

LEGROW: EFFECTIVENESS OF GPA ON NURSE DEMENTIA CARE COMPETENCIES

**EVALUATING THE EFFECTIVENESS OF THE GENTLE PERSUASIVE APPROACH
ON DEMENTIA CARE COMPETENCIES FOR NURSES PRACTICING IN LONG-
TERM CARE**

by © Tracy LeGrow

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Abstract

Background: Nurses practicing in LTC are frontline caregivers for those living with dementia, which involves managing responsive behaviors such as aggression. There is a need for nurses to be prepared with the knowledge and competency for effectively caring for people with dementia in LTC. The Gentle Persuasive Approach (GPA) is an innovative interdisciplinary curriculum informed by person-centered care (PCC) designed for front-line staff providing direct care for people living with dementia. This evidence-based education focuses on providing staff the increased knowledge, skills, and confidence to support the person with dementia. **Purpose:** to evaluate the effectiveness of the Gentle Persuasive Approach education workshop on dementia care competencies for nurses practicing in the Long-Term Care (LTC) setting. **Methods:** 1) an integrated literature review, 2) consultation interviews with key stakeholders and 4) an evaluation of the GPA educational workshop for the region and LTC setting it is being implemented in nursing practice. **Results:** Findings from the methods established the need for the evaluation of the GPA education workshop. The literature revealed a knowledge gap exists for LTC nurses relating to the management of challenging and responsive behaviours of people living with dementia due to a reported basic knowledge of dementia care included in professional nurses' entry level education into the profession. The consultations reinforced the importance for GPA education for LTC nurses. The evaluation revealed the positive impact GPA education has on nurse confidence and knowledge for dementia care with valuable insights to strengthen these practices within LTC. **Conclusion:** The findings highlight the significance of GPA education in elevating the standards of dementia care within the LTC practice setting while providing a foundation for continuous improvement in nursing practice.

Key words: *Dementia Care, Long-term Care, Gentle Persuasive Approach, Nurse Knowledge*

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Introduction

The setting for this practicum project is within long term care (LTC) eastern-urban zone of NL Health Services in the province of Newfoundland and Labrador, Canada. Professional nurses practicing in the LTC setting are often faced with increased complex care requirements from residents with dementia and dementia related diagnoses. This practicum project is directed towards the evaluation of the Gentle Persuasive Approach (GPA) educational workshop on dementia care competencies for nurses practicing in LTC. GPA is an innovative interdisciplinary curriculum informed by person-centered care (PCC) and is designed for front-line staff providing direct care for people living with dementia. This evidence-based education is based on a PCC approach and focuses on providing staff the knowledge, skills, and confidence to support the person with dementia (AGE Inc., 2023).

The GPA curriculum was developed by the Advanced Gerontological Educational (AGE Inc.) Inc. in 2004 for the purpose of creating a PCC curriculum for healthcare providers caring for older adults living with dementia. This evidence-based education is grounded in the philosophical underpinnings of humanism, and personhood, recognizing each individual's value and place in the world and is an interactive and practical learning experience for staff working across healthcare organizations (AGE Inc., 2023). This course teaches PCC, compassion and gentle approaches with confidence and respect as a response to a person's responsive behaviors that are associated with symptoms of dementia. The GPA program consists of a combination of small group exercises, reflection, role-play, respectful self-protective and gentle redirection techniques to enhance the effective response for challenging and aggressive behaviors associated with advanced dementia (AGE Inc., 2023). PCC is an approach to providing healthcare or support to someone focusing on their individual needs, preferences, and values. It encompasses

treating each person as their own unique individual with their own story, desires, and ways of doing things (Kim et al., 2017).

Throughout the development of this practicum project, it was determined that an evaluation of the GPA (AGE Inc., 2023) program was needed for the region and LTC setting it is being implemented in nursing practice. The examination of the evidence from the integrated literature review has identified a gap in the knowledge of dementia care among professional nurses. This has been demonstrated in the high-quality systematic review by Evripidou et al. (2018) which included sixteen quantitative, one qualitative and two mixed methods studies for measuring nurses' knowledge and attitudes towards dementia care. Knowledge deficit towards dementia care among nurses was demonstrated in the analysis of the findings with nurses reporting a basic knowledge of dementia care and 91.9% of nurses (n=34) describing a need for additional knowledge on how to manage the behaviors of dementia in a nonpharmacological way. Nurses are frontline caregivers in LTC and there is complexity in managing care needs for those living with dementia, so it is important to address any knowledge gaps of dementia care for LTC nurses. The purpose of this practicum was to evaluate the effectiveness of the GPA on dementia care competencies for nurses practicing in the LTC setting.

Specific Objective(s) for the Practicum

The overall goal of the practicum is to evaluate the effectiveness of the one-day GPA educational workshop on dementia care competencies for professional nurses practicing in the LTC setting.

The key objectives of my practicum are as follows:

1. To evaluate the effectiveness of the Gentle Persuasive Approach education on the dementia care competencies and attitudes towards GPA of professional nurses practicing in the long-term care setting following the one-day education session delivered by

certified coaches/educators employed within the regional health authority (RHA) of Eastern Health, Gentle Persuasive Approaches in Dementia Care.

2. To develop recommendations through consultation and collaboration of stakeholders within the partnering regional health authority following the evaluation of dementia care competencies of nurses practicing in long term care within the eastern urban region of NL Health Services following Gentle Persuasive Approaches education.
3. To demonstrate Advanced Nursing Practice competencies including research, leadership, consultation and collaboration, education, and reflection.

Overview of Methods

Several methods were implemented to assist with the completion of this practicum. An integrated literature review, consultations interviews with key stakeholders and an evaluation of the effectiveness of GPA education on LTC professional nurses' dementia care competencies and confidence were completed. Findings from the literature review revealed a knowledge gap among nurses for the management of the complex behaviours of people living with dementia within the LTC setting. The evidence from the research examined for this literature review demonstrated the importance of nurse's knowledge on the overall well-being of individual's living with dementia and how incorporating evidence-based interventions like GPA educational workshops to nurses practicing in LTC can contribute to increasing dementia care knowledge of nurses while enhancing the well-being for the residents living with dementia in LTC. The findings of the literature review can serve as rationale for the implementation of interventions like GPA education during the orientation for all new nurses hired into LTC as well as refresher education for experienced LTC nurses.

Summary of the Literature Review

An integrated literature review was conducted utilizing the CINAHL, PubMed, Cochrane Library and Google Scholar databases for articles related to nursing care and dementia. English-language, peer-reviewed scholarly articles and journals that studied knowledge of dementia following dementia care education. Both nursing and allied health research were considered. The reference lists of relevant articles were also searched to find additional articles appropriate for this literature review. The research question that guided the search of the literature was: “What is known about a long-term care (LTC) nurse’s knowledge of dementia in relation to caring for people with challenging behaviors from dementia symptoms?”. Key terms used included a combination of the following: “Dementia Care”, “Gentle Persuasive Approaches”, “Nursing Knowledge”. No geographical restrictions were applied, and precedence was given to research articles published within Canada as this literature review is informing a practicum project that was developed for use within Atlantic Canada. Articles were considered from other countries if there was a reasonable amount of generalizability or transferability related to the topic of evaluating dementia care programs in nursing practice in Canada. There was an emphasis to include research that was published within the last ten years to allow for the synthesis of relevant evidence that reflects current nursing practices, however, some research that was older was considered if more recent publications were unavailable and the articles were deemed as remaining relevant to current nursing practices. All design strengths of qualitative, quantitative, and mixed methods were considered with focus on medium and high-quality strong study designs from a quantitative lens preferred. Meta-analysis and systematic reviews were also considered as these synthesize multiple primary studies and are generally considered to provide the strongest evidence-based results with their utilization of strategies to reduce bias and errors

(Gopalakrishnan & Ganeshkumar., 2013). A full copy of the literature review can be found in Appendix A of this report.

The Public Health Agency of Canada (PHAC) Critical Appraisal Toolkit ([CAT], 2014) was used for the analytical studies. Qualitative research was reviewed using criteria from the Joanna Briggs Institute ([JBI], 2020) Checklist for Qualitative Research. Trustworthiness for the qualitative studies were assessed using the requirements by Lincoln and Guba as cited in Polit and Beck (2021). The mixed methods research was analyzed using the Mixed Methods Appraisal Tool (MMAT) Version 2018 (Hong et al., 2018). Literature summary tables were completed for studies implementing educational interventions for nurses, allied health, and families with a focus on improving knowledge in dementia care and a complete copy of the literature summary tables can be found in Appendix B of this report.

Significance of the problem

Nurses who practice in the LTC setting are faced with increasing complex physical care requirements for the residents they are caring for. BPSD are challenging behaviors that can contribute to the complexities of dementia care and effectively managing, understanding, and responding to challenging behaviors of people with dementia is important. Cadieux et al. (2013) conducted a medium quality systematic review on the needs of people with dementia in LTC with a concentration on quantitative studies (n=50) including 14 randomized controlled trials. Managing problematic behaviors in people with dementia (n=31) was reported in most of the included studies. This review estimated that in Canada and the United States (US), over 60% of the people living in LTC have dementia. A medium-quality systematic review by Costello et al. (2019), included a combination of seventeen quantitative and qualitative studies in the synthesis on the prevalence and association of stress and burnout among staff providing care for people

with dementia in LTC. A possible limitation of this systematic review is that the authors did not specifically identify each study design. Eight studies analyzed, reported low to moderate burnout level mean scores in caregivers for people with dementia from the Maslach Burnout Inventory (MBI). The MBI tool is known to be a valid and reliable instrument and was used in this research for measuring levels of burnout of caregivers for people with dementia (Cronbach's alpha = 0.49). Four of the studies included in the systematic review went through an analysis using the complete 22 item MBI (n=598) and found moderate emotional exhaustion levels (mean [M], 18.34, 95%, confidence interval [CI], 14.59-22.10), low depersonalization (6.29, 2.39-10.19), and moderate personal accomplishment (33.29, 20.13-46.46). These results may signify that dementia care may be causing significant strain among caregivers for people with dementia as the complexity of caregiving tasks along with the emotional toll of witnessing people with dementia progressively declining, can lead to burnout and a decrease in the satisfaction of their job as health care professionals.

Mackenzie and Peragine (2003) states that a nurse may spend as much as 40 percent of their time managing dementia related behaviors during a clinical shift. The literature review is inclusive of both nursing and allied health research with a focus towards the importance of dementia care education. The interventions of the studies aimed at or included increasing the knowledge of both professional and family caregivers of people with dementia. The GPA interventional studies included five Canadian studies. Three were mixed methods (Christianson et al., 2021; Crandall et al., 2022; Hung et al., 2018). The qualitative and quantitative data from the mixed methods were appropriately integrated, and the findings clearly described according to the MMAT with a quality score of 100%. Another study was a high quality, strong non-randomized controlled trial (NRCT) by Schindel-Martin et al. (2016) and one inadequate

Interrupted Time Series (ITS) weak design and moderate strength study by Speziale et al. (2009), whose overall appraisal was included according to the Public Health Agency of Canada (PHAC) critical appraisal tool kit (PHAC, 2014). Please see Appendix B for completed literature summary tables for these studies.

Overall, the literature has revealed that basic knowledge of dementia care exists among nurses which may possibly contribute to poor outcomes unless specialized dementia care education is implemented. Deficits for nurses and allied health professionals' knowledge, competency, and strategies for effectively caring for people with dementia was noted (Christianson et al., 2021; Crandall et al., 2022; Hung et al., 2018; Schindel-Martin et al., 2016; Speziale et al., 2009). In the quantitative analysis portion of the study by Crandall et al. (2022), it was reported that a significant increase in dementia care knowledge scores from immediate pre and post intervention following implementation of GPA education among staff ($n=75$), ($M = 4.96$, $SD 1.35$; $M = 5.99$, $SD 1.26$, $t(df) = 6.98$, $p < 0.001$). Results for 6 weeks post GPA were ($n=36$) ($M = 5.94$, $SD 1.45$, $F(df) = 14.78(2,70)$ $p < 0.001$).

Different themes emerged for Christianson et al. (2021), Crandall et al. (2022) and Hung et al. (2018) with the consistent message that people with dementia require a supportive environment as the nature of dementia care requires individualized, compassionate PCC approach. Following the intervention of GPA education, all three studies reported a more comprehensive understanding and need for training for responsive behaviors among people with dementia noting that the behaviors are expressions of unmet needs for people with dementia. These valuable insights put emphasis on the individualized approach to dementia care while also recognizing the importance of dementia care education to help address the challenges within dementia care.

Four systematic reviews related to dementia education were included to inform this integrated literature review. Three of the reviews were critically appraised as per PHAC, (2014), one high quality (Evripidou et al., 2018), and two medium quality (Adewuyi et al., 2021; Mulyani et al., 2021). Rasmussen et al. (2023) was critically appraised according to the JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (JBI, 2020). All four reviews included the Preferred Reporting Items for Systematic Review and Meta-Analyses Protocols (PRISMA-P). In the systematic review by Evripidou et al. (2018), the research topic of the included studies in the review addressed knowledge level and/or attitudes of people with dementia among nurses. It was reported that only 26% of nurses had knowledge of risk factors of Alzheimer's disease including little knowledge of the specific techniques required to manage those resistant to care. Low levels of confidence relating to nursing care for people with dementia among nursing staff was reported that was related directly to the identification and management of dementia ($r = .20, p = .05$). Rasmussen et al. (2023) measured the effectiveness of dementia education with results structured using Kirkpatrick's model specifically developed for the evaluation of educational programs. The reviews concluded there was a positive effect on the knowledge, attitude, and self-efficacy of nursing care staff in all settings and there was consistent or partial improvement of dementia care knowledge reported. Mulyani et al. (2021) measured the impact of dementia training for nurses working in various clinical settings. 20 articles were reviewed, 18 quantitative and 1 qualitative and 1 mixed method. Outcomes for this review were categorized into four domains, cognitive, physical, psychological, and working performance with the cognitive domain represented the knowledge of dementia and was the most measured outcome in the included studies. Various instruments were used to evaluate the outcome of nurses' knowledge before and after dementia education. The lengths of the training

varied but the overall the results were reported as positive in increasing the nurse's knowledge about dementia along with care related factors such as person-centered care.

The systematic review by Adewyi et al. (2021) explored the impact of experiential dementia care learning on knowledge, skills, and attitudes of nursing students. Findings of the research revealed that GPA education and clinical experiences caring for people with dementia had more of an impact on nursing students' skills and attitude. This evidence underscores the importance of including dementia care clinical experiences for nursing students to assist with translating theory into practice. This was noted following results of the face-to-face experiential dementia care learning pre and post-test knowledge scores, $p < .001$, $r = .56$ and competence score, $t = -3.65$, $p = [0.002]$. The receipt of GPA education could help to further develop their critical thinking and help build on their clinical judgement through the implementation of newly learned strategies to manage dementia care. The impact would be two-fold by enhancing the knowledge and communication of nursing students in addition to improving PCC for this vulnerable population.

Theoretical Framework

The theoretical framework to guide the evaluation is based on Kolb's cycle of experiential learning theory (Kolb, 1984). This adult learning theory recognizes that adults learn best through the four roles of the learning process: concrete learning, reflective observation, abstract conceptualization, and active experimentation. As a learner engages in a task or situation it leads to reflective observation where the learner connects to what happened in past experiences or understanding. These reflections are then refined into concepts and then tested during the active experimentation role of the learning process where the learner's skills are sharpened, and new ideas tested. This process helps to bridge the knowledge gap (Long and Gummelt, 2020).

Kolb's experiential learning model focuses on real world experiences through the process of learning while accommodating the diversity of learners helping them to develop professional skills and enhance their critical thinking (Kolb, 1984). Nurses learn through clinical experiences, self-reflection on their observations and experience and then take away the knowledge gained and apply it to their own practice. A nurse already possesses the foundational knowledge of dementia from their professional education. This knowledge coupled with the existing clinical experiences they would bring from receiving the intervention of GPA education, would help to further develop their critical thinking, enhance clinical judgement through new strategies to manage dementia care resulting in improved person-centered care for this vulnerable population.

Summary of Consultations

The purpose of the consultations was to determine key stakeholders' knowledge of dementia care following their experience of the GPA education session as well as identify any knowledge gaps or barriers for nurses who have already completed the one-day GPA education. Additionally, identify possible issues related to implementation and evaluation of the GPA program within the context of the LTC setting for the eastern zone of NL Health Services. Six health care professionals interviewed, all of them were considered experienced nurses (e.g., more than 5 years of experience). The clinical nurse specialist (CNS) was selected as a consultant due to their expertise with GPA as they are responsible for overseeing GPA education for LTC eastern zone as part of their portfolio. As a key member of the implementation team for the GPA education workshops in LTC for NL Health Services, responsibilities included the initial GPA facilitation to selected LTC sites then recruitment and certification of GPA coaches within the RHA. The CNS continues to oversee and help sites coordinate GPA education workshops in addition to supporting over thirty GPA coaches within LTC. The resident care manager (RCM)

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consultant is also a current GPA coach within LTC providing the GPA education workshops to employees who are new to LTC. The Registered Nurse (RN) consultants are all currently working in the LTC setting and actively engaging in providing dementia care, they have previously completed the GPA educational workshop.

The results of the content analysis revealed three key themes which are entitled: *GPA knowledge, barriers, and changes to GPA*. The subthemes that emerged from the analysis were: *Benefits for GPA, Challenges with GPA, Consideration for GPA Implementation and Areas for Improvement with GPA*. Details of these are provided below and are depicted below in Table 1 to provide a visual overview of the data gained during the consultations.

Table 1: Analysis of Consultations

GPA Knowledge	
<i>Benefits for GPA</i>	<ul style="list-style-type: none"> ●Increased Knowledge ●Mentorship and Knowledge Sharing ●Increased Confidence ●Managing Challenging Behaviors ●Enhanced Person-Centered Care
GPA Barriers	
<i>Challenges with GPA</i>	<ul style="list-style-type: none"> ●Organizational Challenges ●Limited Certified GPA Coaches ●Decreased Access in Rural Areas ●Inexperienced GPA Coaches ●Staffing Shortages ●Staffing Needs ●Time Constraints ●Conflicting Responsibilities
<i>Considerations for Improvement for GPA Implementation</i>	<ul style="list-style-type: none"> ●Refresher GPA courses ●Orientation ●GPA for all LTC staff ●Undergraduate education opportunities
Changes to GPA	
<i>Areas of Improvement with GPA</i>	<ul style="list-style-type: none"> ● ●Virtual Access to GPA ●Person-centered bathing

GPA Knowledge

All six of the consultants were asked if they felt that the GPA course was effective to help increase nurses' dementia care knowledge and help provide person-centered care to people with dementia living in the LTC setting. All agreed that GPA was effective in increasing nurses' knowledge of dementia care stating an increase in confidence with knowing what to do in challenging situations practicing the strategies like stop and go to help curb challenging behaviors and focus on person-centered care. One of the experienced Registered Nurses stated that they have utilized their knowledge of the GPA program to help other employees who have not yet had an opportunity to complete the education to help them provide care for residents with dementia.

Barriers

The question surrounding barriers was directed only to the CNS and the RCM and both mentioned organizational challenges as a barrier. The CNS discussed the challenge of finding GPA coaches for smaller rural areas so that the GPA education can be delivered. Another barrier is that existing GPA coaches who have not had an opportunity to facilitate classes due to staffing or human resource issues experience a lapse in their GPA certification. GPA coaches must facilitate a required number of hours within a specified timeframe to keep up with the GPA certification. Another barrier mentioned by the RCM is having to cancel already scheduled GPA classes due to short staffing on units. Many employees commit to the GPA classes but if the units are short staffed and no replacements can be found the GPA education has to be rescheduled as resident and staff safety are priority. The RCM mentioned time constraints and GPA coach shortages as a possible barrier. Many GPA coaches facilitate on an as needed basis, and they also have other responsibilities to the organization so there are times when GPA training may have to

be deferred due to this.

Changes to GPA

All consultants were asked during the interview if there were any aspects of the GPA curriculum that they would like to see changed, all four Registered Nurses stated they would not change anything in the current GPA curriculum but when asked if they would like to share anything further about GPA or dementia care at the end of the interview one of the experienced nurses brought forward they would like to see GPA refresher training and another experienced nurse suggested completing the GPA training during LTC orientation as it was more in depth than what is currently being presented. The remaining two Registered Nurses both stated the importance for all staff working with people with dementia receive the GPA education. Both the CNS and RCM also made recommendations for change. The CNS stated they would like to see a renewal GPA refresher process implemented so that there is more consistency with GPA refresher training for employees who have not taken the workshop in a long time. The CNS also discussed that it may be beneficial to introduce some form of virtual dementia tour (VDT) to LTC employees so they can experience what it is like to live in the shoes of someone with dementia realistically. Finally, both the CNS and one RN stated they would like to see the GPA educational workshop integrated into the nursing undergraduate program or the Licensed Practical Nursing (LPN) diploma program to help increase the knowledge of dementia care. The RCM discussed that they would like to see some sort of interactivity focused on person-centered bathing added to the curriculum as bathing a person who has dementia can be challenging.

