Improving Dementia Caregiver Competency in Nursing Home

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Improving Dementia Caregiver Competency in Nursing Home

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Abstract

Background: Inadequate training of dementia care providers in nursing homes lead to adverse health outcomes in patients with dementia.

Purpose: To educate and train dementia caregivers in a nursing home to improve dementia care.

Methods: A Quality Improvement Project (QIP) was implemented in a nursing home with nine nurses engaged in two virtual education group sessions led by the DNP student over an eight-week timeframe. Topics discussed included education on the nature and progress of dementia, building trust with dementia patients, managing their behavior, communication strategies, and self-care. Pre-training and post-training surveys were completed prior to the start of the education session and after completing the education session. Results: The post-training surveys revealed that 60% more participants rated their overall knowledge of dementia and competency in building trust with their dementia patients as excellent, 20% more rated themselves as excellent in managing behaviors, and 60% more rated themselves as excellent in communication skills and 70% more rated themselves in the domain of self-care after the educational sessions. Analysis of the survey results further demonstrated a strong agreement by 89% that dementia training was excellent. Additional findings from the surveys concluded that dementia caregivers need to engage in self-care to improve their individual well-being, making them better caregivers who are confident with patient care.

Keywords: training, dementia, caregivers, person-centered
Introduction

Dementia is a degenerative disease (Alzheimer’s Association, 2019). A steady increase in the number of dementia patients worldwide continues to pose tremendous burden on the caregivers of these patients (Koca et al., 2017). The primary caregivers who drive the quality of care provided to the dementia patients in nursing homes are nurses and nursing assistants. Effective strategies to educate and support the wellbeing of these caregivers are essential for executing efficient disease management in dementia patients.

Problem Statement

As life expectancy increases, so is the number of residents living longer with dementia. There is a high incidence of dementia in our society. Dementia affects almost 4.7 million people who are 65 and above. Risk of poor quality of care and negative health outcomes among persons with dementia results from lack of caregiver knowledge in nursing homes regarding the overall nature of dementia which includes progressive deterioration of cognition, communication and overall activities of daily living.

Background

Dementia is a major health problem as it is a degenerating disease that affects the person’s overall well-being, from cognition to daily living activities. The World Health Organization (WHO) has drawn attention to the fact that dementia is considered one of the most debilitating diseases that affects older adults (2019). The Centers for Disease Control and Prevention (CDC) has mentioned that dementia will affect almost 14 million people by 2060. Both, elderly African Americans and the Hispanic population has increased likelihood of being diagnosed with dementia compared to the Caucasian population (What is dementia? CDC, 2019).
Many federal agencies such as the Centers for Medicare and Medicaid Services (CMS) and the Workforce Development Workgroup of the National Research Summit on Dementia Care have highlighted that poor patient outcomes are a result of lack of training of caregivers in institutional settings such as nursing homes and long-term care facilities (Weis et al., 2017).

CMS is partnering with several state and federal agencies, and nursing homes to improve dementia care. The goal of this partnership is to promote a non-pharmacological approach to improve dementia care. This approach includes training dementia caregivers to improve patient quality of care.

As dementia progresses, the caregiver burden is increased (Anand et al., 2016). The patients with dementia have frequent behavior outbursts and trust issues with the care providers. The demands on the caregiver therefore increases, leading to poor health outcomes of the caregiver. This in-turn results in poor care to the dementia patient (Beinart et al., 2012).

