Exploring Mental Health Nurses’ Experiences of Administering Chemical Restraint in an Acute Care Setting

By

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Abstract

While there is a growing body of research available on general restraint intervention in acute adult psychiatric settings, relatively little is known about nurses’ experiences of administering chemical restraint. The research question explored in this study was: what are mental health nurses’ experiences of using chemical restraint interventions in times of behavioural emergency on adult inpatient acute mental health units? Eight adult acute inpatient mental health nurses were interviewed using van Manen’s hermeneutic phenomenological method. Six themes emerged from the data analysis: using all the tools in the toolbox, taking control to maintain safety, using therapeutic intervention, working within constraints, making medication choices, and transitioning from novice to expert. Through this Canadian study understanding of direct care nurses’ first-hand experiences of the use of chemical restraint interventions was sought. Integral ways that nurses make meaning from administering chemical restraint were found, as well as some of the complex clinical and ethical decision-making aspects involved in psychiatric nursing care. Implications for practice, education, and policy are discussed, along with suggestions for future research.
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Chapter 1 - Introduction

Three types of restraint are used in acute mental health inpatient settings: 1) physical, 2) environmental, and 3) chemical (National Mental Health Consumer and Carer Forum, 2009; The Patient Safety Education Program, 2012). Direct care nurses have been the most frequent health care providers who initiate and administer restraints on mental health inpatient units (Bigwood & Crowe, 2008). A growing body of research is available on general restraint intervention (Cannon, Sprivilis, & McCarthy, 2001; Gelkopf, Roffe, Behrbalk, Melamed, Werbloff, & Bleich, 2009), in some of which the authors explored patient (Georgieva, Mulder, & Wierdsma, 2012) and nurse (McCain & Kornegay, 2005) experiences, yet relatively little is known about nurses’ experiences of use of chemical restraint specifically.

Through this research project, the author used interpretive phenomenology to gain insight into the experiences of mental health nurses’ use of PRN psychotropic medication in managing behavioural emergencies in the adult inpatient mental health care setting. The goal of the research was to learn nurses’ perspectives to increase understanding of the ways that nurses made meaning of medication practices commonly considered chemical restraint interventions vis-a-vis the clinical, ethical decision-making process. Interpretive phenomenology was determined as best suited to explore the phenomenon of chemical restraint experiences because this research method was used to give voice to the nurses, who regularly used the practice, and would provide insight into the nuances of their lived experience. The researcher plans to use the exploratory research findings to inform nurses, health care leaders, and policy makers about the complex ethical decision making required for use of chemical restraint interventions. Research findings indicated a need for further inquiry into the specifics of the decision-making process of
nurses in making the choice to use chemical restraint medication, the time to use this medication, and the type of medication to use.

**Purpose**

The phenomenon of interest was the nurses’ experience of the use of chemical restraint interventions for managing behavioural emergencies with adult patients on acute inpatient mental health units. The aim of the research was to increase understanding of a commonly used (Baker, Lovell, Harris, & Campbell, 2007; Knutzen et al., 2013), and well accepted, (Allison & Moncrieff, 2014; Mott, Poole, & Kenrick, 2005) mental health nursing practice. The intervention at times appeared to contradict mental health nursing ethics, yet was simultaneously framed by some researchers as a therapeutic intervention to assist patients in gaining self-control in crisis situations (Currier, 2003; Gonzalez, et al., 2013; Larsen, & Terkelsen, 2013; Mott et al., 2005).

Restraint use has been a common nursing practice in acute inpatient mental health care settings (Landeweer, Abma, & Widdershoven, 2010). Although clinical practice guidelines and educational material for mental health staff highlight the use of Pro Re Nata (PRN) medication to subdue patients, who pose a safety risk through violence, as common practice on acute inpatient mental health units (National Mental Health Consumer & Carer Forum, 2009; The Patient Safety Education Program, 2010; Registered Nurses of Ontario, 2012), little formal research has been published on the use of chemical restraint interventions. The use of a qualitative research approach allowed inquiry into a minimally researched area, increasing understanding of nurses’ practices in using chemical restraint interventions, laying the foundation for further research. Research results were used to provide increased understanding of research participants’ subjective experience. Dissemination of results will potentially promote self-reflection and
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awareness of practitioners about contributing factors in their clinical and ethical decision-making processes (Grypdnock, 2006). The hermeneutic phenomenology perspective was deemed the best methodology and method to gain insight into the meaning that mental health nurses make of the use of chemical restraint interventions.

**Hermeneutic Phenomenological Approach**

Exploratory inquiry is best suited to fulfill the purpose of research when little formal research evidence is available on the topic. The findings can provide the initial step in laying the foundational groundwork for further inquiry. There are different phenomenological schools of thought; the tradition being followed in this study was originated by Heidegger. One of the major benefits in using hermeneutic phenomenology in the tradition of Martin Heidegger is that researchers can include reflexivity of their influence on their research (Grypdnock, 2006; Streubert & Carpenter, 2011). Conducting quality research provides opportunity for researchers to include the impact of their lived experiences, as well as personal values and beliefs in the design, collection, and reporting of data. The researchers are embedded in their research (Grypdnock, 2006).

The philosophical and methodological framework being used is hermeneutic phenomenology in the tradition of Heidegger, as described by van Manen (1997). Heidegger believed that the use of phenomenology allowed researchers to focus on the persons (the participants) and the context of their existences (Converse, 2012). Exploring the experience of the person in a specific context involved interpretation of social phenomenon, emphasizing rich description found in everyday life (Mackey, 2005). Use of the phenomenological method provided insight into the ways that mental health nurses make meaning of their experiences with chemical restraint intervention, a commonplace intervention that has potentially profound ethical
implications for patient care and nursing practice (Knutzen et al., 2013; Mayoral & Torres, 2005; Mott, Poole, & Kenrick, 2005).

Understanding lived experience included context. Hermeneutic phenomenology was used as the researcher considered that human experience was grounded in time and space, highlighting that context was fundamental to complete understanding of being and ways of being (Mackey, 2005; van Manen, 1997). To achieve understanding, the researcher’s interpretations went beyond the literal meaning of the participants’ words to pursue the fore-structures and thematic meanings held in the data (Mackey, 2005). Methodologically, the back and forth movement between partial and more complete understandings of the phenomenon was conceptualized as a hermeneutic circle (Converse, 2012; Mackey, 2005).

The interpretive process was used to allow the researcher to describe, analyse, and reflect upon the relationships between the participants and the phenomenon (Converse, 2012; Mackey, 2005; Streubert & Carpenter, 2011). The hermeneutic nurse-researcher situated herself in the research, substantiating this clearly in the analysis process (Converse, 2012; Mackey, 2005). The researcher listened to participants’ descriptions of the phenomena, situations and experiences that were brought to her attention, while maintaining reflexivity in her understanding of the phenomenon. Streubert and Carpenter (2011) suggested that the researcher conduct a cursory literature review prior to data collection, limiting the literature review to reduce the preconceived notions of the researcher about the phenomenon of inquiry. A literature review was conducted to support the necessity of the study and the chosen method of inquiry.
Chapter 2 - Literature Review

The literature search was conducted using the Internet-based academic search engines Google Scholar, CINAHL, and PubMed using the search terms and combinations of search terms including: restraint, chemical restraint, rapid tranquillisation, nurse experience, nurse perspective, patient experience, patient perspective, acute mental health, inpatient mental health, psychiatry, and lived experience. Studies were limited to those studies conducted after the year 2000. The initial search produced peer-reviewed studies on three types of restraint: environmental, physical/mechanical, and chemical, with most literature being focused on environmental and physical restraint (Baker, Lovell, & Harris, 2008; Gelkopf et al., 2009; Perlman et al., 2013; Whittington, Baskind, & Paterson, 2006).

Although research on general restraint use and coercive practice in mental health has been increasing, few researchers focused specifically on chemical restraint use; none were found that explored nurses’ experiences. Few peer-reviewed studies were conducted specifically on chemical restraint, with only one research article where researchers specifically used the term ‘chemical restraint’. Thus, the initial search was broadened to include search terms related to involuntary medication practices.

The literature review included 54 peer-reviewed research articles. The literature review has been divided into five main themes related to chemical restraint intervention: chemical restraint, PRN medication, rapid tranquillisation, nursing management of challenging patient behaviours, and coercive practice. One central challenge, which emerged in the literature review process, was the inconsistent use of terminology to define pharmacological emergency control measures. Diversity of the definitions used in the articles was important to consider. Prior to presenting the literature review, an overview is provided of the controversy, and varying
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terminology used, to describe ‘chemical restraint’, to highlight the inconsistencies in use of the term in current research.

**Definition Challenges**

Much controversy was identified concerning use of the term ‘chemical restraint’. Some clinicians viewed the term as outmoded and unethical because of a belief that medication was a therapeutic intervention based on provisional and formal diagnosis (Currier, 2003; Currier & Allen, 2000). Other clinicians viewed the practice as a coercive, involuntary, emergency measure that posed known risk to the patient (Anderson & Reeves, 1991; Stastny, 2000).

American research conducted by Currier (2003) was used to explore the common perception of health care clinicians that ‘as needed’ emergency medication interventions used in situations to control patients was a less invasive intervention, despite national federal policy treating all types of restraint as equally restrictive. Similarly, Bowers, Alexander, Simpson, Ryan, and Carr-Walker (2004) collected evidence supporting the idea of a hierarchy of restraint, with chemical restraint viewed as least invasive in comparison to mechanical and physical restraint, through quantitative research conducted with mental health nursing students. Nursing students gave PRN medication the highest approval rating compared to other types of restraint (Bowers et al., 2004).

The researchers offered the suggestion that their findings supported the perspective that chemical restraint was not a restraint at all, but rather, a therapeutic intervention.

Despite evidence of health care professionals’ different perceptions of emergency psychotropic medication for controlling behavioural emergencies, Currier (2003) found that the distinct term ‘chemical restraint’ had many negative connotations. The negative view persisted despite the potential therapeutic clinical effect for mental health patients. The discussions offered in the research were largely posed from the perspectives of physicians. Exploring
nurses’ understandings of chemical restraint interventions may provide clarity to the meaning of
the term from the perspective of those health professionals, who most often administer the
intervention.

**Chemical Restraint**

Little research was found to be focused specifically on chemical restraint. The literature
that was found has been divided into five sections: studies conducted specifically on chemical
restraint, notions of emergency medication as a less invasive approach, different cultural factors
identified in restraint use, emotional response, and patient characteristics.

**Specific research.** Only one study was found where researchers specifically used the
term ‘chemical restraint’. The researchers’ aim was to provide a foundational understanding of
chemical restraint practices in Greece, as an initial step in development of national standards and
guidelines of practice in accordance with existing global guidelines (Bilanakis, Papamichael, &
Peritogiannis, 2011). The findings were consistent with Pakistani research on forced
intramuscular injections, which supported the use of antipsychotics as the most frequent choice
of chemical restraint, often in combination with benzodiazepines (Iqbal, Naqvi, & Siddiqui,
2006). Chemical restraints were the most frequently administered restraint, with first generation
antipsychotics used more than the available second-generation antipsychotics, possibly due to
lack of clinical testing and personal familiarity (Bilanakis, et al., 2011).

**A less invasive response.** Chemical restraints were sometimes presented as the least
invasive and most safe intervention in behavioural emergencies, often the first-choice
intervention. The choice of chemical restraint over other types of restraint seems consistent with
research conducted with British mental health nursing students, who perceived chemical
containment methods as the least invasive and most safe choice of restraint (Bowers et al., 2004).
Bowers et al. (2004) found that all students (new and upper level) gave mechanical restraint and net beds the lowest approval rating and PRN medication the highest, indicating that opinions about the ethical practice of specific restraint interventions were formed before integration into professional practice. However, these nurses’ opinions may have changed once they entered professional practice and became integrated into the unit culture.

While other researchers tended to use terms such as forced, involuntary, or coerced medication as substitutes for the term chemical restraint, possibly because of the negative connotations associated with the term, the research findings supported potential benefits and challenges of chemical restraint interventions. Georgieva, Mulder, and Noorthoorn (2012) found that using involuntary medication interventions, as a first line treatment, resulted in a reduction in the use of seclusion room interventions. Interestingly, for those patients, who required rapid tranquillisation and seclusion room use, the mean time in seclusion did not differ from those patients who required seclusion room use alone, indicating that staff had additional challenges in managing patients who were agitated and violent (Georgieva, et al., 2012). Although nurses identified risks in using restraint and seclusion interventions, they had challenges in identifying effective alternatives (Haglund, et al., 2003; Muir-Cochrane, Baird, & McCann, 2015). The organizational, environmental, and cultural factors of the inpatient unit influenced the successful workplace integration of policies targeted at restraint reduction (Husum, Bjorngaard, Finset, & Ruud, 2010; Kaltiala-Heino et al., 2003; Muir-Cochrane, et al., 2015). Utilization of the semi-structured interview method allowed direct care nurses to share their experiences, thereby allowing the researcher to gain insight into ways that they made meaning of chemical restraint intervention. Exploration of nurses’ understandings of the perceived risks, benefits, and
alternatives to chemical restraint, is necessary to gain insight into the clinical decision-making process.

**Cultural factors.** In some countries chemical restraint was perceived as more invasive, thus was utilized less than physical or mechanical restraint. Norwegian researchers demonstrated that patients, least frequently, were administered chemical restraint alone, with mechanical restraint being the most frequent restraint intervention (Knutzen et al., 2013; 2014). Cultural factors may have influenced the preference of restraints that were used and thus, the perspectives of the nurses, who administered them. In a comparative review of global literature on patient confinement techniques, Tekkas and Bilgin (2010) found that different methods were condoned, and thus used more frequently in different countries. No studies were published on perspectives of Canadian nurses, indicating the potential benefit of qualitatively exploring nurses’ perspectives on chemical restraint with respect to their clinical decision-making process, unit culture, understandings of indications, and perceptions of effectiveness of chemical restraint in managing behavioural crisis.

The perspectives of nurses, and thus unit culture, may have been influenced by training support for safe use of restraint interventions by the health care organization. Kontino et al. (2008) conducted qualitative research, which was focused on nurses’ and physicians’ educational needs to support the use of restraint interventions. Staff identified needs of infrastructural (staff resources, safe facility design, adequate staffing, and instructions for staff) and managerial (occupational health involvement, peer support for debriefing, psychological support, clinical supervision, and interdisciplinary discussion) support to better ensure safe nursing practice.

**Emotional response.** Further study is necessary to identify important emotional responses to restraint interventions that promote psychological well-being of nurses. The one
Canadian study on restraint interventions was conducted in a residential care facility (Merineau-Cote & Morin., 2014). Researchers focused on clients with intellectual disability and their staff in the residential community setting. The researchers found that both staff and residents viewed restrictive measures negatively, with staff reporting anxiety, when using restraint interventions. The findings may be similar for inpatient mental health nurses, suggesting benefit in exploring nurses’ emotional response to chemical restraint interventions as a basis for establishing necessary supports.

**Patient characteristics.** Patient characteristics, for those persons who were most frequently administered involuntary medication, included diagnosis of schizophrenia, involuntary admission status, and history of involuntary admissions (Kaltiala-Heino et al., 2003; Knutzen et al., 2013). Patients believed that their opinions were not considered with respect to their care decisions, despite having attention from staff and having ability to voice their opinions about their care (Haglund, et al., 2003; Soininen, et al., 2013). Patients voiced their beliefs that they did not see benefit, nor necessity, for restraint or seclusion interventions (Soininen, et al., 2013). No published peer-reviewed research was found to be conducted on nursing staff practice related to assessment of patients’ treatment preferences and use of interventions that meaningfully included patients in the treatment decision-making process. Thus, phenomenology may be best utilized to learn about different mental health nurses’ practices and beliefs regarding patient inclusion in chemical restraint treatment decisions.

Pertinent research related to chemical restraint interventions was focused on specifically identifying chemical restraint practices, exploring notions of emergency medication as a least invasive approach, identifying different cultural factors in restraint use, exploring emotional response, and distinguishing patient characteristics. Research on PRN medication use was
identified as a pertinent area of research with respect to chemical restraint interventions because chemical restraints have been essentially ‘as needed’ medication provided in situations of behavioural emergency (Cleary, Horsfall, Jackson, O'Hara, Aarons, & Hunt, 2012).

**PRN Medication**

Medication administration has been common nursing practice in acute inpatient mental health settings (Landeweer, et al., 2010). Few research studies were conducted on administration of chemical restraint PRN medication, despite clinical practice guidelines and educational material for mental health staff. Available information highlights the use of medication to subdue patients, who pose risk of violence, and the frequency of such practice on acute inpatient mental health units (National Mental Health Consumer and Carer Forum, 2009; The Patient Safety Education Program, 2010; Registered Nurses of Ontario, 2012). Researchers, who published studies on PRN use, highlighted nursing practice concerns, common medications used, and knowledge-practice gaps.

**Nursing practice concerns.** Nursing practice concerns included challenges in completing documentation reflective of actual practice, implementing the informed consent process, and ensuring effective patient education. Patients, who were admitted to acute inpatient units, reported not receiving relevant facts about PRN use; a significant number reported not receiving any information at all (Cleary et al., 2012). Many patients reported that no consent was sought (Cleary et al., 2012). Many patients were able to identify benefits of PRN medication in retrospect, with half of the participants identifying disadvantages and all participants identifying numerous alternatives (Cleary et al., 2012). Psychiatric inpatients have been found to receive PRN medication, with the documented rationale for administration being widely varied, with few other therapeutic interventions being documented prior to administration.
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(Curtis, Baker, & Reid, 2007; Lindsey & Buckwalter, 2012). Exploration of nurses’ perceptions and understanding of the patient experience, in comparison to what is known about the patient experiences, may provide better understanding of ways nursing practice can be used to integrate patient involvement, medication teaching, informed consent, and identification of alternative interventions.