The recommended GPA education renewal as per AGE Inc. is to complete a GPA recharge session after one year and again at the two-year mark then complete the full day GPA education session in year three to truly refresh knowledge, skills, and confidence (AGE Inc.,

2023). These findings are in conjunction with the findings sought from the evaluation portion of this practicum to help confirm if the current GPA education workshop is a benefit to nurses practicing in LTC as it will help increase nurse knowledge of dementia care and further ensure person-centered care remains a priority. The data collection from these consultation interviews have been insightful towards the existing GPA education workshop (AGE Inc., 2023) and provided a clear understanding of how the key stakeholders agree there is a knowledge increase from the GPA education workshops and that it is also important to consistently continue refresher training. All participants of the consultation interviews had varying levels of experience and nursing roles within LTC and overall noted the GPA education helped to increase their knowledge of dementia care. The impact of increased knowledge of dementia care can positively impact the overall QOL for those with dementia (Kim et al., 2017). The literature supports that nurses with advanced knowledge of dementia care and PCC can serve as valuable resources for family support as well as other members of the interdisciplinary team within LTC. Please see Appendix C for a complete copy of the consultation report.

Summary of the Evaluation

Throughout the development of this practicum project, it was determined that an evaluation of the GPA program was needed for the region and LTC setting it is being implemented in nursing practice. The examination of the evidence identified a gap in the knowledge of dementia care among professional nurses (Evrpidou et al., 2018). The inclusion criteria for this evaluation were sixteen professionally licensed nurses currently practicing within the LTC setting within NL Health Services of Newfoundland and Labrador in Atlantic Canada. Registered Nurses (RNs) as well as Licensed Practical Nurses (LPNs) were both included who provide dementia care to residents within their LTC practice setting. Both novice (e.g., less than

5 years' experience) and experienced (e.g., more than 5 years' experience) nurses were part of the inclusion criteria. As this practicum project was a part of a quality improvement initiative, ethical approval was not required but also limited the data we can collect from participants such as classification for registration or the breakdown of participants who are RNs or LPNs.

Data Collection

The specific objectives were to evaluate LTC nurses' dementia care knowledge competencies and attitudes towards the GPA education program. This would be accomplished with nurses completing the 8-item multiple choice questionnaire before and after the GPA education session. Once the GPA quantitative data was collected pre- and post- GPA education, analysis of the GPA questionnaire knowledge scores took place in the form of mean percentages overall and for each participant. This method was repeated to extract each individual percentages to provide a comparison of scores between participants. Percentage scores for the lowest and highest were reported to provide a participant percentage range and are outlined in the findings below. Nurses who participated were enrolled in the GPA educational workshop through the practicing health authority, NL Health Services. Participants were informed that their participation in the questionnaire was voluntary, anonymous with no negative repercussions if they chose not to participate. Consent was implied by their willingness to participate in this evaluation process.

The data was collected from the participants in the form of two versions of eight multiple choice question surveys (MCQ) that were administered both immediate pre and post GPA education to each participant with a time limit of approximately 15 minutes to complete. The developers, AGE Inc., created this questionnaire for their own research as a measurement of

participant dementia knowledge following their GPA education and have utilized it for a number of years. Permission was granted by AGE Inc. to utilize the two versions of the questionnaire for the purpose of the practicum project. The face validity of the questionnaire has provided preliminary indications that the questionnaire assessment tool appears to measure dementia care knowledge and a more comprehensive evaluation of the tool's content validity will be set by the authors in the future (Age Inc., 2023). The two versions of the questionnaire alternated between participants to minimize the potential for bias or contamination of responses that can occur when participants share information or influence each other's answers. Three qualitative questions were also used to gather subjective data exploring the participants attitudes towards the effectiveness of the GPA education. To ensure confidentiality of the participants, there were no personal identifiers collected and surveys were submitted anonymously. A complete copy of the evaluation can be found in Appendix E at the end of this report.

Data Analysis

For this evaluation both quantitative and qualitative analysis was used to obtain the data on dementia care knowledge of nurses as well as nurses' attitudes towards the effectiveness of the GPA education. As per Polit and Beck (2021), quantitative analysis is foundational in empirical research offering a systematic and rigorous approach to exploring relationships, patterns and trends through a structured framework using numerical data. Using the quantitative 8-item GPA questionnaire to measure dementia care knowledge among nurses, the findings contribute to the credibility of the results. Once the GPA multiple choice questionnaires were collected both pre- and post- GPA education, the data was then analyzed by summing up the scores for each of the eight multiple choice questions and then converting the total score to a

mean percentage for each of the sixteen participants. This method was repeated to extract every individual percentage for pre-test and post-test questionnaires. All pre-test percentages were then calculated for an overall average and the same method conducted for the post-test questionnaires and the results recorded. Percentage scores for the lowest and highest were reported to provide a percentage range for each pre and post questionnaire.

The qualitative component offers an exploration of participants experiences, perceptions and attitudes towards a research topic capturing diverse viewpoints to contribute to the richness of the data as reported in Polit and Beck (2021). For nurse attitudes towards the effectiveness of the GPA education, three questions were analyzed using content analysis to identify and extract key themes. The statements were read and reread carefully to extract commonalities and trends among participants statements. This qualitative research method identifies, analyzes, and reports patterns or themes within text (Polit and Beck, 2021). The content analysis method allows insight into research questions through the organization and interpretation of data to find underlying meanings (Bengtsson, 2016). Themes were defined from the analysis of the recurring ideas within the data. This process allowed me to explore and interpret the individual perspectives of the nurses and their personal experience with the GPA course. Once the themes were finalized, they were then compared to the integrated literature review for the purpose of supporting the evaluation of the GPA education on dementia care competencies for nurses practicing in LTC.

Results of Quantitative Analysis

Analysis of the evaluation from the 8-item GPA questionnaire measuring nurse knowledge of dementia care competencies among nurses practicing in LTC revealed that nurses demonstrated a low to moderate level of dementia care knowledge overall with the pre-GPA

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scores noting a total mean average of 55.5% from the 16 participants. The range of the pre-GPA scores of participants measured from 25% to 87.5%. The overall mean average of the post-GPA test results was higher at 74.2% which was an 18.7% increase in overall scores from pre-GPA. The lowest post-GPA participant score was 50% and the highest individual score was 100%. The increase in overall scores from pre to post questionnaire results show an improvement in participants knowledge and confidence on the understanding of dementia care following GPA education. See table 1 below for more detailed results.

Table 1: Pre and Post Questionnaire Scores for Dementia Care Competencies

Pre- GPA (out of 8)	Percentage Score	Post -GPA (out of 8)	Percentage Score
5	62.5	6	75
6	75	4	50
5	62.5	5	62.5
2	25	5	62.5
5	62.5	8	100
4	50	6	75
3	37.5	5	62.5
4	50	6	75
5	62.5	5	62.5
2	25	8	100
4	50	7	87.5
4	50	8	100
4	50	7	87.5
5	62.5	6	75
6	75	4	50
7	87.5	5	62.5
Mean	Mean %	Mean	Mean %
4.4375	55.5%	5.9375	74.2%

Results of Qualitative Analysis

Content analysis from the evaluation revealed three key themes which are outlined in more detail below and are titled: *GPA Influence*, *GPA Knowledge*, and *GPA Improvement Areas*.

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The subthemes that emerged from the analysis were: *GPA influence on Nurse Confidence and Knowledge, Dementia Care Knowledge, and Consideration for Changes to GPA*. Detailed results are provided below in Table 2 to provide a visual overview of the data gained during the evaluations.

Table 2: Content Analysis Results for GPA

GPA Influence	Key Themes
<i>GPA Influence on Nurse Confidence and Knowledge</i>	<ul style="list-style-type: none"> • Increased Knowledge • Increased Confidence • Mentorship and Knowledge Sharing • Greater Understanding of Dementia • Positive Impact for Nurses and Residents
Dementia Care Knowledge	Key Themes
<i>Nurse Dementia Care Knowledge</i>	<ul style="list-style-type: none"> • Increased Knowledge for Challenging and Responsive Behaviors • Increased Knowledge for Non-pharmacological Dementia Care Techniques • Enhanced Person-Centered Care
GPA Improvement Areas	Key Themes
<i>Consideration for changes to GPA</i>	<ul style="list-style-type: none"> • Increased GPA Refresher Training • GPA Education for All LTC Staff • GPA Education for LTC Resident Families

GPA Influence

All participants were asked how the GPA course had influenced their confidence and knowledge for providing dementia care within their practice setting. 75% of participants (n = 12) provided responses to this question in the evaluation that align with increased knowledge and confidence of dementia care. Responses included an increase in participant knowledge and confidence with application of the GPA dementia care strategies within the practice setting. Participants mentioned how the practical skills outlined in the education will be a benefit as nursing staff will be equipped to provide person-centered dementia care in a non-

pharmacological way to LTC residents.

Dementia Care Knowledge

The second open-ended evaluation question focused on whether participants knowledge of dementia care increased specific to successfully managing challenging and responsive behaviors. 12 out of the 16 participants agreed that the knowledge of dementia care increased relating to the successful management of challenging and responsive behaviors from residents with dementia. Participants responses included learning how to de-escalate responsive behaviors and safely managing the behaviors of residents with dementia. Two of those participants mentioned that this education refreshed their knowledge of dementia care, and two participants left this question unanswered.

GPA Improvement Areas

Each nurse who participated in the evaluation was asked if they would change or add anything to the existing GPA education session to help strengthen dementia care within their practice setting. Three (n =3) of nurse participants did not reply to the question and (n = 5) of nurse participants responded that no changes or additions were needed. One (n = 1) participant replied to this question that they were unsure. The remaining participants, (n = 7), replied that the GPA education was adequate, presented well and the hands-on techniques helped to solidify the learning for the practice setting. One participant in the evaluation put forward multiple recommendations, suggesting GPA education for all staff within LTC in addition to offering the same or similar dementia care education to any interested resident families. The same participant also put forward the recommendation for more frequent GPA refresher training so staff could revisit the best practice evidence-based training.

The data collection from these evaluations have been insightful towards the existing GPA education. Overall, the findings from this evaluation have underscored the positive impact GPA education has had on nurse confidence and knowledge in dementia care with valuable insights to strengthen dementia care practices within LTC within eastern Newfoundland.

Advanced Nursing Practice Competencies

The Pan-Canadian Framework (Canadian Nurses Association [CNA], 2019) outline multiple advanced nursing practice (ANP) competencies that are expected to be demonstrated as an advanced practice nurse across many domains of nursing. These competencies consist of specific knowledge, skills, judgement, and personal attributes nurses require for safe, ethical practice (CNA, 2019). This practicum project has given me the opportunity to meet the following ANP competencies: research, leadership, education and consultation and collaboration.

Research Competencies

The act of research as an ANP involves applying and understanding advanced research concepts including staying up to date on current research methodologies (CNA, 2019). Nurses can achieve this through identifying, appraising, and applying research, practice guidelines and current best practice. During this practicum project I have had the opportunity to demonstrate the ability to assess the evidence-practice gap through the integrated literature review and analysis of data from the consultations and evaluations. The data I collected was protected and analyzed to further develop my practicum project.

Leadership Competencies

Leadership is a core component of ANP that is achieved through self-awareness and participation in nursing professional development while showing the character and behavior that

aligns with the ethical values of ANP (CNA, 2019). I have demonstrated and promoted this competency via my nursing and advanced practice nursing roles through my academia pursuits and through my professional practice with my peers. I am contributing to my organizations vision for health care and working towards approaches to reach this vision with the help of my practicum project.

Consultation and Collaboration Competencies

Consultation and collaboration have been met throughout this practicum project through my engagement with my faculty advisor and the consultations and collaborations with identified key stakeholders that are from both an organizational and national level. This competency is defined as communication with other members of the healthcare team and within the community promoting collaboration within the organizational level and beyond (CNA, 2019). I have built professional partnerships through this project that can help contribute to quality improvement within healthcare. I have demonstrated the ability to communicate in a respectful and skillful manner maintaining professional relationships.

Education Competencies

Education competencies are demonstrated through ANP with a commitment to professional growth and learning (CNA, 2019). This was achieved throughout this practicum project through the “dissemination of new knowledge through formal and informal channels, including presentation and publication at the municipal, regional, national, and international levels” (p. 31). My methods and findings and recommendations to Memorial University of Newfoundland and Labrador (MUN) Faculty of Nursing in addition to colleagues within my organization and peers within my program.

Reflection Competencies

Reflection is a competency that has been achieved throughout this practicum through my accountability which has been the cornerstone of my approach, guiding my actions and decisions. I have consistently taken responsibility for the tasks assigned and ensured clear communication with my practicum supervisor. Through this hands-on experience, I have refined my clinical skills and critical thinking. I have actively sought opportunities to build professional partnerships. My theoretical knowledge has grown throughout this journey and my advanced nursing practice competencies are increasingly solidified. This journey of growth and development has further enhanced my future practice in the nursing profession.

Next Steps

Dissemination Plan

Following the completion of this practicum project, I will collaborate with colleagues and leadership within my practice setting to discuss the findings and implications of the findings from my practicum report. I will highlight the positive impact of GPA education on nurse confidence, knowledge, and practical skills in dementia care and collaborate potential strategies for integrating the findings into LTC nursing orientation and continuing education. Through knowledge translation initiatives, such as workshops, education days and educational materials, increasing the knowledge around dementia care competencies for LTC nurses can effectively be translated from practical initiatives like GPA. This collaborative approach can help enhance the quality of dementia care within NL Health Services and continue to promote a culture of evidence-based practice and continuous learning among professional nurses. In addition to my practicum report, I have drafted a manuscript for consideration for publication to *Nursing2024*

which is a reputable peer-reviewed nursing journal. I chose this journal as it is a publication that provides a wide range of evidence-based information for professional nurses that includes both clinical and professional journal content. Publication of an article in a peer-reviewed journal will help to expand the findings of my practicum report to a wider audience contributing to the broader knowledge base in nursing. If published, the article will serve as a valuable resource for other nurses practicing in Atlantic Canada helping to inform their clinical decision making and contributing to improving care for people with dementia in the clinical setting by translating research into practice. A copy of the completed manuscript is located under Appendix F at the end of this report.

Conclusion

The escalating incidence and prevalence of dementia pose a significant challenge considering our aging global population. With longevity on the rise, the number of individual's affected by various forms of dementia is increasing. Nurses hold a pivotal role in dementia care, necessitating specialized knowledge and attention in this field. The research reviewed in this practicum emphasizes the impact of nurses' knowledge on the well-being of individual's living with dementia within our healthcare system. Incorporating evidence-based interventions like GPA educational workshops for nurses in LTC can enhance dementia care knowledge and improve PCC. This approach closes the gap in understanding and addressing dementia care needs among LTC nurses. The research has shown that enhanced knowledge in dementia care has a positive effect on the quality of life and care for people with dementia (Kim et al., 2017). This practicum project has highlighted the significance of GPA education in elevating the standards of dementia care within the LTC practice setting while providing a foundation for continuous improvement in nursing practice. This enhanced knowledge positions professional

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nurses as valuable resources for supporting family and for interdisciplinary collaboration within LTC facilities.

References

- Adewuyi, M., Morales, K., & Lindsey, A. (2022). Impact of experiential dementia care learning on knowledge, skills and attitudes of nursing students: A systematic literature review. *Nurse Education in Practice*, 62. <https://doi.org/10.1016/j.nepr.2022.103351>
- Advanced Gerontological Education. (2023, November 24). *Enhancing the care of older adults by learning together*. <https://ageinc.ca>
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus open*, 2, 8-14. <https://doi.org/10.1016/j.npls.2016.01.001>
- Canadian Nurses Association (2019). *Advanced practice nursing: A Pan-Canadian Framework*. Ottawa, ON: Author. <https://www.cna-aiic.ca/-/media/cna/page-content-pdf-en/apn-a-pan-canadian-framework.pdf>
- Christianson, T. M., Hoot, T. J., McLelland, V., & Morris, K. (2021). “All behavior has meaning”: *A qualitative exploration of dementia training of healthcare assistant students*. *Journal of Nursing Education and Practice*, 11(2). https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=All+Behaviour+has+meaning%3A+A+qualitative+exploration+of+dementia+training+of+healthcare+assistant+students&btnG=
- Crandall, J., Coatsworth-Puspoky, R., Schlegel, K., Beker, L., McLelland, V. C., & Martin, L. S. (2022). Implementing Gentle Persuasive Approaches dementia education for staff on inpatient medicine units: *A program evaluation*. *Dementia (14713012)*, 21(4), 1173–1199. <https://doi.org/10.1177/14713012211070148>

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- Evripidou, M., Charalambous, A., Middleton, N., & Papastavrou, E. (2019). Nurses' knowledge and attitudes about dementia care: *Systematic literature review. Perspectives in Psychiatric Care*, 55(1), 48–60. <https://doi-org.qe2a-proxy.mun.ca/10.1111/ppc.12291>
- Hong, Q.N., Pluye, P., Fabregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M-P., Griffiths, F., Nicolau, B., O’Cathain, A., Rousseau, M-C., & Vedel, I. (2018). *Mixed methods appraisal tool (MMAT) version 2018: User guide*. McGill: Department of Family Medicine.
http://mixedmethodsappraisaltoolpublic.pbworks.com/w/file/fetch/146002140/MMAT_2018_criteria-manual_2018-08-08c.pdf
- Hung, L., Son, C., & Hung, R. (2019). The experience of hospital staff in applying the Gentle Persuasive Approaches to dementia care. *Journal of Psychiatric and Mental Health Nursing.*, 26(1/2), 19–28. <https://doi.org/10.1111/jpm.12504>
- Kim, S. K., & Park, M. (2017). Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis. *Clinical Interventions in Aging.*, 12, 381–397.
<https://doi.org/10.2147/CIA.S117637>
- Kolb, D. A. (1984). *Experiential learning: experience as the source of learning and development*. Prentice-Hall.
- Long, E. M., & Gummelt, G. (2020). Experiential Service Learning: Building skills and sensitivity with Kolb’s learning theory. *Gerontology & Geriatrics Education.*, 41(2), 219–232. <https://doi.org/10.1080/02701960.2019.1673386>

Mackenzie, C. S., & Peragine, G. (2003). Measuring and enhancing self-efficacy among professional caregivers of individuals with dementia. *American Journal of Alzheimer's Disease and Other Dementias.*, 18(5), 291–299.

<https://doi.org/10.1177/153331750301800507>

Mulyani, S., Probosuseno, P., & Nurjannah, I. (2021). The Effect of Training on Dementia Care among Nurses: A Systematic Review. *Open Access Macedonian Journal of Medical Sciences*, 9(F), 145–152. <https://doi.org/10.3889/oamjms.2021.5969>

Public Health Agency of Canada. (2014). *Infection prevention and control guidelines: critical appraisal tool kit*. Retrieved from

https://publications.gc.ca/collections/collection_2014/aspc-phac/HP40-119-2014-eng.pdf

June10, 2023

Rasmussen, B. M., Andersen, P. T., Waldorff, F. B., & Berg-Beckhoff, G. (2023). Effectiveness of dementia education for professional care staff and factors influencing staff-related outcomes: An overview of systematic reviews. *International Journal of Nursing Studies*, 104469. <https://www.sciencedirect.com/science/article/pii/S0020748923000342>

Schindel Martin, L., Gillies, L., Coker, E., Pizzacalla, A., Montemuro, M., Suva, G., & McLelland, V. (2016). An education intervention to enhance staff self-efficacy to provide dementia care in an acute care hospital in canada: *A Nonrandomized Controlled Study*. *American Journal of Alzheimer's Disease and Other Dementias.*, 31(8), 664–677.

<https://doi.org/10.1177/1533317516668574>

Speziale, J., Black, E., Coatsworth-Puspoky, R., Ross, T., & O'Regan, T. (2009). Moving forward: Evaluating a curriculum for managing responsive behaviors in a geriatric psychiatry inpatient population. *The Gerontologist*, 49(4), 570-576.

