

THE NURSES' EXPERIENCE USING NON-PHARMACOLOGICAL INTERVENTIONS  
FOR PERSONS LIVING WITH DEMENTIA IN RURAL LONG-TERM CARE  
FACILITIES IN SASKATCHEWAN

A Thesis Submitted to the  
College of Graduate and Postdoctoral Studies  
In Partial Fulfillment of the Requirements  
For the Degree of Master of Nursing  
In the College of Nursing  
University of Saskatchewan  
Saskatoon

By

VIRGINIA M. DEOBALD

© Copyright Virginia M. Deobald, February, 2024. All rights reserved.  
Unless otherwise noted, copyright of the material in this thesis belongs to the author

## PERMISSION TO USE

In presenting this thesis/dissertation in partial fulfillment of the requirements for a Postgraduate degree from the University of Saskatchewan, I agree that the Libraries of this University may make it freely available for inspection. I further agree that permission for copying of this thesis/dissertation in any manner, in whole or in part, for scholarly purposes may be granted by the professor or professors who supervised my thesis/dissertation work or, in their absence, by the Head of the Department or the Dean of the College of Nursing. It is understood that any copying, publication, or use of this thesis/dissertation or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and the University of Saskatchewan for any scholarly use that may be made of any material in my thesis/dissertation.

Requests for permission to copy or to make other uses of materials in this thesis/dissertation in whole or part should be addressed to:

Dean of the College of Nursing

104 Clinic Place

University of Saskatchewan

Saskatoon, Saskatchewan, S7N 2Z4 Canada

OR

Dean College of Graduate and Postdoctoral Studies

University of Saskatchewan

116 Thorvaldson Building, 110 Science Place

Saskatoon, Saskatchewan S7N 5C9, Canada

## ABSTRACT

**Introduction:** Managing responsive behaviour (RB) is one of the major difficulties when caring for persons with dementia. Nearly 70% of residents in long-term care facilities (LTCF) have diagnoses of dementia. Evidence recommends nonpharmacological interventions (NPIs) as the first line of defense to treat RB, yet indicates it is not always being used. Nurses working in LTCF have direct impact on decisions of care, including interventions for RB. Minimal research exists including nurses use of NPIs.

**Purpose:** The purpose of this study was to discover the nurse experience using NPIs for persons living with dementia in rural LTCF. With no current evidence describing the nurse experience, this study seeks to fill the current knowledge gap and discover factors involved in the use of NPIs within this context.

**Methodology:** Qualitative description was used with conventional content analysis. Data were collected from seven participants using semi structured interviews throughout 2019. NVivo© software was used for organizing initial categories, followed by traditional hand coding for the remainder of the analysis.

**Findings:** Four major categories emerged including Sentiment and prelude to using PIs and NPIs; How and what NPIs are being used; Barriers to implementing NPIs; and Other Important Factors. Each category had several subcategories. Nurses used distraction and redirection as NPIs to manage RB in their everyday practice. While other NPIs were described (e.g., music), they were not ordered or scheduled in any routine or systematic way. Barriers to using NPIs was a major finding. A lack of staff, time, and supportive resources were mentioned by all participants, as well as descriptions of environmental barriers including physical layout and function and organizational barriers (e.g., staffing level; policies; education, prioritizing tasks). An overall theme of struggle and complexity wove throughout all categories.

**Implications:** Numerous implications for future research and LTCF organizations were found in the data including the importance of addressing barriers to the implementation of best practice using NPIs

**Conclusion:** The findings from this study support the need for further research to address the struggle and complexity described by nurses within LTCF when wanting to implement best practices and support those living with dementia in rural LTCF.

## ACKNOWLEDGEMENTS

I would like to acknowledge the student advisory committee consisting of Dr. Diane Campbell, Dr. Debra Morgan, and Dr. Shelley Peacock. This exceptional committee of advisors provided expert guidance and various opportunities for me to highlight this work while gaining valuable experience in research. It has made for a memorable graduate experience.

A special thanks to thesis supervisor Dr. Shelley Peacock, who became fundamental in seeing this study through to completion by supporting me throughout this master's program. It is a special duty and responsibility to guide others. Dr. Peacock has done so with a skillful display of expert knowledge and great compassion.

Financial assistance by way of bursaries, awards, and other funding was greatly received and is kindly acknowledged below:

- RaDAR (Rural Dementia Action Research)
- Canadian Center for Health and Safety in Agriculture
- Canadian Nurses Foundation
- University of Saskatchewan's College of Nursing

A special thanks to Dr. Morgan, who was instrumental in providing opportunities to be part of RaDAR. This allowed for exposure to researchers in various disciplines and promoted the nurturing and growth as a novice researcher.

## **PERMISSION TO REPRODUCE**

Where a thesis includes a "substantial part" of a work or other proprietary material in the thesis, permission from the rights-holder must be obtained. No permission to reproduce was necessary or used for the purpose of this thesis study.

## **DEDICATION**

This thesis is dedicated to the residents and staff of the Ituna Pioneer Health Care Centre, who have taught me so many valuable things during my time there. To the people living with dementia who have given me the chance to experience their world for brief moments in time and with whom I shared intimate moments of grace, kindness, and struggle. To the residents who have challenged my thinking, spurred me to expand my knowledge, and given me a sense of humor and appreciation again for simple things.

I dedicate this thesis work to you and am immensely grateful for the experiences you've given me. I am not just a better nurse for it, but a better person. I will always hold a place in my heart for IPHCC and all the nurses and aids across Saskatchewan who choose to do this important work, caring for others.

I must also share my gratitude to Joel Mayer, who, despite navigating several life events with me during the same time, supported my work and my journey as a graduate student. I am forever grateful.

## TABLE OF CONTENTS

<b>PERMISSION TO USE.....</b>	<b>ii</b>
<b>ABSTRACT.....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>iv</b>
<b>PERMISSION TO REPRODUCE .....</b>	<b>v</b>
<b>DEDICATION.....</b>	<b>vi</b>
<b>LIST OF TABLES .....</b>	<b>x</b>
<b>LIST OF FIGURES .....</b>	<b>xi</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>xii</b>
<b>GLOSSARY OF TERMS.....</b>	<b>xiii</b>
<b>CHAPTER 1 INTRODUCTION AND BACKGROUND.....</b>	<b>1</b>
1.1 Dementia.....	1
1.2 Responsive Behaviour .....	2
1.3 Pharmacological Interventions (PIs).....	3
1.4 Non-Pharmacological Interventions .....	3
1.5 Long Term Care.....	5
1.6 Rural.....	6
1.7 The Nurse Role .....	6
1.8 Statement of Problem and Summary .....	7
1.9 Acknowledgement of Pre-Pandemic Research.....	8
<b>CHAPTER 2 LITERATURE REVIEW.....</b>	<b>9</b>
2.1 Search Terms and Strategy .....	9
2.2 NPIs as Best Practice for RB: Are Nurses Using Them? .....	10
2.3 Staff Knowledge and Perceptions.....	12
2.4 Barriers.....	13
2.4.1 Lack of Support.....	14
2.4.2 Time .....	14
2.4.3 Organizational Considerations .....	15
2.5 Other Findings .....	16
2.6 Summary.....	16
2.7 Purpose and Objective .....	17
<b>CHAPTER 3 METHODOLOGY.....</b>	<b>18</b>
3.1 Qualitative Descriptive Methodology.....	18
3.2 Setting and Target Population.....	19

3.3	Data Collection .....	20
3.4	Data Analysis .....	21
3.5	Rigor/Trustworthiness.....	22
	3.5.1 Credibility.....	22
	3.5.2 Confirmability .....	23
	3.5.3 Dependability .....	23
	3.5.4 Transferability .....	23
3.6	Ethics.....	24
3.7	Limitations .....	24
3.8	Relevance and Benefits.....	25
3.9	Knowledge Translation.....	25
<b>CHAPTER 4 FINDINGS .....</b>		<b>26</b>
4.1	Sentiment & Prelude to Using PIs and NPIs .....	28
	4.1.1 Sentiment/Attitude towards NPIs Vs PIs .....	28
	4.1.2 Assessment & Medication Reviews .....	30
	4.1.3 Deciding Factors .....	31
4.2	What and How NPIs are Being Used.....	32
	4.2.1 Distraction/Redirection .....	33
	4.2.2 Client History/Personalizing Care and Approach .....	35
	4.2.3 Trial and Error .....	36
	4.2.4 Team Effort .....	38
	4.2.5 Restraints and Alarms .....	39
4.3	Barriers – Time & Staffing; Environment .....	40
	4.3.1 Time and Staffing.....	40
	4.3.2 Environment .....	42
4.4	Mitigating Factors .....	46
	4.4.1 LTC Education .....	46
	4.4.2 Rural Context .....	47
	4.4.3 Effectiveness of Resources.....	48
4.5	Summary .....	51
<b>CHAPTER 5 DISCUSSION AND LIMITATIONS .....</b>		<b>52</b>
5.1	Discussion .....	52
	5.1.1 Sentiment.....	53
	5.1.2 Lack of Ordered or Scheduled NPIs .....	53



5.1.3	Lack of Volunteers and Unclear Recreation Team Outcomes .....	54
5.1.4	Personalized Care .....	55
5.1.5	Barriers as Reality; Lack of Dementia Specific Units, and Restraint Use	56
5.1.6	Mitigating Factors .....	57
5.1.7	LTC Education .....	58
5.1.8	Rural Context. ....	59
5.2	Pre and Post Pandemic.....	60
5.3	Limitations .....	61
5.3.1	Size and Demographics of Participants.....	61
5.3.2	Geographical Location .....	62
5.3.3	Methods.....	62
<b>CHAPTER 6 IMPLICATIONS AND CONCLUSIONS.....</b>		<b>64</b>
6.1	Implications for Practice and Research.....	64
6.2	Conclusion .....	65
<b>REFERENCES.....</b>		<b>66</b>
<b>APPENDICES.....</b>		<b>78</b>
Appendix A.....		78
Appendix B Interview Guide .....		80
Appendix C Participant Consent Form .....		81
Appendix D.....		84

## LIST OF TABLES

Table 4.1 Demographics .....	26
Table 4.2 Findings .....	27

## LIST OF FIGURES

Figure 4.1. Categories and Common Theme .....	28
---	----

## **LIST OF ABBREVIATIONS**

BPSD: Behavioral and Psychological Symptoms of Dementia

CCA: Continuing Care Assistant

HCW: Health Care Worker

LTCF: Long Term Care Facility

LPN: Licensed Practical Nurse

NPI: Non-pharmacological Intervention

PI: Pharmacological Intervention

RB: Responsive Behaviour

RN: Registered Nurse

RPN: Registered Psychiatric Nurse

QD: Qualitative Description

## GLOSSARY OF TERMS

*Behavioral and Psychological Symptoms of Dementia (BPSD)*: Sequelae of dementia, BPSD affects most persons with dementia, particularly in the middle and later stages. Behavioural symptoms can include loud vocalization, restlessness, agitation, and wandering; psychological symptoms include anxiety, depressive mood, hallucinations, and delusions. The preferred term used for these behaviours is now *responsive behaviour*.

*Dementia*: A syndrome where deterioration in memory, thinking, comprehension, language, judgement, behaviour, and the ability to perform everyday activities occurs (World Health Organization [WHO], 2012).

*Long-Term Care Facility (LTCF)*: Publicly funded, facility-based long-term care is offered through “special care homes” in Saskatchewan and operates following the standards in the Program Guidelines for Special-Care Homes published by the Saskatchewan Ministry of Health (2016). Nurses employed in these LTCFs are licensed health professionals and are required to meet educational standards.

*Non-pharmacological Intervention (NPI)*: “strategies that are used to prevent, reduce, or eliminate behavioral and psychological symptoms associated with dementia without the use of, or in conjunction with, pharmaceutical agents” (Fitzsimmons et al., 2014, p. 10).

*Responsive Behaviour (RB)*: “is a term preferred by persons with dementia, representing how their actions, words, and gestures are a response, often intentional, that express something important about their personal, social or physical environment” (Alzheimer Society of Ontario, 2017).

# CHAPTER 1

## INTRODUCTION AND BACKGROUND

Dementia is a syndrome affecting hundreds of thousands of Canadians (Alzheimer Society of Canada, 2022). Over half a million Canadians (747,000) are diagnosed and living with dementia right now (Alzheimer Society of Canada, 2023). Symptoms of dementia can include the inability to recall recent events or personal history, confusion about day/time/place, changes in sleep patterns, increased inappropriate decision making, trouble controlling bowel and bladder, personality and behaviour changes, increased difficulty communicating, and physical changes, all which contribute to responsive behaviours (Alzheimer's Association, 2023).

Responsive behaviours can cause distress for the person with dementia, their families, and the health professional, requiring attention to provide the most appropriate care possible (Koder et al., 2014; McKenzie et al., 2012; Simmons et al., 2015). Nurses working in long term care facilities (LTCF) have an essential role in caring for persons with dementia (Canadian Nurses Association, 2016). The current best practice is to treat responsive behaviours with nonpharmacological interventions (NPIs) first before intervening with pharmacological (i.e., medication) interventions (Cohen-Mansfield et al., 2014; Janzen et al., 2013). Despite knowledge and evidence recommending this first line of treatment, research shows that it is not always practiced (Azermai et al., 2014; Lapeyre-Mestre, 2016). Little research exists to describe the nurse's role in using NPIs, leaving a knowledge gap that would allow insight into better utilization of NPIs as best practice.

This study aims to better understand the nurse experience using NPIs in LTCFs, with a focus on rural settings. This chapter will introduce the following major concepts: dementia, responsive behaviour; pharmacological interventions, nonpharmacological interventions, long-term care; rural; and nurse roles. The chapter concludes with a summary statement of the problem and comments related to the COVID-19 pandemic.

### **1.1 Dementia**

Dementia is a syndrome involving deterioration in memory, thinking, comprehension, language, judgement, behaviour or personality, and the ability to perform everyday activities (WHO, 2012). Dementia is currently the seventh leading cause of death worldwide, affecting 55 million people. In 2019, the estimated total global societal cost of dementia was a staggering US 1.3 trillion dollars (WHO, 2023). The prevalence and costs of dementia are expected to continue

to rise over the next 15 years. The Alzheimer Society of Saskatchewan (2017) reports that every 24 hours, ten people will develop Alzheimer's disease or other related dementia within the province. Currently, there is no cure for dementia.

While dementia is a clinical diagnosis, it is not a specific disease; rather, it is a syndrome precipitating from an underlying condition (Cunningham et al., 2015). Different physical changes in the brain cause different forms of dementia, with the most common being Alzheimer's disease. Other dementias include Lewy Body, frontotemporal, and vascular dementia (Rabins & Blass, 2014). The severity of dementia and its symptoms vary in each person. Often, stages are referred to as early-stage, mid-stage, and late-stage. While this study does not focus on a specific stage of dementia, the study is situated within the LTCF context, where mid-to-late stages of dementia are often noted. Some of the symptoms noticeable at the mid-to-late stages include the inability to recall recent events or personal history, confusion to day/time/place, changes in sleep patterns, increased inappropriate decision making, trouble controlling bowel and bladder, personality and behaviour changes, increase difficulty communicating, and physical changes, such as inability to walk, sit, and swallow (Alzheimer's Association, 2018).

## **1.2 Responsive Behaviour**

Responsive Behaviour (RB) is a relatively new term in the dementia literature. RB is used to describe what has been commonly termed 'behavioural and psychological symptoms of dementia' (BPSD) or neuropsychiatric symptoms (Clifford & Doody, 2017). It is important to note that it is not just the unmodifiable neurodegeneration associated with dementia that causes behaviours that we once labelled as BPSD (Kales et al., 2015). Triggers associated with these behaviours can be environmental, social, or needs-based (Scales et al., 2018). Due to a better understanding and desire for more respectful language, these behaviors are now commonly termed RB in current literature. This acknowledges that behaviour is not just a 'symptom of dementia' stemming from changes in the brain but is rather a response to the environment or an unmet need that the person living with dementia is experiencing (Clifford & Doody, 2017; Dementia Australia, 2018). While some literature continues to use the term BPSD or neuropsychiatric symptoms, this study will use the term RB to represent all changes in behaviour that the person living with dementia may exhibit.

When providing care to persons with dementia in LTCF, RBs have been identified as the primary difficulty (Alzheimer Society of Canada, 2023; Ervin et al., 2012; Karlin et al., 2017). Some of these changes in behaviour include agitation, psychotic symptoms (e.g., hallucinations and delusions), sleep disturbances, depression, apathy, and wandering (Rockwood et al., 2015). Evidence shows that RBs cause distress for the family and staff, as well as the person living with dementia (Fitzsimmons et al., 2014; Long, 2017). Learning how to prevent and manage RB in LTCF is an important component of providing quality care to persons with dementia.

### **1.3 Pharmacological Interventions (PIs)**

Historically, pharmacological (i.e., medication) interventions were commonly used to treat RB (Hersch & Falzgraf, 2007). Some of these drugs include antipsychotics, antidepressants, and benzodiazepines (Lapeyre-Mestre, 2016). Due to an increase in adverse events (e.g., falls, stroke, death) when used in persons with dementia, warnings and recommendations against these medications as the first line of defense for RB have emerged (Fitzsimmons et al., 2014; Gurwitz et al., 2017). Antipsychotics are commonly divided into two categories, typical and atypical, the difference being chemical structure and mechanism of action. Typical antipsychotics are often classed as first-generation, which emerged in the 1950s and include Haloperidol, Loxapine, and Chlorpromazine (King & Voruganti, 2002). Atypical antipsychotics, typically classed as second-generation, emerged in the late 1980s and include Clozapine, Olanzapine, Quetiapine, and Risperidone (Laredo et al., 2011). While atypical antipsychotics are effectively and safely prescribed for certain psychiatric disorders such as schizophrenia, bipolar disorder, and psychomotor agitation, using these drugs to treat RB is not recommended and must be used with caution (Steinberg & Lyketsos, 2012). In 2005, Health Canada issued a warning against the use of atypical antipsychotic drugs for older adults living with dementia, associating them with an increased risk for all-cause mortality (Health Canada, 2005). Despite warnings and recommendations, pharmacological interventions, including atypical antipsychotics, are still being used as the first choice to treat RB in LTCF (Azermai et al., 2014; Lapeyre-Mestre, 2016).

### **1.4 Non-Pharmacological Interventions**

Due to the evidence and warnings against the use of antipsychotics to manage RB in persons with dementia, current recommendations include NPIs as a first-line intervention when managing RB (Alzheimer Society International, 2017; Backhouse et al., 2016; Fitzsimmons et al., 2014; Liperoti et al., 2008; Mitchell & Agnelli, 2015). NPIs are defined as “strategies that are



used to prevent, reduce, or eliminate behavioral and psychological symptoms associated with dementia without the use of, or in conjunction with, pharmaceutical agents” (Fitzsimmons et al., 2014, p. 11). They include but are not limited to, music, massage, therapeutic touch, light therapy, aromatherapy, pet therapy, sensory stimulation, art, horticulture, and walks (Forbes et al., 2005; Livingston et al., 2014; Long, 2017).

NPIs are most effective when tailored and individualized to the person living with dementia (Meyer & O’Keefe, 2020). While one client may find relief from agitation when holding a hand or receiving a hand massage, the next may become more agitated with someone touching them. For example, an older woman who lives with dementia is noted to be agitated, as evidenced by her banging on the table and loudly yelling that someone keeps stealing her belongings. This behaviour is witnessed daily by staff, despite no evidence of truth to her claim, and is considered an RB. Following best practice, staff would treat this RB by using a personalized tailored plan of care suited to eliminate the cause of her RB best or reduce the severity. This plan might include documenting precipitating factors surrounding the behaviour (e.g., time of day, activity going on, persons around) to help identify triggers for the RB and then arranging care to avoid these triggers. Another option may be using distraction techniques (such as teatime, reminiscence therapy, pet therapy, gardening, walking, etc.) when experiencing the RB. The key to NPIs is personalized tailoring to the individual and taking the time to understand and treat any unmet needs (e.g., hunger, thirst, pain, needing to use the washroom). The Alzheimer Society of Canada put forth a document in 2011 that reflects the importance of person-centered care, issuing a framework called “Guidelines for care: Person-centered care of people with dementia living in care homes.” This philosophy has been adopted in many LTCFs and lends itself to more effective NPI use in long-term care.

For some, living with dementia creates barriers to communicating clearly; thus, an individual may respond with what presents as RB when physiological needs are not being met. The above example illustrates that it can take much time, effort, resources, knowledge, and care to provide appropriate NPIs to adhere to best practices. The alternate version of the example might include staff witnessing the yelling and banging and then treating with medication such as an antipsychotic to manage the distressing behaviour.

Upon reviewing the literature, it is apparent that there is no clear-set definition of NPI; many descriptions of what constitutes an NPI exist. For example, light therapy or music therapy

are commonly recognized NPIs. Some researchers (e.g., Cohen-Mansfield et al., 2015) further categorize NPIs as care, sensory stimulation, movement activities, artistic activities, and work-like activities when comparing the efficacy of different NPIs. Furthermore, a systematic review by Seitz et al. (2013) classified NPIs into the following categories: “nursing staff training interventions, comprehensive mental health assessment or consultations, psychosocial activities, exercise, music therapy, and other forms of sensory stimulation” (p. 504). For the present study, NPI was used as an umbrella term to include all possible interventions that do not involve medication, ranging from education and training interventions for staff to hand holding and light therapy for the person with dementia.

Owing to individualized preference, along with multiple variables affecting the study of NPIs within the LTCF setting, it is difficult for researchers to identify which NPIs are best for treating RB (Cabrera et al., 2015; O’Neil et al., 2011; Theleritis et al., 2017). Despite the lack of concrete evidence suggesting a “best” NPI overall, research still recommends their use and advocates their efficacy in treating RB (Cohen-Mansfield et al., 2015; Folkerts et al., 2017; Seitz et al., 2013, Plante-Lepage et al., 2022). Of significance, studies examining NPIs state that they are safe and have not found any harmful side effects as of yet. This explains the strong recommendation to use NPIs compared to PIs, which are linked to harmful side effects.