Ambiguity was apparent concerning the specific clinical indications for PRN administration of psychotropic medication. ‘Agitation’ has been a commonly documented indication for PRN administration (Fujita, Nishida, Sakata, Noda, & Ito, 2013; Stein-Parbury, Reid, Smith, Mouhanna, & Lamont, 2008). Conflict, most frequently verbal aggression, has been identified as the most common antecedent to PRN medication administration (Stewart et al., 2012). Researchers have relied heavily on retrospective chart data, which may not always be accurate representations of interventions and assessments actually implemented. Qualitative interviews of staff nurses’ recollections of clinical decision making, with respect to specific incidents, may provide more accurate insight into the pre-assessment, the intervention, and post-assessment processes.

Methodological challenges exist in attempting to attain greater understanding into the nurses’ clinical decision-making process. Researchers attempted to capture the clinical decision-making process through nurses’ responses to clinical vignettes (Usher, Baker, & Holmes, 2010), as well as through seeking best-practice opinions through Delphi studies, which indicated the importance of service user involvement in the clinical decision-making process (Baker, Lovell, Harris, & Campbell, 2007). Interestingly, some researchers purported that patients often were left out of the decision-making process contrary to reports within best-practice studies (Cleary et
al., 2012), with nurses showing confusion about the clinical decision-making process (Usher, Lindsay & Sellen, 2001).

**Common medications.** Pharmacotherapy has been a standard practice to subdue mental health patients, especially in certain settings. Some research was used to support the types of medications that were commonly used in risky psychiatric situations with respect to specific settings such as the Psychiatric Intensive Care Unit (Brown, Chhina, & Dye, 2010), the Emergency Room (Wilson, Pepper, Currier, Holloman, & Feifel, 2012), and care areas with older adult populations (Mott et al., 2005). In the findings, researchers showed that many patients, who were seen to require medication interventions, received rapid tranquillisation agents or antipsychotics medications such as lorazepam and zuclopenthixol acetate respectively, via intramuscular (IM) injection, with an even larger proportion, who received oral benzodiazepines during their admissions (Brown et al., 2010). The use of medication interventions varied significantly, in terms of both IM and oral medication administered, suggesting again that culture (Brown et al., 2010) and tradition (Stewart et al., 2012) may be factors that were as influential as evidence-based practice. Medication interventions tended to be the identified focus, with less emphasis on the clinical decision-making process and the non-pharmacological interventions that may accompany medication interventions, despite the recommendation of non-pharmacological interventions as first-line treatment (Wilson et al., 2012). Overall researchers relied on retrospective chart data and staff self-reporting of their practice, potentially leading to missing information and bias. Qualitative perspective is beneficial to explore the process of nurses’ practice of chemical restraint use, including pre and post-assessment, and debriefing processes.

**Knowledge-practice gaps.** Gaps have been present between knowledge and application of best practice. Some researchers have highlighted the dangerous practices that occurred as a
result of use of PRN medication interventions. Polypharmacy has been an established risk, especially for agitated patients with diagnoses of schizophrenia (Fujita, et al., 2013) and geriatric populations (Lindsey & Buckwalter, 2012), as both groups have been frequently prescribed PRN medication in addition to regularly scheduled medication regimes, placing them at risk of overdose and adverse side effects. In an exploration of mental health nurses’ knowledge, attitudes, and clinical judgement concerning medicine management in an inpatient setting with a focus on enhancing training, Haw, Stubbs, and Dickens (2015) found that many nurses did not have awareness of or compliance with current UK medicine management policies and guidelines. Research, pursuing nurses’ perspectives on decision-making processes and practices of PRN medication use in situations of behavioural emergency (situations of chemical restraint intervention), has been beneficial in providing insight into actual nursing practice, and the relationship between nurses’ understanding of current policy and application to their clinical practices. However, there is a lack of research on the ethical issues that underlie the use of chemical restraint. Insight into nurses’ experiences of administering chemical restraint can uncover the ethical dilemmas that they face.

Australian researchers have proposed national standards for PRN medication administration in psychiatric inpatient settings. National standards were determined to best include factors such as: prescription of medication, nurse selection of the best method to evaluate the indicated intervention, nurse consideration of different types of therapeutic interventions, informed consent process, and nurse assessment of effectiveness of the PRN administered (Hilton & Whiteford, 2008), yet, gaps between policy and practice persist. Policy and practice gaps beg the question: Are nurses aware of the standards that are in place? Some researchers suggested that policy, directing nurses to administer involuntary medication as a first-line
treatment for agitation and risk of violence, reduced the relative risk of the patient also being secluded. However, studies showed no reduced duration of time in seclusion. This finding suggests that previous clinical practice continues despite changes in policy and procedure that reflected best practice (Georgieva et al, 2013). Better understanding of connections between policy and practice may be found through research, specifically exploring ways that nurses, who use chemical restraint interventions, are supported in developing skills and training to support best practice.

Researchers have identified challenges with PRN use in nursing practice, practices with respect to common medication use, and knowledge-practice gaps. Qualitative research designed with the specific focus of attaining information about nurses’ recollections, of chemical restraint intervention scenarios experienced, as well as the different situations and related practice constraints, is necessary to gain insight into the challenges nurses faced when confronted with the use of chemical restraint interventions. Perhaps a further challenge that nurses’ face is the lack of standardized terms and clear indications with respect to the PRN medication ordered for the purpose of chemical restraint. Some researchers specifically focused on the practice of ‘rapid tranquilisation’ (delivery of fast acting medication, delivered in injection form, specifically to subdue a patient) in their research of chemical restraint interventions.

**Rapid Tranquilisation**

Rapid tranquilisation is a term that has been used to describe situations of behavioural emergency, requiring fast-acting medication intervention to subdue/control a patient (Allison & Moncrieff, 2014; Dickinson, Ramsdale, Speight, & Davies, 2009; Innes & Sethi, 2013). Research conducted on rapid tranquilisation interventions was found to focus on etymology or the historical development of the term, clinical practice guidelines, and prescriber indications.
The research was focused on physical aspects of injection medications, directed primarily towards physicians.

**Etymology.** The term ‘rapid tranquilisation’ was developed as a means of avoiding the use of the term ‘chemical restraint’ and to shift the focus to the use of rapid-acting medication to treat targeted behaviours in behavioural emergencies (Allison & Moncrieff, 2014). Allison and Moncrieff (2014) used a historical perspective to explore the concept of rapid tranquilisation with respect to the development of antipsychotic medication, the origin of the term, the practice of emergency sedation, the historical context, and the views on usage. Limited understanding of the popularization of clinical practices has restricted the ability of clinicians to make informed decisions about the application of the intervention (Allison & Moncrieff, 2014). The authors noted the importance of shifting clinical research towards the therapeutic benefit of antipsychotic interventions, rather than maintaining a narrow focus on emergency sedation for chemical restraint only (Allison & Moncrieff, 2014), a conclusion echoed by Currier (2003) and Wilson et al., (2012).

**Clinical practice guidelines.** Practice documents, including guidelines as well as policy and procedure manuals, may be used by nurses to direct chemical-restraint practice. One United Kingdom-based research study was aimed at reviewing clinical practice documents related to rapid tranquilisation (Innes & Sethi, 2013). The most commonly recommended drugs were lorazepam, haloperidol, olanzapine, and risperidone (Innes & Sethi, 2013). The authors identified a need to standardize rapid tranquilisation practice documents and develop guidelines and clinical decision-making tools based on evidence-based practice (Innes & Sethi, 2013). A researcher, from another UK-based study, focused on examining the auditing process used in post-rapid tranquilisation monitoring, limited to identifying measurement tools for physical
monitoring of post-RT administration (Loynes, Innes, & Dye, 2013). Inconsistencies were found in aspects of patient monitoring, and the frequency of monitoring, highlighting the knowledge gaps in links between guidelines, practice, and safe practices by clinicians, who were administering the intervention (Loynes et al., 2013). No similar Canadian studies were found. Due to the lack of research, benefit may exist in asking direct-care nurses about the tools, if any, which guide their practice of chemical restraint use, to gain further understanding into specific guidelines that influence their practice.

Prescriber indications. Researchers have largely been focused on treatment of schizophrenia and mania, as the two main diagnoses of focus for safety of specific agents for rapid control of agitated patients. The authors of the research on rapid tranquillisation, conducted from a physician perspective, indicated that treatment of agitation was best focused on the underlying condition, with medication used as a last resort measure for goals of seeking calm, rather than causing sleep as the therapeutic end-point (Wilson et al., 2012). Atypical antipsychotic medications were popularized as first-line treatments in agitation of patients with acute psychotic disorders (Mohr, 2005). Atypical antipsychotics, particularly intramuscular aripiprazole have been beneficial because of the lesser side effect profile and lesser sedative effect as compared to typical antipsychotics, which allowed nurses to build better patient rapport (Gonzoles et al., 2013). Another important advantage of newer atypical antipsychotics was that use of atypical antipsychotics allowed for transition to longer term therapy including oral formulations of the same medication (Wilson et al., 2012), thus supporting the notion of their inclusion, as part of a comprehensive treatment plan, rather than simply for emergency containment of a patient. The perspective of nurses is needed because, although physicians are the prescribers, nurses tend to be the administrators of rapid tranquillisation interventions. Rapid
tranquilisation medications are often prescribed as PRN medications, to more than those patients, who have been diagnosed with mania and/or schizophrenia.

Curiously, exploration of the nurses’ perspectives is missing from the research conducted on rapid tranquilisation practices. Research conducted on rapid tranquilisation interventions was focused on examining the etymology in the historical context of psychiatry, related clinical practice guidelines, and prescriber indications. Despite the lack of nursing-focused research on rapid tranquilisation interventions, nurses have been understood to be the health care professionals, who most frequently provide patient interventions in response to managing challenging patient behaviours, such as those behaviours requiring emergency medication interventions (Dickinson et al., 2009)

**Nursing Management of Challenging Patient Behaviours**

Nurses working on inpatient mental health units have been required to manage challenging patient behaviours such as aggression, violence, and agitation (Cowin et al., 2003; Cutcliffe, 1999; Ilkiw-Lavalle & Grenyer, 2003; Kindy, Petersen, & Parkhurst, 2005; Luckhoff et al., 2013). Researchers’ have identified the importance of understanding the nurses’ clinical decision-making processes, challenges related to inconsistent use of terminology to describe the patient experiencing behavioural crisis, nurses’ perception of violence in the workplace, and nurses’ emotional reaction to the type of intervention used in response to violence.

Quantitative methods utilizing retrospective chart analysis were used to conduct research on nurses’ clinical decision-making strategies, with respect to the type of restraint, which is used in emergency situations of violence (Di Lorenzo et al., 2014; Wynn, 2002). The use of quantitative data has led to identification of specific clinical factors, staff practices, and changes in hospital policy that influence restraint use. However, conducting qualitative research focused
on clinical factors and staff practices of chemical restraint use may be beneficial to gain greater understanding into the meaning of restraint practice for the nurses who administer the restraint, as well as to increase understanding of specific antecedents to chemical restraint use and choice of restraint.

Ambiguity related to the terminology used to indicate the need for restraint use has been an ongoing challenge. The term ‘agitation’ often was not well defined, resulting in potential misuse by healthcare professionals; was used synonymously with anxiety, aggression, hyperactivity problem/disruptive behaviour; and was used to describe non-purposeful behaviour (Schleifer, 2011). Exploration of the language that nurses have used to describe patient presentation prior to their administration of chemical restraint may be of benefit, specifically to determine behaviours that were noted prior to the particular intervention. Studying the language and terminology used to describe experiences of chemical restraint interventions may be beneficial in determining the impact and influence of language on nursing practice.

Nurses’ perceptions of violence in the workplace may be key to understanding restraint interventions. A growing body of literature has been available on nurses’ perceptions of violence in acute mental health settings (Jansen, Middel, Dassen, & Reijneveld, 2006; Jonker, Goossens, Steenhuis, & Oud, 2008), and mental health nurses’ lived experience of work-related patient violence (Cutcliffe, 1999; Kindy, et al., 2005), including research on types of violence perpetrated, causes, and recommendations for aggression reduction (Ilkiw-Lavalle & Grenyner, 2003). The concept of violence and patient aggression was the central focus of the literature, with restraint use being discussed as a mitigating intervention. Types of aggression and violence vary. Psychiatric nurses commonly experienced verbal aggression and threats, mild physical violence, and exposure to patients who were self-injuring (Nijman, Bowers, Oud & Jansen,
Research is needed on the specific types of behaviours that patients may display, which can lead to chemical restraint interventions, specifically as the indications may be different depending on the degree of danger and the direction of the threat.

Violence has become part of the acute inpatient mental health nurse’s everyday work experience. The increasing report of assault and injury of psychiatric nurses in acute inpatient settings has contributed to the choice of restraint used to manage aggressive patients (Luckhoff, et al, 2013), highlighting the lack of research on the effectiveness of programs aimed at reducing patient assault and the impact of violence on nurses’ lives (Moylan & Cullinan, 2011). Although the evidence supports nurses’ experiences of distressing emotions in response to restraint and seclusion use generally (Moran, et al., 2009), increased understanding about whether the degree of distress differs when administering the interventions of chemical restraint specifically is needed, especially if chemical restraint is viewed as a less invasive intervention.

Understanding the nurses’ experiences of chemical restraint interventions used in a workplace setting, where nurses are confronted with violence on a regular basis, poses many challenges. Researchers have provided evidence to support the clinical decision-making processes, identification of challenges related to inconsistent use of terminology to describe the patient experiencing behavioural crisis, nurses’ perception of violence in the workplace, and the general emotional reaction to intervention used in response to violence. Given the commonplace occurrence of violence in the inpatient acute psychiatric setting and the understanding of chemical restraint, as a forced intervention utilized in times of behavioural emergency, there is necessity to understand the research conducted on coercive practice in mental health.

Coercive Practice
Mental health nurses face daily ethical challenges, which are morally complex (Hem, Molewijk, & Pedersen, 2014). The inpatient mental health setting often requires nurses to exercise power and control, often experienced as coercion by patients in their care, which can result in multiple ethical challenges for nurses (Olofsson & Jacobsson, 2001). Ethical practice is a central concept in mental health nursing, especially with respect to use of restraint interventions, which may be considered coercive practices. Most of the literature on ethical practice in mental health has been opinion-based, focused on the involuntary treatment that patients, who have been admitted to acute inpatient mental health units, receive (Stastny, 2000). Researchers have identified the challenges that exist with respect to workplace constraints, the importance of autonomy and patient engagement, the negative effects of coercion on therapeutic rapport, principles of patient dignity, and the detrimental effect of coercive practices on staff morale. Little is known about the impact of mental health act legislation on acute care nursing practice. The British Columbia Mental Health Act (2005) contains relevant aspects with respect to the legislation on involuntary treatment and decision-making capacity of involuntary patients. Nurses working in acute mental health settings must be aware of the legal implications of the Mental Health Act to best inform their practice in caring for involuntary patients because of the legal and ethical issues that arise, especially with respect to involuntary and coerced medication practices. Legal and ethical challenges must also be understood within the context of the multiple workplace constraints that nurses face.

Nurses are in a challenging position, with some newer researchers indicating that marginalization of acute mental health nurses results from mandatory administrative work, which detracts from their availability to therapeutically connect with patients and to get to know patients (Rose, Evans, Laker, & Wykes, 2015; Shattell, Andes, & Thomas, 2008). Specific
interventions, such as chemical restraint, may be becoming more prevalent because of the many challenges in the workplace such as staff shortages and increasing incidence of patient violence (Cowin et al., 2003). Specifically interviewing direct-care nurses, to gain insight into the nuances of chemical restraint interventions, may be useful in identifying changes in a specific coercive practice, as related to the changes in the context of acute inpatient settings.

A growing body of literature may be used to identify the need for more research on coercive practice in mental healthcare settings, related to the understanding of the importance of patient autonomy and engagement (Hem, et al., 2014; Hui, Middleton, & Vollm, 2013; Whittington, et al., 2006). In response to the lack of research on nurses’ perspectives, VanderNagel, Tuts, Hoekstra, and Noorthoorn (2009) explored nurse perceptions of seclusion room use in the Netherlands, using a grounded theory approach. The themes that emerged were tension, trust, and power. They concluded that since nurses were most involved in the daily care of patients, they were deeply impacted by seclusion room use. Current research on coercive practices often included restraints generally (Larsen & Terkelsen, 2014), along with other coercive practices, such as forced treatment for involuntary patients (Hall, 2004) and forced medication, not necessarily defined as chemical restraint (Olofsson, Jacobsson, Gilje & Norberg, 1999). Norwegian researchers showed that nurses frequently believed that the use of forced medication was approved by their patients, who required these interventions (Haglund, et al., 2003). Nurses’ perceptions of chemical restraint, as coercive practice, may differ from other types of forced interventions, as medication sometimes was viewed as less invasive and may have been included as part of a larger treatment plan. Exploration of Canadian nurses’ perceptions of the patients’ perspectives of chemical restraint may prove fruitful in determining
if factors, such awareness about patients’ distress and nurses’ moral distress, influenced study participants’ practices.

