

Psychiatric Nurses Lived Experiences of Preventing Patient Aggression

A Dissertation
SUBMITTED TO THE FACULTY OF
OF UNIVERSITY OF MINNESOTA
BY

Niki Ann Gjere

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Jean Wyman, PhD, RN, FAAN, Adviser

October 2017

Acknowledgements

There are many people who have supported and encouraged me through my PhD journey. For that, I am indebted for how they arrived at a time in my life which helped mold the project and my scholarship.

I am grateful for my advisor, Dr. Jean Wyman, for her continued support in my development as a researcher. Her counsel and expertise have been invaluable on my path to completion of the PhD program.

Additionally, I greatly appreciate the expertise and support of each member of my dissertation committee: Dr. Jean Wyman, Dr. Cynthia Peden-McAlpine, Dr. Joanne Disch, and Dr. Deb DeBruin. I am honored and humbled to have been able to receive counsel from those who are such distinguished leaders in their fields.

And to my family, husband Greg, and children Jim and Megan, I am deeply grateful for their unwavering support. Many late nights of studying, many days reading at the ball park, and times spent highlighting articles at the hockey rinks were all taken in stride. And to my parents, I am thankful for their lessons of compassion, justice, and perseverance, which have greatly influenced my perspective on what is important in clinical practice.

Development for the concept of this research was supported the Midwest Nursing Research Society (MNRS) which awarded a mentorship grant and allowed me the opportunity to work with Dr. Mary Johnson. This dissertation research was generously supported by the Minnesota Nurses Association Foundation (MNAF).

Dedication

This dissertation is dedicated to the nurses who shared their experiences in preventing psychiatric inpatient aggression. I am honored with the trust in sharing about their clinical practice. Their commitment to caring for those most vulnerable is a shining example of the nobility of psychiatric nursing.

Overview

Aggression is a common problem that confronts nurses within inpatient psychiatric units, yet there is limited evidence to definitively guide identification of consistent precursors to aggression and interventions to prevent aggression. This dissertation included two foci: an integrative literature review on the precursors to aggression, and a qualitative study examining the experiences of expert psychiatric nurses preventing acutely ill patients from transitioning to aggression.

The integrative literature review of 17 studies identified numerous precursors to aggression. These were organized into three categories adapted from the socio ecological model: individual, interpersonal, and organizational (Dahlberg & Krug, 2002). The review of available studies reflected the complexity of aggression research in the patient population; as well as the delicate nature of studying interactions of patients and nurses in a locked psychiatric unit. Precursors identified were not outlined or linked to specific phases of aggression.

The qualitative study using phenomenological analysis explored the experiences of 10 inpatient psychiatric nurses in preventing patient aggression during a situation of escalating behavior. Experienced psychiatric nurses described interventions used to prevent patient aggression. Three themes emerged: 1) connected knowing; 2) moral commitment and action; and 3) managing uncertainty. Within the three themes, subthemes also emerged. Connected knowing included subthemes: 1) knowing from past experience with the specific patient; 2) knowing from past experiences with other patients

with similar diagnoses and behaviors; and 3) knowing through presence with patients.

Subthemes embedded within moral commitment and action were: 1) empathic understanding; and 2) advocacy. Managing uncertainty included: 1) priority of creating and maintaining a safe environment; and 2) using time in clinical reasoning.

Applying interventions in an uncertain situation requires patience, advocacy, and empathic understanding. The results suggest that nurses need to be allowed time to work with their patients to allow interventions to unfold and continue the connection with the patient. Future research is needed to test whether educational interventions that teach how to establish and maintain connections with patients during behavioral escalation and managing the uncertainty of the situation are effective in supporting nurses and other health care staff in intervening during the “middle phase” of aggression. Additional opportunities for research include the explicitly defining the how expert psychiatric nurses teach “middle phase” aggression prevention interventions to novice nurses.

Table of Contents

	<u>Page</u>
Acknowledgements.....	i
Dedication.....	ii
Overview.....	iii
Table of Contents.....	v
List of Tables.....	vii
List of Figures.....	viii
Chapter 1: Introduction.....	1
Study Aim.....	2
Significance.....	2
Organization of the Dissertation.....	3
Chapter 2: Precursors of Aggression: An Integrative Review.....	4
Background.....	4
Objective.....	4
Design.....	4
Results.....	4
Conclusions.....	4
Keywords.....	4
Precursors of Aggression in Adult Psychiatric Inpatient Settings.....	5
Definition of Aggression.....	8
Search Strategy.....	9
Results.....	10
Study Characteristics.....	10
Study Findings.....	11
Discussion.....	13
Conclusion.....	15
References.....	17
Chapter 3: Expert Psychiatric Nurses Experiences in Preventing Patient Aggression.....	31
Expert Psychiatric Nurses Experiences in Preventing Patient Aggression.....	32
Background.....	32
Objective(s).....	32
Design.....	32
Results.....	32

Table of Contents

	<u>Page</u>
Conclusions.....	32
Keywords:.....	32
Expert Psychiatric Nurses Lived Experiences in Preventing Patient Aggression	33
Background	35
Study Design.....	41
Sample.....	41
Ethical Considerations	42
Procedure	42
Analysis.....	43
Results.....	46
Participant Characteristics	46
Themes	47
Theme One: Connected Knowing.....	47
Knowing from Past Experience with the Specific Patient	48
Knowing from Past Experiences with other Patients with Similar Diagnosis and Behaviors.....	51
Knowing through Presence with Patients	51
Theme Two: Moral Commitment and Action	54
Empathic Understanding.....	54
Advocacy	57
Theme Three: Managing Uncertainty.....	59
Priority of Creating and Maintaining a Safe Environment	59
Using Time in Clinical Reasoning.....	61
Interventions for De-escalating Aggressive Patients	65
Discussion	66
Limitations	69
Conclusion	69
References.....	71
 Chapter 4: Synthesis	 80
 Comprehensive Reference List	 87
 Appendix A: IRB Approval Letter	 99

List of Tables

	<u>Page</u>
Table 1 <i>Study Characteristics</i>	25
Table 2 <i>Summary of Precursors to Aggression Among Inpatient Psychiatric Patients</i>	27
Table 3 <i>Summary of Interventions to Prevent Aggression in Psychiatric Patients</i>	77

List of Figures

	<u>Page</u>
Figure 1. Number of Articles Identified in the Literature Search and Reasons for Exclusion.....	24

Chapter 1: Introduction

Mental illness affects 1 in 5 adults in the United States (National Alliance on Mental Illness, 2017). People who are in psychiatric crisis may require inpatient hospitalization for danger to self or others. Psychiatric inpatients are the sickest and most vulnerable mentally ill individuals (American Psychiatric Nurses Association, 2012). Inpatients who are experiencing a psychiatric crisis may pose a risk of aggression that can be expressed in different forms ranging from loud arguing to physical assaults (Foster, Bowers, & Nijman, 2007), and may lead to severe injury or death (Weiss, 1998).

Researchers have studied factors that contribute to aggression, which can be organized into an adapted socioecological framework including individual, interpersonal, and organizational precursors (Dahlberg & Krug, 2002). Individual precursors that may contribute to violence include those related to the patient, such as age, illness, substance use, values, and beliefs. Interpersonal precursors include the relational experiences between the patient with other patients and staff on the unit. Organizational precursors include those such as the structure of the unit, staffing patterns, and culture of the unit.

Aggression was initially conceptualized as a linear process (Daffern & Howells, 2002); however, more recent research suggests aggression is non-linear and at times unpredictable (Johnson & Delaney, 2006). Behavior within a psychiatric inpatient unit appears to have three non-linear presentations; each requires nursing interventions to assure safety of the patient and staff members. One presentation includes generally benign behaviors, with little expectation of brewing to aggression. The general structure

and activities of the unit are sufficient to keep patients and staff members safe. Another presentation of severe aggression includes behaviors that are violent, dangerous, and require immediate action to prevent serious harm to the patient, staff members, and other patients (M. Johnson, personal communication, April 14, 2012). Restraints and seclusion are commonly used in this phase to prevent harm to patients and staff members.

The presentation in the middle of the two extremes is a “middle phase,” in which the patient is demonstrating behaviors that may possibly lead to aggression. If left along with no intervention, the patient may eventually need restraint or seclusion. During this phase, the expert psychiatric nurse watches, monitors, and knows when to intervene to assure the situation does not move to the explosion point. Interventions during this phase may offer the greatest opportunity to prevent aggression.

Study Aim

The purpose of this dissertation was two-fold. The first aim was to review the literature on precursors to aggression in adult patients in inpatient psychiatric units. The second aim was to describe the lived experiences of expert inpatient psychiatric nurses in preventing patient “middle phase” aggression, and to identify interventions or practices these nurses utilized to prevent aggression requiring seclusion or restraints.

Significance

Current efforts to prevent aggression in adult psychiatric inpatient settings are limited and ineffective (Farrell & Cubit, 2005; Morrison & Love, 2003). The work in this dissertation will advance the understanding of precursors of aggression and the

interventions nurses utilize to prevent aggression by psychiatric inpatients. Information from this study will be helpful in designing effective interventions to improve care to psychiatric patients experiencing behavioral escalation and prevent staff injury.

Organization of the Dissertation

This dissertation is organized into four chapters. Chapter 1 provides an introduction and overview of the dissertation and its purpose. Chapter 2 is an integrative literature review of the precursors to aggression in adult psychiatric inpatient settings, and served as the basis for the dissertation research. This chapter includes an evidence synthesis of 17 studies conducted from 1990 through 2016. This review organized the precursors into a socioecological framework that included individual, interpersonal, and organizational domains. Chapter 3 reports on the methods and outcomes of a qualitative study of inpatient psychiatric nurses' lived experiences of preventing patient aggression. The nurses identified precursors to aggression and strategies for intervening to prevent aggression. Precursors to aggression were identified in the interviews. Chapter 4 summarizes and discusses the precursors to aggression in psychiatric inpatients, the results of the qualitative study, and the linkages between the chapters. Limitations and recommendations for future research are described.

Chapter 2: Precursors of Aggression: An Integrative Review

Background: Patients admitted to inpatient psychiatry are increasingly more acute. Not all psychiatric inpatients are aggressive, however aggression is one factor that complicates psychiatric inpatient care and causes harm for patients and staff members.

Objective: This paper provides an integrative review of the literature on the precursors of aggression in adult psychiatric inpatients.

Design: Four electronic databases were searched for primary research reports published between 1990 through 2016 using keywords: aggression, violence, precursor, precipitant, and adult inpatient psychiatry.

Results: Seventeen research reports met the inclusion criteria. Aggression precursors were identified that were organized within individual, interpersonal, and organizational levels.

Conclusions: Precursors to aggression are varied, and include descriptions about patients, staff interactions, and organization. Lacking was a description of the importance of understanding the complexity of precursor interactions and potential for prevention of aggression. Future research is needed to understand the role of the nurse in aggression prevention.

Keywords: precursor, violence, aggression, inpatient psychiatry

Precursors of Aggression in Adult Psychiatric Inpatient Settings

Prevention and management of aggression in adult psychiatric inpatients is a challenging nursing intervention problem. Aggression is expressed in many different forms ranging from loud arguments to physical assaults that may involve a weapon (Foster, Bowers, & Nijman, 2007), and has led to injuries and even death (Bibby, 2011; Francis, 2003; Lee, 2010).

Nurses as a group are at an increased risk of violence. Simon (2011) described variations in violence rates against physicians and nurses. In 1999, violence against physicians was 16.2 per 1000 workers; whereas for nurses it was 21.9 per 1000 workers. Psychiatric nurses are especially at risk for violence and injury. They are frequent victims of patient aggression and violence, and experience it at higher rates than other hospital personnel. In an early study, nurses on medical units filed the most abuse-related injuries; however, psychiatric nurses had the highest rate of injuries among the nursing staff (Yassi, 1994). In a survey of psychiatric personnel on their experiences of violence within the previous 12 months, psychiatric nurses had experienced significantly greater amounts of violence than psychiatrists (Nolan, Dallender, Thomsen, and Arnetz, 1999).

In Minnesota's health care settings, the prevalence of aggression against registered nurses and licensed practical nurses occurred at a rate of 13.2 assaults per 100 persons per year, with 90% of these assaults committed by patients and clients (Gerberich et al., 2004). The psychiatric nurse assault rate was 264 exposures to violence (7.1%). Most of the assaults did not require hospitalization; however, emotional consequences

included a range from frustration (45.8%) and anger (32.7%) to nightmares and hallucinations (0.2%). Seven nurses (1.1%) quit their job and 16 others (2.4%) took a leave of absence or transferred out of their job.

Although the prevalence of aggression toward psychiatric nurses is well-documented, studies lack consistent methodology to capture the full scope of the problem. Physical and emotional effects are far reaching and psychiatric nurses often see aggression as a normative experience and part of their jobs (Lanza, Zeiss, & Rierdan, 2006).

Economic costs of patient violence are daunting. In 1993, the costs associated with 134 serious injuries occurring in a 973-bed forensic psychiatric hospital were \$766,290 (Carmel & Hunter, 1993). These dollars would be significantly more striking in today's estimations.

Additional costs include burdens placed on society by making scarce nursing resources even scarcer and data continues to mount about the increasing demand for registered nurses (RNs). In a recent projection, the national demand for nurses is projected to grow by 612,000 full time equivalents and the supply of registered nurses is expected to outpace the demand (952,000 full time equivalents) (U.S. Department of Health and Human Services, 2014). Even though it appears that the national supply will be more than sufficient to meet staffing requirements for years to come, psychiatric nursing may not be a highly-desired career path. Stigma is often associated with working with psychiatric patients (Stuhlmiller, 2005). One study identified that 89.8% of

psychiatric nurses perceived a risk of patient assault. The perception of assault risk was a predictor of intent to leave their jobs as psychiatric nurses; whereas actual assault was not (Ito, Eisen, Sederer, Yamada, & Tachimori, 2001). Recruiting into a field that has a negative image presents significant challenges.

For a person to be hospitalized in a psychiatric unit, he/she needs to demonstrate a danger to self, danger to others, and/or a serious inability to care for him/herself. These criteria typically represent patients with significant illness and impairment in their level of functioning. An inpatient psychiatric unit provides structure, safety, and crisis stabilization. There are few interventions that protect patients and staff when a patient becomes aggressive. Physical interventions to address aggression include restraints and seclusion. These interventions are highly regulated and risk violation of patient rights (Centers for Medicare and Medicaid Services, 2013). Special focus about federal regulations and risk management continued throughout national professional organizations (Recupero, Price, Garvey, Daly, & Xavier, 2011). The Joint Commission (2013) has significant focus on patient safety and revisions of standards occur on a regular basis. Each accreditation process reinforces that the only acceptable use of restraint or seclusion is for imminent danger to self or others.

There are potential dangers in the use of restraints or seclusion, one of those includes death. All patient deaths from restraints or seclusion must be reported to the Centers for Medicare and Medicaid Services. However, an investigation by the Office of the Inspector General of the Department of Health and Human Services found that patient

deaths in hospitals were under-reported by 42% (44 of 104 total deaths) over a 5-year period (Levinson, 2006). Another danger includes the risk of staff member injury during restraint or seclusion (Haimowitz, Urff, & Huckshorn, 2006). A national meeting held in May 2003 issued a call to action to eliminate the use of seclusion and restraint (U.S. Department of Health and Human Services, 2003). The meeting participants identified necessary policy changes that required implementation for the elimination of seclusion and restraint.

Literature about aggression in psychiatric units has focused on characteristics of the patient, staff member, and setting that lead to aggressive behavior. An early review on individual patient factors in aggression identified certain psychiatric diagnoses as increasing its risk (Johnson, 2004). These diagnoses included schizophrenia, mania, psychosis, and certain organic syndromes. This review concluded that little is known about the specific precursors of aggression in psychiatric settings.

Patients are admitted into locked units that each have a unique treatment program and staff members to administer that program. The nature of psychiatric inpatient aggression at the point of patient and nurse interaction is poorly understood. The purpose of this integrative literature review was to synthesize the evidence on the precursors or precipitants of adult psychiatric patient aggression and derive implications for research.