A wide range of NPIs can be incorporated to increase the quality of care when treating and managing RB in the LTCF. The current study focused on NPIs as nurses have experienced them, whether this is training and education interventions for themselves and staff, a structured group social activity with residents, or an individual-tailored intervention to suit the acute needs of a resident.

## **1.5 Long Term Care**

While many persons diagnosed with dementia live in their own homes, care needs often increase as dementia progresses, eventually leading to admission to an LTCF for 24-hour care (Vernooij-Dassen et al., 2010). In Canada, approximately 69% of those living in LTCF have a diagnosis of dementia (CIHI, 2023), however the number is likely higher as many people may go undiagnosed. This means nearly 70% of the population living in LTCF in Canada live with some form of dementia, and it is expected that this number will double by 2030 (Alzheimer Society of Canada, 2016). The complexity of caring for those living with dementia in an LTCF can be magnified as multiple factors within the LTCF environment can affect both preventative actions

and interventions to decrease distress. The feasibility of implementing NPIs can be additionally complicated by multiple factors, including staff education regarding NPIs, equipment needed to carry out the NPI, noisy, crowded environments, and staffing to implement the NPI (Backhouse et al., 2016; Barbosa et al., 2014; Cohen-Mansfield et al., 2012; Seitz et al., 2013). With many factors involved with the implementation of NPIs within LTCFs, the need for increased research surrounding this environment is echoed in many of the studies conducted. This gap in the literature is further discussed in Chapter Two. Common terms used to refer to LTCF in the literature include nursing home, long-term care home, and care home. For consistency, this study collectively refers to these terms as LTCF.

## **1.6 Rural**

There are numerous definitions of rural, depending on the purpose of the question asked. Rural is often conceptualized as a social representation or way of life, not just a geographical concept (Statistics Canada, 2001). A commonly used geographical definition of rural includes populations residing outside the commuting zone of urban areas containing 10,000 or more people (Statistics Canada, 2001). However, more recent definitions now classify these as small population centres, including populations between 1,000 and 29,999 (Statistics Canada, 2016). The LTCF included in the present study reside in communities with populations of 2,500 people or less, falling under the definition of small population centre (Statistics Canada, 2016). For this study, the term rural is used to represent the small population centres of 2,500 or fewer.

It has long been evidenced that rural health care differs from its urban counterpart (Iglehart, 2018; Morgan et al., 2004; Morgan et al., 2015; Sibley & Weiner, 2011), not only for the clients receiving service in these areas but also for the nursing staff (Kosteniuk et al., 2016; Morgan et al., 2016). Rural nursing staff may have different experiences using NPIs in the LTCF than those working within an urban LTCF (Morgan et al., 2002). This study focused on rural LTCFs in Saskatchewan, adding to the much-needed research that includes this population.

## **1.7 The Nurse Role**

Registered nurses (RN), registered psychiatric nurses (RPN), and licensed practical nurses (LPN) participate in and impact the overall quality of care for persons living with dementia in LTCFs. For the remainder of this paper, the term ‘nurse’ will be used to encompass the three roles of RN, RPN, and LPN. The Canadian Nurses Association (2016) states that “nurses make up the largest group of healthcare providers in Canada and will likely be

responsible for a large part of formalized dementia care across all sectors” (p. 11). Nurses are positioned to have an influence and effect on client care. The charge nurse, for instance, delegates tasks and care plans to other healthcare providers in the LTCF. While this study focused on the nurse experience, it is important to note that multiple roles exist and make up the health care team within the LTCF (e.g., continuing care assistant [CCA], dietary, recreational therapist, housekeeping) and that educational levels can often vary for those who work alongside the nurse (Estabrooks et al., 2015).

This study focused on the role of nurses. RNs, RPNs, and LPNs all attain a standard of education, are licensed to practice, and have a regulatory body. These nurses are decision-makers in formal care, including delivering pharmacological interventions (PIs) and NPIs in LTCFs. As of 2015, the Canadian Institute for Health Information reported that approximately 60,000 nurses work in LTCF in Canada. By focusing on the nurse experience using NPIs, it is possible to discover how NPIs are used by nurses in LTCF.

## **1.8 Statement of Problem and Summary**

Ideally, NPIs would be chosen first and used consistently by nurses rather than medication administration when managing RB in LTCF. Currently, medications are still being used as a first choice despite research recommending NPIs (Azermi et al., 2014; Lapeyre-Mestre, 2016). Compounding the situation is that rural LTCFs are underrepresented in research. Both nurses and persons living with dementia in rural LTCF may have differing needs and perspectives, such as access to resources, compared to their urban counterparts. While RB has been identified as one of the most difficult aspects to manage for those who live with dementia, limited information exists on how to deliver best practices within the rural LTCF context. This leaves a gap in knowledge as to how, when, or if nurses are using NPIs to treat RB.

Given the discussion above and in response to this problem, the purpose of this study was to better understand the experience of nurses using (or not using) NPIs for persons living with dementia in rural LTCF. This research topic, the nurses’ experience using NPIs in rural LTCFs, is timely, as evidenced by an increased interest in decreasing antipsychotic medications used for dementia, along with an increased focus on dementia research to better support persons living with dementia. The present study addressed three of the top ten dementia research priorities published in “Report of the Canadian Dementia Priority Setting Partnership” (Alzheimer Society of Canada, 2017). These priorities include: (a) implementation of best practices for care, (b) non-

drug approaches to managing symptoms; and (c) care provider education. A report entitled “What We Heard Report: Informing a Dementia Strategy for Canada” (Public Health Agency of Canada, 2019) also expressed the need to include LTCF in dementia research. Thus, this study contributes valuable insight and evidence to improve care for those living with dementia in rural LTCFs.

### **1.9 Acknowledgement of Pre-Pandemic Research**

It is necessary to acknowledge that while I, the graduate student, presented this research in 2023, this study began before the COVID-19 pandemic. The graduate student conducted the initial literature review, and all data were collected until December 2019. This is significant to acknowledge as there were major consequences to how care was implemented in LTCFs during the pandemic for residents, loved ones and staff

The pandemic highlighted the long-standing challenges in LTCF and created awareness of the need for more resources in these settings. When reading this study, remember that these experiences and descriptions were before the extra pressure and stress in LTCF. A discussion around this will be presented in Chapter 5.

## **CHAPTER 2**

### **LITERATURE REVIEW**

As mentioned previously, due to adverse outcomes and warnings for the use of antipsychotic medications in older adults who live with dementia, non-pharmacological interventions (NPIs) are the current best practices when preventing, treating, and managing responsive behaviors (RB). RBs are indicated as one of the most upsetting sequelae of dementia for not only the person diagnosed but also caregivers, both family and professional. This has become a major topic of concern and requires continued research to provide the best care possible for people living with dementia. With limited evidence to explain how, when, where, or if NPIs are being used by nurses in LTCFs, coupled with evidence indicating that PIs continue to be used inappropriately for this population, this study was conducted to better understand the nurse experience using NPIs in LTCFs, with a focus on rural settings. Chapter Two presents evidence from initial searches between 2016 and 2019. An additional search was also conducted at the time of writing in 2023. The literature review highlights studies with the greatest relevance to the nurses' experience using NPIs in rural LTCFs, helping to understand what we currently know about this subject and what is still unknown.

#### **2.1 Search Terms and Strategy**

Based on the background information and the graduate student's nursing experience, guiding questions helped direct the literature search, including: What is the nurse experience using NPIs in LTCFs? Are nurses aware and knowledgeable of NPIs? How are they being used? What resources are in place to assist in implementation? How do nurses perceive the value in NPIs vs PIs?

In order to locate evidence to answer the questions, an initial search of various databases (CINHAL, PUBMED, MEDLINE PLUS, NURSING AND ALLIED HEALTH PROFESSIONALS) using the terms "Long Term Care" and "Dementia" and "Non-pharmacological interventions" and "nurse experience" was conducted, yielding no results with that specific combination of terms. Alternate searches were then conducted using the terms "BPSD" or "dementia" and "management of symptoms" and "long-term care" or "nursing home" and "staff". These terms produced varied results, with no works identified specific to the nurse experience using non-specific NPIs. Studies including nurses' experiences either managing RB or using any NPI specifically in LTCF setting were captured within the review, as well as

studies involving NPI implementation in LTCF regardless of exclusivity to the nurse. There were no time restrictions, allowing for the latest and seminal articles to be located, allowing for the most relevant evidence to remain closest to the topic of interest.

The literature found to be most relevant is discussed below and includes both quantitative and qualitative studies and a systematic review. These studies were published in peer-reviewed academic journals, focusing on NPI use in LTCF and the management of RB in LTCF. The discussion is organized to include (a) NPIs as best practice for RB; (b) staff knowledge and perceptions; (c) barriers, including subheadings: lack of support; time; organizational considerations; and (d) Other Findings. The chapter concludes with the purpose and objectives of the proposed study.

## **2.2 NPIs as Best Practice for RB: Are Nurses Using Them?**

If NPIs are considered the best practice to treat RB, is it safe to assume that nurses are implementing this practice? In a qualitative study in Australia examining nurses' experiences managing RB in LTCF, Ostaszkiwicz et al. (2015) described that nurses possess adequate knowledge of RB and know the best practices to manage these behaviours. However, they found that nurses do not consistently use best-practice care guidelines. The study concluded that future work needs to focus more on organizational efforts, such as addressing contextual factors in LTCF that hinder the use of NPIs. While this study is one of the only studies found exclusive to the nurses' perspective, its focus was on the overall experience of nurses caring for people with RB and not specifically on the use of NPIs.

One Canadian study focusing on NPI use specifically for those experiencing agitation reports that "although the staff was knowledgeable about and trained to deliver several NPIs, their heavy workloads, task-oriented work schedule, and low staff-to-resident ratios limited NPI delivery" in LTCF (Ervin et al., 2012, p. 530). While this study is based on a Canadian LTCF, it echoes the findings of Ostaszkiwicz et al. (2015). However, it is inclusive to all staff (e.g., management, support workers, recreation, nursing aides), not specific to nurses alone. Despite these differences, it provides evidence that NPIs may not be being used to their full potential.

Additional studies (Backhouse et al., 2016; Ervin et al., 2012) also identified a gap between rhetoric and practice. Backhouse et al. (2016) found that while staff reported the importance and effectiveness of using NPIs, they do not routinely implement them in practice. This study was unique as it used four in-depth ethnographic case studies. These produced not

only the voiced data from direct care workers but also the observed data from researchers using the ‘observer’ role to correlate the information; this gives insight into real-life practices. Furthermore, using a 43-point questionnaire with 130 respondents, Ervin et al. (2012) found that while nursing staff from six rural LTCFs in Australia did know RB and its underlying causes, staff lacked sufficient understanding of methods and resources available to assist in applying NPIs. It is important to note that this quantitative study (Ervin et al., 2012) and its qualitative arm (Ervin et al., 2014) were the only studies identified in the literature search that specifically examined NPIs for RB in a rural LTCF.

This evidence suggests that best practices are not always being implemented for people living with dementia in LTCFs. Limitations to the studies presented include the non-Canadian context for health care, including all staff, including managers who may not spend time in direct care for residents, and the varying degrees of education/training received by those included in the studies across settings.

Further evidence, including an exploratory study by Cohen-Mansfield et al. (2015) and a systematic review of reviews by Legere et al. (2018), also point to the experiences of knowledge versus implementation. Their research indicates the lack of quality studies on implementing NPIs into everyday practice. For instance, Cohen-Mansfield et al.’s (2015) study about the utilization of NPIs sets an example of how to use ongoing evaluation to record the NPI systematically used and impact on a resident to better clarify who should get what interventions and when. While this would seem to be an effective strategy to understand how to best utilize and implement NPIs, the study had research assistants provide the interventions and track responses, which limits the generalizability of findings to implementation in real life practice among staff who may face time constraints and other barriers.

Legere et al.’s (2017) systematic review of reviews also sought to provide evidence that could be used by nurses seeking greater knowledge on how to use NPIs. They included meta-analyses, systematic reviews, integrative reviews, critical reviews, scoping reviews, and reviews of qualitative, quantitative, or mixed-methods studies. While this review provides a clear, easy-to-navigate table (which may be helpful for those seeking to adopt best practice guidelines on NPIs), the authors also noted that despite the growing body of evidence surrounding NPI use, “translating best evidence into practice remains a challenge” (Legere et al., 2017, p. 1374).



These studies show that despite the evidence recommending NPIs for RB, a knowledge gap exists regarding how, when, and if nurses use NPIs in LTCFs in Canada. Further research surrounding this topic would provide insight to benefit staff and those living with dementia in rural LTCF.

### **2.3 Staff Knowledge and Perceptions**

Knowing there is a discrepancy between what staff know and what staff do may lead to questioning the training, knowledge, and attitudes that staff hold towards using NPIs for RB. In Backhouse et al.'s (2016) study exploring the use of NPIs in LTCF to manage RB, findings indicate that staff members' confidence, education, and training levels can all affect their willingness to include/exclude residents in activities. For instance, staff expressed feeling 'uncomfortable' dealing with high-needs residents with difficult behaviours. Consequently, they often excluded them from activities, while higher functioning residents (not necessarily those with dementia) received NPIs and routine group activities. This study supports the conclusion that staff require more education on both NPIs and RB to better care for those living with dementia in LTCFs.

Barbosa et al. (2014) found similar results in their cross-sectional study focused on direct care workers' experiences caring for those living with dementia in LTCF. Staff reported feeling they did not have enough education and background information to deal with many of the residents experiencing RB. Communication was noted to be a hindrance to engagement with persons living with dementia, as staff reported they did not know how to communicate effectively with some of the residents who had higher needs and could not verbally express themselves clearly, and thus avoided them. This may be important, as it could explain the low incidence of NPI implementation for this population in some settings. These studies suggest that education is needed to promote and empower direct care workers (i.e., nurses) to engage with this population and routinely implement NPIs (Backhouse et al., 2016; Barbosa et al., 2014). The drawbacks of both studies included the mixed participants that included not only nurses but also continuing care aids (CCAs) and activity workers. This may account for such high reports on the need for more education and may not compare to Canadian nurses' (i.e., RN, RPN, and LPN) level of training and education. This is an area that requires further exploration.

Janzen et al. (2013) show contrasting insights to the above studies, stating that "LTC staff possessed a high awareness of common NPIs" (p. 529) but also described staff education

and training as a feasible way to promote and sustain NPI use. The study concludes that staff perceived NPIs as short-lasting, not guaranteed effective and that the time put into administering them was not worth the benefit gained. This perspective correlated with the increased use of PIs for treating agitation (Janzen et al., 2013) and suggests that nurses may have negative perceptions of NPIs for managing agitation. Additional contrasting results were found as staff reported via quantitative questionnaires that neither knowledge, training, experience, or confidence was a limitation to using NPIs (Ervin et al., 2012), yet in the qualitative arm of the study (Ervin et al., 2014) staff reported feeling that they required more education and training to use the NPIs. Further, nursing staff reported that some NPIs are “not their job,” but rather that certain NPIs are the job of the *diversional* therapist (Ervin et al., 2014). In this context, a diversional therapist may be comparable to a recreational therapist within Canadian LTCFs, and nursing staff varied in level of education as the study was conducted in a rural Australian setting.

One study located in this literature review was exclusive to the nurse experience managing RB in LTCFs. Ostaszkiewics et al. (2015) noted that nurses are well-informed and have adequate knowledge of managing RB without resorting to restraints (either physical or chemical). They also report that dealing with RB was an everyday occurrence and that they felt undervalued by both managers and family members when it came to deciding what intervention to use (i.e., PI or NPI). They cited that PIs were often the most appropriate choice in some cases. Increased studies exclusive to nursing would add perspective and improve our understanding of this topic, which could lead to more conclusive evidence on NPI versus PI choices. Nevertheless, current studies, including CCA and recreational staff, are still valuable as they may provide insight into the nurse’s decision on administering a medication versus delegating a CCA to administer an NPI.

With limited research on the nurse perspective and varying results reported in the studies, it is difficult to conclude if nurses perceive their NPI knowledge and training to be adequate or if they share positive or negative attitudes towards NPIs. More research is required to shed light on nurses' impact on NPI administration for RB in LTCFs.

## **2.4 Barriers**

Regardless of knowledge, educational level, perspective, professional designation, and years of experience, two recurring themes were found in the literature: (1) lack of support on how to implement NPIs for persons living with dementia in LTCFs and (2) barriers that exist to

NPI implementation within the LTCF context (Backhouse et al., 2016; Barbosa et al., 2014; Cohen-Mansfield et al., 2015; Ervin et al., 2012; Janzen et al., 2013; Legere et al., 2018; Ostaszkiwicz et al., 2015; Scales et al., 2018; Seitz et al., 2013). In other words, staff lack clarity on how to use NPIs specifically. However, even when they feel confident and know how to effectively use them, they often meet barriers that impede their ability to implement the NPI. Again, while the experience and perspective exclusive of the nurse are not well represented in the literature, LTCF staff share and give insight into what the nurse may also be experiencing regardless of their position. The following sections discuss the topic of barriers: (a) lack of support, (b) time, and (c) organizational considerations.

#### **2.4.1 Lack of Support**

Current literature reports the lack of evidence-based protocols for administering NPIs (Legere et al., 2018; Scales et al., 2018), which creates a barrier that hinders staff's ability to put NPIs into operation. This lack of clear evidence may account for some mixed results related to staff knowledge of NPIs and actual implementation. Another important finding is that staff report not knowing about available resources, such as training websites and specialists that can assist in providing care for residents with RB (Ervin et al., 2012). This can be further complicated in rural areas that may lack access to resources and specialized training opportunities (Seitz et al., 2012; Ervin et al., 2012) and specialized dementia care units (Ervin et al., 2014).

Overall, several researchers agree that to sustain and strengthen NPI use in the LTCF setting, more staff education and adequate resources need to be in place to support the uptake and use of NPIs as best practice (Backhouse et al., 2016; Barbosa et al., 2014; Cohen-Mansfield et al., 2015; Ervin et al., 2012; Janzen et al., 2013; Legere et al., 2018; Ostaszkiwicz et al., 2015; Scales et al., 2018; Seitz et al., 2013). NPIs such as dementia care mapping, person-centered skills, and communication training were effective in the LTCF setting (Legere et al., 2017). The current literature is unclear regarding how, when, and if nurses are actively implementing NPIs to manage RB.

#### **2.4.2 Time**

Studies that promote and support the efficacy and feasibility of NPIs all similarly report that NPIs can be implemented with minimal to moderate investment of time and resources (Cohen-Mansfield et al., 2015; Scales et al., 2017; Seitz et al., 2012). Concerning resources, for example, Scales et al. (2017) use the following measurements of time: considering 'low'

investment of time, less than one hour of training and less than 15 minutes to implement, whereas ‘moderate’ investment of time is: one to four hours of training and 15-60 minutes to implement (p. 90). While this may seem reasonable to some, a four-hour training session, coupled with a nurse being dedicated to one resident for 60 minutes to implement an NPI, is not likely feasible (Ostaszkievicz et al., 2015).

Moving onto time as a consideration to implement an NPI, quantitative studies appear to support a more favorable outlook that NPIs can be easily implemented into practice (Cohen-Mansfield et al., 2015; Scales et al., 2017). As mentioned, this phenomenon may be related to researchers implementing the NPIs and doing the measurements (not staff balancing heavy workloads). The researcher reports that the interventions could easily be implemented by staff with minimal training (Cohen-Mansfield et al., 2015). However, researchers may be less than practical. The trial and treatment phase conducted by the researchers will not equate to similar findings if used by staff juggling competing priorities in the LTCF context (Barbosa et al., 2014; Ostaszkievicz et al., 2015).

Despite suggesting that certain NPIs can be easily implemented, time is still acknowledged as a barrier (Cohen-Mansfield et al., 2015; Scales et al., 2017; Seitz et al., 2012). The citing of ‘time’ as a barrier to using NPIs within the LTCF context occurs in almost every study (Backhouse et al., 2016; Barbosa et al., 2013; Ervin et al., 2012; Ervin et al., 2014; Janzen et al., 2013; Legere et al., 2018; Ostaszkievicz, 2015; Scales et al., 2017; Seitz et al., 2012). Additionally, nurses expressed feeling rushed and anxious about their ability to get their (other) work done (Ostaszkievicz et al., 2015), as did CCAs (Backhouse et al., 2016). Regardless of why it is perceived as limited, time can pose further implications on a nurse’s ability to carry out NPIs or delegate the task of implementing NPIs to other staff members. What researchers perceive as a ‘moderate time investment’ and ‘moderate feasibility’ may not align with what direct care nursing staff perceive and warrants further investigation into what the nurse experiences when choosing to use an NPI.

### **2.4.3 Organizational Considerations**

Evidence suggests that staff in LTCFs are not only short of time but are often faced with organizational barriers, such as being moved from their recreational therapist or CCA positions to work in other areas of the LTCF, such as the laundry, kitchen, and/or housekeeping (Backhouse et al., 2016). While this may be less likely for nurses, it is possible that this type of

organizational barrier can affect their decision to delegate NPIs or use a PI. With an organizational culture that prioritizes tasks over activities for residents (Backhouse et al., 2016), and management that may not understand or value the full scope of NPIs (Barbosa et al., 2013; Ostaszkievics et al., 2015), it is possible to perceive how such organizational barriers may impede the nurse's decision to use an NPI. In an exploratory and descriptive study of nurses' experiences managing RB, Ostaszkievics et al. (2015) express the need to "go beyond staff education to heed nurses' concerns about organizational concerns to interpersonal care" (p. 506). This further implies that organizational barriers affect the nurse's experience using NPIs for RB, thus their experience using NPIs as best practice. It is reasonable to suggest that more research is needed in this area to address the many gaps in the literature. The nurse perspective and the added component of being in a rural setting are currently missing from the literature.