The research on nurses’ experience of coercive practice varies, as some psychiatric nurses viewed the concept of coercion, as ethically problematic (Lind et al., 2004) and a barrier to therapeutic connection with patients (Olofsson & Norberg, 2001), while some researchers indicated that regular use of coercion led to lower thresholds of use and perceptions of coercive practice, as treatment rather than as last resort measures (Larsen & Terkelsen, 2013). Exploration of nurses’ perceptions of coercive practice, such as chemical restraint interventions, using a qualitative research method, may be beneficial because patients were found to view their inpatient mental health experiences more positively when less coercion was perceived (Sheehan & Burns, 2011). Deliberate sampling of nurses with diverse levels of experience also may prove fruitful in attaining differences in perception and understanding. In a Swedish study, grounded theory method was used to find that nurses adjusted their meaning of self-choice to match the patient’s perceived needs during conflict. The findings highlighted the need for further exploration of the experiential aspect of nurses’ ethical decision making.

Although identified as paramount in mental health nursing, the concept of dignity has been ambiguous, necessitating further exploration and clearer understanding (Endlund et al., 2013). Psychiatric nurses have been found to practice using dichotomous views of patient dignity, sometimes preserving it, but also infringing on it (Lindwall et al., 2012). Qualitative inquiry into ways mental health nurses make meaning of chemical restraint practice will add to the discussion on ways that such interventions contribute to or detract from patient dignity.

Staff morale also may be an important topic to pursue, as researchers have shown that mental health nurses experience moral distress related to limitations in their ability to provide
effective interventions and engage in meaningful therapeutic relationships with patients (Shattell, et al., 2008; Staniuliene et al., 2013; Totman, Hundt, Wearn, Paul, & Johnson, 2011).

Exploration of the ways that staff have been supported in difficult work that involves ethically challenging and morally distressing interventions, such as chemical restraint, may help increase understanding of ways to improve morale. The complex factors, which emerged from the literature, supported the necessity of a research philosophy and method focused on learning about the lived experience of nurses to gain insight into the ways that they make meaning of common acute inpatient mental health care interventions. Legal issues directly related to the British Columbia Mental Health Act also have a considerable influence on the treatment and practice of nurses caring for patients involuntarily admitted to inpatient mental health units.

**Legal issues.** Compulsory psychiatric treatment is ethically and clinically complex because forcing treatment on a person is a potential violation of human rights. Ethical concerns are often ameliorated by the belief that compulsory measures can improve clinical outcomes, and this is supported by research evidence (Sheehan, 2009). In British Columbia patients may be admitted involuntarily to a designated psychiatric facility if they meet four criteria: have a mental illness or mental disorder, have risk of mental or physical deterioration, require psychiatric treatment, and are incapable of making an admission or treatment decision (British Columbia Ministry of Health, 2005).

According to the British Columbia Mental Health Act untreated illness may cause substantial mental deterioration, thus meeting the legal criteria for involuntary admission (Gray, Hastings, Love, & O’Reilly, 2016). Involuntarily detention is used for treatment only, not for punitive purposes. The British Columbia statute also includes compulsory treatment committal criterion, meaning that patients are not allowed to refuse treatment. Interestingly, while patients
retain capacity to make treatment decisions, they also are not allowed to refuse psychiatric treatment, as determined by their psychiatrist and enacted by the nurses (Gray, Hastings, Love & O-Reilly, 2016). Researching the lived experiences of nurses’ using chemical restraint interventions in the clinical setting may provide insight into their understanding of British Columbia mental health legislation and influence of the Act on care provided to involuntary patients.

Researchers’ have identified some challenges that existed with respect to workplace constraints, the role of autonomy and patient engagement, effects of coercion on therapeutic rapport, principles of patient dignity, and the effects of coercive practices on staff morale. Discussion of the six main themes, which included definition challenges, chemical restraint, PRN medication, rapid tranquilisation, managing challenging patient behaviours, and coercive practice, was used present current research on the topic, to raise the importance of this issue, and to provide rationale for conducting this hermeneutic phenomenological study.
Chapter 3 - The Research Design

The purpose of phenomenological study is to gain insight into the lived experience of a particular phenomenon (Streubert & Carpenter, 2011). The research question being explored was: what are mental health nurses’ experiences of using chemical restraint interventions in times of behavioural emergency on adult inpatient acute mental health units? Phenomenology is both a philosophical perspective and a method (Streubert & Carpenter, 2011; Creswell, 2013). The research method, the researcher’s role, study setting/participant selection, ethical considerations, data collection, and data analysis were consistent with principles of hermeneutic phenomenology.

Research Method

Data were collected using semi-structured interviews (Interview Guide, Appendix A). Kvale (1996) identified that the very nature of the qualitative interview is semi-structured because the data were collected through a goal-driven conversation with sequenced themes to be discussed. The interview process was chosen because of the research goal of understanding nurses’ lived daily world from their perspectives. Van Manen (1997) identified that the phenomenological interview accomplishes two goals: exploring and gathering experiential narrative material, which may serve as a resource for developing a richer and deeper understanding of a human phenomenon, and allowing development of a conversational relationship with a partner (interviewee) about the meaning of an experience. The qualitative research interview is an inherently interpersonal interaction, which allows the researcher to gain insight into the lived experience of the participant.

The research interview is used to allow knowledge to be created through the process of human interaction (Kvale, 1996). The researcher engaged potential participants through the use
of the Letter of Invitation (Appendix B), which was distributed in person, to nurses known to the researcher, and who worked in the study setting. The Consent Form (Appendix C) was used to ensure that all participants were aware of the purpose of the research, and the associated benefits and risks. Van Manen (1997) suggested that the researcher maintain a strong orientation to the research question, while using concrete questions focused on specific situations or events. The researcher can explore each experience fully following the identification of the experience by the research participant. Although value exists in creating an interview guide, silence, repetition, or questioning thoughts were identified as effective tools to bring the discourse back to the concrete experience (van Manen, 1997). Open-ended questions were asked to generate rich description of participants about their experiences (Streubert & Carpenter, 2011). Data were recorded using a digital recording device. During the informed consent process each participant was asked for consent to digitally voice record her interview (Appendix C).

The Researcher’s Role

Hermeneutic phenomenology requires that researchers maintain awareness of their personal biases (van Manen, 1997). Explication of the biases was identified through continual self-reflection and the writing and re-writing process; reflection occurred intentionally at every stage of the research process. The researcher is a registered nurse, who holds a Canadian Nurse Association Certification in Psychiatric and Mental Health. The researcher currently practices in multiple mental health care clinical settings. The researcher’s educational preparation includes a Bachelor of Nursing, Bachelor of Sociology, Bachelor of Psychology, Master of Nursing, and current enrollment in the Master of Psychiatric Nursing program through Brandon University. Areas of professional practice include inpatient mental health rehabilitation, mental health outreach, and clinical instruction for undergraduate Bachelor of Science in Nursing students.
The researcher practices nursing by using a recovery-oriented, trauma-informed perspective. The research is being pursued to complete the researcher’s thesis. The researcher has no associated conflicts of interest.

**Participant Selection**

The focus of the study is the nurses’ experience in the use of chemical restraint within adult acute mental health units located in general hospitals in large urban centres located in the Lower Mainland, British Columbia. Participants reportedly worked in care areas providing acute inpatient services primarily to adults 19 to 65 years of age. Nurses working in urban centres were determined as best fit because the centres contain multiple designated facilities, as defined under the British Columbia Mental Health Act, meaning hospitals, which are able to admit patients requiring treatment for acute mental health needs and are equipped to provide emergency interventions such as restraint (British Columbia Ministry of Health, 2005). The acute mental health units in general hospitals were chosen because research data supports that patients care for are diverse, in terms of varying diagnoses, age range, and inclusion of patients, who had voluntary and involuntary admissions (Canadian Institute for Health Information, 2014).

Participants targeted for the sample were direct care mental health nurses (either registered nurses or registered psychiatric nurses), with more than one year of experience on inpatient units, and employed permanently (as opposed to casual or temporary) on inpatient units located in the Lower Mainland, British Columbia. The rationale for selecting fulltime or part-time employees with more than one year of experience is the assumption that those nurses will have had greater exposure to chemical restraint interventions.
Purposive snowball sampling was used (Green & Thorogood, 2009). All nurses interviewed were required to have had experience in administering chemical restraint and/or have had direct involvement in team interventions using chemical restraint to be included in the study. Snowball sampling was deemed appropriate because participants were engaged in identifying nurses, who met the criteria for participation in the study. Participants assisted the researcher in identifying nurses, who worked in different locations and at different health authorities, increasing diversity of the sample, and ensuring no affiliation with any particular health authority. Letters of invitation were distributed to mental health nurses, who met the criteria for the study. The researcher began the snowball sampling by identifying three nurses known to meet the criteria to participate in the study. The researcher had a verbal and email conversation with those nurses and requested that each nurse identify potential study participants. Email contact was made with the researcher, and a screening process was used to confirm that participants met the study criteria. Following each interview the participant was asked to identify other nurses, who fit the outlined inclusion criteria. Letters of invitation were provided to each potential participant to give to the identified nurses. All study participants were recruited through the snowball sampling process. Care was taken to explicitly communicate that no affiliation will be made with a particular place of employment thus ethical approval will not be sought from any particular institution or health authority. Sample size was determined at the point when sufficient data were collected for effective data analysis (Streubert & Carpenter, 2011). The goal in the use of hermeneutic phenomenology is to generate thick rich data related to lived experience (van Manen, 1997), therefore 5 or 6 interviews may result in sufficient data for useful analysis.

**Participant Descriptions**
In total, eight interviews were conducted. Initially six interviews were conducted. All participants were women, ranging in age from 26 to 58 years old. Three participants identified as Registered Nurses, holding undergraduate nursing degrees; five participants identified as Registered Psychiatric Nurses, four holding undergraduate psychiatric nursing degrees and one holding a psychiatric nursing diploma. The participant group was diverse, in terms of participants working in different sites, on different acute units. The number of years of experience of each nurse ranged from 1.5 to 9 years. However, a majority of participants in the initial round of interviews had only worked for the majority of their career in their identified current place of work, some had only worked in their current place of work (as early as in their final preceptorship of nursing school). The exclusion criteria, of current fulltime or part-time employment on an acute psychiatric unit, were changed to allow more variability in response. The inclusion criteria were expanded to include participants, who recently had worked in acute inpatient psychiatry inpatient, but whose current practice was in a non-acute mental health area. Two additional participants were recruited and interviewed following revision of study design and approval from the institutional research ethics board. The two additional participants had worked on inpatient mental health units for the majority of their careers, but at the time of interview worked in another area of adult mental health at the time of their interview.

Before, during and after each interview, the researcher reflected on the influence of her personal experience, values, and beliefs. During each interview, the researcher kept a small notebook for field notes. Notes also were written after each interview, during the process of transcription, and during the analysis process.

Ethical Considerations
Ethical considerations are made for any research study that involves human participants (Streubert & Carpenter, 2011). Ethical principles must be upheld at every stage of the research process (Streubert & Carpenter, 2011). Ethical considerations include discussion of informed consent, confidentiality and anonymity, as well as benefits and risks for study participants. Research ethics review board (REB) approval was obtained from Brandon University Research Ethics Committee (BUREC) (Appendix D).

**Informed consent.** Informed consent was obtained from all participants prior to their research involvement, with clear instruction that opportunity not to answer any particular question or to withdraw from the study was possible at any time. Informed consent upholds the ethical principle of autonomy by allowing the participant the ability and the right to independently decide whether he or she wants to participate in the study (Streubert & Carpenter, 2011).

**Confidentiality.** Confidentiality was maintained throughout the research process through careful collection, storage and use of all participants’ data, ensuring privacy and restricted access. The researcher had no affiliation with any of the health care regions that participants were employed at during the time of interview, which was made clear to each participant before commencing each interview. Interview data were kept confidential to uphold integrity of the responses, and as a means of decreasing potential anxieties of study participants because the results will be made public, as a finalized Master’s thesis document, thus managers and co-workers will have access to their responses in the form of described experiences and direct quotations. Anonymity was maintained through use of a number being assigned to each participant and fictitious locations assigned to each participant (Streubert & Carpenter, 2011).
Participants were selected from a geographical area that included 4 health care authorities and more than 20 inpatient adult acute units, further ensuring anonymity.

**Benefits and risks.** Potential benefits to the participants were that the interviews may have provided the opportunity for participants to share their stories, as well as share concerns and feelings about their experiences in an unrestricted manner. Potential risks to participants may have occurred if participants chose to disclose memories of emotionally difficult, traumatic, and distressing experiences. Participants were given the opportunity to pause or terminate the interview, with opportunity to resume at a later time and location of the participant’s choosing. In the event of participant distress participants would have been provided with opportunities to de-brief with the researcher immediately after the interview and offered a written list of resources for counselling support if requested or deemed useful. The benefits and potential risks were made clear to the study participants both in the Letter of Invitation (Appendix B) and the Consent Form (Appendix C). No incidents of participant distress were evident during or following any interview.

**Data Collection**

Interview data were recorded using digital voice recording. The interviews ranged from 32 minutes to 98 minutes in duration. Interviews were conducted in a private location chosen by each participant. Digital recordings were stored on one computer accessible only by the researcher. Field notes were written by the researcher in a paper notebook during the interview process, to note observations not captured in the audio recording (Streubert & Carpenter, 2011). Notes also were made during the transcriptions and analysis process using a paper notebook and in the margins of the printed interview transcripts. The audio recordings were transcribed verbatim by the researcher using voice transcription computer software. The audio recordings
were digitally stored and password encrypted. Written material and recordings were stored in a locked location accessible only by the researcher. Computerized data and written notes will be destroyed following the thesis defense and dissemination of the research findings.

Participants were informed that they may withdraw from the study at any time up to the time of research dissemination. If participants choose to withdraw from the study their data will be destroyed. No participants have withdrawn from the study to date.

**Data Analysis**

Data analysis was completed using van Manen’s (1997) process of phenomenology. Data analysis commenced following the first interview. Transcription of the first interview commenced approximately one week after the interview was conducted. The process of data analysis involved phenomenological reflection, where the researcher engaged in reflectively analyzing the structural or thematic units of an experience (van Manen, 1997). The researcher listened to each interview at least once before the transcription process began, and at least once during the transcription process, to promote increased attention of the researcher to both the content of the interview and the nuances of each piece of the interview such as pauses, intonation, repetition of phrases, and emphasis placed on certain statements. During the transcription process, certain pieces of the interviews were replayed multiple times as field notes were reviewed and notes were made about the researcher's personal reflections.

The researcher was immersed in the data analysis process throughout the research process to develop a rich understanding of the emerging themes. The data analysis process involved writing and rewriting to adequately articulate and communicate the meaning of the phenomenon of interest (van Manen, 1997). An audit trail consisting of reflective journal notes was maintained to assist with trustworthiness and authenticity of the data (Streubert & Carpenter,
2011). The researcher maintained a reflective journal throughout the data collection and analysis process to document personal reactions of the process as a preventative measure for reducing the effect of the researcher’s assumptions and experiences throughout the study.

**Personal Reflection**

Reflection on personal experiences by the researcher was useful, as firsthand experiences of the researcher were often similar to the experiences of interview participants, who had experienced the phenomenon of interest. The researcher had experience in nursing clinical education with both undergraduate nursing students as well as in acute psychiatry. Multiple times during each interview, the researcher deliberately used silence and short probing phrases to seek clarification, despite feeling the impulse to interject with information and/or teaching. The researcher also deliberately chose to share very little personal information about her experience to limit any influence this experience may have had on interview participants’ responses. Van Manen (1997) suggested that these thoughts and experiences should be identified and effort should be made to keep these thoughts from influencing the data collection and analysis. Thus, throughout the research process, the researcher must be aware of the power of language, recognizing that reflection must be focused on the words used too, as they have interpretive significance for the phenomenological description (van Manen, 1997). The impact of language may be apparent in the interview guide that has been constructed, as well as in the analysis of the interview transcripts, and in the writing and re-writing process of analysis.

The analysis process involved writing and re-writing. Phenomenological writing begins with reading and listening to the data to engage with the data (Streubert & Carpenter, 2011; van Manen, 1997). Van Manen (1990) suggested using a circular process of writing and re-writing which allowed the researcher to clarify, reflect, and attain deeper meaning related to the
phenomenon of inquiry. The circular process was deemed advantageous because this process was used to promote increased reflection of the researcher through maintaining distance, while drawing the researcher closer to the phenomenon for more focused understanding (van Manen, 1997). Through the reflective process the researcher experienced an increased awareness of the challenges that acute mental health nurses face in providing care for patients requiring chemical restraint interventions.

**Stages of the Analysis Process**

The first stage of the analysis process involved listening to each interview prior to the transcription process. Originally the researcher planned to hire a transcriptionist. However, after conducting the interviews, the researcher reviewed the field notes written before, during, and after each interview and decided to transcribe the interviews, to further immerse herself in the data.

In the process of listening to the interviews it was evident that the researcher provided the study participants with adequate time to answer each question. Consideration was made to minimize responses of the interviewer to decrease risk of leading participants in certain directions for their responses. Deliberate consideration was made to minimize any interviewer response that communicated value judgements. All probing questions were attempted to be asked in a neutral way to decrease risk of leading participants to certain responses.