<https://academic.oup.com/gerontologist/article/49/4/570/680815>

Appendix A: Literature Review Report

Evaluating the Effectiveness of the Gentle Persuasive Approach on Dementia Care
Competencies for Nurses Practicing in Long-Term Care:
An Integrated Literature Review

Imagine a world where the lifetime of memories that you cherished faded from your mind and your loved ones become complete strangers distorting your reality. This is the reality for people with dementia. Dementia has been defined by the Diagnostic and Statistical Manual of Mental Disorders-IV-Text Revision (DSM-IV-TR) as an acquired condition marked by impairments in memory and one other cognitive domain that cause significant limitations in social and/or occupational functioning (American Psychiatric Association [APA], 1994). The symptoms of dementia may include: a decline in memory, language, and judgment that may include changes in mood and/or behavior. These problematic symptoms are generally progressive and can include difficulty performing activities of daily living. The need for assistance with daily activities and care become more pronounced as cognitive function declines for people with dementia and dementia related diagnosis (Fiest et al., 2016). In the high-quality systematic review by Fiest et al. (2016) several forms of dementia are described with the most common ones identified as Alzheimer's disease, vascular dementia, Lewy body disease and frontotemporal dementia.

Approximately one-third of seniors under the age of 80 that have been diagnosed with dementia are living in long-term care facilities (LTCFs). This statistic increases to 42% for those people who are 80 years and above in Canada (Canadian Institute for Health Information [CIHI], 2023). In 2020 there were approximately 596,600 Canadians living with dementia with an estimate of over 955,900 Canadians anticipated to be living with this disease by 2030 (CIHI, 2023). With the rising number of seniors diagnosed with dementia in Canada, there is a growing reliance on external support, whether from family members, personal support workers, and/or nurses. This dependence extends to admission to LTCFs, ensuring that individuals with dementia can access the essential support they need. The provision of care may inadvertently escalate due

to dementia and the challenging behaviors that can emerge upon admission due to unexpected and jarring changes in routines. As the symptoms of dementia affect memory, communication, and mood, activities of daily living are often impacted resulting in associated behavioral and psychological symptoms of dementia (BPSD). The manifestation of BPSD symptoms often emerge from fear and frustration experienced by individuals with dementia. These behaviors sometimes include violence and aggression that are sometimes directed towards nursing staff. Possible contributing factors for these behaviors may include an inappropriate response from nursing staff due to a knowledge deficit for gentle persuasive approaches (GPA) with dementia care and will be explored in this paper.

The purpose of this paper was to conduct an integrated literature review that explored important aspects of dementia care in LTC. The identified knowledge gap in dementia care may be ameliorated by effective dementia care education that emphasizes gentle GPA which has been reported in the moderate quality systematic review by Rasmussen et al (2023). The overall strength of this literature review demonstrates a range from moderate to strong highlighting the significance of GPA education as a valuable intervention for dementia care in the LTC setting to enhance nurses' knowledge of dementia care, improve communication and help decrease violent and aggressive behaviours.

Search Methods

A comprehensive literature search was conducted using CINAHL, PubMed, Cochrane Library and Google Scholar databases for articles related to nursing care and dementia. English-language, peer-reviewed scholarly articles and journals that studied knowledge of dementia following dementia care education. Both nursing and allied health research were considered. The reference lists of relevant articles were also searched to find additional articles appropriate for

this literature review. The research question that guided the search of the literature was: “What is known about a long-term care (LTC) nurse’s knowledge of dementia in relation to caring for people with challenging behaviors from dementia symptoms?”. Key terms used included a combination of the following: “Dementia”, “Gentle Persuasive Approaches”, “Education”, “Nursing” and “Knowledge”. No geographical restrictions were applied, and precedence was given to research articles published within Canada as this literature review is informing a practicum project that was developed for use within Atlantic Canada. Articles were considered from other countries if there was a reasonable amount of generalizability or transferability related to the topic of evaluating dementia care programs in nursing practice in Canada. There was an emphasis to include research that was published within the last ten years to allow for the synthesis of relevant evidence that reflects current nursing practices, however, some research that was older was considered if more recent publications were unavailable and the articles were deemed as remaining relevant to current nursing practices. All design strengths of qualitative, quantitative, and mixed methods were considered with focus on medium and high-quality strong study designs from a quantitative lens preferred. Meta-analysis and systematic reviews were also considered as these synthesize multiple primary studies and are generally considered to provide the strongest evidence-based results with their utilization of strategies to reduce bias and errors (Gopalakrishnan & Ganeshkumar., 2013).

The Public Health Agency of Canada (PHAC) Critical Appraisal Toolkit ([CAT], 2014) was used for the analytical studies. Qualitative research was reviewed using criteria from the Joanna Briggs Institute ([JBI], 2020) Checklist for Qualitative Research. Trustworthiness for the qualitative studies were assessed using the requirements by Lincoln and Guba as cited in Polit and Beck (2021). The mixed methods research was analyzed using the Mixed Methods Appraisal

Tool (MMAT) Version 2018 (Hong et al., 2018). Literature summary tables have been completed for studies implementing educational interventions for nurses, allied health, and families with a focus on improving knowledge in dementia care (**Christianson** et al., 2021; **Crandall** et al., 2022; **Hung** et al., 2018; **Schindel-Martin** et al., 2016; **Speziale** et al., 2009). The names of these authors are in bold text the first time they are referenced in each subsection of the literature review and are available in detail in Appendix A.

Significance of the problem

Nurses who practice in the LTC setting are faced with increasing complex physical care requirements for the residents they are caring for. BPSD are challenging behaviors that can contribute to the complexities of dementia care and effectively managing, understanding, and responding to challenging behaviors of people with dementia is important. Cadieux et al. (2013) conducted a medium quality systematic review on the needs of people with dementia in LTC with a concentration on quantitative studies (n=50) including 14 randomized controlled trials. Managing problematic behaviors in people with dementia (n=31) was reported in the majority of included studies. This review estimated that in Canada and the United States (US), over 60% of the people living in LTC have dementia. A medium-quality systematic review by Costello et al. (2019), included a combination of seventeen quantitative and qualitative studies in the synthesis on the prevalence and association of stress and burnout among staff providing care for people with dementia in LTC. A possible limitation of this systematic review is that the authors did not specifically identify each study design. Eight studies analyzed, reported low to moderate burnout level mean scores in caregivers for people with dementia from the Maslach Burnout Inventory (MBI). The MBI tool is known to be a valid and reliable instrument and was used in this research for measuring levels of burnout of caregivers for people with dementia (Cronbach's alpha =

0.49). Four of the studies included in the systematic review went through an analysis using the complete 22 item MBI (n=598) and found moderate emotional exhaustion levels (mean [M], 18.34, 95%, confidence interval [CI], 14.59-22.10), low depersonalization (6.29, 2.39-10.19), and moderate personal accomplishment (33.29, 20.13-46.46). These results may signify that dementia care may be causing significant strain among caregivers for people with dementia as the complexity of caregiving tasks along with the emotional toll of witnessing people with dementia progressively declining, can lead to burnout and a decrease in the satisfaction of their job as health care professionals. Most of the studies (n=14), identified respondents via probability sampling and the remaining studies approached the entire population. Validity criteria scores reported (n=8) studies fulfilled six or more of the criteria with a higher quality rating. The results of this systematic review demonstrated that nurses may be negatively impacted from providing care for people with dementia. Mackenzie and Peragine (2003) states that a nurse may spend as much as 40 percent of their time managing dementia related behaviors during a clinical shift which increases the risk of burnout. Further details on how to minimize and mitigate the negative consequences of this are detailed below in the section of this paper that explores interventions for dementia care.

Incidence and Prevalence

Dementia has been recognized as a global health concern in the aging population. Its prevalence is increasing worldwide according to the high-quality systematic review of Mulyani et al. (2021) measuring the effect of training on dementia care among nurses, reporting 47 million cases of people with dementia globally and 131 million cases of dementia predicted worldwide by the year 2050. In the high-quality systematic review by Cao et al. (2020), the prevalence of dementia globally was explored. They reported a pooled prevalence for dementia

and Alzheimer's disease for people over the age of fifty was 697 (CI 95%: 546-864) per 10 000 persons, 324 (CI 95%: 228-460) per 10 000 persons, and 116 (CI 95%: 86-157) per 10 000 persons respectively with prevalence higher in Europe and North America. Every five years, the number of people diagnosed with dementia approximately doubles (Cao et al., 2020). The prevalence of dementia impacts Canadians, as reported in the results of the pooled point and annual period prevalence estimates of dementia in Canada by Fiest et al. (2016). The results indicate that approximately 48.62 (CI 95%: 41.98-56.32) and 69.07 (CI 95%: 52.36-91.11) per 1000 people in Canada suffer from dementia. Respectively when looking at incidence rates in Canada, the pooled rate was 17.18 (CI 95%: 13.90-21.23) per 1000 persons and the annual incidence proportion was reported at 52.85 (CI 95%: 33.08-84.42) per 1000 persons (Fiest et al., 2016).

Impacts of Dementia

Financial

LTC is considered one of the largest financial absorbers of dementia care as the overall general costs for caring for people with dementia is estimated to be five and a half times greater compared to people without dementia. When examining dementia care costs globally, a medium-quality systematic review by Wimo et al. (2022) reported that the estimated cost of dementia for 2019 cost \$1.3 trillion United States Dollar (USD). The global status report on the public health response to dementia (World Health Organization [WHO], 2021) also estimates the global cost of dementia to reach US \$1.7 trillion by 2030. As a public healthcare priority recognized since 2012, dementia care is costly for Canadian taxpayers, as it is estimated that the total annual healthcare costs for Canadians with dementia will reach \$16.6 billion (CIHI, 2023). This substantial impact for the Canadian healthcare system is anticipated to triple by the year 2050

(Fiest et al., 2016). The literature demonstrates the severity of the financial burden of dementia and highlights the need for the implementation of care practices that are cost-effective and promote the quality of life for those suffering from this disease.

Dementia Care

In addition to the individual impacts of cognitive and functional decline and impairment to a person's life living with dementia, there is the impact to providing care to people with dementia. Family or relatives with dementia may be required to act as caregivers. This may include caregiving duties such as assisting with general activities of daily living, managing their household, finances, and medical well-being. Engaging in the role of caregiver can have a significant impact on families, often leading to the burden of having to admit the person with dementia into LTC. For example, the cross-sectional study by Bramble et al. (2009) despite its weak design and medium quality, explored caregivers experience of placing a loved one with dementia into LTC while the medium quality systematic review by Lindeza et al. (2020) explored the broader impact of dementia on informal care from the perception of family caregivers. These impacts then extend to nursing staff once loved ones have been admitted into the LTC setting. Staff are faced with the challenges of emotional, physical and communication aspects of dementia care. Caring for individuals with dementia requires specialized knowledge and skills to manage the unique needs and behaviours associated with dementia. If staff do not possess the specific skills for dementia care, it may impact the level of care individuals with dementia receive in addition to a possibility of burnout among nursing staff.

Contributing Factors

Knowledge Deficit

The examination of the evidence has identified a gap in the knowledge of dementia care among professional nurses. This has been demonstrated in the high-quality systematic review by Evripidou et al. (2018) consisting mostly of quantitative studies (n=16), that measured nurses' knowledge and attitudes towards dementia care. Knowledge deficit from lack of education, experience, and unit acuity towards dementia care among nurses was demonstrated in the analysis of the findings with nurses reporting a basic knowledge of dementia care. 91.9% of nurses (n=34) described a need for additional nonpharmacological knowledge on how to manage the behaviors of dementia. Knowledge deficit for dementia can result in a lack of effective communication and an inability to foster dementia specific activities along with implementing strategies to manage those who might be resistant to care (Evripidou et al., 2018). Nurses are tasked with meeting the demands for the complexity of providing safe and effective care to people with dementia, so it is essential to address any knowledge deficits of dementia care for LTC nurses.

Negative Nursing Attitudes

The high-quality systematic literature review by Evripidou et al. (2018) provides evidence to support the impact of dementia care education on nurses' perceptions, knowledge, and attitudes from their analysis. Their findings demonstrate a change in nurse's attitudes before, during and after the education intervention. Prior to receiving the intervention, nurses attitude score was relatively low ($M = 4.21$, $SD=0.29$, $M=20.28$, $SD = 6.67$) which could indicate negative bias towards caring for people with dementia. However, post-training at four months ($M = 4.57$, $SD=0.21$, $p<.001$) and then six months ($M = 28.83$, $SD = 5.34$, $F(1, 61) = 5.07$, $p<.05$) revealed significant improvements, indicating a positive shift in attitudes that were sustained over time. The connection between nurses' positive attitude, increased knowledge and

better patient outcomes helps to reinforce the important role education plays on influencing caregiver's mindset and overall quality of care for people with dementia. The findings from this systematic review highlights the potential of dementia care education on improving dementia care practices and the overall well-being of people with dementia.

Nurse Self-Efficacy

Self-efficacy, rooted in Bandura's social cognitive theory, plays an important role in the choices, perseverance and efforts of nurses providing care, particularly for individuals with dementia (Chenoweth et al., 2016; Mackenzie & Peragine, 2003). Bandura's model puts emphasis on the breaking down of caregiving responsibilities into manageable goals to help inspire greater effort and achievement. Nurses' belief in what they are capable of directly affects the choices they make and the quality of care they provide (Mackenzie & Peragine, 2003). The theory also suggests that if there is improvement in a nurses' self-efficacy then that can contribute to their professional growth (Moran et al., 2021). Two studies by Mackenzie and Peragine (2003) and Schindel-Martin et al. (2016) underscored the correlation between nurses' self-efficacy and their ability to care for people with dementia.

Mackenzie and Peragine's (2003) moderate strength, medium quality controlled before-after (CBA) study focused on LTC nurses practicing in LTC. Prior to the intervention the ANCOVA analyses showed a difference in self-efficacy scores, with the control group (n =13) holding a nonsignificant advantage, demonstrating an unadjusted mean outcome rating of 53.0 (8.0) compared to the intervention group's 48.4 (14.9). This initial lack of self-efficacy among the intervention group underscored the challenges that existed among LTC nurses working in dementia care. Mackenzie and Peragine's study highlight the important role self-efficacy plays to positively transform the mindset of LTC nurses. Furthermore, the initial lack of confidence

among nurses as demonstrated by the control groups advantage underscores the need to address self-efficacy as a contributing factor to limited knowledge of dementia care. When nurses perceive themselves as lacking the necessary skills or confidence in dementia care, their ability to provide effective care may be affected.

Schindel-Martin et al.'s (2016) non-randomized controlled trial (NRCT) of strong design and high quality measured the self-efficacy of health care professionals providing dementia care. The waitlisted group had a slightly higher baseline total self-efficacy score ($M = 46.96/70$, $SD = 10.07$) compared to the intervention group ($M = 43.06/70$, $SD = 9.99$), and an initial independent samples t test for all preintervention complete cases showed a significant difference, $t(742) = 5.13$, $P < .001$. This result was expected due to the between group demographic differences and therefore included the demographic variables as covariates in all subsequent analyses.

Bonferroni-corrected pairwise comparisons clarifies that while the complete case wait-listed ($M = 42.83$, $SD = 9.40$) and intervention ($M = 41.68$, $SD = 8.57$) groups did not significantly differ in self-efficacy at time 1 when controlling for demographic variables ($P = .86$), the waitlist group was significantly lower than the intervention group at 6 to 8 weeks post intervention ($M = 45.17$, $SD = 8.56$) ($P = .21$). Both studies highlight the correlation between nurses' self-efficacy and their provision of care to people with dementia; thus, supporting that a lack of self-efficacy may contribute to ineffective care for older adults with dementia.

Interventions

With the demonstrated knowledge deficit for dementia care identified throughout the literature. Bridging this knowledge gap can help to enhance and prioritize the care and well-being for this vulnerable population in addition to enhancing professional nursing practice.

Bridging this gap can be achieved through educating nurses on dementia care that include evidence-based practices.

Gentle Persuasive Approaches

AGE Inc. is a national not for profit enterprise based in Ontario, Canada whose focus is to enhance the care of older adults through dementia care education, products, and services. Their programs are evidence-based, modelled on best practice, and have a person-centered approach to care (PCC). The GPA curriculum was developed in 2004 and offers different levels of education aimed specifically at individual's working across healthcare sectors who care for older adults living with dementia. This evidenced-based education is grounded in the philosophical underpinnings of humanism and personhood and is an interactive and practical learning experience for staff working across healthcare organizations (AGE, 2023). PCC is considered an approach that is holistic and integrative focused on maintaining the well-being for people with dementia. This approach includes elements of care for the individual, the family, and the caregiver. The PCC approach has been widely implemented in LTC settings globally as it enables healthcare staff to recognize unmet needs of people with dementia and provide the appropriate support through the incorporation of knowledge of the person with dementia and by making the well-being of the person with dementia a priority. This can be accomplished through meaningful activities and quality relationship building between the person with dementia and the health care provider. (Kim & Park, 2017).

AGE Inc. has a partnership with the health authority of this province, Newfoundland and Labrador Health Services (NLHS), providing GPA curriculum to employees. The one-day GPA basics course for learners integrates PCC through confidence, respect and compassion while responding to the challenging and responsive behaviors that are associated with symptoms of

dementia. The course includes a combination of facilitation and demonstration via adult learning principles. These practice-based strategies are accomplished through small group exercises, reflection, role-play, respectful self-protective and gentle redirection techniques that are taught for use in situations where employees are at risk with residents who have responsive behaviors due to dementia symptoms (AGE Inc., 2023). To date, the GPA curriculum has been introduced into over 2000 LTC facilities, and other healthcare centers across Canada (Crandall et al., 2022).

Interventional Studies Exploring GPA

In this literature review I examined evidence that included GPA education as an intervention for health care staff caring for people with dementia. The studies were assessed to determine relevance and support the evaluation of GPA in LTC. All included studies discussed below utilized GPA education as interventions according to the GPA curriculum of AGE Inc. (2023). Five studies of varying designs were reviewed, and all took place in Canada. Three were mixed-methods (Christianson et al., 2021; Crandall et al., 2022; Hung et al., 2018), one was a high quality, strong NRCT (Schindel-Martin et al., 2016) and an inadequate Interrupted Time Series (ITS) of weak design with medium quality (Speziale et al., 2009). In all the mixed method designs (Christianson et al., 2021; Crandall et al., 2022; Hung et al., 2018), the qualitative and quantitative data was appropriately integrated, and the findings clearly described according to the MMAT. The quality score for each study was evaluated to be 100%. Christianson et al. (2021) was the only study with health care students as participants (n = 84), participants in the remaining four studies by Crandall et al. (2022), Hung et al. (2018), Schindel-Martin et al. (2016) and Speziale et al. (2009) explored healthcare staff experience with a GPA intervention. Christianson et al. (2021), Crandall et al. (2022) and Schindel-Martin et al. (2016) used the Self-Perceived Behavioural Management Self-Efficacy Profile (SBMSEP) tool as a measure of

confidence in the clinical behaviors and tasks necessary for responding respectfully to responsive behaviors. The tool was established for content validity, internal consistency, and reliability (Cronbach alpha = 0.93) for all three studies. Christianson et al. (2021) chose to use only the three qualitative questions from the SBMSEP at two time points pre- and 12 weeks post-GPA.

Crandall et al. (2022) used the complete SBMSEP as a measurement at three time points, immediate pre- and post-GPA and then again at 6-8 weeks post-GPA while Schindel-Martin et al. (2016) measured self-efficacy as the primary outcome measure from the SBMSEP pre-GPA and again at the eight week follow up. SBMSEP results demonstrated increased self-efficacy scores for both Crandall et al. (2022) and Schindel-Martin et al. (2016). Crandall et al. (2022) reported a significant increase in dementia care self-efficacy, competence and knowledge scores immediate pre-intervention of GPA and post-GPA ($p < 0.001$). Competence and knowledge increase relative to pre-intervention was sustained ($p = <0.001$) and there was a further significant increase in self-efficacy scores from immediate post-intervention to six to eight weeks later ($p = 0.002$). Schindel-Martin et al. (2016) demonstrated that from baseline to immediate postintervention the intervention group had a significant increase in self-efficacy ($M = 57.31$, $SD = 7.374$; $P < .001$) and then a small decrease was noted during the time from immediate postintervention and six to eight weeks postintervention ($M = 54.68$, $SD = 6.46$; $P = .05$). The intervention group had significantly higher self-efficacy ($M = 54.68$, $SD = 6.46$; $P < .001$) than the wait-listed group ($M = 45.17$, $SD = 8.56$; $P = .21$) at six to eight weeks postintervention. The waitlisted group showed no significant differences in self-efficacy between the two time points. These findings suggest the positive impact of the GPA educational intervention on sustaining a higher level of self-efficacy compared to those within the waitlist group.