Definition of Aggression

Definitions of aggression vary in the literature; however, they are similar in their description of a range of behaviors from verbal to physical demonstrations. Rippon

(2000) proposed a definition to include “aggression can be physical or verbal, active or passive, and can be focused on the victim(s) directly or indirectly” (p. 456). Aggression is also “a forceful action or procedure (as an unprovoked attack) especially when intended to dominate or master” and “hostile, injurious, or destructive behavior or outlook especially when caused by frustration.” (Merriam-Webster.com, n.d.) These working definitions were used to evaluate the primary research reports on aggression in inpatient psychiatric settings.

Search Strategy

The search strategy included using four electronic databases: Medline, CINAHL, PsycINFO, and Google Scholar. The databases were searched from January 1990 through December 2016 using the subject headings and keywords of: antecedent, precursor, precipitant, violence, aggression, aggressive behavior, psychiatric hospital and inpatient psychiatry. Studies were included that were: a) primary research reports of using either a qualitative or quantitative study design; b) adult psychiatric patients (ages 18 to 65 years) treated in inpatient settings; and c) published in the English language. Articles excluded were: opinion papers, case studies, editorials, and reviews. Patient populations excluded were children, adolescent, geriatric, and forensic. Even though forensic patients are typically adults, the addition of forensic situations is a confounding variable. Reference lists of the included studies were also reviewed to identify potential missing articles from the original search.

Results

Study Characteristics

A total of 637 potentially relevant articles were located. After duplicates were removed and full texts reviewed, the total number of articles included was 17. (See Figure 1 for flowchart of search process.) No additional articles were identified after a review of the reference lists from included studies.

Characteristics of the included studies are presented in Table 1. Studies were conducted in the United Kingdom (n=6), Australia (n=5), United States (n=2), Germany (n=1), Italy (n=1), South Africa (n=1) and the Netherlands (n=1). Two studies included a component of patient and staff member matched responses (Duxbury & Whittington, 2005; Ilkiw-Lavalle & Grenyer, 2003). No studies included only nurses in their report findings, and few highlighted the role of the nurse in precursor identification.

Fifteen of the 17 studies used descriptive designs, with three incorporating qualitative methodologies (Barlow, Grenyer & Ilkiw-Lavalle, 2000; van Wijk, Traut, & Julie, 2014; Ward, 2013). One study involving a cross-sectional design randomly sampled psychiatric units within a large metropolitan area (Bowers et al., 2009).

The primary method of data collection was records review. Twelve studies used checklists and report forms, with seven augmenting the records review with interviews or surveys (Ilkiw-Lavalle & Grenyer, 2003; Morrison, 1992; Nijman, Merckelbach, Evers, Palmstierna, & Campo, 2002; Owen, Tarantello, Jones, & Tennant, 1998; Shepherd & Lavender, 1999; Stone, McMillan, Hazelton, & Clayton, 2011; Troisi, Kustermann, Di

Genio, & Siracusano, 2003). Three studies were qualitative in which only interviews were conducted with patients and / or staff members (Pulsford et al, 2013; van Wijk et al, 2014; Ward, 2013). All studies used some form of patient aggression report relying on staff member recall for events, with the recall period extending up to three weeks. One study included video monitoring review (Crownier, Peric, Stepic, & Lee, 2005) and the remaining were incident recall based.

Study Findings

The precursors to aggression were organized into three categories adapted from the socio – ecological model: individual, interpersonal, and organizational (Dahlberg & Krug, 2002) (see Table 2).

The individual level precursors included several patient specific or individual factors such as mental state or illness, personality issues, and prior history of aggression. Six articles identified the patient’s mental state or illness, such as bipolar illness (Barlow et al., 2000; Crownier et al., 2005; Duxbury & Whittington, 2005; Ilkiw-Lavalle & Grenyer, 2003; Morrison, 1992, Shepherd & Levender, 1999; Stone et al., 2011). Four articles identified the patient’s personality issues (Barlow et al., 2000; Stone et al., 2011) including alcohol or drug use (Barlow et al., 2000; Shepherd & Levender, 1999) as contributors to aggression. Other studies identified a history of violence (Morrison, 1992), demonstrated agitation (Owen et al., 1998; Troisi et al., 2003), admission status such as involuntary admission, confinement in a locked unit (Barlow et al., 2000; Bowers et al., 2009; Owen et al., 2009; Troisi et al., 2003) and the length of the hospitalization

(Morrison, 1992) as precursors to aggression. Additional individual level precursors included medication issues (Barlow, et al., 2000; Foster et al., 2007) and lack of cigarettes (Shepherd & Levender, 1999). Fear on the unit (Ward, 2003) was a precursor to aggression as well as a negative experience of seclusion and feeling unsafe on the unit (van Wijk, 2014).

Interpersonal level precursors included interpersonal contexts such as those occurring among patients, with family members, or between patients and staff members. Precursors to aggression consisted primarily of conflicts between patients and staff members. Five articles identified conflict as a precursor, including that with medication refusal, rule breaking, and conflict between patients and with staff members (Bowers et al., 2009; Bowers & Crowder, 2012; Ilkiw-Lavalle & Grenyer, 2003; Ketelsen et al., 2007; Stone et al., 2011).

Additional precursors of aggression were related to patients' experiences of nursing care. They included general dissatisfaction with care (Morrison, 1992), being denied something (Foster et al., 2007), restrictions and limit setting (Bowers et al, 2009, Ilkiw-Lavalle & Grenyer, 2003; van Wijk et al., 2014), feeling let down (Shepherd & Levender, 1999), needing help with activities of daily living (Foster et al., 2007), and being treated like prisoners (Duxbury & Whittington, 2005). Others included poor staff communication (Duxbury & Whittington, 2005; Pulsford et al., 2013) and poor listening (Duxbury & Whittington, 2005; Pulsford et al., 2013).

Several studies reported that the general attitude of the nursing staff members and nursing interventions were aggression precursors (Crownier et al., 2005; Morrison, 1992; Stone et al., 2011; van Wijk et al., 2014). Additional precursors were higher staffing numbers (Bowers et al., 2009; Bowers & Crowder, 2012) and family issues (Bowers et al., 2009).

The third level of precursors to aggression were identified at the organizational level. The environment itself was an identified precursor (Stone et al., 2011) including a locked unit (Barlow et al., 2000; Bowers et al., 2009) and difficult or restrictive environment (Duxbury & Whittington, 2005; Pulsford et al., 2013; Shepherd & Levender, 1999). Crowding of the unit environment with numbers of patients, students, and increased staff was identified in two studies (Owen et al., 1998; van Wijk, 2014). Turnover of patients (Bowers et al., 2009; Shepherd & Levender, 1999) and staff members missing from service (Owen et al., 1998) adds to instability in the environment. Seclusion use), passive activity, and being unoccupied were also identified as precursors to patient aggression (Owen et al., 1998; Shepherd & Lavendar, 1999).

Discussion

The purpose of this integrative review was to synthesize the precursors of aggressive behavior in inpatient adult psychiatric patients. Precursors to aggression were identified using a variety of measurements, including standardized scales, report forms, and clinical records. In rare instances, the patient was asked about the aggression event. However, in most cases the nurses or staff members were the primary data collection

agents. When patients were asked about the aggression event and their responses were compared to nurses' responses, there were startling differences. Patients identified interactional and situational factors as causes of aggression when the staff did not (Duxbury & Whittington, 2005; Ilkiw-Lavalle & Grenyer, 2003). Mental illness causation was a strong factor for nurses and not for patients (Duxbury & Whittington, 2005; Ilkiw-Lavalle & Grenyer, 2003). These differences may portray a serious methodological issue when seeking to define precipitants or precursors to aggression.

Survey research and research from existing records are valuable sources of data for researchers (Polit & Beck, 2008). The use of existing records has potential for bias in aggression situations because of the reliance on event recall (of the nurse) and the voice of the patient being lost. All studies used convenience sampling, which jeopardizes the opportunity for generalization (Kelley, Clark, Brown, & Sitzia, 2003). Specific precursors or precipitants to aggression may not have been identified because of the potential bias of the event recollection. The opportunity for evaluating the precipitant or precursor from the voice of the patient was a missed opportunity in many of the studies.

One precursor identified was that of having too many staff members on a unit (Bowers et al, 2009; Owen et al, 1998). More research is needed on how staffing levels influence aggression.

Most of the research reviewed had methodological limitations; however, several studies did demonstrate rigor. Bowers et al. (2009) randomized the sampling of units in multiple institutions. Crowner et al (2005) used video data to capture aggression

incidents. Qualitative rigor (van Wijk, 2014) was evident in direct interviews with patients.

Regardless of the methodology, these studies reflect the current state of the science of understanding precursors of aggression. Overall, the studies would have been stronger if there was consistent methodology including use of standard measurement tools, assurance of inter-rater reliability of the measurement tools utilized, and consistent inclusion of the voice of the patient.

Conclusion

Aggression is a common problem that confronts nurses, psychiatric staff members, and patients within inpatient psychiatric units. Understanding precursors is important to assist in recognition of a patient's potential for aggression. This review documented the current understanding of precursors of aggression in psychiatric inpatients. Application of the findings is complex because each patient situation is unique.

This review reflects the complexity of aggression research in this patient population; as well as the delicate nature of studying interactions of patients and nurses in a locked psychiatric unit. Future research is needed to better identify the precursors to patient aggression, and strategies that are used to either prevent or de-escalate aggression. The role of the psychiatric nurse may be especially important in aggression prevention, and should be further examined. Understanding the perspectives and experiences of

psychiatric nurses could lead to the design of effective interventions for aggression prevention and management in the clinical setting.

References

- Barlow, K., Grenyer, B., & Ilkiw-Lavalle, O. (2000). Prevalence and precipitants of aggression in psychiatric inpatient units. *Australian and New Zealand Journal of Psychiatry, 34*, 967-974.
- Bibby, P. (2011, November 4). Nurse killed by patient who thought chiropractors could resurrect the dead. *The Sydney Morning Herald New South Wales*. Retrieved from <http://www.smh.com.au/nsw/nurse-killed-by-patient-who-thought-chiropractors-could-resurrect-the-dead-20111104-1myw4.html>
- Bowers, L., & Crowder, M. (2011). Nursing staff numbers and their relationship to conflict and containment rates on psychiatric wards -- A cross sectional time series Poisson regression study. *International Journal of Nursing Studies, 49*, 15-20. doi:10.1016/j.ijnurstu.2011.07.005
- Bowers, L., Allan, T., Simpson, A., Jones, J., Van Der Merwe, M., & Jeffery, D. (2009). Identifying key factors associated with aggression on acute inpatient psychiatric wards. *Issues in Mental Health Nursing, 30*, 260-271.
doi:10.1080/01612840802710829
- Carmel, H., & Hunter, M. (1993). Staff injuries from patient attack: Five years' data. *Bulletin of American Academy of Psychiatry Law, 21*, 485-493.

- Centers for Medicare and Medicaid programs. (2013). *Hospital conditions of participation: Patient's rights* Washington, D.C: Government Printing Office.
- http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_a_hospitals.pdf
- Crowner, M. L., Peric, G., Stepic, F., & Lee, S. (2005). Assailant and victim behaviors immediately preceding inpatient assault. *Psychiatric Quarterly*, 76(3), 243-256. doi:10.1007/s11126-005-2977-2
- Dahlberg, L. L. & Krug, E. G. (2002). Violence – a global public health problem. In: Krug, E, Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R. (2002) *World Report on Violence and Health*. Geneva, Switzerland: World Health Organization.
- Duxbury, J., & Whittington, R. (2005). Causes and management of patient aggression and violence: Staff and patient perspectives. *Journal of Advanced Nursing*, 50, 469-478.
- Foster, C., Bowers, L., & Nijman, H. (2007). Aggressive behaviour on acute psychiatric wards: Prevalence, severity and management. *Journal of Advanced Nursing*, 58(2), 148-149. doi:10.1111/j.1365-2648.2006.04169.x
- Francis, W. (2003, June 19). Nurse killed on ward by psychiatric patient; 2nd death to hit hospital. *The Mirror (London, England)*. Retrieved from <http://www.questia.com/library/1G1-103736847/nurse-killed-on-ward-by-psychiatric-patient-2nd-death>

- Gerberich, S. G., Church, T. R., McGovern, P. M., Hansen, H. E., Nachreiner, N. M., Geisser, M. S., & Watt, G. D. (2004). An epidemiological study of the magnitude and consequences of work related violence: The Minnesota Nurses' Study. *Occupational and Environmental Medicine, 61*, 495-503.
doi:10.1136/oem.2003.007294
- Haimowitz, S., Urff, J., & Huckshorn, K. A. (2006, September). Restraint and seclusion - a risk management guide.
- Ilkiw-Lavalle, O., & Grenyer, B. (2003). Differences between patient and staff perceptions of aggression in mental health units. *Psychiatric Services, 54*, 389-393.
- Ito, H, Eisen, S., Sederer, L., Yamada, O., & Tachimori, H. (2001). Factors affecting psychiatric nurses' intention to leave their current job. *Psychiatric Services, 52*, 232-234.
- Johnson, M. E. (2004) Violence on inpatient psychiatric units: State of the science. *Journal of the American Psychiatric Nurses Association, 10*(3), 113-121.
- Joint Commission. (2013). *2013 Portable comprehensive accreditation manual for hospitals (CAMH): The official handbook*. Chicago, IL: Joint Commission Resources.
- Kelley, K., Clark, B., Brown, V., & Sitzia, J. (2003). Methodology matters: Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care, 15*(3), 261-266.

- Ketelsen, R., Zechert, C., Driessen, M., & Schulz, M. (2007). Characteristics of aggression in a German psychiatric hospital and predictors of patients at risk. *Journal of Psychiatric and Mental Health Nursing, 14*, 92-99.
- Lanza, M. L., Zeiss, R., & Rierdan, J. (2006). Violence against psychiatric nurses: Sensitive research as science and intervention. *Contemporary Nurse, 21*, 71-84.
- Lee, V. (2010, October 25). *Napa state hospital murder raises safety questions* [Video podcast]. San Francisco, CA. Retrieved September 16, 2013, from http://abclocal.go.com/kgo/story?section=news/local/north_bay&id=7745374
- Levinson, D. R. (2006). *Hospital reporting of deaths related to restraint and seclusion* (OEI-09-04-0350). Washington, D.C: Government Printing Office.
- Merriam-Webster.com (n.d.). *Aggression*. Retrieved October 5, 2013, from <http://www.merriam-webster.com/dictionary/aggression>
- Moher, Liberati, Tetzlaff, & Altman. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. Retrieved July 20, 2014, from <http://www.plosmedicine.org/article/fetchObject.action?uri=info%3Adoi%2F10.1371%2Fjournal.pmed.1000097&representation=PDF>
- Morrison, E. (1992). A coercive interactional style as an antecedent to aggression in psychiatric patients. *Research in Nursing & Health, 15*, 421-31.

- Nijman, H., Merckelbach, H., Evers, C., Palmstierna, T., & a Campo, J. (2002). Prediction of aggression on a locked psychiatric admissions ward. *Acta Psychiatrica Scandinavica*, *105*, 390-395.
- Nolan, P., Dallender, J. S., Thomsen, S., & Arnetz, B. (1999). Violence in mental health care: the experiences of mental health nurses and psychiatrists. *Journal of Advanced Nursing*, *30*, 934-941. doi:10.1046/j.1365-2648.1999.0163.x
- Owen, C., Tarantello, C., Jones, M., & Tennant, C. (1998). Violence and aggression in psychiatric units. *Psychiatric Services*, *49*, 1452-1457.
- Polit, D. F., & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Pulsford, D., Crumpton, A., Baker, A., Wilkins, T., Wright, K., & Duxbury, J. (2013). Aggression in a high secure hospital: Staff and patient attitudes. *Journal of Psychiatric and Mental Health Nursing*, *20*, 296-304.
- Recupero, P., Price, M., Garvey, K., Daly, B., & Xavier, S. (2011). Restraint and seclusion in psychiatric treatment settings: Regulation, case law, and risk management. *Journal of the American Academy of Psychiatry Law*, *39*, 465-476.
- Rippon, T. J. (2000). Aggression and violence in health care professions. *Journal of Advanced Nursing*, *31*(2), 452-460.
- Shepherd, M., & Lavender, T. (1999). Putting aggression into context: An investigation into contextual factors influencing the rate of aggressive incidents in a psychiatric hospital. *Journal of Mental Health*, *8*(2), 159-170.

