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MASTER OF ARTS IN NURSING

MELISSA MARGRET FIEL

**KNOWLEDGE, ATTITUDES, AND SELF-EFFICACY IN DEMENTIA CARE
AMONG NURSES IN TWO HEALTH INSTITUTIONS IN METRO MANILA**

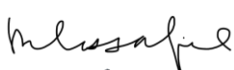
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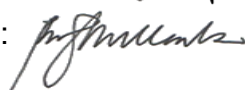
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Perception on the Motivational Factors for Educational Advancement and Self-Efficacy to Provide Quality Care Among Nurses

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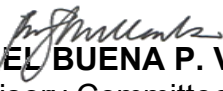
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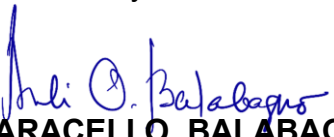

MELISSA MARGRET FIEL

Acceptance Page

This Thesis of **MELISSA MARGRET FIEL** titled: “**KNOWLEDGE, ATTITUDES, AND SELF-EFFICACY IN DEMENTIA CARE AMONG NURSES IN TWO HEALTH INSTITUTIONS IN METRO MANILA**” is hereby accepted by the Faculty of Management and Development Studies, U.P. Open University, in partial fulfillment of the requirements for the degree Master of Arts in Nursing.


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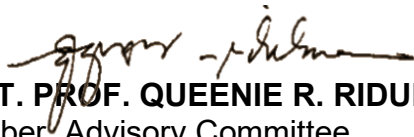
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Biographical Sketch

Melissa Margret Fiel completed her Bachelor of Science in Nursing degree in the Philippines in 2011 and practiced for two years in the country before transferring to the United Kingdom. She is currently working as a Practice Development Nurse in a tertiary hospital in the UK. Majority of her nursing experience has been in an acute ward for older adults where she used to be a staff nurse and then, a charge nurse. Coming from the Philippines, she did not have a lot of experience and knowledge on dementia when she started practicing abroad. She completed post-graduate courses on dementia care in the UK which led to her interest in pursuing the subject for her master's degree. She wishes to contribute to the literature on dementia care in the Philippines.

Acknowledgement

To my parents Mark and Grechel, thank you for always believing in me and for pushing me to achieve my greatest potential. All my achievements would not have been possible without you both. To my husband Xavier, thank you for your patience, for spending countless hours in the library with me, and for always telling me to push forward. The most challenging times were bearable because of your presence and support.

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To my siblings Mariel, Miguel, and Maui, thank you for tolerating and inspiring me. I can finally wear the UP *Sablay* like the boys and hang another graduation photo on the wall by the stairs at home. To my friend Bjorn, thank you for starting the MAN journey with me and offering valuable advice. To my friend Carlo, thank you for always listening to my 'thesis rants' even if only pretending to be interested. I would also like to thank Miguel Carlos Fiel, Joy Marie Gillera, and Sofia Jean Carpio for their time, expertise, and dedication to this work.

It took a village for me to finish this work. I would not have progressed from my initial draft if not for all of you. Lastly and most importantly, thank you Lord for always working behind the scenes and for fulfilling all your promises in perfect time.

Dedication

I am dedicating this piece of work to my *Lola Aling* who took care of me with so much patience when I was a child. She was and continues to be strong, independent, and stubborn. I could only wish for her to be treated with the same if not greater amount of patience now that she needs it by those responsible for her care including myself.

This work is also dedicated to my birth country, the Philippines. I hope that healthcare services, especially dementia care, for older Filipinos continue to improve.

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LIST OF ACRONYMS

BPSD Behavioral and psychological symptoms of dementia

CSMC Cardinal Santos Medical Center

DAS Dementia Attitudes Scale

DKAS Dementia Knowledge Assessment Scale

JRRMMC Jose R. Reyes Memorial Medical Center

LMICs Low- and middle-income countries

PwD People with dementia

SCIDS Sense of Competence in Dementia Care Staff

Abstract

The number of people with dementia in the Philippines is rising rapidly. This means that the healthcare workforce, most specifically nurses, must be prepared to take care of this patient group in hospital settings. Increasing the self-efficacy of nurses might improve patient outcomes and quality of care for PwD and their families. The purpose of this study is to determine the knowledge and attitudes of Filipino nurses towards dementia care and their influence on self-efficacy. A total of 182 registered nurses from a private and a public hospital in the Philippines were recruited for the study. Their levels of knowledge, attitudes, and self-efficacy on dementia care were measured.

Filipino nurses have inadequate knowledge, positive attitudes, and a high level of self-efficacy in dementia care. Correlation statistics revealed that attitudes were significantly correlated with self-efficacy (Spearman $\rho = 0.243$, $p = 0.001$) while general knowledge was not (Spearman $\rho = 0.143$; $p\text{-value} = 0.054$). A 'higher level of knowledge' based on experience and observations of people with dementia which forms the cognitive aspect of nurses' attitudes had the highest correlation with self-efficacy (Spearman $\rho = 0.275$, $p\text{-value} = <0.01$). Age and length of experience were significantly associated with dementia knowledge. There is a need to sustain Filipino nurses' positive attitudes on dementia care as it can influence their self-efficacy and therefore, their ability to provide person-centered care, the gold standard in dementia care.

Keywords: knowledge, attitudes, self-efficacy, nurses, dementia care

Chapter I

THE RESEARCH PROBLEM

Background of the Study

Since dementia has been declared a public health priority in 2012 by the World Health Organization (WHO) due to rapid global population aging, limited progress has been made for dementia care in the Philippines. Dementia is not a priority due to limited resources in the country (Dominguez et al., 2021). There is still no national dementia plan thirteen years after the WHO called for an urgent need to act. The Expanded Senior Citizens Act (Republic Act 9994) stipulates the establishment of a geriatric ward in every government hospital in the country in response to a growing number of older patients. However, there were no specific recommendations made for people with dementia [PwD]. The Philippines is projected to have almost 1.5 million dementia cases by 2030 (Dominguez et al., 2021). This is concerning given that the numbers of PwD in hospitals are also expected to increase alongside population aging.

Filipino nurses will see an increase of PwD in hospitals and will be expected to provide direct care for this patient group. In addition, the lack of dementia care specialists and resources in the country means that nursing care will be the mainstay management (Alzheimer's Disease International [ADI], 2016; Dela Vega, 2018). Majority of the literature on nurses' knowledge and attitudes on dementia were conducted in developed and Western countries (Evripidou et al., 2018; Yaghmour, 2022). There are very limited studies on dementia care in the Philippines. Moreover,

little is known about Filipino nurses' knowledge on dementia and attitudes towards PwD. Coming to England from the Philippines in 2015 to practice nursing, the investigator had limited knowledge about dementia and initially struggled to take care of this patient group. She has been privileged to experience and to further study dementia care in a high-resource setting. It is her wish to contribute to the field of dementia care in the Philippines where she studied nursing.

According to literature reviews, PwD suffer from the negative consequences of hospitalization and nurses, in trying to provide the acute needs of these patients, sacrifice their need for holistic care. (Dewing and Dijk, 2016; Karrer et al., 2021). This creates tension for PwD in hospital settings (ADI, 2016). A large group of studies explore the knowledge and attitudes of nurses in dementia (Evripidou et al., 2018; Zhao et al., 2020). The evidence collectively indicates that dementia knowledge among nurses is poor and that their attitudes need improvement. These studies were mostly descriptive and only a few have explored the effect of these factors on nurses' self-efficacy which is assumed to be an important determinant of behavior and quality of performance in dementia care. The primary study by Dela Vega et al. (2018) explored the knowledge and attitudes in dementia care of healthcare workers in the Philippines. While most of the participants are nurses, the findings could not be generalized for this group. Moreover, the study did not use validated and contemporary scales making it challenging to compare this with data from other settings and countries.

There is a need to advance dementia research in Asia, considering that the majority of PwD worldwide are from this area (WHO, 2012). Low- and middle-income countries (LMICs) including the Philippines will face a unique challenge as they might

not be prepared for the consequences of an older population, specifically the dementia epidemic. Dementia research is currently needed in anticipation of aging population in the country. In 2017, the WHO presented the Global Action Plan for 2017 to 2025 in response to dementia. Building the knowledge and competencies of healthcare workers through education and training were proposed. The study will explore the knowledge, attitudes, and self-efficacy of Filipino nurses in dementia care. This will help justify the need for dementia education and intervention in general hospitals. Given that the country has limited resources, provisions for dementia care must be streamlined and cost-effective (Ferri & Jacob, 2017). It is the investigator's hope to help nurses in acute care, nursing educators, hospital administrators, nursing leaders, and policy makers in dementia care through this study.

Statement of the Problem

The number of people with dementia presenting in general hospitals for acute care is predicted to increase alongside population aging. Currently, the Filipino healthcare workforce is deemed to be unprepared for the challenges of dementia care in general hospitals. This may be partly due to a poor awareness on dementia. Nurses are expected to provide direct care to this patient group and to support their families when they are in hospital settings. However, the knowledge and attitudes of nurses remain to be fully explored. There is a need to measure these factors in the Philippine setting using validated and contemporary tools. In doing this, interventions could be targeted to address context-specific gaps in the knowledge and attitudes of Filipino nurses. There is also a need to identify whether nurses' knowledge and attitudes could influence their self-efficacy which can potentially affect their behavior and their caring practices. The study will determine the level of knowledge, attitudes, and self-efficacy of Filipino nurses in dementia care. It will also determine the influence of knowledge

and attitudes in dementia care to their self-efficacy. Lastly, it will explore the relationships between the demographic profile of Filipino nurses and their level of dementia knowledge.

Objectives of the Study

General Objective

To determine the association of knowledge and attitudes in dementia care to the self-efficacy of nurses in selected hospital institutions in Metro Manila, Philippines.

Specific Objectives

1. To determine the level of knowledge on dementia care in older persons among Filipino nurses in terms of:
 - 1.1. Causes and characteristics
 - 1.2. Communication and behavior
 - 1.3. Care consideration and risks
 - 1.4. Health promotion
2. To determine the level of attitudes on dementia care in older persons among Filipino nurses in terms of:
 - 2.1. Dementia knowledge
 - 2.2. Social comfort
3. To determine the level of self-efficacy on dementia care in older persons among Filipino nurses in terms of:
 - 3.1. Professionalism
 - 3.2. Building relationships
 - 3.3. Care challenges

3.4. Sustaining personhood

4. To determine the relationship between the level of knowledge and self-efficacy on dementia care in older persons among Filipino nurses
5. To determine the relationship between the level of attitudes and self-efficacy on dementia care in older persons among Filipino nurses
6. To determine the relationship between the level of knowledge and demographic profile of Filipino nurses in terms of:
 - 6.1. Age
 - 6.2. Length of experience
 - 6.3. Attendance to training on geriatric care

Significance of the Study

The expected rise in the number of people with dementia in the Philippines will place an unprecedented demand on its healthcare workforce that is largely unprepared (Badana & Andel, 2018; Dela Vega et al., 2018). The study was conducted to help improve the care for people with dementia in the Philippines through an understanding of nurses' knowledge, attitudes, and self-efficacy. Understanding what factors can potentially influence nurses' self-efficacy would help in preparing them for taking care of this patient group.

Nursing Educators

The study aims to contribute to the nursing profession by establishing what can be improved in terms of dementia care by highlighting crucial areas to focus on. The findings can be used to guide practice development in nursing by looking at factors

affecting nurses' self-efficacy. The study can also be used by educators to determine what guidance and support nursing students need in caring for an ageing population. It can also support the need to enhance and/or update the dementia care curriculum for nursing undergraduates.

Hospital Administrators and Nurse Leaders

There is a challenge to create more dementia-friendly hospitals for PwD. An understanding of current nursing knowledge and attitudes can help guide hospital administrators and leaders' decisions in terms of improving healthcare services and support for the elderly especially for those with dementia. Moreover, it can be used to support the need for in-service training for registered nurses caring for this vulnerable patient group.

Dementia Policy Makers

There is a need to create a National Strategy for Dementia in the country (Dominguez et al., 2021). Findings of the study could be used to strengthen the push for a national plan and to ensure that the nursing profession is represented.

Research

LMICs are challenged to create strategies that are practical, and context-appropriate which means research is needed (Ferri & Jacob, 2017). The knowledge and attitudes of nurses on dementia have been widely studied in developed countries. Research is needed to determine specific gaps in the knowledge and attitudes of Filipino nurses to best support them and to guide interventions. There is also a need

to determine whether these factors could influence their self-efficacy of nurses which could affect their dementia care practices.

Scope and Limitation of the Study

The respondents of the study included Filipino nurses working in two Level 3 public and private hospitals in Metro Manila. Nurses in acute care units who have taken care of patients over the age of 60 were considered. Due to challenges in completing the recommended number of respondents in the private hospital, data collection was extended to nurses in the ancillary department. In total, twelve responses were lacking which might affect the study's generalizability and reduce the power of the statistical tests. Nurses from long-term care facilities and mental health facilities for the elderly were not included.

The study was conducted using a cross-sectional descriptive correlational design. Therefore, causation between the variables cannot be implied. It was also limited to hospitals in Metro Manila due to time constraints and, not to mention, higher-level healthcare facilities are more concentrated in this area. The study utilized self-assessment scales to measure knowledge, attitudes, and self-efficacy. The responses might not correspond to observed practices on dementia care (Scerri et al., 2020). When interpreting the results of the study, sampling, response, and social desirability bias must be taken into consideration.

Chapter II

THEORETICAL BACKGROUND

Review of Literature

This review of related literature will discuss what is known about the knowledge and attitudes of nurses in relation to dementia care in acute hospitals. Due to a paucity of research in the Philippine setting, the investigator will discuss findings from other South and Eastern Asian countries where the healthcare settings and culture are similar. Findings from Western and developed countries were also included because they have a breadth of research in dementia care. It will initially discuss the current situation of the care for older people and people with dementia in the Philippines.

Next, the review will focus on the challenges of dementia care in acute hospital settings. A section per variable included in the study will follow. Existing and relevant literature on the proposed relationships of the dependent and independent variables will be explored. Gaps in the literature presented will be identified to highlight specific areas which will be addressed by the current study. The synthesis will explain how the study is placed within the context of available literature and how it will add to what is already known. Lastly, the theoretical and conceptual frameworks that guided the study will be explained.

The search for relevant literature was done using manual searches on Google Scholar and systematic searches using CINAHL, Embase, EBSCOhost, and Medline. The systematic search was conducted through the assistance of a clinical librarian based in a National Health Service Foundation Trust in Guildford, England. The Cochrane library of systematic reviews and NICE guidelines were also searched. The date range used for the search was from 2010 to 2024 and was limited to nurses,

nursing staff and/or nursing in acute care or hospital settings. The investigator also used cited references for this review. Primary sources used include printed books written by authors of the theories supporting the study which were borrowed from a local library. The investigator also contacted experts on the subject including the authors of the chosen instruments for the study and key resource authors in the Philippines.

Dementia

Dementia is not a specific disease, but a syndrome characterized by impaired cognitive function in older adults which is not a normal consequence of biological aging (World Health Organization, 2021). It is an umbrella term used for describing a group of symptoms affecting memory, thinking, behavior and emotion which mainly occurs in older people. Dementia is one of the leading causes of disability and dependency among this age group. It is chronic and progressive in nature and there is currently no cure for it. While Alzheimer's disease is the most common form, other causes include vascular, Lewy body, and frontotemporal diseases in the brain. Non-modifiable factors for dementia include age and familial history of dementia. The modifiable risk factors include but are not limited to diet, exercise, alcohol intake, hypertension, diabetes, smoking, depression, and head trauma. In the Philippines, these modifiable risk factors are prevalent making the population at high risk of developing dementia (Dominguez et al., 2018).

Dementia can affect many bodily systems and functions. A person with dementia may suffer from poor nutrition, infections, worsening of other chronic conditions among many others. They may be unable to perform activities of daily living and to keep themselves safe. Social isolation and strained relationships may result

from the symptoms and consequences of dementia. The disease has great implications for families, healthcare professionals, healthcare systems, and economies. The most common misconception about dementia is that it is a normal part of aging. This has been the case for the public and healthcare professionals alike. Filipinos may view dementia as being “*ulianin*” or senile when translated directly in English (Braun & Browne, 1998). According to the same study, other phrases used to describe dementia may include “*tumatandang paurong*” or “*bumalik sa pagkabata*” – growing old backwards or going back to childhood respectively.

Dementia Care in the Philippines

From 2025 to 2030, Filipinos aged 60 and above will account for at least 10% of the country’s total population (Cruz et al., 2019). By then, the Philippines will be classified as an ageing society based on the definition of the United Nations. South Korea, Singapore, Thailand, and China are high-ageing societies (20-29%) while Japan is now considered a hyper-aged society with more than 30% of its population above 60 (Asia Health and Well Being Initiative [AHWIN], 2022). In 2030, more than 60% of the older population worldwide will be in Asia. However, many of its countries are not prepared for the consequences of population aging.

The incidence of dementia increases along with population ageing. It is estimated that 63% of PwD will be in Asia by 2030 (Alzheimer’s Disease International, 2014). Unfortunately, most of its nations are low- and middle-income countries (LMICs). These settings will face specific challenges including insufficient human and financial resources, inadequate training for healthcare professionals, and limited awareness on dementia (ADI, 2014). In addition, a more rapid pace of demographic change in these countries means that governments have considerably less time to

respond to these challenges compared to developed countries (ADI, 2013; AHWIN, 2022). For example, it took 115 years for France to move from an ageing to an aged society while China and Thailand are expected to transition within 25 and 22 years, respectively.