Hung et al. (2018) and Speziale et al. (2009) both used separate forms of analysis. Hung et al. (2018) utilized a post education questionnaire that was provided with the GPA curriculum and given to all participants who attended the GPA workshop (n=297). Thematic analysis was utilized to analyze the focus group data and qualitative survey responses. Validity and reliability were met through the transparent, consistent, and accurate methods of the coding procedures as outlined in the study. From the questionnaire, 95% of participants agreed the GPA education was applicable to their practice and would have a positive impact on their ability to respond to challenging behaviors of dementia. Speziale et al. (2009), utilized a pre- and post-GPA intervention survey that was evaluated using a seven-item *Staff Satisfaction with the Curriculum Tool*. Threats to the study's validity and reliability were not specifically mentioned but the reliability of the measurement instrument to collect the data was known. Survey one was given immediately after GPA training and survey two was given three months post-GPA training. Both surveys employed a 5-point Likert type scale. 92.7% of participants in survey one reported that the GPA training improved their response to challenging behavior after survey one. Participants from survey two reported 82%. 90% of participants agreed the GPA training helped to learn strategies to respond to challenging behavior immediate post GPA. This decreased to 81.6% at the three month follow up. When asked if they would use the specific GPA body containment techniques in their daily practice, 93.9% stated they would immediate post-GPA but only 42.9% agreed they would at the three-month follow-up. More than 95% of staff rated the GPA curriculum as very good or excellent in both surveys.

These findings highlight the importance of evaluating the impact of GPA education on health care practitioners' ability to respond to the challenging behaviours within dementia care. The results also provide valuable insights into the perceived applicability and effectiveness of the

GPA program, the potential for the program to contribute to staff satisfaction, improve response strategies and contribute positively to the care of people with dementia.

The case study portions of the mixed methods research in the studies by Christianson et al. (2021) and Hung et al. (2018) were subject to thematic review and content analysis. Emergent themes differed for both studies. Christianson et al. (2021) emergent themes included: *All Behavior has Meaning; Knowledge is Power; Paying Attention; and Labelling Residents*. Responses demonstrated that participants gained knowledge and understanding around caring for people living with dementia. From the thematic analysis of Hung et al. (2018), the three main themes emerged were: *changing attitude, changing practice, and changing conditions to enable person-centered care*. The theme of changing attitude gave participants the opportunity to understand the perspective of the person with dementia to gain a deeper understanding and have empathy for people living with dementia. Under the theme of changing practice, participants recognized the complexity of applying GPA techniques and that all behavior has meaning. The theme of changing conditions revealed a consistent message among participants in the focus group discussion that people with dementia need a supportive environment including team member and leadership support to reach the goal of person-centered care approach for people with dementia. While emergent themes varied, commonalities were present in the pursuit of PCC for people living with dementia and on the importance of enhancing understanding, empathy, and practice in caring for this population highlighting the importance of GPA training for dementia care.

Theoretical Framework

The theoretical framework to guide the evaluation is based on Kolb's cycle of experiential learning theory. This adult learning theory recognizes that adults learn best through

the four roles of the learning process: concrete learning, reflective observation, abstract conceptualization, and active experimentation. As a learner engages in a task or situation it leads to reflective observation where the learner connects to what happened in past experiences or understanding. These reflections are then refined into concepts and then tested during the active experimentation role of the learning process where the learner's skills are sharpened, and new ideas tested. This process helps to bridge the knowledge gap (Long & Gummelt, 2020). Kolb's experiential learning model focuses on real world experiences through the process of learning while accommodating the diversity of learners helping them to develop professional skills and enhance their critical thinking. Nurses learn through clinical experiences, self-reflection on their observations and experience and then take away the knowledge gained and apply it to their own practice. A nurse already possesses the foundational knowledge of dementia from their professional education. This knowledge coupled with the existing clinical experiences they would bring from receiving the intervention of GPA education, would help to further develop their critical thinking, enhance clinical judgement through new strategies to manage dementia care resulting in improved person-centered care for this vulnerable population.

Summary of the Literature

This literature review is inclusive of both nursing and allied health research with a focus towards the importance of dementia care education. The interventions of the studies aimed at or included increasing the knowledge of both professional and family caregivers of people with dementia. The GPA interventional studies included five Canadian studies. Three were mixed methods (Christianson et al., 2021; Crandall et al., 2022; Hung et al., 2018) with the critical appraisal of the studies appropriately integrated with findings clearly described according to the MMAT with a quality score of 100%. The fourth study was a high quality, strong NRCT

(Schindel-Martin et al., 2016) and the final one was an inadequate Interrupted Time Series (ITS) of weak design with medium quality by Speziale et al. (2009). Both were critically appraised as per PHAC, (2014). Overall, the literature has revealed that basic knowledge of dementia care exists among nurses and can possibly contribute to poor outcomes unless specialized dementia care education is implemented. Deficits for nurses and allied health professionals' knowledge, competency, and strategies for effectively caring for people with dementia was noted (Christianson et al., 2021; Crandall et al., 2022; Hung et al., 2018; Schindel-Martin et al., 2016; Speziale et al., 2009). Pre and three-months post intervention by Speziale et al. (2009) utilized an approach to evaluate the effectiveness of the GPA intervention with a seven-item staff satisfaction with the curriculum tool. This Likert-type scale evaluated the course overall. The post survey also included participants perception of the course in relation to utilization of the GPA principles into clinical practice. This was the only study that reported on physical aggression rates. This was measured pre and post training through a review of occupational health and safety records and a 50% decline in physical aggression among people with dementia was reported post-GPA training with Yates' correction $\chi^2 (2, N = 564) = 27.51, p = .0001$. Crandall et al. (2022) reported that a significant increase in dementia care knowledge scores from immediate pre and post intervention following implementation of GPA education among staff (n=75), (M = 4.96, SD 1.35; M = 5.99, SD 1.26, $t(df) = 6.98, p < 0.001$). Results for 6 weeks post GPA were (n=36) (M = 5.94, SD 1.45, $F(df) = 14.78(2,70) p < 0.001$).

Different themes emerged for Christianson et al. (2021), Crandall et al. (2022) and Hung et al. (2018) with the consistent message that people with dementia require a supportive environment as the nature of dementia care requires individualized, compassionate PCC approach. Christianson et al. (2021) emergent themes included: *All Behavior has Meaning*;

Knowledge is Power; Paying Attention; and Labelling Residents. Crandall et al. (2022) three main themes were: *Rudimentary Self-Confidence, Best Basic Approaches to Responsive Behaviours and Need for Additional Responsive Behaviour Techniques*. The thematic analysis of Hung et al. (2018) emergent themes were: *changing attitude, changing practice, and changing conditions to enable person-centered care*. Following the intervention of GPA education, all three studies reported a more comprehensive understanding and need for training for responsive behaviors among people with dementia noting that the behaviors are expressions of unmet needs for people with dementia. These valuable insights put emphasis on the individualized approach to dementia care while also recognizing the importance of dementia care education to help address the challenges within dementia care.

Four systematic reviews related to dementia education were included to inform this integrated literature review. Three of the reviews were critically appraised as per PHAC, (2014), one high quality (Evripidou et al., 2018), and two medium quality (Adewuyi et al., 2021; Mulyani et al., 2021). Rasmussen et al. (2023) was critically appraised according to the JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses (JBI, 2020). All four reviews included the Preferred Reporting Items for Systematic Review and Meta-Analyses Protocols (PRISMA-P). In the systematic review by Evripidou et al. (2018), the research topic of the included studies in the review addressed knowledge level and/or attitudes of people with dementia among nurses. It was reported that only 26% of nurses had knowledge of risk actors of Alzheimer's disease including little knowledge of the specific techniques required to manage those resistant to care. Low levels of confidence relating to nursing care for people with dementia among nursing staff was reported that was related directly to the identification and management of dementia ($r = .20, p = .05$). Rasmussen et al. (2023) measured the effectiveness

of dementia education with results structured using Kirkpatrick's model specifically developed for the evaluation of educational programs. The reviews concluded there was a positive effect on the knowledge, attitude, and self-efficacy of nursing care staff in all settings and there was consistent or partial improvement of dementia care knowledge reported. Mulyani et al. (2021) measured the impact of dementia training for nurses working in various clinical settings. 20 articles were reviewed, 18 quantitative and 1 qualitative and 1 mixed method. Outcomes for this review were categorized into four domains, cognitive, physical, psychological, and working performance with the cognitive domain represented the knowledge of dementia and was the most measured outcome in the included studies. Various instruments were used to evaluate the outcome of nurses' knowledge before and after dementia education. The lengths of the training varied but the overall the results were reported as positive in increasing the nurse's knowledge about dementia along with care related factors such as person-centered care.

Adewuyi et al. (2021) was the only systematic literature review with nursing students as the participants. This medium quality review explored the impact of experiential dementia care learning on knowledge, skills, and attitudes of nursing students. Findings of the research revealed that GPA education and clinical experiences caring for people with dementia had more of an impact on nursing students' skills and attitude. This evidence underscores the importance of including dementia care clinical experiences for nursing students to assist with translating theory into practice. This was noted following results of the face-to-face experiential dementia care learning pre and post-test knowledge scores, $p < .001$, $r = .56$ and competence score, $t = -3.65$, $p = [0.002]$. The receipt of GPA education could help to further develop their critical thinking and help build on their clinical judgement through the implementation of newly learned strategies to

manage dementia care. The impact would be two-fold by enhancing the knowledge and communication of nursing students in addition to improving PCC for this vulnerable population.

Conclusion

The escalating incidence and prevalence of dementia represents a challenge in the face of our aging population globally. As the longevity of the world's population increases, so will the number of people with various forms of dementia. It is important to recognize the pivotal role nurses will play in dementia care, dedicating more time to this specialized area than in any other discipline. The evidence from the research examined for this literature review demonstrates an important aspect of dementia care which is the impact of a nurse's knowledge on the overall well-being of individual's living with dementia. The repercussions of not addressing dementia care knowledge extend far beyond the individual person and can reach through to the healthcare system. Incorporating evidence-based interventions like GPA educational workshops to nurses practicing in LTC can contribute to increasing the dementia care knowledge of nurses while enhancing the well-being for the residents living with dementia in LTC. The evidence reviewed reveals the consequences to both nurses and people with dementia when the need for training and education are not met. Furthermore, the findings of this literature review can serve as rationale for the implementation of interventions like Gentle Persuasive Approach (GPA) education during the orientation for all new nurses hired into LTC as well as refresher education for experienced LTC nurses.

References

Adewuyi, M., Morales, K., & Lindsey, A. (2022). Impact of experiential dementia care learning on knowledge, skills and attitudes of nursing students: A systematic literature review.

Nurse Education in Practice., 62. <https://doi.org/10.1016/j.nepr.2022.103351>

Advanced Gerontological Education (AGE) Inc. (2023). About GPA. Advanced Gerontological Education. Retrieved November 01, 2023, from <https://ageinc.ca/about-gpa-2/>

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders–IV–Text Revision. Washington, DC: American Psychiatric Association; 1994

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191. Bandura1977_SelfEfficacy_for_Behavioral_Change-libre.pdf (d1wqtxts1xzle7.cloudfront.net)

Boscart, V. M., McNeill, S., & Grinspun, D. (2019). Dementia care in Canada: Nursing recommendations. *Canadian Journal on Aging/La Revue canadienne du vieillissement*, 38(3), 407-418.

https://web.archive.org/web/20220521085957id_/https://www.cambridge.org/core/services/aop-cambridge-core/content/view/FBF3A0B52112FF4B950308255A9BE853/S071498081800065Xa.pdf/div-class-title-dementia-care-in-canada-nursing-recommendations-div.pdf

Bramble, M., Moyle, W., & McAllister, M. (2009). Seeking connection: family care experiences following long-term dementia care placement. *Journal of clinical nursing*, 18(22), 3118-

3125. [Seeking connection: family care experiences following long-term dementia care placement - Bramble - 2009 - Journal of Clinical Nursing - Wiley Online Library](#)

Cadieux, M. A., Garcia, L. J., & Patrick, J. (2013). Needs of people with dementia in long-term care: a systematic review. *American Journal of Alzheimer's Disease & Other Dementias*®, 28(8), 723-733. [Needs of People With Dementia in Long-Term Care: A Systematic Review - Marie-Andrée Cadieux, Linda J. Garcia, Jonathan Patrick, 2013 \(sagepub.com\)](#)

Cao, Q., Tan, C.-C., Xu, W., Hu, H., Cao, X.-P., Dong, Q., Tan, L., & Yu, J.-T. (2020). The Prevalence of Dementia: A Systematic Review and Meta-Analysis. *Journal of Alzheimer's Disease*, 73(3), 1157–1166. <https://doi.org/10.3233/JAD-191092>

Canadian Institute for Health Information. *Dementia in Canada*. Ottawa, ON: CIHI; 2018. <https://www.cihi.ca/en/dementia-in-canada/dementia-care-across-the-health-system/dementia-in-long-term-care>

Chenoweth, L., Stein-Parbury, J., White, D., McNeill, G., Jeon, Y. H., & Zaratan, B. (2016). Coaching in self-efficacy improves care responses, health and well-being in dementia carers: a pre/post-test/follow-up study. *BMC health services research*, 16(1), 1-16. <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-016-1410-x>

Christianson, T. M., Hoot, T. J., McLelland, V., & Morris, K. (2021). “All behavior has meaning”: A qualitative exploration of dementia training of healthcare assistant students. *Journal of Nursing Education and Practice*, 11(2). https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=All+Behaviour+has+mean

[ing%3A+A+qualitative+exploration+of+dementia+training+of+healthcare+assistant+stu
dents&btnG=](#)

Costello, H., Walsh, S., Cooper, C., & Livingston, G. (2019). A systematic review and meta-analysis of the prevalence and associations of stress and burnout among staff in long-term care facilities for people with dementia. *International Psychogeriatrics*, 31(8), 1203–1216. <https://doi-org.qe2a-proxy.mun.ca/10.1017/S1041610218001606>

Crandall, J., Coatsworth-Puspoky, R., Schlegel, K., Beker, L., McLelland, V. C., & Martin, L. S. (2022). Implementing Gentle Persuasive Approaches dementia education for staff on in-patient medicine units: *A program evaluation*. *Dementia (14713012)*, 21(4), 1173–1199. <https://doi.org/10.1177/14713012211070148>

Evripidou, M., Charalambous, A., Middleton, N., & Papastavrou, E. (2019). Nurses' knowledge and attitudes about dementia care: Systematic literature review. *Perspectives in Psychiatric Care*, 55(1), 48–60. <https://doi-org.qe2a-proxy.mun.ca/10.1111/ppc.12291>

Fiest, K. M., Jetté, N., Roberts, J. I., Maxwell, C. J., Smith, E. E., Black, S. E., Blaikie, L., Cohen, A., Day, L., Holroyd-Leduc, J., Kirk, A., Pearson, D., Pringsheim, T., Venegas-Torres, A., & Hogan, D. B. (2016). The Prevalence and Incidence of Dementia: a Systematic Review and Meta-analysis. *The Canadian Journal of Neurological Sciences / Le Journal Canadien Des Sciences Neurologiques.*, 43 Suppl 1, S3–S50. <https://doi.org/10.1017/cjn.2016.18>

Gopalakrishnan, S., & Ganeshkumar, P. (2013). Systematic Reviews and Meta-analysis: Understanding the Best Evidence in Primary Healthcare. *Journal of family medicine and primary care*, 2(1), 9–14. <https://doi.org/10.4103/2249-4863.109934>

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Hong, Q.N., Pluye, P., Fabregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M-P., Griffiths, F., Nicolau, B., O’Cathain, A., Rousseau, M-C., & Vedel, I. (2018). *Mixed methods appraisal tool (MMAT) version 2018: User guide*. McGill: Department of Family Medicine.

http://mixedmethodsappraisaltoolpublic.pbworks.com/w/file/fetch/146002140/MMAT_2018_criteria-manual_2018-08-08c.pdf

Hung, L., Son, C., & Hung, R. (2019). The experience of hospital staff in applying the Gentle Persuasive Approaches to dementia care. *Journal of Psychiatric and Mental Health Nursing.*, 26(1/2), 19–28. <https://doi.org/10.1111/jpm.12504>

Hurd, M. D., Martorell, P., Delavande, A., Mullen, K. J., & Langa, K. M. (2013). Monetary costs of dementia in the United States. *The New England journal of medicine*, 368(14), 1326–1334. <https://doi.org/10.1056/NEJMsa1204629>

Joanna Briggs Institute (2020). Checklist for qualitative research: Critical Appraisal tools for use in JBI Systematic Reviews https://jbi.global/sites/default/files/2020-08/Checklist_for_Qualitative_Research.pdf

Joanna Briggs Institute (2020). Checklist for Quasi-Experimental research: Critical Appraisal tools for use in JBI Systematic Reviews https://jbi.global/sites/default/files/2019-05/JBI_Quasi-Experimental_Appraisal_Tool2017_0.pdf

Joanna Briggs Institute (2020). Checklist for Systematic Reviews and Research Syntheses: Critical Appraisal tools for use in JBI Systematic Reviews https://jbi.global/sites/default/files/2021-10/Checklist_for_Systematic_Reviews_and_Research_Syntheses.docx

LEGROW: EFFECTIVENESS OF GPA ON NURSE DEMENTIA CARE COMPETENCIES

Kim, S. K., & Park, M. (2017). Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis. *Clinical Interventions in Aging.*, *12*, 381–397.

<https://doi.org/10.2147/CIA.S117637>

Lindeza, P., Rodrigues, M., Costa, J., Guerreiro, M., & Rosa, M. M. (2020). Impact of dementia on informal care: a systematic review of family caregivers' perceptions. *BMJ supportive & palliative care.* [https://spcare.bmj.com/content/bmjspcare/early/2020/10/14/bmjspcare-](https://spcare.bmj.com/content/bmjspcare/early/2020/10/14/bmjspcare-2020-002242.full.pdf)

[2020-002242.full.pdf](https://spcare.bmj.com/content/bmjspcare/early/2020/10/14/bmjspcare-2020-002242.full.pdf)

Long, E. M., & Gummelt, G. (2020). Experiential Service Learning: Building skills and sensitivity with Kolb's learning theory. *Gerontology & Geriatrics Education.*, *41*(2),

219–232. <https://doi.org/10.1080/02701960.2019.1673386>

Mackenzie, C. S., & Peragine, G. (2003). Measuring and enhancing self-efficacy among professional caregivers of individuals with dementia. *American Journal of Alzheimer's Disease and Other Dementias.*, *18*(5), 291–299.

<https://doi.org/10.1177/153331750301800507>

Moran, V., Israel, H., & Sebelski, C. (2021). Leadership development of nursing professionals: Education and influences of self-efficacy. *Nursing Outlook.*, *69*(4), 589–597.

<https://doi.org/10.1016/j.outlook.2021.01.002>

Mulyani, S., Probosuseno, P., & Nurjannah, I. (2021). The Effect of Training on Dementia Care among Nurses: A Systematic Review. *Open Access Macedonian Journal of Medical*

Sciences, *9*(F), 145–152. <https://doi.org/10.3889/oamjms.2021.5969>

Polit, D.F., & Beck, C. T. (2021). *Resource manual for nursing research: Generating and assessing evidence for nursing practice* (11 th ed). Walters Kluwer; Lippincott Williams & Wilkins.

Public Health Agency of Canada. (2014). Infection prevention and control guidelines: critical appraisal tool kit. https://publications.gc.ca/collections/collection_2014/aspc-phac/HP40-119-2014-eng.pdf

Rasmussen, B. M., Andersen, P. T., Waldorff, F. B., & Berg-Beckhoff, G. (2023). Effectiveness of dementia education for professional care staff and factors influencing staff-related outcomes: An overview of systematic reviews. *International Journal of Nursing Studies*, 104469. <https://www.sciencedirect.com/science/article/pii/S0020748923000342>

Schindel-Martin, L., Gillies, L., Coker, E., Pizzacalla, A., Montemuro, M., Suva, G., & McLelland, V. (2016). An Education Intervention to Enhance Staff Self-Efficacy to Provide Dementia Care in an Acute Care Hospital in Canada: A Nonrandomized Controlled Study. *American Journal of Alzheimer's Disease and Other Dementias.*, 31(8), 664–677. <https://doi.org/10.1177/1533317516668574>

Speziale, J., Black, E., Coatsworth-Puspoky, R., Ross, T., & O'Regan, T. (2009). Moving forward: Evaluating a curriculum for managing responsive behaviors in a geriatric psychiatry inpatient population. *The Gerontologist*, 49(4), 570-576. <https://academic.oup.com/gerontologist/article/49/4/570/680815>

LEGROW: EFFECTIVENESS OF GPA ON NURSE DEMENTIA CARE COMPETENCIES

Wang, Y., Xiao, L. D., Ullah, S., He, G.-P., & De Bellis, A. (2017). Evaluation of a nurse-led dementia education and knowledge translation programme in primary care: A cluster randomized controlled trial. *Nurse Education Today*, 49, 1–7. <https://doi-org.qe2a-proxy.mun.ca/10.1016/j.nedt.2016.10.016>

Wimo, A., Seeher, K., Cataldi, R., Cyhlarova, E., Dielemann, J. L., Frisell, O., Guerchet, M., Jönsson, L., Malaha, A. K., Nichols, E., Pedroza, P., Prince, M., Knapp, M., & Dua, T. (2023). The worldwide costs of dementia in 2019. *Alzheimers Dement*, 19(7), 2865–2873. <https://doi.org/10.1002/alz.12901>

World Health Organization. (2021). Global status report on the public health response to dementia. <https://iris.who.int/bitstream/handle/10665/344701/9789240033245-eng.pdf>

Appendix B Literature Summary Tables

Key Question: What is known about the impact of dementia care education on nurse knowledge?