- Simon, R. I. (2011, March 3). Psychiatric Times. Retrieved September 16, 2013, from <http://www.psychiatrictimes.com/schizophrenia/patient-violence-against-health-care-professionals>
- Stone, T., McMillan, M., Hazelton, M., & Clayton, E. H. (2011). Wounding words: Swearing and verbal aggression in an inpatient setting. *Perspectives in Psychiatric Care, 47*, 194-203. doi:10.1111/j.1744-6163.2010.0295.x
- Stuhlmiller, C. M. (2005). Promoting student interest in mental health nursing. *Journal of the American Psychiatric Nurses Association, 11*, 355-358. doi: 10.1177/1078390305284274
- Troisi, A., Kustermann, S., Di Genio, M., & Siracusano, A. (2003). Hostility during admission interview as a short-term predictor of aggression in acute psychiatric male inpatients. *Journal of Clinical Psychiatry, 64*, 1460-1464.
- U. S. Department of Health and Human Services. (2003). *Summary Report*. Compilation of presentations at the National Call to Action: Eliminating the use of Seclusion and Restraint. Washington, DC.
- U.S. Department of Health and Human Services. (2014). Health Resources and Services Administration, National Center for Health Workforce Analysis. The future of nursing workforce: National- and state-level projections, 2012-2025. Rockville, Maryland.

van Wijk, E., Traut, A., & Julie, H. (2015). Environmental and nursing-staff factors contributing to aggressive and violent behaviour of patients in mental health facilities. *Curationis*, 37(1), Art #1122, 9 pages.

<http://dx.doi.org/10.4102/curationis.v37i1.1122>

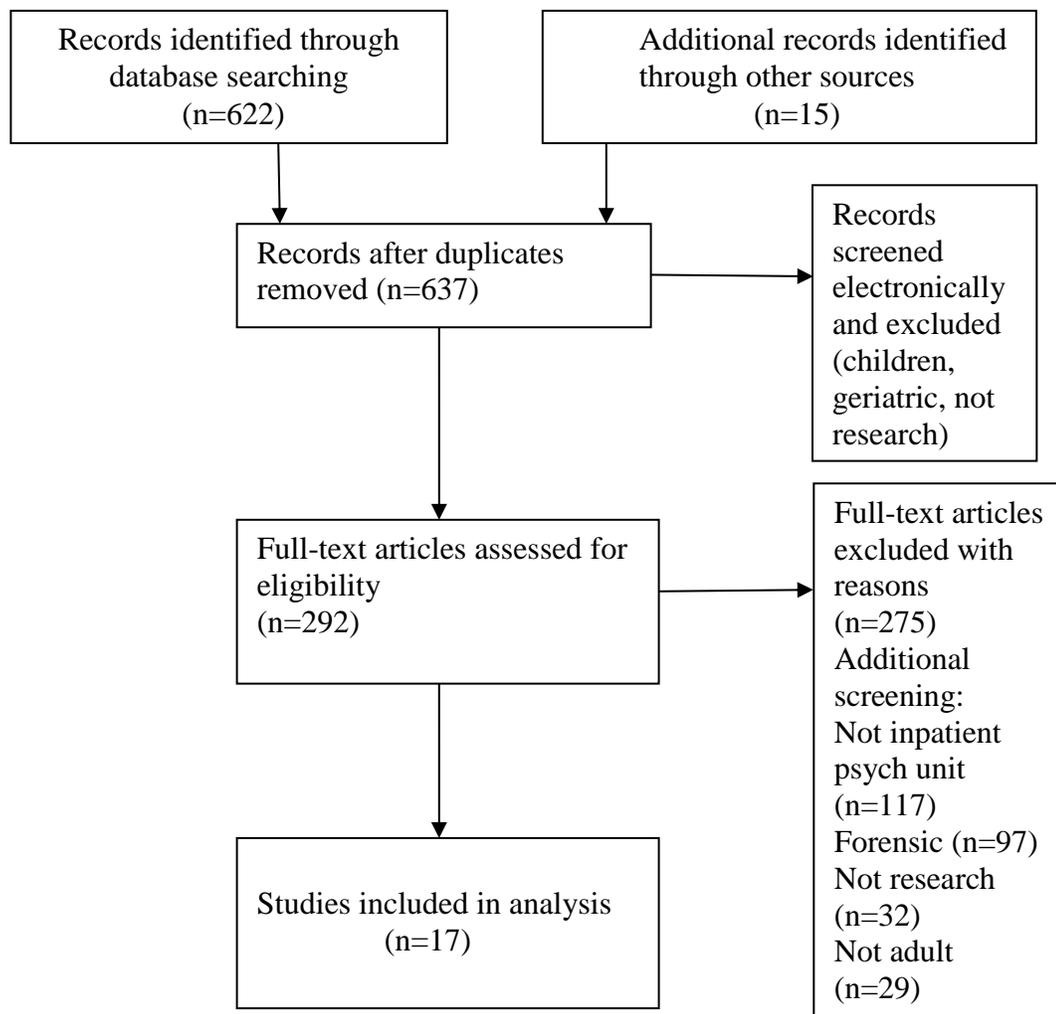
Ward, L. (2013). Ready, aim, fire! Mental health nurses under siege in acute inpatient facilities. *Issues in Mental Health Nursing*, 34, 281-287.

doi:10.3109/01612840.2012.742603

Yassi, A. (1994). Assault and abuse of health care workers in a large teaching hospital.

Canadian Medical Association Journal, 151, 1273-1279.

Figure 1. Number of Articles Identified in the Literature Search and Reasons for Exclusion



Note. Adapted from the flowchart recommendations for meta-analyses by the PRISMA group (Moher, Liberati, Tetzlaff, and Altman, 2009)

Table 1

Study Characteristics

Author (Year)	Sample and Location	Design	Data Collection 1
Barlow et al. (2000)	4 units Australia	Record review	Aggressive/Assaultive Report Form
Bowers et al. (2009)	136 units U.K.	Record review	Patient-staff Conflict Checklist (PCC-SR)
Bowers & Crowder (2012)	32 units U.K.	Record review	Patient staff Conflict Checklist (PCC-SR)
Crowner et al. (2005)	1 unit New York, NY	Observation	Video camera recording, assault event and 5 minutes preceding event
Duxbury & Whittington (2005)	Convenience (patients, nurses, ward managers, nursing assistants) UK	Survey Interview	Management of Aggression and Violence Attitude Scale
Foster et al. (2007)	5 units UK	Records review	Staff Observation Aggression Scale – Revised (SOAS-R)
Ilkiw-Lavalle & Grenyer (2003)	4 units Australia	Records review Interview	Aggressive/Assaultive Report Form
Ketelsen et al. (2007)	16 units Germany	Records review	Staff Observation Aggression Scale (SOAS)
Morrison (1992)	State hospital USA	Records review Interviews	Clinical records

Author (Year)	Sample and Location	Design	Data Collection 1
Nijman et al. (2002)	1 unit Netherlands	Records review Survey	Visual Analogue Scale Staff Observation Aggression Scale – Revised (SOAS-R)
Owen et al. (1998)	5 units Australia	Records review Survey	Violence and Aggression Checklist Ward Activity Index Staff Level Index Detailed Report of Aggressive Incidents
Pulsford et al. (2013)	1 hospital U.K.	Survey	Management of Aggression and Violence Attitude Scale – Likert (MAVAS-L)
Shepherd & Lavender (1999)	13 units U.K.	Records review Interview	Hospital Incident forms
Stone et al. (2011)	Long stay facility Australia	Records review Survey	Overt Aggression Scale (OAS) Nursing Swearing Impact Questionnaire (NSIQ)
Troisi et al. (2003)	Hospital Italy	Records review Clinical interview	Brief Psychiatric Rating Scale (BPRS) Modified Overt Aggression Scale (MOAS)
Van Wijk et al. (2014)	2 mental health facilities South Africa	Qualitative	Interview
Ward (2013)	1 unit Australia	Qualitative	Interview

Table 2

Summary of Precursors to Aggression Among Inpatient Psychiatric Patients

Socio-ecological Level	Precursor	Citation
Individual	Mental state or illness	<ul style="list-style-type: none"> • Barlow et al., 2000 • Crowner et al., 2005 • Duxbury & Whittington, 2005 • Ilkiw-Lavalle & Grenyer, 2003 • Morrison, 1992 • Shepherd & Levender, 1999 • Stone et al., 2011
	Admission status	<ul style="list-style-type: none"> • Barlow et al., 2000 • Bowers et al., 2009 • Owen et al., 1998 • Troisi et al., 2003
	Personality issues	<ul style="list-style-type: none"> • Barlow et al., 2000 • Stone et al., 2011
	Medication issues	<ul style="list-style-type: none"> • Barlow et al., 2000 • Foster et al., 2007
	Alcohol and / or drug use	<ul style="list-style-type: none"> • Barlow et al., 2000 • Shepherd & Levender, 1999
	Length of hospitalization	<ul style="list-style-type: none"> • Morrison, 1992

Socio-ecological Level	Precursor	Citation
	History of violence	<ul style="list-style-type: none"> • Morrison, 1992
	Satisfaction with care	<ul style="list-style-type: none"> • Morrison, 1992
	Agitation	<ul style="list-style-type: none"> • Owen et al., 1998 • Troisi et al., 2003
	Felt let down	<ul style="list-style-type: none"> • Shepherd & Levender, 1999
	Lack of cigarettes	<ul style="list-style-type: none"> • Shepherd & Levender, 1999
	Negative experience of seclusion	<ul style="list-style-type: none"> • van Wijk et al., 2014
	Fear, feeling unsafe on the unit	<ul style="list-style-type: none"> • van Wijk et al., 2014 • Ward, 2003
Interpersonal	Conflict – med refusal, rule breaking, between patients, with staff members	<ul style="list-style-type: none"> • Bowers et al., 2009 • Bowers & Crowder, 2012 • Ilkiw-Lavalle & Grenyer, 2003 • Ketelsen et al., 2007 • Stone et al., 2011
	Nursing or other staff interventions	<ul style="list-style-type: none"> • Crowner et al., 2005 • Morrison, 1992 • Stone et al., 2011 • van Wijk et al, 2014
	Higher staffing numbers	<ul style="list-style-type: none"> • Bowers et al., 2009

Socio-ecological Level	Precursor	Citation
		<ul style="list-style-type: none"> • Bowers & Crowder, 2012
	Being treated like prisoners	<ul style="list-style-type: none"> • Duxbury & Whittington, 2005
	Poor communication or listening	<ul style="list-style-type: none"> • Duxbury & Whittington, 2005 • Pulsford et al., 2013
	Limit setting	<ul style="list-style-type: none"> • Bowers et al., 2009 • Foster et al., 2007 • Ilkiw-Lavalle & Grenyer, 2003 • van Wijk et al., 2014
	Family issues	<ul style="list-style-type: none"> • Barlow et al., 2000
	Restrictions placed on patient	<ul style="list-style-type: none"> • Bowers et al., 2009
	Provocation of other patients	<ul style="list-style-type: none"> • Foster et al., 2007
	Help with activities of daily living	<ul style="list-style-type: none"> • Foster et al., 2007
	Felt let down	<ul style="list-style-type: none"> • Shepherd & Levender, 1999
Organizational	High patient turnover	<ul style="list-style-type: none"> • Bowers et al., 2009 • Shepherd & Levender, 1999
	Ward doors being locked	<ul style="list-style-type: none"> • Barlow et al., 2000 • Bowers et al., 2009
	Restrictive or difficult structural	<ul style="list-style-type: none"> • Duxbury & Whittington, 2005

Socio-ecological Level	Precursor	Citation
	environment	<ul style="list-style-type: none"> • Pulsford et al, 2013 • Shepherd & Levender, 1999
	Psychologists or doctors missing from service	<ul style="list-style-type: none"> • Owen et al., 1998
	Seclusion use	<ul style="list-style-type: none"> • Owen et al., 1998
	Crowding (more patients, students, increased staff)	<ul style="list-style-type: none"> • Owen et al., 1998 • van Wijk, 2014
	Passive activity, unoccupied	<ul style="list-style-type: none"> • Shepherd & Levender, 1999
	Ward environment	<ul style="list-style-type: none"> • Stone et al., 2011

Chapter 3: Expert Psychiatric Nurses Experiences in Preventing Patient Aggression

Expert Psychiatric Nurses' Experiences in Preventing Patient Aggression

Niki Gjere
University of Minnesota

Author Note

Funding by Minnesota Nurses Association Foundation

Conflicts of Interest: None

Expert Psychiatric Nurses Experiences in Preventing Patient Aggression

Background: Psychiatric nurses are instrumental in preventing patient aggression; however, there is limited information about interventions that are effective to prevent behavior escalation.

Objective(s): This study explored the experiences of inpatient psychiatric nurses in preventing patient aggression.

Design: A qualitative research design using phenomenological analysis was used to explore the lived experiences of psychiatric nurses who intervened to prevent aggressive behavior.

Results: Ten expert psychiatric nurses were interviewed. Thematic analysis of narratives summarized their experiences with interventions used to prevent patient aggression. Three themes emerged: 1) connected knowing; 2) moral commitment and action; and 3) managing uncertainty.

Conclusions: Sustaining connection with the patient to manage uncertainty was a key strategy for the prevention of aggression escalation. Future aggression prevention education programs should incorporate strategies that can enhance or maintain the nurse-patient connection.

Keywords: Aggression prevention, violence prevention, psychiatric inpatient, psychiatric nurse

Expert Psychiatric Nurses Lived Experiences of Preventing Patient Aggression

Mental illness affects 43.8 million adults in the United States (National Alliance on Mental Illness, 2017). Individuals who are in psychiatric crisis, may require inpatient hospitalization and may pose a risk of aggressive behavior. Patient aggression may be experienced in different forms ranging from loud arguing to physical assaults (Foster, Bowers, & Nijman, 2007) and can lead to severe injury or death to patients and staff members (Joint Commission, 2010). A national audit in the United Kingdom reported a third of patients and 72% of the nursing staff felt unsafe at some point while in the psychiatric unit (Royal College of Psychiatrists, 2007). Interventions to prevent aggression utilized in clinical practice do not demonstrate consistent effectiveness (Gaynes, et al., 2016; Rao, Yeung, & Javaram, 2012). Ineffective interventions have serious consequences to patients and staff members such as psychological trauma and physical injuries (Bowers, et al., 2011).

Researchers have studied factors that contribute to aggression, specifically factors relating to patients, staff members, and the care environment. Behavior within psychiatric inpatient units appears to have three non-linear phases (Johnson & Delaney, 2007). A phase at one end of the continuum includes generally benign behaviors, with little expectation of leading to aggression. The general structure and activities of the unit are sufficient to keep patients and staff members safe. At the opposite end of the continuum, behaviors are aggressive and dangerous, and immediate action must be taken to prevent serious harm to patient, staff members, and other patients. Restraints and

seclusion are most likely to be used in this phase to prevent harm to patients and staff members. The middle phase offers the greatest opportunity for preventive strategies before the aggression escalates to a dangerous level (M. Johnson, personal communication, April 14, 2012). In this phase, the patient is demonstrating behaviors that may possibly lead to aggression. If left alone with no intervention, the patient may eventually require restraint or seclusion. During this phase psychiatric nurses observe, monitor, and intervene to prevent the situation from moving to the explosion point. More information is needed about the interventions used during this middle phase that are effective in de-escalating the situation.