In the Philippines, the prevalence of dementia was found to be at 10.6% and cases are estimated to increase steadily from 568,000 in 2030 to more than 1 million by 2050 (ADI, 2014; Dominguez et al., 2018). However, a more recent community-based study by Dominguez et al. (2021) found the incidence rate of dementia to be at 16 cases per 1000 person-years. This implies that cases would increase more rapidly than previously estimated with almost 1.5 million cases in 2030 and 2.5 million in 2050 (Dominguez et al., 2021). The study also urgently called for a need to develop a national plan or strategy for dementia.

Dementia will cause a substantial burden on the healthcare system. A mixed-methods research conducted by Dela Vega et al. (2018) identified the need for dementia specific health services in the Philippines. Unfortunately, the country's healthcare workforce is currently not prepared to meet the needs of older people in hospitals much more for PwD (Badana & Andel, 2018; Dela Vega et al., 2018). There is a shortage of trained personnel and specialists for dementia. Nurses make up the majority of the healthcare workforce and they are expected to provide direct care for PwD. Ferri and Jacob (2018), recognizing the lack of specialists in LMICs identified nursing care as the mainstay of management for PwD. To add, the recent COVID-19 pandemic posed additional financial and healthcare access burden to an already vulnerable group (Soriano & Aruta, 2022). There is a need for integrated services within the country's healthcare system for PwD.

PwD in the Philippines are mostly admitted to hospitals for an acute problem or a different medical condition such as falls, infection, and behavioral disturbances (Dela Vega et al., 2018; Dominguez et al., 2021). Majority of PwD have at least one of the following cardiovascular risk factors: hypertension, diabetes, high cholesterol and/or smoking (Dominguez et al., 2021). This may explain a common theme noted by Dela Vega et al. (2018) in their focused group interviews of Filipino healthcare workers who viewed dementia as a secondary problem compared to acute conditions which are their priority.

Nurses are in an optimal position to identify and care for PwD, but they are not adequately trained to assess and manage these patients (Evripidou et al., 2018). In addition, competing priorities in acute care may worsen the state of care for PwD in hospitals. This is also the case for other Asian countries with healthcare settings that could be compared to that of the Philippines such as Taiwan, Singapore, and Indonesia. A culture of care that is focused on physical needs, tasks, and routine is also prevalent in developed countries and is assumed among many healthcare settings (Dewing & Dijk, 2016).

Dementia will place a heavy burden on Filipino families who are culturally expected to take care of the elderly. Family-based, female-dominated long-term care is common practice in the country, but this might not be sustainable (Cruz et al., 2018). More than the physical burden of disability, the informal cost implications are high (Dominguez et al., 2021). Leung et al. (2019) studied the dementia literacy of the Filipino public and their health-seeking behaviors. In addition to having limited dementia awareness and knowledge, they were found to be reluctant in approaching healthcare professionals for help. It was suggested that healthcare professionals in the country should make themselves available for help and that they could be

mobilized to educate the public (Kang et al., 2010; Leung et al., 2019). Nurses were also identified as valuable resources for case identification and assessment in LMICs. They are in a good position to detect dementia early on and to manage symptoms because they are most involved with direct patient care and have closer contact with PwD compared to other healthcare professionals (Dewing & Dijk, 2016; Wang et al., 2020). These recommendations are pragmatic; however, little is known about what Filipino nurses know and how they feel about dementia. Nursing staff must be trained before they are able to support self-management in dementia (Verkaik et al., 2017). To add, it is important to determine if they feel confident to take care of PwD.

The Expanded Senior Citizens Act (R.A. 9994) stipulates the establishment of a geriatric ward in every government hospital but there were no specific recommendations made for the care of PwD. The accompanying need to train and educate healthcare workers in view of this Act was recognized but there is limited information if action or progress has been made since its approval in 2010. The Philippine General Hospital and National Centre for Geriatric Health provide government and charity-run services for older people including those with dementia. However, the financial challenges brought about by the COVID-19 pandemic may pose a burden on healthcare systems and vulnerable patients (Soriano & Aruta, 2022). There are also a few private institutions with dedicated services for the elderly and for PwD. However, considering the fees required for private and/or specialist care, only a limited number of PwD can access these services (Soriano & Aruta, 2022). The Philippine Mental Health Act (R.A. 11036) aims to provide affordable and accessible mental health services for Filipinos but specific services and provisions for PwD are also yet to be made since enactment in 2018.

Caring for People with Dementia in Hospitals

Dela Vega et al. (2018) conducted the first study on the models of care for PwD in Philippine hospitals. Twenty-six purposively selected facilities, a mix of private and government general hospitals and long-term care institutions were included in a mixed-methods study. Healthcare facilities in the country were grouped into having separate or specific care, partial-services, or no specific dementia services. Only one private hospital had a separate unit for dementia. Majority of the facilities had no specific provisions for PwD. The focused group interviews with administrators and healthcare workers in the selected institutions highlighted several challenges in caring for PwD in acute care which are comparable to the findings of the literature review on the state of care for PwD in hospitals by Dewing and Dijk (2016). Majority of the studies are from Western and developed countries.

The literature review highlighted several themes on the state of care for PwD in hospitals. Admission to hospitals creates challenges for both PwD and healthcare staff which are intensified by the care environment, cultures of care, and attitudes. First, the study highlighted the tendency of nurses to prioritize caring for acute conditions and other comorbidities over dementia. This focus on 'physical' care and safety creates a culture where PwD are seen as 'inappropriate' patients in acute care. This theme was consistent with the findings of Dela Vega et al. (2018) where dementia was viewed as a secondary problem compared to acute conditions in Philippine hospitals. Healthcare administrators are hesitant to introduce dementia programs and services because they are focusing on patients who are acutely unwell or those who are "really sick." A more recent systematic integrative review by Rosvik and Rokstad (2020) on the needs of PwD in acute hospitals found that these patients were

overlooked or excluded by nurses in a busy hospital setting which may result in unmet needs. Training to enhance staff competence was recommended.

Another theme pointed out by Dewing and Dijk (2016) is the direct effect of hospitalization for PwD. These patients may express unmet needs by exhibiting behavioral and psychosocial symptoms of dementia (BPSD). For example, shouting and resisting may be a way for PwD to regain a sense of control in an unfamiliar setting where their normal routine has been disrupted. Difficulties in caring for PwD has also been highlighted in focused group discussions with healthcare workers in the Philippines (Dela Vega et al., 2018). In the study, patience was identified as important when dealing with PwD who may be violent towards nurses. Unfortunately, nurses may view these behaviors as disruptive if they do not have a good understanding of dementia (Dewing & Dijk, 2016). These views may cause nurses to avoid interactions with PwD or to use restraint to control unwanted behaviors (Brossard Saxell et al., 2021). These practices may be harmful for patients and may even exacerbate BPSD. Moreover, these patients are at risk of developing complications and adverse events during hospitalization such as falls and hospital-acquired infections among many others which may result in extended stays. In the Philippines, dementia-associated events leading to emergency hospitalizations have direct implications for the cost of care (Dominguez et al., 2021). Aside from cost, prolonged hospital stays for PwD may lead to functional decline and social isolation. These issues combined with an untrained healthcare workforce for dementia in hospitals leads to a burdensome cycle in acute care (Fukuda et al., 2015).

Third, dementia in acute care presents multiple challenges for nurses who are crucial in delivering quality of care for PwD (Dewing & Dijk, 2016). Constraints to best

care practices for dementia as mentioned above may lead to burnout and poor self-efficacy among nurses. These factors are assumed to affect nurses' care behaviors and practices in dementia. Nurses are expected to compensate for structural and cultural flaws in the healthcare system on top of existing multiple demands to deliver quality care for PwD (Brossard Saxell et al., 2021). This was supported by the findings of Fukuda et al. (2015) who studied Japanese nurses in acute care and found that nurses try to adapt to difficulties in dementia care despite feeling conflicted and pressured by their organizations. Services, organizational support, and nursing training in hospitals when it comes to dementia care are sparse in Japan as is the case with the Philippines. A considerable difference in the self-rated preparedness of healthcare workers who work in hospitals with separate dementia units (median of 85 using a 0-100 scale) compared to those with no specific dementia services (median of 40) was found in the study of Dela Vega et al. (2018). There is a lack of trained staff and specialists in the country. As a result, nurses may be left to cope with the challenges of dementia in acute care without adequate support leading to burnout and poor self-efficacy.

Informal or family care is still the foundation of dementia care in the Philippines (Dela Vega et al., 2018; Dominguez et al., 2021). Nurses are dependent on families even in acute care and this is reflected in other Asian settings as well. For example, families are expected to assist in the care of PwD and to prevent them from having 'problematic' behaviors in Japanese hospitals (Fukuda et al., 2015). In Korea, nurses involve family members of PwD in managing delirium and in providing basic care (Kang et al., 2016). These were also echoed in the focused group interviews in the study of Dela Vega et al. (2018). Healthcare workers have identified the importance of supporting and training family members. The participants felt that family members are

best placed to take care of PwD especially with their daily needs and following discharge from hospital.

To summarize, there is limited information on the state of care for PwD in acute hospital settings in the Philippines. What is currently known is comparable to findings from literature reviews. However, most studies about acute care for PwD are from Western and/or developed countries (Dewing & Dijk, 2016; Rosvik & Rokstad, 2020). Similarities with other Asian countries have been found in existing studies as well. Themes in acute care for PwD mainly revolve around a culture of care that prioritizes physical needs, negative consequences of hospitalization for PwD, and the challenges faced by nurses due to inadequate support.

Holistic Care for People with Dementia

Holistic care is the recommended approach not only for older people but also and most especially for those with cognitive impairment. In terms of dementia care, holistic care is synonymous to 'person-centered care.' The concept was introduced by Tom Kitwood in 1997 who defined 'personhood' in his seminal work on caring for people with dementia. Personhood was defined as a "standing or status bestowed upon one human being, by others, in context of relationship and social being (Kitwood, 1997)." According to him, maintaining personhood despite cognitive and functional decline should be the goal of care for PwD. He also identified the five psychological needs of PwD which are attachment, inclusion, occupation, comfort, and identity. Since then, the concept of person-centered care and its importance have been widely studied and supported in dementia literature. It has been identified as the gold standard in dementia care and is linked with evidence-based and quality care for PwD in literature (Dewing & Dijk, 2016; National Institute for Health and Care Excellence,

2018). Person-centered or holistic care for PwD entails respect, valuing their individuality and preferences, and enhancing social relationships or interactions despite their age and degree of cognitive impairment.

Jean Watson, in her Theory of Transpersonal Care, promotes personhood. According to the theory, being recognized as a person is a human need that nurses respond to. Saying that, nurses are crucial in providing holistic care for PwD. Much like Kitwood's recommendations for PwD, Watson states that the goal of nursing is to protect, enhance, and preserve human dignity. Utilizing these theories and caring approaches, nurses will be encouraged to move away from a purely biomedical approach for PwD which undermines personhood (George, 2002; Kitwood, 1997). Jean Watson listed ten carative factors which are interactions and modalities that can be used to enhance the caring experience. These factors as listed below reflect principles of holistic care which could be beneficial for PwD:

1. Formation of a humanistic-altruistic value system
2. Instillation of faith hope
3. Cultivation of sensitivity to self and others
4. Development of helping-trust relationships
5. Expression of positive and negative feelings
6. Creative problem-solving
7. Promotion of transpersonal teaching and learning
8. Supportive, protective, and/or corrective mental, physical, social, and spiritual environment
9. Assistance with human needs
10. Allowance for existential-phenomenological-spiritual forces

The carative factors overlap with Kitwood's 'positive person work' in terms of how nurses are encouraged to interact with and intervene for PwD to fulfill their psychological needs. The interventions include recognition, negotiation, collaboration, play, giving, sensory stimulation, celebration, relaxation, validation, holding, creation, and facilitation. These types of interaction enhance personhood through cultivating positive feelings, encouraging abilities and/or addressing psychological damages. Both theories encourage a human-to-human connection (transpersonal and/or shared meanings) and can therefore be utilized by nurses in taking care of PwD in hospitals. In an integrative literature review, meeting the holistic care needs of PwD involves reaching 'the person' behind the disease, understanding the different ways they communicate their needs and being genuinely empathetic (Monthaisong, 2018). Nurses must understand dementia from the perspective of the patient and their own aesthetic experience (Layher, 2008). The authors were guided by the concepts of Watson's theory which emphasized the importance of the human over traditional science. More than biomedical knowledge, the nurse's own life history, previous experiences, values, beliefs, and self-awareness are essential in providing holistic care for PwD (George, 2002; Kitwood, 1997).

Much like person-centered care, the Theory of Transpersonal Care has been recommended for the care of PwD. Using a support group process using the theory was found to reduce caregiver burden and to improve coping skills of informal carers in Turkey (Gonen-Senturk & Kucukguclu, 2021). Maintaining personhood in the face of failing cognitive faculties is the goal for PwD regardless of where they are cared for. Handley et al. (2017), in their realist review, stated that acute healthcare staff must be able to organize their work on the individual needs of PwD rather than just focusing on routine care if they are to be person-centered. For example, delivering care during

optimal times for PwD where they are more likely to cooperate. This could be practiced through flexibility and trying to get to know the person. Blake et al. (2019) conducted a systematic review on person-centered care and identified several interventions linked to a person-centered approach. The interventions included communication strategies, managing emotional impact, promoting integrity, modifying care environments, changing interaction approaches, and using memory books for PwD. The qualitative study by Scerri et al. (2015) explored person-centered approaches in hospital wards by interviewing staff and families of PwD. The themes that came out were building relationships with PwD and their families, going the 'extra mile,' providing quality time, caring for psychosocial needs, and having a 'human touch' when giving physical care.

Dementia Care Knowledge

Knowledge is defined as information or awareness acquired from both experience and education (Oxford University Press, 2020). This can also be said for nurses' dementia knowledge. They form an understanding of the syndrome based on both their personal and/or professional experience and their nursing education. Dementia knowledge is multifaceted. Understanding it requires a combination of biomedical, social-psychological, and gerontological perspectives (Innes & Manthorpe, 2012). This was supported by a Delphi consensus study where a mix of dementia experts agreed that a diverse range of domains are crucial in understanding the syndrome (Annear et al., 2015). Nonetheless, it is important to establish the essential aspects of knowledge needed to support care (Annear et al., 2015).

In the literature review by Evripidou et al. (2018), nurses reported to have basic knowledge of dementia but reported poor knowledge in communication strategies,

dealing with BPSD, enhancing safety, and non-pharmacological interventions. This suggests that nurses need knowledge that could be applied in practice. In a cross-sectional study, Taiwanese nurses in acute care scored well on a dementia knowledge scale but it was argued that they might not know how to care for PwD (Lin et al., 2018). This strengthens the need for practical dementia knowledge in dementia which can be applied based on context – in this case, acute care.

It is important to assess the dementia knowledge of healthcare professionals for several reasons. First, it can support the need for education and/or training. In fact, it is argued to be the first step in developing targeted educational interventions and strategies for healthcare staff (Annear et al., 2017; Smyth et al., 2013). Second, it is needed to determine if knowledge can contribute to other outcomes such as being able to provide quality care for PwD (Sullivan & Mullan, 2017). Without this information, it will be difficult to identify deficits which hinder the provision of evidence-based dementia care (Robinson et al., 2014).

There is an assumption that knowledgeable staff will provide better care for PwD (Sullivan & Mullan, 2017). If that assumption is true, then it is fair to say that good knowledge of dementia in healthcare staff can improve the care experience of PwD in hospitals. Tay et al. (2018) studied the effectiveness of an acute hospital dementia unit in Singapore whose multidisciplinary team was trained to learn theoretical and practical knowledge on dementia care. The functional ability, well-being and length of hospital stays of patients were better compared to the control group. However, it is important to note that there were many other variables that could have influenced the outcomes in the study such as the home-like environment, better staffing, and a positive care culture. The literature review by Turner et al. (2017) also highlighted that

theoretical knowledge cannot always be easily applied to acute ward settings. Learning with experienced colleagues and a psychosocial knowledge of dementia were useful for nurses.

The dementia knowledge of nurses depends on many other factors aside from education and experience. The age, attitudes, and care setting of nurses were found to have an impact on their knowledge as well (Evripidou et al., 2018). This was evident in the study of Lin et al. (2017). For example, age was significantly correlated with dementia knowledge scores and emergency room nurses were less knowledgeable compared to those in psychiatry and neurology wards. The literature review by Zhao et al. (2020) on healthcare professionals in China also found the same results. Education, experience, age, in-house training and working in neurology departments significantly influenced healthcare professionals' knowledge scores.

Culture also plays an important role in the dementia knowledge of healthcare professionals (Johnston et al., 2020). Therefore, a context-specific assessment of dementia knowledge is needed for culturally congruent interventions in different settings (Leung et al., 2019). Ayalon (2009) found that Filipino home care workers in Israel lack dementia knowledge which was attributed to their lack of experience with PwD. Brooke et al. (2019) also found that Filipino nursing students did not report familial or clinical experiences with PwD and therefore lacked awareness. Yaghmour (2021) conducted a literature review on the impact of culture and care settings on nurses' knowledge. It supports that culture can influence the knowledge in dementia care and highlighted the scarcity of studies from Southeast Asia. For example, families might be expected to manage BPSD in hospitals for Asian settings. It is unclear whether this comes from a lack of professional knowledge or a culture that values filial

responsibility. There is a big group of studies about the specific knowledge needs of nurses when it comes to dementia care. The following domains are relevant for healthcare professionals especially nurses.