Legend: HCA: Health Care Assistant; Canada: CAN; GPA: gentle persuasive approaches training; PTBD: physical aggression rates per thousand bed days; OH&S: occupational health and safety; RAI-MH: resident assessment instrument-mental health; MO.: month; MOS.: months; Hour: Hr; HR: Human Resources; RCT: randomized controlled trial; ITS: Interrupted Time Series; ANOVA: Analysis of Variance; GLM: Univariate General Linear Model; SE: self-efficacy; AMSS: Agitation Management Self-Efficacy Scale; SBMSEP: Self-Perceived Behavioral Management Self-Efficacy Profile; CI: Confidence Interval

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Study/Design	Methods	Key Results	Comments
<p>Christianson et al. (2021)</p> <p><u>Title:</u> “All Behavior has meaning: A qualitative exploration of dementia training of healthcare assistant students</p> <p><u>Design:</u> Mixed Methods</p> <p>Quantitative=NRC T</p> <p><u>Purpose:</u> To evaluate the effects Gentle Persuasive Approaches training on health care assistant students’ knowledge and ability to care for patients who have the potential for responsive behaviors.</p>	<p><u>N:</u> 69 HCA students</p> <p><u>Setting:</u> 1 university in CAN</p> <p><u>Intervention:</u> 1 day GPA Training F2F and 2–3-hr GPA eLearning followed up with 2-hr classroom session 1-month post-eLearning GPA prior to clinical practicum</p> <p><u>Control Group:</u> No GPA training</p> <p><u>Data Collection:</u></p> <ul style="list-style-type: none"> • Three qualitative questions included in the SBMSEP with Cronbach’s alpha = 0.93, administered pre-GPA and 12 weeks post clinical <p><u>Data Analysis:</u></p> <p>Quantitative:</p> <ul style="list-style-type: none"> • No Regression 	<p>Quantitative Findings: Demographics</p> <p>GPA F2F participants who completed a college diploma (50%) than the GPA eLearning group (17.4%; $p < .05$).</p> <p>82% participants with no previous dementia experience</p>	<p>MMAT 100%</p> <p><u>Issues:</u></p> <ul style="list-style-type: none"> • Participants represent one homogenous sample from one university HCA program. • Mandatory theory courses on people with cognitive challenges may have influenced baseline knowledge. • Self-selection bias due to voluntary participation • Confounding variables not controlled

LEGROW: EFFECTIVENESS OF GPA ON NURSE DEMENTIA CARE COMPETENCIES

Study/Design	Methods	Key Results	Comments
<p>Crandall et al. (2022)</p> <p><u>Title:</u> Implementing Gentle Persuasive Approaches dementia education for staff on in-patient medicine units: A program evaluation</p> <p>Design: Mixed Methods</p> <p>Quantitative = ITS (adequate)</p> <p>Purpose: Evaluation of Gentle Persuasive Approaches education for staff on in-patient medicine units.</p>	<p><u>N:</u> 82 health care staff providing dementia care</p> <p><u>Setting:</u> 5 medicine units at a hospital in Canada</p> <p><u>Intervention:</u> 1 day in person GPA training</p> <p><u>Data Collection:</u> immediate, pre- and post-GPA</p> <ul style="list-style-type: none"> • SBMSEP for self-efficacy (Cronbach's alpha = 0.93) • SCIDS for confidence (Cronbach's alpha = 0.91) • GPA Knowledge Test • Participant satisfaction questionnaire following GPA training. • <p><u>Data Analysis: Quantitative:</u></p> <ul style="list-style-type: none"> • Paired sample t tests • ANOVAs • No regression 	<p>Quantitative Results:</p> <ul style="list-style-type: none"> • Increase in self-efficacy, competence, and knowledge scores between immediate pre- and post-intervention ($p < 0.001$ for all three measures of self-efficacy, competence and knowledge). • Competence and knowledge sustained scores relative to pre-intervention ($p < 0.001$). • Self-efficacy increased immediate post-intervention after 6-8 wks ($p = 0.002$). <p>Satisfaction Results: 100% recommended GPA.</p>	<p>MMAT 100%</p> <p><u>Issues:</u></p> <ul style="list-style-type: none"> • Follow-up was not beyond 6-8 weeks. • Confounding variables not controlled

LEGROW: EFFECTIVENESS OF GPA ON NURSE DEMENTIA CARE COMPETENCIES

Study/Design	Methods	Key Results	Comments
<p>Hung et al. (2018)</p> <p><u>Title:</u> The experience of hospital staff in applying the Gentle Persuasive Approaches to dementia care</p> <p><u>Design:</u> Mixed Methods</p> <p>Quantitative = ITS (inadequate)</p> <p><u>Purpose:</u> To describe staff's experience of learning and applying the Gentle Persuasive Approaches (GPA) to enact person-centered care in a hospital</p>	<p>Sample: (n= 310) hospital staff working in mental health and medicine units.</p> <ul style="list-style-type: none"> • 48% care providers • 60, > 5 yrs experience <p><u>Setting:</u> Large Vancouver metropolitan hospital</p> <p><u>Intervention:</u> 1 day GPA training for dementia education</p> <p><u>Data Collection:</u></p> <ul style="list-style-type: none"> • Post-education questionnaire, validity and reliability not stated • Likert type scale – range of strongly disagree to strongly agree for three domains: education impact, course content, and workshop delivery. <p><u>Data Analysis:</u></p> <ul style="list-style-type: none"> • No Regression used 	<p>Quantitative Results:</p> <ul style="list-style-type: none"> • 95% reported GPA education was useful and applicable to their practice and would recommend to colleagues. <p>Evident themes from Qualitative data:</p> <ul style="list-style-type: none"> • <i>Changing Attitudes – reflecting on people's perspectives</i> • <i>Changing Practices – recognizing complexity and focusing on what matters</i> • <i>Changing conditions to enable person-centered care – shifting to system thinking and providing leadership support.</i> 	<p>MMAT 100%</p> <p><u>Issues:</u></p> <ul style="list-style-type: none"> • Baseline data not surveyed for comparison. • Study should be repeated for future program effect sustainability.

LEGROW: EFFECTIVENESS OF GPA ON NURSE DEMENTIA CARE COMPETENCIES

Study/Design	Methods	Key Results	Comments
<p>Schindel Martin et al. (2016)</p> <p><u>Title:</u> An Education Intervention to Enhance Staff Self-Efficacy to Provide Dementia Care in an Acute Care Hospital in Canada: A Nonrandomized Controlled Study</p> <p><u>Design:</u> NRCT</p> <p><u>Purpose:</u> To investigate the impact of the GPA education program on acute care staff's self-efficacy related to delivering person-centered dementia care.</p>	<p><u>Sample:</u> n= 745 clinical hospital employees</p> <p><u>Setting:</u> 7 clinical areas within a metropolitan acute care hospital in Ontario, Canada</p> <p><u>Intervention:</u> 468 employees from 7 clinical areas received 7.5 hours GPA education in groups of 18-20 by 3 GPA certified coaches</p> <p><u>Control Group:</u> 277 employees from 5 clinical areas waitlisted to the intervention but received standard educational support from clinical educators when requested by staff.</p> <p><u>Data Collection:</u></p> <ul style="list-style-type: none"> ● SBMSEP at baseline and 8-wk follow-up for both groups ● The intervention group completed the questionnaire immediately post GPA education. ● Focus groups 8 wks post intervention. <p><u>Data Analysis:</u></p> <ul style="list-style-type: none"> ● No regression 	<p>SBMSEP Scores:</p> <p>Baseline Intervention:</p> <ul style="list-style-type: none"> ● (M = 43.06/70, SD = 9.99) <p>Baseline Control Group:</p> <ul style="list-style-type: none"> ● (M = 46.96/70, SD = 10.07) <p>$t(742) = 5.13, P < .001$</p> <p>Intervention SE from pre to post: ($P < .001$)</p> <p>Control Group SE from pre to post: ($P = .21$)</p>	<p>Strength: Strong</p> <p>Quality: High</p> <p>Issues:</p> <ul style="list-style-type: none"> ● Confounders were not controlled ● significant differences on several demographic variables between intervention and control groups ● Some staff were reassigned and lost to follow-up ● No generalizability to other acute care settings

LEGROW: EFFECTIVENESS OF GPA ON NURSE DEMENTIA CARE COMPETENCIES

Study/Design	Methods	Key Results	Comments
<p>Speziale et al. (2009)</p> <p><u>Title:</u> Moving Forward: Evaluating a Curriculum for Managing Responsive Behaviors in a Geriatric Psychiatry Inpatient Population.</p> <p><u>Design:</u> Interrupted Time Series</p> <p><u>Purpose:</u> To evaluate the effectiveness of the GPA curriculum</p>	<p><u>Sample:</u> 99 full-time geriatric staff and 41 nursing staff who received the GPA curriculum.</p> <p><u>Setting:</u> GPP, 108 inpatient unit in CAN</p> <p><u>Intervention:</u> Multiple 7.5-hr in-person GPA training over a 3-mo. period.</p> <p><u>Data Collection:</u></p> <ul style="list-style-type: none"> • Pre- and 3 mos. post-satisfaction surveys validity and reliability not noted in study • Course evaluation questions. • PTBD to measure incidents of physical aggression. • OH&S records reviewed 3-mos. pre- and post-GPA training. • RAI-MH examining acuity levels 3-mos. pre- and post-GPA training. <p><u>Data Analysis:</u></p> <ul style="list-style-type: none"> • No Regression 	<p>Staff Satisfaction Survey Results:</p> <p><u>Survey 1 & 2:</u></p> <p>Improved Response: 92.7% vs. 82%</p> <p>Understanding Brain Changes: 85.7% vs. 81.6%</p> <p>Strategies Learned: 90% vs. 81.6%</p> <p>Intent to Use 93.9% vs. 42.9%</p> <p>Overall Recommendation: 99% vs. 94.1%</p> <p><u>PTBD:</u></p> <ul style="list-style-type: none"> • Declined 50% • 3 MOS post-GPA chi-square with Yates' correction $\chi^2 (2, N = 564) = 27.51, p = .0001$ <p><u>OH&S:</u> Time lost statistics –</p> <ul style="list-style-type: none"> • 45.2 days pre-GPA • 41.7 post-GPA <p><u>RAI-MH:</u></p> <ul style="list-style-type: none"> • $p = .154$ unequal variance assumed • $p = .156$ equal variance assumed <p>No significant difference between patient care acuity pre- and post-GPA</p>	<p>Strength: Weak</p> <p>Quality: Medium</p> <p>Issues:</p> <ul style="list-style-type: none"> • Study should be replicated to validate findings • Cross-disciplinary nature of study • Evaluation was limited due to the financial and human resources

Appendix C: Consultation Report

Evaluating the Effectiveness of the Gentle Persuasive Approach on Dementia Care
Competencies for Nurses Practicing in Long-Term Care: Consultation Report

Dementia has been defined by the Diagnostic and Statistical Manual of Mental Disorders-IV-Text Revision (DSM-IV-TR) as an acquired condition marked by impairments in memory and one other cognitive domain that cause significant limitations in social and/or occupational functioning (APA, 1994). The symptoms of dementia may include: a decline in memory, language, and judgment can occur including changes in mood and/or behavior. These problematic symptoms are generally progressive and can include difficulty performing activities of daily living. Fiest et al. (2016) conducted a high-quality systematic review and describes several forms of dementia with the most common ones identified as Alzheimer's disease, vascular dementia, Lewy body disease and frontotemporal dementia. The need for assistance with daily activities and care become more pronounced as cognitive function declines for people with dementia and dementia related diagnosis (Fiest et al., 2016).

Significance of the problem

Nurses who practice in the long-term care (LTC) setting are faced with increasing complex physical care requirements for the residents they are caring for. Behavioral and psychological symptoms of dementia (BPSD) are challenging behaviors that can contribute to the complexities of dementia care. Effectively managing, understanding, and responding to challenging behaviors of people with dementia is important. The examination of the evidence has identified a gap in the knowledge of dementia care among professional nurses. This has been demonstrated in the high-quality systematic review by Evripidou et al. (2018) which revealed a knowledge deficit due to a lack of education, and experience towards dementia care among nurses. This was demonstrated in the analysis of the findings reporting a basic knowledge of dementia care among nurses. 91.9% of nurses (n=34) described a need for additional knowledge on how to manage the behaviors of dementia. Nurses are frontline caregivers in LTC and there is

complexity in managing care needs for those living with dementia, so it is important to address knowledge gaps for nurses practicing in LTC.

Interventions

There is a demonstrated knowledge deficit for dementia care identified throughout the literature. Bridging this knowledge gap and through the education of evidence-based practices can help to enhance and prioritize the care and well-being for this vulnerable population in addition to enhancing professional nursing practice. Throughout the development of this practicum project, it was determined that an evaluation of the Gentle Persuasive Approaches (GPA) program (AGE Inc. 2023) was needed for the region and LTC setting it is being implemented in nursing practice. The goal of this practicum project is to perform an evaluation on the effectiveness of GPA education on dementia care competencies for nurses practicing in LTC. The setting for the practicum project is within LTC eastern zone of NL Health Services in the province of Newfoundland and Labrador, Canada.

Gentle Persuasive Approaches

GPA is an innovative interdisciplinary curriculum informed by person centered care (PCC) and is designed for front-line staff providing direct care for people living with dementia. This evidence-based education is based on a PCC approach and focuses on providing staff the knowledge, skills, and confidence to support the person with dementia (AGE Inc., 2023). The GPA curriculum was developed by the Advanced Gerontological Educational (AGE Inc.) in 2004 for the purpose of creating a PCC curriculum for healthcare providers caring for older adults living with dementia. This evidenced-based education is grounded in the philosophical underpinnings of humanism, and personhood, recognizing each individual's value and place in

the world and is an interactive and practical learning experience for staff working across healthcare organizations (AGE Inc., 2023). There is strong evidence within recently published literature supporting the educational intervention of GPA may increase nurses' dementia care knowledge practicing in LTC, with additional benefits PCC for people with dementia. Five Canadian studies of varying designs were reviewed and included to support this. Three were mixed methods (Christianson et al., 2021; Crandall et al., 2022; Hung et al., 2018). In all the mixed method designs, the qualitative and quantitative data was appropriately integrated, and the findings clearly described according to the mixed methods appraisal tool (MMAT) (Hong et al., 2018). The quality score for each study was evaluated to be 100%. The remaining two studies were a high quality, strong NRCT (Schindel-Martin et al., 2016) and one inadequate Interrupted Time Series (ITS) of weak design with medium quality by Speziale et al. (2009), whose overall appraisal was included according to the Public Health Agency of Canada (PHAC) critical appraisal tool kit (PHAC, 2014).

Additionally, it was determined that consulting with key stakeholders could help determine the effectiveness of this program within the region and LTC clinical setting where the GPA education is being implemented and evaluated. The purpose of the consultations was to determine key stakeholders' knowledge of dementia care following their experience of the GPA education session. Also, identify any knowledge gaps or barriers for nurses who have already completed the one-day GPA course and identify issues related to implementation and evaluation of the GPA program within the context of the LTC setting for the eastern zone of NL Health Services.

Specific Objective(s) for the Consultations

1. Evaluate long term care nurses' confidence for knowledge of dementia care following the one-day GPA education session.
2. Identify any gaps or barriers to acquiring knowledge of dementia care for nurses practicing in LTC who have already completed the one-day GPA course.
3. Identify issues related to implementation and evaluation of the GPA program within the context of the LTC setting for the eastern zone of NL Health Services.

The strategies used to meet the objectives were:

1. Semi-structured interview guides to gather relevant data from a clinical nurse specialist implementing the GPA training program with key stakeholders.
2. Synthesize findings utilizing thematic analysis to reveal key themes and summarize the findings as per Bengtsson (2016).

Methods

Setting and Sample

The setting for the consultations was LTC in the eastern zone of NL Health Services. Invitation emails were sent to eight Registered Nurses requesting an interview. Six accepted the invitation to interview regarding their experience with GPA training. Included in the consultations was a resident care manager (RCM), a clinical nurse specialist (CNS) overseeing the GPA education for the eastern zone of LTC and four Registered Nurses who have previously completed the GPA training between 2017 and 2023. Consultees were contacted via email to request their participation in a 30-minute semi-structured interview on their views and feedback of GPA training and dementia care in LTC. See Appendix D for copies of the email for each

group provided above respectively. Two additional Registered Nurses were contacted via email request for an interview as well but there was no response during the timeframe for consultations.

Of the six health care professionals interviewed, all of them were considered experienced nurses (i.e., more than 5 years of experience). The CNS was selected as a consultant due to their expertise with GPA as they are responsible for overseeing GPA education for LTC eastern zone as part of their portfolio. As a key member of the implementation team for the GPA education workshops in LTC for NL Health Services, responsibilities included the initial GPA facilitation to selected LTC sites then recruitment and certification of GPA coaches within the RHA. The CNS continues to oversee and help sites coordinate GPA education workshops in addition to supporting over thirty GPA coaches within LTC. The RCM consultant is also a current GPA coach within LTC providing the GPA education workshops to employees who are new to LTC. The Registered Nurse consultants are all currently working in the LTC setting and actively engaging in providing dementia care, they have previously completed the GPA educational workshop.

Data Collection

The key stakeholders were contacted via email to request their participation in a 30-minute semi-structured interview. The target group identified as an RCM, a CNS for the GPA training program and four registered nurses practicing in LTC. The interview guides consisted of questions on their views and feedback of GPA training and dementia care knowledge in LTC. See the semi-structured interview guides that were designed for the CNS, the RCM and the LTC registered nurses in Appendix D. Each interview was conducted via the secure Microsoft TEAMS platform through NL Health Services, lasting approximately 30 minutes. Detailed

handwritten notes were completed by the author for each interview. Prior to each interview, the participants were informed individually of their right to confidentiality and that their participation was entirely voluntary. Each participant was also informed that they could refuse to answer a question, pause, or stop the interview at any time and request that their data not be used without any prejudice up to the point of the analysis.

Data Management and Analysis

Data management was completed by the myself in the form of handwritten notes which were then compiled on my password encrypted personal laptop for proficiency of recording each participants response. The data is stored on the same encrypted laptop for the purpose of my practicum and de-identified. The de-identified data may only be accessed by myself and my practicum supervisor throughout the continued development of this practicum project. The data was then analyzed to identify and extract key information for themes using a thematic content analysis which is a qualitative research method used to identify, analyze, and report patterns or themes within text. This analysis method allows insight into research questions through the organization and interpretation of data to find underlying meanings (Bengtsson, 2016). The notes from each interview were read and reviewed multiple times and defined into themes from the recurring ideas within the data. This allowed me to explore and interpret the human experiences and perspectives from the consultations. Once finalized, the themes were compared to the integrated literature review for the purpose of supporting the evaluation of the GPA education on dementia care competencies for nurses practicing in LTC.

Ethical Considerations

The Health Research Ethics Authority (HREA) screening tool was completed to

determine if the practicum project required ethical review. Since this practicum project is an evaluation of an established education program for quality improvement purposes only, it does not require a review by Health Research Ethics Authority (HREA) as this is not research being conducted on human subjects. The completed HREA screening tool is included in Appendix G.

Stakeholders were contacted through the NL Health Services via their secure email platform and agreement for voluntary participation was obtained. No personal names or identifiers were used, a numeric code was assigned to each interviewee and the participant's individual responses were not shared. All interviews took place via NL Health Services secure online meeting platform Microsoft TEAMS with confidentiality maintained throughout. All data collected from each interview was stored on my password protected personal laptop. Once the handwritten notes from the interviews were transferred to the laptop and contained no identifying information, the paper was shredded and properly disposed of. Following the completion of the practicum project, all data will be permanently erased.