After the interviews were transcribed into a Microsoft Word document the researcher did an initial reading. Each transcript was printed in a format that left a far right-hand column to make notes relevant to coding. The analysis process began with an initial reading of each printed interview transcript. Transcripts were scanned for responses that were relevant to the research questions. Responses were deemed irrelevant if they did not relate to mental health nursing
practice. Each transcript was then re-read with notes made in the coding column with a short phrase (1-5 words) that described the general theme of each statement. Codes were tracked on a separate Excel spread sheet. In the initial coding process 15 codes were created. After all interviews were initially coded, they were read again to determine if similar codes should be grouped together within more inclusive terms. The themes and sub themes captured the statements that were made in each interview.

The interview was read through line by line with notes made in a separate column with thought given to the central theme being revealed in the statement. As outlined by van Manen (1997), the researcher considered the message each participant was conveying about his or her lived-experience in using medication for controlling behavioural emergencies. After the initial notes were made, each interview transcript was read again to collect the different initial themes to identify similarities or differences and determine if certain ones could be combined and labelled with a more inclusive theme. In the following chapter, a detailed analysis with illustrating quotes will be provided to substantiate the emergent themes.
Chapter 4 - Emergent Themes

The themes that emerged in the data analysis process were: using all the tools in the toolbox, taking control to maintain safety, using therapeutic intervention, working within constraints, making medication choices, and transitioning from novice to expert. Within each theme, subthemes were created to further refine the meaning of the data within each main theme. Taking control to maintain safety was divided into the following six subthemes: managing the milieu, managing risk, managing fear, managing coworkers, managing the patients/patient behaviours, and using a language of control. Using therapeutic intervention was divided into five subthemes: easing patient suffering, helping the patient, repairing the relationship, conceptualizing a hierarchy of invasiveness, and offering choices. Working within constraints included three subthemes: staffing challenges, environmental challenges, and limitations of knowledge/skills. Medication practices were divided into two subthemes: following tradition and changing trends. The final theme, transitioning from novice to expert included: building de-escalation skills, accepting current practice, and questioning the status quo.

Using All the Tools in the Toolbox

Medication was identified as an essential component of providing care to patients, who were demonstrating behavioural crises. Overall, medications were described as useful tools in providing safe and ethical patient care. ‘As needed’ psychotropic medications were used in both times of crisis, and more importantly, to avoid behavioural incidents and behavioural crisis. Participants described medication as providing a means of safely managing high-risk patients and situations, within the many constraints of their acute mental health workplaces. There was an expressed sentiment that providing medication during circumstances of a patient demonstrating
signs of being in distress was an essential part of the job, not necessarily a well-liked part of the job, but a necessary intervention.

I think [medication] is really important. I don't think it is the be-all, end-all. I think that we do a really good job with what we are doing, but I don't think it's enough, obviously, there's not unlimited resources. I think, I think it's a necessity. I don't know...I think it's, I'm not sure, it doesn't really bother me to do it, as long as it's absolutely necessary. As long as I feel like I'm doing it for the right reasons. And I think that as long as I have the patient's best...I want the best for my patient, if I think that's best for my patient, in that moment, then I think it's a good thing, as long as I'm not abusing it. Then I think that it's the right thing to do. (Participant 5)

In some situations, emergency medication use was described as a negative, but also beneficial part of the job in terms of potentially causing moral distress, but also helping patients manage symptoms and nurses manage unit milieu. For example:

[PRN medication] can be positive and negative in that...I appreciate when nurses properly, I hate to say this word because it’s condescending, but manage their patients, like give them the PRNs that they need because it changes the entire milieu of the unit. When you’ve got someone who needed a chemical restraint running around un-PRNed. (Participant 6)

Participants often described PRN medications as less preferred than other types of de-escalation strategies, yet necessary for out of control situations.

I think there is certainly always a time and place for PRN medications. Of course, it would be nice to try other interventions first that didn't require more medication...but sometimes depending on what the state...the patient's state, you can't really bring them down if they're super agitated, with, you know distraction techniques, or, calm down methods...so I think there are definitely certain situations where...medication involvement is appropriate. (Participant 1)

Medication administration was a commonly used and essential mental health nursing intervention, often framed as a tool to maintain control in distinct types of risky situations.

Ultimately, participants believed that the option of using medication allowed nurses to maintain the safety of the inpatient acute mental health unit. Medication was frequently used to manage
unsafe and high risk patient behaviours and situations, yet there was lack of understanding of the term chemical restraint.

Chemical restraint was not a commonly understood term. All participants sought explanation from the researcher to describe the term. Often the discussion focused on only forced injection. The term ‘rapid tranquilisation’ was not used by any participants in describing forced injection. Participants consistently included incidents of forced injection, with no initial discussion of oral medications, in response to questions about incidents of administering medication in times of behavioural crisis. Further questioning and explanation by the researcher was presented to illicit participants telling of experiences administering oral medications ordered for the purpose of chemical restraint. Administration of oral medications were described as commonplace, described as a less invasive strategy for maintaining safety in the acute inpatient setting.

Taking Control to Maintain Safety

The notion of using medication to take control was discussed by all participants as a means of maintaining patient and staff safety on the inpatient acute mental health unit. Control was discussed in distinct ways, as a means for nurses managing the unit milieu, managing risk, managing fear, managing coworkers, and managing patients/patient behaviours. Different language conveying control also was used by participants. As described in the following quote, when medication was deemed necessary for control purposes the use of the medication was no longer negotiable with the patient.

A lot of times people do refuse to take all their medications. Sometimes they only end up taking them because they've been informed it's not really negotiable and if they don't take it or [if they try to] leave they will get an injection of it so it's kind of a coerced cooperation with them. (Participant 3)
The underlying theme connecting the different areas of control was the emphasis placed on using medication, in a coerced way, to help manage situations of behavioural emergency to maintain patient and staff safety.

**Managing the milieu.** Chemical restraint was used by participants as a means of managing the milieu (or atmosphere) of their inpatient mental health units. The descriptions of the inpatient units included the words, “chaos,” (Participant 4) and “unsettled,” (Participant 3) with the choice to use PRN medications sometimes being dependent on the impact of behaviours of one patient on the other patients admitted to the unit. The nature of the acute inpatient unit was described as busy, with nurses sometimes feeling overwhelmed, turning to the use of chemical restraint medication as a means of keeping the unit calm and controlled as demonstrated in the following quotes.

>[The unit] is more acute. There's more aggressive patients that the team feels it's important to PRN people too...to maintain a calm environment and so if you don't PRN someone-I don’t know, it depends. It's totally patient-specific but sometimes there are people who kind of need consistent PRNs to keep them settled. (Participant 1)

Some days it can be fine, and other days it's just one incident after another, you know depending who is on the unit and how acute everybody is. We get everybody settled, they're all ready to go, then the nice unit is calm and nice, right? But when they are all gone and we get a bunch of new people then it is just chaos for awhile...and they triggered each other...So I mean...we don't want it to get to that point, but we watch it, give PRNs to keep them calm before that happens right? (Participant 4)

Depending on the milieu of the unit, sometimes [emergency injections are] happening twice a day and then sometimes it does not happen for two weeks...It just kind of depends on if we get a bad group of patients. Especially ones that are, like, when patients are more argumentative with each other and they are not getting along. Especially like...young males...we find that if they are arguing. Getting into our unit, they can be...we can end up doing a lot more. (Participant 5)

It is kind of different for every situation. I think there is always the hope that you can spend a lot more time with your patient and really be able to have a therapeutic relationship and have a conversation that is more effective than giving pills. But I think about how sometimes the milieu of the unit just does not allow you to do that. You have your other patients that you need to look after, so it's kind of a little bit easier to give,
unfortunately for lack of a better word, easier to give them, and then just try to work on your other patients as well too. Because, being in an acute care unit, there is just so much going on all the time. (Participant 7)

**Managing risk.** Assessing level of risk was discussed as an integral part of the decision-making process to use PRN medication to control certain situations. No formal risk assessment tools were identified. However, participants did identify characteristics of different risks presented to both themselves and their patients, for example violence, self-harm, and medication side effects, when a behavioural crisis was occurring and chemical restraint interventions were considered. Participants identified the necessity of managing risks to the patient, in terms of trauma experienced by the patient requiring chemical restraint and the risk of medication side effects. Participants also noted the risk posed to staff from the behaviours of patients requiring emergency medication in situations of behavioural crisis. The risks were sometimes considered a decision between causing harm to the individual patient and the harms that were posed to staff and other patients by not controlling the situation through use of chemical restraint.

A lot of times it can be tough to administer the medications. I think it would be IM medications especially, it can be...traumatizing for the patients because they're held down a lot of the time if they don't take it orally. You don't want to have an injection, so they have to be held down by security, and that's, and that's terrible. Yeah, it's hard to, it's hard to do that but I mean you have to. (Participant 1)

Sometimes we can see, we are really struggling with a patient, and the patient does not have enough medication. And because they do not have enough medication, they are putting, the staff feels that they are put at risk. The patients are put at risk, and even that patient is being put at risk, because a lot of the time if they are not medicated, a lot of the time they are verbally and physically violent. And because they are like that they end up in a security room, and really the only way to get them out initially is medication. Until they settle down and then we can take them out. (Participant 5)

Some participants identified the constant calculation that they had to make in terms of risks of staff injury and benefits of entering situations where rapid tranquilisation was ordered.
There’s just one [psychiatrist] who has a habit of…prescribing ridiculous baby doses of medications that put the team in greater harm’s way then…the benefit does not outweigh our safety risk. (Participant 6)

Two participants identified concerns about risks posed to the patient by taking the medication, in terms of side effects experienced and causing the patient to feel disconnected from their body respectively.

I don't take meds because there are side effects to all meds…And that's the unfortunate part of it, and these people are on long-term medication and they've got…metabolic syndrome and all the other side effects that go along with it. I mean. I don't blame them for not being for being non-compliant with their meds when they're out in the community I don't blame them right? But it manages their illnesses too. It's a double-edged sword right…I mean I see them getting better, I do see their minds clear as best as they can and you know? (Participant 4)

I was talking to some of the students yesterday in the class that I was teaching and we were talking about chemical restraints and seclusion room restraint and some of them actually said that they would opt to be locked in a room rather than chemically restrained because they don't have control over their body and I've never actually really thought about that piece before. I thought it was so interesting because I, working in an acute setting I have always thought that chemical restraint is fair, like it’s least restraint, in some ways. And I think, if I was in that situation I would probably just want to have a pill rather than be locked in a room but I guess that's not for everybody. Yeah I don't know and I did not really think about that before like how awful it might feel or the side effects or what not. (Participant 7)

Risk was something that participants faced daily, commonplace in the acute mental health nursing workplace. Legal risk was not mentioned by participants, as focus was more on immediate physical harms. With the risk sometimes came fear, which was found to be another important factor to be controlled in order to provide safe patient care.

Managing fear. Participants identified that their own fear was a factor in choosing a more invasive medication delivery method. The fear often was described as greater when working with patients who were not known to the nurse. Fear was identified as fear of the unknown, sometimes fueled by stories or situations that they knew about, which were related to co-workers.
I think in some situations, I get scared so you kind of go for the IM faster, and you don't really sit down and talk with the patient. I find if I know the patient well and I know that they are not going to hurt me or anything like that I will sit down with them and give them more time to take the pill rather than an injection. But I think there is always that fear of the unknown with somebody... I have not seen the staff like be physically punched or anything like that but, one of my co-nurses from [the unit], I was not there the day that this happened but she did get attacked so I think there is that to vicarious trauma piece. (Participant 7)

Fear was identified as a factor that influenced nurses’ decisions to use more invasive interventions, such as intramuscular injections rather than oral medications. The fear often resulted from both knowledge of previous situations that they had observed or heard about, and from distinct types of behaviours that they had observed that led them to believe that the outcome would result in violence or situations of elevated risk. The fear response led to nurses taking the initiative in managing different patient behaviours through use of medication.

**Managing the patient/patient behaviours.** Control was identified as needing to be exerted by nurses to manage patients by managing distinct types of patient behaviours. The patient requiring chemical restraint was described as angry, agitated, disorganized, and aggressive. Common worrisome patient behaviours identified were swearing, pacing, suicidal acts, and violent acts (verbal and physical).

There was one guy who was, he was really mad. I guess his belongings were lost somewhere between the police bringing him into emergency. So, we didn't have his belongings and he escalated. He was not happy. So, I got out the loxapine PRN and was going to give it to him and he kind of, was like, “no I don't need that,” and then I think I just gave him a little bit of space and told him, “you know...you are clearly in distress and if you're in distress and you're agitated then that's going to end up with a seclusion, right? So, it would be good to take the medication, to try to help ease your anxiety and calm you down because it's just not going to end well, you know?” So...he took it. And that happens, pretty commonly people take it, but if it doesn't then you have to do the IM. (Participant 1)

They also misinterpret things and they get mad because they are there or you know because they are brain-injured and they have poor impulse control and...it's just the nature of who they are. The antisocials they think none of the rules apply to them, I'm just you know, you give me what I want or I'm used to intimidating by bullying people I'm
used to getting my needs met that way so I am going to try to pull it on you guys, right? (Participant 4)

Those nurses with more years of experience used words such as, “threaten” to describe some of the coercive practices that they used to control patient behaviours. Sometimes participants showed a reluctance to use phrases that conveyed violence towards patients as highlighted in the following response.

You would do your best to explain to them why you are giving the medications as well as why they need it… But if they are still, acutely agitated, and not calming down, then, I hate to use the word, sort of, threaten them… I would, remind them that…taking the medication will help settle them, but if they don't take it by the oral route then you will have to suggest taking it by injection. (Participant 2)

Participants experienced interventions using PRN medication to control patients as a necessary part of their job because using the PRN medication allowed them to control situations that were escalating or had the potential of escalating.

Using a language of control. Participants used language that was demonstrative of control, a lexicon shared amongst participants despite working in different work-sites and having different years of nursing experience. Terms that indicated a sense of forced control, “take down,” and “bring them down,” were used to describe the situation of holding a patient to administer intramuscular injection. The terms “snowed,” and “knocked out,” were used to describe the situation of giving patients medication that heavily or overly sedated them indicating increased control of potentially serious situations. There was some judgement of patients who sought out PRN medication and were identified as “medication seeking”. They were stereotyped as people with potential addictions issues with control being exerted to refrain from using medications because they would not be as effective due to high incidence of drug use before admission and/or because medication really was not needed.
If they're labelled...oh, they're, "addicts" if they're, "addicts"...perhaps certain nurses, if a patient is asking for a PRN, the nurse will say “no” because they don't actually need it and they're, "just addicts med seeking". But then you'll also have a nurse, maybe who has a patient who asks, or who doesn't ask, for a medication and then that nurse really wants them to take the medication. (Participant 2)

Medication interventions were frequently described as a means of control. However, participants also discussed the place of medications as a means of providing therapeutic interventions to patients experiencing distressing situations.

**Using Therapeutic Interventions**

Medication provided nurses with means of intervening for patients, who were experiencing severe distress from symptoms of their mental illness. Participants stated that some patients arrived in the acute inpatient setting without having active treatment, and were admitted as being at risk to themselves and/or others. Subthemes identified were easing patients suffering, helping the patient, repairing the relationship, conceptualizing a hierarch of invasiveness, and offering choices. Administration of PRN psychotropic medication was sometimes the only means available to reduce a patient’s suffering.

**Easing patient suffering.** The use of medication in emergency situations was sometimes viewed as a means of easing a patient’s suffering, primarily from inner torment of distressing auditory hallucinations and delusions. The intervention offered was sometimes attributed as a means of working within situations where ideal patient care could not be provided, in both environmental limitations and with knowledge/practice gaps.

Recently I had a female patient with bipolar disorder and delirium. And she was out of seclusion room that was not my choice, but the doctor wanted to try her out. She was my patient. I was against it because I felt like she was too ill. And, she wound up going into other patient’s rooms, and riffling through their belongings, and on PSU you cannot do that...particularly to an aggressive male...and she was unsafe for herself, so she...when you touched her or came near her she just completely freaked out, um, screaming and batting you away. She was combative. She was not trying to be aggressive. She was just trying to get you away from her. We were just trying to like guide her back to the
seclusion room, we were, “okay this is not the place for you”. And…we had to go hands on and escort her there, like a little bit more than guiding…and I wound up giving her loxapine 25mg IM and um, 2 of Ativan, uh, and it had to be IM in the dorso-gluteal and it had to be with the whole team, like the Code White Team, someone pressed the panic button…It had to be the whole team, like holding her down because she was so combative, but she was just so confused and so ill. It’s nothing to do with drugs, it’s just like old-school heart-breaking illness and…she was just terrified. She couldn’t really verbalize what about…and then we had to wrap her up like a burrito to get out of the seclusion room safely. And then watch her like a hawk because she had delirium. (Participant 6)

She just looked so distressed, and I did not know what was going on. In the report I got she was settled, so I go up to her and I was like, “is everything okay? I'm one of the mental health nurses,” and she said, “I just I just need a private place, I just need a private place.” I said okay, let's go she was going towards a washroom I said let's go see if that washroom is free…there was somebody in it, and she freaked right out. And you could tell she…was really just responding to internal stimuli, it looked like her voices were driving her absolutely nuts, and she's just, holding on to her head and she kept saying, “stop, stop, stop.” And then she eventually just started running like down the hallway towards the exit, and I'm like, oh crap so I go running after her and I'm calling out, I’m telling the charge people are looking, who I saw the charge nurses call security to triage so they overhead page security and I kind of just like and gently grab her arm, and I'm saying, “wait, wait, wait, talk to me, talk to me,”…security comes running and I take her back…she sits down and security is now surrounding her and I'm like what's going on. She's like, “I need a private place, I need a private place.” She's pulling out her hair at this point…and I said, “can you find a room or something just for a little while? And, get some medications,” so they got out to get Ativan and were able to get a private room... She was extremely frustrated and I thought, okay this may lead to going hands-on. So security set it up, getting restraints ready on a bed that she was like the bedroom that she was going to go into…she did not try to hurt us, she was obviously in distress…She did not try to leave after that, I could hear her in her room quite distressed still but about 20 minutes later she was feeling much better and I went in and checked in on her. She said, she was still distressed but did not look it as much as she did before. (Participant 8)

Medication allowed nurses to provide an intervention to patients, who otherwise would not have been able receive care because of characteristics such as being combative or violent. Use of PRN medication for those emergent situations allowed nurses to help.