## **2.5 Other Findings**

It is important to note that NPIs are offered to all residents in LTCFs, most often as group recreation activities. Thus, NPIs are not necessarily being targeted to or including persons living with dementia who are experiencing cognitive impairment and physical limitation, as seen in the mid to late stages of dementia (Backhouse et al., 2016; Barbosa et al., 2013). For this population experiencing RB, hand holding, distraction, and attending to their physiological needs (such as hunger or thirst) are recognized to be the most used NPIs. However, antipsychotic medications are still used as a first line for this population to treat agitation (Janzen et al., 2013). Ervin et al. (2014) notes a possible lack of nurses' knowledge about antipsychotic medications, including their adverse effects on the older adult population in LTCF, that may add to the high rates of PI administration.

## **2.6 Summary**

While studies report the efficacy of specific NPIs and promote their use in LTCFs (Cohen-Mansfield et al., 2015; Legere et al., 2017; Seitz et al., 2012; Scales et al., 2018), they also report a variety of barriers that may affect implementation in the LTCF context (Cohen-Mansfield et al., 2015; Ostaszkievics et al., 2015; Seitz et al., 2013). Evidence shows a gap between what is stated and what is practiced, with numerous studies echoing similar findings: staff express that NPIs are best practices yet do not actively apply them in daily practice for the specific treatment of RB.

The findings of this literature review reveal gaps in knowledge about how nurses are using NPIs to treat RB for persons living with dementia in LTCFs. This is especially concerning, as persons living with dementia require unique care and attention to address their complex situations and to improve their quality of life. A lack of clear protocols to assist nurses in deciding what NPIs to implement and for whom, along with organizational factors affecting the nurse workload and resources available, supports the question: *What is the nurse experience using NPIs for RB in rural LTCFs?* The present study addresses the lack of understanding surrounding how nurses use NPIs. The current study produces findings that can assist other nurses, researchers, and stakeholders in promoting best practices for those living with dementia in rural LTCFs more effectively.

## **2.7 Purpose and Objective**

As a result of the identified gaps from the literature review, this study aimed to explore and describe the nurse experience using NPIs for persons living with dementia in rural LTCF in Saskatchewan. The current study aimed to address the following objectives:

- i. Discover nurses' knowledge and attitudes towards NPI use.
- ii. Discover what, when, and how NPIs are used by LTCF nurses.
- iii. Identify variables within the rural context of LTCF that affect NPI implementation.

By hearing the nurse's perspective, it is possible to identify variables affecting the implementation of NPI use, including barriers, benefits, attitudes, and perceptions. This research can inform nurses and organizations to better plan and implement NPI use in LTCF, thus supporting residents living with dementia.

## CHAPTER 3

### METHODOLOGY

This study's research question was derived from both personal clinical experience and the literature review in chapter two. In seeking more knowledge on how to manage RB for those living with dementia in rural LTCFs, the graduate student discovered a lack of evidence to guide the use of NPIs in practice. This further inspired the research question: *What is the nurse experience using NPIs for RB in rural LTCFs?* To improve practice and promote the uptake of NPIs in the LTCF setting, more information is necessary to allow both researchers and organizations a better understanding of this phenomenon.

By conducting a qualitative study, we can gain valuable insight from the nurse's perspective on NPI use for RB in the rural LTCF. Empowering nurses' voices can provide rich data and insight, furthering the current knowledge of NPIs. To gather more information and fill the gap that exists on NPI use in rural LTCFs, a qualitative study focusing on the nurse perspective was conducted. This chapter will present the methodology and describe the methods involved in conducting the study.

#### **3.1 Qualitative Descriptive Methodology**

Qualitative description (QD) (Sandelowski, 2000; 2010) is a well-suited methodology for this study, as it seeks to bring insight into a poorly understood phenomenon (Kim et al., 2017) by gathering rich descriptive data (Colorafi & Evans, 2016) from participants. Furthermore, it aims to use the data to provide an understanding of how to improve practice (Sullivan-Bolyai et al., 2005).

QD is grounded in the general principles of naturalistic inquiry and supports the researcher in uncovering events as they happen in everyday life (Sandelowski, 2010). The philosophical assumptions include subjectivism, and "accepts that many interpretations of reality exist and that what is offered is a subjective interpretation strengthened and supported by reference to verbatim quotations from participants" (Bradshaw et al., 2017, p. 2). The philosophical underpinnings of a QD approach include (a) using an inductive process; (b) data collected in the natural setting where participants experience them; (c) acknowledging the subjectivity of not only each participant describing the phenomenon but also the researcher; (d) the design is shaped to understand and describe the phenomenon; (e) the researcher is involved

and active in the research process (interacting directly with participants); and (f) an emic (insider) view is held (Bradshaw et al., 2017).

These philosophical assumptions lent themselves to the current study. This is important as the literature from chapter two illuminates the need for more qualitative studies to gain insight into the phenomenon. QD takes a pragmatic research approach (Neergaard et al., 2009) and helps produce a rich and meaningful description of the nurse experience using NPIs.

Criticisms of QD have included a lack of rigor, a lack of theory base, and its low inference (Bradshaw et al., 2017; Milne & Oberle, 2005; Neergaard et al., 2009). Steps taken to mitigate these included clearly describing actions to ensure rigor (known as trustworthiness, discussed in Section 3.5 below), articulating clearly how the subject being studied is well suited to the methodology (as previously stated in this section), and recognizing that the phenomenon of interest is not well known and that using QD, while low inference, can create the foundation for future working hypothesis or theory based research (Neergaard et al., 2009).

### **3.2 Setting and Target Population**

The setting for the study was rural LTCF in Saskatchewan. In Saskatchewan, publicly funded, facility-based long-term care is offered through “special care homes” and operates per the standards in the Program Guidelines for Special-Care Homes (2016), which is the responsibility of the Saskatchewan Health Authority. Staff working within these facilities are certified or licensed healthcare workers. These special care homes are referred to as LTCFs throughout the current study.

Purposeful sampling is used to identify participants rich in experience with the phenomenon of study (Bradshaw et al., 2017; Kim et al., 2017; Milne & Oberle, 2005). Previous RN experience in rural LTCF by the graduate student allowed for insight into possible options of where and whom to recruit. By utilizing connections already built by the graduate student, five rural facilities currently caring for persons living with dementia were approached, and nurses who could provide rich data on NPI use in rural LTCFs were employed. These facilities were in communities with less than 2,500 people and contained 19 to 64 long-term care beds. Initial telephone contact was followed by a letter of invitation to participate (Appendix A) that the manager of each LTCF shared with potential participants. Managers were encouraged to post the invite or directly offer it to any nurses they thought would be potential participants. Participants were then free to contact the graduate student to participate in the current study. Seven



participants contacted the graduate student and met all the criteria to be included in the study. Relationships were developed with participants during this stage as the graduate student communicated by email, text message and phone, in the process of arranging interviews. This assisted in laying the foundation for trusting relationships that promote rich fulsome descriptions when conducting qualitative interviews (Milne & Oberle, 2005).

The inclusion criteria for the study included: (a) must be an RN, RPN, or LPN; (b) must work in a rural LTCF in Saskatchewan and actively care for persons living with dementia; (c) work on a part-time or full-time basis with a minimum of one-year experience in a rural LTCF; and (d) be fluent in the English language. The exclusion criterion included anyone who (a) has a restricted license prohibiting them from medication administration or (b) has not actively worked in the setting for more than three months (e.g., on parental leave, education leave, etc.). This criterion ensured that the participants involved were actively administering interventions (like NPIs) and were currently up to date with care standards in the LTCF where they worked. The study targeted this population (nurses), as they are often decision-makers in formal care, including delivery of PI and NPIs in LTCFs. Based on other QD studies, anywhere from five to fifteen participants were expected for this study (Åhlin et al., 2014; Larocque et al., 2014; Lux et al., 2014; Peacock et al., 2014; Sturesson & Ziegert, 2014). Qualitative research offers a rich description of participants' described experiences, thus tending to have smaller sample sizes (Bradshaw et al., 2017).

### **3.3 Data Collection**

Data for the current study was gathered by field notes to set the context and by conducting a single, face-to-face interview with each participant. Interviews ranged from 41 - 96 minutes in length and were audio recorded. It is suggested that data collection should continue until data saturation (or redundancy) is reached, in which no new information emerges from the data (Kim et al., 2016; Richards & Morse, 2013). Seven interviews were conducted in total. Interview questions were open-ended, utilizing a semi-structured guide (Appendix B). The interview guide assisted in drawing out rich data, gently guiding the participants to share their experiences, yet ensuring the graduate student remained open to how the participant responded and adjusted the follow-up/probing question to ensure an emic view could emerge (Mitchell, 2015). The graduate student intentionally did not provide a set definition of NPI to participants to allow for descriptions to include NPIs as the nurse experiences them.

Interviews took place in a space suggested by the participant. This included one interview at the participant's home, two at local restaurants, and four at office spaces within the participant's LTCF. Regardless of the chosen setting for the interview, efforts were always made to ensure privacy and maintain confidentiality, including gathering informed consent before the interview. Participants were also given a \$25 gift card as an honorarium for their time at the end of the interview. Data collection started in September 2019 and was completed in December 2019.

### **3.4 Data Analysis**

The graduate student recorded and transcribed the interviews verbatim; transcripts were then cleaned and re-read word for word. With immersion in the transcripts, small data units were systematically reduced into codes. Meaningful codes categorize emerging similarities, differences, and patterns (Milne & Oberle, 2005). "Codes are action-oriented words or labels assigned to designated portions (chunks or meaning units) of text reflecting themes or topics that occur with regularity" (Miles et al., 2014, p. 71). Nvivo software was initially used to help organize and sort data into categories. This gave the graduate student a clear picture of the emerging categories. Once the major categories were established, the graduate student opted to use traditional hand coding, going through each transcript line by line, further analyzing and coding using highlighters, sticky notes, and handwritten notes in margins.

Data analysis often used in QD studies includes content analysis (Kim et al., 2016). Using conventional content analysis (Hsieh & Shannon, 2005), categories arise during the analysis of the data collected rather than pre-selected categories. This allows categories to flow from the data collected and not be hinged upon preconceived categories (Hsieh & Shannon, 2005), as the researched phenomenon has limited foundational research to date. While the literature review appears to have possible themes, few studies focused exclusively on the nurse's perspective. For this reason, conventional content analysis was used to allow unbiased categories to be developed from participants' words and descriptions.

As previously stated, these methods were well suited to this study, as seen by the extensive verbatim quotes in chapter 4 (Findings). The participants' detailed descriptions with commonalities and differences make up the findings. Using QD and content analysis created a solid foundation for the novice researcher (graduate student) to discover and present the data meaningfully while being mindful to practice and maintain rigor/trustworthiness, as presented

below. This was important as a major intent of the graduate student was to learn and become competent in the research process.

### **3.5 Rigor/Trustworthiness**

The principle of rigor within the qualitative paradigm is also known as ‘trustworthiness’ as stated by Lincoln and Guba (1985). Trustworthiness is incorporated from the beginning and encompasses all aspects of the study design and conduct (Richards & Morse, 2013). The following aspects of trustworthiness in qualitative research will be assessed: credibility, confirmability, dependability, and transferability (Bradshaw et al., 2017). The following discussion will include these headings and account for the study’s trustworthiness.

#### **3.5.1 Credibility**

Credibility considers the truth value, or ‘credibility’ of the research study (Richards & Morse, 2013) and is “directly related to its purpose; that is, what the study was intended to accomplish” (Milne & Oberle, 2005, p. 414). To ensure credibility, steps were taken to ensure an emic view, ensuring participants were “free to speak their experiences authentically and fully” (Milne & Oberle, 2005). This was done by (a) establishing rapport with participants prior to the interview – through telephone interactions, email, and text messages; developing a trusting relationship – using the graduate student’s nursing skills to develop trust and rapport, thus creating an open environment in which to share knowledge; (b) using open-ended questions with a supportive stance that encouraged participants to be authentic when sharing their perspectives; (c) using communication skills during the interview that express compassion and empathy to make the participant feel safe, supported, and trusting in their sharing of information; (d) providing enough time and comfortable space chosen by the participant for the interview, so that the participant could freely focus and engage; and (e) ensuring the sample size is representative and sufficient through purposeful sampling and double checking with another researcher to inform when data saturation had been accomplished.

As a nurse conducting the interviews, the graduate student brought a similar perspective, which must be accounted for when analyzing data. This emic view was an important feature of the study, as the graduate student had shared experiences of being a nurse working in a rural LTCF. This also proved useful as participants using nursing ‘lingo’ could be adequately represented in the analysis. A journal was used before and after each interview to account for any personal biases encountered or experienced. Biases were also addressed through discussions with

the thesis supervisor and committee during regular meetings. While the graduate student used a reflexive journal as a form of self reflection and way to process the experience, it was also used to help reflect and consider the lived experiences of the researcher as an expert and insider of the topic of research.

### **3.5.2 Confirmability**

Confirmability refers to the degree to which others can confirm the results (Bradshaw et al., 2017). This was done through the following: (a) keeping notes in a reflective journal to capture reflectively what was occurring at the time of interviews (b) using an audit trail that details the data collection and analysis process; (c) transcribing recorded interviews verbatim; and (d) ensuring findings are representative of the data collected and not the researcher bias, as evidenced by including the actual words spoken (i.e., direct quotations) of participants.

Analytic memos are “brief or extended narratives that document the researcher's reflections and thinking processes about the data” (Miles et al., 2014, p. 95) and were used throughout the process. The graduate student transcribed the data verbatim, including rechecking for errors and again during coding. A second researcher (graduate student’s supervisor) analyzed data from randomly selected interviews to ensure replication of content categorized by the graduate student.

### **3.5.3 Dependability**

Dependability speaks to the ability to replicate the findings in the study or for readers to easily grasp “the original researcher’s decision-making process during the study and reach similar conclusions” (Prion & Adamson, 2014, p. 107). To ensure dependability, the study’s background, literature review, and research methodology were questioned and challenged by a committee of experienced researchers to ensure a clear, logical path was taken before data collection. During the data collection, analysis, and results, triangulation and regular check-ins with the graduate student’s supervisor and committee were used to ensure similar conclusions. Peer review through the defence of the thesis will also occur, adding to the study’s ability to ensure dependability. The methodology lent itself to dependability and other aspects of rigor/trustworthiness, including extensive use of verbatim quotes and low inference.

### **3.5.4 Transferability**

As qualitative research explores a person’s perceptions and feelings towards certain phenomena, transferability is focused on the relatability of the findings and thus, their

transferability to others in similar situations (Carminati, 2018; Morse, 1999). This will be accounted for through purposeful sampling, maintaining a reflexive journal, and using rich descriptions (Bradshaw et al., 2017). Using qualitative methods to draw out rich, meaningful data on the topic, findings may be transferable for other populations in similar contexts, as they find their individual experiences relatable to those in the study.

### **3.6 Ethics**

Ethical approval was sought for the study from the Research Ethics Board of the University of Saskatchewan (REB #1291), followed by organizational approval from the Saskatchewan Health Authority. The risk of harm to participants in the study is low. Informed, written consent (Appendix C) was obtained before beginning the interview. All data collected were stored in a password-protected computer and will be stored for five years after the last publication. Publications and presentations of the findings will use pseudonyms to protect participants' privacy.

### **3.7 Limitations**

Limitations to the study may include the nature of the small sample size accompanying QD studies and the fact that only one interview was conducted with each participant, thus not allowing any additional information to be added or clarified following each interview. However, due to the low inference used in QD, the follow-up interview can be considered unnecessary as the graduate student is not interpreting beyond the surface of what the participant describes about the subject. Recruitment may be affected by the fewer nurses working full-time in these rural LTCFs, creating a lack of possible participants within each site (e.g., only ten full-time nurses employed at one site). However, this limitation was mitigated by using more than one site to recruit from (five LTCF were approached). Managers of the LTCF may also affect recruitment depending on their participation in promoting and distributing posters to nurses in the LTCF and any biases they may hold toward the topic or their staff with whom they will have the freewill to share or not share the invitation to participate in the study. The rural setting of the study can create a barrier to travel, distance, etc. For this reason, rural areas within a two-hour drive from the graduate student's residence have been chosen, allowing more feasibility in conducting interviews at the participants' chosen time and place.

### **3.8 Relevance and Benefits**

The findings from the current study have the potential to hold relevance for improved dementia care in Saskatchewan. As stated earlier, NPIs are best practice when intervening for RB. Persons living with dementia can benefit from this research, as currently, evidence is not available to ensure best practice is being implemented. LCTFs can benefit from this study as it can bring forth important information to guide resource allocation to ensure the successful administration of NPIs or future policies and best practice guidelines for treating RB. Conducting a study on nurses' experience using NPIs with persons living with dementia in rural LTCFs benefits the body of research that exists or lack thereof. The findings from this study can add to the limited body of literature and allow others to use the findings to study the phenomena further.

### **3.9 Knowledge Translation**

The study findings will be published in a peer-reviewed journal (e.g., *Journal of Gerontological Nursing*). Dissemination through presentations at nursing conferences and application for poster presentations at provincial and national conferences (e.g., Canadian Association on Gerontology) will be sought. It is also a requirement that the findings be presented via poster at the Canadian Centre for Rural and Agricultural Health research seminar and the annual RaDAR (Rural Dementia Action Research) Dementia Summit, which will provide a platform to disseminate findings to those interested in rural dementia research. During the graduate student's program, preliminary results and introduction of the study topic have already been presented as conference posters, Summit presentations, and academic seminars.

With the completion of this study, the graduate student will benefit from the conduct of the study and the eventual publication(s) of the findings to lay a foundation for continued work on this topic as a larger-scale PhD project. Future studies may include in-depth research surrounding specific findings of the proposed project (i.e., barriers to using NPI's in rural LTCF, attitudes and perceptions of using NPI's).

## CHAPTER 4

### FINDINGS

As stated previously, little is known about the nurse’s perspective on using NPIs in rural LTCFs for residents living with dementia. This study aimed to explore and describe the nurse experience, uncover nurses’ knowledge and attitudes; discover what, when and how NPI’s are being used in practice, and identify variables within the context of rural LTCF that affect NPI implementation.

The findings are from analysis of seven interviews conducted between August 2019 and December 2019. Note that this was before the COVID-19 pandemic. Certain daily nuances, such as mask-wearing by staff and visitors, were not a standard practice unless on precautions; visitors and volunteers came and went freely, as did visiting practitioners/health professionals; and social distancing and restrictions were not in effect. The data offers the perspective pre-COVID and will be discussed in Chapter 5.

Participants represented four different LTCFs in rural communities throughout Saskatchewan. They included two licensed practical nurses (LPN), one registered psychiatric nurse (RPN), and four registered nurses (RN). Each participant had worked in LTC for a minimum of a year, ranging from 1.5 to 39 years as a nurse. More detailed demographics are displayed in Table 1. None of the facilities had dedicated dementia units or wings, as seen in some larger LTCFs. Each interview was conducted in-person and one-to-one, ranging from 41 – 96 minutes. Participants were asked to describe their experiences using NPIs in rural LTCF to treat and manage RB in residents living with dementia, with an interview guide (Appendix B) used to help guide the interview.

**Table 4.1**

*Demographics*

Title	Years Nursing	Years in LTC specific	# Of beds in facility
P1- RN	1.5	1.5	52
P2- LPN	19	6	19
P3- RN	22.5	2	63
P4 – RN	6.5	6	63
P5 – RPN	27	17	53
P6 – LPN	16	3	53

The purpose of this chapter is to present the findings from the data collected. The four main categories are presented with subcategories developed from the transcripts using a QD methodology (Sandelowski, 2000; 2010) with conventional content analysis (Hsieh & Shannon, 2005). The categories derived from the data include sentiment and prelude to using NPIs and PIs; What and how NPIs are being used; Barriers to implementing NPIs; and Mitigating Factors..

**Table 4.2**

*Findings*

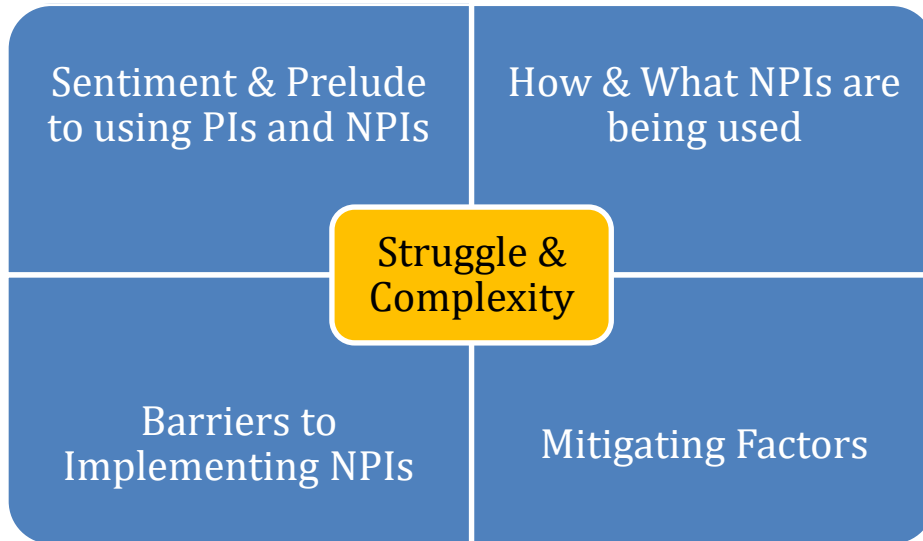
Category	Subcategory
Sentiment & Prelude to using NPIs and PIs	<ul style="list-style-type: none"> <li>- Attitude towards NPIs Vs. PIs</li> <li>- Assessment &amp; Medication Reviews</li> <li>- Deciding Factors</li> </ul>
What and How NPIs are being used	<ul style="list-style-type: none"> <li>- Distraction/ Redirection</li> <li>- Client History/ Personalizing Care &amp; Approach</li> <li>- Trial and Error</li> <li>- Team Effort</li> <li>- Restraints &amp; Alarms</li> </ul>
Barriers to Implementing NPIs	<ul style="list-style-type: none"> <li>- Time &amp; Staffing</li> <li>- Environment</li> </ul>
Mitigating Factors	<ul style="list-style-type: none"> <li>- LTC Education</li> <li>- Rural Context</li> <li>- Effectiveness of Resources Available</li> </ul>

Embedded across the descriptions is the prevailing experience of struggle and complexity. From their sentiment towards NPIs to their specific ability to use them, participants described experiences of struggle. Descriptions highlighting the complexity of preventing, treating, and managing RBs in an LTCF can be identified throughout the findings. This repeated theme extracted from the data is represented in diagram 1 as it is highlighted in all the categories found in the participants' descriptions of their experience using NPIs for residents living with dementia in rural LTCFs. An overall acknowledgement of struggle and complexity embedded in the daily practice of nurses who cared for residents in LTCF was noted throughout all interviews.