Psychiatric nurses work to improve patient and staff safety in their units and may hold the key to prevention of behavior leading to aggression. Understanding the behavioral cues used by experienced psychiatric nurses to identify a patient's escalating behavior, as well as strategies nurses have found to be effective in defusing a situation, would be helpful in designing evidence-based approaches to aggression prevention. These approaches could be taught to other psychiatric staff and may lead to more effective preventive strategies. Therefore, the purpose of this research was to examine inpatient psychiatric nurses' experiences in preventing middle phase aggression in patients. We also aimed to identify those strategies that psychiatric nurses found most beneficial in preventing the escalation of patient aggression.

Background

Psychiatric inpatients are among the sickest and most vulnerable mentally ill individuals (American Psychiatric Nurses Association, 2012). People with psychiatric illness are often admitted to inpatient psychiatric units who are a danger to self or others. When admitted, the nurse is responsible for assuring safety of the individual patient, other patients on the unit, and the staff members who work on the unit.

Workers in healthcare face significant risk for job-related violence. “While under 20 percent of all workplace injuries happen to healthcare worker, healthcare workers suffer 50 percent of all assaults” (Occupational Safety and Health Administration [OSHA], 2016). Psychiatric aides and psychiatric technicians experience higher rates of violence as compared to the national rate of violence in the workplace, with psychiatric aides 69 times higher and psychiatric technicians 39 times higher (Longton, 2015). A large international review of 424 studies examining violence in different healthcare settings found an incidence rate of patient violence of over 32% (Bowers, et al, 2011). The percent of violence in specific settings were categorized by psychiatric hospitals (20.8%), acute wards (25.6%), and forensic units (45.8%) (Bowers, et al, 2011).

Data about workplace violence incidents or assaults against psychiatric RNs is dated. Gerberich et al (2004) studied the prevalence of aggression in Minnesota health care settings in a random selection of 6,300 registered nurses and licensed practical nurses. They reported a rate of 13.2 assaults per 100 persons per year, with 90% of these assaults committed by patients and clients. The psychiatric nurse assault rate was 264

exposures to violence (7.1%). Although most of the assaults did not require hospitalization, the emotional consequences included a range of emotions from frustration (45.8%) and anger (32.7%) to nightmares and hallucinations (0.2%). Seven nurses quit their jobs and 16 others had a leave of absence or transferred out of their job.

Physical and emotional effects are far reaching and psychiatric nurses often see aggression as a normative experience and part of their jobs (Lanza, Zeiss, & Rearden, 2006). Verbal aggression toward staff is common and may lead to poor performance and functioning (Stone, 2010; Uzun, 2003); and low morale (Bowers, et al, 2009; Sprigg, et al., 2007). In response to patient verbal and physical aggression, psychiatric nurses described several emotional and behavioral responses including fear, anger, frustration, despair, hopelessness, helplessness and in some situations retaliation (Bimenyimana, Poggenpoel, Myburgh, & van Niekerk, 2009). Patients are at risk for increased medication errors and infections when their nurses are fatigued, injured, or stressed (Speroni, et al., 2014).

The costs of violence mount as treatment and lost wages paid for nurses who are assaulted. In one year, one hospital system reported a total cost of \$94,156 for 30 nurses who had been assaulted (OSHA, 2015). Costs to replace a nurse who leaves the profession because of a patient assault is also high. Estimates range from \$27,000 to \$103,000 to replace a nurse who has left the profession (Li & Jones, 2012).

Psychiatric inpatients expect respect and open communication about their problems before their behavior escalates (Faschinbauer, et al., 2013), and experience

distress when they are physically managed by using forced medication, seclusion or restraint, or other physical force (Knox & Holloman, 2012). If psychiatric inpatients experience distress during physical management interventions, it makes it more difficult to engage them to trust the therapeutic process of the inpatient units.

Expert psychiatric nurses are responsible for assuring safety on the inpatient unit, including aggression prevention and management. Lindsey (2009) studied nurses' decisions to restrain psychiatric inpatients. Nurses used an individualized approach to aggression management, not a regimented decisional hierarchy directed to specific patient cues. Different nurses viewed and explained aggression cues differently. With varying explanations of the cues, nurses used different nursing interventions for aggression. Seasoned nurses were asked about their ability to balance between the need to apply restraints to manage aggression and the ever-changing regulations limiting restraints (McCain & Kornegay, 2005). One nurse shared the importance of noticing the emergence of possible aggression. "Once a potentially volatile and dangerous situation begins to develop, it is important to de-escalate the situation before it gets out of hand..." (p. 240).

Nurses move through stages of competence from novice to expert, with the essential quality between expert and non-expert practitioners being intuitive knowing, or subconscious competence (Benner, 1984). Benner and Tanner (1987) highlighted intuitive knowing in expert nurses. Expert psychiatric nurses make "on the spot clinical decisions" in high-risk situations (Crook, 2001, p. 4). During an aggressive episode,

there are several onlookers including other patients and other staff members (those with less or more experience than the expert psychiatric nurse). Strict protocols within the employment setting may create dissonance with the action to prevent seclusion or restraint. The expert psychiatric nurse develops an understanding of “unusual body language stances which alerts them to the potential for aggression which they use to inform their decision-making process” (p. 5). The expert psychiatric nurse juggles a variety of data sources when making clinical decisions. Nurses become expert “through ‘paradigm’ cases that are powerful enough to become critical incidents that are remembered and used to influence future decision-making” (Johnson & Hauser, 2001, p. 654).

McElroy (1996) utilized a Heideggerian hermeneutic methodology to uncover relational themes of dangerousness (patient self-harm and suicide). The nurses described an embodied knowing, a sense of salience and intuitive processes in working with patients with potential for self-harm and suicide (p. 209). Three themes emerged from the data: “Uncovering Dangerousness in Psychiatric Nursing Practice, Acknowledging and Marking the Boundaries, and Reflection on Practice” (p. 208). Nurses described “gut reactions” and “intuitive feelings that they could not fully explicate but nonetheless proved to be valid” (p. 210). Healthy boundaries and the patient or client’s sense of boundaries was significant for the nurses in the study. Reflective thinking allowed the use of themes, patterns and insights to surface. This was important to understand the

present situation (p. 211). Self-harm and suicide behaviors are types of dangerous behaviors that are self-directed violence.

Not all nurses and staff members experience violence as problematic; they resolve the situation in a positive manner. Researchers who studied staff narratives about encounters with violent patients resulting in a positive outcome. described these experiences as an “embodied moment” (Carlsson, Dahlberg, & Drew, 2000, p. 533). “The ‘embodied moment’ is characterized by pliability, the professional’s ability to be at the same time close as well as distant, active as well as passive, willing to wait as well as to take action” (p. 542). Johnson and Hauser (2001) interviewed 20 expert psychiatric registered nurses utilizing an interpretive phenomenological methodology. Nurses were included who were identified by their peers or a supervisor as being skilled in de-escalating aggressive patient situations. The results revealed the nurses “were skilled at noticing the patient, reading the situation and patient, knowing where the patient was on the continuum, understanding the meaning of the behavior, knowing what the patient needed, connecting with the patient, and matching the intervention with the patient’s needs” (p. 651). The interventions were matched with what the patient needed, with a fluidity of interventions and knowledge. “The nurse who is skilled at accompanying the patient to a calmer personal space embodies highly integrated knowledge that has become a part of who he or she is” (p. 660). Highly integrated knowledge is a hallmark of expert psychiatric nursing practice.

Few researchers have studied the complex environment of an inpatient psychiatric unit. The units are typically locked and general access is restricted. In a series of publications, Johnson and Delaney (2006, 2007) and Delaney and Johnson (2006) described the anatomy of behavior escalation within a framework of dimensions of time, space, people, and ideology. The researchers spent over 400 hours within the units and described the co-existence of staff and patients in a locked setting. The dimension of “space” included the importance of staff visibility on the unit and use of structure. The units were organized around time. Unit activities and shifts were predictable with other aspects such as admissions lending unpredictability. At times the “milieu would erupt into frenzy” (Johnson & Delaney, 2006, p. 18) for apparently no reason. Ideology is a dimension in which “the notion of providing a therapeutic environment was closely aligned with the idea of providing a safe environment” (p. 16). The dimension of “people” included both patients and staff members. Typical types of patients were cared for on the unit, and the staff would become accustomed to caring for that type of patient. When a different type of patient was admitted to the unit, an adjustment was made to care for that patient. The inpatient unit activity was fluid, with staff and patients co-existing in a locked setting.

Inpatient psychiatric units are challenging environments because so many variables are fluid and constantly changing. Expert psychiatric nurses are responsible for de-escalating patients who are becoming aggressive on the units, yet little is known what interventions are effective to accomplish the de-escalation that occurs in the middle phase

of aggression. The purpose of this research is to fill the gap in the literature about how psychiatric nurses know when and how to intervene to prevent patient aggression.

Study Design

A qualitative research design using phenomenological analysis was used to understand the lived experiences of psychiatric registered nurses (RNs). Phenomenology is a qualitative methodology that is appropriate to understand the everyday life experiences of people (Polit & Beck, 2008). It is "... the systematic attempt to uncover and describe the structures, the internal meaning structures, of lived experience" (Van Manen, 1990, p. 10). This research methodology is especially useful when there is little known about a phenomenon such as how to de-escalate aggressive behavior.

Sample

A purposive sample of 10 expert psychiatric registered nurses (RNs) was recruited through two upper Midwestern state professional nursing associations using flyers and emails. The inclusion criteria included RNs with at least five years of inpatient psychiatric nursing experience, current employment as a direct care provider in a locked psychiatric inpatient unit, experience with one or more episodes of patient aggression, and English speaking. Potential participants contacted the researcher by email or phone and a brief description of the study was given through a telephone conversation. If the individual met the initial eligibility criteria, an in-person meeting was arranged in a private location in the workplace (e.g., conference room) to discuss the study, determine

final eligibility, and obtain informed consent. Participants received a \$75 gift card as an honorarium.

Ethical Considerations

The research protocol was approved by the University of Minnesota's Institutional Review Board (HSC 1210P22681). Privacy was maintained by having participants set the date and time of the interview in a setting convenient for them. During this interview, the investigator explained the purpose of the study, the use of the audiotape, and that individual responses would not be able to be identified by anyone in presentations or publications of the findings. After all questions were answered, a consent form was signed prior to initiating the interview. After the informed consent was completed, participants chose a pseudonym for use during the interview process. When the participant had an emotional reaction during the interview, the researcher assured that the participant resolved the emotional reaction before leaving the interview. Interview digital audio files were transmitted securely to the transcription service. Transcripts were stored on a password-protected computer and paper files were stored in a locked cabinet.

Procedure

Interviews were conducted from July through September 2013. All interviews were conducted by the first author (NG) and were audio recorded. The interviewer was a master's prepared psychiatric clinical nurse specialist with over 30 years of clinical and leadership experience in locked adult mental health units and excellent interview skills.

She had expertise in qualitative research methodology having completed three graduate qualitative research courses.

The interviews lasted an average of one hour. Interview questions were broad and open-ended to allow for rich information to emerge from participants. The grand tour question was “please tell me a story of patient aggression, in rich detail as though you were there again, in which you were able to prevent patient restraint or seclusion.” Additional questions were used to probe and expand the participants’ descriptions to include where people were in the unit, interventions used to prevent or avoid restraint or seclusion, and feelings and reflections about the event.

Field notes were documented at the end of each interview and used for comparison to the transcripts. All interviews were transcribed verbatim into written text by a professional transcription service. Participant chosen pseudonyms were used throughout the transcripts and data analysis. Each transcribed interview was verified by listening to the audiotapes and comparing the written transcript for accuracy. Completed transcripts were e-mailed to the participant to assure accuracy and validity of the accounts described in the findings. There were no comments received from the participants.

Analysis

For each interview, phenomenological analysis was conducted by reading the interview several times for a sense of the whole. Van Manen (1990) describes four-lifeworld themes from reflection in qualitative research. They include “lived space

(spatiality), lived body (corporeality), lived time (temporality), and lived human relation (relationality or communality)” (Van Manen, 1990, p. 101). Text was read to uncover and isolate themes using three approaches: the wholistic approach, the selective or highlighting approach, and the detailed or line-by-line approach (Van Manen, 1990, p. 93). The text was read in reflection of the lifeworld themes, reflecting on the text and the situated description of the individual nurse’s story. The text was then read for phrases or lines that appeared to be particularly essential to the understanding of the participant’s experiences. These were highlighted and notes placed in the margins of the text. The text was again read line by line to reveal additional themes. As themes were revealed, they were documented in a separate section of the analysis document. Each subsequent interview was analyzed with the same procedures. As additional themes were revealed, they were included in the analysis document. The interviews were again read to assure accuracy of the overall theme and subthemes. Modifications were made in the themes and subthemes to assure staying true to the data. Once the themes and subthemes were identified, the texts were reread and participants’ quotes were entered into the thematic sections. Highlighted text was used to illustrate the themes uncovered to describe the nurses’ experiences.

This process was completed for all interview transcripts. Co-author (CP-M), an expert in qualitative data analysis, conducted additional analysis of a subset of the interview texts. In meetings, the expert discussed, modified, and verified themes. Saturation was achieved after analysis of the seventh interview transcript.

Validity of the research was assured using Whitemore and Colleagues framework (2001) for qualitative validity criteria. This framework identifies questions for self-scrutiny during a study and for post-hoc assessments of a study. Four primary criteria for all qualitative inquiry include: credibility, authenticity, criticality, and integrity.

To assure credibility, the interviewer ensured the audio recordings were sent to the transcriptionist on a secure server with capacity to accept the full transcript. When the transcript was completed, the audio recording and written transcript was compared for accuracy. One copy of the written transcript was kept in a secured file and not altered by notes or analysis. Memoing occurred throughout the entire research process.

Authenticity was assured by using effective interview techniques and gently encouraging the participant to describe in rich detail their story. Data were analyzed directly from the transcripts without alteration. Once the themes were uncovered, highlighted unaltered text was then used to describe the themes. Confidentiality was assured by removing identifying information. As the researcher further reviewed the transcripts and in the reporting of the results, the pseudonym was replaced by the participant number because of the potential risk of identifying specific situations and participants.

To assure criticality, the primary author analyzed one transcript, wrote notes in the transcripts, and memoed. A second researcher (CP-M) met with the primary author to analyze the texts and review key decisions. This process was replicated for the

subsequent two transcripts. All remaining transcripts were analyzed through a meeting between the two researchers to review and verify the themes.

Integrity was assured by returning to the data to verify the themes. Because of the role of the primary author in clinical practice, memoing and research supervision was vital to assure integrity of the interpretations.

Results

Participant Characteristics

The sample included 10 participants: nine females and one male. All participants were Caucasian, and had a mean of 18 years of psychiatric nursing experience, with a range from 5 to 40 years. Two participants had five years of psychiatric nursing experience, one participant had eight years of experience, and the remaining seven participants had an average of 23 years' experience. Participants worked within two urban health systems. No participant withdrew after the informed consent process was completed.

Each nurse could describe an experience of a patient with aggression in which they were able to intervene to prevent the patient from going into restraint or seclusion. One surprise finding was the level of emotion expressed by the nurses in telling their stories. One nurse described an event that occurred 30 years' prior – the event brought out emotions similar to those at the time of the event. The events affected the nurses deeply and they spoke of their level of concern for the patient.

Themes

Three themes emerged from the data analysis: (1) Connected Knowing, (2) Moral Commitment and Action, and (3) Managing Uncertainty. The three themes are overlapping. They are broken down and ordered sequentially only for the purpose of description.

The following quotation gives insight into the practical knowledge so important to experienced psychiatric mental health nurses:

“A lot of us have that same connection with people. Generally, nurses are doing it because they care about people, so that’s the foundation... Then I think it’s just watching and learning the language. There’s a certain language.... The language of psych nursing, and the language of the unit. Once you have that experience, there’s an unspoken understanding....” (Nurse 6)

Making the implicit language of experienced psychiatric mental health nurses explicit is the major tenant of the findings.