**Review of the Literature**

A comprehensive literature search for training to dementia caregivers was performed using PubMed, Cochrane, and the Cumulative Index of Nursing and Allied Health Literature (CINAHL). For the CINAHL database, the following keywords: “dementia training” were used. 256 articles were retrieved from the search. When the keywords were changed to “training for dementia caregivers”, seventy (70) articles were retrieved. As the key terms were further changed to “person-centered dementia training,” seven (7) articles were retrieved. Only the English language publications were considered for inclusion in this study. The inclusion criteria included studies that identified dementia patients as chronic patients with a definitive dementia diagnosis and not having intermittent confusion. Articles that only described training for dementia patients and not the caregivers were excluded from further consideration. In the Cochrane Review, the
search with keywords “training for dementia caregivers” retrieved seventeen (17) articles. None of the articles addressed the training for caregivers. When keywords were changed to “dementia caregiver training,” seven (7) articles were retrieved. None could be included as they all were related to training the dementia patients and not the caregivers. Two hundred fifty-eight (258) articles were retrieved when the key term “dementia caregiver training” was used for the PubMed search. When searched with keywords “training for dementia caregivers in nursing homes” in PubMed, one hundred seven (107) articles were retrieved. Keywords limited to “training for dementia caregivers,” yielded eight (8) articles. Finally, eleven (11) articles that met the inclusion criteria were selected for further in-depth research.

Main Findings

As the eleven (11) articles were compared and contrasted, a common theme that cut across them was the importance of caregiver training to improve dementia care. An overview of each of the articles analyzed is presented in the following section.

Ballard et al. (2018) conducted a study to evaluate the outcome of person-centered dementia care and psychosocial interventions in sixty-nine (69) United Kingdom nursing homes (Ballard et al., 2018). The authors concluded staff training was an essential indicator of good quality of care. Passalacqua and Harwood (2012) studied the impact on quality of care giving and care giver morals of person-centered dementia care training, including valuing people, individualized care, and communication strategies through workshops aimed at training paraprofessional dementia care givers in long term care facilities. The preliminary evidence from this study showed an improvement in caregiver moral, empathy, and improved caregiving for dementia patients (Passalacqua & Harwood, 2012). Da Silva et al. (2017) studied the impact of a 6-week training conducted in two long-term care settings in Brazil, including twenty-five formal
caregivers and forty-six adults who had dementia. The study showed a significant improvement in the behavioral and psychological dementia symptoms of the dementia patients with the use of caregiver training (da Silva Serelli et al., 2016). Sullivan et al. (2018) researched and compared five Veterans Health Administration nursing homes with good quality resident care to five Veterans Health Administration nursing homes with bad quality resident care. The study found that among four other variables resident-centered care training for staff was one of the most important factors that made the five veterans nursing homes with good quality care better than the ones with poor quality of care (Sullivan et al., 2018). Magai, Cohen, and Gomberg (2002) conducted a study including ninety-one (91) dementia patients who were in nursing homes along with their caregivers. The aim of the study was to evaluate the impact of a nonverbal sensitivity training program to see how it impacted the quality of care that was provided to the dementia patients and the staff well-being. Additionally, the study aimed at evaluating how the sensitivity trained staff helped improve the behavior symptoms and mood of the dementia patients (Magai et al., 2002). Eggenberger, Heimerl, and Bennett (2012) have shown the importance of communication skills training for caregivers in different settings (Eggenberger et al., 2012). Xu et al. (2017) conducted a study aimed at improving the quality of care of dementia patients in China by training the formal and informal care providers (Xu et al., 2017). The study concluded that to improve dementia care, both the formal and informal dementia care providers have to be trained. Guerrero, Eldridge, and Tan (2019) developed and implemented a competency-based curriculum for home supportive services (IHSS) workers in California who cared for people with Alzheimer's and related dementia. The post-training results showed a considerable gain in the confidence level and knowledge of the participants (Guerrero et al., 2019). Polacsek et al. (2007) studied the gaps in the community-based care for older adults with dementia. The study
concluded that lack of trained home care workers was a significant frustration for the families. The study also concluded that trained dementia workforce contributed to the overall wellbeing of dementia patients (Polacsek et al., 2019). Peterson, Berg-Weger and McGillick (2002) evaluated the dementia training that the St. Louis Alzheimer’s Association offered. The study design included three standardized measures, namely the impact of the training on stress level, work-related self-esteem, and knowledge. The results demonstrated that 76.4 (%) percent of the sample participants increased their understanding of dementia (Peterson et al., 2002). Smyth et al. (2013) conducted a survey-based research study in Queensland, Australia, to examine the knowledge related to dementia for health care staff in a regional health care district. The study concluded that those who had attended dementia-specific training had higher knowledge and were more competent in caring for dementia patients (Smyth et al., 2013).