Causes and Characteristics

The most common misconception about dementia is that it is a normal part of aging (WHO, 2012). While it predominantly occurs in later life, it is not normal to have dementia. It is a terminal syndrome brought about by a deterioration in the structure and function of the brain (Annear et al., 2015). There is also poor understanding around the signs and symptoms of dementia which is important in care provision. Understanding the pathological, physical, and terminal nature of dementia is important in providing care (Annear et al., 2015). Robinson et al. (2014) highlighted the need for healthcare staff to understand the progression and the clinical course of dementia.

Communication and Engagement

Nurses' knowledge about communication strategies in dementia care was also lacking according to the literature review by Evripidou et al. (2018). For example, nurses found it challenging to engage PwD in activities or to manage those resistant to care. Effective communication strategies are important in enhancing patient safety and to reduce the need for pharmacological interventions for BPSD. Communication, verbal or non-verbal, is possible regardless of the degree and type of dementia according to experts (Annear et al., 2015). Healthcare professionals in China reported communication to be the most challenging when taking care of PwD in hospitals (Zhao et al., 2020).

Care Needs

Nurses must have dementia knowledge that is relevant to their field of practice. In a meta-synthesis of qualitative literature, healthcare staff also reported that they needed more knowledge and practical solutions in dealing with the BPSD (Turner et al., 2017). Significant deficiencies in knowledge were also found in relation to pain management, fall prevention and injuries, and end-of-life care (Evripidou et al., 2018; Yaghmour, 2021). This domain is crucial as it represents the actual work of caring for PwD. Despite having good knowledge on dementia, knowledge on how to care for PwD might not be as good in a sample of Taiwanese nurses (Lin et al., 2018).

Risks and Health Promotion

There is currently no cure for dementia but some of its risk factors are modifiable in earlier stages of life (Annear et al., 2015). There is poor awareness on the risk factors associated with dementia in low- and middle-income countries (Alzheimer's Disease International, 2024). Nurses have an important role in dementia prevention especially in populations who are at high risk of developing dementia. Nurses are identified as important resource persons for PwD and their families, but it would be challenging for them to fulfil that role without adequate knowledge.

To conclude this section, studies highlight that there is a gap in the dementia knowledge of nurses. A multi-perspective approach is recommended in studying dementia. However, there is also a need to focus on 'essential knowledge' that can be directly applied in the care of PwD. This type of knowledge is assumed to influence both nurse and patient outcomes. There is also a need for context and culture specific studies to make specific recommendations. In the Philippines, the dementia knowledge of healthcare professionals was noted to be poor and was based on their

ability to correctly define the syndrome (Dela Vega et al., 2018). While this is insightful, a better understanding of their dementia knowledge is warranted to help target interventions and achieve outcomes (e.g., self-confidence in nurses) that can be useful in practice. A proper assessment of dementia knowledge is important in informing practice, education, and policy (Annear et al., 2015).

Attitudes in Dementia Care

An attitude is defined as a way of thinking or feeling about something (Breckler, 1984). It is theorized to have three components which are cognitive, affective, and behavioral based on the tripartite model. The cognitive (knowledge and beliefs) and affective (feeling) components of an attitude were described. The behavioral component is characterized as the effect of attitude on behavior.

In studies about attitudes towards dementia, stigma has been widely discussed (Digby et al., 2016). Nguyen and Li (2020), in their systematic review of stigma around dementia, discussed three themes that overlap with the components of attitudes in the tripartite model. They described stereotypes (beliefs) and prejudice (feelings) towards PwD which may lead to discrimination (behavior). The literature review by Digby et al. (2016) exposed a culture of stigmatization towards PwD in acute care. Incorrect beliefs and inadequate knowledge about the cause of BPSD may bring out feelings of anger or inadequacy in nurses. To regain a sense of control, nurses labelled PwD inappropriately. Patronizing language and making derogatory remarks were also reported.

The attitudes of nurses towards dementia care are mainly studied to improve the care for PwD across different settings (Evripidou et al., 2018; Zhao et al., 2020).

In acute care, PwD may be treated differently because they are viewed as 'inappropriate' patients in a fast-paced and busy environment. Kang et al. (2010) studied the attitude of acute nurses in Korea. They found that surgical ward nurses held more negative attitudes compared to those in the medical ward due to rapid shifts in patients' status and priorities. To be specific, surgical nurses viewed PwD as a nuisance as they are used to high-tech care procedures or interventions. Providing routine care may be challenging because PwD may be confused, uncooperative, and resistant (Digby et al., 2016). Healthcare workers in the Philippines were viewed to have a positive attitude towards dementia based on their willingness to learn and care for PwD (Dela Vega et al., 2018). Their attitudes based on the tripartite model in dementia care are yet to be fully explored.

The attitudes of nurses towards PwD have also been described as either positive or negative in the literature review by Evripidou et al. (2018). Negative attitudes include fear or anxiety when dealing with BPSD especially during the advanced stage of the disease while positive attitudes include being hopeful (Keogh et al., 2020). In general, the attitudes of nurses are thought to have a tremendous impact on their work experience and the quality of care for PwD (Yaghmour, 2021). Negative attitudes surrounding dementia are thought to come from being unable to see the person behind the disease or a lack of understanding of personhood in dementia. More importantly, attitudes were also influenced by the culture and competing priorities in acute care.

Physical care is the primary concern of nurses in hospital which means dementia care could easily be overlooked (Pinkert et al., 2018). Acute hospitals are fast-paced and disorganized. Patience was identified by Filipino nurses as important in caring for people with PwD (Dela Vega et al., 2018; Ojo et al., 2020). The pressure

on nurses to provide quality care despite these issues may lead to a self-protective approach where they consciously avoid or ignore PwD and moral conflict (Fukuda et al., 2015; Moonga & Likupe, 2016). All these combined, may lead to feelings of frustration and guilt which may exacerbate negative attitudes towards PwD (Gwernan-Jones et al., 2020).

Age, gender, training, and experience in dementia care influence healthcare professionals' attitudes (Keogh et al., 2020; Zhao et al., 2020). The attitudes of nurses towards dementia have been found to be somewhat negative and this has been consistent over time (Evripidou et al., 2018; Lee et al., 2016; Pinkert et al., 2017). Brooke et al. (2019) found that although Filipino nursing students did not have experiences of PwD, they held positive attitudes on taking care of older people. Acute care nurses, in general, do not hold high expectations for PwD and are less hopeful. This may be attributed to a lack of understanding of person-centered care in these settings and contextual constraints (Evripidou et al., 2018; Pinkert et al., 2017).

The attitudes of nurses towards PwD may also be affected by their culture. For example, filial responsibility and a strong family bond in Korea was thought to be a factor which influenced acute nurses' moderately positive attitudes (Kang et al., 2010). Long-term care is not the norm in Korea as it is considered shameful to place PwD in these facilities. This is also the case for the Philippines where failure to provide care for family members leads to *hiya* or shame (Badana & Andel, 2018). This means that they might be reluctant to utilize healthcare services and to approach healthcare professionals. Saying that, nurses must make themselves available for PwD and their families, but negative attitudes might pose a barrier in care. For instance,

hopelessness may lead to poor self-efficacy and reluctance in providing evidence-based care for PwD.

Apart from increasing awareness, the WHO (2012) called for efforts to improve attitudes around dementia care and to reduce stigma. They introduced a six-stage model from awareness to acceptance of dementia as a disability. As awareness grows, the inclusion of PwD in society is expected to improve. Long-term care for PwD in the Philippines often falls to their families (Cruz et al., 2018). There is a challenge for healthcare professionals to have a good understanding of dementia for them to be able to give help and to encourage public to seek for help. While having a biomedical knowledge on dementia is important, this might not be enough for a change in attitude, and therefore behavioral change, to occur (Ebert et al., 2019). O'Connor and McFadden (2010) developed an instrument to measure attitudes towards PwD using the tripartite definition. The cognitive items were grouped under 'dementia knowledge.' The affective and behavioral items formed a single factor called 'social comfort.' Both are components of attitudes in dementia care.

Dementia Knowledge

An attitude has a cognitive aspect. The dementia knowledge associated with attitude is the knowledge formed by experiences with PwD. This also pertains to beliefs held by healthcare professionals that can affect the way they interact and care for PwD. This is different from the biomedical knowledge of dementia and focuses mainly on 'personhood-based' knowledge (Ebert et al., 2019). The knowledge subscale of attitudes is based on personal experiences and observations of the capacity and viewpoints of PwD. Because of these 'experiences and observations,' healthcare professionals (who may have limited awareness of dementia) may form beliefs or stereotypes against PwD.

Social Comfort

This covers the affective and behavioral component of attitude. Social comfort refers to the relationship between the feelings and actions brought about by contact with PwD (O'Connor & McFadden, 2010). There is a strong connection between how people feel towards PwD and how they eventually behave around them. Dementia knowledge (personhood-based) influences social comfort while biomedical knowledge does not (Ebert et al., 2019). Social comfort encompasses being able to have meaningful relationships with PwD. It is different from physical or personal comfort. A higher level of social comfort is proposed to be an important factor in making healthcare professionals more inclusive for PwD.

Self-Efficacy in Dementia Care

Self-efficacy is defined as an individual's perception in their ability to perform competently in a particular situation (Bandura, 1997). It is a construct derived from the social cognitive theory which states that behavior, cognition, and environment affect each other. Self-efficacy (SE) has been used interchangeably with 'sense of competence' (SoC) and 'confidence' in dementia care literature (Mullan & Sullivan, 2016; Schepers et al., 2012). Self-efficacy in dementia care is the belief in one's ability to effectively care for people with dementia. According to Bandura, self-efficacy is affected by different factors and can influence human thought and subsequently, behavior.

Measurements of self-efficacy by healthcare staff were used to determine effectiveness of interventions aimed at improving the quality of care for PwD (Scerri & Scerri, 2019; Zhao et al., 2021). Self-efficacy or sense of competence was also

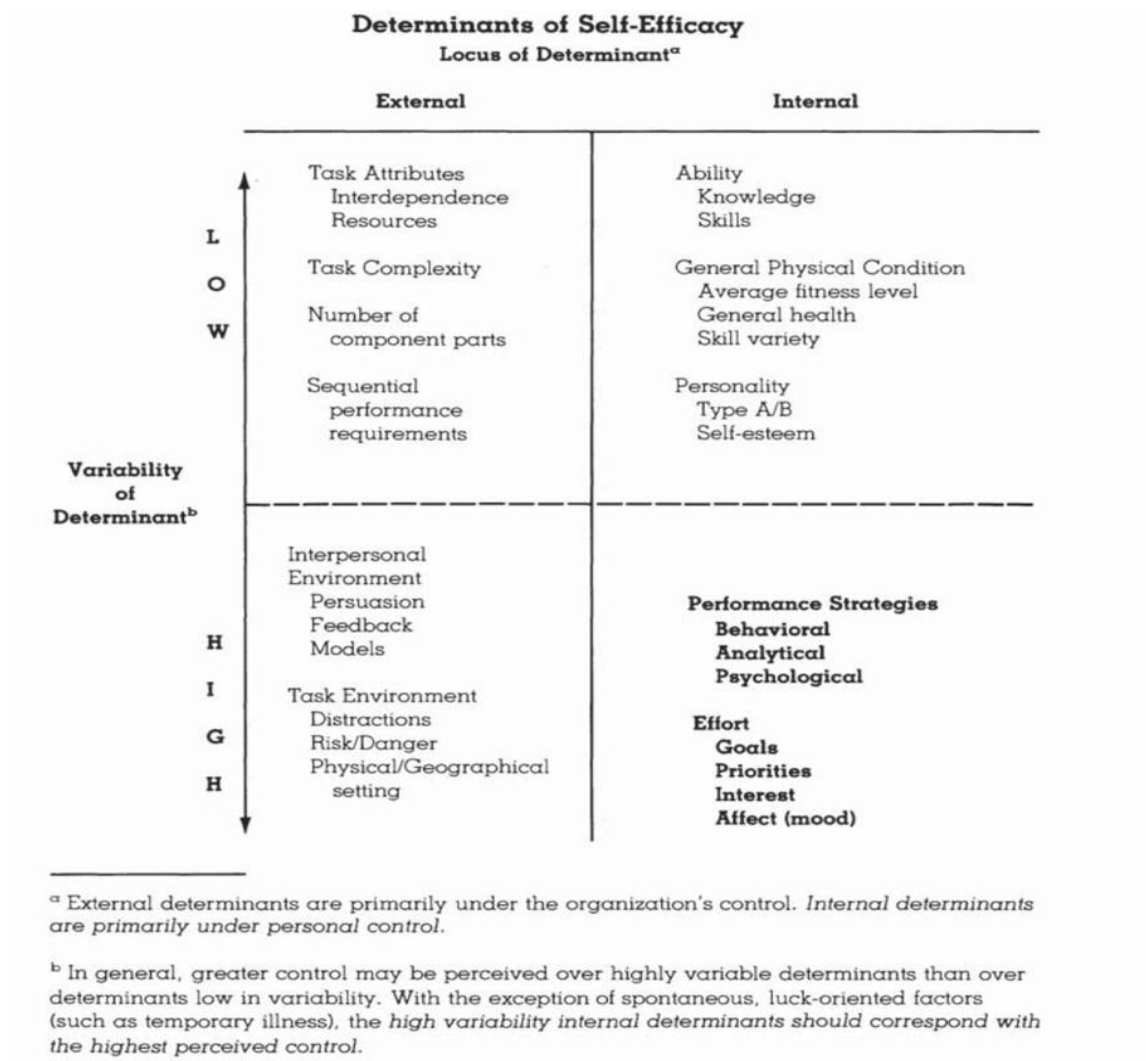
explored in other studies because it is thought to influence healthcare staff's job satisfaction, burnout, and overall work experience. Taking care of PwD in acute settings can be highly demanding for nurses leading to professional frustration and a negative impact on job satisfaction (Digby et al., 2016). If self-efficacy leads to more positive experiences at work, then it will be worth studying how this can be developed in healthcare professionals taking care of PwD (Coates & Fossey, 2019; Digby et al., 2016; Kokkonen et al., 2014).

The impacts of self-efficacy on care delivery and patient outcomes remain unclear (Elvish et al., 2014; Rivett, Hammond, and West, 2019). Yet, self-efficacy in dementia care has been equated to the ability to provide person-centered care. Kokkonen et al. (2014) found that recognition of personhood was positively correlated with a higher level of self-efficacy at work. Moreover, a nonrandomized controlled study found that an acute hospital staff caring for PwD whose self-efficacy improved following an education intervention used person-centered approaches to care (Schindel-Martin et al., 2016). For instance, staff used communication strategies to deal with behavioral and psychosocial symptoms of dementia. This was attributed to a more person-centered understanding of BPSD – that these behaviors are due to unmet needs and are clinical responsibilities. In addition, self-efficacy decreased negative feelings when staff were confronted by BPSD. They attended to the patients' needs instead of ignoring them or feeling helpless.

According to Bandura (1977), self-efficacy comes from enactive mastery experience, vicarious experience, verbal persuasion, and physiological and affective states. Mastery experience is mastery brought about by successful experience and personal attainments. It comes from repeated execution of the task. Vicarious experience comes from watching others or through modelling behavior. Verbal

persuasion comes from instructions, feedback, and advice. Physiological and affective states refer to factors such as physical strength, mood, stress and/or anxiety that might influence behavior. Gist and Mitchell (1992) attempted to simplify these experiential sources of self-efficacy in their theoretical analysis. They suggested that the determinants of self-efficacy can be divided into external and internal determinants below:

Figure 1. Determinants of Self-Efficacy



Dementia knowledge is assumed to influence the self-efficacy of nurses in dementia care which can in turn affect their care behaviors and subsequently, patient outcomes. Takeuchi et al. (2020) developed a professional care program for nurses in dementia wards in Japan. They measured the self-efficacy of nurses following the acquisition of dementia knowledge and compared the data between a randomly sampled intervention group and two control groups in one psychiatric hospital. The intervention group was subjected to a program with three parts including a motivational component, professional knowledge, and sharing of successful experiences as guided by Bandura's Theory of Self-Efficacy. The second group was a knowledge-acquisition group only while the third group did not receive any intervention. The first and second groups scored higher on self-efficacy compared to the group with no intervention. Interestingly, significantly greater self-efficacy was found in the intervention group compared to the knowledge-acquisition only group. The study's findings suggest that dementia knowledge can improve the self-efficacy of nurses. In addition to knowledge, increasing their motivation and encouraging them to reflect on positive experiences increased self-efficacy.

Similar results were found in other studies. Schindel-Martin et al. (2016) conducted a nonrandomized controlled study for acute healthcare staff. An educational intervention called Gentle Persuasive Approaches (GPA) was delivered to participants in several hospitals in Canada to help them manage 'need-driven dementia-compromised behavior' – a positive reframing for behavioral and psychological symptoms of dementia (BPSD). Their self-reported self-efficacy in behavioral management and aggression were measured using a Likert-type scale. There was a statistically significant improvement in the self-efficacy of staff who were part of the program compared to those who did not receive it. They also found that

self-efficacy was reported as important in reducing work-related stress and burden in healthcare staff. This was consistent with the findings of Murray et al. (2019) who implemented the Dementia Care in Hospitals Program, a staff education program in four hospital sites in Australia which improved staff confidence, comfort, and job satisfaction.