Theme One: Connected Knowing

The first theme, Connected Knowing, focuses on the importance of establishing relationships to sustain connection with the patient to prevent future escalation of behavior. All participants discussed how important this was in their practice of caring for patients. This theme identifies how nurses obtain the information needed to understand the patient’s current illness. Connected Knowing is also inherent in developing a moral commitment to inform action and it is crucial to the nurses’ ability to manage uncertainty of patient behaviors and prevent potential aggressive behavior.

Nurses use multiple ways of getting to know their patients. They assess the admission data and then put emphasis on introductions to learn about the patient, their behavior, and likes and dislikes. They get this information directly from talking with the patient and from other staff members who have interacted previously with the patient.

One nurse describes these as different levels of knowing the patient:

“There’s different levels of knowing your patient. You know from admission report, but you don’t know what that patient looks like, so that’s all just data. And then introducing yourself to that person, learning things about them, their behavior, their likes or dislikes is another level. Or I might just see information about them coming in on admission and another nurse will say, ‘oh, I remember that person,’ and they’ll give me their perspective of that patient. So there’s different levels and different ways you can know your patient.” (Nurse 6)

Several subthemes of Connected Knowing were identified: *knowing from past experience with the specific patient; knowing past experiences with other patients with similar diagnoses and behaviors; and knowing through presence with patients.*

Knowledge of the patient from current and past experiences with a patient informs the nurses of interventions that have worked in the past to de-escalate specific patients.

Knowing from past experience with the specific patient. Knowing the patient’s history provides information about how and how long to negotiate during a current episode of escalation. Some nurses have cared for patients through many hospitalizations and years of mental illness. The nurse knows the illness trajectory to inform current interventions; connecting past successful learning and interventions for the patient to the

current time of behavior escalation. The nurse reflects on past experiences and intervenes to become an ally which assists to de-escalate the situation. Nurses use information from the patient, other staff members, and direct observation of behaviors. Hand off communication about specific patients is an important intervention to assure continuity of information sharing.

The nurse's ability to establish relationships is dependent upon what they know about the patient from the emergency room assessment, hand-off report from the emergency department, their immediate assessment, and getting a "feel" for where the patient is at in any given moment. Later, the more formal assessment is completed when the patient is able to process information. Sometimes this is difficult because the patient's level of agitation and inability to focus on and process information takes more time. Nurses know how to use time effectively, an example of this is to allow patients to eat and sleep prior to initiating the formal interview.

This type of knowing informs interventions to help de-escalate potential aggressive behavior. A nurse described one effective intervention with a patient as standing in front of the patient and having the patient acknowledge her, and then she repeated things she knew were important to the patient. Another nurse described a patient who had perceived injustices done to him during his initial hours on the unit. The nurse described how she repeatedly acknowledged the incident and apologized and this calmed the patient. Another nurse described an example of a patient refusing medications consistently. She intervened with this patient by acknowledging that she knew the patient

typically did not want to be medicated, and discussed how the importance of communicating her personal knowledge of the patient to them helps to de-escalate increasingly aggressive behavior.

This nurse described how connected knowing informed how she intervened to de-escalate the patient's aggressive behavior:

“We got through a bit of the interview, as much as I could. I got the essentials. She pretty much cut it off in the middle. Her focus was on food and sleep, which again, is understandable. I got what I needed at that time. ... So I did try, as much as possible, to therapeutically intervene with her by apologizing for the dismay, telling her that I understood it was annoying and I wouldn't want to be here either, and she's not here by choice, definitely. I tried to be a sympathetic ear right away. I've found that usually not starting out as the heavy or starting out challenging in patient's face right always works better”. (Nurse 3)

Nurses described trying to find a “core value” in patients that they could use to get past the aggressive behavior, and focus on affirming the positive values of the patient to maintain and/or de-escalate the situation. Another meaningful way nurses establish relationships with patients is to be culturally, emotionally, and spiritually sensitive to the patient's needs. One nurse discussed this as a means of empowering the patient: *“Any type of collaboration has to be a togetherness thing”* (Nurse 9). The nurses discussed the importance of avoiding a power imbalance with their patients and always attempted to equalize power in their patient relationships.

Knowing from past experiences with other patients with similar diagnoses and behaviors. For the experienced nurses, interactions with patients become automatic after working in the field and having past life experiences, education, and clinical experience. They understand that the possible interventions they take based on experience may turn out well or not so well, and are comfortable with this. Nurses discussed that years of experience informed their practical knowledge and helped them know how to intervene. Reflection on previous sentinel events informed their current practice. From years of experience, nurses are attuned to potential patient escalation and are aware of the need to create safe surroundings. Past experiences inform the nurse about current levels of fear about patients and the possibilities for interventions.

“I think I have a pretty good sense of people, not that I can tell what they’re thinking, but your very first lesson when I started working in the adult unit was always keep in mind where the door is, that they (the patients’) have safety, knowing what your surroundings are. ... There are certain patients that I would let them get between me and the door, because I have a feeling that I’m comfortable with them. That feeling of comfort, I just feel I’m not at risk. There are other patients I’m really very aware of when I get near them, not to get too near.” (Nurse 5)

Knowing through presence with patients. Presence with the patient informs the nurse about safe and unsafe behavior, which is part of an unspoken understanding. This unspoken understanding was learned by watching and learning. Nurses sense unsafe behavior and subtle clues about behavior changes which may be a sign of increasing

aggression. They know when to be close physically and when to move away. They know how and when to give the patient more distance.

All nurses discussed the use of presence as a means of getting to know the patient. They described their use of presence as an intervention to decrease agitation in situations such as elopement. Nurses also discussed the use of presence to help patients refocus their thoughts and ultimately distract them as a means of de-escalation.

This nurse described presence as a creative technique of communicating that she was listening to the patient:

“... often times just approaching the person who wants to talk and just being there to listen, sometimes they talk themselves down. Sometimes you can offer them medications and they will take them. Other times they get even more angry, sometimes feeling that they don't need meds, they don't want meds. Maybe that's why they ended up there in the first place, because they thought that way when they actually needed them. It's kind of a take your best guess at times. Knowing their history helps, if you know they've been refusing meds all along. If you state that you understand they don't typically want meds, at least you're showing them that you know something about them and that might help. Sometimes if you say you're worried about them for whatever reason, what their behavior might progress to, sometimes they'll stop and look at that and hear what you're saying. Other times they're just lacking insight at that point in their illness. (Nurse 4)

Experienced nurses describe a connection with patients based on caring presence. The nurse knows presence affects the patient – patients feel caring or lack of caring.

“The vast majority of the time, something works to varying degrees or you’re successful in varying degrees, where someone will either completely come around, and they finally feel like they have an ally, rather than just another adversary in the system that they have to fight against. It feels rewarding not to have someone say you’re the rescuer and everyone else is evil, but just to have someone say that at least you listen. You genuinely feel like they appreciate your time in listening to them, hearing their story and telling them that sucks and I hear you. We can’t change the facts, but we can work towards the best possible outcome.” (Nurse 3)

At times, patients become angry with other patients on the unit that creates the potential for aggression. In these situations, nurses use touch to refocus the patient.

“I don’t know if I do it with everyone, but I’m not afraid to touch. I think at that point I was trying to do anything that was going to take the direction off the other patient and to get his focus somewhere else, no matter what that took. They have that glare in their eye and that stare when they’re angry. To break that, it’s almost like a trance. That was my focus was trying to get him to break that focus and get his attention back to reality. I think you would describe it as seeing red. ...

“So I just stood in front of him and he is staring at that other person and wanting to get to that person. I just kept tapping him on the chest and redirecting him to me, to look at me. Don’t look at him; look at me, look at me. I kept saying, ‘you’ve earned privileges...’ I’m repeating some of the things that were

important to him, and he was able to pull it together. Why in that instance, I'm not sure. Was it our rapport? Was it the things he didn't want to lose?" (Nurse 6)

Another way of knowing the patient was through their own voice. The nurse learns about the patient's likes and dislikes. In challenging situations, the nurse caring for the patient alerts other staff members of the patient's story and behaviors so there can be a consistent plan of care. As long as the patient continues to talk with the nurse, there is hope to intervene and de-escalate the patient.

Theme Two: Moral Commitment and Action

Experienced psychiatric nurses approach all interactions with their patients with an attitude of unconditional respect because they know that this is crucial to their ability to sustain connections with their patients over time. A key intervention experienced psychiatric nurses use is equalizing power in the nurse-patient relationship. Nurses are committed to finding a successful outcome for the patient and take action to provide all possible opportunities to support the patient in their quest to restore personal equilibrium. Subthemes of the theme of "Moral Commitment and Action" are *empathic understanding* and *advocacy*.

Empathic understanding. Nurses hold an unconditional respect for patients because they know the patient may not be able to understand explanations when in a crisis. The nurses use empathy to contextualize their understanding in order to approach each patient's situation and intervene to support the patient in regaining control of their behavior. The patient's illness and developmental level may impair their ability to hear information. The attempt to establish rapport with the patient is important to equalize

power so there is no imbalance. The nurse recognizes the human experience before intervening because any intervention can have a result. One nurse offered this explanation:

“It’s the human part of it. That is the human experience, because anything we do has a result. The young man had so much potential when he was healthy and then to see him go downward into that spiral. You relate to a person as a human being, and then to see them so out of control. I guess I thought maybe, what would happen if this was somebody I really cared about or really loved? Would I want that to happen to me? How would I want to be treated, or how would I want my family member to be treated?” (Nurse 2)

Respecting the patient was key to intervention. During routine activities, the nurse takes time to acknowledge the patient and check in with them. Measures to promote comfort are used creatively to calm patients. Examples of providing comfort may include music to calm patients or a snack at night.

The nurses use knowledge of the patient’s experiences in the emergency department to support the patient in transition to the inpatient unit. Knowing the patient’s probable course of clinical symptoms, such as not sleeping for days when manic, informs the nurse about the ability of the patient to fully participate in transition activities. While in the emergency department the patient sometimes will be agitated, and placed in restraints. They may be in a small space and unable to move freely about the area.

“ER does not always do a great job of medicating patients before they come up, so we’ll get patients up that have been in the ER for eight hours, no

medication, they're angry, they're agitated, and I don't blame them. They've been sitting in a little cubicle room with a bed... ” (Nurse 8)

Nurses use empathic understanding to acknowledge patients' situations and attempt to keep an escalating situation as calm as possible. This may also minimize trauma to other patients who are witnessing the situation. Nurses keep other patients mentally and physically safe while working with the escalated patient. They are in constant communication with the staff to maintain safety, direct the care and to carry out a consistent plan of care to support the patient. Awareness of support from other team members allows the nurse to focus on de-escalating the patient.

When there are dangerous situations, the nurse physically intervenes to prevent or reduce the potential or actual harm to others. When the nurse is threatened with danger, the patient's clinical symptoms are considered. Most nurses recognize the level of illness knowing that when the patient improves, they are different people. When a patient is assaultive to the nurse, the nurse understands the patient was ill and not like their usual self. The nurse is aware of her own effectiveness with de-escalating a patient, and will transfer care to another staff member if they may have more success with interventions.

Nurses described examples of their empathy for the patient and commitment to turn difficult situations around.

“I don't ever remember being scared, because I'd already started that interview with him, so you always get a feel for the patient. I feel like when you're in the interview with them you always can assess whether it's a fearful situation, if you have to be concerned for your own safety. I do not remember

that. I remember feeling just really sorry for him. I know I just felt determined to turn this around, whatever I had to do or say, and that I did not want it to become a restraint. I never want it to be that way. Sometimes it has to be, actually for a patient's safety, but this wasn't about restraint or a need to keep him safe. This was a need to explain to him that we were here to help him. I remember wanting this to be righted, if that makes any sense.” (Nurse 1)

Nurses utilize connection and an optimistic approach to ameliorate the difficulty of being on a locked unit. Nurses know the capacity of the patient within their illnesses and modify rules to create interventions to support their patients. When in an escalating situation, nurses remind patients of their successes and goals that refocus them on here and now. Nurses demonstrate caring and try to lighten the burdens of their patients. One nurse described this as follows: “I think we really care and we carry burdens for people” and “try to lighten their load” (Nurse 6).

Advocacy. Advocacy for the patient includes acknowledging and understanding the patient's feelings and supporting them through danger. Putting a patient in restraints and isolating them is always difficult because nurses are concerned about how patients are going to feel. Nurses advocate for other interventions during behavior escalation such as reasoning, even though the hospital cultural expectations may indicate placing the patient in restraints. Giving the patient time to calm down allows for the possibility of de-escalation and a mutual point of discussion. The following nurse relates a situation where she advocated for this patient to avoid restraint:

“He couldn’t get out that second door and he was pretty worked up. The more that I kept trying to talk to him, I could see him – relaxing is not the correct word that I want – but I could just see him finally starting to listen maybe to me, would be a more accurate description, that I was sincerely contrite, that I really was sorry for what had happened. I think I kept saying that and he finally was able to hear that. That’s when I felt like I’m going to give this a lot of time. I avoid restraints as much as possible. I will go the extra length of time to try to avoid them.” (Nurse 1)

Nurses also advocate for their patients when events are not going well. One nurse recommended the patient contact an external advocate with unmet medical needs. When de-escalation interventions are unsuccessful, nurses talk with patients to prepare them for what to expect when the restraint team arrives on the unit.

In some instances, when needed, nurses apologize to patients for other staff members’ disrespectful behavior knowing not all interactions go well and there may be past biases that prevent effective interactions.

“I think certain personalities grate on each other, like certain staff just irritates certain patients. I don’t know why that is. It’s the same thing with the patients and their peers. They don’t like everybody and we all don’t like everybody. That probably plays into it, also, how effective we can be with them. Sometimes you’re just not going to be effective with somebody because you might remind them of their mother or somebody they don’t want to talk to.” (Nurse 5)

Theme Three: Managing Uncertainty

When patients are escalating, the full extent of the situation and the eventual outcome is unknown to the staff. The third theme, Managing Uncertainty, focuses on the ways in which nurses intervene to ensure safety while managing patient escalation. Subthemes include a *priority of creating and maintaining a safe environment for all*; *using time in clinical reasoning*; and *interventions for de-escalating aggressive patients*.

Priority of creating and maintaining a safe environment. The nurses' priority in managing uncertainty is to create and maintain a safe environment. This includes safety for all patients on the unit, his or herself, and other staff. If the nurse assesses that she can intervene to decrease a patient's aggression safely she does so. They do this by using time in the clinical reasoning process.

If one patient is escalating on the nursing unit, nurses prioritize protecting other patients on the unit in the face of potential violence. Nurses are aware of the effect of one patient's escalated behavior on other patients (becoming nervous and uncomfortable) and direct the patient away from others. One nurse provided an example of the effect of one patient on others:

"Some patients feel unsafe and others will kind of join in. it's kind of a synergistic effect. One becomes negative and demanding or insulting or criticizing, whatever she's doing, a little bit out of control, and then some others might join in with her. Others were more afraid. One of them said, 'I'm kind of nervous around her.' It's still safety for all of them and you don't want the others to get wrapped up in this other person's fight, in this patient's fight, if you want

to call it that for lack of a better word, because that's not helping them overall either. You want to try to discourage the gang mentality before it sets them back.” (Nurse 4)

Patients who are vulnerable and unable to protect themselves may be at risk of physical injury when one patient becomes aggressive. The nurse is constantly identifying potential safety risk for other patients.

“They (staff) knew that the young man posed a danger to others, so everybody's response was to protect the others, especially because there were the little old people, and people reacted to that. They didn't want the violence to happen.” (Nurse 2)

Environmental modifications are another type of intervention to provide patient privacy and allow for space to safely intervene with the patient. When nurses are concerned for other patients on the unit, in the face of potential violence situations, they will modify the environment for safety. Nurses use space to balance privacy and risk of harm. Knowledge of the patient's history is used to recommend modifying the patient's space to prevent restraints. The nurse will move the patient to a more private area if restraints are required – to protect patient privacy. When the nurses observe a patient escalating, they engage the patient by acknowledging them, giving them space, privacy and distraction.

Nurses will modify personal space and set appropriate boundaries depending upon the severity of the patient's symptoms. The nurse may decide to remove the escalated patient from the environment, rather than directing other patients to their rooms. Patients

who do not get along with other patients are given private rooms. In some settings, there are not enough private rooms for patients. At times, the nurse will ask security to be present when boundaries on escalation are needed and unable to be provided by the nurse.