To summarize, it has been proven by overwhelming evidence that there are gaps in dementia caregiver training that contribute to decreased quality of care for dementia patients. Staff training can improve the staff's confidence level and knowledge level. The literature findings support overall large positive effects of dementia training contributing to competent caregivers capable of providing quality care.

**Theoretical Framework/ Evidence Based Practice Model**

The Stetler’s Model of evidence-based practice was used as a guideline for this project. The model links research and evidence-based practice. The model uses evidence to change an organization and has five phases: Preparation, Validation, Comparative Evaluation/Decision making, Translation/Application, and Evaluation. Stetler describes the Preparation phase as the phase when you focus on the study's outcome and ask the question: “What do we want to change?” In an attempt to address the gaps in the training of nurses who care for dementia
patients in nursing homes, the change that was identified for the purpose of this project was the need for ongoing educational training sessions for nurses caring for dementia patients.

The Translation phase of Stetler’s model is when strategies are created for the formal dissemination of knowledge. This phase was translated into the Intervention phase of the project when the two (2) education sessions were implemented virtually and the Evaluation phase was the Post-Intervention phase when the data was analyzed to evaluate the outcome of the project.

**Goals, Objectives, and Expected Outcomes**

The goal of this QIP was designed to improve dementia care in a nursing home by improving the knowledge of nurses through the development of dementia caregiver educational material during September 2020. Nine (9) nurses and nursing assistants were trained via two (2) virtual sixty-minute educational sessions during October 2020 and November 2020. To validate the outcome data was collected on knowledge of dementia caregiving before and after intervention using a survey questionnaire. The expected outcome was that after all the participants receive the education, more than fifty (50%) percent of participants would improve their knowledge of dementia caregiving.
Table 1

Goals, Objectives, and Expected Outcomes

<table>
<thead>
<tr>
<th>Goals</th>
<th>Objectives</th>
<th>Expected Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve dementia care givers (nurses and nursing assistant’s) knowledge of dementia</td>
<td>The DNP student would: Develop educational presentations on dementia for caregivers</td>
<td>1. Provide education to nurses and nursing assistants at the nursing home.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Presented virtually during teaching sessions with a review of PowerPoint slides on dementia caregiving.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. There would be two sixty-minute virtual educational presentations for nursing staff during October 2020.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Participants would complete the program evaluation survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100% of dementia caregiver staff would participate and receive the education.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More than 50% of participants would improve their knowledge of dementia caregiving as demonstrated through the post-implementation phase survey results.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>90% or more of the participants would rate the education sessions as helpful in caring for patients with dementia.</td>
</tr>
</tbody>
</table>

Methods

The methodology used for this DNP project was based on the assumption that implementing a nurse education program that targets dementia care and nurse self-care in a nursing home would increase nursing competence, improve quality of care, nurse’s knowledge about the disease, and self-care management. We implemented two (2) sixty (60) minute educational sessions during October 2020 and November 2020. Data using survey questionnaires in the following domains: overall dementia knowledge, building trust with dementia patients, managing and recognizing behavior outbursts of dementia patients, communication skills, and
self-care before and after the intervention, were collected. The data was quantified to understand the impact of the educational sessions and the value of the educational program.

**Project Site and Population**

The site for the QIP was a nursing home in the Northeast. The nursing home comprised of total ten (10) nurses who served approximately fifty (50) dementia patients. The breadth of the nursing home services included: Alzheimer’s care and rehabilitation care for elderly patients. Preference was given to this site because the nurses were actively working with dementia patients. Additionally, the nursing home had a dedicated locked dementia care unit, and most of the nurses worked in this unit. For our educational sessions, the main conference room was used for the virtual classes. The room dynamics included computer screens with projector screens, enabling a focused view of the virtual sessions for the trainee nurses. Moreover, the conference room had good lighting, privacy and easy access to a bathroom.