**Helping the patient.** The participants identified that they approached administering medication in situations of patient escalation as a means of helping the patient. The use of medication in a controlled situation sometimes provided a sense of safety to the patient, as
described by Participant 7, “I've had some patients who [were] just unable to control themselves in that moment if, whether they are self-harming or they are having violent thoughts...they appreciate it when the control is taken away from them.” Sometimes the nurses’ familiarity with the patient and past established rapport helped in framing the intervention as helpful and therapeutic as exemplified in the following quote.

I knew she had a care plan, so I pulled that up...I think that was our first, like real, nurse to patient interaction. I think it actually went really well. She responded to me well. The next day, when we were, when I had sat her on the unit...and she had a rough day the next day as well with everybody but even in her moments of being really angry or sad or whichever she was still able to sort of connect with me. Like when I would come into the room she would be like hi, she would brighten up a little bit and she did say thank you for our interaction the day before which I thought was huge...I think it just helped that I was explaining everything along the way and then I stuck to what I was going to do, like I said I was going to come back every half hour at this time and she kept saying no you won't know you won't know you won't and so I did and made sure of it. And I wrote her a letter, at one point before the end of my shift. She was sleeping so I wrote her a note and I just left it at her bedside and she was fully restrained prior to me leaving and the thing is what you really have to ask if I think she could have even gotten off restraint before I left and I had told her I would try to take her off before I went home...when I came on the next evening, the day nurse was telling me like she read your note she was happy about that. And she felt, she said can you tell [P8], “thank you.” And it seemed like she felt heard, and it was nice. So I hope that helps in our next interaction when she comes in. (Participant 8)

The patients would sometimes apologize and even thank nurses for their forced medication interventions.

After the medication was given and he also had physically tired himself out so much that we were able to get him into a secure room. And he calmed down, I think because of the medication we had given him, but he calmed. He calmed down quite quickly and was quite forgiving of the whole experience afterwards I think he was making jokes about it. Yeah, there was no hard feelings, like I don't- I do think a part of him realized that his behavior was very abnormal. (Participant 3)

More often nurses needed to actively re-establish the therapeutic relationship that was harmed or destroyed by the using the chemical restraint intervention.
**Repairing the relationship.** The relationship was damaged when forced intramuscular injection was used because of the complete withdrawal of control from the patient. Participant 2 described a salient experience of administering a forced IM where the patient, “obviously hated everyone involved in that situation.”

It helps them calm down, but obviously isn't going to cure, so they're not better yet. It can definitely lead to a rocky relationship. They can be quite angry towards you, untrustworthy, your relationship can get more…where it's just, it's just dry between you, it's just basic questions…you can't have that nice in-depth conversation with them anymore. As they start to get better we do see a lot of patients, when we do have to intervene, let's say we have a take-down, take them to the security room. We end up having a chance if we do have to give an injection. (Participant 5)

The relationship repair was sometimes possible when the patient was stabilized.

Initially it is negative. They feel like we are ganging up on them or that they do not have a choice but once they start to clear, they recognize and they start apologizing…it's not good rapport building and we recognize that. You know but what can we do right I mean, a lot of times they do not even remember either, they do not remember…They're like, “oh really? That happened? I did that?”…they are not out of control anymore. (Participant 4)

We do have patients come back and they will be apologizing for their behaviour, and if they are more understanding and more forgiving then the relationship does not get as…it doesn't get as ruined I guess. For lack of a better word… It all depends on the patient. Some patients never forgive you and some patients are more forgiving. (Participant 5)

The relationship repair after a forced injection was challenging and sometimes impossible.

However, the use of oral medications was a much more widespread practice that was viewed as less invasive and offered the opportunity to provide the patient with more choice, thus more power and control in the patient-nurse relationship.

**Conceptualizing a hierarchy of invasiveness.** Participants clearly identified a hierarchy of invasiveness in terms of restraint, with oral chemical restraint being the least invasive and seclusion room and mechanical restraint being the most invasive.

Sometimes you go into seclusion and they're destroying seclusion or they start banging their head or hurting themselves, hugging the toilet hitting their head on the floor, stuff like that. Then…it's a safety issue to them and will put them in restraints and sometimes
give them medication. If they are not settling, injection, if they are not going to settle… I would rather give the medication then see them in seclusion or restraints… If that is what is going to work, that is my first go-to, right? My first go-to is oral, the next, and you know, we do have a protocol that we're all pretty good about. Nobody wants…the last line of restraints and injections and you know we don't want that. We will get our excitement in other ways. (Participant 4)

So you'll only go hands-on if absolutely necessary. You only put on restraints if it's absolutely necessary. You know, we would offer security room first because you're still allowed to move, but what if they're destroying the room, what if they're bashing their head against the wall, what if they're flooding the security room. All those things have happened. Then you have no choice but to warn them if they're don't stop, well now they're putting the unit at risk, themselves at risk, we're at risk, so you have to restraint them. You know all, those things. So it's like a ladder. (Participant 5)

Offering choices. The offering of choice was used to help the patient feel less powerless. Choice, though often limited, was viewed as the most power that nurses could offer in certain crisis situations to give the patient some semblance of control.

They feel that they have no choice. They feel like, like we're brutalizing them, especially if we have to bring them down with security and all of that. You know we don't want to do that right? But sometimes we have to, they are just too, but if we offer them PO first right because then it feels like they have some power. But if they are way beyond that then there is nothing that we can do. (Participant 4)

Participants tried to make the most of a tough situation, recognizing the benefits of chemical restraint as a means of helping patients who were in extreme distress, attempting to help patients have the most amount of power possible in a powerless situation. There were multiple constraints that nurses had to consider, specific to their particular workplaces.

Working within Constraints

Multiple constraints were identified, including staffing challenges, environmental challenges, and limitations in knowledge.

Staffing Challenges. The decision of when to use chemical restraint interventions was impacted by various team and staff factors. Use of chemical restraints often was described as a team response because of the safety risk posed to staff and other patients by the patient identified
as experiencing behavioural crisis. The impact of a team-oriented approach can be quite profound in either highlighting interpersonal problems that exist within the team or reinforcing the cohesiveness of the team.

When it's working well those types of situations and interventions can sort of reinforce that the team is working well. When the team is not working well, it reinforces that the team is not working well. Individuals will, sometimes will clearly not be on the same page when something is happening, will disagree that the intervention was done at all. And I would say, more often than not, it's usually talked about in a professional manner…I have not personally been involved, but I have seen other colleagues very nasty towards each other. (Participant 3)

There’s always a nurse that you don’t want to work with because they don’t PRN their patients and then their patients run rampant so to speak, whipping up others and agitating others and needed a practically a constant on the unit, when they just could have been PRNed. Um, for, in a positive way, I uh, I, it impacts relationships in that you want to work with people who are actually watching their patients and making note of their mental status properly and if they need some help. Um, that’s always a better shift than if you are going to work with people who are negligent in that way. Then again, I used to work with a nurse, I’m glad she’s long gone, um, she came onto shift and she flat out said, “I’m going to snow all my patients”. But you haven’t met them yet. Wow! That’s alarming. (Participant 6)

**Environmental challenges.** Chemical restraint medication was identified as a strategy that was sometimes used to overcome environmental challenges of older, poorly designed, overcrowded or overly restrictive, patient care areas. As described by Participant 3, “there's nothing I can do about the physical layout of any unit,” meaning that the only viable choice was to adapt by using medication as a means of controlling patients in environments not designed for acute mental health patients. Further elaboration on the topic was provided:

They are really crowded. They were never designed for Psychiatry to begin with. There's only one eating area. There's one television area; it's loud. There's lots of stimulation. If you were feeling really agitated there's nowhere you can go that's quiet to calm down. You know just going to your room might make it even worse if you have a roommate who is disorganized as well so there is more medication involved with that...If you already are agitated that environment is not going to help. And in the actual seclusion area would be psych emerge seclusion rooms, it's very dark, it's like a prison. I can't describe it any other way. It's like a prison. It's like concrete blocks. There's no windows, there's only artificial light...You feel disoriented, just working there. I cannot imagine
being in that area as a patient for more than a few days. The seclusion rooms are like prison cell blocks. It's a really tight compressed space as well so you have usually four very agitated individuals in a really small area and it just does not help. So there's a lot of medication given in there just because physically if they had a better set up they would be able to calm themselves a little bit easier. (Participant 3)

They have the TV room, which honestly, is like the size of like three quarters to washroom and maybe to the bar, and it's super tiny. And basically it just fits, maybe six seats, and it's one TV and one remote with 12 patients, who have nothing else to do so...they're not allowed anything, like no, obviously like no laptops, no cell phone access, no anything, like books, no pens, like nothing. Like, crayons, they can have crayons, and they can have some magazines, and that's it. Like, there's literally nothing else to do and there's no groups for them, very minimal groups because of lot of them can't tolerate groups. So, really they're stuck there, for weeks and there's nothing to do. So then they just get into fights with others patients. (Participant 5)

Participants clearly identified factors that they believed could promote a decrease in the use of chemical restraint practices.

All the patients here have private rooms. So they have their own private space. There's also...common areas with TVs...there's Foosball table, ping pong table, like a lot of resources for the patients to be able to...calm down, or spend alone time. Which I think is very helpful, versus if you're on a ward where you've got overcrowding and you've got 15 people fighting over 1 TV. Like if you have one elevated patient who's really needs some quiet space but you really don't have that room, I think that that can be disastrous. So, yeah, the fact that the lay out of here, I think is really therapeutic for, for our patients. It really helps. Yeah. It's a nice unit. [laughs] It's very nice. (Participant 2)

The unit that they are on, everyone has their own room. Everyone has, there are two separate TV areas that are at opposite ends of the unit, um, so that if you are having conflicts with someone you have the option of going somewhere else...two separate dining areas, so again, if you are having difficulties with a particular individual, you can move to a different area to eat. There is an outdoor balcony, so it is a locked unit, but there is an outdoor balcony that you can go out on and have fresh air at any time. You are not you are not limited by pass privileges. That makes a huge difference a lot of times when people are getting agitated, they can just go to their own room and calm down on their own. (Participant 3)

I feel like...we could do more, just even, having more space. I think we could prevent even PRN use, if we had more space for the clients to spread out, and had a little more entertainment and a little bit more stimulation, a bit more privacy, that would stop them fighting, them fighting with us, things like that, which result in PRN medication. (Participant 5)
Identification of design changes that could be made was anecdotal. Some ideas for change were voiced by participants, who had worked in different care areas where they could compare the physical design of the care area in connection to between-patient conflicts, and access to outdoor space and private quiet spaces.

**Knowledge limitations.** No participants identified formal training that they had received in the use of chemical restraint interventions. When specifically asked about where their knowledge came from, all participants stated that it was from watching other nurses. Learning happened on the job, through observation and mentorship from more experienced nurses, rather than in formal classroom training.

You kind of learn as you go, but mainly I learned in my preceptorship. My preceptor taught me about all the different PRNs and, also speaking with the, with the, the psychiatrist and the pharmacist as well... Because some psychiatrists prefer you to use different like, like, ativan and loxapine are like the go-to usually. But sometimes if that's not effective for people, or if they, if the psychiatrist wants to try something else, then they'll let you know and they kind of teach you about it. But I think I've kind of learned, you know? I feel like I'm still learning, but I started to. I started to learn in my preceptorship and then orienting to each unit, you kind of learn more from the nurses who, you know, were orienting you. (Participant 1)

You learn through experience. You also learn through when you have more experience...and you see, if you're smart, you watch the senior staff work with the other patients and you pick up on things that way. So I guess, through watching role modeling. Through being open to having people tell you, “you might want to maybe try this,” and sort of, a different way. That's something I do in my job, is, mentor people, and sometimes though they have heard the suggestion, then they'll be like, “oh, I never even thought about that before, that's great.” Sometimes I'll get shut down immediately, “I know this,” and everything happens immediately, “I don't need your advice.” Personality-wise. It also depends on how old when they are trained. (Participant 3)

I’m still such a new nurse, I feel like most of my learning has actually been done from other nurses. And when I like their practice, and they have really good rapport with their patients, I just make note. And I just try and have a lot of conversations, just passing it on to the others. You know, like, “yesterday I gave 25 to so and so and it snowed them, and I did not mean to do that so if you have to give him something today I just recommend giving less.” Things like that. But yeah, just taking note of, I would say, more experienced nurses, and how their practice is, and what they do. I can’t think of a more, like more formal education than that. (Participant 6)
In addition to lack of formal training, some participant identified the experiential learning limitations that they had in their undergraduate nursing preparation.

My mental health rotation was on the unit I started working on. My first mental health rotation…in a clinical…setting was actually in my preceptorship… so had I not done my preceptorship on [an acute mental health unit] I would have gone through nursing school without doing any clinical… Over 50% of my graduating class did not actually get a mental health rotation. (Participant 2)

They [participant’s post-secondary training institution] are really bad about that. I wish, I wish there was more of that, yeah. I wish there was more of that. So now they are talking about having a program at [post-secondary institutions] for working in an acute setting…We did one medical, one psych, one medical. Once I tried, and we just kind of, it was wherever…I did my preceptorship on an acute unit so I just carried on, right? I did not have 2 years of experience, but it was like “well we need you,” so if they implement this program, which is good. (Participant 4)

There was a lack of formal training that involved best practice with respect to the current evidence on chemical restraint practice, with some reliance placed on the knowledge of psychiatrists to inform nurses about medication practices as discussed by Participant 4, “they are more aware of all the side effects than we are, of all the long-term side effects…so they are mindful of that too.” However, after medication orders were written by the physicians, the decision about particular medications used was in the hands of the nurses. Medication practices were described consistently amongst participants.

**Making Medication Choices**

Common medications were identified as regularly used in chemical restraint interventions. Discussion focused on the different types of medications chosen for the purpose of chemical restraint. The two subthemes that emerged from the data were: following tradition and changing trends. Following tradition was experienced in terms of medication choice, because of the limited number of medications prescribed and the types of practice described. Changing trends in medication prescribing helped shape nurses’ experience of the intervention in
terms of both safety and perceived efficacy. Participants made a distinction between medications that were their preferences and those medications that were the psychiatrists’ preferences.

**Following tradition.** Participants identified the common medications that were used for PRN chemical restraint. Ativan, loxapine, olanzapine, and acuphase (zuclopenthixol acetate) were identified as the common medications used. No participants identified specific practice guidelines that were used in their workplace to guide chemical restraint use, medication choice, pre-administration assessment, or post-administration follow-up. The general practice similarly was described by participants. For example, Participant 1 stated, “generally, I mean basically you always give loxapine and ativan IMs if they won't take it orally.” Choice of medication was described as based largely on observing other nurses or reading previous clinical documentation of the patient and action taken that was supported by other members of the health care team. Participants clearly identified traditional or “old school” practices that they noticed in the workplace.

[A previous worksite] used acuphase at the drop of a hat. And actually…I’m glad you brought that up, because I felt that, that’s part of the reason that I stopped working there too is that I felt that practically all people needed to do was give a nurse a dirty look and they were like, “oh my God, they’re agitated let’s acuphase them, lock them up!” And I was like, okay, come on now, you’re allowed to have a mood and a personality, you’re allowed to have some unpleasant feelings about being certified. It is legal kidnapping, so you can’t really get mad when they’re angry about that. So that, I did not like. And…every patient that we get [from there] I do notice that they have been, of course, acuphased a whole bunch of times before they come. (Participant 6)

Certain trends in medication prescribing also were highlighted as key factors in influencing medication choice.

**Changing trends.** Participants, with more years of experience, identified different trends in medication choice. Some participants described their perceptions of the different trends of medication use that they had seen in their careers.
I was working out of [a different health authority]…there it was halodol and ativan, and as soon as I came over here it was the world of loxapine so that was a big change and again it's a very regionally used drug. You don't see it used the way it is here anywhere else… Yeah, I've noticed there was a period of time there were there was not as much nozinan being given, and now there's a lot of nozinan being given… I don't know. Like, it works for some people, it does not carry the side effects of loxapine has. Like, I've used it with individuals who might have more restlessness or EPS side effects from the loxapine, so we're not nothing causing side effects with them like in large dosages 50 - 75. (Participant 3)

It depends, I guess, what study this guy must have read, for the doctors. There must be a new study right now on olanzapine or something because all of a sudden everybody's prescribing olanzapine…and that changes quite frequently. Certain doctors tend to favor certain medication so. But I know, I mean, now I think they're just doing the best they can with what is available for them too, right? You know, yeah because they are more aware of all the side effects than we are of all the long-term side effects right so they are mindful of that too. (Participant 4)

We see a lot of loxapine and ativan period, sometimes depending on the patient. If they want halodol then they will prescribe halodol for PRN. So that was kind of rare if the client had been known to be effective with that. And then they did a lot of seroquel as well too on our unit, and sometimes they really wanted seroquel to be used first. Once in a while we had olanzapine, but not too much. We did use olanzapine as a PRN in emergency…Those are the main ones that we had… I don't know. I think with the olanzapine they found it more sedating, something like that? I don't know. (Participant 7)

There was no identification of first-hand knowledge of particular research or formal training that supported trends in the use of particular medications. Differing levels of experience were identified with different types of practice as clinical skill was developed. The final theme that emerged highlighted the journey from novice to expert.