Using time in clinical reasoning. The outcome of an escalated patient situation is unknown at the beginning of the event. Escalation episodes unfold through time and nurses need time to assess the patient and evaluate effectiveness of unfolding interventions. Nurses “buy” time or delay interventions they prefer not to use (sedation and restraint) to see if they can effectively de-escalate the patient. The temporal nature of clinical reasoning is important when intervening with patients who are escalating. Time was used as a framework for knowing and thinking about possible precursors to agitation, possible interventions for present, and projecting future interventions. Time is also bought by using space to move or situate the escalated patient, other patients and staff members while intervening with the escalated patient.

Nurses continually organize, interpret and act on information over the course of the patient’s hospitalization. They assess the patient’s current functional ability and symptom severity. Based on patient assessment, the nurse understands the potential for escalation, danger and capacity to de-escalate. They allow time for the patient to de-escalate and repeat an understanding of the patient’s concerns over time until the patient can hear and process information.

The nurse assesses and gives the patient choices of interventions. Nurses are continually assessing to evaluate the effectiveness of interventions.

“I think you just go from second to second or minute to minute and just see for a while if it’s working. Sometimes it would be me talking to them; sometimes it would be another person talking with them. Sometimes I can’t deescalate them, but if you ever see how [one of our staff] does it, he’s got a knack in knowing how to talk to people and you can just see. You can tell when a person is going from to the highest level, just notched down, what he says, what he does, if he’s listening.” (Nurse 10)

Nurses also assess the patient’s ability to understand the situation and customize their interventions accordingly. The nurse talks with patients who are psychotic and paranoid and are escalating to provide comfort and decrease fear of the environment. The nurse talks with the patients even though they may not understand what is being said. Working to reduce the patient’s fear, worries and anxieties helps the patient de-escalate.

“... Sometimes their reality is so... It’s hard. They’re not dealing with reality, so it’s hard sometimes to try to talk to them, but I always try. When patients are really paranoid, too, that’s one of the bigger challenges because it’s hard to, in a sense, almost comfort them because they’re so afraid of their environment.” (Nurse 1)

The nurse recognizes fear and confusion in the patient and attempts to reason with the patient prior to use of restraints. The goal of dealing with a dangerous situation is to maintain patient and staff safety.

Nurses project future possibilities from knowledge of the past and present. They know their resources and prepare for the future possibility of danger. These resources are gathered in the face of patient escalation.

When assessing a patient, they assess the safety of the patient and others. The nurse reflects on past experience and present knowledge of future risk of danger. Nurses question the risk to other patients and talk about being aware of what is going on in the moment and what the potential effects of that can be. Nurses will anticipate the need for additional staff such as calling for help from other units and security staff. More staff may be needed to direct the patient to a different space. The nurse assesses the unit environment and know the risk for escalated behavior increases when there is a chaotic environment.

Nurses implement interventions to buy time for the patient to de-escalate. Nurses use interventions to distract or divert the patient's thoughts to prevent escalation. The diversionary techniques are used so that the patients can use their room as a place to cool down. One nurse uses delaying of rule implementation to equalize power:

“A lot of patients like to push, so they feel like they've lost all their power, so you know what I'll say? They come out of their room and I'll say, 'how about this? Hospital policy is you're supposed to stay in your room until 6:00, but what if I let you stay out for 10-15 minutes, is that OK?' then I'll tell the behavioral tech the patient can stay out for 15 minutes.” (Nurse 7)

Another nurse described an example of how distraction and refocusing is used to interfere with the patient's train of thought. The nurse used diversion, getting the patient into a different frame of mind and buying time so they can de-escalate the patient.

“Notch down, notch down, and if he's not notching down you can see that they're on high and that they're probably destructive to themselves, destructive to the environment, picking up chairs, whatever. If you can interfere with that brain process of what they're doing, I think it's just interfering with that and seeing if they'll start to listen, get them to switch thinking about whatever it is they're thinking about. Like talking about something a little bit different. Like, 'gee, when you came in here you were really doing well. You've had some good days. I know your mom is coming tonight and you're really looking forward to that. Gosh, you had such a good day in music today. I saw some of the stuff you did.' Just switch them into a different frame of mind. They kind of hear you as you keep rambling along really softly or breathing with them. It's probably more somebody who is psychotic, like extreme psychosis, where they may not hear you. You can tell when they're not deescalating, and if they're not, then there won't be much of an in between phase sometimes and you have to just be prepared to do what you need to do.” (Nurse 10)

The nurse also utilizes medications to buy time for the patient to de-escalate. Nurses listen to other staff members to determine potentially escalating behavior and if patients need additional interventions. The nurse will offer medications to relieve early signs of distress. Early recognition of patient distress allows for early initiation of interventions to reduce distress. Occasionally, other staff and security guards respond to

a situation in which a patient is escalated. The nurse manages other staff perceptions of wanting to speed up the de-escalation process. Nurses know to continue talking and engaging the patient; as long as the patient is listening and not violent and take time to prevent restraint and seclusion.

Nurses also place boundaries on the amount of time they will spend with a patient. For example, one patient was known to the nurse and would become angry when the nurse terminated the discussion. To avoid this, the nurse set a time limit on the discussion, which allowed the patient to understand the limit and prevented behavior escalation.

When another staff member feels threatened by a patient, the nurse will create a barrier between the patient and staff member. When a patient is agitated, and walking away from a situation, the nurse will allow the patient to walk away. There is another opportunity to talk with the patient throughout the shift. One nurse offered a final intervention that is effective for de-escalation – to focus the patient on breathing. *“It’s rare that they won’t try to breathe with you, unless, they’re... just extremely psychotic or out of control.”* (Nurse 10)

Interventions for De-escalating Aggressive Patients

Throughout the descriptions of the experiences of expert psychiatric nurses, interventions were described that they used during the “middle phase” of aggression. These interventions were effective to prevent aggression escalating and requiring

seclusion or restraints. These interventions are grouped within the themes and sub-themes (Table 3).

Discussion

The findings of this study revealed expert nurses' experience in preventing psychiatric patient aggression in the "middle-phase" of aggression. In this study, expert psychiatric nurses recognized the signs of behavior escalation and approached the patient to establish a positive relationship and connection. Maintaining the connection was important to prevent aggression from moving on to violence requiring restraints or seclusion. The importance of establishing a relationship is consistent with other studies (Levinson, 2004; National Collaborating Center for Mental Health [NICE], 2015).

Sustaining connection with the patient was important in order to manage the many aspects of uncertainty when caring for a patient who may be escalating in the inpatient psychiatric unit. The theme of maintaining connection with the patient is consistent with a study conducted by Johnson and Hauser (2001) in which psychiatric nurses described a process of accompanying the patient to a calmer personal space. Similarities in findings included the nurse effectively reading the situation and the patient; matching the interventions with the patient's needs; and experiencing uncertainty with knowing which interventions would work. Another similarity was the active role the nurses took to support a patient in calming. "These nurses engaged the patient in the process of calming down, rather than simply reacted to or behaviorally responded to the patient (Johnson & Hauser, 2001, p. 656). De-escalation interventions are a frontline for defusing

aggression, however there is no core skill set documented in the literature (Robinson, et al, 2012).

A new contribution to the literature includes the significant role uncertainty plays in clinical practice. Uncertainty was interwoven throughout interactions and interventions with patients. The expert psychiatric nurses were uncertain that their interventions would be effective and what role other staff and patients would take during the interventions. The nurses did not know at the outset of the interventions how much time the intervention would require determining effectiveness. Not knowing added to the uncertainty and challenge in keeping the unit's staff members and patients safe. The nurses knew if they continued the connection then the aggression would be prevented. However, if the connection was lost or broken, the patient most likely would require seclusion or restraints. This study aided in filling the gap about the importance of maintaining, and not breaking, the connection with the patient.

Even though the nurses described uncertainty in managing patient escalation, they also described knowing how the patient would react to various interventions. This is similar to that which is described in the literature about early recognition (Peden-McAlpine, 2000). The nurses "think in action" (p. 211) and are continually taking in information and contextually applying possible interventions which may de-escalate the patient.

The themes and sub-themes were analyzed within the context of lived experiences of an inpatient psychiatric unit. Even though the research was conducted with a focus on

expert psychiatric nurses caring for hospitalized psychiatric patients, transferability within the context of other clinical care settings is possible. Nurses in other clinical settings experience “middle-phase” aggression with patients or visitors and interactions to prevent “middle-phase” aggression situations may be similar. An unexpected finding in this study was the clarity in which the nurses described their stories that occurred up to decades earlier. Even though the nurses were asked about recent episodes of aggression, many asked if they could share stories of patient situations that were sentinel in their professional and personal development. This may represent lingering emotional trauma, similar to that described by Bimenyimana et al (2009). The stories were vivid in their mind, and often they would share they were concerned they did not do more to prevent a difficult situation. They reflected about the importance of the patient situations and how that formed their practice. This finding about the length of time that situations of patient aggression stay with nurses suggests the importance of identifying and teaching effective interventions to prevent aggression.

The themes found in this study suggest a framework that could be useful in training health care staff to identify and prevent aggression. Future research is needed to test whether an educational intervention based on this framework is effective in teaching nurses and other health care staff how to intervene in the “middle phase” of aggression. Additional opportunities for future research include the explicitly defining the how expert psychiatric nurses teach “middle phase” aggression prevention interventions to novice

nurses. Application to other clinical settings such as critical care and medical surgical also require exploration.

Limitations

The limitations of this research include the homogenous sample of the participants. All participants were expert psychiatric nurses who worked in two urban Midwestern hospital systems. The sample size may have prevented additional data for insights and themes, however saturation was achieved relatively early in the data collection process. No new themes or interventions were identified after analysis of the seventh interview transcript. The rich descriptions of the expert psychiatric nurses provided clear detail of their encounters; however, it is uncertain if their recall was fully descriptive due to the passage of time.

Conclusion

This study supports the complexity of the role of expert psychiatric nurses in preventing patient aggression. The uncertainty is ever-present and continually managed with a variety of interventions the nurses believe will work for the patient. If the connection to the patient is maintained, then there is hope that the patient will be de-escalated and aggression avoided. This takes time and the nurses report an increasing pressure to expedite their interventions and critical thinking processes. This is problematic because with uncertainty associated with escalating behavior, there is no pre-determined algorithm that will provide a guarantee of success or safety. The results

suggest that the need to provide education and training may be of utmost importance in supporting nurses to implement interventions that may assist the patient to de-escalate their aggression.

The results of this study support what is known and unknown in the field of aggression prevention. There is no clear stepwise protocol or guideline which, when followed, will prevent patient aggression. Applying interventions in an uncertain situation requires patience, advocacy, and empathic understanding. Educational frameworks must include strategies for making and maintaining connection with the psychiatric patient. The framework must also include strategies to assist the nurse and staff member the ability to tolerate uncertainty to prevent aggression leading to seclusion or restraints.

Future research is needed to test whether an educational intervention based on this framework is effective in teaching nurses and other health care staff how to intervene in the “middle phase” of aggression. Additional opportunities for future research include the explicitly defining the how expert psychiatric nurses teach “middle phase” aggression prevention interventions to novice nurses. Application to other clinical settings such as critical care and medical surgical also require exploration.

References

- American Psychiatric Nurses Association. (2012). APNA position statement: Staffing inpatient psychiatric units. *Journal of the American Psychiatric Nurses Association, 18*(1), 16-22.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice* (Commemorative Ed.). Upper Saddle River, NJ: Prentice Hall Health.
- Benner, P., & Tanner, C. (1987). Clinical judgment: How expert nurses use intuition. *American Journal of Nursing, 87*(1), 23-84.
- Bimenyimana, E., Poggenpoel, M., Myburgh, C., & van Niekerk, V. (2009). The lived experience by psychiatric nurses of aggression and violence from patients in a Gauteng psychiatric institution. *Curationis, 4*-13.
- Bowers, L., Allen, T., Simpson, A., Jones, J., Van Der Merwe, M., & Jeffery, D. (2009). Identifying key factors associated with aggression on acute inpatient psychiatric wards. *Issues in Mental Health Nursing, 30*(4), 260-71.
- Bowers, L., Stewart, D., Papadopoulos, C., Dack, C., Ross, J., & Khanom, D. (2011). Inpatient violence and aggression: A literature review. *Report from the Conflict and Containment Reduction Research Programme.*
- Carlsson, G., Dahlberg, K., & Drew, N. (2000). Encountering violence and aggression in mental health nursing: A phenomenological study of tacit caring knowledge. *Issues in Mental Health Nursing, 21*, 533-545.

- Crook, J. A. (2001). How do expert mental health nurses make on the spot clinical decisions? A review of the literature. *Journal of Psychiatric and Mental Health Nursing*, 8(1), 1-5.
- Delaney, K. R., & Johnson, M. E. (2006). Keeping the unit safe: Mapping psychiatric nursing skills. *Journal of the American Psychiatric Nurses Association*, 12(4), 198-207.
- Faschingbauer, K. M., Peden-McAlpine, C., & Tempel, W. (2013). Use of seclusion: Finding the voice of the patient to influence practice. *Journal of Psychosocial Nursing*, 51(7), 32-38.
- Foster, C., Bowers, L., & Nijman, H. (2007). Aggressive behavior on acute psychiatric wards: Prevalence, severity and management. *Journal of Advanced Nursing*, 58(2), 148-9.
- Gaynes, B. N., Brown, C., Lux, L. J., Brownley, K., Van Dorn, R., Edlund, M., ... Lohr, K. N. (2016). *Strategies to de-escalate aggressive behavior in psychiatric patients: Comparative Effectiveness Review No. 180*. (Prepared by the RTI-UNC Evidence-based Practice Center under Contract No. 290-2015-00011-I) AHRQ Publication No. 16-EHC032EF. Rockville, MD: Agency for Healthcare Research and Quality. www.effectivehealthcare.ahrq.gov/reports/final.cfm

- Gerberich, S. G., Church, T. R., McGovern, P. M., Hansen, H. E., Nachreiner, N. M., Geisser, M. S., ... Watt, G. D., (2004). An epidemiological study of the magnitude and consequences of work related violence: The Minnesota Nurses' Study. *Occupational and Environmental Medicine*, 61, 495-503.
- Johnson, M. E., & Delaney, K. R. (2006). Keeping the unit safe: A grounded theory study. *Journal of the American Psychiatric Nurses Association*, 12(1), 13-21.
- Johnson, M. E., & Delaney, K. R., (2007). Keeping the unit safe: The anatomy of escalation. *Journal of the American Psychiatric Nurses Association*, 13(1), 42-52.
- Johnson, M. E. & Hauser, P. M. (2001). The practices of expert psychiatric nurses: Accompanying the patient to a calmer personal space. *Issues in Mental Health Nursing*, 22, 651-658.
- Joint Commission. (2010). Preventing violence in the health care setting. *Sentinel Event Alert, Issue 45*. http://www.jointcommission.org/assets/1/18/SEA_45.PDF
- Knox, D. K. & Holloman, G. H. (2012). Best practices in evaluation and treatment of agitation - Use and avoidance of seclusion and restraint: Consensus statement of the American Associate for Emergency Psychiatry Project BETA Seclusion and Restraint Workgroup. *Western Journal of Emergency Medicine*, 12(1), 35-40.
- Lanza, M. L., Zeiss, R., & Rierden, J. (2006). Violence against psychiatric nurses: Sensitive research as science and intervention. *Contemporary Nurse*, 21, 71-84.