**Recruitment**

The nine (9) direct care nurses were recruited by the DNP student directly with the help from the Director of Nursing and the Assistant Director of Nursing, who were familiar with the roles and responsibilities of the nursing staff. One Registered Nurse (RN) had to be excluded from the project due to the inability to attend all the meetings required, so the project was implemented virtually with nine (9) nurses who signed informed consent. The participant makeup included; five (5) Registered Nurses (RNs), three (3) Licensed Practical Nurses (LPNs), and one Nursing Assistant. At the time of the project implementation, all the nine (9) nurses self-reported that they would prefer to get further training on dementia caregiving.
Ethical Considerations/Protection of Human Subjects

The University of Massachusetts, Amherst (UMass) Internal Review Board (IRB) approval was obtained prior to initiating the DNP Project. All participants were protected by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) which, among other guarantees, protects the privacy of patients’ health information (Modifications to the HIPAA Privacy, Security, Enforcement, and Breach Notification Rules, 2013). Additionally, the DNP student and practice personnel carefully conducted this project virtually following the Standards of Care for practice in the nursing home setting. All information collected as part of evaluating this project's impact was aggregated data from the project participants and did not include any potential patient identifiers. The project involved the participation of nursing staff, and no patients participated in this project.

Description of the Educational Sessions

The QIP was led by the DNP student over eight (8) weeks. The project consisted of two virtual educational sessions. The title of the presentation was: “Improving Dementia Caregiver Competency in Nursing Home”. Trainees took part in two one-hour education sessions once a month for two (2) months. The timeline for the entire project was September 2020 – March 2021.

A phased implementation was done over six (6) months. In the first phase, the DNP student did a gap analysis of the project site and recruited and collected materials to design and create the educational presentation necessary to execute the project. In the nursing home, where this project was implemented, the Director of Nursing and the Staff Educating Coordinator had reported that the nursing staff caring for dementia patients often lacked adequate knowledge to handle such patients. As per State policy, all nursing staff are required to attend a two (2)- hour
dementia training annually. The Director of Nursing reported that nursing staff needed more training, and an educational session will be beneficial. This will reinforce staff’s knowledge and refresh their knowledge base.

After the DNP student’s personal interviews with most of the nursing assistants in the facility, it was inferred that considering the nursing assistants' education level (most nursing assistants are high school graduates) a simple interactive educational session in slide format would be beneficial. The DNP student also did a Strengths, Opportunities, Weakness, and Threat (SWOT) analysis of the project plan to understand the circumstances in the organization. The SWOT analysis has been included in Appendix A at the end of the paper.

The second phase was devoted to coordinating appropriate times and dates for the two meetings and executing the actual education sessions with the nine (9) participants virtually. During this phase participants completed the pre-surveys for baseline assessment. Finally, third phase included data analysis and post training surveys.

**The Educational Presentation**

The presentation was prepared reviewing evidence and guidelines of the Alzheimer’s Association. The trainings were conducted virtually using Zoom sessions. The education materials were written in slide format in English. Nursing education sessions were organized in two sessions. Each month there was one session. Each session lasted for sixty (60) minutes. (See Appendix D for session schedule). The two (2) sessions were scheduled with the following educational contents and tasks.

**Session 1:**

- What Is dementia?
- Nature and Progression of different types of dementia.
• How to build trust with dementia patients?
• How to manage behavior of dementia patients?
• How to communicate with dementia patients?
• How to take care of self while caring for dementia patients?

Session 2:
• Review of the educational material presented in session 1.
• Nurses will demonstrate their learning outcomes by asking questions.
• Answering questions raised by nurses.
• Completion of post-intervention survey.