**Figure 4.1**

*Categories and Common Theme*



#### **4.1 Sentiment & Prelude to Using PIs and NPIs**

Data shows that participants interviewed held a positive sentiment toward using NPIs while simultaneously describing the benefits and need for PIs in appropriate situations. Despite all participants making positive statements about NPIs, off the record (outside the recorded interview), participants noted feeling defensive around their use of PI's. Participants were encouraged to express their lived experiences and were assured that the purpose of the research was not to imply that PIs were “bad” but rather to learn more about how participants use NPIs and their experiences in LTCF for residents with dementia. Within this category of sentiment and prelude are sub-categories describing participants’ attitudes towards PIs and NPIs, assessment and process before making a clinical decision on how to treat the RB, and primary factors influencing the decision to use a PI.

##### **4.1.1 Sentiment/Attitude towards NPIs Vs PIs**

Participants all shared positive sentiments towards NPIs but had a clear belief that PIs were also valuable. Stories of complexity emerged as participants expressed positive regard for NPIs while describing many experiences where NPIs were not affective and that a PI was warranted. Participants agreed that both NPIs and PIs were helpful and necessary in their practice.

P6 shared this sentiment as she described using NPIs in her practice before trying other options: “We always try to go through a non-pharmaceutical first...” but described frustration

completing Convergence™, a program that tracks certain markers in LTCF, including the use of antipsychotics.

Well, it's hard too... you put on there, yes, they are on an antipsychotic, Red Flag! Okay, let's get all these people off [antipsychotics]. Well, can you please ask us WHY they're on it... they're needed at a specific time... So don't just say that we don't need it at all.

P2 also described his belief in NPI's "well nonpharmacological interventions, as I said before, they do work... they're very effective if you have the time", while also describing an example of how using a PI was helpful when trying to employ an NPI to support a resident who was experiencing RB and displaying anger and aggression daily. "He was started on risperidone or quetiapine... once the dose kicked in and he got a therapeutic [dose], he was wonderful. I could sit down and talk to him about the ball game, and I couldn't do that before!"

Struggle and complexity are highlighted as P5 described a situation where a resident was exhibiting RB, with the resident believing that she was a prisoner of war. Refusing to eat or take any medication and exhibiting fear, defensiveness, and aggression towards those trying to provide care for her, the resident struggled through an entire evening and night. P5 described the process of trying to avoid using a PI, specifically an injection, and going through multiple attempts and NPIs to convince the resident she was safe and that the nurses were there to help. The resident had a recent fracture and was refusing to take anything orally, including pain medication, resulting in a state of panic and fear. She would not settle or trust the staff in their attempts to calm and support her. P5 explained how, finally, at 5:30 am, she used an injection to provide relief, giving an antipsychotic to help offset the RB and allow the resident a chance to relax enough so she could take her pain medication and fall asleep.

It was for her own benefit. I mean, we would have treated her for a low blood sugar, so why wouldn't we treat her for being in that kind of mental anguish? So like, that's why I'm saying I get annoyed when they talk about chemical restraints and stuff. I mean, she wasn't hurting me, but she was hurting so bad... Of course, I'm gonna give that to her.

P5 further explained her perspective and sentiment on using PI's:

Like when you say, oh, the patient is being aggressive, or this or that. No, they are upset to the point where they think they need to be aggressive. They are paranoid because they can't filter fact from fiction because the dementia has sent them here... paranoia is a psychiatric disorder. Whether it's brought on by dementia or something that they

acquired as a youth, it really doesn't matter. The treatment needs to be similar. You need to use antipsychotics. So for them to say, oh, it's just their dementia, and you can't use these things is just completely BS.

P2 expressed his belief in antipsychotics while describing that anecdotal evidence is not taken into consideration or studied, as nurses often document only what is not going well or things out of the norm (charting by exception). "There's anecdotal evidence all over the place... like we always chart the bad stuff, but if we could chart the good stuff like, hey, this person was very calm today." He described how successful outcomes of PIs may not be getting documented and, thus, overlooked in their effectiveness.

In this study, the findings show that participants described NPIs as helpful, with a positive sentiment around them. However, PIs were seen as a necessary intervention alongside NPIs in appropriate cases.

#### **4.1.2 Assessment & Medication Reviews**

Descriptions of assessments, including reviewing medications to respond to RB, were identified. Participants described doing assessments without necessarily identifying it as an NPI but as something infused into their routine practice. Every participant described doing basic assessments, using their nursing skills to determine a cause, if possible, and then deciding the best approach or intervention for the resident. We hear the nuances of struggle and complexity as participants describe their thought processes when caring for a resident with RB.

P5 described a complex case of a resident who was impulsive, swearing, and physically attacking staff and whom they had tried numerous interventions for:

But he was also going after other residents, so then you're a little torn because you are changing the pharmacological part of it because you tried everything else. You tried distraction, you tried redirection, you tried the toileting, you tried making sure he wasn't hungry or thirsty, like the first thing we usually assess is pain. ... We talk about all that and those are usually the places we start... are they getting enough sleep, and how noisy is it for them? Is the lighting good? ...so when you've worked through all that stuff, and you can't get anywhere else, and you're looking at starting medications... for being aggressive around here for whatever reason, verbal or otherwise, we're checking on the medications already right?... we're looking for unmet needs first...

Another participant echoes the thoughts of P5 as she described her process and thoughts when trying to understand why and where the RB was coming from and for what purpose to treat and respond to it appropriately:

I'm looking at you as a person, and then okay, this is what you're exhibiting, how can I provide care that you really need and deserve? So that's why it's like okay, is it pain? No, it's not pain. Are you hungry? No, you're not hungry... so when you fulfill and look at Maslow's hierarchy... food, shelter, etc. You can go by that and ask if there are things that they aren't getting, like basic need... sometimes you have to think... when was the last time they had a bowel movement? So there are so many things that if you're not thinking pain, you're thinking that... it could be a comforting thing... what if their stomach is upset, but they cannot tell you? Right? So that's why that Maslow Hierarchy of needs... those basic things... once you get those eliminated, then you can look beyond... and if it's actual behaviour. (P1)

Additionally other participants described: "A lot of them just asking bathroom, pain, thirsty, hungry, tired..." P6 or:

What are you trained to do as a nurse or CCA? You're trained to make sure they are comfortable and that includes: how are you feeling? Do you have everything you need? Do you have any pain? Would you like some water? Do you have to go to the bathroom? That's our job. (P2)

As previously stated, the data demonstrates participants assessing basic needs and reviewing medications as a routine part of their practice. In descriptions, it appeared participants would not consider this an NPI but rather an appropriate and expected nursing process when caring for a patient – something they would naturally do in their practice as a prelude to making any decision to use a PI or NPI. These findings were consistent amongst all participants, providing insight into the prelude to making decisions regarding PIs and NPIs for residents.

#### **4.1.3 Deciding Factors**

Participants all expressed similar sentiments towards NPIs and PIs, describing the use of assessment and often a complex process of attempting NPI before landing on a decision to use a PI. Findings described safety and time arising as factors in whether they might treat RB with a PI instead of, or in conjunction with, an NPI.

While the safety of residents, staff, and visitors was a unanimous factor in their decision, the lack of time that participants had to implement an NPI and the fast-acting time of a PI were seen as factors when choosing an intervention. Time as a factor presents in various forms throughout the data and appears grounded in struggle and complexity. The discussion of time as an influencing factor in choosing an NPI or PI will be further discussed in Section 3.1, titled Barriers to Implementing NPIs.

“The only time we really treat that [with medication] is if they’re at risk to themselves or if they put other people at risk,” P7 describes her experiences, explaining how, despite having a zero harassment policy “in long-term care, it’s always happening” explaining how swearing and verbal aggression were often tolerated but physical altercations and threats were a factor in her decision to give a PI or not “so if it’s just verbal to us or other residents, really we wouldn’t give a med or anything...But when they come so then they’re putting other people at risk, that’s when the meds would really step in.”

P3 expressed the same as she spoke about trying to give space to an aggressive client and provide him with an opportunity to calm down before she would consider using a PI: “If it’s a situation where the resident is not going to be harmed...if they’re violent or whatever just stay out of their reach”. A comment by P4 that reflects this notion of safety: “As long as they are safe and they’re not endangering other residents, you can leave them and try again.” These descriptions depict the struggle and complexity when choosing what intervention to use, with the resident's and other co-residents' safety as a major factor in their choice for using a PI vs NPI.

#### **4.2 What and How NPIs are Being Used**

Recall that this study defined any non-pharmacological intervention as an NPI, whether it be nursing education, referrals, or specific therapies such as music, massage, animal, or gardening.

Participants described using multiple NPIs in their practice, including distraction/redirection, client history, personalizing care and approach, team effort, trial and error, and restraints and alarms. Participants described using NPIs most often in the moment with distraction or redirection and personalizing their approach based on assessment and needs. Noting that what works one day may not be effective the next echoes the theme of struggle and complexity when choosing what NPI, for whom, and how/when it is used.

#### 4.2.1 *Distraction/Redirection*

Participants described distraction as the most common NPI used when caring for persons living with dementia in LTCF. Redirection and distraction were often used interchangeably throughout participants' descriptions and included using methods such as offering food or drink, redirecting residents' attention through creative storytelling or 'going with the flow', one-to-one focussed visiting, watching television, or listening to music.

Every participant in the study described multiple instances of distraction/redirection to avoid or manage RB, stating it was the most used NPI in their practice. Emerging similarities in the data highlighted that nurses most commonly use distraction *in the heat of the moment* and rely on their ability to be creative or think on their feet, depending on the time and resources available.

Participants often described using distraction to redirect residents from potentially dangerous situations or reduce potential responsive behaviours. For example, P1 describes using creative storytelling to distract and redirect a resident who walked outside the building and was insistent on leaving to go to the city. "if you come back into the building, there is a bus from here that goes to [hidden city name] ...and guess what, she came back into the building. And obviously, that was a lie, right... but it did work." On another occasion, P1 describes multiple attempts to distract a resident who was insistent on leaving the facility before eventually using a fictitious dressing change (wound) to distract the resident from her focus on leaving the building. "You know what, how about we do something... let's do some dressing changes (even though it doesn't exist for her). So, we can get you all ready". P6 describes using distraction in similar ways: "A lot of distraction. Had a bunch ask me how they're gonna get home. Well, I tell them, you're gonna stay for supper first."

While participants described appropriate times to orientate residents to the present time/place/reality, all described similar patterns of creative storytelling and distraction. Participants described adapting to the individuals' sense of reality to effectively comfort or settle them in that moment, decreasing the RB. For instance, P2 describes a resident who would become upset as he believed it was his responsibility to take care of his horses, even though he now lived in the LTCF: "Like this one guy was always worried about his horses, so we'd say 'oh well let's go have a cup of coffee, and after we have coffee, we'll go get the horses'." The resident would settle, comforted knowing someone was listening, and would attend to his horses

(despite them no longer existing). Once having coffee, the resident often forgot about this misbelief, and the RB would no longer be evident.

P7 described using warm blankets for soothing residents who had trouble sleeping: “We’re very fortunate we have a beautiful blanket warmer, and it’s always full so the ladies that can’t sleep and it’s 1 o’clock in the morning...” She also described using 1:1 visiting.

If the night is quieter and you can just go in and talk to them and ask them about their own kids... cause as soon as you shift from ‘oh my back is sore’, which is, like yes, it’s going to hurt all the time, they have severe arthritis or whatever. But it’s like us; you can have a headache or something, but as soon as something happens at home, you get a call from the best friend you haven’t seen for how long; all the sudden the headache isn’t that bad.

P3 describes redirection and distraction used in practice, “I’ve used distraction. That’s been the one I’ve found I’ve used the most.... I’ve found talking to them, showing them something, asking them questions... trying to just... divert whatever, their attention from what they’re doing”. She goes on to describe her Charge Nurse’s ability to divert a resident from leaving the building:

I’ve watched her and these people that are trying to get out the door and she just directs them other ways. One little lady wanted to go out in this cold and she’s like “well how about we go get a jacket?” and by the time we turn around and walk a few feet she’s totally okay ya know, going and doing something else.

Participants described using TV and music on multiple occasions as a form of distraction to either avoid or treat the RB: “Music sometimes does help; the TV does help! Go watch sports with the guys like, that’s what I do with a couple of the old guys.” P2 or “Yeah, so they bought us some nice big earphones, and that worked for a little while; we used the music for her on a little MP3 player.” (P5).

P6 described a situation where a resident became upset with her as she was passing out pills, telling P6 that she had not sung to her that day despite P6 never engaging in such activities before with this resident. “And so, I was like, uh... well, do you know amazing grace? So, she sang a verse, and we sang together, and then she was fine. Then she wasn’t mad at me anymore.” Food and drink were common amongst participants as ways to distract residents, often offering them coffee or tea to distract them from their focus. One nurse described how in the small

facility where he works, they continue to cook traditional foods, pureeing the meals for residents who require it instead of using the packaged puree packs: “And they get their cabbage rolls, and they get their perogies and they get their sauerkraut and... and you see the difference... and you know, it helps! Food is a very comforting thing...” P2. He described how distracting residents with favorite foods was a helpful in managing RB.

Participants shared great stories of how quick thinking and creativity allowed them to divert or recover from an episode of RB with the residents. These findings highlight the excellent work in LTCF and provide evidence that NPIs are being used.

#### ***4.2.2 Client History/Personalizing Care and Approach***

While participants often used distraction and redirection to avoid RB, they also described a personalized approach tailored to the individual. Reviewing resident history and diagnosis, getting feedback from families, and customizing care, including altering the environment, were NPIs used by all the participants. Multiple descriptions came from data as participants described using client history and personalized approach when working with the residents:

The first thing we kind of try to determine is what type of dementia they have, because I feel it makes a big difference in symptoms and things we see... like Lewy Body...or you get some people who can get really verbal with all those frontal, temporal dementias, they can change in their personality so much.... (P5)

P7 talked about honoring the resident’s perspective to avoid triggering RB, which sometimes means allowing them to wear or do certain things that might not make the most sense to you but are harmless in the end: “They want to wear this ridiculous looking outfit, but really does it matter if it makes them happy...we can either insist they wear what we want them to, or fight and end up giving risperidone and saying they are difficult”. Moreover, “If you’re a loud person, which I tend to be, you have to pick and choose and consciously know which person you need to put your voice down because it will make them upset”. She also described using a slower approach, not rushing, and allowing residents more choices, such as clothing options.

Several examples of personalizing care were heard in each interview, suggesting that it was part of routine practices: “Maybe they aren’t an early morning person or a late-night person, so we try to work with what they were like prior to getting that stage.” P1. And “I think it just depends on the person. That’s why I like to know a bit about their history. To know what did they do, what did they like to do...did they work as a housewife? Were they a farmer?... and you



can use that to distract them” P3. Furthermore, “The music must be meaningful too...like, you can’t just have random music on. It’s gotta be something that they’re into. It must be something they can relate to.” (P5).

I had an old guy with [severe] dementia; every time I went into his room the woman’s network was on his tv. I’m pretty sure he never watched the woman network in his life...and I talked to his wife and asked what he likes, and she said fishing and sports... so every time I walked into his room, I’d take it off the woman’s network [and put on sports]. (P2)

P6 described multiple examples of altering the environment to serve the residents and help prevent RB. “Like with our seating arrangements, if one lady is being mean to another or triggered by something, we will try moving them to a different table and see how it goes”. She continues “we learned this one lady doesn’t speak anymore, and she often pinches or picks at things including staff, so we gave her something to hold onto when doing care, and she would pick that instead pinching or grabbing staff.”

P6 also described trying to personalize care but running into challenges as the resident was not accepting of male care assistants or certain cultural norms, but because of the nature of the smaller facility and the number of staff, sometimes an inability to personalize care. Again, the central theme of struggle and complexity arises.

We had this one resident; he was very aggressive and would charge at us and that kind of thing. It was hard to redirect him, we would try. He was a very hard case...he got really triggered by men. We had three male care aides. And the one nurse wore the Hijab, and [the resident] would corner her and stuff.

Descriptions such as this show the recognition of personalized care and barriers in the environment, which is further highlighted in Section 4.3.2 of this chapter.

### **4.2.3 Trial and Error**

Trial and error were recurring terms used in the data from participants describing the process of knowing what NPI to use for whom and when. This section highlights the theme of struggle and complexity as what participants use one day would not work the next or work differently for different residents, making it difficult to provide a consistent, timely, and effective intervention. A sense of frustration permeated participants’ descriptions of the challenges of not having consistent results and needing to shift their approach.

P1 described the common method of trial and error when caring for residents and the struggle to find an effective, consistent approach or intervention.

Sometimes it works, other times it doesn't, so... there's a space where it's trial and error, trial and error, trial and error, and you see what works. Sometimes you can get a pattern that will work, for two or three days, but on the fourth day, it totally bombs and doesn't work. You struggle a lot... it's a constant cycle of trial and error.

P6 described similar challenges with not having consistency in what might work or not, describing how, despite using what usually works can backfire next time, "... but sometimes, even if you use that, it can be a trigger. So you have to kind of...trial and error basically." Describing a particularly challenging situation, P6 shared how they tried everything and even had a special intervention team come out, but nothing helped. "We tried music, TVs, iPads, various different tools, flipping charts, and picture pointing for words... but it didn't really work for him".

P7 described trialing an approach or intervention for a week. However, it noted that communication with shift workers can impede the follow-through process.

I could leave a note for the nurses to say I did this, and it really worked, could we try for a week... but if it isn't very detailed (or carried through), it's usually lost because we've lost that communication somewhere among the report.

P3 described that when working with a new resident or returning on shift after being away and residents changing it takes extra time and trial and error to get to know the likes and dislikes or quirks beyond what is written in the chart history,

I mean walking in on someone who's acting out, and you don't know what their full history is or haven't worked with them in the past... if you see they're starting to escalate, I do whatever I can do... talk to them, distraction or even calling family members to talk to them. But it's hard because each resident is so different and doesn't respond to the same things, and if you don't really know them yet...

There is a common experience amongst the participants of trying different approaches with different residents, with no consistent results. The descriptions highlight nurses' struggle and complexity in managing RB and the lack of clear protocols or instructions with NPIs on what to use, who, how, and when. This made it difficult for participants to make clear, timely decisions on how to best approach residents experiencing RB and what NPI to use.

#### **4.2.4 Team Effort**

Participants talked about engaging fellow nurses, care aides, and support services such as housekeeping, dietary, and other team members with managing RB. P7 described using care aides and sometimes the housekeeper to visit a resident and provide one-on-one attention, “so you can ask them to spend time with the resident instead of giving them [a PI] ...we have really good staff here”.

P1 describes the recreation team as being useful while also displaying the struggle with RB:

We have other team members like the recreation team. Recently they created this big poster that had to do with boredom, loneliness... so whenever one of the residents gets agitated and tries to exit the building, we will show her the poster. It has a bunch of things to stimulate conversation and tips for distraction... so it helps for a while... then she gets back to it...it's like a constant cycle.

She also described “an in-house collaborative effort” for residents who were known to have exit-seeking behaviour: “Like for this one person, everybody knows her main aim is to leave and go out of the building... so it’s a collaborative effort by everyone.” P2 also shared the experience of using staff outside of the nursing department to help brainstorm ideas for more challenging residents. “I don’t care who they are...if they’re kitchen staff, aides, housekeeping, maintenance...if they have a good idea... I use whoever I can, whatever I can... especially when it comes to that sort of thing.”

Similarly, P3 described coming from an acute care setting and relying on her coworkers to help guide her: “Asking my coworkers, what have you done in the past? What’s worked for you? I ask as many questions as I can...I don’t like going into it thinking I know it all because I don’t.”

Overall, participants described using a team approach, although not consistently or routinely. Most examples shared described specific residents who may require increased attention due to increased occurrences or severity of RB. Experiences varied amongst participants and may be affected by staff morale, staffing levels, individual personalities, and approaches. Despite how informal or who it was (e.g., another nurse or a housekeeper), all participants did mention relying on someone outside themselves when needed.

#### 4.2.5 *Restraints and Alarms*

Examples of alarms or restraints were included in the descriptions of NPI. Interventions included using a t-belt restraint (a type of restraint to help keep the resident in their wheelchair), using bedside rails, a half door, alarms that are triggered if a resident leaves the building, and alarms that are triggered if a resident attempts to get out of bed. While most participants mentioned policy around not using restraints, restraints appeared commonly used in some instances to manage RB. While often viewed negatively and not necessarily recommended in the literature, restraints and alarms were endorsed as an NPI used to prevent or treat RB.