**Transitioning from Novice to Expert**

Clinical expertise was developed over time with years of practice, from directly observing other nurses and health care professionals (mainly physicians), and from hearing different stories of incidents of behavioural emergency that required chemical restraint. Participants identified that with development of de-escalation skills their chemical restraint practices changed. As participants become more integrated into their mental health nursing
roles, some nurses found themselves becoming more accepting of medication practices, while also increasingly questioning the status quo to challenge outdated, unethical, and unsafe practices.

**Building de-escalation skills.** Participants spoke of building their clinical skills, which over time led to a noticeable change in practice. Building skills was identified as developing largely informally, from watching the practice of different nurses. Participants identified that earlier in their careers, they were more inclined to use PRN medication. With increased comfort through increased practice, they began to understand the value in varying their interventions, using different types of medications, including other members of the health care team (particularly psychiatrists) in their decision making, and listening to patients as part of the assessment process.

Yeah, it's changed. When I first started I was really, like really, really, really, really, really avoided giving PRN's as much as possible, even if people are begging me for them. I would not give them out because I felt like I wanted to, I wanted to have this, the least amount of medication given to that individual as possible. As time has gone on, I'm much more lenient to handing it out. Just gaining experience of knowing how to identify signs of distress and potential escalation better now from when I first started out. So I will give things out in smaller doses to sort of prevent a problem from happening, as opposed to waiting for a gigantic explosion of a problem and then having to give a huge dose and having huge problems on top of that. So I am much more willing to give things out to people frequently now. (Participant 3)

The psych worker is working mainly on the floor, so they are pretty supportive of medications, especially because that is the only place that they work and they do two days, two nights there. So it can get quite exhausting when they are dealing with like, very, very acute clients in that area…Psychiatrists on our unit though would, it depended. Some would like to be really involved if you were giving up your end, and they were there during the day and they felt like the conversation with…the conversation would be better. Or easier. Some were very keen on us giving it, giving PRN's, but some like, would have liked to have been called, rather, like first rather than us giving a PRN so that you kind of learn who would want to be involved when you are giving a PRN. (Participant 7)
In building skills, there was sometimes identification that use of chemical restraint became an accepted part of practice. Initially some participants reported feeling the disconnect in the textbook practices, which they learned in school, and the reality of working in an acute area, where they were often short on time, or lacked adequate numbers of staff.

**Accepting current practice.** At times, the acceptance of current practice seemed to come at the price of personal values. Despite the sentiment that use of chemical restraint was a necessary practice, there also was questioning of the current practice.

> When I started I…I still believe this, but it's so much like to de-stim and de-escalate people without the use of PRN medication, like that's what I was all for, and like having…a sit-down or one to one and hopefully they won't need that PRN. That's kind of where I started…And that's kind of what they value on [one particular unit]. But now with this population on [a different unit] where people are so agitated and unwell I think it's necessary for you…to be able to keep them settled enough to start a treatment plan…so I don't know, I think it's necessary depending on the person….I guess I used to be more against PRNs and now I am more accepting of them. (Participant 1)

> I mean, I am anti-medication to a degree too. I won't give a PRN unless, you know, it's warranted. But I think the majority of us are like that…so we can also see that those who are floridly psychotic and floridly paranoid and it helps…So, I see it, I mean, I'm changing my tune about them because I see how it does help. Or it gives them some sleep, which is really necessary, right? Or they need to sleep for a few days, right? and if medication will do that and they may become clear. (Participant 4)

**Questioning the status quo.** Participants discussed that at times they did begin to question the safety and ethics of accepted chemical restraint practice. For example, in looking back at the start of their careers, participants identified increasing awareness of knowledge gaps as they become more aware of safe and competent practice (primarily through informal mentorship and observation of diverse nursing practices). With a lack of knowledge there was a reluctance to challenge practices that they now recognized as unsafe and often unethical. With development of clinical skill, participants more often questioned outdated, unethical, and unsafe practices.
She’s old school and she’s very, hard headed…people used to joke that she was KGB…She was, no interest in her nursing, and she wanted all her patients sleeping or sitting watching TV. She didn’t want to deal with them, she didn’t want to talk to them. And if they upset her then she would take it personally, rather than saying, “it’s the illness.” And upsetting her would just mean being…wandering around awake. So, looking back I would do things differently and if I could I would take note of all the PRNs that she gave…I don’t think that would fly now, like, just, I think in our positive culture, and ethical culture…that wouldn’t fly now. (Participant 6)

Multiple participants spoke of their discomfort with what they often termed "old school" practice in which PRN medication was administered sometimes without assessment, or without informing the patient in what they perceived as excessive doses that led to over-sedation. One participant who recently changed jobs, from the inpatient acute setting to a community setting, identified changes in perspective that came with this shift. The participant identified that further shifts in perspective were made related to a question voiced by a student in her care area, who broached the potential harms of forced PRN psychotropic medication, resulting in the participant questioning her longstanding belief of a hierarchy of restraint in which chemical restraint was least harmful.

I was talking to some of the students yesterday...and we were talking about chemical restraints and seclusion room restraint and some of them actually said that they would opt to be locked in a room rather than chemically restrained because they don't have control over their body...I've never actually really thought about that piece before. I thought it was so interesting because I, working in an acute setting, I have always thought that chemical restraint is far, like it’s least restraint, in some ways. And I think, if I was in that situation I would probably just want to have a pill rather than be locked in a room, but I guess that's not for everybody...I did not really think about that before like how awful it might feel or the side effects or what not. (Participant 7)

There was a distinct difference in perspective as nurses looked back on their past experiences. Participants identified clear incidents in their careers of practice that they looked to as exemplary, but also those practices that they did not want to continue.

**Summarizing Themes**
Participants shared their experiences of using psychotropic medication regularly in their day-to-day mental health nursing practice. The themes that emerged in the data analysis process were: using all the tools in the toolbox, taking control to maintain safety, using therapeutic intervention, working within constraints, making medication choices, and transitioning from novice to expert. Subthemes were used to further refine the meaning of the data within each main theme.

Medications were conceptualized as a necessary intervention, used amongst a range of interventions for helping patients, when assessed as posing high-risk of harm to themselves, to staff, and to others on the inpatient units. Participants effectively took control of patient situations through use of chemical restraints to maintain safety by managing unit milieu, managing risk, managing their own fear, and managing behaviours of coworkers. There was a distinct language of control used amongst participants conveying use of violence, and, in contrast, their reluctance to use coercive practices and violence. Participants viewed their experiences as helping their patients through easing suffering from psychiatric illness symptoms, attempting to offer as much control as possible to try and empower their patients in situations that they recognized were extremely disempowering. Emphasis was placed on the need to repair the therapeutic relationship, identified as often damaged with the use of chemical restraint intervention.

All participants described a hierarchy of chemical restraint. Oral medications were viewed as offering more control and being less invasive, while injection medications, in some cases, were identified as the most invasive restraint (compared to mechanical and physical). The workplace was identified as less than ideal in terms of best practice for patient de-escalation, posing staffing challenges, environmental challenges, and offering limited opportunity for
learning formal knowledge/skills. Participants’ medication practices followed tradition and also were influenced by changing trends in physicians’ prescribing practices. Over time, participants developed their clinical skills, transitioning from novice to expert practitioners, questioning practices perceived as dangerous or unsafe, but also accepting current practice.

The information gained from this study has provided insight into eight acute inpatient mental health nurses’ experiences of using medication interventions for patients in situations of behavioural crisis. The themes and subthemes may be used as a starting point for additional research on safe chemical restraint practices of acute inpatient mental health nurses to better inform nursing practice and to improve patient care. The implications for improving nursing practice will be explored in the discussion chapter.
Chapter 5 – Discussion

The purpose of this research project was to gain insight into adult acute inpatient mental health nurses’ perspectives of administering as-needed (PRN) psychotropic medication in times of behavioural crisis, and to increase understanding of ways that nurses make meaning of medication practices that are commonly considered chemical restraint interventions. This interpretive phenomenological research is important because, to the researcher’s knowledge, this is the first Canadian study where the researcher has attempted to seek understanding of direct care nurses’ first-hand experiences of chemical restraint interventions. Integral ways nurses make meaning of administering chemical restraint were found, as well as complex clinical and ethical decision-making processes involved in psychiatric nursing care. Additionally, this research is used to highlight current knowledge and practice gaps, and provide ideas for future research.

The discussion in the chapter that follows is divided into four subsections related to the major themes identified during the analysis. Consistencies and differences between evidence from the literature and the findings of this study are identified, and are highlighted as contributions that this research lends to the extant knowledge base. The primary themes that were identified and those that shape this discussion are: using PRN psychotropic medication as a tool for safety, ethical use of chemical restraints within constraints, supporting medication best practices, and transitioning from novice to expert. The implications of this research on nursing practice and policy are included in each subsection. Suggestions for education are provided in the transitioning from novice to expert section. Next, recommendations for future research are provided. Lastly, strengths and limitations of this study are examined.

Using PRN Psychotropic Medication as a Tool for Safety
PRN psychotropic medication administration was viewed as a necessary practice tool by nurses working in acute mental health settings. As-needed medication administration was reportedly used to manage both occurring and potential behavioural crises, and was identified as a core intervention by participants. Medication, ordered with the purpose of chemical restraint, is not always used as a last resort, despite the accepted definition that restraint is a last resort intervention (The Patient Safety Education Program, 2010). PRN medications are administered as a timely intervention to promote safety and prevent harm. Chemical restraint is sometimes used preventatively, as an early intervention in behavioural crises. Consistent with the previous research findings, nurses identified a need for chemical restraint to manage unsafe patient behaviours such as aggression, violence, and agitation (Cowin et al., 2003; Cutcliffe, 1999; Ilkiw-Lavalle & Grenyer, 2003; Kindy et al., 2005; Luckhoff et al., 2013). Participants’ understandings of chemical restraint, however, were inconsistent with research evidence. Participants sought explanation and clarification of the term. Discussion of chemical restraint tended to focus on incidents of forced injection medication administration. Many participants generally were unaware of evidence-based best practice guidelines. Implications for nursing practice include supporting the delivery of safe and ethical care through redefining chemical restraint terminology and creation of practice standards. Nursing education implications will be addressed in a later section.

Defining chemical restraint. Medications ordered for the purpose of chemical restraint were perceived as having more applications than subduing or sedating a patient, indicating the need to redefine, or perhaps to more clearly define the term chemical restraint for inpatient mental health practice. The term ‘chemical restraint’ was not common knowledge amongst interview participants, evidenced by participants’ requests for its explanation in each interview.
The term, ‘rapid tranquilisation,’ was not common knowledge, despite the term being consistently used in the research literature to describe IM administration of chemical restraints (Allison et al., 2014; Dickinson et al., 2009; Innes & Sethi, 2013). A knowledge-practice gap was evident between research and practice, even for those nurses who indicated that research-based evidence guided their practice. Consistent, standard terminology is necessary to ensure nurses’ common understanding of chemical restraint.

Ambiguity of the terminology used for chemical restraint must be resolved to better support nurses’ understandings of the difference between medications ordered for specific psychiatric symptom management and those medications ordered for the purpose of chemical restraint. Outcomes may include improved medication utilization and confirmation that the right medication is given for the right reason, thus decreasing medication errors. Medication errors can be further reduced by clearly defining PRN psychotropic medication indications. The term agitation seemed to be a catchall term used to describe unsafe and/or dangerous behaviour, yet often was used to describe the patient in need of chemical restraint. However, agitation was described in an inconsistent manner, ranging from physical and verbal aggression to pacing and disregarding the rules and/or directions of the nurse. Findings were consistent with those of Schleifer (2011), who stated that the term “agitation” was defined ambiguously, resulting in potential misuse by healthcare professionals. Exploration of the behavioral antecedents to the use of chemical restraint interventions and the step by step process of chemical restraint administration were useful in uncovering the different language that nurses used to describe patient presentation prior to nurse administration of chemical restraint. The language used to discuss chemical restraint events was noted as paternalistic, controlling, and conveying violence used towards patients.
The language and terminology, used to describe chemical restraint interventions, illustrates the impact and influence of language on nursing practice, uncovering the tension between the need to control and the desire to uphold the ethical principles of nonmaleficence and autonomy. The effect of changing language in mental health care can be profound in reducing stigma and creating a culture of peace (Alex, Whitty-Rogers, & Panagopoulos, 2013). Development and consistent use of a common language that provides objective definition of chemical restraint and rapid tranquillisation practices, from a place of support rather than control, will help nurses foster a therapeutic culture.

**Lack of clear practice standards.** Despite lack of clarity around practice standards for chemical restraint interventions, use of chemical restraint was frequent, especially the use of oral medications. Participants consistently identified common medications used, dosages, and practices that included progression of invasive severity from oral to intramuscular formulations (particularly for patients who refused oral medications), yet, denied having knowledge of formal practice standards. Practice was guided by tradition, and based on anecdotal information, as evidenced by reliance on learning through role modelling, storytelling, and observation. These findings are consistent with previous research that PRN medication use was a common inpatient mental health practice (Landeweer, et al., 2010), often not well understood or evidence guided, but well accepted (Barr, Wynaden, & Heslop, 2017; Martin, Arora, Fischler, & Tremblay, 2017). The acceptance, perceived necessity, and perceived positive patient outcomes indicated a need for nurses to have better understanding of chemical restraint in accordance with current best practice evidence. Creation of clear and evidence-based practice standards would be beneficial in providing a foundational, collective understanding amongst direct care nurses.
Nurses held a dichotomous view of chemical restraint medications. These medications were considered both a safe and an ethical intervention when used to intervene in patient distress, but were cited as a cause of moral distress of nurses when used coercively or invasively, particularly with forced intramuscular injection. The level of moral distress perhaps was exacerbated by the lack of guidance for best practice. Support for nurses in the clinical decision-making process is necessary to help nurses identify early signs of escalation and to promote de-escalation strategies to potentially include the use of oral medications. Practice standards should be used to formalize the commonly understood hierarchy of invasiveness, in which oral medications are the first step prior to using the more invasive injections of medication.

Use of injection medication was beneficial for controlling quickly escalating behavioural emergencies, but also caused participants’ moral distress, trauma to nurses and patients, and anger as well as resentment of patients towards nurses. Nurses need to be made explicitly aware of potential physical and psychological risks posed to both patients and staff members, when a more invasive intervention such as rapid tranquillisation is administered. Nurses also need to be aware of the potential benefits of a less invasive intervention, such as oral chemical restraint. An important first step is clearly defining chemical restraint.

However, even with clear terminology and practice standards to foster positive changes multiple, workplace challenges will continue to impact chemical restraint use. Considerations must be made about the many workplace constraints that also influence nurses’ decisions to use chemical restraint interventions.

**Ethical Use of Chemical Restraint within Workplace Constraints**

Nurses work within a myriad of workplace constraints. Participants consistently identified workplace limitations that resulted in chemical restraint use as a means of managing
risk, taking control, and asserting power in behavioural crises. As discussed in the previous section, there is a need to reconceptualise the term ‘chemical restraint’, due to numerous practical applications for medications, which are ordered for chemical restraint purposes. Findings provided some indication of specific circumstances and influences on nurses’ choice to use chemical restraint. In the following section challenges of the workplace environment, therapeutic use of medication ordered for chemical restraint, fear of the unknown, and the role of coercive medication practices, are addressed.

**Challenges of the workplace environment.** Incidents were identified where chemical restraints could have been avoided if the workplace environment was better designed and better resources were available to support non-medication interventions. Participants consistently identified multiple workplace challenges that led to increased chemical restraint use. Chemical restraint intervention was sometimes considered the only viable option to manage risk posed when caring for multiple patients experiencing multiple stressors. These stressors included substance cravings and acute mental illness symptoms such as paranoia, boredom, lack of private space, and living amongst many angry, frustrated, and bored co-patients. The results echo the findings of Cowin et al. (2003) that specific interventions, such as chemical restraint increasingly may be prevalent due to multiple workplace challenges, including staff shortages and increasing incidence of patient violence (Cowin et al., 2003). Chemical restraint best practices must be designed to emphasize safe patient care, as well as to ameliorate the challenges posed by shortages of staffing, crowded units, and poor inpatient mental health unit design.

Known alternatives to seclusion and mechanical restraint could be useful alternatives to chemical restraint. The primary actions known to decrease restraint are identifying underlying causes of individual patient’s violent behaviours, and including patients in managing their
behavior before, during, and after a crisis (Kontio et al., 2010). Improving communication, being available, and building assessment skills lead to improved identification of early signs/behaviours that may lead to violence (Hamrin, Iennaco, & Olsen, 2009; Kontio et al., 2010). Maximizing nurses contact time with their patients in a workplace rife with staff shortages may be achieved through building the nurses’ group facilitation skills, simultaneously combating the stressors of patient boredom. Promoting early interventions from a policy and leadership level may further decrease use of chemical restraint. Including the patient input in choice of PRN psychotropic medication for symptom treatment and management, rather than emergency chemical restraint to sedate and subdue, may also prove beneficial.