Results

The content analysis revealed three key themes which are entitled: *GPA knowledge*, *barriers*, and *changes to GPA*. The subthemes that emerged from the analysis were: *Benefits for GPA*, *Challenges with GPA*, *Consideration for GPA Implementation* and *Areas for Improvement with GPA*. Details of these are provided below and are depicted in Table 1 to provide a visual overview of the data gained during the consultations.

GPA Knowledge

All six of the consultants were asked if they felt that the GPA course was effective to help increase nurses' dementia care knowledge and help provide person-centered care to people

with dementia living in the LTC setting. All agreed that GPA was effective in increasing nurses' knowledge of dementia care stating an increase in confidence with knowing what to do in challenging situations practicing the strategies like stop and go to help curb challenging behaviors and focus on person-centered care. One of the experienced Registered Nurses stated that they have utilized their knowledge of the GPA program to help other employees who have not yet had an opportunity to complete the education to help them provide care for residents with dementia.

Barriers

The question surrounding barriers was directed only to the CNS and the RCM and both mentioned organizational challenges as a barrier. The CNS discussed the challenge of finding GPA coaches for smaller rural areas so that the GPA education can be delivered. Another barrier is that existing GPA coaches who have not had an opportunity to facilitate classes due to staffing or human resource issues experience a lapse in their GPA certification. GPA coaches must facilitate a required number of hours within a specified timeframe to keep up with the GPA certification. Another barrier mentioned by the RCM is having to cancel already scheduled GPA classes due to short staffing on units. Many employees commit to the GPA classes but if the units are short staffed and no replacements can be found the GPA education has to be rescheduled as resident and staff safety are priority. The RCM mentioned time constraints and GPA coach shortages as a possible barrier. Many GPA coaches facilitate on an as needed basis, and they also have other responsibilities to the organization so there are times when GPA training may have to be deferred due to this.

Changes to GPA

All consultants were asked during the interview if there were any aspects of the GPA curriculum that they would like to see changed, all four Registered Nurses stated they would not change anything in the current GPA curriculum but when asked if they would like to share anything further about GPA or dementia care at the end of the interview one of the experienced nurses brought forward they would like to see GPA refresher training and another experienced nurse suggested completing the GPA training during LTC orientation as it was more in depth than what is currently being presented. The remaining two Registered Nurses both stated the importance for all staff working with people with dementia receive the GPA education. Both the CNS and RCM also made recommendations for change. The CNS stated they would like to see a renewal GPA refresher process implemented so that there is more consistency with GPA refresher training for employees who have not taken the workshop in a long time. The CNS also discussed that it may be beneficial to introduce some form of virtual dementia tour (VDT) to LTC employees so they can experience what it is like to live in the shoes of someone with dementia realistically. Finally, both the CNS and one Registered Nurse stated they would like to see the GPA educational workshop integrated into the nursing undergraduate program or the Licensed Practical Nursing diploma program to help increase the knowledge of dementia care. The RCM discussed that they would like to see some sort of interactivity focused on person-centered bathing added to the curriculum as bathing a person who has dementia can be challenging.

The recommended GPA education renewal as per AGE Inc. is to complete a GPA recharge session after one year and again at the two-year mark then complete the full day GPA education session in year three to truly refresh knowledge, skills, and confidence (AGE Inc.,

2023). These findings are in conjunction with the findings sought from the evaluation portion of this practicum to help confirm if the current GPA education workshop is a benefit to nurses practicing in LTC as it will help increase nurse knowledge of dementia care and further ensure person-centered care remains a priority.

Table 1: Analysis of Consultations

GPA Knowledge	
<i>Benefits for GPA</i>	<ul style="list-style-type: none"> •Increased Knowledge •Mentorship and Knowledge Sharing •Increased Confidence •Managing Challenging Behaviors •Enhanced Person-Centered Care
GPA Barriers	
<i>Challenges with GPA</i>	<ul style="list-style-type: none"> •Organizational Challenges •Limited Certified GPA Coaches •Decreased Access in Rural Areas •Inexperienced GPA Coaches •Staffing Shortages •Staffing Needs •Time Constraints •Conflicting Responsibilities
<i>Considerations for Improvement for GPA Implementation</i>	<ul style="list-style-type: none"> •Refresher GPA courses •Orientation •GPA for all LTC staff •Undergraduate education opportunities
Changes to GPA	
<i>Areas of Improvement with GPA</i>	<ul style="list-style-type: none"> •Virtual Access to GPA •Person-centered bathing

Conclusion

The data collection from these consultation interviews have been insightful towards the existing GPA education workshop and provided a clear understanding of how the key stakeholders agree there is a knowledge increase from the GPA education workshops and that it is also important to consistently continue refresher training. All participants of the consultation

interviews had varying levels of experience and nursing roles within LTC and overall noted the GPA education helped to increase their knowledge of dementia care. This is consistent with findings from the literature review that this program addresses the noted gap in dementia care knowledge in nurses practicing in LTC (Evrpidou et al., 2018). The impact of increased knowledge of dementia care can positively impact the overall QoL for those with dementia (Kim et al., 2017). Nurses with advanced knowledge of dementia care and PCC can serve as valuable resources for family support as well as other members of the interdisciplinary team within LTC.

References

- Advanced Gerontological Education. (2023, November 24). *Enhancing the care of older adults by learning together*. <https://ageinc.ca>
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders–IV–Text Revision. Washington, DC: American Psychiatric Association; 1994
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus open*, 2, 8-14. <https://doi.org/10.1016/j.npls.2016.01.001>
- Christianson, T. M., Hoot, T. J., McLelland, V., & Morris, K. (2021). “All behavior has meaning”: *A qualitative exploration of dementia training of healthcare assistant students*. *Journal of Nursing Education and Practice*, 11(2).
https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=All+Behaviour+has+meaning%3A+A+qualitative+exploration+of+dementia+training+of+healthcare+assistant+students&btnG=
- Crandall, J., Coatsworth-Puspoky, R., Schlegel, K., Beker, L., McLelland, V. C., & Martin, L. S. (2022). Implementing Gentle Persuasive Approaches dementia education for staff on inpatient medicine units: *A program evaluation*. *Dementia (14713012)*, 21(4), 1173–1199.
<https://doi.org/10.1177/14713012211070148>
- Evripidou, M., Charalambous, A., Middleton, N., & Papastavrou, E. (2019). Nurses’ knowledge and attitudes about dementia care: *Systematic literature review*. *Perspectives in Psychiatric Care*, 55(1), 48–60. <https://doi-org.qe2a-proxy.mun.ca/10.1111/ppc.12291>

- Fiest, K. M., Jetté, N., Roberts, J. I., Maxwell, C. J., Smith, E. E., Black, S. E., Blaikie, L., Cohen, A., Day, L., Holroyd-Leduc, J., Kirk, A., Pearson, D., Pringsheim, T., Venegas-Torres, A., & Hogan, D. B. (2016). The Prevalence and Incidence of Dementia: a Systematic Review and Meta-analysis. *The Canadian Journal of Neurological Sciences / Le Journal Canadien Des Sciences Neurologiques.*, *43 Suppl 1*, S3–S50.
<https://doi.org/10.1017/cjn.2016.18>
- Griffiths, A. W., Robinson, O. C., Shoesmith, E., Kelley, R., & Surr, C. A. (2021). Staff experiences of implementing Dementia Care Mapping to improve the quality of dementia care in care homes: a qualitative process evaluation. *BMC Health Services Research*, *21*(1), 1–12. <https://doi-org.qe2a-proxy.mun.ca/10.1186/s12913-021-06152-6>
- Hung, L., Son, C., & Hung, R. (2019). The experience of hospital staff in applying the Gentle Persuasive Approaches to dementia care. *Journal of Psychiatric and Mental Health Nursing.*, *26*(1/2), 19–28. <https://doi.org/10.1111/jpm.12504>
- Kim, S. K., & Park, M. (2017). Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis. *Clinical Interventions in Aging.*, *12*, 381–397.
<https://doi.org/10.2147/CIA.S117637>
- 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. *The British Journal of Psychiatry*, *205*(6), 436-442.
<https://www.cambridge.org/core/services/aop-cambridge-core/content/view/6EEAE41E1FA6AE868BE97D18A02FF443/S0007125000278410a.p>

[df/div-class-title-non-pharmacological-interventions-for-agitation-in-dementia-systematic-review-of-randomised-controlled-trials-div.pdf](#)

Public Health Agency of Canada. (2014). Infection prevention and control guidelines: critical appraisal tool kit. https://publications.gc.ca/collections/collection_2014/aspc-phac/HP40-119-2014-eng.pdf

Schindel Martin, L., Gillies, L., Coker, E., Pizzacalla, A., Montemuro, M., Suva, G., & McLelland, V. (2016). An education intervention to enhance staff self-efficacy to provide dementia care in an acute care hospital in Canada: *A Nonrandomized Controlled Study*. *American Journal of Alzheimer's Disease and Other Dementias.*, 31(8), 664–677. <https://doi.org/10.1177/1533317516668574>

Speziale, J., Black, E., Coatsworth-Puspoky, R., Ross, T., & O'Regan, T. (2009). Moving forward: Evaluating a curriculum for managing responsive behaviors in a geriatric psychiatry inpatient population. *The Gerontologist*, 49(4), 570-576. <https://academic.oup.com/gerontologist/article/49/4/570/680815>

Watt, J.A., Goodarzi, Z., Veroniki, A.A. *et al.* Safety of pharmacologic interventions for neuropsychiatric symptoms in dementia: a systematic review and network meta-analysis. *BMC Geriatr* 20, 212 (2020). <https://doi.org/10.1186/s12877-020-01607-7>

**Appendix D: Consultation Letter of Invitation and Questionnaire
Clinical Nurse Specialist**

Good day (participant name),

I am writing you today to request your participation in an interview that will assist with my master's practicum project completion. I am a registered nurse manager currently working with NL Health Services and completing my Master of Science in Nursing degree through Memorial University of Newfoundland and Labrador. **My final practicum project entails the evaluation of a nurse's knowledge following the completion of the one-day Gentle Persuasive Approaches (GPA) training in long term care.** The goal of my practicum is to develop recommendations through consultation and collaboration of stakeholders within NL Health Services following the evaluation.

As part of this process, I am looking to consult with Clinical Nurse Specialist who oversee the one-day GPA training for eastern zone of LTC for NL Health Services. Your insight will help inform whether this established program will need adjustments or adaptations to the LTC practice setting. I am requesting your participation in a short interview in which you can share your experiences. This interview can take place either in person, or via secure online meeting platform TEAMS and would last approximately 30 minutes.

Your participation in this interview is voluntary and any information you would share would remain confidential. The data will be stored on my personal laptop which is password protected and will only be viewed by myself and my practicum supervisor. There are also no consequences or negative implications if you chose not to participate in this interview.

If you have any questions or would like to participate in this interview, please contact me via email tracy.legrow@easternhealth.ca by November 08, 2023. My plan is to have the interviews completed by November 15, 2023. I am confident your experience would be valuable to my project and any assistance you can provide would be greatly appreciated.

Thank you in advance for your consideration,

Tracy LeGrow BNRN

Master of Science in Nursing Student

Memorial University of Newfoundland and Labrador

Nurse Manager

Good day (participant name),

I am writing you today to request your participation in an interview that will assist with my master's practicum project completion. I am a registered nurse manager currently working with NL Health Services and completing my Master of Science in Nursing degree through Memorial University of Newfoundland and Labrador. **My final practicum project entails the evaluation of a nurse's knowledge following the completion of the one-day Gentle Persuasive Approaches (GPA) training in long term care.** The goal of my practicum is to develop recommendations through consultation and collaboration of stakeholders within NL Health Services following the evaluation.

As part of this process, I am looking to consult with LTC nurse managers who have either completed or facilitated the one-day GPA training. Your insight will help inform whether this established program will need adjustments or adaptations to the LTC practice setting. I am requesting your participation in a short interview in which you can share your experiences. This interview can take place either in person, or via secure online meeting platform TEAMS and would last approximately 30 minutes.

Your participation in this interview is voluntary and any information you would share would remain confidential. The data will be stored on my personal laptop which is password protected and will only be viewed by myself and my practicum supervisor. There are also no consequences or negative implications if you chose not to participate in this interview.

If you have any questions or would like to participate in this interview, please contact me via email tracy.legrow@easternhealth.ca by November 08, 2023. My plan is to have the interviews completed by November 15, 2023. I am confident your experience would be valuable to my project and any assistance you can provide would be greatly appreciated.

Thank you in advance for your consideration,

Tracy LeGrow BNRN

Master of Science in Nursing Student

Memorial University of Newfoundland and Labrador

Registered Nurse

Good day (participant name),

I am writing you today to request your participation in an interview that will assist with my master's practicum project completion. I am a registered nurse manager currently working with NL Health Services and completing my Master of Science in Nursing degree through Memorial University of Newfoundland and Labrador. **My final practicum project entails the evaluation of a nurse's knowledge following the completion of the one-day Gentle Persuasive Approaches (GPA) training in long term care.** The goal of my practicum is to develop recommendations through consultation and collaboration of stakeholders within NL Health Services following the evaluation.

As part of this process, I am looking to consult with LTC registered nurses who have completed the one-day GPA training. Your insight will help inform whether this established program will need to be adjusted or adapted to your practice setting. I am requesting your participation in a short interview in which you can share your experiences. This interview can take place either in person, or via secure online meeting platform TEAMS and would last approximately 30 minutes.

Your participation in this interview is voluntary and any information you would share would remain confidential. The data will be stored on my personal laptop which is password protected and will only be viewed by myself and my practicum supervisor. There are also no consequences or negative implications if you chose not to participate in this interview.

If you have any questions or would like to participate in this interview, please contact me via email tracy.legrow@easternhealth.ca by November 08, 2023. My plan is to have the interviews completed by November 15, 2023. I am confident your experience would be valuable to my project and any assistance you can provide would be greatly appreciated.

Thank you in advance for your consideration,

Tracy LeGrow BNRN

Master of Science in Nursing Student

Memorial University of Newfoundland and Labrador

Interview Questions for the Clinical Nurse Specialist

1. What is your role in LTC and how long have you held this role?
2. What is your experience with the GPA Program?
3. Do you feel the GPA course has been effective to help increase nurses' dementia care knowledge and help to provide person-centered care to people with dementia in the LTC setting?
1. Have you identified any barriers related to implementation and evaluation of the GPA program within the context of the LTC setting for the eastern zone of NL Health Services.
4. Are there any aspects of the GPA curriculum that you would add or change?
5. Is there anything else related to the GPA program, including the evaluation methodologies, or related to dementia care that you would like to share with me today?

Interview Questions for the Nurse Manager

1. What is your role in LTC and how long have you held this role?
2. What is your experience with the GPA Program?
3. Do you feel the GPA course has been effective to help increase nurses' dementia care knowledge and help to provide person-centered care to people with dementia in the LTC setting? Have you identified any barriers?
4. Are there any aspects of the GPA training that you would add or change?
5. Is there anything else related to the GPA program, including the evaluation methodologies, or related to dementia care that you would like to share with me today?

Interview Questions for Registered Nurses

1. How many years have you been working as a registered nurse? How many years of experience do you have practicing within the long-term care setting?
2. What is your experience with the GPA Program?
3. Do you feel the GPA course has been effective to help increase nurses' dementia care knowledge and help to provide person-centered care to people with dementia in the LTC setting?
4. Based on your experience from the GPA training, has your knowledge of dementia care increased to help you manage challenging and responsive behaviors more successfully?
5. Would you change or add anything to the GPA education session?
6. Is there anything else related to the GPA program, including the evaluation methodologies, or related to dementia care that you would like to share with me today?
7. Would you recommend the GPA education session to your nursing colleagues?

Appendix E: Evaluation Report

Evaluating the Effectiveness of the Gentle Persuasive Approach on Dementia Care
Competencies for Nurses Practicing in Long-Term Care: Evaluation Report

The setting for the practicum project is within long term care (LTC) eastern-urban zone of NL Health Services in the province of Newfoundland and Labrador, Canada. Professional nurses practicing in the LTC setting are often faced with increased complex care requirements from residents with dementia and dementia related diagnoses. This practicum project is directed towards the evaluation of the Gentle Persuasive Approach (GPA) educational workshop on dementia care competencies for nurses practicing in LTC. GPA is an innovative interdisciplinary curriculum informed by person-centered care (PCC) and is designed for front-line staff providing direct care for people living with dementia. This evidence-based education is based on a PCC approach and focuses on providing staff the knowledge, skills, and confidence to support the person with dementia (AGE Inc., 2023). PCC is an approach to providing healthcare or support to someone focusing on their individual needs, preferences, and values. It encompasses treating each person as their own unique individual with their own story, desires, and ways of doing things (Kim et al., 2017).

Implementation and Evaluation

Throughout the development of this practicum project, it was determined that an evaluation of the GPA (AGE Inc., 2023) program was needed for the region and LTC setting it is being implemented in nursing practice. The examination of the evidence has identified a gap in the knowledge of dementia care among professional nurses. This has been demonstrated in the high-quality systematic review by Evripidou et al. (2018) which measured nurses' knowledge and attitudes towards dementia care. This systematic review revealed a gap in dementia care knowledge among nurses relating to the management of challenging and responsive behaviours of people living with dementia. Nurses included in the review's studies reported a basic

knowledge of dementia care that is part of their entry level education into the profession.

Evripidou reported 91.9% of nurses (n=34) described the need for additional knowledge on how to manage the behaviors of dementia beyond pharmacological interventions.

Nonpharmacological interventions to manage behaviours and increase nurses' competencies in identifying triggers to responsive behaviours may include gentle and respectful physical redirection, effective communication, and identifying appropriate and respectful responses to the challenging behaviour which includes de-escalation strategies (AGE Inc., 2023).

As nurses are recognized as the frontline caregivers in LTC, it is imperative to address any knowledge gaps which include implementing nonpharmacological interventions for effective dementia care for LTC nurses and their patients as there is complexity in managing care needs for those living with dementia (i.e., aggressive episodes which can result in violent outbursts towards nursing staff). Therefore, the results of these evaluations outlined in this report explore the effectiveness of additional dementia care education that is the GPA education program. This evaluation measured dementia care competencies of nurses practicing in LTC who were enrolled in and completed the GPA program. The evaluations took place during winter 2024 within LTC of the eastern urban zone of NL Health Services.

Gentle Persuasive Approaches

This practicum project is directed towards the evaluation of the GPA educational workshop on dementia care competencies for nurses practicing in LTC. GPA is an innovative interdisciplinary curriculum informed by PCC and is designed for front-line staff as an educational intervention teaching gentle, respectful physical redirection to support persons with dementia and responsive behaviours. This evidence-based, interactive, and practical education is

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based on a person-centered approach with a focus on providing the knowledge, skills, and confidence towards dementia care (AGE Inc., 2023). The GPA curriculum was developed by the Advanced Gerontological Educational (AGE Inc.) Inc. in 2004 for the purpose of creating a PCC curriculum for healthcare providers caring for older adults living with dementia. This evidence-based education is grounded in the philosophical underpinnings of humanism, and personhood, recognizing each individual's value and place in the world and is an interactive and practical learning experience for staff working across healthcare organizations (AGE Inc., 2023). This course teaches PCC, compassion, and gentle approaches to dementia care with confidence and respect as a response to a person's responsive behaviors that are associated with symptoms of dementia. The GPA program consists of a combination of small group exercises, reflection, role-play, respectful self-protective and gentle redirection techniques to enhance the effective response for challenging and aggressive behaviors associated with advanced dementia (AGE Inc., 2023). To date, the GPA curriculum has been introduced into over 2000 LTC facilities, and other healthcare centers across Canada and a reported significant increase in dementia care knowledge scores was noted from immediate pre and post intervention following implementation of GPA education among staff has been noted in the literature ($n=75$), ($M = 4.96$, $SD 1.35$; $M = 5.99$, $SD 1.26$, $t(df) = 6.98$, $p < 0.001$). Results for 6 weeks post GPA were ($n=36$) ($M = 5.94$, $SD 1.45$, $F(df) = 14.78(2,70)$ $p < 0.001$) (Crandall et al., 2022).

Specific Objective(s) for the Evaluation

1. To evaluate the measurement of LTC nurses' knowledge of dementia care competencies through pre and post questionnaires of the GPA education.
2. To evaluate nurse attitudes for the effectiveness of the GPA program via open ended questions post education.

3. Disseminate the results with key stakeholders within the RHA regarding the outcome of nurse competency knowledge for person centered dementia care in addition to nurse attitudes towards the effectiveness of the GPA education session including the identification of any additional issues.