Measurement Instruments

To measure the outcomes of this DNP project, two surveys were created. The two surveys, pre- and post-educational training survey was created following the Sense of Competence in Dementia Staff Instrument (SCIDS) scale. The SCIDS instrument scale was developed by Schepers et al. in 2012. The National Alzheimer’s Dementia Resource Center lists this tool as a valuable instrument to determine dementia caregiver competency. The SCIDS instrument scale has seventeen questions. In the pre-and post-educational training survey only five questions from the SCIDS instrument scale relevant to caregiver education in the nursing home was utilized.

The Pre-educational training survey instrument (See Appendix F):

This survey was created to get a baseline information of the nurse’s competence in the five domains of overall dementia knowledge, building trust with their dementia patients, managing and recognizing behavior outbursts of dementia patients, communication skills and finally self-care while caring for dementia patients. The questions were framed using the Likert
The participants were asked to rate themselves in the five domains. The rating scale was 1-5 (1=worse, 5=excellent).

**The Post-educational training survey instrument (See Appendix G):**

This survey was created to get information on the impact of the educational training sessions and to gauge the improvement of the nurse’s competence in the five domains of overall dementia knowledge, building trust with their dementia patients, managing and recognizing behavior outbursts of dementia patients, communication skills and self-care while caring for dementia patients after the educational training sessions. The questions were framed using the Likert Scale. The participants were asked to rate themselves in the five domains. The rating scale was 1-5 (1=worse, 5=excellent). The higher the Likert score (5=excellent), the higher the self-reported probability of improving competence in the particular domain.

**Program Evaluation Survey (See Appendix H):**

To evaluate the impact of the overall educational training session, a four-question program evaluation questionnaire was developed. It was to be administered after the educational session to see whether the nursing staff felt that the education session on dementia was helpful in their everyday practice and whether they felt this would help them improve their care giving practices.

**Data Collection Procedures**

Pre and post responses of the educational training survey and the Program Evaluation survey assessments were collected via email using Survey Monkey. Responses were anonymous and a comparison between the pre/post-educational training was performed.

The pre-educational training survey was sent out via email (survey monkey) in September, 2020 before the education sessions were held in October 2020. The purpose of the
The survey was to gather baseline information on the nurses’ competencies in the five domains of overall knowledge of dementia, building trust, managing behavior outbursts of dementia patients, communication strategies to deal with dementia patients and finally self-care while providing care to dementia patients. These five questions were included in the pre-educational training survey:

- In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate your knowledge of overall dementia care giving?
- In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate yourself in building trusting relation with your dementia patients?
- In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate yourself in managing and recognizing behavior outbursts of your dementia patients?
- In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate your communication skills are with your dementia patients?
- In a scale of 1 to 5 (1 being the worst and 5 being the best) how good are you in taking care of yourself so that you are not burnt out?

The post-educational training survey included the same five questions and also a sixth question was added to gather qualitative feedback on the dementia educational sessions. The sixth question was; Describe in five lines how competent you feel now in taking care of dementia patients? This survey was administered in November, 2020 after the educational training sessions had taken place.
Data Analysis

Results from the QIP were used to compare the change in the nurses’ competencies in the five domains of care, namely: overall knowledge of dementia, building trust with their dementia patients, managing behavior outbursts of dementia patients, communicating with dementia patients, and self-care while taking care of dementia patients. The nurses' responses using the Likert scale score (1=worse and 5=excellent) were used to create the bar graphs with the help of excel. Bar diagrams were used as a visual tool to compare pre- and post-intervention data. Data analysis was accomplished with basic excel features using graphs. All results were entered and analyzed by the DNP student.

Results

Nine nurses participated in the QIP virtually and responded to three survey questionnaires via a pre/post method. The nurses were all full-time employees of the nursing home. The nurse's ages range between 39-55 years. Out of the nine participants, eight were African American, one Asian American. The majority of the nurses, eight out of the nine nurses, had been working in the nursing home for almost more than eight years. There was one nurse who was hired last year. All nine nurses had been taking care of dementia patients regularly. All nine nurses worked all three shifts, including the night shift.