**Therapeutic use of medication ordered for chemical restraint.** Psychotropic PRN medications ordered for the purpose of controlling behavioural emergencies were viewed as having therapeutic value. Practical applications contrasted current definitions of restraint as a last resort intervention (Anderson & Reeves, 1991; Stastny, 2000). Participants’ clinical decision-making processes included consideration of the therapeutic indications of medications, rather than the fact that the order was for a chemical restraint, indicating a need for medication orders to include clear indications for each PRN, if ordered for multiple uses. De-escalation strategies also included use of oral PRN medications, sometimes paired with non-pharmacological interventions, suggesting a need to clearly separate diffusion/”talk-down” de-escalation techniques from medication strategies. Promoting inclusion of patient preferences also is necessary to plan and evaluate interventions, as the patient may have insight into interventions which work best and when to use them.

Participants reported efforts to include patients in care planning, and educate patients on PRN use, contrasting the research of Clearly et al. (2012), where patients admitted to acute
inpatient units reported not receiving relevant facts about PRN use. According to participants, patients stated that they recognized the therapeutic value of chemical restraint. Positive experiences were discussed, as patients voiced positive feedback, sometimes thanking nurses for providing an external means of control because of a patient’s awareness of being out of control and seeing no alternative means of containment. These findings were in contrast to research in which patients most frequently voiced beliefs of no benefit, nor necessity, for restraint or seclusion interventions (Soininen, et al., 2013), substantiating the benefit of discussing patient preferences of emergency containment methods. Clinical supervision may be a strategy in helping nurses to gain insight into the multiple factors influencing their decisions to use chemical restraint, factors which included fear of the unknown and caring for unfamiliar patients.

**Fear of the unknown.** Participants disclosed their fears about providing care for new patients because of the potential for unpredictable behaviours resulting in violence. The subsequent fear contributed to the use of chemical restraint. Participants were more comfortable with patients for whom they previously had provided care; patients with whom they had established therapeutic rapport and held some predictability of behaviours, because of known patient history. Efforts were made to plan care using information available about patients’ histories, demonstrating participants attempting to include patients’ preferences in the intervention planning processes in the event of behavioural emergencies. However, patient care information was conferred from the nurse’s perspective, with little mention of discussion and debriefing with patients to create long-term aggression or crisis management care plans. Promoting reflective practice exercises through case study review with patients following difficult incidents may help nurses shift their perspectives to become more aware of the patient perspective.
Multiple barriers prevented quick access to patient’s psychiatric history, including regional division of health care delivery, length of time for paper documentation to arrive from health records, and informally documented pertinent information (verbal or documents not part of the permanent record). To improve person-centred and trauma-informed practice, crisis management care plans could be created and contained as part of the permanent record, with copies given to the patient and family, to be presented in the event of acute inpatient admission. Inclusion of family and other community supports early in a patient’s acute psychiatric admission also may be helpful in learning about patient’s history of violence, early signs of escalation, strategies for de-escalation, and preferences of containment methods in the event of behavioural crisis. More inclusion of patient’s families and community providers also can be helpful in reducing coercive practices.

The role of coercive medication practices. Coercive medication practices are a mainstay for acute mental health nursing, with the moral distress that is caused being an accepted aspect of the job. Power differentials between patients and nurses were prevalent, especially for patients certified under the British Columbia Mental Health Act, perpetuated by participants understanding of forced treatment as medication compliance by any means necessary (Gray, Hastings, Love, & O’Reilly, 2016). Though acknowledged, few suggestions were made to alleviate coercive practice. Similar to the findings of Merinaeu-Cote et al. (2014), participants discussed the emotional distress that they experienced in administering medications under circumstances of coercion. However, reducing the use of coercive practice is essential to build trust with patients, and thus reduce the frequency of incidents that require chemical restraint interventions (Gilburt, Rose, & Slade, 2008), which will in turn benefit the patients and reduce the moral distress of the nurses.
Strategies identified to reduce use of forced medication were: administering medications early, asking patients about preferences, listening for explicit requests for medications, and honouring patient’s stated preference for oral or injection medication when in crisis. Engaging with patients early in their admission, to identify their preferences and intervening at the first signs of distress, was a key strategy to assist staff members and reduce coercive practice and moral distress related to use of forced medication interventions. Research findings support including patients in care planning decisions to strengthen the therapeutic relationship between nurse and patient and decrease patient perception of coercion (Sheehan & Burns, 2011). However, the higher the acuity of patient, the more difficulties participants faced when trying to include patients in making care decisions.

Participants identified a lack of integration of patient involvement in care planning when providing care for patients experiencing acute symptoms of psychosis. For example, patients, who were experiencing distress related to severe paranoia and perceptual disturbances, were described as quickly treated with medications and either transferred to less acute hospital units or discharged soon after symptom stabilization, limiting opportunity to provide input in the decision-making process. Participants working with the most symptomatic patients focused efforts on patient compliance with medication regimes to manage symptoms. Less thought was given to ramifications of chemical restraint practices on patients’ lives post-discharge, as focus was directed at addressing acute concerns limited to the acute inpatient stay. Coercive practices could be decreased by implementing strategies to increase nurses understanding of the lasting effects that invasive acute inpatient interventions can have on patients, for example trauma caused by rapid tranquilisation. Increased knowledge about best practice for medication utilization also may have positive effect on reducing coercive medication practices.
Supporting Medication Best Practices

Lack of understanding of evidenced-based chemical restraint practices was identified by participants overtly and substantiated in their descriptions of practices contradictory to research evidence. These current study findings are consistent with previous researchers, who claimed that mental health nurses’ medication practices and choices often were based on unit culture (Brown et al., 2010) and tradition (Stewart et al., 2012). Discussion will focus on supporting nurses in developing adequate knowledge of chemical restraint medications, indications for the use of these medications, and assessment of the effects of their use.

Participants demonstrated consistency in their identification of medications ordered, with all participants identifying both lorazepam and loxapine. Through their anecdotal reports, participants identified lorazepam and loxapine as the most effective medications used for chemical restraint, in both IM and oral formulations, which was in contrast to the research literature (Innes & Sethi, 2013). This discrepancy between best-practice evidence and practice demonstrates either a lack of best-practice knowledge or disregard of it. As discussed in the previous section, including specific indications in medication orders will provide clarity for nurses. Recommendations for addressing the knowledge-practice gap will be provided in the education section. In addition to supports to increase nurses’ psychotropic medication knowledge, there must be clear medication practice standards for safe use of psychotropic medication, including increased accountability of both prescribers and nurses by auditing physician medication orders for clear indications for use of drugs and reviewing nurse documentation regarding pre and post drug administration assessment.

Participants demonstrated limited awareness of negative impacts of chemical restraint use. Participants identified some negative aspects of chemical restraint use, including some
medication side-effects. At times, knowledge of potential side-effects influenced the decisions to use chemical restraints, especially for those patients with multiple medications orders. Though participants did identify some of the alternatives to chemical restraint, such as more space and access to distraction activities, alternatives were difficult to implement, especially in higher acuity settings because of higher security and safety measures. Participants’ perceptions of limited options within a risk averse culture of mental health nursing, led by fear and need to control, may be best addressed by creating a cultural shift away from control and risk management towards patient engagement and relational practice (Slemon, Jenkins, & Bungay, 2017). Further, the reliance on physicians for directives in medication administration indicates a need for more communication and sharing of knowledge between prescribers and the nurses, who administer the medications. Nurses should take responsibility to learn about the prescribed medications that they are administering to ensure consistent safe, ethical, and evidence-based practice. Education related to medication indications and side effects, as well as relational-based interventions are discussed in greater detail in the education section.

**Transitioning From Novice to Expert**

Nurses journey down a path from student to novice, new graduates to experienced clinicians, with different experiences changing their perceptions of the roles of chemical restraint. In reflecting on their careers, participants identified their initial hesitancies of using containment methods. With experience, they learned the value of using both oral and IM medication to manage patients, who were experiencing behavioural crises. In the transition from novice to expert, nurses tended to become more accepting of chemical restraint use as a form of patient containment (Keser Özcan, Bilgin, Akın, Boyacıoğlu, & Elçin, 2015). Increased experience with a particular containment method appears to lead to positive attitudes about the
method. Ongoing exposure to chemical restraint use, with continued observation and explanation of the clinical decision-making process from more experienced nurses, seems to have influenced nurses’ acceptance of the use of chemical restraint and PRN psychotropic medication in general. Education recommendations to improve chemical restraint practices are offered, with consideration made to the role of mentorship, definitions of chemical restraint, strategies for reducing coercion, and promotion of a recovery-oriented approach, integrating recommendations for nursing curricula throughout each subsection.

**Education recommendations.** Often participants demonstrated a lack of formal education on safe use of chemical restraint. Participants identified development of their clinical decision-making through reflecting on role modelling, by emulating care that they believed was ethical and competent, and rejecting care typified as unsafe, unethical, and harmful practice. In this sample, graduates of Bachelor of Nursing, Bachelor of Psychiatric Nursing, and Psychiatric Nursing diploma programs identified that when they were students they received limited formal education on chemical restraint practices. Similarly, they reported no recollection of receiving clinical education on use of chemical restraint following their entry to practice. Participants spoke of their lack of knowledge and reliance on psychiatrists for assisting in their clinical judgement about medication choice and dose, as well as assessment pre and post medication administration (especially in terms of side-effects). Participants seemed to lack agency in making decisions earlier on in their careers, lacking confidence in openly questioning co-workers clinical decision-making processes and curtailing dangerous practices. Given the complexity of clinical decision-making, and depth of clinical judgment required to provide the intervention safely and ethically, clinical leaders would best serve the interests of patients and clinical staff in the acute inpatient mental health setting by helping nurses develop competencies earlier in their
careers, in the use of chemical restraints. Nurses must be supported in learning competencies of chemical restraint starting at the undergraduate level, when they become exposed to psychotropic medication practices. De-mystifying chemical restraint practices will allow for the development of confidence in clinical decision making of control measures in behavioural emergencies, encouraging nurses to reflect on and question the ethics of such practices, rather than foster unquestioning acceptance.

*Nursing mentorship.* Participants learned about chemical restraint practices through mentoring relationships with more experienced staff, role modelling of experienced nurses to newer nurses, and through seeking advice from psychiatrists (which was sometimes identified as contradicting the nursing practice). Participants’ knowledge-bases were often in contradiction of current literature, which illuminates a pathway for perpetuation of outdated nursing practices based on tradition rather than current science. Findings from this study, may be used to highlight the importance of developing formal education at the undergraduate level and for nurses in clinical practice. Education may be best designed to teach nurses earlier on, a range of de-escalation strategies, with opportunities to practice, increasing knowledge and safety in the application of chemical restraint along continuum of interventions.

Education is a key factor, which can be used to improve safety in the use of restraint interventions and reduce the use of restraint practices (Mann-Poll, Smit, Van Doeselaar & Hutschemaekers, 2013). Given participants identification of the lack of education related to the use of chemical restraint provided at the undergraduate level, nurses may need more clinical support as they transition into the workplace. New nurses learn from more experienced nurses, whose knowledge base may be reliant on tradition, embedded in the unit culture, and deeply influenced by the constraints of the environment. Participants reported lacking confidence in
challenging what they saw as unsafe and unethical practices when they were new nursing graduates, unsure if their perspectives were idealistic and unrealistic, in fear of challenging the status quo. Nurses in acute inpatient mental health workplaces may benefit from formalized programs that connect experienced nurse mentors with novice nurses to support building of skills coupled with formalized clinical competencies defined for safe and ethical administration of PRN psychotropic medication and chemical restraint interventions. Formalized team training focused on practical implementation of best practice, specific to a care area, may help shift unit culture. Through education of an entire team rather than focusing on individuals, workplace specific education may be used to address safe and ethical practices given different constraints.

**Definitions of chemical restraint.** The term, "rapid tranquillisation," was not common knowledge to any participants in this study, yet the term consistently being used in the research literature to describe IM administration of chemical restraint (Allison et al., 2014; Dickinson et al., 2009; Innes & Sethi, 2013), indicating a knowledge-practice gap of participants, including those nurses, who indicated an interest in research-based evidence to guide their practices. Nursing educators must integrate a standard terminology when referring to chemical restraint interventions to ensure that nurses have the basic knowledge to competently provide these interventions. Curriculum development on the use of chemical restraint also must include definitions of chemical restraint, to help nurses differentiate between PRN medication ordered for specific symptom management and those medications ordered for chemical restraint. Support from clinical leaders, nurse educators, and prescribers are necessary to improve nurses understanding of chemical restraint. Creation and implementation of clear policy and procedure, with regular education and auditing of incidents to ensure safety, is necessary to ensure clear understanding similar to that of physical and mechanical restraint. Appropriate education with
clear definitions of chemical restraint and explanation of practical and ethical applications of different types of coercive nursing practice will support reduction in the use of coercive practice.

Reducing coercion. Participants differentiated between worse-case scenarios and those situations, which were considered to be common, everyday practice. Oral psychotropic medications were described as given frequently, so much so, that many participants described experiences blending together without salient memories of specific incidents where injection medication was required. Nurses require formal education about the potential traumatic impacts of coercive medication practices to foster more reflection on when coercion was used and ways it can be reduced as means of building patient trust and instilling a sense of safety. Education is necessary to support integration of recovery and trauma-informed practice into nursing education, to support patients and families. Focus also must include strategies to uncover and reduce stigma of patients and fear of patient behaviours such as violence, leaving space for nurses to openly acknowledge the impacts on choice of intervention, the number and types of interventions that are used, and the timing of the interventions. Psychiatric inpatients have been found to receive PRN medication, with the documented rationale for administration being widely varied, with few other therapeutic interventions being documented prior to administration of the medication (Curtis et al., 2007; Lindsey & Buckwalter, 2012). Education is necessary to ensure other interventions are attempted prior to the use of chemical restraint, including proper documentation before and after medication administration, to evaluate success of different interventions as a means of future care and safety planning.

In theory, the most acceptable reason to use a patient containment method is violent behavior (Cowin et al., 2003), however, in practice different behaviours lead to Patient Control Measures (PCMs), including milieu management of the inpatient nursing ward. Education must
include nursing interventions necessary for each specific area of practice, with simulation-type practice to increase the awareness of staff about the different constraints that occur in practice. De-escalation programs are best designed with integration of the unique challenges that are experienced in specific work areas, including team factors such as experience levels of staff members and staff mix of regulated and unregulated health care professionals. Team factors contribute to a positive or negative workplace. Therefore, policies and programs, as well as education designed to foster positive workplace culture and teamwork, are key considerations. The importance of team factors also highlights the importance of designing practices that include hiring new nursing staff members with a range of knowledge and skills to provide effective and supportive mentorship.

Promoting a recovery-oriented practice. Benefit in using a recovery approach has been demonstrated in psychiatric settings (Lim, et al., 2017). Recovery-oriented practice involves collaboration between health care provider and patient, supporting the patient through building on his/her strengths, recognizing the importance of engaging the patient, and working with him/her to improve his/her quality of life (Lim, Wynaden, & Heslop, 2017). Integrating a recovery approach often requires a cultural shift due to the pervasiveness of traditional paternalistic medical models commonly used in psychiatry (Repique, Vernig, Lowe, Thompson, & Yap, 2016). Education designed to integrate recovery principles in acute care settings is necessary to shift culture towards collaborative, patient-centered care in which patients are meaningfully included in the clinical decision-making process in all aspects of care, including their preferences in times of behavioural emergency.

In addition, connecting nursing practices on inpatient acute units to the patient’s life beyond the inpatient acute hospital stay has improved outcomes (Nolan, Bradley, &
Brimblecombe, 2011). The recovery approach may be best achieved by bringing together care providers. Use of a multidisciplinary education approach that brings together prescribing psychiatrists and the nurses, who administer the medication and provide ongoing care to the patients, may prove fruitful in creating mutual understanding and shared practice. Team training may be of benefit to bring together the physicians, who are prescribing medications with the direct care nurses and other members of the team. The goal is to build a unit environment based on the recovery principles, which has potential to increase patient-led holistic treatment planning, including patient preference and early intervention of behavioural crisis, thereby reducing the use of restraint interventions (Repique, et al., 2016)

**Recommendations for Future Research**

This study provided new insight into the experiences of acute mental health nurses’ practices and reflection on practices of administering chemical restraints. Recommendations for future research include study of legal implications of the use of chemical restraints, research related to nurses’ knowledge of aspects related to the use of chemical restraints, nurses’ attitudes towards patient aggression/anger, and factors influencing nurses’ choices to use chemical restraint.

**Legal implications.** Participants identified nursing practice concerns including challenges in completing documentation indicative of actual practice, implementing the informed consent process, and ensuring effective patient education. Previous researchers found that many patients reported that no consent was sought prior to receiving of PRN psychotropic medication (Cleary et al., 2012). Participants endorsed the use of psychotropic medications as compulsory, as defined with the British Columbia Mental Health Act, and thus, coercion was an acceptable practice, with no consent for forced injection being sought. Some participants openly disclosed
their use of covert medication practice (hiding medications in food or providing PRN medications in addition to regular medication without notifying the patient) to get a patient to take a PRN medication. Participation in such practices raises ethical concerns, especially for those patients, who are deemed competent to make their treatment decisions. The British Columbia Mental Health Act allows for the detainment of those persons, who meet the criteria for involuntary admission, and does not allow for treatment refusal by those persons (Gray, Hastings, Love, & O’Reilly, 2016). Research is necessary to further clarify the influence of the British Columbia Mental Health Act and the influence that the Act has on the clinical decision-making process of nurses with respect to their understanding of the meaning of compulsory treatment for the patient, who is admitted involuntarily. Education of nurses regarding the Act, and follow-up research to determine the influence of the education on practice also is a key consideration. Research to compare mental health acts across provinces and countries could be beneficial as well as the comparisons of applications of these mental health acts in practice.