The studies mentioned thus far only used self-reported measures for self-efficacy. On the other hand, Sampson et al. (2017) implemented a 'train-the-trainer' model in eight acute hospitals in England and the efficacy of healthcare staff was measured at individual, ward, organization, and systems level. The majority of healthcare staff included were nurses. There was a significant increase in self-reported competence (or self-efficacy) of staff using the Sense of Competence in Dementia Care Scale (SCIDS). The quality of interactions with dementia patients also improved at a ward level based on Person Interaction and Environment (PIE) observations. For example, staff were reported to initiate conversations, use touch and non-verbal cues, and person-centered approaches. Organization and system wide changes were also seen. These findings support the assumption that self-efficacy, even if self-rated, can translate to changes in care behavior.

It is essential to highlight that while these studies suggest an improvement in self-efficacy after an educational intervention, it is unclear whether the change was brought about by an increase in knowledge. Some studies have addressed this limitation. Elvish et al. (2014) argued that the measurement of knowledge is needed when evaluating training for general hospital staff as it is linked with confidence. They utilized the 'Getting to Know Me' program to enhance the skills of staff (41% were nurses) in a hospital in England. On evaluation, it had a significant impact on the knowledge and confidence of healthcare staff. They suggested, however, that ongoing

training is needed to translate knowledge into practice. This is comparable to the results from the study of Surr et al. (2016) who studied the impact of a person-centered dementia care training program for hospital staff. They found that intermediate level training (3-day training delivered over a 3-to-4-month period) provided a more in-depth knowledge on dementia care compared to a foundation level training (half-day training). The self-efficacy of staff improved only after a greater depth of knowledge was achieved.

Another limitation is that some of these studies did not use questionnaires with established psychometric properties. A few authors used their own tools for their respective studies (Elvish et al., 2014; Schindel-Martin et al., 2016). While there is theory that supports the importance of knowledge and self-efficacy in practice, research is still needed to know how these factors can translate into quality dementia care (Elvish et al., 2014). There are specific challenges in measuring improvement in experience and outcomes for PwD (Takeuchi et al., 2020). This limitation was pointed out by Karrer et al. (2021) in their systematic review of interventions used to improve the care for PwD in hospitals. They highlighted that enhanced knowledge and self-efficacy do not always mean better clinical expertise. A change in behavior which is a more complex staff outcome was only assessed by a few studies and the results were inconclusive. Moreover, the evidence from the review is not sufficient to conclude whether an increase in knowledge and self-efficacy of nurses affected PwD.

The studies of Schepers et al. (2012) and Mullan and Sullivan (2016) found a weak, positive, but statistically significant relationship between the knowledge and self-efficacy of healthcare staff. These studies used validated scales (DK-20 and DKAT2 respectively) to measure dementia knowledge and self-efficacy, but both had limitations in terms of response rates which could have affected their power. Moreover,

the DKAT2 which was used by Mullan and Sullivan (2016) to measure dementia knowledge was criticized for its ceiling effect, item ambiguity, and oversimplified response options (Annear et al., 2016). The DK-20 which was used by Schepers et al. (2012) was developed for unqualified care staff and had borderline internal consistency (Shanahan et al., 2013). Scales that measure the contemporary understandings and domains of dementia have been developed since then for healthcare professionals which address the limitations of previously developed measures.

Improving attitudes might also increase the self-efficacy of nurses. Mullan and Sullivan (2016) studied 61 Australian care staff, 69% of whom were nurses, in residential homes. They found that attitudes towards PwD was a strong predictor of sense of competence using correlational analysis. The study also found that knowledge and/or training did not predict a sense of competence contrary to the findings of other studies (Elvish et al., 2014; Sampson et al., 2017; Schindel-Martin et al., 2016; Takeuchi et al., 2020). The finding that positive attitudes influenced a sense of competence is consistent with the Social Cognitive Theory (Bandura, 1977). The theory was also used by Jordan and Church (2013) who described a learning activity for nursing students which took place in a 104-bed nursing home in a suburban setting. The psychosocial learning activity following clinical experiences with PwD affected the students' attitudes (based on log entries) and was suggested to have an impact on their increased self-efficacy following implementation.

Coates and Fossey (2019) interviewed care assistants with a high level of self-efficacy based on their scores on the Inventory of Geriatric Nursing Self-Efficacy from different care homes in England. The term 'person-centered care' was only mentioned

once but their internal resources and positive attitudes resonated with a person-centered care approach. Participants with high self-efficacy treated individuals with respect, were empathetic, and had genuine interest in their patients' stories – elements of person-centered care. The study of Scerri et al. (2020) found that the attitude scores of care staff in Malta were positively associated with their perceptions of being able to provide person-centered care. This can be compared to the study of Schepers et al. (2012) who found a correlation between positive attitudes on personhood and self-efficacy of care staff and experts in London.

The studies mentioned above were mostly from Western countries. There is a need to conduct well-designed studies in Asian countries to gain context specific understanding and to be able to compare results. Kang et al. (2010) conducted a descriptive study of the attitudes of Korean nurses in acute settings. Good attitudes were assumed to increase the self-efficacy of nurses, but this was not tested. In addition to limitations, the tools and/or methods used by the studies to measure attitudes were highly variable and thus, cannot be compared. There are widely used and validated tools available for contemporary use. Lastly, the findings could not be generalized for acute nurses due to the different settings (i.e., clinical placement, long-term care) used by the studies above.

Synthesis

Up to date, no study has assessed the knowledge and attitudes of Filipino nurses using approved measures. The study of Dela Vega et al. (2018) cannot be generalized for nurses and did not use validated and contemporary tools for measuring

dementia knowledge and attitudes. Dementia knowledge was measured on the ability to define dementia and attitudes were measured based on willingness. There is a need to assess knowledge using suitable tests for findings to be consistent, comparable, and useful in practice (Sullivan & Mullan, 2017). Studies have highlighted the need to improve dementia awareness in the Philippines especially for nurses who are going to look after PwD in general services and who are expected to raise public awareness. Yet, little is known about the gaps in their professional knowledge and specific-learning needs.

The predicted rapid increase in dementia cases will pose a burden to healthcare professionals thus developing social and healthcare policies are urgently called for (Dominguez et al., 2021). Unfortunately, Filipino citizens and healthcare professionals alike may share negative stigma on dementia (Dela Vega et al., 2018; Leung et al., 2019). The preparedness of the Philippine workforce for dementia is poor but this cannot be used to assume that they are not competent or able to provide quality care for PwD. An assessment of their self-efficacy could help identify areas that could be addressed by education and/or training and is assumed to be linked to behavior.

It is equally important to know whether these factors can influence nursing care for PwD in the Philippine setting. This is important as LMICs need tailored solutions that are cost-effective and sustainable (Ferri & Jacob, 2017). Nurses are crucial in the care of PwD in hospitals, but they might not be effective in doing this if they lack the necessary knowledge and attitudes. It is important to determine how nurses meet the needs of people with dementia and how they work using a model of care delivery in practice (Traynor et al., 2011). Majority of dementia research in acute settings were conducted in Western and developed settings making results difficult to generalize.

There is conflicting evidence on the relationship between nurses' knowledge and attitudes and their self-efficacy. There is a need for a study focusing on nurses in the Philippine setting which can be compared to other existing studies. Lastly, a focus on nurses is warranted as studies involving other healthcare professionals and the wider multidisciplinary team may not be directly applicable to nursing.

In summary, it has been shown from this review of literature that there is a need to improve the care for people with dementia in acute hospitals. There are numerous challenges in providing evidence-based and quality care for this patient group. There will be a marked increase in the number of PwD in Asian countries, majority of which are low- and middle-income countries with inadequate resources. Nurses will see an increase of PwD presenting in hospitals due to the nature and consequences of the syndrome. Moreover, the prevalence of non-modifiable risk factors of dementia will lead to admissions for acute symptoms. The culture of care in acute hospitals which prioritize physical care, worsened by a lack of dementia awareness in healthcare professionals, might create a harmful environment for PwD. It could also lead to poor self-efficacy and burnout in nurses.

Nursing care has been identified as a mainstay for LMICs and nurses will spend the most time with PwD in hospitals. Unfortunately, the knowledge and attitudes of nurses remain poor overtime. In the Philippines, there is limited information about the knowledge and attitudes of nurses in dementia care. It is claimed that they are unprepared for an aging population, more so for dementia. Literature suggests that interventions increasing the self-efficacy of nurses in dementia care are useful not only for PwD but also for nurses themselves. Filipinos may be reluctant in approaching healthcare professionals about dementia (Leung et al., 2019). An informed and

confident workforce is essential to support PwD and their families. Without an understanding of gaps in dementia knowledge among nurses, it will be difficult to target educational interventions.

The current study will utilize contemporary and validated measures to identify the knowledge, attitudes, and self-efficacy of Filipino nurses in dementia care. It will focus on nurses working in Philippine hospitals in anticipation of increasing numbers of PwD presenting for acute care. There is conflicting evidence to support the importance of knowledge and attitudes of healthcare professionals in improving patient experience and outcomes of PwD in hospitals. Moreover, self-efficacy in dementia care has been known to influence nursing performance and behavior towards PwD. There is scant research about these variables in the Philippine setting and cultural context which the study can expand on, making it unique and necessary. The study will also identify whether knowledge and attitudes are correlated with Filipino nurses' self-efficacy. The anticipated relationship of the variables was based on sound theoretical frameworks and existing literature, the majority of which reflect Western settings. There is an urgent need to advance research in this area especially for low- and middle-income countries in Asia.

Theoretical Framework

The theory that would be used to support the study is the Self-Efficacy Theory under the Social Cognitive Theory. These theories were first proposed by Albert Bandura in 1977 and they were used to study educational, career and/or organizational development. The Social Cognitive Theory (SCT) proposes that learning is a result of the interaction between person, environment, and behavior. One

key concept of the SCT is self-efficacy which is defined as the “conviction that one could successfully execute the behavior required to produce the outcomes.” It was proposed that a higher level of self-efficacy leads to better outcomes and/or desirable behaviors (Bandura, 1977). This has been argued convincingly and evidenced in multiple studies over time. According to Bandura, self-efficacy comes from four different sources of information which are enactive mastery experience, vicarious experience, verbal persuasion, and physiological and affective states (Bandura, 1997).

Enactive mastery experience defined as successes and failures from past experiences is argued to be the most effective source of self-efficacy. Vicarious experience is gained through modelling the attainments of others. Social comparison can heighten or lower efficacy beliefs depending on the level of performance. Verbal persuasion through positive feedback and communication of belief in one’s capabilities can sustain self-efficacy. Lastly, physiological and affective states refer to factors such as physical strength or stamina, stress, or anxiety affecting behavior. Gist and Mitchell (1992) analyzed the determinants of self-efficacy by Bandura and simplified the determinants of self-efficacy by dividing it into external and internal factors.

They stated that self-efficacy is temporary and can easily be shaped depending on the situation or task. Moreover, a person has more control over internal factors and greater control leads to enhanced self-efficacy. The study will focus on determining whether knowledge and attitudes, both internal determinants, can influence the self-efficacy of nurses in acute dementia care. Since the unit of study will be individual nurses, it will be justified to measure personal variables. If the study supports that knowledge and attitudes influence self-efficacy, then interventions can be designed to

enhance these factors (Gist & Mitchell, 1992). Interestingly, a change in behavior is argued to be greatly dependent on or influenced by internal determinants that are highly variable – for example, attitudes. The following statement describes the logic of the study’s design based on the Self-Efficacy Theory. The knowledge and attitudes of nurses in dementia has an influence in their self-efficacy in providing dementia care. Self-efficacy is believed to determine their care behavior significantly. Knowledge and attitudes, if proven to affect self-efficacy, can be potential targets of intervention to influence care behavior changes.

Several studies in dementia have used the Self Efficacy Theory. Elvish et al. (2014) used it in the development and evaluation of “Getting to Know Me,” a training program for developing the skills of healthcare staff in an acute hospital in the UK. Self-efficacy was described as “self-confidence.” The self-confidence of healthcare staff improved as knowledge improved following training. Jordan and Church (2013) also used the theory to support the need to improve student nurses’ attitudes and therefore, self-efficacy following a clinical learning experience in a nursing home. A significant improvement in their self-efficacy was attributed to positive attitudes that were encouraged during the psychosocial activity. However, the “positive attitudes” were not measured using validated instruments and were only based on observations and clinical logs. The theory has also been used to create a framework for the development of the Sense of Competence in Dementia Care Staff scale (Schepers et al., 2012). Takeuchi et al. (2020) found that “deeper knowledge” or knowledge gained through sharing expertise-based knowledge (vicarious experience) and successful experience (enactive mastery) led to greater self-efficacy. Their findings supported the assumptions of the Self-Efficacy Theory. Several articles of studies on the effect of knowledge and attitudes to self-efficacy did not mention their theoretical basis. Self-

efficacy was also studied to explore its effect on burnout and other nurse-related outcomes, but the use of a specific theory was not specified.

The investigator used a second theoretical framework supporting the direction of the variables in the study. Jean Watson's Theory of Transpersonal Caring assumes that nurses require biomedical knowledge and knowledge of human behavior to provide care to their patients (George, 2002). Knowledge alone, however, is not enough to provide humanistic care and to uphold personhood. She argued that nurses must be reflective and contemplative about their knowledge to be effective. Otherwise, nursing care would be purely technical. One premise of the theory is that the nurse's feelings and expression of feelings affect the caring moment (Watson, 1999, as cited in George, 2002). "Genuineness and sincerity" when caring increase nurses' efficacy (Watson, 1985, as cited in Alligood, 2010). She also discussed the importance of "intentionality" or how nurses act or project awareness based on their thoughts, beliefs, and values. Therefore, it is assumed that human care processes or nursing interventions require a wide scope of knowledge and attitudes.

Watson (1999, as cited in George, 2002) described nursing as transpersonal which means that both nurse and patient would benefit from having a human-to-human connection or "being-together." The need for person-centered care is supported by Watson's theory which views a person as whole or greater than and different from the sum of its parts (Alligood, 2010; Alikari et al., 2022). Literature suggests that person-centered care is effective for PwD and is currently accepted as the gold standard. The elements of person-centered care overlaps with Watson's definition of transpersonal care. Both value the importance of forming genuine relationships in giving care. As defined in a previous section, self-efficacy in dementia care is the belief in one's ability

to effectively care for people with dementia. Therefore, self-efficacy in dementia care can be likened to being able to provide transpersonal care as well. According to Watson, this is influenced by background knowledge, values, will, and commitment of nurses (Devi et al., 2022).

Conceptual Framework

The conceptual framework will be applied through the determination of the level of the dependent, independent, and intervening variable/s initially. It will then guide the choice of statistical tests applied to determine if there is a correlation between the variables presented and to meet the general and specific objectives of the study. It will connect the theoretical framework to the context of the current study by identifying the main concepts and how they are related based on the problem being addressed.

Figure 2. Conceptual Framework

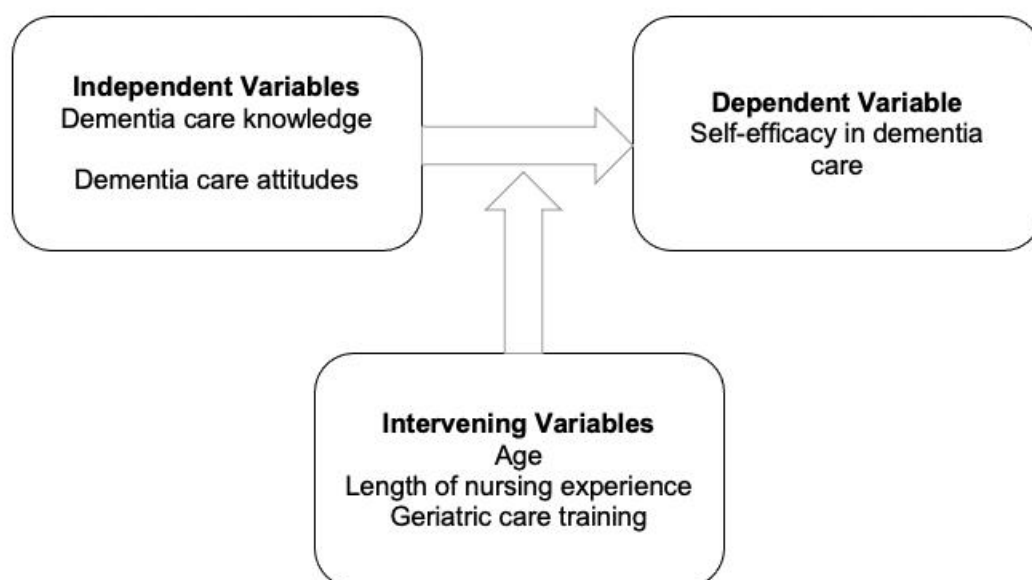


Figure 2 presents the conceptual framework of the study. Dementia care knowledge and dementia care attitudes are the independent variables. Self-efficacy is the dependent variable. Age, length of nursing experience, and geriatric care training are the intervening variables. The Self-Efficacy Theory supports the proposed direction of the variables. According to Bandura (1997), both knowledge and attitudes affect a person's self-efficacy or belief in his/her ability to perform a certain task. Other sources of self-efficacy aside from those mentioned will not be explored. The Theory of Transpersonal Care by Jean Watson (1999, cited in George, 2002) also supports the relationship of the variables in the study. It states that knowledge, both traditional and humanistic, are requirements for effective nursing care. Caring is a transaction that is directed towards the preservation of *personhood* (George, 2002) – an important concept and/or aspect of dementia care. The values, intentions and actions of a nurse translates his/her knowledge (sense of *knowing*) to a sense of *being* and therefore, *doing* caring practices.