While describing her frustration with managing certain behaviors, P5 described using door alarms: “Wandering is a tough one. We have wander guards at our facility at least, so if they try to go out the entrance, the door locks.”. Another participant described caring for a resident who was non-verbal, experiencing aggression when unable to communicate his needs: “sometimes he would come and charge at us, and that kind of thing...he did have a half door that we used for him, it was hard to redirect him...but that was his safe place.” P6

P1 described how restraints are used to manage walking (wandering) at times, often at night when staffing is low, or for an agitated person who may pose a risk to others or themselves. You can sense the struggle as she speaks about her experiences trying to manage and be responsible for all the residents with minimal staffing while needing to make decisions on managing everyone’s competing needs.

So, most of us just use restraints. Some people use a Segifix [a type of magnetic restraint used in bed]; some have wheelchair restraints... you settle for it. We had one night where it was a full moon, everyone was going crazy, and you’re like, put him in a wheelchair, put on a restraint...I can deal with listening to you yell but not you wandering and causing nonsense with other people, right? And then you have someone else who says, oh, just put him in a Segifix,... you find that you're doing these things, and... you go back home to reflect, and you’re[thinking], should I have done something differently? But at the same time, you’re like, no. My hands are tied. It’s difficult.

The use of restraints and alarms were often described as safety interventions, such as preventing the resident from walking outside in freezing temperatures or trying to get out of bed on their own (not remembering they physically are unable to). While restraints were described as

generally chosen as a last resort, the descriptions show how complex it is to provide both safe and client-centered care for those living with dementia in LTCF.

### **4.3 Barriers – Time & Staffing; Environment**

#### **4.3.1 Time and Staffing**

Participants presented strong descriptions of time being a barrier to using NPIs. While a simple “lack of time” or “having no time” was consistently present throughout the data, there was also another version of ‘time.’ The time it takes for an NPI to work, and the length of time it is effective. Participants mentioned how PIs were quick and longer lasting compared to NPIs, making time a barrier to using NPIs in many cases. The two concepts of time are interconnected, as participants often described one with the other. For example, when participants had many tasks to complete during their shift and felt rushed for time, they would opt for a PI, knowing it takes effect quickly and lasts longer than an NPI. This concept of time is intertwined with a ‘lack’ of time, as they felt rushed, without time to dedicate to using an NPI.

While staffing first seemed like a category itself, through descriptions, it became clear that ‘staffing’ and ‘time’ were often used synonymously as barriers. A nurse describing having no time also describes having limited staff as a reason for not having time.

We just lean faster towards the PIs more than NPIs because you think about it; there is not enough time to invest in NPIs. I’m trying to be very honest here; there is not enough time. So, in a space where your recreation team is, say, on the weekend, we don’t have those extra team members right? So it’s basically the nurse and other CCA’s and there is no time because there’s so many other things to do...that distract you. So, on weekends, holidays, evenings, and nights, there is no time for that. So, what you find yourself doing is leaning back to the PIs... (P1)

P2 shared similar experiences describing both lack of time and staff as a barrier to using NPIs:

Especially in my facility where at night there is me and one aide. I had a classic example last night where a lady who’s got severe dementia was in bed, and she had both legs over the bed rail. And I went by with my pills... doing my pill pass... and the other aide is getting other people ready for bed. So, I put her legs back, talked to her for a minute, left, came back the other way and she was the same way again. Ya know... you’re torn. Like, you stay on top of this lady and try to get her calmed down and back in bed or... which

could take up to 20 minutes... or do I give her an Ativan and continue with my pills? And guess which one it was, right?

He described further how he felt pressure, as other residents were waiting for their medication and could not go to sleep until they got their pills and became angry if he was not there by a certain time. He described how only two staff working at night make it a challenge if anyone needs extra attention, adding to his decision to use PIs at night. P4 described similar experiences, describing time as a luxury they don't have in LTC:

Well, if you have more time to spend with this resident, there might be circumstances you need medication, but for some of them, all you need is time to talk to them, and that's all they need ya know? Sometimes the easiest is to go and [use a PI]. Due to time. You just don't have the time you know? We have 63 residents and 2 nurses. It's hard. It's heavy. I just think more staff... like with the time and everything, maybe there are a lot of preventative ways we could hold off on medication if we had that luxury.

P3 described the stress in managing workload and how it takes away from being able to provide direct care at times, "You just don't have time, depending on the acuity of your residents and if you've got dressing changes that are time-consuming... you start your noon med pass... write your notes... give report, and you're done! There is no time!" When asked what could be done to promote the use of NPIs, P3 described again how time constraints affect patient care: "I find that it all comes back down to time and staff." Furthermore, she described how the pressure physically manifests as she races through her day trying to complete her RN duties:

You know, another thing with time constraints is that I go out in the morning, and you've got all these residents you've gotta give pills to and say they're due at 8 o'clock, and you've gotta start at seven... you finish at nine. Depending on your facility, you got a half hour leeway on each side, and it's like... I feel panicked most of the time and it's like go, go, go, go. And if someone is not swallowing their pills fast or if you have to do 1 or 2 [pills] at a time, like how on earth do you get this done? I feel panicky... like I don't wanna say it's chest pain, but sometimes it feels like it.

P5 shared how every LTCF struggles to retain staff, how 'short-staffing' takes away from everyone, and the pressure to complete tasks.

Even at overtime and stuff, you get stuck with too few staff. Then other things fail... like you can't get everyone's bath done and things like that, right? I'm busy handing out

coffee, when I should have been down the hall with so and so, and I probably should have contacted the doctor or things like that... it's trying to prioritize the care. But that's the model, right? It's everywhere. Every LTCF.

When asked what some of the barriers to using NPIs are, P7 replied:

Mostly staffing. Because we might know that it would be better, to take time ... but Grama's gonna take an hour and half to convince her to get out of bed and into chair, but honestly, when you calculate out how much time a care aide has for a resident... I could be wrong on this... but basically, we have about 4 minutes. So, um, it's hard to convince someone who's definitely not doing something to do it in 4 minutes... even if it's a wonderful idea...

P6 comments reflect how baseline staffing models are not adequate, and even when not 'short-staffed', the staffing levels still do not allow for extra time to complete NPIs. "If we are full staff, we have staff to get things done, the things they ask us to everyday, but we don't have that extra time to spend with them... the 1:1's...just sitting and chatting. We don't do that."

The participants all described several instances where they felt rushed and pressured to choose between competing priorities. A sense of 'not having enough time' was quite palpable and felt throughout all the interviews. This lack of time and staff led to the next sub-category of environment, where we see an overlap in how staffing levels and baseline models in LTCF contribute to the struggle and complexities in providing care.

#### **4.3.2 Environment**

Each of the examples below were considered environmental factors, acknowledging that many other categories may also blur into environment, depending on the context and its definition. For this study, the purpose was not to explicitly explore the environment, but rather to gather participants' descriptive experiences using NPIs.

The environment itself, whether it was the home's physical layout, the staffing models, or the routine and structure of the day, was identified as a barrier to using NPIs, as well as preventing and managing RB. The complexity and struggle are evident in these descriptions as participants try to balance a variety of residents with competing needs and varying stages of dementia while living in shared common spaces. With no special 'dementia unit,' these rural facilities create major challenges that either trigger or create major barriers to managing RBs.

A lack of safe space for residents to move around and express loud vocalizations without triggering others and areas for privacy outside of individual rooms appear to be contributing factors as participants do their best to maintain harmony and provide client-centered care while keeping residents safe.

P5 described an experience of trying to manage RB within the LTCF and how challenging it is to have many residents with different needs, conditions, and behaviors all living in a shared space. Describing how easy it is for one resident to trigger another, or the entire environment to trigger residents due to noise, space/proximity, and nowhere for residents to go to escape the triggers.

I mean, they're captive. They got nowhere else to go... looking at the overstimulation is a big deal, the environmental factors... We have one resident who makes a lot of noise, and it's not just her exhibiting agitation and verbal aggression; she's also at risk from other residents now because she triggers them, and they tell her to shut up... we run a lot of interference. Trying to keep people from getting into others' space or from being too loud... (P5)

P5 continued to share the story of a resident who gets agitated in the evening and night. To avoid RB, they may bring him out to the main area, but it does not always work due to the environment, and at times, they would choose a PI over the NPI. "There are some gentlemen that if you have them out in the evening, which is also when we have a reduced number of staff, it's not a good scene because of the spaces they can wander into" She goes onto express how the staffing levels and environment are barriers. "[Residents] get into places they shouldn't, and we've had people get injured because of it...that's a flaw too, in the set up of long-term care, which is that sundowning starts and we send 2/3 of the staff home..."

P7 described examples of how lack of time, staff, and the environment and policies often clash in LTCF, making it a barrier to providing the best care to the residents:

But for safety, Grandma might like... for example, those really soft baby blanket type things but it's not practical because Grandma is gonna tangle those blankets in her legs, and she's gonna trip... so you have to look at what you know would make them comfortable so you don't need to use meds, but you always have to be aware what you're giving them safety wise...



P7 described more complexities of providing comfort and care while maintaining safety and policies:

Like, people love tea. It's a great comfort. And hot tea... like if you grew up where you'd drink hot tea, like my Grandma, it be great to leave it on her bedside, but she's not steady enough to drink that tea and might burn her leg when she goes to drink it. So even if we know it would work, we don't have the staff in health care to leave hot tea in their room.

This highlights the many aspects nurses consider when trying to provide best practices in the LTC environment. She spoke about how residents often come from a household of two, or possibly alone, where they have lived for years, and are now placed in a communal setting with 50 other people, describing how complicated it can be to adjust and settle into for many residents.

That room is their house now, we'll say. So they wanted lots of pictures, and maybe grandma had lots of grandchildren, so on her buffet in her living room, she has 14 pictures, and she had flowers and had all that. If we could give her that in LTC, we'd make her more settled into that room. However, Grandma's too unsteady and can't be trusted to move any of those pictures because when she drops them, they're all full of glass, and now we are now cut... so is it feasible to give her that comfort?

P6 described how there is a lack of time for completing formal care plans, brainstorming interventions, and the challenges with the computer work required.

I don't wanna be rude, but our care plans probably get updated like once a year... there's a lack of time to do what we need to do. And there's a lot of computer stuff that's coming up now and our computers, I'm not joking you, they take like 15 minutes to load, yet we are supposed to do all this stuff, and you know, because 15 minutes in a nurse's day, that's valuable time. And Convergence now, too, they want an immediate thing. Okay, so you know if they are discharged, you're supposed to discharge them at the moment, or if they are admitted. So like, if they're coming, the moment they hit the parking lot you're supposed to get them in there [computer program] and admit them, and it's like, who's doing this? There's a lot of stuff we're doing that I think isn't necessary to what we need to do to be able to be with the residents...

P6 also described how complex it is to mix residents' needs with staff needs and the schedules and routines in the LTCF, describing how greatly it impacts certain residents.

It just seems that everybody has a form of dementia, and that's on top of some other comorbidity. Yeah, and well it's hard too. Like we have our routines too, like this is when we hand out meds, this is when we do treatments. The care aides have their routine and if something happens during that time and throws them off, you know it may throw the residents off...

When asked about what could be done to promote NPI use, P3 shared her thoughts and experiences, including increasing staffing levels and described, once again, complex environmental factors affecting care.

I think that these residents that we take care of could have a better experience if we had a few more staff. I think part of the reason I see residents where I work getting agitated is because, you know, if they've called and they want something and nobody's there and you don't get a response right away... I mean, if you got this disease process going on and you're not... like, you're not in your right mind, you can't understand why people aren't responding to you right away. I think we've set ourselves up for failure with that. You're stretched so thin... like with an RN or an LPN where I work, you got about 30 residents that you're responsible for, and then you got your aids right... but you can't pay attention to them the way you'd like to, right...

P2 expressed concern with residents walking at night as there are only two staff scheduled to work the night shifts, "We actually should be a non-dementia specific facility because we are so small", and how the environment is not set up for the extent of needs that are seen in some residents within the LTCF. He continues to describe the struggle and complexity of managing residents at night:

We do have a wander guard system for our front doors... but we don't have a wander guard system for going into other people's rooms... and so they aren't locked out of people's rooms, they're just locked out of getting outside. So if I'm handing out pills, or the two of us [nurse and CCA] have to put a two-person to bed, and we're both in the room, this person is wandering around doing God knows what. While we're in a room for 10 minutes, what are they doing? Are they going into some poor little old lady's bed that has dementia and trying to pull her out of bed or get her up? When I'm in someone's room changing their brief and washing them up and lifting them into bed... what's that person doing that's wandering around with dementia?

P1 shared how patience is very important, describing a situation that required a more flexible approach, while in a work environment that can sometimes prioritize tasks over the resident's wishes:

If you're not careful, like what I'm saying mentioning patience... If you don't have that, you would easily snap back, and then you're just going back home and thinking, okay, what am I doing, you know... it's very difficult. Like sometimes the [CCA's] come to me and are like, 'She's not giving me her teeth,' and I'm like, 'Well, if she sleeps with her teeth in, is she gonna die tomorrow? No, so how about you just leave her teeth in?'. Sometimes you find that the CCA's are so hung up on things like 'Oh, we didn't get this off, or she didn't get changed'. But if she sleeps in her day clothes nothing is going to happen right... so if she doesn't wanna get changed, that's okay. So it's difficult; you have to remember that this patient is a person. They were a person who also lived like you before this dementia kicked in... But yah, when you are so hung up on 'oh, I have to finish you first', you will never get any headway because you will be there struggling, and then you're just gonna keep getting that behavior and more agitated.

The above descriptions highlight how far-reaching environmental factors can contribute to both RB's triggering and treatment options. Often described as creating complex situations where nurses must make difficult decisions on managing RB, the environment proves to be a barrier to using NPIs. The overall setup in LTCF, whether the physical layout (limited spaces or small rooms), the staffing models (baseline number of staff; shifts) the workplace culture and policies (task focussed; competing policies for safety and client-centered care), present complex barriers for participants to promote and use NPIs.

#### **4.4 Mitigating Factors**

##### **4.4.1 LTC Education**

Participants expressed receiving no specific training upon starting their jobs in LTC, aside from a basic orientation and one mandatory course called 'Gentle Persuasive Approach'. Participants at varying stages in their careers shared similar comments about only learning about dementia and LTC in nursing school. Expressions for more LTC-specific education were heard throughout the findings, with an acknowledgement that it was lacking. It is unclear whether this affected the nurse's ability or choice to use NPIs.

P1 described how she had to draw on her formal nursing education, which may have been several years prior. “I would say, all the knowledge or information that I have, I’ve taken from nursing school...I know with other floors and stuff you have this orientation package with what you need to know to be successful.” She goes onto explain, “But with long-term care, you come in, and you just basically have orientation [shifts] and are expected to start...so I don’t feel well equipped, and I don’t feel that I have a whole lot of knowledge.”

P4 spoke to the lack of specific education or training for nurses in LTC. While expressing positive regard towards dementia-specific education received at one point, she couldn’t remember it and expressed the need for more continued and repetitive education for staff working in an LTCF.

You’re always scrambling for knowledge...and one patient will be so different from another, so if we were equipped with knowledge about certain types of dementia...Us nurses are all at different levels and, so LTC nurses should focus more on LCT stuff, you know? Because it’s different than acute care, so, education should be more about dementia and Alzheimer’s... in LTC, there seems to be not much evidence-based... like we just try to do what we can do best we know how based on our own knowledge, like, those residents who are non-verbal are really complicated.

When asked if they were updated on best practices in LTC or dementia-specific education, P2 shared their experience: “We don’t get updated with best practice no. It’s by word of mouth; someone will say hey, I heard this... so who knows if it’s even true...”

Participants all voiced similar descriptions of minimal education being available or given around dementia in LTCF. None of the participants had nurse educators or anyone specializing in LTC for whom they would seek information. This phenomenon will be discussed in Chapter 5.

#### **4.4.2 Rural Context**

Despite the study focussing on rural LTCF, very few participants acknowledged this aspect directly. Participants described the more obvious aspects of living in a rural area, such as being far from education sessions or other services, not having proximity to other health professionals to ask advice or get help from, as well as how many staff or residents know each other and are familiar with each other.

“In a small rural facility, lots of times the residents are known by the staff,” P2 said while explaining how those close-knit environments can be helpful. “They might know, well, so, and so used to like this, or was always out dancing, or something.”

Comments comparing urban or hospital settings to the rural setting of LTCF were heard from those who had previous experience outside a rural setting like P3:

I guess one thing that really frustrates me is, I’m used to being in acute care in a bigger centre where there’s lot more support. You got doctors, and we had... out my back door was the ER, and in house, we had the internist. Out here...we only have doctors that come once a month and do their rounds...I mean, you can fax or call, and I guess... it frustrates me because health care here isn’t as good... I mean, it’s not as good as it could be... I mean, it’s hard. But that’s what we have and that’s what we work with...there’s no RT, PT, OT just down the hall you could run and ask or just consult quick like you would in a hospital facility. So yeah... you do everything you can to avoid residents from escalating.

P6 shared frustration with not having pharmacy available 24/7 as hospitals do, and how LTCF access to medications is inadequate with no pharmacy services in the evening or weekends. P6 explained that there are times when pain medication or other medications are ordered, but residents don’t receive them right away.

We don’t have a pharmacy that’s available 24/7. Our pharmacy, we get a week's worth in a roll, and so if our meds are ordered today, but we already have this week's roll, they have to wait until the following week’s roll. So, depending, they might not have those med changes for, like, another week... unless the doctor says no, I want to start it now. But then sometimes we have the push from the pharmacy...

While this description may also fall under Environmental barriers, it highlights how rural areas are often under-resourced, with fewer options or access to services than their urban counterparts. For example, providing medication for pain control may significantly impact the residents’ comfort level and, in turn, their RB, thus making access to the pharmacy a significant factor for nurses.

#### **4.4.3 Effectiveness of Resources**

Resources varied in description, including recreation teams, actual physical resources such as games, tools, etc., and management support. Overall, participants expressed a lack of effective resources available in LTCF.

Participants shared similar descriptions regarding a resource within their organization. Each nurse had access to the same resource, which included a small team of health professionals to help with more difficult RB management. While this team was designed specifically for complex cases of RB, all participants reported feeling it did not have an effective outcome for the client. In many cases, it only created more paperwork for the staff.

They come here, and the resident might be good for them, but they go away, and the behaviour comes back...it's just a lot of paperwork and not really a different outcome. I don't find it very effective. There's no nurse, no doctor... there's a pharmacist, and somebody else... I don't know, the ones that have been here, since I've been here, I don't feel it's made any difference for any of them... they'll say, hold a baby or put music on, let's take the blood pressure for a month, let's do [blood sugar checks]... lets try changing this... and then we have a psych nurse here that's like, NO, we are not touching this, this part is not broken... so there's a lot of documentation you have to send, and we already would have tried a lot of it, but now we have to try and document. Document behaviours, document what they're doing every half hour.( P4)

P2 described similar sentiment with the resource. "The team comes in; it's like a broken record...they always say more 1:1, distraction, find out what they like; the same things over and over again...they say figure out what they like and try to use that" he goes on to express the lack of innovation and tools provided within the LTCF "well if you go to the premier places that are right on the cutting edge, they have things. We are still using nothing and doing what we always do."

P5 added to the other participants, stating:

It's not effective. The only thing they have access to that we don't is that they can go straight to the psychiatrist if they want, but he doesn't specialize in geriatrics... I mean, their suggestion to us regarding a man who was very aggressive was that we should just sit and hold his hand. And yah... I'm like, okay, but when are we washing him? And when are we doing any care? Like, did you try any of that? And they're like, well no... and I'm like, well yah, I can sit there and hold his hand, and he's fine too... they have nobody who's actually practiced in a facility, but they're trying to tell us what to do... they have no personal experience... it's a pharmacist and an occupational therapist and a social worker

Participants voiced overall disappointment with what should be one of their most significant and helpful resources for managing RB.

In the previous Section 4.2.5 (Team Effort), participants shared positive experiences working with the recreation department, however, some participants noted it wasn't as helpful for them when dealing with residents with more advanced dementia: "We have recreation, but they're not really trained in advanced dementia... they're not trained to deal with higher needs... so not much you can do" P4. Similarly, another participant indicated that the recreation director was a key player and resource to help him manage RB, but voiced disappointment in the tools and supplies available.

We have a recreation director who is very good, but she has limited supplies, and she's good at helping when someone is agitated... she'll come and grab them and try to distract them or something... but again, the resources for recreation are sorely lacking... you're always told that you need to distract them, but you're not given any tools to distract them with (P2)

Mixed descriptions of feeling supported by management were found in the data. Some participants understood that many of the barriers and challenges were out of the manager's control (such as staffing levels). Other participants expressed feeling that management was not a support for them. Either way, both opinions indicated management was not a major resource and, even if supportive, was not effective in creating changes that might support better NPI use and satisfaction among residents and staff.

P5 described the struggles while expressing that her manager did everything she could to help, "I think our manager manages the staff the best she can to her ability...she's done as much as she can. She's very much like, pro-staff, and she knows that happy staff make happy residents too, and it all trickles....". P3 described her manager as one of the reasons she chose to work at the LTCF, noting that despite being supportive, management had little ability to improve things.

I guess for me, one of the reasons I wanted to work here is because the lady who's manager now... in the previous place I worked, management didn't really support us; I didn't feel safe with them. At this job, at least, for the most part, I can go to her and can complain and stuff. And I feel, for the most part, I'm heard. Whether she can do something about it or not is another thing.

P1 describes challenges with having a manager who has no nursing background, expressing the pressure on the nurse to figure everything out and no one to 'go to'.