Figure 1 shows the participants' knowledge on providing care to the dementia patients pre-and post-educational training sessions. In the pre-educational training survey, 22% of the participants rated their overall knowledge of dementia and the competency of building trust with their dementia patients as best or excellent. Whereas after the educational sessions, almost 80% of the participants rated their overall knowledge of dementia and competency in building trust with their dementia patients as best or excellent. Moreover, 33% of the participants rated their
skill in managing behaviors of their dementia patients as best or excellent in the pre-educational training survey, whereas after the educational sessions, this increased to 55%. In the pre-educational training survey, 33% of the participants had rated themselves as best or excellent in communicating with dementia patients, whereafter it increased to 89% after the educational sessions. Approximately 22% of the participants had responded that they are best or excellent in the domain of self-care during the pre-educational training survey, whereas it increased to 89% after the educational sessions in the post-educational training session.

Figure 1

*Pre and Post Educational Training Survey Results (n=9)*

The qualitative feedback was gathered from the participants after the post-educational training survey. Eight participants responded that this was a great refresher course on dementia caregiving and they all feel very confident now. Five participants responded that every nursing home in the United States should have such training and educational sessions every month. All
nine participants responded that they now understand the importance of caring for themselves and feel very competent since if nurses themselves have mental well-being and peace, they will be better patient caregivers.

To evaluate the impact of the overall educational training session, a four-question program evaluation questionnaire was developed. It was administered after the educational session to see whether the nursing staff felt that the education session on dementia was helpful in their everyday practice and whether they felt this would help them improve their care giving practices. Almost 89% of participants said that they rated the training sessions as excellent, and almost 80% of participants said that the training slides were excellent (Figure 2).

Figure 2

Program Evaluation Survey Results
Discussion

The overall project experience was very well received by the participants and created a sense of accomplishment within the nurses. Several research studies have shown that continuous training of nurses helps to increase their competence and improves their confidence level. This project’s findings confirm the research evidences.

This project's expected outcome was that more than fifty percent of the participants would increase their knowledge of dementia caregiving, and ninety percent or more would rate the dementia education sessions as helpful. The anticipated outcomes were met. As per the post-educational training survey and the program evaluation survey, approximately 89% of participants said they had improved their skills to provide care for patients living with dementia. Additional findings from the surveys concluded that dementia caregivers need to engage in self-care to improve their individual well-being, making them better caregivers who are confident with patient care.

The resources that influenced the implementation of this DNP project were the staffing patterns at the nursing home. The constraints mainly were the nursing staff being reluctant to cooperate in the training sessions due to the overwhelming work burden and staff shortage that happens often. It was a potential barrier in the implementation plan, which was overcome by getting support and help from the nursing home management team. Finally, facilitators were the nursing home management team who helped with the implementation plan and provided incentives to nursing staff completing this training. One difficult barrier has been COVID-19. Due to this pandemic, the entire project was implemented virtually. In the United States (U.S.), twenty-three states require annual dementia training for the staff working in nursing homes (e.g., nursing facilities, long-term care facilities). Fourteen of those states have laws governing
dementia-specific training in Alzheimer’s special care units or facilities that provide services to residents with Alzheimer’s disease or other dementias (Burke & Orlowski, 2015). According to Maryland State regulations, Maryland Facilities providing long-term care for patients with Alzheimer’s must have a dementia-specific in-service education program for staff (Burke & Orlowski, 2015). Although there are mandates for providing dementia training in several states, as mentioned before, the majority of mandates are only for annual dementia training. There is no mandate for ongoing frequent training at least on a quarterly basis.