- Levinson, J. L. (2004). *The American Psychiatric Publishing Textbook of Psychosomatic Medicine*. Washington, DC: American Psychiatric Association. In Spencer, S., & Johnson, P. (2016). De-escalation techniques for managing aggression. *Cochrane Database of Systematic Reviews 2016*, Issue 1. Art. No.: CD012034.
- Li, Y., & Jones, C. B. (2012). A literature review of nursing turnover costs. *Journal of Nursing Management*, 21(3), 405-418.
- Lindsey, P. L. (2009). Psychiatric nurses' decision to restraint: The association between empowerment and individual factors. *Journal of Psychosocial Nursing*, 47(9), 41-40. doi:10.3928/02793695-20009730-02
- Longton, J. (2015). A look at violence in the workplace against psychiatric aides and psychiatric technicians. *Monthly Labor Review*, U.S. Bureau of Labor Statistics, March 2015, <https://doi.org/10.21916/mlr.2015.4>.
- McCain, M., & Kornegay, K. (2005). Behavioral health restraint: The experience and beliefs of seasoned psychiatric nurses. *Journal for Nurses in Staff Development*, 21(5), 236-242.
- McElroy, E. (1996). Uncovering clinical knowledge in expert psychiatric nursing practice. *Journal of the American Psychiatric Nurses Association*, 2(6), 208-215.
- National Alliance on Mental Illness (2017). Retrieved August 13, 2017, from <http://www.nami.org>

- National Collaborating Centre for Mental Health [NICE]. (2015). Violence and aggression: Short-term management in mental-health, health and community settings. *NICE guideline [NG10]. Update*. Leicester and London, UK: British Psychological Society and the Royal College of Psychiatrists.
- Occupational Safety and Health Administration. (2016). Guidelines for preventing workplace violence for healthcare and social service workers. U.S. Department of Labor Occupational Safety and Health Administration OSHA 3148-06R 2016. (retrieved August 13, 2017). <https://www.osha.gov/Publications/osha3148.pdf>
- Peden-McAlpine, C. (2000). Early recognition of patient problems: A hermeneutic journey into understanding expert thinking in nursing. *Scholarly Inquiry for Nursing Practice: An International Journal*, 14(3), 191-222.
- Polit, D. F., & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Rao, H., Yeung, W. L., & Javaram, M. B. (2012). *De-escalation techniques for psychosis – induced aggression or agitation*. Cochrane Database of Systematic Reviews, Issue 7, Art. No: CD009922. DOI: 10.1002/14651858.
- Robertson, T., Daffern, M., Thomas, S., & Martin, T. (2012). De-escalation and limit-setting in forensic mental health units. *Journal of Forensic Nursing*, 8(2), 24-101.
- Royal College of Psychiatrists. (2007). *Healthcare Commission National Audit of Violence 2006-2007*. London: Royal College of Psychiatrists.

- Speroni, K. G., Fitch, T., Dawson, E., Dugan, L., & Atherton, M. (2014). Incidence and cost of nurse workplace violence perpetrated by hospital patients or patient visitors. *Journal of Emergency Nursing, 40*(3), 218-228.
- Sprigg, C. A., Armitage, C. J., & Hollis, K. (2007). Verbal abuse in the National Health Service: Impressions on the prevalence, perceived reasons for and relationships with staff psychological well-being. *Emergency Medicine Journal, 24*(4), 281-2.
- Uzun, O. (2003). Profession and society. *Journal of Nursing Scholarship, 35*(1), 81-5.
- Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany, New York: The State University of New York.
- Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in qualitative research. *Qualitative Health Research, 11*(4), 522-537.

Table 3

Summary of Interventions to Prevent Aggression in Psychiatric Patients

Theme	Sub-theme	Intervention
Connected Knowing	Knowing from past experience with specific patient	<ul style="list-style-type: none"> • Know illness trajectory • Reflects on past experiences with patient • Become ally • Use information from patient, other staff members, direct observation of behaviors • Use hand-off information from previous care setting • Acknowledge patient • Communicate personal knowledge of patient, what is important to the patient • Find “core value” • Affirming positive values • Sensitivity to cultural, emotional, and spiritual needs • Equalize power, avoid power imbalance
	Knowing from past experiences with other patients with similar diagnoses and behaviors	<ul style="list-style-type: none"> • Reflect on previous sentinel events from current practice • Reflect on previous patient experiences
	Knowing through presence with patients	<ul style="list-style-type: none"> • Refocus patient’s thoughts • Distraction • Listen • Redirect to focus on interaction • Sense level of aggression

Theme	Sub-theme	Intervention
Moral Commitment and Action	Empathic understanding	<ul style="list-style-type: none"> • Reflect as if caring for own family member • Keep other patients mentally and physically safe • During routine activities, acknowledge and check in with patient • Promote comfort to calm patient • Remind patient of successes and goals; refocus on here and now • Demonstrate caring and try to lighten burdens of the patient
	Advocacy	<ul style="list-style-type: none"> • Acknowledge feelings • Understand feelings • Support patient through danger • Utilize other interventions such as reasoning • Give the patient time to calm down • If de-escalation interventions unsuccessful, prepare patient for what to expect when restraint or seclusion is imminent
Managing Uncertainty	Priority of creating and maintain a safe environment	<ul style="list-style-type: none"> • Awareness of effect of one patient's escalated behavior on other patient's • Direct the patient away from others • Modify environment for safety • Move patient to more private area if restraints are required • Engage patient by acknowledging them, giving space, privacy, and distraction
	Using time in clinical reasoning	<ul style="list-style-type: none"> • Buy time or delay interventions the RN prefers not to use • Think about possible precursors

Theme	Sub-theme	Intervention
		<p>to agitation</p> <ul style="list-style-type: none"> • Think about possible interventions for present and future • Use space to move or situation escalated patient and patients / staff members • Understand the potential for escalation, danger, and capacity to de-escalate • Allow time for patient to de-escalate • Repeat an understanding of the patient's concerns over time until patient can hear and process information • Provide comfort • Decrease fear, worries, and anxieties • Know and use resources and prepare for future possibility of danger • Offer medications • Continue talking and engaging patient

Chapter 4: Synthesis

The broad goal of this dissertation was to better understand the precursors to aggression in adult psychiatric inpatients, and how psychiatric nurses intervene to prevent behavior from escalating into aggression. This goal was addressed in two ways: 1) performing a literature review on the precursors to aggression in inpatient psychiatric patients; and 2) conducting a study to explore the lived experiences of expert psychiatric nurses in preventing patient “middle phase” aggression, and to identify interventions or practices these nurses used in preventing aggression.

The first goal involved undertaking an integrative literature review of 17 studies conducted from 1990 to 2016 to identify the precursors to inpatient psychiatric patient aggression. The studies used a variety of measurements to identify precursors, including standardized scales, report forms, and clinical records. Even though aggression is a common problem that confronts nurses within inpatient psychiatric units, there was limited evidence to definitively guide identification of consistent precursors to aggression. Identified factors were organized into an adapted socioecological framework including individual, interpersonal, and organizational precursors (Dahlberg & Krug, 2002).

Individual precursors included mental state or illness, admission status, personality issues, medication issues, alcohol and / or drug use, length of hospitalization, history of violence, satisfaction with care, agitation, felt let down, lack of cigarettes, negative experience of seclusion, and fear / feeling unsafe on the unit. Precursors in the

interpersonal area included conflict, nursing / staff interventions, higher staffing numbers, being treated like prisoners, poor communication / listening, limit setting, family issues, restrictions placed on the patient, provocation of other patients, help with activities of daily living, and feeling let down. Organizational precursors included high patient turnover, ward doors being locked, restrictive or difficult structural environment, psychologists or doctors missing from service, seclusion use, crowding, passive activity or being unoccupied, and ward environment.

Patients and staff members identified different factors as precursors to aggression. Patients identified interactional and situational factors as causes of aggression when the staff did not (Duxbury & Whittington, 2005; Ilkiw-Lavalle & Grenyer, 2003). Mental illness causation was a strong factor for nurses and not for patients (Duxbury & Whittington, 2005; Ilkiw-Lavalle & Grenyer, 2003). One precursor identified was that of having too many staff members on a unit (Bowers et al, 2009; Owen et al, 1998).

Most of the research reviewed had methodological limitations. Regardless of the methodology, these studies reflect the current state of the science of understanding precursors of aggression. This is a reflection on the complexity of aggression research in this patient population; as well as the delicate nature of studying interactions of patients and nurses in a locked psychiatric unit.

The second goal was addressed by conducting a qualitative study using phenomenological analysis that explored the experiences of 10 inpatient psychiatric nurses in preventing patient aggression during a situation of escalating behavior.

Experienced psychiatric nurses described interventions used to prevent patient aggression. Three themes emerged: 1) connected knowing, piecing together the puzzle of the patient's situation; 2) moral commitment and action; and 3) managing uncertainty. Within the three themes, subthemes also emerged. Connected knowing included subthemes: 1) knowing from past experience with the specific patient; 2) knowing from past experiences with other patients with similar diagnoses and behaviors; and 3) knowing through presence with patients. Subthemes embedded within moral commitment and action were: 1) empathic understanding; and 2) advocacy. Managing uncertainty included: 1) priority of creating and maintaining a safe environment; and 2) using time in clinical reasoning.

In psychiatric inpatient settings, patient aggression threatens patient and staff member safety. Nurses are at the front line to prevent aggression, which requires the ability to utilize interventions to de-escalate a patient and allow the interventions time to work in an uncertain situation. In this study, nurses recognized the signs of behavior escalation and approached the patient to establish a positive relationship. The importance of establishing a relationship is consistent with other studies (Levinson, 2004; National Collaborating Center for Mental Health [NICE], 2015). Using de-escalation techniques as a frontline response for defusing aggressive or agitated behavior was identified as important, however, like Robertson et al (2012) no clearly documented core skill set was known.

In this study, the expert psychiatric nurses described the necessity of sustaining connection with the patient. The connection was important in order to manage the many aspects of uncertainty when caring for a patient who may be escalating in the inpatient psychiatric unit. Maintaining connection with the patient is consistent with a study conducted by Johnson and Hauser (2001) in which psychiatric nurses described a process of accompanying the patient to a calmer personal space. Similarities in findings included the nurse effectively reading the situation and the patient; matching the interventions with the patient's needs; and experiencing uncertainty with knowing which interventions would work. Another similarity was the active role the nurses took to support a patient in calming. "These nurses engaged the patient in the process of calming down, rather than simply reacted to or behaviorally responded to the patient (Johnson & Hauser, 2001, p. 656).

Nurses were uncertain that their interventions would be effective and what role other staff and patients would take during the interventions. It was clear that the nurses did not know how much time the interventions would require determining if they were effective. Not knowing added to the uncertainty and challenge in keeping the unit's staff members and patients safe. The nurses knew if they continued the connection then the aggression would be prevented. However, if the connection was lost or broken, the patient most likely would require seclusion or restraints. This study aided in filling the gap about the importance of maintaining, and not breaking, the connection with the patient.

Even though the nurses described uncertainty in managing patient escalation, they also described knowing how the patient would react to various interventions. This was similar to prior research that described about the concept of early recognition (Peden-McAlpine, 2000). The nurses “think in action” (p. 211) and are continually taking in information and contextually applying possible interventions that may de-escalate the patient.

An unexpected finding in this study was the clarity in which the nurses described their stories that occurred up to decades earlier. Even though the nurses were asked about recent aggression, many asked if they could share stores of patient escalating aggression situations that were sentinel in their professional and personal development. This may represent lingering emotional trauma, like that described by Bimenyimana et al (2009). The stories were vivid in their mind, and often they would share they were concerned they did not do more to prevent a difficult situation. They reflected about the importance of the patient situations and how that formed their practice. This finding about the extended length of time that situations of patient aggression stay with nurses suggests the importance of identifying and teaching effective interventions to prevent aggression.

There is no stepwise protocol or clinical guideline that, if followed, will guarantee success in preventing aggression. Applying interventions in an uncertain situation requires patience, advocacy, and empathic understanding. Educational frameworks must include strategies for making and maintaining connection with the psychiatric patient through an uncertain time. The framework must also include strategies to assist the nurse

and staff member the ability to tolerate uncertainty to prevent aggression. Because there is little research to direct practice, future research should test whether an educational intervention based on this framework is effective in teaching nurses and other health care staff how to de-escalate aggression in psychiatric inpatients.

This research offers important insights into interventions to prevent “middle-phase” aggression – the period in which the patient may proceed to violence and require restraints or seclusion. The expert psychiatric nurses used their knowledge of precursors at the individual and interpersonal systems to inform possible interventions for use with patients. One opportunity to extend this research is to explore the organizational system influences in aggression prevention interventions. Nurses spoke of the role of security officers, hospital management, and external regulators in context of interventions to prevent aggression; however, there was little explicit description of the impact of those factors on their interventions. Organizational factors appeared to be embedded within the context of the day to day activities, and not necessarily highlighted within interventions.

One overarching concern is the vivid detail in which the nurses described their stories – stories of patient aggression incidents which occurred years and possibly decades earlier. Nurses cried during their interviews. The level of trauma and pain was evident in their stories. Organizations need to recognize and acknowledge this trauma occurs in their care settings. Trauma often goes unrecognized until the nurse is exhibiting behavioral signs of stress or decides to quit the job. Organizations have an opportunity to support nurses in healing from trauma of highly charged aggression situations. Future

research is necessary to identify effective interventions to support nurses in resolving trauma.

The themes identified in the qualitative study suggest a framework that could be useful in training nurses and health care staff in preventing and managing aggression. Research is needed to test whether an educational intervention based on this framework is effective in teaching nurses and other health care staff how to intervene in the “middle phase” of aggression. Additional opportunities for future research include the explicitly defining the how expert psychiatric nurses teach “middle phase” aggression prevention interventions to novice nurses. Application to other clinical settings such as critical care and medical surgical also require exploration.

Comprehensive Reference List

- American Psychiatric Nurses Association. (2012). APNA position statement: Staffing inpatient psychiatric units. *Journal of the American Psychiatric Nurses Association, 18*(1), 16-22.
- Barlow, K., Grenyer, B., & Ilkiw-Lavalle, O. (2000). Prevalence and precipitants of aggression in psychiatric inpatient units. *Australian and New Zealand Journal of Psychiatry, 34*, 967-974.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice* (Commemorative Ed.). Upper Saddle River, NJ: Prentice Hall Health.
- Benner, P., & Tanner, C. (1987). Clinical judgment: How expert nurses use intuition. *American Journal of Nursing, 87*(1), 23-84.
- Bibby, P. (2011, November 4). Nurse killed by patient who thought chiropractors could resurrect the dead. *The Sydney Morning Herald New South Wales*. Retrieved from <http://www.smh.com.au/nsw/nurse-killed-by-patient-who-thought-chiropractors-could-resurrect-the-dead-20111104-1myw4.html>
- Bimenyimana, E., Poggenpoel, M., Myburgh, C., & van Niekerk, V. (2009). The lived experience by psychiatric nurses of aggression and violence from patients in a Gauteng psychiatric institution. *Curationis, 4*-13.