If you have a manager in LTCF who has been there for X amount of years or that was a LTC nurse they would have more knowledge base and provide that support. But when you have your manager who has no relationship with nursing, you are basically the beginning and the end with whatever concerns you have with that unit. So that alone burns you out, I think...I know it might be difficult, but like we've had nursing managers, coordinators of LTC that ... this is their specialty, right, like you have some RPNs that are so invested in this, and they know. So, if you had that person as your manager, you know it would help a long way, right? Because they are constantly bringing up suggestions, and you will try them, and you will document, and you will see what works. Well I think the main concern I'm struggling with is just having managers who are not nurses... yah, so... when you're trying to have a conversation with them, they don't know what you're talking about.

Overall, the findings show that many resources available are not ineffective and that the outcomes remain the same for the resident even if well intended.

#### **4.5 Summary**

The strongest message generated from the data was that LTCFs are complex, and nurses struggle to provide NPIs based on current practices/models. Shared experiences with similar descriptions among participants created rich data that spoke strongly to the complexity and struggle of providing care to residents living with dementia in these settings. While the study set out to explore the participants' experience using NPIs, much of the data described challenges preventing and managing RB in general. However, it also highlighted the incredible work nurses do in assessing, adapting, and personalizing their care, confirming that nurses use NPIs regularly in their practice, most often in the form of distraction or redirection.



## CHAPTER 5

### DISCUSSION AND LIMITATIONS

The following chapter will introduce discussion topics organized by headings, not including every single category of findings but rather focusing on the major topics of discussion. Included is a discussion on pre and post-pandemic. The chapter will conclude with a section discussing the limitations of the study. Implications and conclusions will be forthcoming in the sixth and final chapter.

#### **5.1 Discussion**

The theme of struggle and complexity weaves in and out of the findings, creating a common thread amongst all categories. The graduate student did not anticipate having the depth and breadth of descriptions expressing the struggle and complexity presented. While the current study provided evidence that NPIs are being used in practice, it was evident that a major finding of the study was the recurring theme of struggle and complexity.

While the study's objectives were met within the data (Appendix D), a strong sense of importance around the management of RB arose to overshadow the primary research question of NPI use. For example, when asked about their experience using NPIs, the response always included descriptions of the often-challenging experience of managing RB, not necessarily the details of attempting or using a particular NPI. This discovery aligns with the current lack of literature focusing on NPI use in LTCF. It may suggest that RB as a concept has been more favourable or relevant to study than NPI use. However, no real conclusion or assumption can be made other than that NPI use by nurses in LTCF has limited published studies.

The findings in this study strongly support what others have found surrounding the lack of time, staff, and resources in LTCFs (Ervin et al., 2012; Blackhouse et al., 2016; Barbosa et al., 2014; Ostaszkievics et al., 2015). Participants' chosen verbiage showed how complex it can be to meet everyone's needs and provide best practices in LTCF. Words such as "you're torn" P2; "you're always in that constant dilemma" P1; "it's hard" P3; "It's frustrating" P6; "It's hard, it's heavy" P4; expressed the struggle, and were a major finding within the data. Even when participants spoke in a positive tone, the descriptions showed several factors affecting their practice and how challenging it can be to provide best practice care to those living with dementia in LTCF.

While the theme of struggle and complexity can be seen throughout, numerous areas provided opportunities for discussion and insight into the nurse's experience using NPIs in LTCF and are presented below.

### **5.1.1 *Sentiment***

The current study showed that participants were on par with other HCPs in their views on NPIs and PIs. As previously stated in Chapter 2, limited studies are available that include specific nursing perspectives. A systematic review of nurse's attitudes around using PIs for persons with dementia found both negative and positive sentiments (Ma et al., 2020). Data collected from this study showed similar insights, with participants voicing a need for both PIs and NPIs.

A discussion on this topic may be to ask how much of the sentiment towards NPIs and PIs is due to barriers that exist in LTCF. For example, assuming greater sentiment towards using a PI may be reasonable if you are not equipped with the resources to use an NPI. The current study described how participants used safety as a factor in deciding to use a PI and how a lack of resources to manage more intense RB was often a deciding factor in administering PIs. While no clear conclusions can be met, it directs leaders and researchers to consider this when trying to promote NPIs and reduce use of PIs. It also highlights the role of PIs and the importance of having them at the appropriate time for the appropriate person.

### **5.1.2 *Lack of Ordered or Scheduled NPIs***

One of the outcomes was to discover if nurses were using NPIs in practice, and if they were, which ones, and how. While we discovered that participants were using NPIs, it was often informal, with no scheduled times or specific instructions. For example, the most used NPI was distraction/redirection, which the participants used impromptu and often creatively.

Interestingly, we did not hear of many NPIs being ordered or being used in a more systematic, routine way, such as scheduled pet therapy programs, and garden or art therapy programs. Nearly all described NPIs were used in response to an RB, with fewer descriptions showing NPIs being used to prevent RB. This is something to note, as it shows a possible gap in services being offered or used in rural LTCF and highlights an opportunity to explore how scheduled or routine NPI programs might assist in the prevention of RB.

We must also consider the possibility that participants were not aware of programs in place, such as those implemented by recreation teams or external sources (families, hired

professionals, volunteers). This could be a reason these NPIs are not mentioned in the data. It is also possible that participants were not identifying these as NPIs but rather just therapeutic interventions as part of routine activities in the residents' lives. For example, a family member coming every evening to read the local paper to a resident may seem benign but may support best practices and reduce or prevent RB in that person. Similarly, the recreation team engaging in 'coffee time' every morning with specific groups of residents may also be categorized as an NPI, preventing certain residents from experiencing RB some mornings. These activities and happenings may be something nurses did not consider as conventional NPIs, especially if they were prevention and not used at the moment to treat RB. Understandably, treatment using an NPI would be easier to identify than preventative NPIs. It is worth a discussion to consider that what nurses identify as NPIs and how they are used may factor into the results of the data. As noted in Chapter 1, there are varying definitions of what constitutes an NPI in the literature (Cohen-Mansfield et al., 2015; Seitz et al., 2013). This may have factored into nurses' responses.

Regardless of why, findings showed limited use of ordered or purposefully scheduled NPIs. Purposefully or routinely scheduled NPIs might look like a hired registered massage therapist coming every Tuesday, someone hired or volunteering to provide regularly scheduled 1:1 time with individuals, etc. These services can be provided by externally hired professionals, volunteers, or staff. They can potentially increase residents' quality of life and satisfaction (Van der Ploeg et al., 2012). Implementing programs within LTCF may come with its challenges. Below, we discuss volunteers and the recreation team's involvement in delivering NPIs.

### ***5.1.3 Lack of Volunteers and Unclear Recreation Team Outcomes***

The discovery that most NPIs are not prescheduled or programmed leads to an interesting finding that emerged in the analysis. Participants did not describe volunteers as a source of support in NPI use. The reason for the connection is that volunteers have been shown to play a significant role in LTCF (Stolen, 2022; de Sandes-Guimarães et al., 2023) and could potentially be the ones to offer scheduled, programmed therapeutic NPIs such as pet therapy, gardening, music therapy, hand holding, sensory therapy, and other therapeutic programs (Stolen, 2022; Kong et al., 2022; Hande, 2022; Von Zon et al., 2016). As previously stated, this may reduce RB in some residents and provide increased quality of life to those receiving the therapy (Hande et al., 2022; Seitz et al., 2016).

Something further to note from this category is how, despite participants expressing a positive sentiment towards it, the recreation department was not unanimously described as a major resource for managing RB or implementing NPIs. Like other studies noted in Chapter 2 (Backhouse et al., 2016; Barbosa et al., 2013), it may be that departments or staff don't feel comfortable around those with advanced dementia and are unsure how to approach or present meaningful activities. The other factor to consider is that staffing levels in all departments may be inadequate, decreasing their effectiveness in assisting nurses treating RB. Participants also mentioned an overall lack of physical resources (activities, books, etc.) and scheduling limitations (weekdays ending at 4:30 pm). All these factors have the potential to impact recreation teams assisting with RB. As previously highlighted, the possibility of misidentifying what is considered an NPI or if it's used in a targeted way for a specific person or group of people living with dementia may also impact participants' descriptions.

While the lack of staff and time is a major barrier to providing NPIs, volunteers are positioned to be a valuable resource that may be underutilized in LTCFs (Van der Ploeg et al., 2012). It is possible that recruiting within a rural setting has more challenges. However, from what was gathered in the current study and the graduate student's own experience, it is an area worth exploring.

#### **5.1.4 *Personalized Care***

An important finding was that all nurses described performing basic needs assessments with residents experiencing RB. Discovering that residents living with dementia are getting a thorough assessment before interventions is a positive finding to share amid the overarching theme of struggle and complexity. Nurses were taking a personalized approach, researching the diagnosis, getting feedback from the family, and taking a good history to better understand what may be a trigger and how to provide comfort. Participants described doing medication reviews every three months for each resident and considered a full holistic assessment (blood work, psychosocial, etc.) when trying to manage more complex cases of RB. Many examples of personalizing approaches were presented in the data.

Again, one must consider the factors impacting client-centered care, including the barriers presented in this study and others (Kong et al., 2022). The environment and numerous barriers proved difficult and will be further discussed below.

### ***5.1.5 Barriers as Reality; Lack of Dementia Specific Units, and Restraint Use***

An important discussion to have of the findings is to acknowledge the gravity of which environment and organizational barriers such as lack of staff and time, affect outcomes. The category entitled barriers blurred into others and could be seen in several contexts and situations described by the participants. Evidence supports the findings from this study, indicating that several barriers exist in LTCF that impede the uptake of best practices (Gilster et al., 2018; Kong et al., 2017; Kong et al., 2022; Pu & Moyle, 2022).

It is fair to say this category highlighted what nurses experience and might take for granted as ‘just the way it is in LTC’. The graduate student noted that many of the participants spoke of barriers within the context of it simply being their reality. This is important for any future work done exploring these barriers. There are hidden complexities and nuances that nurses take for granted amongst themselves that may not be articulated or expressed, as it is just ‘normal’ for them. One might even infer that they are complacent to certain environmental factors. Nurses may no longer recognize certain occurrences as barriers but rather just the world, such as medication administration taking substantially longer for nurses within LTCF settings (Thomson et al., 2009).

While this might not represent all nurses, it could also be argued that there are no other options, as the LTCF environment and models do not widely vary and often hold similar routines, practices, physical layouts, and resources (Kong et al., 2022). For some nurses, residents, and staff, it truly is their reality. As the graduate student with an emic view, it is important to note this and recognise its impact on perpetuating a continued model of care within LTCF that might not serve the needs of multiple groups, including staff, residents, and families.

Our lived experiences and views impact our belief in what we consider possible and can directly impact our choices. This phenomenon was noted by the graduate student early on in interviews. Upon sitting down to transcribe the taped interview, the graduate student soon realized that the participant would end many sentences with “you know...” or trail off without fully describing what it is they were referring to. There were unspoken assumptions and an understanding of the total context inferred between the graduate student and the participant, as the graduate student had a shared experience being an RN who worked in LTC. While not particularly suited for further discussion in this thesis study, it was a profound insight and something for organizations or researchers to consider when approaching nurses or staff about

how to improve practice or environment. An entirely different model better suited to residents, families, and staff may exist, but the system we work in has created a reality for which no other can be considered. An example of this can be seen in casual conversations where staff or management compare numbers or resources based on the status quo instead of the needs.

An important observation is that none of the LTCFs in the current study contained dementia-specific care units. This is discussed more in the section entitled ‘rural’. The LTCFs were built and resourced for general LTC needs, not specifically for those living with mid to late stages of dementia who experience more frequent or challenging episodes of RB. When critically reflecting on this, it is fair to question if using restraints may be an outcome of this.

While participants expressed hesitancy in using restraints, they described feeling like they had no other choice, describing environmental barriers and challenges that put either the resident or co-residents at risk in some way. While we know dementia-specific units can provide increased quality of care to those living with dementia (Joyce et al., 2018), we also know that residents living with dementia have higher use of restraints (Pu & Moyle, 2022) and that increased resources such as education and practical support are needed to reduce restraint use (King et al., 2017; Pu et al., 2022).

Whether it means having increased staff to attend to those with advanced dementia or implementing dementia-specific units in rural areas, there is a clear need to focus on environmental factors to provide adequate, safe, best practices to residents with dementia experiencing RB.

#### ***5.1.6 Mitigating Factors***

One of the findings around the category indicates the need to measure outcomes and the effectiveness of resources. For example, participants noted the same resource team available to help with RB but unanimously described it as ineffective. Many described it as creating even more work for them, which adds to the struggle and complexity of implementing NPIs and managing RB. Examples like this help highlight how organizational factors hinder best practices, despite their good intentions. Without evaluating and seeking honest feedback, a cycle of make-work projects can take place, benefiting no one.

When nurses feel pressured and lack time to do everything they need to for their residents, having one more thing to implement and document, yet not yield positive outcomes, can be extremely frustrating for nurses. It could be considered that programs or resources such as

the team meant to provide support for challenging RB, when ineffective, add to the complexity and perpetuate a work culture of burnout amongst nurses in LTCF. This warrants further discussions with employers and organizations trying to retain and recruit nurses, on top of promoting best practices in LTCF.

### **5.1.7 LTC Education**

Education in LTCF, including orientation, appears to be lacking. While many other nursing departments would have a robust orientation program or an in-house nurse educator to provide learning specific to that department, LTC does not. With increased rates of dementia and more LTCFs caring for all types of dementia, it would seem plausible that having regular workshops, presentations, or courses geared towards working with dementia would benefit all the staff. Again, consistency and routine follow-up would be important factors in ensuring its effectiveness. For example, a 4-hour workshop taken once every three years may not be optimal to ensure that knowledge is being practised and implemented. This study highlighted a need for more consistent and regular support for nurses and all staff who work with residents who live with dementia and was similar to other studies' findings (Wagner et al., 2014; Hartung et al., 2021).

Something important to include in this discussion is that data showed that participants did not assume that behaviours were “BPSD”. This is notable, as concern for how HCPs view and perceive RB has been a topic of discussion over recent years, with changes in the language being an example of that (e.g., RB replacing BPSD). It has been important for researchers to incorporate and acknowledge this awareness into their studies of people living with dementia. While literature and language have changed how we describe and label RB, all participants in this study described doing a basic needs assessment when faced with RB. They used foundational nursing processes when approaching persons with dementia.

What is interesting about this practise is that based on the nurse's description of their education specific to LTC and dementia, along with using outdated language such as ‘demented’ to describe the person with dementia, it is reasonable to assume that the latest best practices and language are not always being disseminated, or adopted, amongst front line staff who care for this population. However, participants working in LTCF, despite not receiving dementia-specific knowledge or training, are using their basic knowledge and theory to systematically assess and diagnose RB, create and implement a plan, then evaluate it and adjust as needed. By hearing

these descriptions, one may conclude that some participants view RB as currently described in the literature and aren't blaming symptoms solely on the diagnosis of dementia but rather on possible unmet needs. However, other descriptions, while showing empathy for the resident, remain using language that may not fully accept the responsibility that environmental factors have on RB.

In summary, the data echoed what other studies suggested (Backhouse et al., 2016; Barbosa et al., 2014; Cohen-Mansfield et al., 2015; Ervin et al., 2012; Janzen et al., 2013; Legere et al., 2018; Kong et al., 2022; Ostaszkiwicz et al., 2015; Scales et al., 2018; Seitz et al., 2013) recommending more staff education and adequate resources need to be in place to support the uptake and use of NPIs as best practice.

#### **5.1.8 Rural Context.**

The rural context of the current study was positioned to provide an important rural perspective. However, without directly comparing it to an urban context, it is difficult to conclude what parts of the participants' descriptions could be connected to its rural context. Most participants grew up in rural areas and may take the nuances and barriers in rural health care for granted, having nothing to compare it to. The participants who had experience in urban health care settings did mention that rural settings can seem more isolated regarding resources or other HCPs, autonomous practice, physical distance from friends/family living in cities, and poor internet connectivity. These factors may add to the underlying complexity.

For example, descriptions included being the only RN at the facility, having no other nurses or physicians working in the same building, creating a sense of pressure and autonomy in your practice, with no one to 'turn' to in moments of need. While urban facilities are often attached to hospitals and health facilities or contain multiple wings employing more than one nurse, rural LTCFs often stand alone, are smaller in capacity, and have no connection to other professionals aside from the telephone. Geographical isolation and distance also factor in; for example, having to drive 50km to your grandparents' LTCF to visit and provide support can be financially and physically taxing, creating a barrier to doing it every day. While this can affect family members, it also affects the resident and staff, who may have one less support and resource they could have leaned on and used to help prevent and manage RB.

Worth discussing is that the current study's LTCF did not have dementia-specific units or cater to any specific dementia needs. They were designed for the general needs of someone



entering LTC, and not necessarily mid to late stages of dementia. When hearing the more challenging descriptions of managing RB, one must consider whether the LTCF matches the needs of those residents. Is it possible, in rural locations, for families to place their loved one in their local LTCF and for staff to accommodate their needs as best they can, despite the facility not being the best fit for the needs of the resident (in effort to remain in the home community and not transferred elsewhere)? This may contribute to the struggle and complexity experienced by nurses, as they feel torn between attending to the complex needs of many residents in an environment that was not designed to accommodate those who experience RB routinely and safely. Evidence shows that dementia special care units increase the quality of life for those living with dementia compared to regular units (Joyce et al., 2018). It may be worth considering the impacts of not having dementia-specific care units readily available in rural settings on residents and care staff.

While the current study does not provide conclusive evidence of whether being in a rural area impacts NPI use, it provides insight into the nurses' experience and highlights the need for more support. A post-pandemic study by Yang et al. (2021) reported that rural nursing homes in the USA experienced higher rates of short staffing over the course of COVID-19 compared to urban nursing homes. More discussion about the pandemic continues below.

## **5.2 Pre and Post Pandemic**

The pandemic highlighted many inefficiencies in LTCF. As news channels covered the pandemic unfolding, we saw stories from LTCF reported worldwide. This study provides insight into what nurses were experiencing months before the added pressures of pandemic guidelines, public orders, and organizational policies took effect.

It is important to acknowledge the descriptions in this study are from before the worldwide pandemic of COVID-19. This study presents barriers, environmental factors, and challenges that nurses experience while caring for residents with dementia. Based on the findings in this study, nurses already felt pressured, rushed to complete tasks, and expressed not having adequate staffing levels. Studies published pre-pandemic align with these findings and confirm that certain topics, such as staffing and workload were already identified as barriers far before the crisis of the global pandemic in 2020 (Brazil et al., 2012; Van der Ploeg et al., 2012; Ervin et al., 2012; Blackhouse et al., 2016; Barbosa et al., 2014; Ostaszkievics et al., 2015).

As facilities went under ‘lock down’ preventing family, support services, volunteers, and even doctors from entering the LTCF, persons living with dementia worsening responsive behaviours noted (Kales et al., 2023). This only further increases the nurses' and staff's duties and tasks, who felt pressured and rushed.

To highlight the strengths of rural LTCF nurses, one consideration that may warrant applause is that rural staff seemed to have already expressed a degree of autonomy and isolation in their practice, with decreased resources and a low number of volunteers or NPI programs being implemented. Rural nurses may have experienced the pandemic differently than urban nurses. While the focus of this thesis study surrounded the use of NPIs for managing RB in LTCF, it produced an important look into what life was like pre-pandemic for residents and nurses. An increased focus on the LTCF setting is needed to promote better ways of structuring our environments, staffing models, routines, standard work, etc., especially in the context of pandemic planning as we saw increased nursing shortages in rural areas compared to urban areas (Yang et al., 2021).

### **5.3 Limitations**

Limitations to this study included the size and demographics of the participants, geographical location, and methods used. Below, each will be presented and discussed.

#### ***5.3.1 Size and Demographics of Participants***

The sample size was seven and included three different classifications of nurses - RN, RPN, and LPN - six of whom identified as female and one male. A considered limitation was that the views and experiences may vary between classifications of nurses (e.g., LPN vs RN) or gender. However, it was discussed and found to be a realistic representation of what staffing models look like in LTCF, making it a realistic, reasonable sample.

Sitting at seven, the sample size could be considered small. However, the data showed repeating findings and redundancy upon the seventh interview. This was confirmed by the graduate student's committee and discussed in the spring of 2020. While the COVID-19 pandemic's lockdown began in March of 2020 and created major challenges for researchers completing data collection and studies during this time, it was not the deciding factor in whether recruiting more participants should happen. It was felt that the data collected at that point showed rich depth, and redundancy had been achieved.

### **5.3.2 *Geographical Location***

Because the study included participants from the same health region and geographical area, it was important to reflect on whether this could be a limitation to the study (if comparing or using other LTCFs). Could it be the shared policies, leadership, or dynamics specific to those LTCFs that produced the strong findings? Based on studies external to this region (Ervin et al., 2012; Blackhouse et al., 2016; Barbosa et al., 2014; Ostaszkievics et al., 2015), it is reasonable to conclude that these nurses' experiences are not isolated but rather shared by others working in LTCFs elsewhere. This may be important as other researchers can use this study to support their findings or further investigate these shared phenomena.

### **5.3.3 *Methods***

There has been criticism surrounding Sandelowski's Qualitative Descriptive Method, including its lack of rigour, theory base, and low inference (Bradshaw et al., 2017; Milnes & Oberle, 2005; Neergaard et al., 2009). This study mitigated these criticisms, as Chapter 3, Section 3.5 described.

Using QD and content analysis (Hsieh & Shannon, 2005) was beneficial for this study. The targeted population could freely express themselves and have the graduate student represent their voices, staying true to the data by using many verbatim quotes. This method created powerful and honest descriptions from the participants that did not require profound interpretation or inference. The data speaks for itself and is intended to be a base for further research in which more in-depth theory or inference may be used.