**Conclusion**

Training dementia caregivers is an important non-pharmacological intervention to improve the quality of care of dementia patients. In future nursing homes may mandate frequent, quarterly, monthly refresher dementia training that will help boost the nursing staff’s competence level and morale. This project’s findings confirm that ongoing dementia trainings of nursing staff in nursing homes will contribute to continuous quality improvement of the organization and its staff. There is often increased level of stress and risk of burn out among the nurses who care for dementia patients. Increased demand for services coupled with the unprecedented disruptions caused by the behavioral outbursts of dementia patients impact the caregivers negatively as dementia progresses. Faced with these significant challenges nurses caring for dementia patients in nursing homes have still remained steadfast in their commitment to meet the needs of the dementia patients.

The project highlighted that dementia care givers in nursing homes need to take care of themselves and engage in self-enjoyment activities to be better caregivers. Following this finding, nursing homes in United States should provide opportunities for dementia care staff to engage in support groups and provide for incentives to take breaks and care for themselves.
Nursing homes should employ practices at the individual as well as organizational level that cultivate a culture of wellness and facilitate nursing staff well-being and prevent burnout.
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Appendix A

SWOT Analysis

Strengths

- It provides an educational training for nurses and nurse’s assistants to learn and utilize the dementia caregiver education sessions.
- Many nursing home staff lack common sense knowledge in dementia care.
- Increase knowledge of dementia caregiving for caregivers in nursing homes.
- Increase nursing home dementia care giving staff competence and morale.

Weakness

- Nurses and nursing assistants will get the training on dementia care however there may not be adequate time to incorporate the strategies in their daily routine.
- Nurse and nursing assistants may not be willing to adapt the methods learnt due to staff burn out.

Opportunities

- The nursing staff will have the educational material handy with them whenever they need it.
- This will be a very good non-pharmacological intervention to manage dementia patient symptoms.

Threat

- Often low pay, long work hours and shortage of staffing disincentivizes the nursing staff to learn and engage in educational opportunities.
- Caregivers might not have enough time to complete the training.
Appendix B

Theoretical Framework

Stetler’s Model of Evidence Based Research

Phase 1 Preparation
- Review of literature

Phase 2 Validation
- Gap Analysis
- SWOT Analysis

Phase 3 Decision Making
- Create the dementia caregiver education PowerPoint.
- Monthly education session via power point

Phase 4 Translation

Phase 5 (Evaluation
Survey and Data Analysis)
## Appendix C

### Project Timeline

<table>
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<tr>
<th>Tasks</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
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<th>February</th>
<th>March</th>
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<td>Recruitment of eligible participants/Pre-survey</td>
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<td>Education sessions</td>
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<td>Post intervention survey/eval</td>
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<td>Analysis of outcomes</td>
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<td>Results presented to DON, NHA, Nursing staff</td>
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### Appendix D

**Nurses Education Schedule**

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Task</th>
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<tbody>
<tr>
<td><strong>Session 1</strong></td>
<td>• What Is dementia?  &lt;br&gt;• Nature and Progression of different types of dementia.  &lt;br&gt;• How to build trust with dementia patients?  &lt;br&gt;• How to manage behavior of dementia patients?  &lt;br&gt;• How to communicate with dementia patients?  &lt;br&gt;• How to take care of self while caring for dementia patients?</td>
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<tr>
<td><strong>Session 2</strong></td>
<td>• Review of the educational material presented in session 1.  &lt;br&gt;• Nurses will demonstrate their learning outcomes by asking questions.  &lt;br&gt;• Answering questions raised by nurses.  &lt;br&gt;• Completion of post intervention survey.</td>
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Appendix E

Educational Training Slides (Title, Goals and Objectives)

Goals and objectives
The goals and objectives of this educational power point is to improve dementia caregiver competency in nursing home by:
- Educating caregivers on the different types of dementia and the nature and progression of dementia.
- Educating caregivers on how to build trusting relationship with their dementia patients.
- Educating caregivers on managing and recognizing behavior outbursts of dementia patients.
- Educating caregivers on improving communication skills with their dementia patients.
- Educating caregivers on the importance of self-care while taking care of dementia patients.