The intervening variables were based on studies conducted in Asian countries reflecting healthcare systems and cultures close to that of the Philippine setting. Lin et al. (2018) who studied Taiwanese nurses in acute care found that dementia knowledge was significantly higher with age, training, and experience. Kang et al. (2010) studied the attitudes of Korean nurses in acute care. Their ages and years of experience did not significantly influence their attitudes which improved with dementia training. Lastly, Zhao et al. (2020) studied both knowledge and attitudes of healthcare professionals in China – dementia training/education, and length of nursing experience were considered. They found that education was a significant predictor of knowledge while experience was a significant predictor of attitudes.

Operational Definition of Terms

1. Dementia knowledge is the understanding of the syndrome of dementia including its causes, characteristics, and risk factors. It also includes knowledge on the communication and behavior of people with dementia and care considerations. It will be measured using the 25-item Dementia Knowledge Assessment Scale 2.0 (DKAS 2.0).
2. Attitudes toward dementia is the combination of the cognitive, affective, and behavioral response towards dementia. It will be measured using the 20-item Dementia Attitudes Scale (DAS).
3. Self-efficacy in dementia care is the belief in one's ability to effectively care for people with dementia. It will be measured using the Sense of Competence in Dementia Care Staff (SCIDS) scale.

Hypothesis

H1: There is a significant relationship between the level of knowledge and self-efficacy in dementia care in older persons among Filipino nurses.

H2: There is a significant relationship between the attitudes and self-efficacy in dementia care in older persons among Filipino nurses.

H3: There is a significant relationship between the demographic profile (age, length of experience, and training on geriatric care) and level of knowledge in dementia care in older persons among Filipino nurses.

Chapter III

RESEARCH METHODOLOGY

Research Design

The study adapted a descriptive-correlational quantitative design. The chosen scales were administered consecutively, and all the data required from the respondents were gathered simultaneously. The study described the respondents in terms of their age, years of experience, and geriatric training. The total and individual item mean scores on the DKAS, DAS, and SCIDS were tabulated. The knowledge, attitudes, and self-efficacy of the sample on dementia care were also categorized per level based on their overall score on the scale and individual scores on the subscales. The study employed correlational design to determine the strength of the variables' relationships (Polit & Beck, 2017; Watson et al., 2006). It measured the correlation between dementia knowledge and attitudes towards dementia (independent variables) and self-efficacy (dependent variable). The correlation of nurses' age, length of experience, and geriatric training to their dementia knowledge were also measured.

Sampling Technique

The study used non-probability quota sampling to meet the target number of respondents in the study. This type of sampling is recommended if probability sampling is not possible (Harvey & Land, 2017). Because the respondents were taken from two hospitals, a random sampling technique would have been impractical and time-consuming. Moreover, the COVID-19 pandemic which was ongoing during the planning of the study posed certain restrictions affecting sample recruitment. The participants were chosen from two different hospitals which increased the possibility

of a sufficiently divergent sample and therefore, the study's generalizability (Polit & Beck, 2017). The nurses were stratified according to their hospital institution to ensure adequate representation and to reduce bias. Quota sampling is better than convenience sampling in the sense that it can improve representation in the identified strata through conscious effort (Polit & Beck, 2017). The table below shows the sampling technique.

Table 1

Recommended Sample Size based on Population Composition of Nurses by Hospital Ownership

Hospital institutions by facility ownership	Population composition of nurses %	Research setting	Recommended sample size
Public	60%	JRRMMC	116
Private	40%	CSMC	78
Total	100%		194

Note: JRRMMC (Jose R. Reyes Memorial Medical Center); CSMC (Cardinal Santos Medical Center)

The recommended sample size with a significance level of 0.05, power of 0.80 and sample correlation of 0.20 based on previous research on the subject (Mullan & Sullivan, 2016; Scerri et al., 2020) is 194. The investigator divided the recommended sample size according to the population composition of nurses in hospital institutions by ownership (Human Resources for Health, 2021). There is a scarcity of dementia studies focusing on nurses in the Philippine setting. Therefore, a diverse sample with varying lengths of experience of nurses would be beneficial (Polit & Beck, 2017). The investigator aims to make targeted recommendations for nursing education and/or training and care practices in dementia that are context-based.

Inclusion and Exclusion Criteria

The following are inclusion criteria for the research study:

- a. Nurses with a current and valid Professional Regulation Commission (PRC) license
- b. With at least 2 years of nursing experience
- c. Who have taken care of an elderly patient (with or without dementia) in the last 6 months
- d. Working in acute medical and surgical wards and/or ancillary services catering to patients above 60 years of age

The following are exclusion criteria for the research study:

- a. Nurses who have previously worked abroad
- b. Nurses working in specialist areas that do not cater to patients above 60 years of age
- c. Nurses who have worked in long-term institutions or care homes for the elderly

The professional licensure examination for nurses in the Philippines ensures that entry-level competencies are met by newly qualified nurses. However, a recent study suggests that one year of nursing experience may not be enough to increase the skills and competence of Filipino nurses (Ubas-Sumagasyay & Oducado, 2020). This may be attributed to the challenges they encounter during the transition from their educational program to a practice setting. At least two years of experience is recommended to be called a competent nurse (Benner, 1984). According to the systematic literature review by Evpiridou et al. (2018), nurses working in the community, care homes, and specialized units for PwD have better knowledge and attitudes. Nurses who have previously worked abroad, especially in high-resource settings and/or countries may have better experience in dementia care and education.

The investigator did not include these nursing groups to reduce bias in the study and to gain a better understanding of acute hospital care for PwD in the Philippines. On the other hand, nurses working in areas that do not take care of an elderly population will have limited experiential knowledge of dementia and might also introduce bias. Currently, there is no case registry or database for dementia cases in the Philippines (Dela Vega et al., 2018). The prevalence of dementia is at 10.6% for patients above 60 years old (Dominguez et al., 2018). Moreover, cognitive impairment, a risk factor for developing dementia, is also highly prevalent in this age group at 23.2%.

Research Setting

The investigator studied participants from selected level 3 public and private general hospitals in Metro Manila, Philippines. These facilities are assumed to have the capacity to provide specialist care for patients with dementia (Dela Vega et al., 2018). The study focused on hospitals in the National Capital Region because higher level healthcare facilities remain to be more concentrated in this area (DOH, 2013). Both public and private hospitals are chosen to account for the possible differences in facilities, resources, and nursing groups in these settings. General hospitals, those which provide services for all kinds of illnesses, injuries and/or deformities, were studied because they cater to patients of all ages including the elderly presenting with acute medical problems (DOH, 2020). In the Philippines, patients with dementia who need hospitalization for an acute medical diagnosis are integrated into general hospital services (Dela Vega et al., 2018). The investigator studied nurses catering to this specific patient group which explains the chosen research settings.

There is a shortage of hospitals providing specific care for PwD in the Philippines (Dela Vega et al., 2018). Two institutions were chosen as settings for the study and were purposely chosen after consultation with a research panel. One public

and one private hospital were approached for the study. Cardinal Santos Medical Center (CSMC) is one of the few private institutions in the country that offer dementia-healthcare services (Soriano & Aruta, 2022). It specializes in the fields of cardiology, oncology, neurosurgery, gastroenterology, and rehabilitation medicine. Its memory clinic is recognized by the Dementia Society of the Philippines as an accredited center for consultations, check-ups, assessment, and treatment. Jose R. Reyes Memorial Medical Center (JRRMMC) is currently managing the National Center for Geriatric Health (NCGH). It provides geriatric care under its emergency and non-surgical services. The NCGH currently runs an outpatient service from Monday to Friday and has limited services. The government is planning to expand NCGH and to make it a research institute according to the press release of the Senate Bill No. 27. It is envisioned to become the leading teaching, research and training hospital specializing in geriatric care. Both institutions have their own Institutional Review Board (IRB) for research ethics review and were contacted by the investigator.

Data Collection

The investigator took the following steps prior to data analysis:

1. *Submitted Thesis Proposal to Thesis Adviser and Research Panel*

The initial thesis proposal was presented on 21 March 2023. It was then approved with minor modifications which were revised as suggested by the investigator's thesis adviser and members of the research panel.

2. *Submitted requirements to respective institutional and ethical review boards of JRRMMC and CSMC*

A full board approval from JRRMMC Institutional Review Board (IRB) was received on August 21, 2024, with a duration of 1 year. For CSMC, a full

board approval was received February 20, 2025 (CRC TM 2024-02) with a validity of 1 year.

3. *Following ERB approval, coordinated with selected institutions regarding sampling and respondent recruitment*

The investigator liaised with the selected institutions mostly through formal correspondence via email and/or online meetings as she was offshore. The aim was to agree on a strategy to ensure ease of respondent recruitment and data collection. The investigator collaborated with the Nursing Research Coordinators of the respective institutions during the duration of the study.

4. *Identify nursing students/research assistants who could assist the investigator in data collection*

The investigator was present during the data collection period for the selected institutions and worked alongside research assistant/s for data collection. Their curriculum vitae and Good Clinical Practice certificates were sent to the IRB and Nursing Research Coordinator.

For JRRMMC, research assistants were responsible for recruiting respondents, securing informed consent and data collection. They were oriented to the study and the process by the investigator on January 24, 2025, in an online meeting. For CSMC, named Clinical Nurse Educators supported the investigator. An online orientation via Zoom was done March 4, 2025, which was scheduled in coordination with the Section Head of Nursing Research. For both institutions, the principal investigator remained fully accountable for data management and for observing ethical considerations during the conduct of the study.

5. *Conducted a mock test or dry run for data collection*

A mock test was conducted from February 10-14, 2025, with 10 respondents using convenience sampling from tertiary hospitals in Metro Manila. The estimated time of completion was 10-15 minutes. Data collected from the mock test was not included in the final list of respondents. This was done to ensure clarity of the instruments and to identify potential problems before the actual data collection. For CSMC, an online version of the questionnaire was requested by the RERC for ease of data collection.

6. Data collection on scheduled days after gaining consent from respondents

The data collection period for JRRMMC was from February 17-28, 2025. A total of 121 responses were collected from Jose Reyes Memorial Medical Center. For CSMC, the initial data collection period was from March 6-21, 2025. Only a total of 45 responses out of the required 78 were collected. After discussion with CSMC, it was decided to extend data collection to the ancillary department to help meet the required number of participants. The RERC granted approval of the proposed amendments on March 26, 2025 and data collection ended on April 8, 2025. A total of 71 responses were collected from CSMC. All participants were able to give consent. The respondents were given chocolates as a token of appreciation following completion of the questionnaires.

Procedure

The following figures present the procedures for data collection in JRRMMC and CSMC respectively.

Figure 3. Data Collection Procedure for JRRMMC

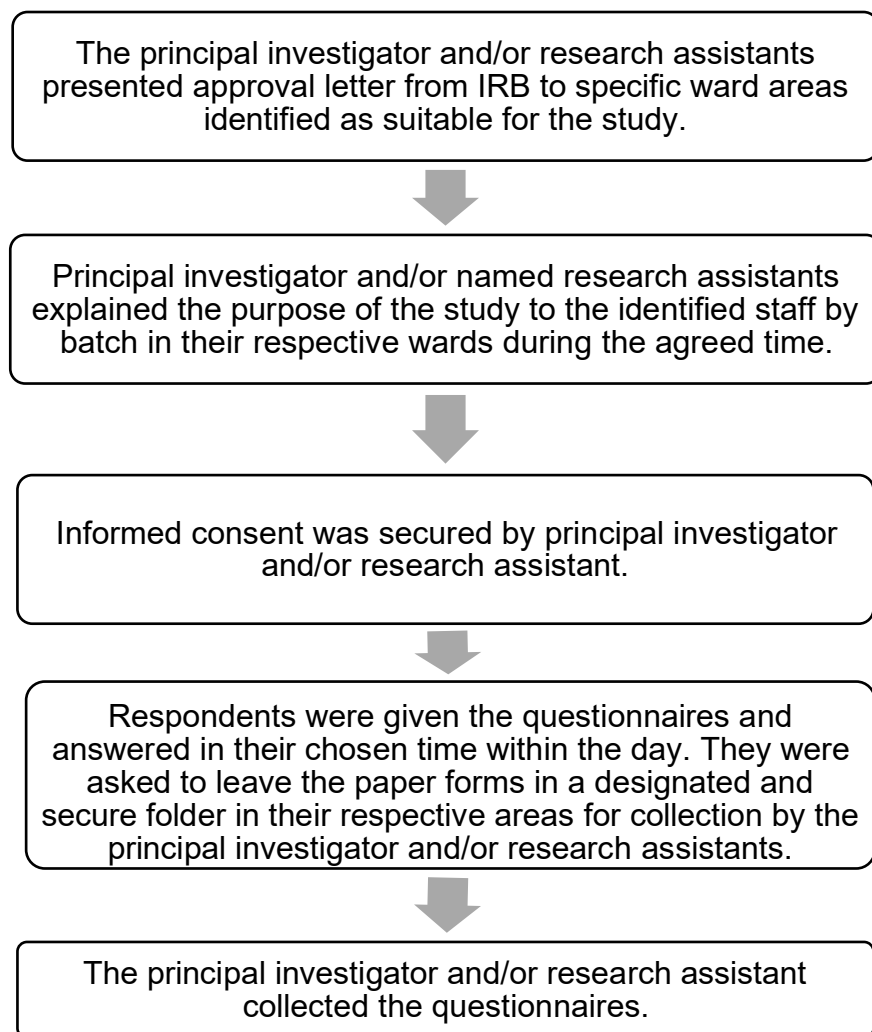
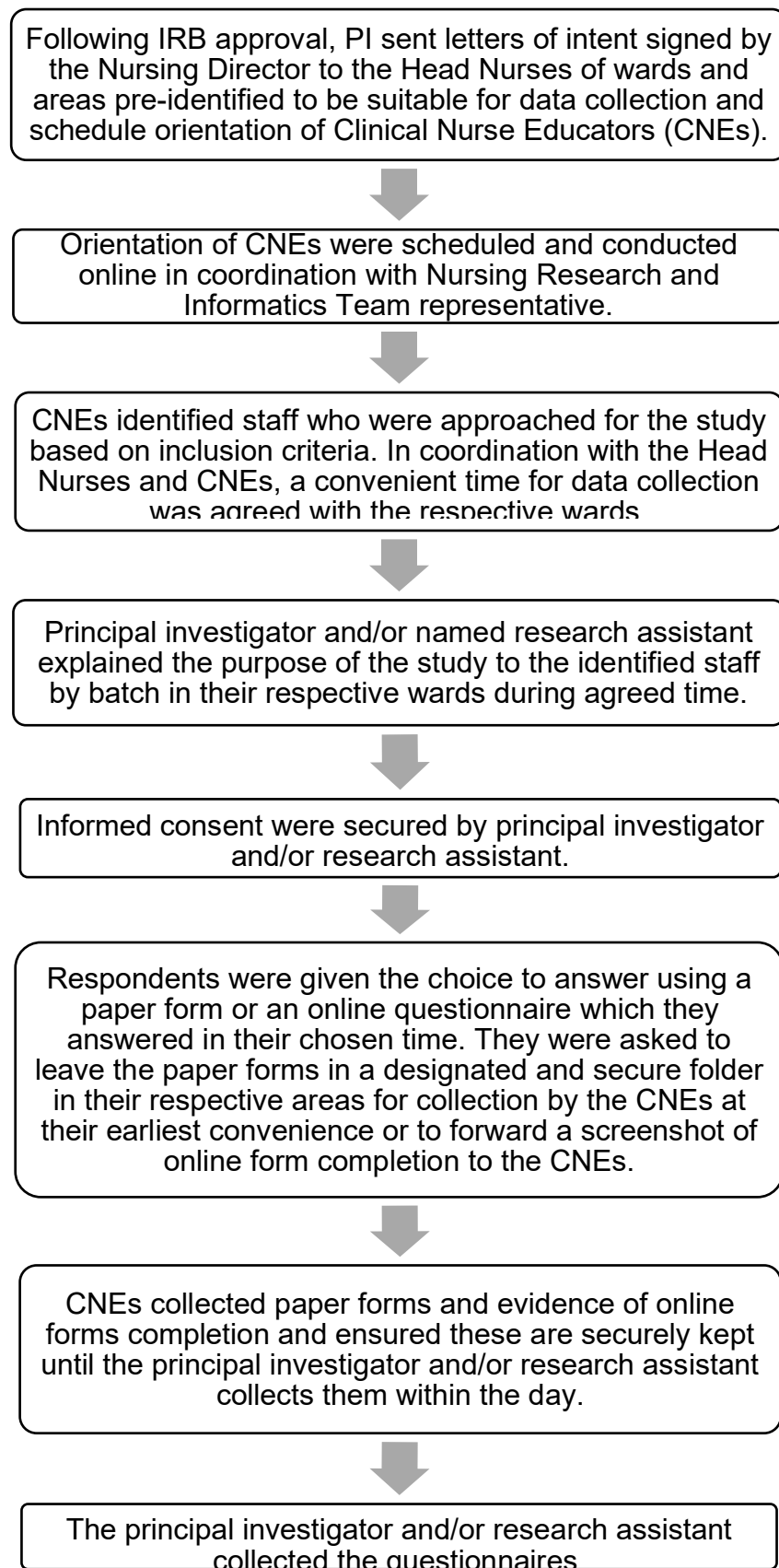


Figure 4. Data Collection Procedure for CSMC



Research Instruments

Participant Information Sheet

A Participant Information Sheet was used to gather the respondents' demographic information including their age, length of nursing experience, and details of geriatric training if any. Three scales were attached to the information sheet to collect data about the independent and dependent variables. Data for demographic information were collected and presented as follows:

Age

26 years and below

27 to 42

43 to 58

59 and above

Length of nursing experience

2-5 years

6-10 years

More than 10 years

Post-graduate geriatric (elderly) care training

Yes

No

Dementia Knowledge Assessment Scale

The Dementia Knowledge Assessment Scale (DKAS) version 2.0 by Annear et al. (2017) was used to measure participants' knowledge on dementia. The tool has four domains including causes and characteristics, communication and behavior, care considerations and risks, and health promotion. The DKAS is a 25-item tool with a 5-item modified Likert-type scale with five response options. It has been developed to

address the limitations of previous tools measuring dementia knowledge using contemporary evidence (Annear et al., 2015; Spector et al., 2012). Since its initial development, the DKAS has undergone improvement and testing (Annear et al., 2017). The DKAS has a good face, construct, and concurrent validity. The internal consistency was calculated as 0.89 (Cronbach alpha) indicating high reliability (Annear et al., 2015). A Confirmatory Factor Analysis was done to ensure construct validity and appropriateness of subscales; the scale has good reliability and acceptable subscale internal consistency (Annear et al., 2017).