Setting and Sample

The target group participants identified for this evaluation were nurses currently practicing within the LTC setting located in the eastern zone for NL Health Services of Newfoundland and Labrador. Registered Nurses (RNs) as well as Licensed Practical Nurses (LPNs) (n = 16) were included as the care of dementia residents in LTC fall under their scope of practice. Inclusion criteria consisted of RNs and LPNs practicing within the LTC setting who were registered for and completed GPA education. Participants were informed that their participation in the questionnaire was voluntary, anonymous with no negative repercussions if they chose not to participate. Consent was implied by their willingness to participate in the evaluation process. Both novice (e.g., less than 5 years' experience) and experienced (e.g., more than 5 years' experience) nurses were invited. The scheduling of the GPA classes within NL Health Services eastern urban zone LTC allowed me to attend three classes during the winter semester to collect the data. Sixteen nurses accepted the invitation to participate and completed the questionnaire.

Data Collection

Data collection was in the form of two versions of the GPA multiple choice questionnaires (MCQ) that were administered both immediate pre (Appendix A) and post (Appendix B) education of the GPA sessions to each voluntary participant. The two versions of

the questionnaire alternated between participants to minimize the potential for bias or contamination of responses that can occur when participants share information or influence each other's answers. Both versions of the surveys consisted of 8 questions. The post-GPA questionnaire also included three qualitative questions (Appendix C) I developed to gather personal participant insight into the GPA education. The qualitative responses gave nurses' the opportunity to explore their attitudes towards the effectiveness of the GPA education. Please see Appendix A, B and C for copies of the questionnaires and open-ended questions.

This anonymous questionnaire was developed by the researchers at AGE Inc. as a measurement of participant dementia knowledge following each GPA education session. The face validity of this instrument has provided preliminary indications of its validity assessment measuring its intended purpose of nurse knowledge. AGE Inc. have utilized this questionnaire in their own research for a number of years with a more comprehensive evaluation of the tool's content validity upcoming in the future. Content validity, which has been defined by Polit and Beck (2021), as the extent to which an instrument's content adequately captures what is intended on being measured. Each version of the GPA questionnaire includes all relevant aspects of the knowledge sections of the GPA educational workshop as per AGE Inc. (2023). Written approval for the utilization of the GPA MCQ questionnaires for this practicum has been granted and a copy of the approval can be found in Appendix D. The questionnaire was distributed in paper form immediately before and then immediately following the GPA education sessions. The rationale for this evaluation process was to measure the effectiveness for increasing the nurse's knowledge after receiving the GPA education. The questionnaire consisted of eight multiple choice answer questions. Each post-GPA questionnaire included the three qualitative response questions. All participants were given approximately 15 minutes to complete. There were no

personal identifiers collected to ensure confidentiality of the participants. The questionnaires were distributed, and the completed forms were collected and placed in an unmarked envelope to ensure confidentiality. The questionnaire respects ethical guidelines and is not intended to cause harm to participants.

Data Management and Analysis

All data was managed in an encrypted excel document-located on my password protected laptop and did not contain any confidential information. The data is only accessible by myself and my practicum supervisor throughout the continued development of this practicum project. Once the GPA MCQ data was collected from the participant nurses pre- and post- GPA education, I analyzed the data by summing up the scores for each of the eight multiple choice questions and then converting the total score to a percentage for each of the sixteen participants. This method was repeated to extract individual percentages for pre-test and post-test questionnaires. All pre-test percentages were then calculated for an overall average and the same method conducted for the post-test questionnaires and the results recorded. Percentage scores for the lowest and highest were reported to provide a percentage range for each pre and post questionnaire. For the qualitative component, I analyzed the three questions from all participants to identify and extract key information for themes using content analysis, which is a qualitative research method used to identify, analyze, and report patterns or themes within text as per Polit and Beck (2021). This analysis method allows insight into research questions through the organization and interpretation of data to find underlying meanings (Bengtsson, 2016). I read and reviewed the answers from each question multiple times and defined themes from the recurring ideas within the data. This process allowed me to explore and interpret the individual perspectives of the nurses and their personal experience with the GPA course. Once the

identified themes were finalized, I compared them to the integrated literature review for the purpose of supporting the evaluation of the GPA education on dementia care competencies for nurses practicing in LTC. All results from the implementation and evaluation are detailed further on in this report. Following the completion of the practicum project, all data will be permanently deleted and destroyed.

Results

Pre and Post Questionnaire Scores

The results from the 8-item questionnaire measuring nurse knowledge of GPA dementia care revealed a total mean average of 55.5% for the total pre-GPA test from the 16 participants. The range of the pre-GPA individual scores measured from 25% to 87.5%. The overall mean average of the post-GPA test results was 74.2% which was an 18.7% increase in overall scores from pre-testing. The lowest individual post-GPA score was 50% and the highest individual score was 100%. The increase in overall scores from pre to post questionnaire results show an improvement in participants knowledge and confidence on the understanding of dementia care following GPA education.

Table 2: Pre and Post Questionnaire Scores

Pre- GPA (out of 8)	Percentage Score	Post -GPA (out of 8)	Percentage Score
5	62.5	6	75
6	75	4	50
5	62.5	5	62.5
2	25	5	62.5
5	62.5	8	100
4	50	6	75
3	37.5	5	62.5
4	50	6	75
5	62.5	5	62.5

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2	25	8	100
4	50	7	87.5
4	50	8	100
4	50	7	87.5
5	62.5	6	75
6	75	4	50
7	87.5	5	62.5
Mean	Mean %	Mean	Mean %
4.4375	55.5%	5.9375	74.2%

Content Analysis

The results of the content analysis from the three open-ended questions revealed three key themes which are outlined in more detail below and are titled: *GPA Influence*, *GPA Knowledge*, and *GPA Improvement Areas*. The subthemes that emerged from the analysis were: *GPA influence on Nurse Confidence and Knowledge*, *Dementia Care Knowledge*, and *Consideration for Changes to GPA*. Detailed results are provided below as well as depicted in Table 2 to provide a visual overview of the data gained during the evaluations.

GPA Influence

All participants were asked how the GPA course had influenced their confidence and knowledge for providing dementia care within their practice setting. 75% of participants (n = 12) provided responses to this question in the evaluation that align with increased knowledge and confidence of dementia care. Responses included an increase in participant knowledge and confidence with application of the GPA dementia care strategies within the practice setting. Participants mentioned how the practical skills outlined in the education will be a benefit as nursing staff will be equipped to provide person-centered dementia care in a non-pharmacological way to LTC residents.

Dementia Care Knowledge

The second open-ended evaluation question focused on whether participants knowledge of dementia care increased specific to successfully managing challenging and responsive behaviors. 12 out of the 16 participants agreed that the knowledge of dementia care increased relating to the successful management of challenging and responsive behaviors from residents with dementia. Participants responses included learning how to de-escalate responsive behaviors and safely managing the behaviors of residents with dementia. Two of those participants mentioned that this education refreshed their knowledge of dementia care, and two participants left this question unanswered.

GPA Improvement Areas

Each nurse who participated in the evaluation was asked if they would change or add anything to the existing GPA education session to help strengthen dementia care within their practice setting. Three (n =3) of nurse participants did not reply to the question and (n = 5) of nurse participants responded that no changes or additions were needed. One (n = 1) participant replied to this question that they were unsure. The remaining participants, (n = 7), replied that the GPA education was adequate, presented well and the hands-on techniques helped to solidify the learning for the practice setting. One participant in the evaluation put forward multiple recommendations, suggesting GPA education for all staff within LTC in addition to offering the same or similar dementia care education to any interested resident families. The same participant also put forward the recommendation for more frequent GPA refresher training so staff could revisit the best practice evidence-based training.

Table 2: Analysis of Qualitative Questions

GPA Influence	
<i>GPA Influence on Nurse Confidence and Knowledge</i>	<ul style="list-style-type: none"> •Increased Knowledge •Increased Confidence •Mentorship and Knowledge Sharing •Greater Understanding of Dementia •Positive Impact for Nurses and Residents
Dementia Care Knowledge	
<i>Nurse Dementia Care Knowledge</i>	<ul style="list-style-type: none"> • Increased Knowledge for Challenging and Responsive Behaviors • Increased Knowledge for Non-pharmacological Dementia Care Techniques • Enhanced Person-Centered Care
GPA Improvement Areas	
<i>Consideration for changes to GPA</i>	<ul style="list-style-type: none"> • Increased GPA Refresher Training • GPA Education for All LTC Staff • GPA Education for LTC Resident Families

Ethical Considerations

The Health Research Ethics Authority (HREA) screening tool was completed to determine if the practicum project required ethical review. Since this practicum project is an evaluation of an established education program for quality improvement purposes only, it does not require a review by Health Research Ethics Authority (HREA) as this is not research being conducted on human subjects. The completed HREA screening tool is included in Appendix E. Consent to participate will be implied by voluntarily completing the anonymous questionnaire and short qualitative survey.

Conclusion

The data collection from these evaluations have been insightful towards the existing GPA education. Overall, the findings from this evaluation have underscored the positive impact GPA

education has had on nurse confidence and knowledge in dementia care with valuable insights to strengthen dementia care practices within LTC within eastern Newfoundland. This is consistent with findings from the literature review that GPA addresses the noted gap in dementia care knowledge in nurses practicing in LTC (Evrpidou et al., 2018). The results of the questionnaires have revealed the positive impact GPA education has on nursing staff practicing in the LTC setting. This was evidenced by the overall mean score improving to 81% resulting in a 28% increase overall from the pre-testing phase. In addition, the qualitative analysis revealed that nurses agreed that their level of dementia care knowledge had improved with the GPA education specifically around managing responsive behaviors. Furthermore, nurses expressed increased knowledge and confidence in applying GPA strategies, with an emphasis on the practical non-pharmacological techniques acquired for delivering PCC to this vulnerable population. These findings highlight the significance of GPA education in elevating the standards of dementia care within the LTC practice setting while providing a foundation for continuous improvement in nursing practice.

References

- Advanced Gerontological Education. (2023, November 24). *Enhancing the care of older adults by learning together*. <https://ageinc.ca>
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus open*, 2, 8-14. <https://doi.org/10.1016/j.npls.2016.01.001>
- Christianson, T. M., Hoot, T. J., McLelland, V., & Morris, K. (2021). “All behavior has meaning”: *A qualitative exploration of dementia training of healthcare assistant students*. *Journal of Nursing Education and Practice*, 11(2).
https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=All+Behaviour+has+meaning%3A+A+qualitative+exploration+of+dementia+training+of+healthcare+assistant+students&btnG=
- Crandall, J., Coatsworth-Puspoky, R., Schlegel, K., Beker, L., McLelland, V. C., & Martin, L. S. (2022). Implementing Gentle Persuasive Approaches dementia education for staff on in-patient medicine units: *A program evaluation*. *Dementia (14713012)*, 21(4), 1173–1199.
<https://doi.org/10.1177/14713012211070148>
- Evripidou, M., Charalambous, A., Middleton, N., & Papastavrou, E. (2019). Nurses’ knowledge and attitudes about dementia care: Systematic literature review. *Perspectives in Psychiatric Care*, 55(1), 48–60. <https://doi-org.qe2a-proxy.mun.ca/10.1111/ppc.12291>

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- Hung, L., Son, C., & Hung, R. (2019). The experience of hospital staff in applying the Gentle Persuasive Approaches to dementia care. *Journal of Psychiatric and Mental Health Nursing.*, 26(1/2), 19–28. <https://doi.org/10.1111/jpm.12504>
- Kim, S. K., & Park, M. (2017). Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis. *Clinical Interventions in Aging.*, 12, 381–397. <https://doi.org/10.2147/CIA.S117637>
- 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. *The British Journal of Psychiatry*, 205(6), 436-442. <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/6EEAE41E1FA6AE868BE97D18A02FF443/S0007125000278410a.pdf/div-class-title-non-pharmacological-interventions-for-agitation-in-dementia-systematic-review-of-randomised-controlled-trials-div.pdf>
- Polit, D.F., & Beck, C. T. (2021). *Resource manual for nursing research: Generating and assessing evidence for nursing practice* (11 th ed). Walters Kluwer; Lippincott Williams & Wilkins.
- Schindel Martin, L., Gillies, L., Coker, E., Pizzacalla, A., Montemuro, M., Suva, G., & McLelland, V. (2016). An education intervention to enhance staff self-efficacy to provide dementia care in an acute care hospital in canada: *A Nonrandomized Controlled Study. American Journal of Alzheimer's Disease and Other Dementias.*, 31(8), 664–677. <https://doi.org/10.1177/1533317516668574>

Appendix F: Dissemination Article

Evaluating the Effectiveness of the Gentle Persuasive Approach on Dementia Care

Competencies for Nurses Practicing in Long-Term Care

Authors:

Tracy LeGrow BNRN, Registered Nurse, Memorial University of Newfoundland and Labrador

Master of Science in Nursing Student

Resident Care Manager, NL Health Services

4 Phoenix Drive, Paradise NL A1L 4H9

Phone: (709)763-4709

Email: Tmdt53@mun.ca

Jennifer Collins Ph.D., RN(BScN), CCNE, Memorial University of Newfoundland and
Labrador's Faculty of Nursing

Correspondence Designate

Occupation: Assistant Professor

Address: 323 Prince Philip Drive, St. John's, NL, A1B 3V6

Phone: 709-691-6110

Email: jcollins13@mun.ca

Good day,

My Name is Tracy LeGrow, and I am a *Master of Science in Nursing* candidate completing my practicum at Memorial University of Newfoundland and Labrador on schedule to graduate May 2024. I am writing to submit my manuscript titled “Evaluating the Effectiveness of the Gentle Persuasive Approach on Dementia Care Competencies for Nurses Practicing in Long-Term Care” for consideration for publication in *Nursing2024*. I believe that my practicum research aligns with the journal’s focus on advancing nursing practice and improving patient outcomes, particularly in the context of dementia care within long-term care settings. The escalating prevalence of dementia presents a significant challenge in healthcare, particularly in long-term care facilities, where nurses play a crucial role in providing person-centered care to individuals with dementia.

My manuscript discusses the methodology, findings and implications of my practicum project highlighting the positive impact of Gentle Persuasive Approach education on nurse confidence, knowledge, and practical skills in dementia care. Through quantitative questionnaires and qualitative feedback from participating nurses, the results underscore the importance of ongoing education and training in enhancing dementia care practices within long-term care. I believe my manuscript contributes valuable insights to the field of nursing by addressing the knowledge gap among professional nurses working with individual's living with dementia and emphasizing the importance of evidence-based interventions such as GPA education. The findings from my practicum have implications for nursing education, practice, and policy within Canada where the aging population and prevalence of dementia are increasing.

Thank you for your consideration and I look forward to the opportunity to contribute to the dissemination of knowledge and best practices in nursing care.

Sincerely,

Tracy LeGrow BNRN

MScN Candidate May 2024

Abstract

Purpose: To evaluate the effectiveness of Gentle Persuasive Approaches on dementia care competencies for nurses practicing in Long Term Care (LTC).

Methods: Sixteen Registered Nurses and Licensed Practical Nurses practicing in LTC completed surveys pre and post GPA education. Individual and overall percentages were analyzed along with content analysis for the qualitative data.

Results: The knowledge scores from the surveys revealed a total mean average of 55.5% pre-GPA and post-GPA mean average was 74.2% The content analysis from the qualitative data revealed three key themes entitled: *GPA Influence*, *GPA Knowledge*, and *GPA Improvement Areas*.

Conclusion: The scores highlight the importance of GPA education in elevating the standards of dementia care among professional nurses practicing within the LTC.

Key words: Dementia Care, Long-term Care, Gentle Persuasive Approach, Nurse Knowledge, Education, Dementia

Imagine a world where the lifetime of memories that you cherished faded from your mind and your loved ones become complete strangers distorting your reality. This is the reality for people with dementia. Dementia has been defined by the Diagnostic and Statistical Manual of Mental Disorders-IV-Text Revision (DSM-IV-TR) as an acquired condition marked by impairments in memory and one other cognitive domain that cause significant limitations in social and/or occupational functioning¹. The symptoms of dementia may include: a decline in memory, language, and judgment that may include changes in mood and/or behavior. These problematic symptoms are generally progressive and can include difficulty performing activities of daily living. The need for assistance with daily activities and care become more pronounced as cognitive function declines for people with dementia and dementia related diagnosis². In the high-quality systematic review by Fiest et al, several forms of dementia are described with the most common ones identified as Alzheimer's disease, vascular dementia, Lewy body disease and frontotemporal dementia.

Approximately one-third of seniors under the age of 80 that have been diagnosed with dementia are living in long-term care facilities (LTCFs). This statistic increases to 42% for those people who are 80 years and above in Canada³. In 2020 there were approximately 596,600 Canadians living with dementia with an estimate of over 955,900 Canadians anticipated to be living with this disease by 2030³. With the rising number of seniors diagnosed with dementia in Canada, there is a growing reliance on external support, whether from family members, personal support workers, and/or nurses. This dependence extends to admission to LTCFs, ensuring that individuals with dementia can access the essential support they need. The examination of the evidence has identified a gap in the knowledge of dementia care among professional LTC nurses. These nurses are faced with increasing complex care requirements for this population and require

implementation of care practices to help close the dementia care knowledge gap by learning to effectively manage, understand, and respond to the challenging behaviours of dementia⁴.

The setting for this practicum project was within the LTC setting of NL Health Services in the province of Newfoundland and Labrador, Canada. The goal was to evaluate the effectiveness of the one-day Gentle Persuasive Approach (GPA) educational workshop on dementia care competencies for professional nurses practicing in LTC. Dementia care competencies refer to the specific knowledge, skills, attitudes, and behaviors that health care professionals need to effectively care for individual's with dementia⁵. The GPA education workshop was developed by the Advanced Gerontological Educational Inc. (AGE Inc.) in 2004 as an interdisciplinary curriculum aimed at healthcare providers caring for older adults with dementia. AGE Inc. has a partnership NLHS, providing GPA curriculum to employees. The one-day GPA education integrates PCC through confidence, respect and compassion while responding to the challenging and responsive behaviors that are associated with symptoms of dementia⁵. The program offers interactive learning focusing on PCC, compassion, and gentle approaches to address responsive behaviours in people with dementia. Through small group exercises, role-play, and techniques like gentle redirection, GPA enhances effective responses to challenging behaviours in advanced dementia⁵. Completion of an integrated literature review and consultations interviews with key stakeholders within NL Health Services revealed a need to evaluate the effectiveness of GPA education on LTC professional nurses' dementia care competencies.

Literature Review

A comprehensive literature search was conducted using CINAHL, PubMed, Cochrane Library and Google Scholar databases for articles related to nursing care and dementia. English-

language, peer-reviewed scholarly articles and journals that studied knowledge of dementia following dementia care education. The research question that guided the search of the literature was: “What is known about a LTC nurse’s knowledge of dementia in relation to caring for people with challenging behaviors from dementia symptoms?”. Key terms used included a combination of the following: “Dementia”, “Gentle Persuasive Approaches”, “Education”, “Nursing” and “Knowledge”. No geographical restrictions were applied, and precedence was given to research articles published within Canada as this literature review is informing a practicum project that was developed for use within Atlantic Canada. Articles were considered from other countries if there was a reasonable amount of generalizability or transferability related to the topic of evaluating dementia care programs in nursing practice in Canada. There was emphasis to include research that was published within the last ten years to allow for the synthesis of relevant evidence that reflects current nursing practices, however, older research was considered if more recent publications were unavailable, and the articles were deemed as remaining relevant to current nursing practices.

All design strengths of qualitative, quantitative, and mixed methods were considered with focus on medium and high-quality strong study designs from a quantitative lens preferred. Meta-analysis and systematic reviews were also considered as these synthesize multiple primary studies and are generally considered to provide the strongest evidence-based results with their utilization of strategies to reduce bias and errors⁶. The Public Health Agency of Canada (PHAC) Critical Appraisal Toolkit was used for the analytical studies⁷. Qualitative research was reviewed using criteria from the Joanna Briggs Institute Checklist for Qualitative Research⁸. Trustworthiness for the qualitative studies were assessed using the requirements by Lincoln and Guba⁹. The mixed methods research was analyzed using the Mixed Methods Appraisal Tool

(MMAT) Version 2018¹⁰. Over 18 articles centered around dementia care education were retrieved and reviewed for the overall integrated literature review. For the purpose of this article, five key studies outlining GPA interventions in dementia care for nurses' practicing in LTC were included¹¹⁻¹⁵.