What is dementia?
- Nature and progression of different types of dementia.
- How to build trust, manage behavior outbursts, and communicate with dementia patients?
- Importance of self care for dementia caregivers.
Appendix F

Pre-educational Training Survey

In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate your knowledge of overall dementia care giving?

| 1 | 2 | 3 | 4 | 5 |

In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate yourself in building trusting relation with your dementia patients?

| 1 | 2 | 3 | 4 | 5 |

In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate yourself in managing and recognizing behavior outbursts of your dementia patients?

| 1 | 2 | 3 | 4 | 5 |

In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate your communication skills are with your dementia patients?

| 1 | 2 | 3 | 4 | 5 |

In a scale of 1 to 5 (1 being the worst and 5 being the best) how good are you in taking care of yourself so that you are not burnt out?

| 1 | 2 | 3 | 4 | 5 |
Appendix G

Post-educational Training Survey

In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate your knowledge of overall dementia care giving?

| 1 | 2 | 3 | 4 | 5 |

In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate yourself in building trusting relation with your dementia patients?

| 1 | 2 | 3 | 4 | 5 |

In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate yourself in managing and recognizing behavior outbursts of your dementia patients?

| 1 | 2 | 3 | 4 | 5 |

In a scale of 1 to 5 (1 being the worst and 5 being the best) how do you rate your communication skills are with your dementia patients?

| 1 | 2 | 3 | 4 | 5 |

In a scale of 1 to 5 (1 being the worst and 5 being the best) how good are you in taking care of yourself so that you are not burnt out?

| 1 | 2 | 3 | 4 | 5 |

Describe in five lines how competent you feel now in taking care of dementia patients?
Appendix H

Program Evaluation Survey

1. Overall, how would you rate the education session?
   I. Excellent
   II. Good
   III. Fair
   IV. Poor

2. How useful/informative was the educational power point slides?
   I. Extremely Useful/Excellent
   II. Somewhat useful/Good
   III. Not so useful/Fair
   IV. Not at all useful/Poor

3. Do you agree that the educational session helped you improve your dementia care giving skills?
   I. Totally agree
   II. Somewhat agree
   III. Neutral
   IV. Not at all agree

4. How comfortable do you feel taking care of dementia patients?
   I. Extremely comfortable
   II. Somewhat comfortable
   III. Not so comfortable
   IV. Not at all comfortable
Memorandum – Not Human Subjects Research Determination

Date: August 16, 2020

To: Disha Bhattacharya, College of Nursing

Project Title: Improving dementia caregiver competency in nursing home

HRPO Determination Number: 20-187

The Human Research Protection Office (HRPO) has evaluated the above named project and has made the following determination based on the information provided to our office:

☐ The proposed project does not involve research that obtains information about living individuals [45 CFR 46.102(f)].

☐ The proposed project does not involve intervention or interaction with individuals OR does not use identifiable private information [45 CFR 46.102(f)(1), (2)].

☒ The proposed project does not meet the definition of human subject research under federal regulations [45 CFR 46.102(d)].

Submission of an Application to UMass Amherst IRB is not required.

Note: This determination applies only to the activities described in the submission. If there are changes to the activities described in this submission, please submit a new determination form to the HRPO prior to initiating any changes. Researchers should NOT include contact information for the UMass Amherst IRB on any project materials.

A project determined as “Not Human Subjects Research,” must still be conducted ethically. The UMass Amherst HRPO strongly expects project personnel to:

- treat participants with respect at all times
- ensure project participation is voluntary and confidentiality is maintained (when applicable)
- minimize any risks associated with participation in the project
- conduct the project in compliance with all applicable federal, state, and local regulations as well as UMass Amherst Policies and procedures which may include obtaining approval of your activities from other institutions or entities.

Please do not hesitate to call us at 413-545-3428 or email humansubjects@ora.umass.edu if you have any questions.

Iris L. Jenkins, Assistant Director
Human Research Protection Office