The current study also contained a single interview with each participant and no follow-up with the participant. Due to the nature of the study, this does not appear to hinder the findings. There were no predetermined categories, and there was no need to complete a second interview for clarification. Interviews were conducted with the expectation that the participant would share their opinion, experiences, and perspectives on the topic, with the graduate student being open to all descriptions and not anticipating a follow-up. A benefit to a second interview might be that the participant would return with more stories or examples of using NPI after being triggered by the first interview. However, it did not seem warranted. Each interview contained many descriptions that laid a powerful foundation for the current study.

Lastly, as stated earlier in the discussion, it is noted that an awareness of an emic view may have assisted in perpetuating what nurses consider to be normal in LTCF settings. An

assumption, inference, and understanding between the graduate student and the participants appeared after the first interview. The graduate student quickly noted and accounted for this in the field notes. A purposeful effort to get participants to fully explain as if the graduate student did not work in similar settings was taken and applied to the remaining interviews to capture a more detailed and thorough explanation and description of their experiences. As the graduate student had several years experience working as an RN in a rural LTCF, many of the concepts, descriptions, and experiences shared in this study were well known to the graduate student. Both field notes and a journal assisted in accounting for any biases that could arise, however, an emic view was a strength in this study. It allowed for original ideas, discussions, and aligns with the methodology used.

## CHAPTER 6

### IMPLICATIONS AND CONCLUSIONS

#### 6.1 Implications for Practice and Research

The current study provides a base for future research surrounding NPI use in LTCF. It also provides a nursing-specific perspective, currently lacking in the literature. A need for further focussed discussions and research is needed to support nurses in providing best practice to those living with dementia in LTCF.

While the previous chapter held discussions around several factors effecting NPI use, it will be useful to consider frameworks such as the i-PARIHS (Harvey & Kitson, 2016) when promoting uptake in LTCF. The framework focusses on the uptake of evidence to practice, and is worth noting as a potentially valuable tool for both researchers and organizations. It includes useful insight and theory on how context (resources, culture, health systems, leadership) and the recipient (individual, team, etc.) all effect the successful uptake of best practice. Applying the i-PARIHS framework could frame the consideration of several complexities and barriers described in this study, and may lend itself to a more robust and successful uptake in NPI use if used in future studies and LTCF.

Descriptions of needing more staff and having no time to provide NPIs (or basic care) are heard throughout the literature and should be taken seriously. While this study may be considered small, it supports the volume of research suggesting the need for increased resources and staffing levels.

While it may be unrealistic to increase staffing levels, this study identified gaps in how NPIs are delivered. Volunteers, for example, could be used in purposeful activities designed to prevent RB. Creative discussion around how to implement and support more routine, regularly scheduled NPIs, customized for each resident based on their needs, is needed by everyone involved. Organizations, families, workplaces, and residents all have the potential to contribute to a more effective and successful uptake in using NPIs.

Findings described the existing complexities and how the environment can negatively impact residents, not lending to best practices or client-centered care options. Amongst all the findings in this study, struggle and complexity are most closely linked with the barriers and were seen throughout many descriptions. This is important to consider when doing further research on promoting NPI use.

While introducing best practice standards and policies in LTCF, for example, organizations must consider the barriers as they contribute to the feasibility of implementing best practices. Without fully assessing the practice setting for feasibility, organizations risk spending time developing best practice guidelines and policies without the practicality of nurses being able to implement them in their practice settings. It will be important for organizations and researchers alike to evaluate implementation to ensure feasibility and effectiveness when offering resources in LTCF.

Recalling the discussion about nurses possibly experiencing barriers to care as part of their everyday life as a nurse in an LTCF, it is important to consider when researching this topic. For example, participants who have worked in LTCF for certain lengths of time may not consider the barriers to be anything other than “just the way it is” and fail to present or describe them as such in clear, concrete ways. It may benefit both leaders of LTCFs and researchers to consider this when asking their staff or participants about barriers or how to promote NPIs or best practices for those living with dementia.

## **6.2 Conclusion**

This study discovered nurses were consistently using distraction and redirection as NPIs to manage RB in their everyday practice. While other NPIs were noted (music, etc.), they were not described to be ordered or implemented in any scheduled or systematic way. This discovery presents an opportunity to explore how scheduled NPIs might be implemented for the prevention and management of RB. Barriers to using NPIs was a major finding. A lack of staff, time, and supportive resources were mentioned by all participants, as well as descriptions of environmental barriers including physical layout and function, as well as organizational barriers (staffing level; policies; education, prioritizing tasks, etc.). Struggle and complexity were an important theme noted throughout the data, effecting the decision-making process of nurses on how to manage RB. While the use of NPIs is the gold standard, there is a major gap surrounding how to introduce, integrate, and support NPIs within the LTCF setting. The findings from this study support the need for further research to address the struggle and complexity described within LTCF when wanting to implement best practices and support those living with dementia in rural LTCF.

## REFERENCES

- Åhlin, J., Ericson-Lidman, E., Norberg, A., & Strandberg, G. (2014). Care providers' experiences of guidelines in daily work at a municipal residential care facility for older people. *Scandinavian Journal of Caring Sciences*, 28(2), 355–363.  
<https://doi.org/10.1111/scs.12065>
- Alzheimer Society International. (2017). *Use of antipsychotic medications to treat people with dementia in long-term care homes* [Position Statement].  
[https://alzheimer.ca/sites/default/files/files/national/media-centre/asc\\_position\\_06072017\\_antipsychoticmeds\\_e.pdf](https://alzheimer.ca/sites/default/files/files/national/media-centre/asc_position_06072017_antipsychoticmeds_e.pdf)
- Alzheimer Society of Canada. (2017). *Canadian dementia research priorities*. Report of the Canadian Dementia Priority Setting Partnership.  
<https://alzheimer.ca/en/Home/Research/Canadian-dementia-priority-setting-partnership>
- Alzheimer Society of Canada. (2022). *Dementia numbers in Canada*.  
<http://alzheimer.ca/en/Home/About-dementia/What-is-dementia/Dementia-numbers>
- Alzheimer Society of Canada. (2023). <https://www.alz.org/ca/dementia-alzheimers-canada.asp>
- Alzheimer Society of Ontario. (2017). *What are responsive behaviors*.  
<https://alzheimer.ca/en/on/We-can-help/Resources/Shifting-Focus/What-are-responsive-behaviours>
- Alzheimer Society of Saskatchewan. (2017). *Dementia in Saskatchewan*.  
<http://alzheimer.ca/en/sk/Vote-Dementia-Care/Dementia-SK>
- Alzheimer's Association. (2023). *Stages of Alzheimer's*.  
[https://www.alz.org/alzheimers\\_disease\\_stages\\_of\\_alzheimers.asp](https://www.alz.org/alzheimers_disease_stages_of_alzheimers.asp)
- Alzheimer's Society of Canada. (2011). *Guidelines for Care: Person-Centered care of people with dementia living in care homes*.  
[https://alzheimer.ca/sites/default/files/files/national/culture-change/culture\\_change\\_framework\\_e.pdf](https://alzheimer.ca/sites/default/files/files/national/culture-change/culture_change_framework_e.pdf)
- Azermai, M., Vander Stichele, R. R. H., Van Bortel, L. M., & Elseviers, M. M. (2014). Barriers to antipsychotic discontinuation in nursing homes: An exploratory study. *Aging and Mental Health*, 18(3), 346–353. <https://doi.org/10.1080/13607863.2013.832732>
- Backhouse, T., Killelt, A., Penhale, B., & Gray, R. (2016). The use of non-pharmacological interventions for dementia behaviours in care homes: Findings from four in-depth,

- ethnographic case studies. *Age and Ageing*, 45(6), 856–863.  
<https://doi.org/10.1093/ageing/afw136>
- Backman, A., Ahnlund, P., Lövheim, H., & Edvardsson, D. (2023). Nursing home managers' descriptions of multi-level barriers to leading person-centred care: A content analysis. *International Journal of Older People Nursing*, e12581–e12581.  
<https://doi.org/10.1111/opn.12581>
- Barbosa, A., Nolan, M., Sousa, L., & Figueiredo, D. (2014). Dementia In Long-term care homes: Direct care workers' difficulties. *Procedia -Social and Behavioral Sciences*, 140, 172–177. <https://doi.org/10.1016/j.sbspro.2014.04.405>
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research*, 4.  
<https://doi.org/10.1177/2333393617742282>
- Brazil, K., Maitland, J., Ploeg, J., & Denton, M. (2012). Identifying Research Priorities in Long Term Care Homes. *Journal of the American Medical Directors Association*, 13(1), 84.e1–84.e4. <https://doi.org/10.1016/j.jamda.2011.04.018>
- Cabrera, E., Sutcliffe, C., Verbeek, H., Saks, K., Soto-Martin, M., Meyer, G., ... Zabalegui, A. (2015). Non-pharmacological interventions as a best practice strategy in people with dementia living in nursing homes: A systematic review. *European Geriatric Medicine*, 6(2), 134–150. <https://doi.org/10.1016/j.eurger.2014.06.003>
- Canadian Institute for Health Information. (2015). *Chartbook: Regulated nurses*.  
<https://www.cihi.ca/en/document/chartbook-regulated-nurses-2015>
- Canadian Institute for Health Information. (2023). *Dementia in long-term care*.  
<https://www.cihi.ca/en/dementia-in-canada/dementia-care-across-the-health-system/dementia-in-long-term-care>
- Canadian Nurses Association. (2016). *Dementia in Canada: Recommendations to support care for Canada's aging population*. [https://www.cna-gtaic.ca/~/\\_media/cna/page-content/pdf-en/dementia-in-canada\\_recommendations-to-support-care-for-canadas-aging-population.pdf](https://www.cna-gtaic.ca/~/_media/cna/page-content/pdf-en/dementia-in-canada_recommendations-to-support-care-for-canadas-aging-population.pdf)
- Carminati, L. (2018). Generalizability in qualitative research: A tale of two traditions. *Qualitative Health Research*, 28(13), 2094–2101.  
<https://doi.org/10.1177/1049732318788379>



- Chambers, L. W., Bancej, C., & McDowell, I. (2016). *The Alzheimer Society of Canada in collaboration with the Prevalence and Monetary Costs of Dementia in Canada Population Health Expert Panel*.  
[https://alzheimer.ca/sites/default/files/documents/Prevalence-and-costs-of-dementia-in-Canada\\_Alzheimer-Society-Canada.pdf](https://alzheimer.ca/sites/default/files/documents/Prevalence-and-costs-of-dementia-in-Canada_Alzheimer-Society-Canada.pdf)
- Clifford, C., & Doody, O. (2018). Exploring nursing staff views of responsive behaviours of people with dementia in long-stay facilities. *Journal of Psychiatric and Mental Health Nursing*, 25(1), 26-36. <https://doi.org/10.1111/jpm.12436>
- Cohen-Mansfield, J., Buckwalter, K., Beattie, E., Rose, K., Neville, C., & Kolanowski, A. (2014). Expanded review criteria: The case of nonpharmacological interventions in dementia. *Journal of Alzheimer's Disease*, 41(1), 15–28. <https://doi.org/10.3233/JAD-132357>
- Cohen-Mansfield, J., Marx, M. S., Dakheel-Ali, M., & Thein, K. (2015). The use and utility of specific nonpharmacological interventions for behavioral symptoms in dementia: An exploratory study. *American Journal of Geriatric Psychiatry*, 23(2), 160–170.  
<https://doi.org/10.1016/j.jagp.2014.06.006>
- Cohen-Mansfield, J., Thein, K., Marx, M. S., & Dakheel-Ali, M. (2012). What are the barriers to performing nonpharmacological interventions for behavioral symptoms in the nursing home? *Journal of the American Medical Directors Association*, 13(4), 400–405.  
<https://doi.org/10.1016/j.jamda.2011.07.006>
- Colorafi, K. J., & Evans, B. (2016). Qualitative descriptive methods in health science research. *Health Environments Research and Design Journal*, 9(4), 16–25.  
<https://doi.org/10.1177/1937586715614171>
- Cunningham, E. L., McGuinness, B., Herron, B., & Passmore, A. P. (2015). Dementia. *The Ulster Medical Journal*, 84(2), 79–87. <http://www.ncbi.nlm.nih.gov/pubmed/26170481>
- De Sandes-Guimarães, L. V., Dos Santos, P. C., Alves, C. P. G. P., Cervato, C. J., Silva, A. P. A., & Leão, E. R. (2023). The effect of volunteer-led activities on the quality of life of volunteers, residents, and employees of a long-term care institution: a cohort study. *BMC Geriatrics*, 23(1), 151–151. <https://doi.org/10.1186/s12877-023-03898-y>
- Dementia Australia. (2018). *Dementia language guidelines*.  
<https://www.dementia.org.au/files/resources/dementia-language-guidelines.pdf>

- Ervin, K., Cross, M., & Koschel, A. (2014). Barriers to managing behavioural and psychological symptoms of dementia: Staff perceptions. *Collegian*, *21*(3), 201–207.  
<https://doi.org/10.1016/j.colegn.2013.04.002>
- Ervin, K., Finlayson, S., & Cross, M. (2012). The management of behavioural problems associated with dementia in rural aged care. *Collegian*, *19*(2), 85–95.  
<https://doi.org/10.1016/j.colegn.2012.02.003>
- Estabrooks, C., Squires, J., Carleton, H., Cummings, G., & Norton, P. (2015). Who is looking after mom and dad?: Unregulated workers in Canadian long-term care homes. *Canadian Journal on Aging / La Revue Canadienne Du Vieillissement*, *34*(1), 47-59.  
<https://doi.org/10.1017/S0714980814000506>
- Fitzsimmons, S., Barba, B., Stump, M., & Bonner, A. (2014). Nonpharmacological interventions in long-term care feasibility and recent trends. *Journal of Gerontological Nursing*, *40*(5), 10–14. <https://doi.org/10.3928/00989134-20140324-04>
- Folkerts, A.-K., Roheger, M., Franklin, J., Middelstädt, J., & Kalbe, E. (2017). Cognitive interventions in patients with dementia living in long-term care facilities: Systematic review and meta-analysis. *Archives of Gerontology and Geriatrics*, *73*, 204-221.  
<https://doi.org/10.1016/j.archger.2017.07.017>
- Forbes, D. A., Peacock, S., & Morgan, D. (2005). Nonpharmacological management of agitated behaviours associated with dementia. *Geriatrics and Aging*, *8*(4), 26–30.  
[https://www.researchgate.net/profile/Dorothy\\_Forbes/publication/265242106\\_Nonpharmacological\\_Management\\_of\\_Agitated\\_Behaviours\\_Associated\\_with\\_Dementia/links/54aea3b20cf2b48e8ed45511/Nonpharmacological-Management-of-Agitated-Behaviours-Associated-with-Dementia.pdf](https://www.researchgate.net/profile/Dorothy_Forbes/publication/265242106_Nonpharmacological_Management_of_Agitated_Behaviours_Associated_with_Dementia/links/54aea3b20cf2b48e8ed45511/Nonpharmacological-Management-of-Agitated-Behaviours-Associated-with-Dementia.pdf)
- Gilster, S. D., Boltz, M., & Dalessandro, J. L. (2018). Long-Term Care Workforce Issues: Practice Principles for Quality Dementia Care. *The Gerontologist*, *58*(suppl\_1), S103–S113. <https://doi.org/10.1093/geront/gnx174>
- Gurwitz, J. H., Bonner, A., & Berwick, D. M. (2017). Reducing excessive use of antipsychotic agents in nursing homes. *JAMA*, *318*(2), 118. <https://doi.org/10.1001/jama.2017.7032>
- Hande, M. J., Taylor, D., & Keefe, J. (2022). The Role of Volunteers in Enhancing Resident Quality of Life in Long-Term Care: Analyzing Policies that May Enable or Limit this Role. *Canadian Journal on Aging*, *41*(2), 252–263.

<https://doi.org/10.1017/S0714980821000106>

- Harvey, G., & Kitson, A. (2016). PARIHS revisited: from heuristic to integrated framework for the successful implementation of knowledge into practice. *Implementation Science : IS*, *11*(1), 33–33. <https://doi.org/10.1186/s13012-016-0398-2>
- Health Canada. (2005). *Health Canada endorsed important safety information on atypical antipsychotic drugs and dementia*. <http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2005/14307a-eng.php>
- Hersch, E. C., & Falzgraf, S. (2007). Management of the behavioral and psychological symptoms of dementia. *Clinical Interventions in Aging*, *2*(4), 611–21. <https://doi.org/10.2147/cia.s1698>
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Hunter, P. V., Thorpe, L., Hounjet, C., & Hadjistavropoulos, T. (2020). Using Normalization Process Theory to Evaluate the Implementation of Montessori-Based Volunteer Visits Within a Canadian Long-Term Care Home. *The Gerontologist*, *60*(1), 182–192. <https://doi.org/10.1093/geront/gny103>
- Iglehart, J. K. (2018). The challenging quest to improve rural health care. *New England Journal of Medicine*, *378*(5), 473–479. <https://doi.org/10.1056/NEJMp1707176>
- Janzen, S., Zecevic, A. A., Kloseck, M., & Orange, J. B. (2013). Managing agitation using nonpharmacological interventions for seniors with dementia. *American Journal of Alzheimer's Disease & Other Dementias*, *28*(5), 524–532. <https://doi.org/10.1177/1533317513494444>
- Joyce, N. R., McGuire, T. G., Bartels, S. J., Mitchell, S. L., & Grabowski, D. C. (2018). The Impact of Dementia Special Care Units on Quality of Care: An Instrumental Variables Analysis. *Health services research*, *53*(5), 3657–3679. <https://doi.org/10.1111/1475-6773.12867>
- Kales, H. C., Gitlin, L. N., & Lyketsos, C. G. (2015). Assessment and management of behavioral and psychological symptoms of dementia. *BMJ*, *350*, h369–h369. <https://doi.org/10.1136/bmj.h369>
- Kales, H. C., Maust, D. T., & Gitlin, L. N. (2023). Addressing Dementia-Related Behaviors

- Before, During, and After the Pandemic—Disrupting the Behavior-to-Prescribing Reflex. *Archives of General Psychiatry*, 80(3), 199–201.  
<https://doi.org/10.1001/jamapsychiatry.2022.4435>
- Karlin, B. E., Young, D., & Dash, K. (2017). Empowering the dementia care workforce to manage behavioral symptoms of dementia: Development and training outcomes from the VOICE Dementia Care Program. *Gerontology & Geriatrics Education*, 38(4), 375–391.  
<https://doi.org/10.1080/02701960.2016.1209419>
- Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of qualitative descriptive studies: A systematic review. *Research in Nursing & Health*, 40(1), 23–42.  
<https://doi.org/10.1002/nur.21768>
- King, C., & Voruganti, L. N. P. (2002). What's in a name? The evolution of the nomenclature of antipsychotic drugs. *Journal of Psychiatry & Neuroscience*, 27(3), 168–175.
- Koder, D., Hunt, E., Davison, T., Hunt, G. E., & Davison, T. (2014). Staff's views on managing symptoms of dementia in nursing home residents. *Nursing Older People*, 26(10), 31.  
<https://doi.org/10.7748/nop.26.10.31.e638>
- Kong, E. H., Kim, H., & Kim, H. (2022). Nursing home staff's perceptions of barriers and needs in implementing person-centred care for people living with dementia: A qualitative study. *Journal of Clinical Nursing*, 31(13-14), 1896–1906. <https://doi-org.cyber.usask.ca/10.1111/jocn.15729>
- Kong, E., Choi, H., & Evans, L. K. (2017). Staff perceptions of barriers to physical restraint-reduction in long-term care: a meta-synthesis. *Journal of Clinical Nursing*, 26(1-2), 49–60. <https://doi.org/10.1111/jocn.13418>
- Kosteniuk, J. G., Morgan, D. G., O'Connell, M. E., Dal Bello-Haas, V., & Stewart, N. J. (2016). Focus on dementia care: Continuing education preferences, challenges, and catalysts among rural home care providers. *Educational Gerontology*, 42(9), 608–620.  
<https://doi.org/10.1080/03601277.2016.1205404>
- Lapeyre-Mestre, M. (2016). A review of adverse outcomes associated with psychoactive drug use in nursing home residents with dementia. *Drugs and Aging*, 33(12), 865–888.  
<https://doi.org/10.1007/s40266-016-0414-x>
- Laredo, L., Vargas, E., Blasco, A. J., Aguilar, M. D., Moreno, A., & Portolés, A. (2011). Risk of cerebrovascular accident associated with use of antipsychotics: Population-based case-