The domains can address the three issues identified by the World Health Organization (2009) in relation to dementia awareness and understanding which includes: (1) the belief that dementia is a normal part of ageing; (2) inability to recognize signs and symptoms, and (3) understanding of risk factors. Items were included to represent the actual work of caring for people with dementia, an area relevant for nurses (Annear *et al.*, 2015). It focuses not only on the biomedical model of dementia care but also addresses person-centered care, a gold standard in dementia care. This is a limitation of other dementia knowledge measures available. The DKAS focuses on the broad scope of the symptom of dementia. Compared to the Alzheimer's Disease Knowledge Test (ADKT), a widely used tool, the DKAS has better internal consistency and construct validity (Annear et al., 2016).

To score the DKAS, the responses were coded, and the total or summative score was calculated. The maximum total score is 50. There is a scoring system recommended by the authors of the DKAS which will be followed (Annear et al., 2015). A higher score reflects better knowledge on dementia care. The scoring system is as follows:

2 points for an answer of 'true' to a truthful statement.

2 points for an answer of 'false' to an untrue statement.

1 point for an answer of 'probably true' to a truthful statement.

1 point for an answer of 'probably false' to an untrue statement.

0 points for an answer of 'true' or 'probably true' to an untrue statement.

0 points for an answer of 'false' or 'probably false' to a truthful statement.

0 points for an answer of 'I don't know.'

This type of scoring system reduces the potential limitation of a binary response format and ceiling effect. The DKAS is free to use and permission for its use has been secured by the investigator from the author. It can be used for a diverse population including healthcare professionals who have not received dementia education (Annear et al., 2015). The DKAS is useful in identifying specific gaps in dementia knowledge by comparing subscale scores. This means that the tool can be useful in designing targeted educational interventions.

Dementia Attitudes Scale

Attitudes towards dementia was measured using the Dementia Attitudes Scale (DAS) by O'Connor and McFadden (2010). It was developed as a general scale to measure attitudes of direct care workers towards people with dementia (O'Connor & McFadden, 2010). The DAS is a 20-item instrument with scale items rated on a 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7). The tool has two domains: dementia knowledge and social comfort. The knowledge assessed by the DAS is different from what the DKAS measures in the sense that it focuses on knowledge based on personal experiences of people with dementia. In the DAS, ten items measure "dementia knowledge" while the remaining ten measure "social

comfort.” The DAS responses can generate a score ranging from 20 to 140, a higher score reflecting more positive attitudes towards dementia care. The negatively worded items need to be reversely coded or scored specifically items 2, 6, 8, 9,16 and 17 during analysis.

During its initial development and validation, the DAS had a Cronbach's alpha of 0.85 (O'Connor & McFadden, 2010). The DAS was tested in Greek psychology students and was found to have adequate internal reliability (Cronbach alpha of 0.74) and satisfactory construct validity (Gkioka et al., 2020). It was also used to test hospital staff in Malta and was noted to have good internal consistency (Cronbach alpha of 0.78) and convergent validity (Scerri et al., 2020). The DAS was also translated and validated in Croatia with a Cronbach alpha of 0.847 (Coso & Mavrinac, 2016). To the investigator's knowledge, the DAS is the only tool that can be used to measure attitudes towards dementia which focuses on all three components of attitude which supports how attitude will be defined in the current study (Breckler, 1984). The DAS is free to use and permission for its use has been secured by the investigator from the author. The scoring scale is as follows:

1 for 'strongly disagree'

2 for 'disagree'

3 for 'slightly disagree'

4 for 'neutral'

5 for 'slightly agree'

6 for 'agree'

7 for 'strongly agree'

Sense of Competence in Dementia Care Scale

The Sense of Competence in Dementia Care Scale (SCIDS) by Schepers et al. (2012) was used to measure the self-efficacy of the participants in dementia care. The self-reported tool has 17-items that are scored from 1 (not at all) to 4 (very much). Scores can range from 17-68 with a higher score indicating a higher sense of self-efficacy in dementia care. A higher score in the SCIDS means a higher level of “sense of competence” which was defined in the same way as “self-efficacy” was defined by Albert Bandura (1977). The SCIDS is divided into four subscales including professionalism, building relationships, care challenges, and sustaining personhood. Higher scores on the scale were associated with longer work experience, job satisfaction, and use of person-centered approaches (Schepers et al., 2012).

The “professionalism” subscale has 5 items while the remaining subscales have 4 items each. The Cronbach alpha of the SCIDS was 0.91 and all subscales had acceptable internal consistency. It was recommended for use in a variety of settings including acute care. The SCIDS was translated to a Chinese version and had satisfactory internal consistency (Cronbach alpha of 0.87) by Zhao et al. (2022). Acceptable validity and reliability of the SCIDS were established by the study. The SCIDS is free to use and permission for its use has been secured by the investigator from the author. The scoring scale of the SCIDS are as follows:

1 for ‘not at all’

2 for ‘a little bit’

3 for ‘quite a lot’

4 for ‘very much’

Data Analysis

Descriptive statistics was used to describe the selected hospital institutions and characteristics of the respondents. Their age, years of experience, and geriatric training were presented using frequency distributions. The mean scores for DKAS, DAS, and SCIDS in JRRMMC and CSMC were reported separately and in total.

Statistical Package for the Social Sciences version 27 (SPSS 27) as used for data analysis. A test of normality was conducted with results shown in Table 2 and the data was not normally distributed; therefore, the Spearman rank correlation was used to determine correlation and the relationship between the variables in the study.

Table 2

Tests of Normality for DKAS, DAS, and SCIDS Scores Among Filipino Nurses in Public and Private Hospitals

Scale	<i>N</i>	Kolmogorov-Smirnov
DKAS	182	0.086
DAS	182	0.039
SCIDS	182	0.003

The results of the DKAS were normally distributed while the results of the DAS and SCIDS were not normally distributed. This supported the choice of a non-parametric statistical test to determine correlation as presented below.

Table 3*Plan for Data Analysis*

Research Question	Variable/s	Tool/s to be used	Type of Data	Statistical Treatment
1. What is the level of knowledge on dementia care in older persons among Filipino nurses?	Dementia care knowledge a. Causes and characteristics b. Communication and behavior c. Care considerations d. Risks and health promotion	“Dementia Knowledge Assessment Scale” by Annear <i>et al.</i> (2017)	Quantitative – ordinal data	Test scores will be categorized into three levels (low, moderate, and high) using percentiles
2. What is the level of attitudes on dementia care in older persons among Filipino nurses?	Attitudes on dementia care a. Dementia knowledge b. Social comfort	Dementia Attitudes Scale by O'Connor and McFadden (2010)	Quantitative – ordinal data	Test scores will be categorized into two levels (low or high) using percentiles To be reported as ‘negative’ attitudes if low and ‘positive’ attitudes if high
3. What is the level of self-efficacy on dementia care in older persons among Filipino nurses?	Self-efficacy on dementia care a. Professionalism b. Building relationships c. Care challenges d. Sustaining personhood	Sense of Competence in Dementia Care Staff Scale by Schepers <i>et al.</i> (2012)	Quantitative – ordinal data	Test scores will be categorized into three levels (low, moderate, and high) using percentiles
4. Is there a relationship between the level of	Knowledge versus self-efficacy	“Dementia Knowledge Assessment Scale” by	Ordinal	Correlational statistics (Spearman rank)

knowledge and self-efficacy on dementia care in older persons among Filipino nurses?		Annear <i>et al.</i> (2017)	DKAS – 5-item modified Likert scale	
		Sense of Competence in Dementia Care Staff Scale by Schepers <i>et al.</i> (2012)	SCIDS – 4-point Likert scale	
5. Is there a relationship between the level of attitudes and self-efficacy on dementia care in older persons among Filipino nurses?	Attitudes versus self-efficacy	Dementia Attitudes Scale by O'Connor and McFadden (2010)	Ordinal DAS – 7-point Likert scale	Correlational statistics (Spearman rank)
		Sense of Competence in Dementia Care Staff Scale by Schepers <i>et al.</i> (2012)	SCIDS – 4-point Likert scale	
6. Is there a relationship between the level of knowledge and the demographic profile of Filipino nurses in terms of: 6.1. Age 6.2. Length of experience 6.3. Attendance to training on geriatric care	Age, length of nursing experience, geriatric care training versus dementia knowledge	Age, length of experience and geriatric care training to be determined using participant information sheet “Dementia Knowledge Assessment Scale” by Annear <i>et al.</i> (2017)	Nominal	Correlational statistics (Chi square)

Test scores were categorized into levels (Table 3) using percentiles and tertiles to divide data into equal groups. This approach provides a norm-referenced interpretation while ranking nurses' performance relative to the sample. This is recommended for ordinal data on small to medium samples. For the DKAS and

SCIDS, tertiles will be used to categorize data for sample-specific grouping ensuring balanced groups for analysis (Altman, 1991). The percentile scoring for DAS is chosen to account for inflated positivity and is justified by the plan's binary categorization which is either positive or negative (Polit & Beck, 2017). All scales are suitable for relative scoring (Annear et al., 2017; O'Connor & McFadden, 2010).

Table 4

Categorization of Percentiles

Tests	Categorization	Interpretation
DKAS and SCIDS	Low: below 33rd percentile	Scores below this point are in the bottom 33% of the sample
	Moderate: 33rd to 67th percentile	Scores between these points fall within the middle range of the distribution
	High: above 67th percentile	Scores above this point are higher than 67% of the scores in the population
DAS	Low: Below 50th percentile (negative attitudes).	Scores at or below this point are in the bottom 50% of the sample
	High: Above 50th percentile (positive attitudes)	Scores at or above this point are in the top 50% of the sample

Note: Sources. Altman, 1991; Polit & Beck, 2017

The following tables show the guide the interpretation for correlational statistic values.

Table 5*Interpretation for Spearman's rank correlation*

Coefficient range (p)	Relationship Level
0.000 – 0.199	Very weak
0.200 – 0.399	Weak
0.400 – 0.599	Moderate
0.600 – 0.799	Strong
0.800 – 1.000	Very strong

*Note: Source. Sugiyono, 2012***Table 6***Interpretation of Cramer's V in Chi-statistics*

Estimated Values	Interpretation of Association
0.00 – 0.10	Negligible
0.10 – 0.20	Weak
0.20 – 0.40	Moderate
0.40 – 0.60	Relatively strong
0.60 – 0.80	Strong
0.80 – 1.00	Very strong

Note: Source. Lee, 2016

Data Management

The investigator was responsible for the collection, organization, and storage of data during and after conducting the study. The investigator and identified research assistants administered the tests personally and stored the completed responses in labelled folders which were sealed to ensure confidentiality. The collected data was

shared with members of a research team. It is available for sharing with the thesis adviser, research panel, and/or UPOU Institutional Research Ethics Committee should they request it for a specific purpose. Data was shared digitally due to certain physical limitations and restrictions present at the time. Secure institutional and academic emails were used, and a password-protected codebook was used for encoding and data analysis. Most of the data was stored in the investigator's personal laptop which is protected with a secure password. To ensure accurate and organized data presentation, data analysis and interpretation, the investigator consulted a professional statistician.

Ethical Considerations

The investigator worked to ensure that the design, data collection, sampling technique, and reporting of the study adhered to legal and ethical considerations in research as set by the International Council of Nurses (2012). This is also in compliance with the Declaration of Helsinki principles for medical research (World Medical Association, 2013). In addition, the 2022 National Ethical Guidelines for Research Involving Human Participants released by the Philippine Health Research Ethics Board was also used as a reference. Research was only conducted following approval from the respective Institutional Review Boards of the selected institutions.

Social Value

The investigator ensured proper representation and equality in recruitment of participants in terms of age, gender, and years of experience. The research was conducted for the benefit of people with dementia, their families, and healthcare

professionals. The significance of the study justifies the participation of respondents. On completion of the study, UPOU will have the rights for dissemination of the results.

Informed Consent

Full informed consent was obtained from the individual respondents before asking them to complete the questionnaires. Participation in the study was not mandatory which was explained in depth to the target respondents by the principal investigator and named research assistants prior to data collection. Informed consent was documented in the Informed Consent Form for Registered Nurses which included essential information for participants who were asked to read the form. The rights of the potential respondents were explained including the purpose of the study. The investigator ensured that consent was voluntary and that it was explained, whether orally or in writing, in a way that was best understood by the participants.

Essential Information for Participants

The investigator ensured that the informed consent form contained the essential information for participants. These include but were not limited to Data Privacy Act of 2012 (Republic Act No. 10173), invitation to participate in the study, reasons why the prospective participants were considered, and the significance of the study.

Vulnerability of Research Participants

The study did not include vulnerable participants. The investigator ensured that prospective participants did not give consent under duress or without the benefit of adequate information.

Risk, Benefits, and Safety

Care was taken to ensure that questions were not offensive and discriminatory, especially in relation to people with dementia. Moreover, the investigator ensured that respondents would not be harmed in any way during the conduction of research. Data was collected in the best way possible to minimize respondent burden. In JRRMMC, prospective participants were identified by the head nurses of the units who ensured they were given protected time to answer should they wish to participate. In CSMC, Google forms were used to give participants a choice as to what form to use, either paper or online depending on their preference. The Clinical Nurse Educators in CSMC supported the data collection process as well to ensure clinical shift times and activity were not compromised. The respondents were informed that they can choose to withdraw from participating anytime during the study.

Privacy and Confidentiality of Information

Confidentiality and anonymity of data were ensured all throughout the duration of the study which will extend until the dissemination of results. The privacy of respondents was maintained throughout the duration of the study. Records that link to specific personal information will not be released. The investigator will take all steps necessary to ensure adherence to the applicable provisions of the Data Privacy Act of 2012.

Data management

The raw data was kept in a password protected software and will be kept for one year after data collection. Data were shared digitally with a statistician and thesis adviser/s due to certain physical limitations and restrictions. Secure institutional and academic emails were used, and a record of data sharing was kept. All electronic files and paper containing identifiable and confidential data/information will be permanently deleted and/or shredded after one year.

Justice

All steps were taken to ensure correct interpretation and representation of data. Objectivity was maintained throughout the discussion and analyses of the study. The investigator ensured that all respondents and their respective institutions were treated equally throughout the duration of the study regardless of their age, economic status, and gender.

Transparency

All types of communication including letters are available. Authors of all the references used in the study are acknowledged using the seventh edition of APA referencing guidelines. Sharing and dissemination of results will be conducted openly and transparently as agreed with UPOU, JRRMMC, and CSMC. It is the aim of the investigator to report results for the public's benefit. The research was solely funded by the investigator herself. The investigator is not affiliated with any of the institutions included in the study and has no conflict of interest to be declared.

Qualification of Researcher

The investigator completed the Good Clinical Practice course given by the NIDA Clinical Trials Network on October 30, 2022. The certification will expire on October 30, 2025. It includes the following modules: institutional review boards, informed consent, confidentiality and privacy, participant safety and adverse events, quality assurance, research protocol, documentation and record-keeping, research misconduct, roles and responsibilities, recruitment and retention, and investigational new drugs.

Community Involvement

The investigator ensured that the conduct of the study promoted learning and research for the good of the public. Collaboration, communication, and consultation with relevant professionals were ensured throughout the duration of the study.

Chapter IV

RESULTS AND DISCUSSIONS

Results

This chapter will present the results of data analysis in reference to the objectives of the study.

Profile of the respondents

A total of 182 responses were analyzed. The target and actual number of participants recruited from Jose R. Reyes Memorial Medical Center (JRRMMC) and Cardinal Santos Medical Center (CSMC) were shown in Table 7. JRRMMC is a government-owned institution while CSMC is privately-owned. Both are considered Level 3 hospitals by the Philippine Department of Health (2013) offering teaching and training programs on top of clinical services for inpatients and ancillary services.