- Bowers, L., & Crowder, M. (2011). Nursing staff numbers and their relationship to conflict and containment rates on psychiatric wards -- A cross sectional time series Poisson regression study. *International Journal of Nursing Studies*, 49, 15-20. doi:10.1016/j.ijnurstu.2011.07.005
- Bowers, L., Allan, T., Simpson, A., Jones, J., Van Der Merwe, M., & Jeffery, D. (2009). Identifying key factors associated with aggression on acute inpatient psychiatric wards. *Issues in Mental Health Nursing*, 30, 260-271. doi:10.1080/01612840802710829
- Bowers, L., Stewart, D., Papadopoulos, C., Dack, C., Ross, J., & Khanom, D. (2011). Inpatient violence and aggression: A literature review. *Report from the Conflict and Containment Reduction Research Programme*.
- Carmel, H., & Hunter, M. (1993). Staff injuries from patient attack: Five years' data. *Bulletin of American Academy of Psychiatry Law*, 21, 485-493.
- Carlsson, G., Dahlberg, K., & Drew, N. (2000). Encountering violence and aggression in mental health nursing: A phenomenological study of tacit caring knowledge. *Issues in Mental Health Nursing*, 21, 533-545.
- Centers for Medicare and Medicaid programs. (2013). *Hospital conditions of participation: Patient's rights* Washington, D.C: Government Printing Office. http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_a_hospitals.pdf

- Crook, J. A. (2001). How do expert mental health nurses make on the spot clinical decisions? A review of the literature. *Journal of Psychiatric and Mental Health Nursing*, 8(1), 1-5.
- Crowner, M. L., Peric, G., Stepic, F., & Lee, S. (2005). Assailant and victim behaviors immediately preceding inpatient assault. *Psychiatric Quarterly*, 76(3), 243-256. doi:10.1007/s11126-005-2977-2
- Daffern, M., & Howells, K. (2002). Psychiatric inpatient aggression: A review of structural and functional assessment approaches. *Aggression and Violent Behavior*, 7(5), 477-497.
- Dahlberg, L. L. & Krug, E. G. (2002). Violence – a global public health problem. In: Krug, E., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R. (2002) *World Report on Violence and Health*. Geneva, Switzerland: World Health Organization.
- Delaney, K. R., & Johnson, M. E. (2006). Keeping the unit safe: Mapping psychiatric nursing skills. *Journal of the American Psychiatric Nurses Association*, 12(4), 198-207.
- Duxbury, J., & Whittington, R. (2005). Causes and management of patient aggression and violence: Staff and patient perspectives. *Journal of Advanced Nursing*, 50, 469-478.
- Farrell, G., & Cubit, K. (2005). Nurses under threat: A comparison of 28 aggression management programs. *International Journal of Mental Health Nursing*, 14(1), 44-53. doi: 10.1111/j.1440-0979.2005.00354.x

- Faschingbauer, K. M., Peden-McAlpine, C., & Tempel, W. (2013). Use of seclusion: Finding the voice of the patient to influence practice. *Journal of Psychosocial Nursing, 51*(7), 32-38.
- Foster, C., Bowers, L., & Nijman, H. (2007). Aggressive behaviour on acute psychiatric wards: Prevalence, severity and management. *Journal of Advanced Nursing, 58*(2), 148-149. doi:10.1111/j.1365-2648.2006.04169.x
- Francis, W. (2003, June 19). Nurse killed on ward by psychiatric patient; 2nd death to hit hospital. *The Mirror (London, England)*. Retrieved from <http://www.questia.com/library/1G1-103736847/nurse-killed-on-ward-by-psychiatric-patient-2nd-death>
- Gaynes, B. N., Brown, C., Lux, L. J., Brownley, K., Van Dorn, R., Edlund, M., ... Lohr, K. N. (2016). *Strategies to de-escalate aggressive behavior in psychiatric patients: Comparative Effectiveness Review No. 180*. (Prepared by the RTI-UNC Evidence-based Practice Center under Contract No. 290-2015-00011-I) AHRQ Publication No. 16-EHC032EF. Rockville, MD: Agency for Healthcare Research and Quality. www.effectivehealthcare.ahrq.gov/reports/final.cfm
- Gerberich, S. G., Church, T. R., McGovern, P. M., Hansen, H. E., Nachreiner, N. M., Geisser, M. S., & Watt, G. D. (2004). An epidemiological study of the magnitude and consequences of work related violence: The Minnesota Nurses' Study. *Occupational and Environmental Medicine, 61*, 495-503. doi:10.1136/oem.2003.007294

- Haimowitz, S., Urff, J., & Huckshorn, K. A. (2006, September). Restraint and seclusion - a risk management guide.
- Ilkiw-Lavalle, O., & Grenyer, B. (2003). Differences between patient and staff perceptions of aggression in mental health units. *Psychiatric Services, 54*, 389-393.
- Ito, H, Eisen, S., Sederer, L., Yamada, O., & Tachimori, H. (2001). Factors affecting psychiatric nurses' intention to leave their current job. *Psychiatric Services, 52*, 232-234.
- Johnson, M. E. (2004) Violence on inpatient psychiatric units: State of the science. *Journal of the American Psychiatric Nurses Association, 10*(3), 113-121.
- Johnson, M. E., & Delaney, K. R. (2006). Keeping the unit safe: A grounded theory study. *Journal of the American Psychiatric Nurses Association, 12*(1), 13-21.
- Johnson, M. E., & Delaney, K. R. (2007). Keeping the unit safe: The anatomy of escalation. *The American Psychiatric Nurses Association, 13*(1), 42-52.
- Johnson, M. E. & Hauser, P. M. (2001). The practices of expert psychiatric nurses: Accompanying the patient to a calmer personal space. *Issues in Mental Health Nursing, 22*, 651-658.
- Joint Commission. (2010). Preventing violence in the health care setting. *Sentinel Event Alert, Issue 45*. http://www.jointcommission.org/assets/1/18/SEA_45.PDF

- Joint Commission. (2013). *2013 Portable comprehensive accreditation manual for hospitals (CAMH): The official handbook*. Chicago, IL: Joint Commission Resources.
- Kelley, K., Clark, B., Brown, V., & Sitzia, J. (2003). Methodology matters: Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, *15*(3), 261-266.
- Ketelsen, R., Zechert, C., Driessen, M., & Schulz, M. (2007). Characteristics of aggression in a German psychiatric hospital and predictors of patients at risk. *Journal of Psychiatric and Mental Health Nursing*, *14*, 92-99.
- Knox, D. K. & Holloman, G. H. (2012). Best practices in evaluation and treatment of agitation - Use and avoidance of seclusion and restraint: Consensus statement of the American Associate for Emergency Psychiatry Project BETA Seclusion and Restraint Workgroup. *Western Journal of Emergency Medicine*, *12*(1), 35-40.
- Lanza, M. L., Zeiss, R., & Rierdan, J. (2006). Violence against psychiatric nurses: Sensitive research as science and intervention. *Contemporary Nurse*, *21*, 71-84.
- Lee, V. (2010, October 25). *Napa state hospital murder raises safety questions* [Video podcast]. San Francisco, CA. Retrieved September 16, 2013, from http://abclocal.go.com/kgo/story?section=news/local/north_bay&id=7745374
- Levinson, D. R. (2006). *Hospital reporting of deaths related to restraint and seclusion* (OEI-09-04-0350). Washington, D.C: Government Printing Office.

- Levinson, J. L. (2004). *The American Psychiatric Publishing Textbook of Psychosomatic Medicine*. Washington, DC: American Psychiatric Association. In Spencer, S., & Johnson, P. (2016). De-escalation techniques for managing aggression. *Cochrane Database of Systematic Reviews 2016*, Issue 1. Art. No.: CD012034.
- Li, Y., & Jones, C. B. (2012). A literature review of nursing turnover costs. *Journal of Nursing Management*, 21(3), 405-418.
- Lindsey, P. L. (2009). Psychiatric nurses' decision to restraint: The association between empowerment and individual factors. *Journal of Psychosocial Nursing*, 47(9), 41-40. doi:10.3928/02793695-20009730-02
- Longton, J. (2015). A look at violence in the workplace against psychiatric aides and psychiatric technicians. *Monthly Labor Review*, U.S. Bureau of Labor Statistics, March 2015, <https://doi.org/10.21916/mlr.2015.4>.
- McCain, M., & Kornegay, K. (2005). Behavioral health restraint: The experience and beliefs of seasoned psychiatric nurses. *Journal for Nurses in Staff Development*, 21(5), 236-242.
- McElroy, E. (1996). Uncovering clinical knowledge in expert psychiatric nursing practice. *Journal of the American Psychiatric Nurses Association*, 2(6), 208-215.
- Merriam-Webster.com (n.d.). *Aggression*. Retrieved October 5, 2013, from <http://www.merriam-webster.com/dictionary/aggression>

- Moher, Liberati, Tetzlaff, & Altman. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. Retrieved July 20, 2014, from <http://www.plosmedicine.org/article/fetchObject.action?uri=info%3Adoi%2F10.1371%2Fjournal.pmed.1000097&representation=PDF>
- Morrison, E. (1992). A coercive interactional style as an antecedent to aggression in psychiatric patients. *Research in Nursing & Health*, *15*, 421-31.
- Morrison, E. F., & Love, C. C. (2003). An evaluation of four programs for the management of aggression in psychiatry settings. *Archives of Psychiatric Nursing*, *17*(4), 146-155.
- National Alliance on Mental Illness (2017). Retrieved August 14, 2017, from <http://www.nami.org>
- National Collaborating Centre for Mental Health [NICE]. (2015). Violence and aggression: Short-term management in mental-health, health and community settings. *NICE guideline [NG10]. Update*. Leicester and London, UK: British Psychological Society and the Royal College of Psychiatrists.
- Nijman, H., Merckelbach, H., Evers, C., Palmstierna, T., & Campo, J. (2002). Prediction of aggression on a locked psychiatric admissions ward. *Acta Psychiatrica Scandinavica*, *105*, 3990-395.

- Nolan, P., Dallender, J. S., Thomsen, S., & Arnetz, B. (1999). Violence in mental health care: the experiences of mental health nurses and psychiatrists. *Journal of Advanced Nursing*, *30*, 934-941. doi:10.1046/j.1365-2648.1999.0163.x
- Occupational Safety and Health Administration. (2016). Guidelines for preventing workplace violence for healthcare and social service workers. U.S. Department of Labor Occupational Safety and Health Administration OSHA 3148-06R 2016. (retrieved August 13, 2017). <https://www.osha.gov/Publications/osha3148.pdf>
- Owen, C., Tarantello, C., Jones, M., & Tennant, C. (1998). Violence and aggression in psychiatric units. *Psychiatric Services*, *49*, 1452-1457.
- Peden-McAlpine, C. (2000). Early recognition of patient problems: A hermeneutic journey into understanding expert thinking in nursing. *Scholarly Inquiry for Nursing Practice: An International Journal*, *14*(3), 191-222.
- Polit, D. F., & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Pulsford, D., Crumpton, A., Baker, A., Wilkins, T., Wright, K., & Duxbury, J. (2013). Aggression in a high secure hospital: Staff and patient attitudes. *Journal of Psychiatric and Mental Health Nursing*, *20*, 296-304.
- Rao, H., Yeung, W. L., & Javaram, M. B. (2012). *De-escalation techniques for psychosis – induced aggression or agitation*. Cochrane Database of Systematic Reviews, Issue 7, Art. No: CD009922. DOI: 10.1002/14651858.

- Recupero, P., Price, M., Garvey, K., Daly, B., & Xavier, S. (2011). Restraint and seclusion in psychiatric treatment settings: Regulation, case law, and risk management. *Journal of the American Academy of Psychiatry Law*, 39, 465-476.
- Rippon, T. J. (2000). Aggression and violence in health care professions. *Journal of Advanced Nursing*, 31(2), 452-460.
- Robertson, T., Daffern, M., Thomas, S., & Martin, T. (2012). De-escalation and limit-setting in forensic mental health units. *Journal of Forensic Nursing*, 8(2), 24-101.
- Royal College of Psychiatrists (2007). *Healthcare Commission National Audit of Violence 2006-2007*. London: Royal College of Psychiatrists.
- Shepherd, M., & Lavender, T. (1999). Putting aggression into context: An investigation into contextual factors influencing the rate of aggressive incidents in a psychiatric hospital. *Journal of Mental Health*, 8(2), 159-170.
- Simon, R. I. (2011, March 3). Psychiatric Times. Retrieved September 16, 2013, from <http://www.psychiatrictimes.com/schizophrenia/patient-violence-against-health-care-professionals>
- Speroni, K. G., Fitch, T., Dawson, E., Dugan, L., & Atherton, M. (2014). Incidence and cost of nurse workplace violence perpetrated by hospital patients or patient visitors. *Journal of Emergency Nursing*, 40(3), 218-228.
- Sprigg, C. A., Armitage, C. J., & Hollis, K. (2007). Verbal abuse in the National Health Service: Impressions on the prevalence, perceived reasons for and relationships with staff psychological well-being. *Emergency Medicine Journal*, 24(4), 281-2.

- Stone, T., McMillan, M., Hazelton, M., & Clayton, E. H. (2011). Wounding words: Swearing and verbal aggression in an inpatient setting. *Perspectives in Psychiatric Care, 47*, 194-203. doi:10.1111/j.1744-6163.2010.0295.x
- Stuhlmiller, C. M. (2005). Promoting student interest in mental health nursing. *Journal of the American Psychiatric Nurses Association, 11*, 355-358. doi: 10.1177/1078390305284274
- Troisi, A., Kustermann, S., Di Genio, M., & Siracusano, A. (2003). Hostility during admission interview as a short-term predictor of aggression in acute psychiatric male inpatients. *Journal of Clinical Psychiatry, 64*, 1460-1464.
- U. S. Department of Health and Human Services. (2003). *Summary Report*. Compilation of presentations at the National Call to Action: Eliminating the use of Seclusion and Restraint. Washington, DC.
- U.S. Department of Health and Human Services. (2014). Health Resources and Services Administration, National Center for Health Workforce Analysis. The future of nursing workforce: National- and state-level projections, 2012-2025. Rockville, Maryland.
- Uzun, O. (2003). Profession and society. *Journal of Nursing Scholarship, 35*(1), 81-5.
- Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany, New York: The State University of New York.

- van Wijk, E., Traut, A., & Julie, H. (2015). Environmental and nursing-staff factors contributing to aggressive and violent behaviour of patients in mental health facilities. *Curationis*, 37(1), Art #1122, 9 pages.
<http://dx.doi.org/10.4102/curationis.v37i1.1122>
- Ward, L. (2013). Ready, aim, fire! Mental health nurses under siege in acute inpatient facilities. *Issues in Mental Health Nursing*, 34, 281-287.
doi:10.3109/01612840.2012.742603
- Weiss, E. M. (1998, October 11). Deadly restraint: A Hartford Courant investigative report. Hartford Courant, Section A.1. Retrieved from
<http://courant.ctnow.com/projects/restraint/data.stm>
- Whittemore, R., Chase., S. K., & Mandle, C. L. (2001). Validity in qualitative research. *Qualitative Health Research*, 11(4), 522-537.
- Yassi, A. (1994). Assault and abuse of health care workers in a large teaching hospital. *Canadian Medical Association Journal*, 151, 1273-1279.

Appendix A

IRB Approval Letter

UNIVERSITY OF MINNESOTA

Twin Cities Campus

*Human Research Protection Program
Office of the Vice President for Research*

*D528 Mayo Memorial Building
420 Delaware Street S.E.
MMC 820
Minneapolis, MN 55455
Office: 612-626-5654
Fax: 612-626-6061
E-mail: irb@umn.edu or ibc@umn.edu
Website: <http://research.umn.edu/subjects/>*

11/05/2012

Niki A Gjere
FUMC
FUMC - 2450 Riverside Ave.
2450 Riverside Ave
Minneapolis, MN 55454

RE: "Inpatient Psychiatric Nurses' Lived Experiences of Preventing Aggression"
IRB Code Number: **1210P22681**

Dear Ms. Gjere:

The referenced study was reviewed by expedited review procedures and approved on November 2, 2012. If you have applied for a grant, this date is required for certification purposes as well as the Assurance of Compliance number which is FWA00000312 (Fairview Health Systems Research FWA00000325, Gillette Children's Specialty Healthcare FWA 00004003). Approval for the study will expire one year from that date. A report form will be sent out two months before the expiration date.

Institutional Review Board (IRB) approval of this study includes the consent form dated September 24, 2012 and the study flyer dated October 1, 2012

The IRB would like to stress that subjects who go through the consent process are considered enrolled participants and are counted toward the total number of subjects, even if they have no further participation in the study. Please keep this in mind when calculating the number of subjects you request. This study is currently approved for 12 subjects. If you desire an increase in the number of approved subjects, you will need to make a formal request to the IRB.

The code number above is assigned to your research. That number and the title of your study must be used in all communication with the IRB office.

As the Principal Investigator of this project, you are required by federal regulations to inform the IRB of any proposed changes in your research that will affect human subjects. Changes should not be initiated until written IRB approval is received. Unanticipated problems and adverse events should be reported to the IRB as they occur. Research projects are subject to continuing review and renewal. If you have any questions, call the IRB office at 612-626-5654.

On behalf of the IRB, I wish you success with your research.

Sincerely,



Christina Dobrovolny, CIP
Research Compliance Supervisor
CD/ks

CC: Jean Wyman