- control study. *Journal of the American Geriatrics Society*, 59(7), 1182–1187.  
<https://doi.org/10.1111/j.1532-5415.2011.03479.x>
- Larocque, N., Schotsman, C., Kaasalainen, S., Crawshaw, D., McAiney, C., & Brazil, E. (2014). Using a book chat to improve attitudes and perceptions of long-term care staff about dementia. *Journal of Gerontological Nursing*, 40(5), 46–52.  
<https://doi.org/10.3928/00989134-20140110-02>
- Legere, L. E., McNeill, S., Schindel Martin, L., Acorn, M., & An, D. (2018). Nonpharmacological approaches for behavioural and psychological symptoms of dementia in older adults: A systematic review of reviews. *Journal of Clinical Nursing*, 27(7–8), e1360–e1376. <https://doi.org/10.1111/jocn.14007>
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Sage Publications.
- Liperoti, R., Pedone, C., & Corsonello, A. (2008). Antipsychotics for the treatment of behavioral and psychological symptoms of dementia (BPSD). *Current Neuropharmacology*, 6(2), 117–124. <https://doi.org/10.2174/157015908784533860>
- Livingston, G., Kelly, L., Lewis-Holmes, E., Baio, G., Morris, S., Patel, N., ... Cooper, C. (2014). Non-pharmacological interventions for agitation in dementia: Systematic review of randomised controlled trials. *British Journal of Psychiatry*, 205(6), 436–42.  
<https://doi.org/10.1192/bjp.bp.113.141119>
- Long, E. M. (2017). An innovative approach to managing behavioral and psychological dementia. *Journal for Nurse Practitioners*, 13(7), 475–481.  
<https://doi.org/10.1016/j.nurpra.2017.05.003>
- Lux, K. M., Hutcheson, J. B., & Peden, A. R. (2014). Ending disruptive behavior: Staff nurse recommendations to nurse educators. *Nurse Education in Practice*, 14(1), 37–42.  
<https://doi.org/10.1016/j.nepr.2013.06.014>
- McKenzie, G., Teri, L., Pike, K., LaFazia, D., & van Leynseele, J. (2012). Reactions of assisted living staff to behavioral and psychological symptoms of dementia. *Geriatric Nursing*, 33(2), 96–104. <https://doi.org/10.1016/j.gerinurse.2011.12.004>
- Meyer C, O'Keefe F. Non-pharmacological interventions for people with dementia: A review of reviews. *Dementia (London)*. 2020 Aug;19(6):1927-1954. doi: 10.1177/1471301218813234. Epub 2018 Dec 7. PMID: 30526036.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods*

- sourcebook*. Sage.
- Milne, J., & Oberle, K. (2005). Enhancing rigor in qualitative description. *Journal of Wound, Ostomy and Continence Nursing*, 32(6), 413–420. <https://doi.org/10.1097/00152192-200511000-00014>
- Mitchell, G. (2015). Use of interviews in nursing research. *Nursing Standard*, 29(43), 44–48. <https://doi.org/10.7748/ns.29.43.44.e8905>
- Mitchell, G., & Agnelli, J. (2015). Non-pharmacological approaches to alleviate distress in dementia care. *Nursing Standard (2014+)*, 30(13), 38. <https://doi.org/10.7748/ns.30.13.38.s45>
- Morgan, D. G., Kosteniuk, J. G., O’Connell, M. E., Dal Bello-Haas, V., Stewart, N. J., & Karunanayake, C. (2016). Dementia-related work activities of home care nurses and aides: Frequency, perceived competence, and continuing education priorities. *Educational Gerontology*, 42(2), 120–135. <https://doi.org/10.1080/03601277.2015.1083390>
- Morgan, D. G., Kosteniuk, J. G., Stewart, N. J., O’Connell, M. E., Kirk, A., Crossley, M., ... Innes, A. (2015). Availability and primary health care orientation of dementia-related services in rural Saskatchewan, Canada. *Home Health Care Services Quarterly*, 34(3–4), 137–158. <https://doi.org/10.1080/01621424.2015.1092907>
- Morgan, D. G., Stewart, N. J., D’arcy, K. C., & Werezak, L. J. (2004). Evaluating rural nursing home environments: Dementia special care units versus integrated facilities. *Aging & Mental Health*, 8(3), 256–265. <https://doi.org/10.1080/1360786041000166796>
- Morgan, D., Semchuk, K., Stewart, N., & D’Arcy, C. (2002). Job strain among staff of rural nursing homes. A comparison of nurses, aides, and activity workers. *The Journal of Nursing Administration*, 32(3), 152–161. <https://doi.org/10.1097/00005110-200203000-00008>
- Morse, J. M. (1999). Qualitative generalizability. *Qualitative Health Research*, 9(1), 5–6. <https://doi.org/10.1177/104973299129121622>
- Neergaard, M. A., Olesen, F., Andersen, R. S., & Sondergaard, J. (2009). Qualitative description – the poor cousin of health research? *BMC Medical Research Methodology*, 9(1), 52. <https://doi.org/10.1186/1471-2288-9-52>
- O’Neil, M. E., Freeman, M., Christensen, V., Telerant, R., Addleman, A., & Kansagara, D.

- (2011). *A systematic evidence review of non-pharmacological interventions for behavioral symptoms of dementia*. U.S. Department of Veterans Affairs.  
<https://www.ncbi.nlm.nih.gov/books/NBK54971/>
- O'Donnell, E., Holland, C., & Swarbrick, C. (2021). 159 BARRIERS AND FACILITATORS TO IMPLEMENTING NON-PHARMACOLOGICAL STRATEGIES TO MANAGE RESPONSIVE BEHAVIOURS OF NURSING HOME RESIDENTS WITH DEMENTIA. *Age and Ageing*, 50(Supplement\_3), i1–i8.  
<https://doi.org/10.1093/ageing/afab216.159>
- Ostaszkiwicz, J., Lakhan, P., O'Connell, B., & Hawkins, M. (2015). Ongoing challenges responding to behavioural and psychological symptoms of dementia. *International Nursing Review*, 62(4), 506–516. <https://doi.org/10.1111/inr.12180>
- Peacock, S. C., Hammond-Collins, K., & Forbes, D. A. (2014). The journey with dementia from the perspective of bereaved family caregivers: A qualitative descriptive study. *BMC Nursing*, 13. <https://doi.org/10.1186/s12912-014-0042-x>
- Plante-Lepage, R., Voyer, P., Carmichael, P., & Kröger, E. (2022). A nursing mentoring programme on non-pharmacological interventions against BPSD: Effectiveness and use of antipsychotics—A retrospective, before–after study. *Nursing Open*, 9(1), 181–188.  
<https://doi.org/10.1002/nop2.1042>
- Prion, S., & Adamson, K. A. (2014). Making sense of methods and measurement: Rigor in qualitative research. *Clinical Simulation in Nursing*, 10(2), e107–e108.  
<https://doi.org/10.1016/J.ECNS.2013.05.003>
- Pu, L., & Moyle, W. (2022). Restraint use in residents with dementia living in residential aged care facilities: A scoping review. *Journal of Clinical Nursing*, 31(13-14), 2008–2023.  
<https://doi.org/10.1111/jocn.15487>
- Public Health Agency of Canada. (2019). *What we heard report: Informing a dementia strategy for Canada*. <https://www.canada.ca/en/services/health/publications/diseases-conditions/what-we-heard-report.html>
- Rabins, P. V., & Blass, D. M. (2014). Dementia. *Annals of Internal Medicine*, 161(3), ITC1.  
<https://doi.org/10.7326/0003-4819-161-3-201408050-01002>
- Richards L., & Morse, J. M. (2013). *Readme first for a user's guide to qualitative methods*. (3rd edition) Sage Publications.

- Rockwood, K., Mitnitski, A., Richard, M., Kurth, M., Kesslak, P., & Abushakra, S. (2015). Neuropsychiatric symptom clusters targeted for treatment at earlier versus later stages of dementia. *International Journal of Geriatric Psychiatry*, *30*(4), 357–367.  
<https://doi.org/10.1002/gps.4136>
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health*, *23*(4), 334–340. [https://doi.org/10.1002/1098-240X\(200008\)23:4<334::AID-NUR9>3.0.CO;2-G](https://doi.org/10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G)
- Sandelowski, M. (2010). What’s in a name? Qualitative description revisited. *Research in Nursing & Health*, *33*(1). <https://doi.org/10.1002/nur.20362>
- Saskatchewan Health Authority. (2016). *Program guidelines for special care homes*. Saskatchewan Ministry of Health. <http://publications.gov.sk.ca/documents/13/98649-Program%20Guidelines%202016.pdf>
- Scales, K., Zimmerman, S., & Miller, S. J. (2018). Evidence-based nonpharmacological practices to address behavioral and psychological symptoms of dementia. *The Gerontologist*, *58*(suppl\_1), S88–S102. <https://doi.org/10.1093/geront/gnx167>
- Seitz, D. P., Gill, S. S., Herrmann, N., Brisbin, S., Rapoport, M. J., Rines, J., ... Conn, D. K. (2013). Pharmacological treatments for neuropsychiatric symptoms of dementia in long-term care: A systematic review. *International Psychogeriatrics*, *25*(02), 185–203.  
<https://doi.org/10.1017/S1041610212001627>
- Seitz, D. P., Knuff, A., Prorok, J., Le Clair, K., & Gill, S. S. (2016). Volunteers Adding Life in Dementia: A Case Series of Volunteer Visits to Reduce Behavioral Symptoms of Dementia in Long-Term Care. *Journal of the American Geriatrics Society (JAGS)*, *64*(1), 220–221. <https://doi.org/10.1111/jgs.13904>
- Sibley, L. M., & Weiner, J. P. (2011). An evaluation of access to health care services along the rural-urban continuum in Canada. *BMC Health Services Research*, *11*(20).  
<https://doi.org/10.1186/1472-6963-11-20>
- Simmons, M., Peraza-Smith, G. B., Harris, M., & Scanland, S. (2015). Application of resources for non-pharmacological interventions to improve dementia care in nursing homes. *Geriatric Nursing*, *36*(3), 242–244. <https://doi.org/10.1016/j.gerinurse.2015.04.007>
- Statistics Canada. (2001) <https://www150.statcan.gc.ca/n1/en/pub/21-006-x/21-006-x2001003-eng.pdf?st=xC3u-dJa>



- Steinberg, M., & Lyketsos, C. G. (2012). Atypical antipsychotic use in patients with dementia: Managing safety concerns. *American Journal of Psychiatry*, *169*(9), 900–906. <https://doi.org/10.1176/appi.ajp.2012.12030342>
- Stolen, K. M. S. (2022). Volunteers do the fun stuff – Experiences from volunteer–professional caregiver cooperation in nursing homes. *Scandinavian Journal of Caring Sciences*, *36*(3), 803–814. <https://doi.org/10.1111/scs.13018>
- Sturesson, A., & Ziegert, K. (2014). Prepare the patient for future challenges when facing hemodialysis: Nurses' experiences. *International Journal of Qualitative Studies on Health and Well-Being*, *9*(1), 22952. <https://doi.org/10.3402/qhw.v9.22952>
- Sullivan-Bolyai, S., Bova, C., & Harper, D. (2005). Developing and refining interventions in persons with health disparities: The use of qualitative description. *Nursing Outlook*, *53*(3), 127–133. <https://doi.org/10.1016/j.outlook.2005.03.005>
- Theleritis, C., Siarkos, K., Politis, A. A., Katirtzoglou, E., & Politis, A. (2017, September 29). A systematic review of non-pharmacological treatments for apathy in dementia. *International Journal of Geriatric Psychiatry*, *33*(2), 177–192. <https://doi.org/10.1002/gps.4783>
- Thomson, M. S., Gruneir, A., Lee, M., Baril, J., Field, T. S., Gurwitz, J. H., & Rochon, P. A. (2009). Nursing Time Devoted to Medication Administration in Long-Term Care: Clinical, Safety, and Resource Implications. *Journal of the American Geriatrics Society (JAGS)*, *57*(2), 266–272. <https://doi.org/10.1111/j.1532-5415.2008.02101.x>
- Van der Ploeg, E. S., Mbakile, T., Genovesi, S., & O'Connor, D. W. (2012). The potential of volunteers to implement non-pharmacological interventions to reduce agitation associated with dementia in nursing home residents. *International Psychogeriatrics*, *24*(11), 1790–1797. <https://doi.org/10.1017/S1041610212000798>
- Van Zon, L., Kirby, J. R., & Anderson, N. (2016). The efficacy of a volunteer-administered cognitive stimulation program in long-term care homes. *International Psychogeriatrics*, *28*(6), 995–1004. <https://doi.org/10.1017/S1041610215002392>
- Vernooij-Dassen, M., Vasse, E., Zuidema, S., Cohen-Mansfield, J., & Moyle, W. (2010). Psychosocial interventions for dementia patients in long-term care. *International Psychogeriatrics C International Psychogeriatric Association*, *22*(7), 1121–1128. <https://doi.org/10.1017/S1041610210001365>

- Wagner, L. M., Huijbregts, M., Sokoloff, L. G., Wisniewski, R., Walsh, L., Feldman, S., & Conn, D. K. (2014). Implementation of Mental Health Huddles on Dementia Care Units. *Canadian Journal on Aging*, 33(3), 235–245.  
<https://doi.org/10.1017/S0714980814000166>
- World Health Organization. (2012). *Dementia*.  
[http://www.who.int/mental\\_health/neurology/dementia/en/](http://www.who.int/mental_health/neurology/dementia/en/)
- World Health Organization. (2017). *Dementia*.  
<http://www.who.int/mediacentre/factsheets/fs362/en/>
- World Health Organization. (2023). <https://www.who.int/news-room/fact-sheets/detail/dementia>
- Yang, B. K., Carter, M., & Nelson, W. (2021). Trends in COVID-19 cases, related deaths, and staffing shortage in nursing homes by rural and urban status. *Health Services Research*, 56(S2), 6–6. <https://doi.org/10.1111/1475-6773.13719>

## APPENDICES

### Appendix A

Dear Nurse,

I am a Master of Nursing Student conducting research on the nurse experience using nonpharmacological interventions (NPIs) for persons living with dementia within rural long-term care facilities (LTCF) as part of my master's thesis. I am interested in hearing nurses describe their experiences using nonpharmacological interventions and share their perspective on this subject. I am seeking LPNs, RPNs, and RNs who have been practicing in long term care for at least a year, currently work part time to full time hours in a LTCF and have no restrictions on their professional license.

Current best practice guides nurses to first use an NPI to treat responsive behaviours displayed by persons living with dementia before using medication (e.g., administering music therapy or distraction techniques before giving Haldol or other antipsychotic medication to treat agitation in a resident). While evidence directs us to this practice, little is known if, when or how nurses are using NPIs. Even less is known surrounding nurses' experiences in rural facilities.

By participating in a 45 to 60 minute interview, you will be contributing to much needed research giving the nurse a voice in describing when, how, and if NPIs are being used as interventions for persons living with dementia in our LTCFs. The study findings hope to shed light on current practices; barriers and benefits to using NPIs; and attitude and perception of NPIs in the LTCF.

Your participation will remain anonymous, and no names will be published in the study. Your experience and perspective are very valuable, and I sincerely appreciate your interest to be part of this study. A \$25 gift card will be given to participants as an honorarium for their time. Interviews will take place at a time and location convenient to you. If you would like to participate in this study, or require more information, please contact Virginia Deobald at 1-306-980-9455 or [virginia.deobald@usask.ca](mailto:virginia.deobald@usask.ca).

Your participation is greatly appreciated, and I look forward to hearing from you!

Sincerely,

Virginia Deobald, RN, BSNIN(c)  
Master of Nursing Thesis Student  
College of Nursing  
University of Saskatchewan

College of Nursing University of Saskatchewan



**NURSE (RN, RPN, LPN) PARTICIPANTS NEEDED FOR RESEARCH**

We are looking for volunteers to take part in a study of:

*The nurse experience using nonpharmacological interventions for persons living with dementia in rural long term care facilities in Saskatchewan.*

As a participant in this study, you would be asked to: partake in an interview with a graduate student about your experiences using nonpharmacological interventions for persons living with dementia.

Your participation would involve 1 interview,  
which is approximately 45-60 minutes.

In appreciation for your time, you will receive  
*a \$25 gift card.*

For more information about this study, or to volunteer for this study,  
please contact:

*Virginia Deobald, RN, BSN, Graduate Student*  
*College of Nursing*

at

1-306-966-7375 or

Email: [Virginia.deobald@usask.ca](mailto:Virginia.deobald@usask.ca)

**This study has been reviewed by, and received approval through, the Research Ethics Office, University of Saskatchewan.**



UNIVERSITY OF  
SASKATCHEWAN

**usask.ca**

## **Appendix B**

### **Interview Guide**

Code Number:

Site Number:

Date:

Professional Designation:

Length of time working as an RN, LPN, RPN:

Length of time working in long term care:

Number of beds in facility you work:

#### **Initial Question**

1. Tell me about your experience using non-pharmacological interventions to treat or manage behavioral and psychological symptoms of dementia while working in your long-term care facility.

#### **Probing Questions**

2. What NPIs are most used in your experience?
3. How do you decide for whom and what NPI to use?
4. How do you feel about your own knowledge and skills surrounding NPIs?
5. Do you feel supported in your workplace to use NPIs to treat RB?
6. What are some of the barriers surrounding the use of NPIs for RB in LTC?
7. What are some of the factors that affect your decision to treat with an NPI or PI?
8. In your experience, what could be done to promote the use of NPIs?
9. Is there anything else you'd like to share about your experience using NPIs?

## Appendix C

### Participant Consent Form

**You are invited to participate in a research study entitled:** *The Nurses' Experience using Nonpharmacological Interventions for persons living with dementia in rural long term care facilities in Saskatchewan.*

**Researcher(s):** Virginia Deobald, RN, BSN, Master of Nursing Student. College of Nursing, University of Saskatchewan. 1-306-980-9455. Virginia.deobald@usask

**Supervisor:** Shelley Peacock, PhD. College of Nursing, University of Saskatchewan; 306 966 7375; shelley.peacock@usask.ca

#### **Purpose(s) and Objective(s) of the Research**

- **Purpose:** to describe and explore the nurse experience using nonpharmacological interventions for persons living with dementia in a long term care facility.
- **Objectives:** (1) Discover nurses' knowledge and attitudes towards NPI use; (2) Discover what, when and how NPIs are being used by nurses in LTCF ; and (3) Identify variables within the rural context of LTCF that affect NPI implementation

#### **Procedures**

- We are inviting nurses (RN, RPN, LPN) who currently work in a rural long term care facility and have been working with persons living with dementia to participate in an individual interview that will last approximately 45-60 minutes. With your permission the interview will be audiotaped. The interview location and time will be at a place and time that is convenient to you (e.g., Your home, College of Nursing office, etc.).
- Please feel free to ask any questions regarding the procedures and goals of the study or your role.

Funded by: (1) *RaDAR (Rural Dementia Action Research)* (2) *Canadian Nurses Foundation* (3) *Canadian Centre for Health and Safety in Agriculture*

#### **Potential Risks**

- There are no known or anticipated risks to you by participating in this research.

#### **Potential Benefits**

- While you will not receive direct benefits from your participation, it is hoped that this research will provide more insight into what nurses' experience when using

nonpharmacological interventions and help highlight areas for further study and improvement to promote best practice.

### **Compensation**

- A \$25 gift card for participation.

### **Confidentiality**

The data from this research will be published and presented, however your identity will be kept confidential. Although we will report direct quotations from your interviews, all identifying information will be removed from our report.

### **Storage of Data**

- The interviews will be audiotaped and transcribed by the graduate student into written electronic form. The graduate student will ensure the recorder is kept secure until the interview has been transcribed, at which time the recording will be permanently deleted from the recorder. All the information you share for the study including the audio recording and any written notes will be kept separate from your name and other identifying information. The graduate student's computer will be password protected and information will be stored on the secure U of S network.
- A copy of this consent form will remain in a locked cabinet in Supervisors office at the College of Nursing, Saskatoon campus for six years at which time all paper documents will be securely shredded and any electronic information including transcripts will be permanently deleted. [Describe how the data will be stored, with whom and how long]

### **Right to Withdraw**

- Your participation is voluntary, and you can answer only those questions that you are comfortable with.
- You may withdraw from the research project for any reason, at any time without explanation or penalty of any sort. You may keep the \$25 card regardless of if you withdraw.
- Whether you choose to participate or not will have no effect on your position or how you will be treated.
- Should you wish to withdraw, up until the time that all the interviews have been completed and data analysis has begun, your information can be removed from the study and destroyed at your request.

- After this date, it is possible that some form of research dissemination will have already occurred, and it may not be possible to withdraw your data.

**Follow up**

- To obtain results from the study, please provide your email address where the findings can be sent:

**Questions or Concerns** (see section 12)

- Contact the researcher(s) using the information at the top of page 1;
- This research project has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board (REB# XXX). Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office [ethics.office@usask.ca](mailto:ethics.office@usask.ca) (306) 966-2975.
- Out of town participants may call toll free (888) 966-2975.

**Consent**

Your signature below indicates that you have read and understand the description provided; I have had an opportunity to ask questions and my/our questions have been answered. I consent to participate in the research project. A copy of this Consent Form has been given to me for my records.

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Researcher’s Signature

\_\_\_\_\_  
Date

***A copy of this consent will be left with you, and a copy will be taken by the researcher.***

\_\_\_\_\_  
Researcher’s Signature

\_\_\_\_\_  
Date



## Appendix D

Objective	Category & Sub-Categories	Significant Findings	Representational Quote
Discover nurses' knowledge and attitudes towards NPI use	Sentiment Towards NPIs & PIs <ol style="list-style-type: none"> <li>a. NPIs vs PIs</li> <li>b. Assessment &amp; Med review</li> <li>c. Deciding Factors</li> </ol>	Positive sentiment towards NPIs, with PIs also having their place.	“Nonpharmacological interventions, as I said before, they do work... they're very effective if you have the time” (P2)
Discover what, when, and how NPIs are being used by nurses in LTCF	What & How NPIs are Being Used <ol style="list-style-type: none"> <li>a. Distraction/Redirection</li> <li>b. Personalized Care and Approach</li> <li>c. Trial &amp; Error</li> <li>d. Team Effort</li> <li>e. Restraints &amp; Alarms</li> </ol>	Distraction & Redirection most used NPI.	“A lot of distraction” (P6)
Identify variables within the rural context of LTCF that affect NPI implementation	Barriers to Implementing NPIs <ol style="list-style-type: none"> <li>a. Time &amp; Staffing</li> <li>b. Environment</li> <li>c. Effectiveness of Resources</li> </ol>	Lack of Time and Staff major barriers to using NPIs. Environment often a trigger or barrier for RB	“Sometimes the easiest is to go and [use a PI]. Due to time. You just don't have the time you know? We have 63 residents and 2 nurses. It's hard. It's heavy. I just think more staff... like with the time and everything, maybe there are a lot of preventative ways we could hold off on medication if we had that luxury” (P3)