Table 7

Target and Actual Sample Size

Hospital institution	Target sample size	Actual sample size
JRRMMC	116 (60%)	116 (63.7%)
CSMC	78 (40%)	66 (36.3%)
Total	194	182

The gap from the actual sample size was from CSMC which fell short by 12 respondents. This was due to a nursing population that did not meet the inclusion criteria of more than two years of experience and refusal to participate. The data collection period was extended and nurses from the ancillary department in CSMC were included in data collection to mitigate this. The results of the study should be

interpreted taking this into consideration. Eleven responses were excluded in data analysis due to a high volume of missing data. Imputation using average sample responses, or mean scores, was used to replace missing data for responses with an acceptable level of missing data.

Table 8

Socio-Demographic Profile of the Respondents

Characteristics	Frequency (n)	Percentage (%)
Age		
26 years and below	46	25.3%
27 – 42	118	64.8%
43 – 58	18	9.9%
59 and above	0	0%
Nursing experience		
2 – 5 years	80	44.0%
6 – 10 years	72	39.6%
More than 10 years	30	16.4%
Post-graduate training in dementia care		
Yes	5	2.7%
No	177	97.3%

The majority of the respondents are between 27 to 42 years of age (64.8%). 25.3% are 26 years of age and below and 9.9% are aged 43 to 58. In terms of nursing experience, the majority have 2 to 5 years of experience (44.0%) and can be considered as competent or proficient according to Benner (1984). 36.9% have 6 to 10 years of experience and only 16.4% had more than 10 years of nursing experience. These groups can be considered proficient or experts (Benner, 1984).

The respondents' age and years of experience are not far from the socio-demographic profiles reported from recent studies on Filipino nurses (Labrague et al., 2018; Jabonete et al., 2023). Lastly, 97.3% of the respondents did not have any post-graduate training and/or education in dementia care. This is worse than the findings

of the study by Dela Vega et al. (2018) which called for enhanced dementia education for healthcare professionals where 73% of the respondents did not receive training on dementia care. This has been consistent in acute settings from different countries where staff have received very minimal or no training at all (Moonga & Likupe, 2016).

Table 9

Mean Scores and Standard Deviation for DKAS, DAS, and SCIDS of the Respondents

Scale	M	SD	SE	95% CI for Mean	
				Lower Bound	Upper Bound
DKAS	26.68	7.64	0.57	25.56	27.79
DAS	99.48	11.70	0.87	97.77	101.19
SCIDS	52.37	8.86	0.66	51.07	53.66

Note: M = mean; SD = standard deviation; SE = standard error; CI = confidence interval

For the DKAS, the overall sample mean score is 26.68 (SD = 7.64) or 53% of the maximum score (50). This is lower compared to studies which measured the knowledge of nurses and healthcare professionals from different countries using different scales. In a study of Maltese hospital staff in acute medical wards, the mean score of participants was 20.37 over a total of 30 (68%) on the Alzheimer's Disease Knowledge Scale (ADKS) (Scerri et al., 2020). Nurses only made up 69% of the sample. In Taiwan, nurses working in two hospitals had a mean score of 10.46 over a total of 16 (66.5%) on the Dementia Care Knowledge (DCK) questionnaire (Lin et al., 2018). In China, 603 healthcare professionals in public tertiary hospitals were reported to have limited knowledge with a mean score of 20.7 over a total of 30 (69%) (Zhao et al., 2020). 71% of the sample were nurses. The ADKS is a widely used tool in measuring dementia knowledge but was criticized to have a simplistic response format

which may lead to guessing and a ceiling effect. These limitations were addressed by the DKAS which was used in the current study.

In Hongkong, 1,347 community care staff (194 of which were nurses) had a mean score of 27.7 out of 50 (55.4%) in the DKAS (Chan et al., 2020). Majority of the participants were involved in the direct care of PwD. The study of Zhao et al. (2020) on healthcare providers from a general hospital in China and 12 care homes was 31.4 out of 50 (62.8%) on the DKAS. While these mean scores on the DKAS were higher compared to the sample, it is important to note that these studies involved a range of healthcare staff who quite possibly had more experience in dementia care compared to Filipino nurses in acute hospitals.

The total mean score for DAS is 99.48 (SD = 11.70) which is 71.1% of the maximum score (140). The attitudes of hospital staff in acute medical wards in Malta were also measured using the DAS and had a similar score (M = 99.45; SD = 71%) (Scerri et al., 2020). Their attitudes were significantly associated with their perceived experience of working with dementia which was neutral for most (58%) but negative (16%) for some in the sample. In China, healthcare professionals in tertiary hospitals had a mean score of 91.3 (65% of total) in the DAS which reported a “low level of positive attitudes.” Interest in dementia care and place of practice influenced their attitudes. Those who worked in a geriatric department had more positive attitudes compared to those in neurologic departments. This is in contrast with findings from the systematic review by Evripidou et al. (2018) which found that acute care nurses tend to have more negative attitudes towards PwD, being less hopeful and less aware of person-centered care.

Kang et al. (2010) studied the attitudes of Korean nurses in acute care and reported moderately positive attitudes in dementia care using the Approaches to Dementia Questionnaire (ADQ). In addition, they found that medical nurses had more positive attitudes compared to surgical nurses, owing to having more time to spend caring for PwD and geriatric training. They also found that the number of years of experience was not correlated with positive attitudes. 36% of their sample had less than one year of experience. The current study did not explore respondent characteristics which could have influenced attitudes on dementia care.

The positive attitudes in this sample can be explained by their years of experience, values of filial piety, and an overall positive regard for the elderly in Filipinos despite a lack in geriatric care training which are supported by findings from other studies. Brooke et al. (2019) found that Filipino nursing students, despite having very limited clinical experience and theoretical background on dementia, used their cultural background to discuss their beliefs on dementia in their phenomenological study. Familial piety was heavily discussed with the importance of taking care of PwD at home. Filipino student nurses believed that stigma and shame were due to a lack of awareness on dementia, but this view was not shared by student nurses in England and New Zealand. Leung et al. (2019) studied the dementia attitudes of the Filipino public who did not have a clinical background. Their mean score was 92.95 (SD = 14.44) out of 140 (66.37%) on the DAS which is lower than the current sample of Filipino nurses. They found that education and knowledge on diagnosis and disease progression were associated with the DAS scores.

The overall sample mean score for the SCIDS is 52.37 (SD = 8.86) which is 77.0% of the maximum score (68). This is higher compared to a sample of Chinese

healthcare professionals working in nursing homes and general hospitals ($M = 46.9$, 68%) and Australian clinical staff in residential care homes ($M = 49.95$, 73.46%) (Mullan & Sullivan, 2016; Zhao et al., 2022). In the Australian sample who had considerable experience in dementia care (at least one patient per day), training and level of education did not predict self-efficacy. The Chinese sample had a mean age of 37.2 years old and a median clinical experience of six years. Surprisingly, care assistants with more involvement in the direct care for PwD had higher scores in the Professionalism subscale of the SCIDS compared to healthcare professionals. Their total mean scores did not vary greatly. The high level of self-efficacy in this sample should be interpreted knowing that respondents have at least two years of nursing experience.

These findings suggest that respondents have limited dementia knowledge (around 53% of the maximum DKAS score), positive attitudes (around 71% of the maximum DAS score), and high levels of self-efficacy (around 77% of the maximum SCIDS score) in dementia care. These findings will be interpreted and discussed alongside the figures for level of dementia knowledge, attitudes, and self-efficacy below. The mean scores per item in the scales will also be reported below.

Knowledge on Dementia Care

Table 10

Means and Standard Deviation of Dementia Knowledge

Item	Causes and Characteristics	Mean (M)	Standard Deviation (SD)
1	Dementia is a normal part of the ageing process.	0.80	0.94
2	Alzheimer's disease is the most common form of dementia.	1.52	0.67
3	People can recover from the most common forms of dementia.	1.06	0.88

4	Dementia does not result from physical changes in the brain.	1.17	0.87
5	Planning for end of life care is generally not necessary following a diagnosis of dementia.	1.15	0.92
6	Blood vessel disease (vascular dementia) is the most common form of dementia.	0.60	0.84
7	Most forms of dementia do not generally shorten a person's life.	0.61	0.82
Overall Mean		0.99	0.85
Item	Risks and Health Promotion	Mean (M)	Standard Deviation (SD)
8	Having high blood pressure increases a person's risk of developing dementia.	0.81	0.76
9	Maintaining a healthy lifestyle does not reduce the risk of developing the most common forms of dementia.	1.07	0.91
10	Symptoms of depression can be mistaken for symptoms of dementia.	1.08	0.78
11	Exercise is generally beneficial for people experiencing dementia.	1.55	0.64
12	Early diagnosis of dementia does not generally improve quality of life for people experiencing the condition.	1.46	0.78
13	The sudden onset of cognitive problems is characteristic of common forms of dementia.	0.28	0.65
Overall Mean		1.04	0.75
Item	Communication and Behavior	Mean (M)	Standard Deviation (SD)
14	It is impossible to communicate with a person who has advanced dementia.	0.90	0.89
15	A person experiencing advanced dementia will not generally respond to changes in their physical environment.	0.79	0.84
16	It is important to correct a person with dementia when they are confused.	0.46	0.78
17	People experiencing advanced dementia often communicate through body language.	1.13	0.75
18	Uncharacteristic behaviors in a person experiencing dementia are generally a response to unmet needs.	1.04	0.75
19	Medications are the most effective way of treating behavioral symptoms of dementia.	0.47	0.72
Overall Mean		0.80	0.79
Item	Care Considerations	Mean (M)	Standard Deviation (SD)
20	People experiencing dementia do not generally have problems making decisions.	1.50	0.74

21	Movement is generally affected in the later stages of dementia.	1.33	0.76
22	People with advanced dementia may have difficulty speaking.	1.33	0.81
23	People experiencing dementia often have difficulty learning new skills.	1.43	0.72
24	Difficulty eating and drinking generally occurs in the later stages of dementia.	1.42	0.69
25	Daily care for a person with advanced dementia is effective when it focuses on providing comfort.	1.62	0.65
Overall Mean		1.44	0.73
Total Overall Means of Dementia Knowledge		1.07	0.78

Table 10 shows the mean and standard deviation scores of the respondents per item of the DKAS (n = 182). The overall mean score per item was 1.07 (SD = 0.78) with a maximum score of 2 per item. The first subscale is Causes and Characteristics which includes items numbered 1 to 7 with an overall mean score of 0.99 (SD = 0.85). This refers to the fundamental information relating to pathology, clinical course, and terminal nature of dementia. Respondents were aware that Alzheimer's disease is the most common form of dementia (M = 1.52, SD = 0.67). However, there was evidence to suggest that the respondents still consider dementia to be a normal part of aging (M = 0.80, SD = 0.94) which is the most common misconception about dementia (WHO, 2012). In general, respondents also have a poor awareness about the impact of dementia on life expectancy as evidenced in item 7 (M = 0.61, SD = 0.82).

The overall mean score for the Risks and Health Promotion subscale was 1.04 (SD = 0.75). This subscale pertains to information about the risk factors and conditions that are associated with or can be mistaken for dementia which includes items 8 to 13. Respondents had a good understanding that early diagnosis (M = 1.46, SD = 0.78), exercise (M = 1.55, SD = 0.64), and maintaining a healthy lifestyle (M = 1.07, SD = 0.91) can reduce the risk of developing dementia and/or can improve their quality of life (items 9, 11, and 12). However, there is low awareness on the risk posed by high

blood pressure ($M = 0.81$, $SD = 0.76$) and the relevance of sudden onset of cognitive problems ($M = 0.28$, $SD = 0.65$) in dementia.

The Communication and Behavior subscale refers to information about how a person with dementia engages with his/her environment and includes items 14 to 19. This subscale had the lowest mean score ($M = 0.80$, $SD = 0.79$) compared to other subscales of the DKAS. Respondents had a mean score of 1.13 ($SD = 0.75$) on item 17 pertaining to the use of body language by those with advanced dementia when communicating. However, respondents generally thought that it is important to correct PwD when they are confused ($M = 0.46$, $SD = 0.78$) and medications are the most effective way to treat behavioral symptoms ($M = 0.47$, $SD = 0.72$) which are not supported by person-centered care principles.

Lastly, the respondents had a total mean score of 1.44 ($SD = 0.73$) on Care Considerations which was highest among the subscales. This was covered by items 20 to 25. This subscale refers to the symptoms of dementia that would affect provision of care. It represents the actual work of caring for people with dementia including activities of daily living which can be affected such as making decisions, movement, speaking, learning new skills, and eating and drinking. Providing comfort as the focus of daily care for those with advanced dementia was believed to be effective by the respondents ($M = 1.62$, $SD = 0.65$).

Table 11 below shows the level of dementia knowledge by the respondents relative to the sample ($n = 182$). Low to moderate scores on the DKAS are grouped together in the discussion as literature reviews suggest that low to moderate dementia knowledge does not influence care (Evripidou et al., 2018; Zhao et al., 2020).

Table 11*Level of Dementia Knowledge based on DKAS Scores Among Filipino Nurses*

DKAS Subscales	Level of knowledge	Frequency (n)	Percentage (%)
Causes and Characteristics	Low	48	26.4
	Moderate	93	51.1
	High	41	22.5
	Total	182	100%
Communication and Behavior	Low	25	13.7
	Moderate	122	67.0
	High	35	19.3
	Total	182	100%
Care Considerations	Low	62	34.1
	Moderate	103	56.6
	High	17	9.3
	Total	182	100%
Risks and Health Promotion	Low	7	3.8
	Moderate	73	40.1
	High	102	56.1
	Total	182	100%
DKAS Overall	Low	18	9.9
	Moderate	122	67.0
	High	42	23.1
	Total	182	100%

Majority of the respondents have low (9.9%) to moderate (67.0%) levels of overall dementia care knowledge making up a total of 76.9%. Only 23.1% have a high level of knowledge. This is consistent with evidence from the systematic review of Evripidou et al. (2018) which found that the lack of nurses' knowledge on dementia care has been consistent over time. This knowledge gap might even be more pronounced in low- and middle-income countries due to lack of resources (Johnston et al., 2020). However, the data is reassuring given that the study of Dela Vega et al. (2018) found that dementia knowledge among a mix of healthcare professionals was "very poor."

Majority of the participants (90.7%) scored low to moderate on care considerations for dementia representing the actual work of caring for PwD. This can be compared to a study of nurses from two hospital institutions in Taiwan which implied that despite moderately good scores on the Dementia Care Knowledge (DCK), their knowledge on how to care for PwD might not be as good (Lin et al., 2018). According to Fukuda et al. (2015), this might be attributed to a lack of understanding of dementia symptoms in their study involving Japanese nurses. This is reflected in the current study as 77.5% of the nurses have a low to moderate knowledge of dementia causes and characteristics. The study by Pinkert et al. (2017) implied that acute care nurses were more confident in addressing physical over psychological needs of PwD to gain a sense of control over challenging situations which can also explain this finding. Lastly, due to a lack of organizational support and resources, there might be poor knowledge relating to falls risks, managing BPSD and daily care (Evripidou et al., 2018). Poor knowledge on how to care for PwD may negatively affect nurses' behavior.

80.7% of the respondents have low to moderate scores on the communication and behavior subscale. Family members are culturally expected to take care of PwD in the Philippines and this view is shared by healthcare professionals (Dela Vega et al., 2018). To add, the study of Brooke et al. (2019) on Filipino nursing students reported that they had no clinical and/or familial experience of dementia. These can potentially explain the results on this subscale. Moreover, this is not unexpected compared to other international cohorts of nurses (Evripidou et al., 2018). In China, healthcare professionals find communication to be the most challenging when taking care of PwD owing to limited exposure to this patient group (Zhao et al., 2020).

It is reassuring to note that 56.1% have a high knowledge of the Risks and Health Promotion subscale. The known risk factors of dementia are highly prevalent in the Philippines putting Filipinos at a high risk for developing dementia (Dominguez et al., 2018). In LMICs, there is low awareness among the public that unhealthy lifestyles can cause dementia (Alzheimer's Disease International, 2024). Nurses can help increase the awareness of dementia risk factors in the Philippines as part of their role in health promotion.

Attitudes on dementia care

Table 12

Means and Standard Deviation of Attitudes Toward Dementia based on DAS Scores Among Filipino Nurses

Item	Social Comfort	Mean (M)	Standard Deviation (SD)
	<i>*Reverse scored items</i>		
1	It is rewarding to work with people who have ADRD.	5.04	1.23
2	I am afraid of people with ADRD.*	5.25	1.39
4	I feel confident around people with ADRD	4.51	1.02
5	I am comfortable touching people with ADRD.	4.77	1.19
6	I feel uncomfortable being around people with ADRD.*	5.01	1.31
8	I am not very familiar with ADRD.*	4.38	1.60
9	I would avoid an agitated person with ADRD.*	4.22	1.62
13	I feel relaxed around people with ADRD.	4.32	1.09
16	I feel frustrated because I do not know how to help people with ADRD.*	4.36	1.43
17	I cannot imagine taking care of someone with ADRD.*	5.10	1.48
Overall Mean		4.70	1.34
Item	Dementia Knowledge	Mean (M)	Standard Deviation (SD)
3	People with ADRD can be creative.	4.64	1.35
7	Every person with ADRD has different needs	5.98	1.12
10	People with ADRD like having familiar things nearby.	5.23	1.32
11	It is important to know the past history of people with ADRD.	6.10	1.08

12	It is possible to enjoy interacting with people with ADRD.	5.23	1.40
14	People with ADRD can enjoy life.	5.38	1.24
15	People with ADRD can feel when others are kind to them.	5.45	1.19
18	I admire the coping skills of people with ADRD.	5.56	1.14
19	We can do a lot now to improve the lives of people with ADRD.	5.74	1.24
20	Difficult behaviors may be a form of communication for people with ADRD.	5.32	1.15
Overall Mean		5.46	1.22
Total Overall Means of Attitudes Toward Dementia		5.08	1.28

Table 12 shows the mean and standard deviation scores of the respondents per item of the DAS (n = 182). The overall mean score per item was 5.08 (SD = 1.28) with a maximum score of 7 (strongly agree) per item.