Understanding nurses knowledge. More specific research is necessary related to nurses’ knowledge of PRN psychotropic medications, awareness of specific chemical restraint guidelines, and understanding of best practices concerning oral and injection chemical restraint. Retrospective chart analysis may be useful to determine the actual frequency of medication use, the specific types of drugs being used, and the doses of these medications. Further understanding about the reflection and resulting steps that nurses take prior to administering oral and IM medication is necessary to understand de-escalation techniques and practices. Although participants attempted to include patients in the decision-making process, they acknowledged that sometimes patient’s mental illness symptoms made communication and meaningful inclusion difficult. Future research could best include the patients’ and nurses’ perspectives of
the same incidents with focus on ways that patients could best be included in their care planning processes.

**Attitudes towards patient anger/aggression.** Participants were not asked specifically about their perspectives on patients’ displays of anger and aggression. However, some participants discussed their empathy towards patients, who exhibited anger about being involuntarily admitted to hospital and forced to take medications. The attitudes that nurses have towards aggression has been related to their acceptance of certain forms of patient containment methods (Dack, Ross, & Bowers, 2012). Exploring nurses specific understanding and attitudes toward certain behaviours, for example aggression, may be used to assess nurses’ beliefs anger and aggression and the connection of these behaviours to the use of chemical restraint intervention.

**Factors influencing nurses’ choices to use chemical restraint.** Acceptance, frequency and application of chemical restraint intervention, (especially use for patients certified under the British Columbia Mental Health Act) are a concern. Despite common understanding of the practice as coercive, and as compromising safe and ethical patient care, further understanding of specific factors that lead nurses to use chemical restraint is necessary. Additional information is necessary to identify specific factors that positively or negatively influence nurses’ decisions to use chemical restraints. Specific factors that may influence the amount of PRN medication use are: staffing ratios, skill mix of staff, patient to nurse ratio, environmental design, as well as education and training. Similarly, the influence of unit culture and the specific characteristic that are prevalent on units with both high and low use of psychotropic PRN medication may be fruitful in identifying key areas in need of change with the potential of reducing chemical restraint use. Research also needs to be done regarding nurses’ understandings of personal
motivations for using chemical restraint interventions, with focus on factors such as fear of the psychiatric patients, experience with different types of restraint interventions, education about behavioural emergency interventions, and other staff factors that may influence their clinical decision-making processes. Clearer understanding of specific factors that influence nurses’ clinical decision-making process can lead to targeted ways to improve practice, policy, and education to improve patient safety and reduce use of chemical restraint interventions.

Strengths and Limitations

A dearth of nursing-focused research was found on chemical restraint interventions in acute inpatient adult mental health settings, with no Canadian studies found. The major strength of this study is the foundational knowledge provided, which is related to nurses’ experiences of chemical restraint utilization in one area of Canada. The study is an example of an effective methodological approach to undertake such study. Use of the interpretive phenomenological method, which generated thick, rich description of direct care nurses experiences, provided a strong basis for future research in an under-researched area concerning a common nursing intervention.

Limitations of the study included participants’ potential accuracy in recalling past events, participants’ potential concern for presentation of self, ambiguity in the use of the term “chemical restraint”, and the context-specific nature of the study. The main limitation emerged from potential challenges participants may have had in expressing themselves freely and accurately, as they were recollecting past experiences, sometimes from several years prior to the interview. Participants acknowledged that occurrences of administering oral medications were more difficult to recall because of the frequency of administering the intervention, resulting in fuzzy memories and more general descriptions.
Additionally, participants may have been influenced by trying to present a certain positive image of themselves to the researcher. Participants may have been experiencing embarrassment or shame over their roles in these experiences, thus influencing the telling of their story in a more positive light in conversation with the researcher. Similarly, in their recollections, participants decided which medications were ordered for the purpose of chemical restraint, and given the ambiguity of the term, ‘chemical restraint’ different participants may have interpreted the situations differently.

The purpose of this study was to obtain thick description of mental health nurses’ experiences of administering as needed psychotropic medication for the purpose of behavioural emergency. The goal was to gain understanding of the meaning nurses make of these practices. Study results can pose challenges for practical applications as results are connected to the specific context of the research. The sample size was small as is common in phenomenological studies. However, participants could share diversity in their unique experiences, despite similarities such as gender, level of education, and geographical location of practice. Useful data were collected and analyzed providing a foundation for continuation of research related to the use of chemical restraint with clients suffering from mental illness and receiving care in acute care settings.
Chapter 6 - Conclusion

The author used interpretive phenomenology to gain insight into the experiences of mental health nurses’ use of PRN psychotropic medication in managing behavioural emergencies in the adult inpatient mental health care setting. The goal of the research was to learn nurses’ perspectives to increase understanding of the ways that nurses made meaning of chemical restraint interventions vis-a-vis the clinical, ethical decision-making process. Interpretive phenomenology was used to explore the phenomenon of nurses’ experiences of chemical restraint administration, giving voice to nurses by asking them to tell their stories. Insight was provided into the experiences of nurses, who regularly used the practice, uncovering the nuances of their lived experiences.

Participants shared their experiences of using psychotropic medication regularly in their day-to-day mental health nursing practice. The themes that emerged in the data analysis process were: using all the tools in the toolbox, taking control to maintain safety, using therapeutic intervention, working within constraints, making medication choices, and transitioning from novice to expert. Subthemes were used to further refine the meaning of the data within each main theme.

Discussion was focused on four subsections related to the major themes identified during the analysis. Consistencies and differences between evidence from the literature and the findings of this study were identified and were highlighted as contributions that this research lends to the extant knowledge base. The primary themes that were identified and those themes that shape the discussion were: using PRN psychotropic medication as a tool for safety, ethical use of chemical restraints within constraints, supporting medication best practices, and transitioning from novice to expert.
The information gained from this study has provided insight into eight acute inpatient mental health nurses’ experiences of using medication interventions for patients in situations of behavioural crisis. The themes and subthemes may be used as a starting point for additional research on safe chemical restraint practices of acute inpatient mental health nurses to better inform nursing practice and to improve patient care. The implications for improving nursing practice were explored, highlighting significant areas for change. Findings of this exploratory research study will be used to better inform nurses, health care leaders, and policy makers about the complex ethical decision making required for use of chemical restraint interventions. Research findings will be used to stimulate further inquiry into chemical restraint practices.

In conclusion, this study provided new insight into the experiences of acute mental health nurses’ practices of administering chemical restraints, and highlighted gaps in consistent terminology and nursing knowledge. As an exploratory study the recommendations made for future research are paramount. Future research recommendations included further study of the legal implications of the use of chemical restraint; additional research related to nurses’ knowledge of chemical restraint practice; nurses’ attitudes towards patient aggression/anger; and factors influencing nurses’ choices to use chemical restraint.

The major strength of this study was the foundational knowledge provided, which was related to nurses’ experiences of chemical restraint utilization in one area of Canada. The study provided an example of an effective methodological approach to undertake such inquiry. Use of the interpretive phenomenological method generated thick, rich description of direct care nurses’ experiences, which provided a strong basis for future research in an under-researched area concerning a common nursing intervention.
Limitations of the study included participants’ potential inaccuracy in recalling past events, participants’ potential concern for presentation of self in a positive light, ambiguity in the use of the term ‘chemical restraint’, and the context-specific nature of the study. The main limitation emerged from potential challenges participants may have had in expressing themselves freely and accurately, as they were recollecting past experiences, sometimes from several years prior to the interview.

Disseminating findings to direct care nurses, leaders, and policy makers can help shape policies, inform curriculum development, and provide a point of reference for future Canadian research projects. Publishing findings from this study will add to the growing body of knowledge restraint practices used on adult acute inpatient units in Canada and globally.
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Appendix A

Lived Experience of Mental Health Nurses who Administer Emergency Psychotropic Medication Interventions in Acute Adult Inpatient Settings

Interview Guide

[The guide is a suggested interview format, intended to provide consistency when appropriate. Research using hermeneutic phenomenology requires asking participants’ broad and general questions to gather data reflective of the participants’ lived experiences. Data will be collected using open-ended interview questions in a semi-structured format. Phenomenological method utilizes a flexible approach, creating responsive data collection based on previous information gathered. Adaptation of the interview format is anticipated.]

Professional History

I would like to discuss your experience as a mental health nurse working with adult clients in acute care settings.

- What is your educational preparation?
- How many years have you actively practiced as a mental health nurse?
- How many years have your practiced in an acute care inpatient setting? How many of those years were with adult patients?
- Please tell me about other mental health settings where you have practiced.
- What is your age?

Emergency Medication Interventions

I would like to understand your experiences in situations where you have administered medication to patients in emergency situations in an acute care inpatient mental health setting.
Tell me about a time when you gave a patient medication in an emergency situation. What led up to the intervention? What were the actions on the unit? What was your role?

Tell me about a time when you gave a patient oral medication, which he or she initially refused.

Tell me about a time when you gave a patient an injection medication, which he or she said initially refused.

What are your reflections after administration of these interventions?

How do you think that interventions with emergency medication affected your relationship with the patient?

How do you think that interventions with emergency medication affect your relationship with other nurses?

How do you think that the interventions with emergency medication affect your relationships with other members of the health care team, such as psychiatrists, social workers, occupational therapists and unregulated health care workers?

How do you view situations where medication has to be given in an emergency situation?

Overtime, what changes have you notice in the use of medication in emergency situations?

Is there anything else that you would like to add?

Thank you, I will send a link to my thesis once it has been completed and is in the repository for graduate student theses.
Appendix B

Exploring Mental Health Nurses’ Experiences of Administering Chemical Restraint in an Acute Care Setting Using Hermeneutic Phenomenology

Letter of Invitation

(to be placed on Brandon University letter head)

Dear Participant,

Learning about the lived experience of mental health nurses, who have administered medication during situations of behavioural emergency, may help increase understanding of this phenomenon, potentially providing foundational knowledge that may lead to better support for nurses and patients, and changes in policy and practice documents. You have been identified as a registered nurse/registered psychiatric nurse who works in an acute adult inpatient mental health setting in the Lower Mainland, BC area.

You are invited to participate in a study to explore nurses’ experiences of administration of medication in situations of behavioural emergency to adult patients admitted to inpatient acute settings.

I am a student in the Master of Psychiatric Nursing program in the Faculty of Health Studies at Brandon University. My supervisor is Dr. Fran Racher. Information gathered in this study will be published in my thesis. This information may be used to inform the mental health service providers and may also be used beyond the thesis project to write papers published in scientific journals, to present at conferences or workshops, or to share with other psychiatric nurses or mental health colleagues.
If you agree to participate, we will meet at a time and place convenient to you for an interview. Our conversation will take about one hour. The interview will be audio-recorded and then transcribed by a transcriptionist who will be contractually obligated to maintain confidentiality. Your participation will be kept confidential. Anonymity will be maintained by using of a pseudonym (false name). Your name or any other identifying information will not be published or shared. Data from all the participants will be combined. When the study is complete, I would be happy to share the findings with you. I will email you a link to my thesis, once completed.

Participation in this study is voluntary. You may refuse to answer questions or withdraw from the study at any time. Participating or declining to participate in this study will not affect your relationship with the researcher or with Brandon University.

Should you have any questions about participating in the study, please contact me directly to further discuss this project. I can be reached at (587) 215-8606 and michellecdanda@gmail.com. You may also speak to my supervisor, Dr. Fran Racher at (204) 727-7414 and racher@brandonu.ca. For questions regarding ethics you may contact the Brandon University Research Ethics Committee (BUREC) at (204) 727-9712 and burec@brandonu.ca.

Sincerely,

Michelle Danda RN MN CPMHN(C)
Master of Psychiatric Nursing Student, Faculty of Health Studies, Brandon University
Appendix C

Exploring Mental Health Nurses’ Experiences of Administering Chemical Restraint in an Acute Care Setting Using Hermeneutic Phenomenology

Consent Form

(to be placed on Brandon University letterhead)

Dear Participant,

This consent form, a copy of which has been given to you, is only part of the process of informed consent. It will provide a summary of the research and what your participation involves. If you would like more details about anything mentioned in this form, or information that is not included here, please ask. Please take time to read this carefully and to understand any additional information.

The following information is being given to you to inform your decision about whether or not you wish to participate in this study. You can withdraw from the study at any point in time without affecting your relationship with this researcher and Brandon University, and without any prejudice to any pre-existing entitlements you hold. Consent will be discussed throughout the research process. Your participation is voluntary and you may refuse to answer any question or you may withdraw from the study at any time.

Mental health nursing interventions are integral to the health and care of mental health patients. You have been identified as a practicing mental health nurse working in an acute care setting.
Your voice is needed to learn about a specific mental health intervention used in the area of acute care. Increased understanding may affect mental health nurses ability to provide safe and ethical care to address the challenging and complex daily demands faced in this profession.

Some patients who are admitted to inpatient acute mental health settings require emergency control interventions to prevent harm to themselves or to others. The purpose of this study is to learn more about the experiences of acute inpatient mental health nurses experiences of administering medication interventions to adults experiencing behavioural emergencies. The information collected will be published in my Master’s thesis. If you wish, I will share the results with you at the completion of the study. I will email you a link to my thesis when it is completed. The information may also be used beyond the thesis project to write papers published in scientific journals, to present at conferences and workshops, or to share with other psychiatric nurses or mental health colleagues.

Data collected from all participants will be presented as a combined whole. Your name will not be associated with the research in any way. I may at times quote your words in my writing, but your name and any identifying information will not be shared at any point. Your data will be collected in an interview at a location and time of your convenience. In my notes and in the transcription files you will be assigned a false name or pseudonym. The interview will be audio-recorded and transcribed by a transcriptionist. The transcriptionist will sign a confidentiality agreement prior to receiving any data collected from your interview. The transcriptionist takes the conversation from the audio-recording and writes it in notes. I may also take handwritten notes during the interview.
The computer files, audio-recordings, handwritten notes, and transcripts of our conversations will be kept confidential and accessed only by myself, Michelle Danda, my supervisor, Dr. Fran Racher, and the transcriptionist. The computer files will be saved on a flash drive and stored with the notes in a locked filing cabinet.

While there are no specific interview questions that are thought to cause distress, you may decide to share experiences that are difficult to discuss. If you find yourself in any discomfort or distress during the interview, please let me know and we will discuss postponing or cancelling the interview, and finding you help. There will be time at the end of the interview for debriefing.

Please sign this consent form with the full knowledge of the nature and purpose of the study. A copy of this consent form will be given to you to keep. You will not incur any financial costs in participating in this research. There are no known risks associated with this study. The expected benefit from this study is the increased knowledge about nurses’ experiences with emergency mental health medication interventions in urban communities. The research approach will be used to gain a rich understanding of these experiences and has the potential to influence education, policy development, practice, and theory.

Your signature on this form indicates that you have understood the information provided about your participation in the research project and agree to participate. This does not waive your legal rights nor release the researcher or the involved institution from their legal and professional responsibilities. Your continuing participation should be as informed as your initial consent, so feel free to ask for clarification or new information at any time.
Do not hesitate to ask any questions about the study before, during, or upon completion of your participation. If you have any questions concerning your participation you may contact me directly at (587) 215-8606 and michellecdanda@gmail.com. You may also speak with my supervisor, Dr. Fran Racher at (204) 727-7414 and racher@brandonu.ca. For questions regarding ethics you may contact the Brandon University Research Ethics Committee (BUREC) at (204) 727-9712 and burec@brandonu.ca.

Signature, participant  Date

Signature, researcher  Date
I am aware that I can be held legally responsible for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the electronic audio recordings, to which I have access.

____________________________
Transcriber’s name (printed)

____________________________
Transcriber’s signature

____________________________
Date
Brandon University Research Ethics Committee (BUREC)
Ethics Certificate for Research Involving Human Participants

The following ethics proposal has been approved by the BUREC. **Ethics Certification is valid for up to five (5) years from the date approved, pending receipt of Annual Progress Reports.**

As per *BUREC Policies and Procedures*, section 6.0, “At a minimum, continuing ethics research review shall consist of an Annual Report for multi-year projects and a Final Report at the end of all projects… Failure to fulfill the continuing research ethics review requirements is considered an act of non-compliance and may result in the suspension of active ethics certification; refusal to review and approval any new research ethics submissions, and/or others as outlined in Section 10.0”.

Any changes made to the protocol must be reported to the BUREC prior to implementation. See *BUREC Policies and Procedures* for more details.

As per *BUREC Policies and Procedures*, section 10.0, “Brandon University requires that all faculty members, staff, and students adhere to the *BUREC Policies and Procedures*. The University considers non-compliance and the inappropriate treatment of human participants to be a serious offence, subject to penalties, including, but not limited to, formal written documentation including permanently in one’s personnel file, suspension of ethics certification, withdrawal of privileges to conduct research involving humans, and/or disciplinary action.”

**Principal Investigator:** Ms. Michelle Danda, Brandon University
Title of Project: Exploring Mental Health Nurses’ Experiences of Administering Chemical Restraint in an Acute Care Setting

Co-Investigators: n/a

Faculty Supervisor: Dr. Fran Racher, Faculty of Health Studies (Psychiatric Nursing), Brandon University

Research Ethics File #: 22011

Date of Approval: January 13, 2017

Ethics Expiry Date: January 13, 2022

Authorizing Signature: Mr. Christopher Hurst
Interim Chair, Brandon University Research Ethics Committee (BUREC)