Learner Group)
2 - Refresher Course (Stage)

Under requirements set by:

University of Texas at Tyler

CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w74921a5b-60d9-4e40-9f42-782c0b14b479-31944865

CITI PROGRAM

Completion Date 11-Aug-2019
Expiration Date 10-Aug-2022
Record ID 32510871

This is to certify that:

Sheila Herrera

Has completed the following CITI Program course:

Social & Behavioral Research - Basic/Refresher (Curriculum Group)
Social & Behavioral Research (Course Learner Group)
1 - Basic Course (Stage)

Under requirements set by:

University of Texas at Tyler

CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w3850707a-bf25-4f8d-959d-02c87a5f4cb0-32510871

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Sheila M. Herrera

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Psychiatric ICU RN

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
Central Philippine University	BSN	03/1991	Nursing
University of the Incarnate Word	MSN, CNL	05/2015	Nursing
University of Texas at Tyler	PhD	07/2020	Nursing

A. Personal Statement

My research interest involves workplace violence perpetrated by patients against psychiatric nurses. My professional experience as a psychiatric nurse and scholastic preparation equipped me with exemplary background on workplace violence against psychiatric nurses. My research experience as the primary investigator in my dissertation project laid a solid foundation in my long-term goal to pursue academic research.

B. Positions and Honors

Positions and Employment

2012-present Psychiatric ICU RN, Methodist Specialty and Transplant Hospital, San Antonio, TX

2009-2011 Psychiatric RN, San Antonio State Hospital, San Antonio, TX

2006-2009	Pediatric Home Health RN, Gentiva Home Health Services, San Antonio, TX
2006-2006	Home Health RN Case Manager, Nurses that Care, McAllen, TX (Relocation)
2003-2006	Elementary School Nurse, Zapata Elementary School, Mission, TX
2001-2003	Antepartum (L&D) Nurse, McAllen Medical Center, McAllen, TX
2001-2001	Home Health RN Case Manager, APC Home Health Services, Harlingen, TX
1995-2000	Staff Nurse, Century Village Nursing and Rehabilitation Center, Bridgeview, Il.

Professional Memberships

American Psychiatric Nurses Association (APNA)
American Nurses Association (ANA)
Texas Nurses Association (TNA)

Certification

Clinical Nurse Leader (CNL)

Awards/Honors

2019 Texas Alpha Xi-chapter, Alpha Chi Honor Society
2017 Nurse of the Quarter (Oct-Dec 2017), Methodist Specialty and Transplant Hospital
2015 Sigma Theta Tau International (STTI)
2015 The National Society of Leadership and Success

C. Contributions to Science

My dissertation research on the prevalence and predictors of posttraumatic stress symptoms among psychiatric nurses adds scientific knowledge on the study of posttraumatic stress symptoms among psychiatric nurses.