Findings from the literature review revealed a knowledge gap among nurses for the management of the complex behaviours of people living with dementia within the LTC setting¹¹⁻¹⁵. The integrated literature review examined evidence that included GPA education as an intervention for health care staff caring for people with dementia. The studies were assessed to determine relevance and support the evaluation of GPA in LTC. All included studies discussed below utilized GPA education as an intervention as per the GPA curriculum of AGE Inc⁵. Five Canadian studies of varying designs were reviewed. Three were mixed-methods¹¹⁻¹³, one was a high quality, strong non-randomized controlled trial (NRCT)¹⁴ and a medium quality inadequate Interrupted Time Series (ITS)¹⁵. The quality score for each study was evaluated to be 100%. Christianson et al was the only study with health care students as participants¹¹ (n = 84), participants in the remaining four studies explored healthcare staff experience with a GPA intervention¹²⁻¹⁵. Three of the included studies utilized the Self-Perceived Behavioural Management Self-Efficacy Profile (SBMSEP) tool as a measure of confidence in the clinical behaviors and tasks necessary for responding respectfully to responsive behaviors^{11,12,14}. The tool was established for content validity, internal consistency, and reliability (Cronbach alpha = 0.93) for all three studies. Only one study chose to use only the three qualitative questions from the SBMSEP at two time points pre- and 12 weeks post-GPA¹¹.

Crandall et al used the complete SBMSEP as a measurement at three time points, immediate pre- and post-GPA and then again at 6-8 weeks post-GPA while Schindel-Martin et al

measured self-efficacy was the primary outcome measure from the SBMSEP per-GPA and again at the eight weeks follow up^{12,14}. SBMSEP results demonstrated increased self-efficacy scores for both these studies^{12,14}. Crandall et al reported significant increase in dementia care self-efficacy, competence and knowledge scores immediate pre-intervention of GPA and post-GPA ($p < 0.001$)¹². Competence and knowledge increase relative to pre-intervention was sustained ($p = <0.001$) and there was a further significant increase in self-efficacy scores from immediate post-intervention to six to eight weeks later ($p = 0.002$)¹². Schindel-Martin et al demonstrated from baseline to immediate postintervention, the intervention group had a significant increase in self-efficacy ($M = 57.31$, $SD = 7374$; $P < .001$) and then a small decrease was noted during the time from immediate postintervention and six to eight weeks postintervention ($M = 54.68$, $SD = 6.46$; $P = .05$)¹⁴. The intervention group had significantly higher self-efficacy ($M = 54.68$, $SD = 6.46$; $P < .001$) than the wait-listed group ($M = 45.17$, $SD = 8.56$; ($P = .21$) at six to eight weeks postintervention and the waitlisted group reported no significant differences in self-efficacy between the two time points¹⁴. These findings suggest the positive impact of the GPA educational intervention on sustaining a higher level of self-efficacy in nurses providing dementia care in LTC compared to those within the waitlist group.

Overall, these studies highlight the effectiveness of GPA interventions in enhancing self-efficacy, competence and dementia care knowledge among health care providers practicing in LTC settings. They also support the importance of evaluating the impact of GPA education on health care practitioners' ability to respond to the challenging behaviours within dementia care for NLHS.

Consultations

The purpose of the consultations was to determine key stakeholders' knowledge of dementia care following their experience of the GPA education as well as identify any knowledge gaps or barriers for nurses who have already completed the one-day GPA education. These consultations would assist in determining the most appropriate method to assess the effectiveness of the GPA education for the practicum project. Possible issues related to implementation and evaluation of the GPA education within the context of the LTC setting for NL Health Services was also explored. Six experienced nurse professionals with more than five years LTC practicing experience were interviewed. A clinical nurse specialist (CNS) was selected as a consultant due to their expertise with GPA as their portfolio was responsible for overseeing GPA education for LTC for NL Health Services. A resident care manager (RCM) was included as a consultant as they were a current GPA educator, and four Registered Nurse (RN) consultants who were all currently practicing in the LTC setting actively engaged in providing dementia care accepted the invite to consult for this project. All the consultants had previously completed the GPA educational workshop. The results from the consultations led to implement an evaluation of the GPA education workshop within the LTC practice area.

Consultation Analysis

The consultation interviews were analyzed to identify and extract key information for themes using a thematic content analysis which is a qualitative research method used to identify, analyze, and report patterns or themes within text. This analysis method allows insight into research questions through the organization and interpretation of data to find underlying meaning¹⁹. The results of the content analysis revealed three key themes which are entitled: *GPA knowledge, barriers, and changes to GPA*. The subthemes that emerged from the analysis were:

Benefits for GPA, Challenges with GPA, Consideration for GPA Implementation and Areas for Improvement with GPA. The results from the consultations supported the need to evaluate the GPA program within NL Health Services to determine the effectiveness of the program and to further provide support to professional nurses providing dementia care in LTC. As per the authors understanding no evaluations for the GPA program has occurred within Atlantic Canada. The involvement of key stakeholders to support educational implementations appear to contribute to improving evidence informed decision making among nurses¹⁶.

Methods

Setting and Sample

The inclusion criteria for this evaluation were sixteen professionally licensed nurses currently practicing within the LTC setting within NL Health Services of Newfoundland and Labrador in Atlantic Canada. Registered Nurses (RNs) as well as Licensed Practical Nurses (LPNs) were both included who provide dementia care to residents within their LTC practice setting. Both novice (e.g., less than 5 years' experience) and experienced (e.g., more than 5 years' experience) nurses were part of the inclusion criteria. As this practicum project was a part of a quality improvement initiative, ethical approval was not required but also limited the data we can collect from participants such as classification for registration or the breakdown of participants who are RNs or LPNs.

Data Collection

The specific objectives were to evaluate LTC nurses' dementia care knowledge competencies and attitudes towards the GPA education program. This would be accomplished

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with nurses completing the 8-item multiple choice questionnaire before and after the GPA education session. Once the GPA quantitative data was collected pre- and post- GPA education, analysis of the GPA questionnaire knowledge scores took place in the form of mean percentages overall and for each participant. This method was repeated to extract each individual percentages to provide a comparison of scores between participants. Percentage scores for the lowest and highest were reported to provide a participant percentage range and are outlined in the findings below. Nurses who participated were enrolled in the GPA educational workshop through the practicing health authority, NL Health Services. Participants were informed that their participation in the questionnaire was voluntary, anonymous with no negative repercussions if they chose not to participate. Consent was implied by their willingness to participate in this evaluation process. Both novice (e.g., less than 5 years' experience) and experienced (e.g., more than 5 years' experience) nurses were invited.

The data was collected from the participants in the form of two versions of eight multiple choice question surveys (MCQ) that were administered both immediate pre and post GPA education to each participant with a time limit of approximately 15 minutes to complete. The developers, AGE Inc., created this questionnaire for their own research as a measurement of participant dementia knowledge following their GPA education and have utilized it for a number of years. Permission was granted by AGE Inc. to utilize the two versions of the questionnaire for the purpose of the practicum project. The face validity of the questionnaire has provided preliminary indications that the questionnaire assessment tool appears to measure dementia care knowledge and a more comprehensive evaluation of the tool's content validity will be set by the authors in the future⁵. The two versions of the questionnaire alternated between participants to minimize the potential for bias or contamination of responses that can occur when participants

share information or influence each other's answers. Three qualitative questions were also used to gather subjective data exploring the participants attitudes towards the effectiveness of the GPA education. To ensure confidentiality of the participants, there were no personal identifiers collected and surveys were submitted anonymously.

Analysis

For this evaluation both quantitative and qualitative analysis was used to obtain the data on dementia care knowledge of nurses as well as nurses' attitudes towards the effectiveness of the GPA education. Quantitative analysis is foundational in empirical research offering a systematic and rigorous approach to exploring relationships, patterns and trends through a structured framework using numerical data⁹. Using the quantitative 8-item GPA questionnaire to measure dementia care knowledge among nurses, the findings contribute to the credibility of the results. Once the GPA multiple choice questionnaires were collected both pre- and post- GPA education, the data was then analyzed by summing up the scores for each of the eight multiple choice questions and then converting the total score to a mean percentage for each of the sixteen participants. This method was repeated to extract every individual percentage for pre-test and post-test questionnaires. All pre-test percentages were then calculated for an overall average and the same method conducted for the post-test questionnaires and the results recorded. Percentage scores for the lowest and highest were reported to provide a percentage range for each pre and post questionnaire. This practicum utilized advanced practice nursing research competencies¹⁷ while the generation, synthesis, and evaluation of the data were guided as per the Tri-Council Policy Statement (TCPS 2), which is recognized as the prevailing Canadian standard for ethical research¹⁸.

The qualitative component offers an exploration of participants experiences, perceptions and attitudes towards a research topic capturing diverse viewpoints to contribute to the richness of the data⁹. For nurse attitudes towards the effectiveness of the GPA education, three questions were analyzed using content analysis to identify and extract key themes. The statements were read and reread carefully to extract commonalities and trends among participants statements. This qualitative research method identifies, analyzes, and reports patterns or themes within text⁹. The content analysis method allows insight into research questions through the organization and interpretation of data to find underlying meanings¹⁹. Themes were defined from the analysis of the recurring ideas within the data. This process allowed me to explore and interpret the individual perspectives of the nurses and their personal experience with the GPA course. Once the themes were finalized, they were then compared to the integrated literature review for the purpose of supporting the evaluation of the GPA education on dementia care competencies for nurses practicing in LTC.

Results

Results of Quantitative Analysis

Analysis of the evaluation from the 8-item GPA questionnaire measuring nurse knowledge of dementia care competencies among nurses practicing in LTC revealed that nurses demonstrated a low to moderate level of dementia care knowledge overall with the pre-GPA scores noting a total mean average of 55.5% from the 16 participants. The range of the pre-GPA scores of participants measured from 25% to 87.5%. The overall mean average of the post-GPA test results was higher at 74.2% which was an 18.7% increase in overall scores from pre-GPA. The lowest post-GPA participant score was 50% and the highest individual score was 100%. The

increase in overall scores from pre to post questionnaire results show an improvement in participants knowledge and confidence on the understanding of dementia care following GPA education. Detailed results from the quantitative analysis are depicted in Table 1 at the end of this report.

Results of Qualitative Analysis

Content analysis from the evaluation revealed three key themes which are outlined in more detail below and are titled: *GPA Influence*, *GPA Knowledge*, and *GPA Improvement Areas*. The subthemes that emerged from the analysis were: *GPA influence on Nurse Confidence and Knowledge*, *Dementia Care Knowledge*, and *Consideration for Changes to GPA*. Detailed results are provided below as well as depicted in Table 2 at the end of this report to provide a visual overview of the data gained during the evaluations at the end of this paper after the references.

GPA Influence

All participants were asked how the GPA course had influenced their confidence and knowledge for providing dementia care within their practice setting. 75% of participants (n = 12) provided responses to this question in the evaluation that align with increased knowledge and confidence of dementia care. Responses included an increase in participant knowledge and confidence with application of the GPA dementia care strategies within the practice setting. Participants mentioned how the practical skills outlined in the education will be a benefit as nursing staff will be equipped to provide person-centered dementia care in a non-pharmacological way to LTC residents.

Dementia Care Knowledge

The second open-ended evaluation question focused on whether participants knowledge

of dementia care increased specific to successfully managing challenging and responsive behaviors. 12 out of the 16 participants agreed that the knowledge of dementia care increased relating to the successful management of challenging and responsive behaviors from residents with dementia. Participants responses included learning how to de-escalate responsive behaviors and safely managing the behaviors of residents with dementia. Two of those participants mentioned that this education refreshed their knowledge of dementia care, and two participants left this question unanswered.

GPA Improvement Areas

Each nurse who participated in the evaluation was asked if they would change or add anything to the existing GPA education session to help strengthen dementia care within their practice setting. Three (n =3) of nurse participants did not reply to the question and (n = 5) of nurse participants responded that no changes or additions were needed. One (n = 1) participant replied to this question that they were unsure. The remaining participants, (n = 7), replied that the GPA education was adequate, presented well and the hands-on techniques helped to solidify the learning for the practice setting. One participant in the evaluation put forward multiple recommendations, suggesting GPA education for all staff within LTC in addition to offering the same or similar dementia care education to any interested resident families. The same participant also put forward the recommendation for more frequent GPA refresher training so staff could revisit the best practice evidence-based training.

Ethical Considerations

The Health Research Ethics Authority (HREA) screening tool was completed to determine if my practicum project required ethical review. Since this practicum project was an

evaluation of an established education program for quality improvement purposes only, it does not require a review by Health Research Ethics Authority (HREA) as this research is not being conducted on human subjects.

Conclusion

The data collection from these evaluations have been insightful towards the existing GPA education. Overall, the findings have underscored the positive impact GPA education has had on nurse confidence and knowledge in dementia care with valuable insights to strengthen dementia care practices within LTC within eastern Newfoundland. This is consistent with findings from the literature review that GPA addresses the noted gap in dementia care knowledge in nurses practicing in LTC⁴. The results of the questionnaires in this evaluation have revealed the positive impact GPA education has on nursing staff practicing in the LTC setting. This was evidenced by the overall mean score improving to 74.2% resulting in a 18.7% increase overall from the pre-testing phase. In addition, the qualitative analysis revealed that nurses agreed that their level of dementia care knowledge had improved with the GPA education specifically around managing responsive behaviors. Furthermore, nurses expressed increased knowledge and confidence in applying GPA strategies to their dementia care practices, with an emphasis on the practical non-pharmacological techniques acquired for delivering PCC to this vulnerable population. These findings highlight the significance of GPA education in elevating the standards of dementia care within the LTC practice setting while providing a foundation for continuous improvement in nursing practice.

References

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders–IV–Text Revision*. Washington, DC: American Psychiatric Association; 1994
2. Fiest, K. M., Jetté, N., Roberts, J. I., Maxwell, C. J., Smith, E. E., Black, S. E., Blaikie, L., Cohen, A., Day, L., Holroyd-Leduc, J., Kirk, A., Pearson, D., Pringsheim, T., Venegas-Torres, A., & Hogan, D. B. (2016). The Prevalence and Incidence of Dementia: a Systematic Review and Meta-analysis. *The Canadian Journal of Neurological Sciences Le Journal Canadien Des Sciences Neurologiques.*, *43 Suppl 1*, S3–S50. <https://doi.org/10.1017/cjn.2016.18>
3. Canadian Institute for Health Information. *Dementia in Canada*. Ottawa, ON: CIHI; 2018. <https://www.cihi.ca/en/dementia-in-canada/dementia-care-across-the-health-system/dementia-in-long-term-care>
4. Evripidou, M., Charalambous, A., Middleton, N., & Papastavrou, E. (2019). Nurses' knowledge and attitudes about dementia care: Systematic literature review. *Perspectives in Psychiatric Care*, *55(1)*, 48–60. <https://doi-org.qe2a-proxy.mun.ca/10.1111/ppc.12291>
5. Advanced Gerontological Education (AGE) Inc. (2023). About GPA. Advanced Gerontological Education. Retrieved November 01, 2023, from <https://ageinc.ca/about-gpa-2/>
6. Gopalakrishnan, S., & Ganeshkumar, P. (2013). Systematic Reviews and Meta-analysis: Understanding the Best Evidence in Primary Healthcare. *Journal of family medicine and primary care*, *2(1)*, 9–14. <https://doi.org/10.4103/2249-4863.109934>
7. Public Health Agency of Canada. (2014). Infection prevention and control guidelines: critical appraisal tool kit. https://publications.gc.ca/collections/collection_2014/aspc-phac/HP40-119-2014-eng.pdf
8. [Joanna Briggs Institute \(2020\). Checklist for Systematic Reviews and Research Syntheses: Critical Appraisal tools for use in JBI Systematic Reviews](https://jbi.global/sites/default/files/2021-10/Checklist_for_Systematic_Reviews_and_Research_Syntheses.docx)
https://jbi.global/sites/default/files/2021-10/Checklist_for_Systematic_Reviews_and_Research_Syntheses.docx
9. Polit, D.F., & Beck, C. T. (2021). *Resource manual for nursing research: Generating and assessing evidence for nursing practice* (11 th ed). Walters Kluwer; Lippincott Williams & Wilkins.
10. Hong, Q.N., Pluye, P., Fabregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M-P., Griffiths, F., Nicolau, B., O’Cathain, A., Rousseau, M-C., & Vedel, I. (2018). *Mixed methods appraisal tool (MMAT) version 2018: User guide*. McGill: Department of Family Medicine.

http://mixedmethodsappraisaltoolpublic.pbworks.com/w/file/attach/146002140/MMAT_2018_criteria-manual_2018-08-08c.pdf

11. Christianson, T. M., Hoot, T. J., McLelland, V., & Morris, K. (2021). "All behavior has meaning": A qualitative exploration of dementia training of healthcare assistant students. *Journal of Nursing Education and Practice*, 11(2).
https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=All+Behaviour+has+meaning%3A+A+qualitative+exploration+of+dementia+training+of+healthcare+assistant+students&btnG=
12. Crandall, J., Coatsworth-Puspoky, R., Schlegel, K., Beker, L., McLelland, V. C., & Martin, L. S. (2022). Implementing Gentle Persuasive Approaches dementia education for staff on in-patient medicine units: A program evaluation. *Dementia (14713012)*, 21(4), 1173–1199.
<https://doi.org/10.1177/14713012211070148>
13. Hung, L., Son, C., & Hung, R. (2019). The experience of hospital staff in applying the Gentle Persuasive Approaches to dementia care. *Journal of Psychiatric and Mental Health Nursing*, 26(1/2), 19–28. <https://doi.org/10.1111/jpm.12504>
14. Schindel-Martin, L., Gillies, L., Coker, E., Pizzacalla, A., Montemuro, M., Suva, G., & McLelland, V. (2016). An Education Intervention to Enhance Staff Self-Efficacy to Provide Dementia Care in an Acute Care Hospital in Canada: A Nonrandomized Controlled Study. *American Journal of Alzheimer's Disease and Other Dementias*, 31(8), 664–677.
<https://doi.org/10.1177/1533317516668574>
15. Speziale, J., Black, E., Coatsworth-Puspoky, R., Ross, T., & O'Regan, T. (2009). Moving forward: Evaluating a curriculum for managing responsive behaviors in a geriatric psychiatry inpatient population. *The Gerontologist*, 49(4), 570-576.
<https://academic.oup.com/gerontologist/article/49/4/570/680815>
16. Yost, J., Ganann, R., Thompson, D., Aloweni, F., Newman, K., Hazzan, A., ... & Ciliska, D. (2015). The effectiveness of knowledge translation interventions for promoting evidence-informed decision-making among nurses in tertiary care: a systematic review and meta-analysis. *Implementation Science*, 10, 1-15. <https://link.springer.com/article/10.1186/s13012-015-0286-1>
17. Canadian Nurses Association (2019). *Advanced practice nursing: A Pan-Canadian Framework*. Ottawa, ON: Author. Available at: https://hl-prod-ca-oc-download.s3-ca-central-1.amazonaws.com/CNA/2f975e7e-4a40-45ca-863c-5ebf0a138d5e/UploadedImages/documents/nursing/Advanced_Practice_Nursing_framework_e.pdf
18. Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council, *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, December 2018.
<https://ethics.gc.ca/eng/documents/tcps2-2018-en-interactive-final.pdf>

19. Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus open*, 2, 8-14. <https://doi.org/10.1016/j.npls.2016.01.001>

Table 1: Pre and Post Questionnaire Scores for Dementia Care Competencies

Pre- GPA (out of 8)	Percentage Score	Post -GPA (out of 8)	Percentage Score
5	62.5	6	75
6	75	4	50
5	62.5	5	62.5
2	25	5	62.5
5	62.5	8	100
4	50	6	75
3	37.5	5	62.5
4	50	6	75
5	62.5	5	62.5
2	25	8	100
4	50	7	87.5
4	50	8	100
4	50	7	87.5
5	62.5	6	75
6	75	4	50
7	87.5	5	62.5
Mean	Mean %	Mean	Mean %
4.4375	55.5%	5.9375	74.2%

Table 2: Content Analysis Results for GPA

GPA Influence	Key Themes
<i>GPA Influence on Nurse Confidence and Knowledge</i>	<ul style="list-style-type: none"> •Increased Knowledge •Increased Confidence •Mentorship and Knowledge Sharing •Greater Understanding of Dementia •Positive Impact for Nurses and Residents
Dementia Care Knowledge	Key Themes
<i>Nurse Dementia Care Knowledge</i>	<ul style="list-style-type: none"> • Increased Knowledge for Challenging and Responsive Behaviors • Increased Knowledge for Non-pharmacological Dementia Care Techniques • Enhanced Person-Centered Care
GPA Improvement Areas	Key Themes
<i>Consideration for changes to GPA</i>	<ul style="list-style-type: none"> • Increased GPA Refresher Training • GPA Education for All LTC Staff • GPA Education for LTC Resident Families