The Social Comfort subscale had reverse scored items (numbers 2, 6, 8, 9, 16, and 17) with an overall mean score of 4.70 (SD = 1.34). This subscale covers the feelings and actions evoked by PwD. This relates to what respondents think and feel when they are with PwD such as being familiar, relaxed, frustrated, and comfortable. The respondents feel that it is rewarding to work with PwD (M = 5.04, SD = 1.23) and that they can imagine taking care of them (M = 5.10, SD = 1.48). These items had the highest mean scores on the Social Comfort subscale and can be explained by a dedication to family caregiving in Filipino culture (Badana & Andel, 2018). In addition, Dela Vega et al. (2018) reported that Filipino healthcare workers were willing to take care of PwD and learn more about them. The respondents also felt comfortable (M = 4.77, SD = 1.19), confident (M = 4.51, SD = 1.02), and relaxed (M = 4.32, SD = 1.09) around PwD. While this is positive, it might be due to the presence and dependence on family members when PwD are admitted to hospitals (Fukuda et al., 2015).

The Dementia Knowledge subscale focuses on knowledge that is based on personal observations and experiences of people with dementia. The mean score for this subscale is 5.46 (SD = 1.22). The respondents generally agree that PwD have different needs (M = 5.98, SD = 1.12), can still enjoy life (M = 5.38, SD = 1.24), and can feel when others are kind toward them (M = 5.45, SD = 1.19). The high scores on these items reflect the respondents' high regard for personhood and therefore, perceived ability to provide transpersonal care. They also agree that difficult behaviors may be a form of communication for PwD (M = 5.32, SD = 1.15). This corresponds with item 17 and 18 on the DKAS pertaining to use of body language when communicating (M = 1.13, SD = 0.75) and behaviors being an indication of unmet needs (M = 1.04, SD = 0.75) respectively. This is important considering that 59% of healthcare professionals believe that their colleagues may ignore the needs of PwD (ADI, 2024). This might be from a lack of understanding of these needs or the belief that they are unable to respond to these needs.

The respondents generally agree that having familiar things nearby (M = 5.23, SD = 1.32) and knowing the past medical history (M = 6.10, SD = 1.08) are important in taking care of PwD. These cover elements of person-centered care and knowledge of human behavior which are relevant in providing transpersonal care. Respondents feel that it is possible for them to enjoy interacting with PwD (M = 5.23, SD = 1.40) and therefore, can enhance the nurse-patient relationship. The item with the lowest score on the Dementia Knowledge subscale of the DAS was "PwD can be creative" with a mean score of 4.64 (SD = 1.35).

Table 13

Level of Attitudes on Dementia Care based on DAS Scores Among Filipino Nurses

DAS Subscales	Level	Frequency (n)	Percentage (%)
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Dementia Knowledge	Low	2	1.1
	High	180	98.9
	Total	182	100%
Social Comfort	Low	5	2.7
	High	177	97.3
	Total	182	100%
DAS Overall	Low	3	1.6
	High	179	98.4
	Total	182	100%

An overwhelming number of participants (98.4%) reported positive attitudes towards dementia care as evidenced by high scores on the DAS. This is consistent on both subscales of the DAS. The majority scored high on the Dementia Knowledge subscale (98.9%). It is important to note that “dementia knowledge” measured in this scale is different from the knowledge measured in the DKAS. The data shown here reflect knowledge based on personal observations and/or experiences with PwD (Ebert et al., 2010). In the study by Brooke et al. (2019) involving nursing students, it was reported that despite having no experience and poor biomedical knowledge on dementia, students had a high regard for the elderly. Interestingly, Filipino nursing students were part of the sample and discussed themes of respect for and taking care of elders at home. The study of Leung et al. (2019) in LMICS reported that Filipinos in general have positive attitudes towards PwD owing to their values of filial piety despite having limited knowledge on dementia. Filipinos have positive attitudes toward family caregiving which can help explain the positive attitudes toward the older population (Badana & Andel, 2018) and in turn, PwD.

Kang et al. (2010) studied the attitudes of Korean nurses towards dementia in acute care and implied that positive attitudes can be attributed to their social system structure and a culture of respect for older people which is comparable to the Philippine setting. These might explain a high score on the Social Comfort subscale

for the majority of the respondents (97.3%). Moreover, it was suggested that nurses in acute care have only taken care of PwD professionally and on a short-term basis only and therefore, were not demanding (Kang et al., 2010). In the systematic review by Evripidou et al. (2018), it was described that acute nurses who were exposed to the behavioral and psychological symptoms of dementia, especially cases where symptoms have progressed in the advanced stages, tend to have more negative attitudes towards PwD. This is also evidenced in the literature review conducted by Yaghmour (2021) on nurses' attitudes toward PwD. The review supported that work environment and settings affected nurses' attitudes. In the Philippines, long-term care for PwD often falls on the person's family, not acute hospitals (Cruz et al., 2019).

Self-efficacy on dementia care

Table 14

Means and Standard Deviation of Self-Efficacy in Dementia Care based on SCIDS Scores Among Filipino Nurses

Item	Building Relationships	Mean (M)	Standard Deviation (SD)
	How well do you feel you can...		
1	Understand the feelings of a person with dementia?	2.81	0.80
2	Understand the way a person with dementia interacts with the people and things around them?	2.81	0.76
3	Engage a person with dementia in a conversation?	2.81	0.79
4	Balance the needs of the person with dementia with their relative's wishes and the service's limitations?	2.87	0.76
Overall Mean		2.83	0.78
Item	Sustaining Personhood		
5	Use information about their past (such as what they used to do and their interests), when talking to a person with dementia?	3.05	0.82
6	Change your work to match the changing needs of a person with dementia?	2.65	0.86
11	Protect the dignity of a person with dementia in your work?	3.35	0.71

16	Offer choice to a person with dementia in everyday care (such as what to wear, or what to do)?	3.07	0.80
Overall Mean		3.03	0.80
Item	Professionalism		
7	Keep up a positive attitude towards the people you care for?	3.38	0.69
8	Keep up a positive attitude towards the relatives of a person with dementia?	3.34	0.70
9	Keep yourself motivated during a working day?	3.32	0.73
10	Play an active role in your staff team?	3.26	0.74
12	Deal with personal care, such as incontinence in a person with dementia?	3.16	0.84
Overall Mean		3.29	0.74
Item	Care Challenges		
13	Deal with behavior that challenges in a person with dementia?	3.13	0.77
14	Decide what to do about risk (such as harm to self or others) in a person with dementia?	3.02	0.78
15	Offer stimulation (for the mind, the senses, and the body) to a person with dementia in your daily work?	3.02	0.72
17	Engage a person with dementia in creative activities during your normal working day?	3.08	0.80
Overall Mean		3.06	0.77
Total Overall Means of Self-Efficacy in Dementia Care		3.05	0.77

Table 14 shows the mean and standard deviation scores of the respondents per item of the SCIDS (n = 182). The overall mean score per item was 3.05 (SD = 0.77) with a maximum score of 4 per item. When asked how well respondents can perform, engage, and respond to the needs of PwD, their answers ranged from “quite a lot” (3) and “very much” (4) on the Likert scale.

The respondents scored highest on the Professionalism subscale compared to the other subscales (M = 3.29, SD = 0.74). This can be explained by the age and years of experience of the sample as it refers to the professional roles and responsibilities of healthcare staff towards PwD. They also scored high on the Sustaining Personhood (M = 3.03, SD = 0.80) and Care Challenges (M = 3.06, SD = 0.77) subscale. These subscales represent direct care and work involved for PwD. This is positive given that

these are roles and responsibilities that may be challenging for healthcare staff which they may not have appropriate training for. However, item 6 which asked how well they can change their work to match the changing needs of PwD had a mean score of 2.65 (SD = 0.86) which was the lowest out of all the items. This can be linked to a lack of available dementia programs, services, and specialists (Dela Vega et al., 2018). Turner et al. (2017) in their meta-synthesis, concluded that the organizational cultures that value speed and efficiency might be a barrier to meeting the specific needs of PwD.

The Building Relationships subscale had the lowest mean score ($M = 2.83$, $SD = 0.78$) compared to the other subscales. This subscale refers to the important pre-requisites of good dementia care such as understanding how PwD interact and engage with people around them and their environment. The mean score for being able to balance the needs of PwD with their family's wishes and service limitations was 2.87 (SD = 0.76). This is similar compared to healthcare professionals in China who scored lowest on the Building Relationships subscale (Zhao et al., 2022). Again, this might be due to a lack of services available for PwD which was considered a secondary problem in the focused group interviews by Dela Vega et al. (2018). Guzman et al. (2016) found a significant increase in the scores on the Building Relationships subscale of care home staff in the United Kingdom following training which were also lower compared to other SCIDS subscales before training.

Table 15

Level of Self-Efficacy on Dementia Care based on SCIDS Scores Among Filipino Nurses

SCIDS Subscales	Level	Frequency (n)	Percentage (%)
Professionalism	Low	0	0
	Moderate	23	12.6
	High	159	87.4
	Total	182	100%
Building Relationships	Low	1	0.5
	Moderate	72	39.6
	High	109	59.9
	Total	182	100%
Care Challenges	Low	0	0
	Moderate	47	25.8
	High	135	74.2
	Total	182	100%
Sustaining Personhood	Low	0	0
	Moderate	38	20.9
	High	144	79.1
	Total	182	100%
SCIDS Overall	Low	0	0
	Moderate	42	23.1
	High	140	76.9
	Total	182	100%

76.9% of the respondents scored high on the SCIDS indicating a high self-reported level of self-efficacy. This can be attributed to the number of years of experience of the majority of the participants (Benner, 1984). Self-efficacy is positively correlated with experience in working with PwD (Schepers et al., 2012). This result can also be interpreted alongside the findings of Dela Vega et al. (2018) where workers and administrators scored their preparedness for dementia using a 0 – 100 (best) scale at 80 and 50 respectively. A high level of self-efficacy in the current study is reassuring provided that only 2.7% had post-graduate education on dementia care. The systematic review by Karrer et al. (2021) shows that training programs significantly improved self-efficacy of nurses in dementia care. On the other hand,

dementia training was not a predictor of self-efficacy in the quantitative study by Mullan and Sullivan (2016).

Most of the respondents scored high on the Professionalism (87.4%) and Sustaining Personhood (79.1%) subscale. A high score on the Professionalism subscale can be attributed to the participants' years of experience and their attitudes (Schepers et al., 2012). According to Benner (1984), the majority of the respondents can be considered competent to proficient. It is reassuring to note that the majority scored high on the Sustaining Personhood subscale despite an identified lack of focus on person-centered care in hospital settings due to the care environment and culture (Rosvik & Rokstad, 2020). This was attributed to a lack of insufficient knowledge on the needs and behavior of PwD. Despite having limited knowledge, the respondents in the study felt that they were able to provide person-centered care for PwD.

40.1% of the respondents scored low to moderate on the Building Relationships subscale of the DAS. This was the subscale with the lowest mean score ($M = 2.83$, $SD = 0.78$) and the lowest percentage of respondents who scored high. This could be attributed to having limited interactions with PwD or a focus on routine care in acute hospital settings (Karrer et al., 2021). On the Care Challenges subscale, 74% scored high which is a necessity for frontline staff. Again, this must be interpreted knowing that the majority of acute Filipino nurses might not have had long exposures and experiences with PwD in hospitals affecting their perceived self-efficacy. In using the SCIDS, the effect of social desirability and cognitive dissonance should be considered (Schepers et al., 2012) knowing that the respondents mostly answered the questionnaires while at work where their self-efficacy is important.

Correlation of Knowledge and Self-Efficacy

Table 16

Spearman Correlations Between Dementia Knowledge (DKAS) and Self-Efficacy (SCIDS)

Variable Pair	Spearman ρ	p-value
DKAS Overall vs. SCIDS Overall	0.143	0.054

A very weak, positive but non-significant correlation was observed between dementia knowledge and self-efficacy (Spearman $\rho = 0.143$; p-value = 0.054). This means that higher levels of dementia knowledge may be associated with higher levels of self-efficacy in dementia care. However, the result was statistically non-significant. This result is similar to the findings of Mullan and Sullivan (2016) who also found weak, positive, but statistically non-significant relationships between knowledge and sense of competence. The study was done on care staff where 69% of the participants were nurses in residential care facilities in Australia. Schepers et al. (2012) did not find an association with the sense of competence and dementia knowledge in care staff and experts. Both studies used different scales (DKAT 2 and DK-20 respectively) to measure dementia knowledge from the current study.

On the other hand, Scerri et al. (2020) found a negative correlation between dementia knowledge and perceived ability to give person-centered care. They argued that higher dementia knowledge means that healthcare professionals know the difference between high standard and actual care. Zhao et al. (2020) found a weak, positive correlation ($r = 0.17$, $p = 0.005$) between the DKAS and SCIDS-C, a Chinese translation of the SCIDS concluding that the scales were measuring similar yet distinct

concepts. They also tested the correlation of the SCIDS-C with other measures of dementia knowledge such as the DKAT2 and DK-20 but found no association.

Surr et al. (2016) studied hospital care staff following delivery of a specialist training program, 85.4% of which are nurses, and argues that a greater depth of knowledge is needed to increase self-efficacy. This can potentially be achieved by more in-depth and longer training programs. This was supported by Takeuchi et al. (2020) in their study of Japanese nurses in dementia wards. The study showed that more than knowledge, a greater sense of self-efficacy was reported by participants who were able to use knowledge in practice and share learning with others. These studies support that knowledge alone is not enough to increase self-efficacy in dementia care. In Taiwan, nurses in acute care might not know how to care for PwD despite having good scores on a dementia knowledge scale (Lin et al., 2020).

The literature reviews by Evripidou et al. (2018) and Zhao et al. (2020), declared that higher levels of knowledge are correlated with higher levels of confidence in dementia care. However, it is important to distinguish the difference between confidence and self-efficacy in dementia care despite being used interchangeably in literature (Rivett et al., 2019). Moreover, the application of knowledge in dementia care is thought to be greatly influenced by the environment and staff workload (Rosvik & Rokstad, 2020). On the other hand, Brossard-Saxell et al. (2021) describes knowledge as an internal facilitator of dementia care and “readiness” to take care of this patient group in challenging situations in their meta-synthesis of qualitative studies.

Correlation of Attitudes and Self-Efficacy

Table 17

Spearman Correlations Between Attitudes (DAS) and Self-Efficacy (SCIDS) (N = 182)

Variable Pair	Spearman ρ	p-value
DAS Overall vs. SCIDS Overall	0.243	0.001

A weak positive correlation was observed between attitudes and self-efficacy in dementia care which was found to be significant (Spearman $\rho = 0.243$, $p = 0.001$). This finding is like that of Mullan and Sullivan (2016) which found that attitudes were the strongest predictor of sense of competence with a medium effect. The study used the Approaches to Dementia Questionnaire (ADQ) which measured hopefulness and use of person-centered approaches in measuring attitudes. Schepers et al. (2012) also found a positive association between the Personhood subscale of the ADQ and SCIDS scores in their study of care staff and experts in London. Hunter et al. (2013) linked positive person-centered attitudes to providing better care for PwD. Positive attitudes are pre-requisites to person-centered care, a gold standard in dementia care (Kitwood, 1997). Consequently, improving attitudes might lead to a higher sense of competence and self-efficacy (Mullan & Sullivan, 2016). The study of Scerri et al. (2020) found that the attitude scores of care staff in Malta using the DAS were positively related to their perceptions of being able to provide person-centered care measured by the Person-centered Care of Older People with Cognitive Impairment in Acute Care (POPAC) scale (Pearson's coefficient = 0.311; $p = 0.001$).

Jordan and Church (2013) studied nursing students taking care of PwD in nursing homes and suggested that positive attitudes translated to an increase in the level of their self-efficacy. However, this finding was not quantitatively measured and was implied from clinical logs of the students' attitudes. Hu et al. (2022), in their quantitative study of nursing home caregivers, implied that positive attitudes mediated the effect of BPSD knowledge on better care ability. This was more evident in staff with a higher level of self-efficacy which can potentially support a correlation between attitudes and self-efficacy. Table 18 below shows the correlations between the subscales of the DAS and overall SCIDS.

Table 18

Spearman Correlations Between DAS subscales and SCIDS Overall

Variables	DAS Social Comfort	DAS Dementia Knowledge	SCIDS Overall
DAS Social Comfort	-	0.423**	0.151*
DAS Dementia Knowledge		-	0.275**
SCIDS Overall			-

*p < 0.05. **<0.01 (two-tailed)

The Dementia Knowledge subscale of the DAS had a higher correlation with SCIDS (p = 0.275, p-value = <0.01) compared to the Social Comfort subscale (p = 0.275, p-value = <0.05). This means that the knowledge and attitudes acquired from experience and observation had a stronger correlation with self-efficacy compared to feelings and actions evoked by PwD. The subscales had a moderately positive correlation which was significant (p = 0.423, p-value = <0.01).

The quantitative study of Ebert et al. (2019) on a sample of 645 Wisconsin residents, 50% of whom had a friend or family with dementia, supported the finding above. They reported that while a biomedical knowledge on dementia is important, there is a need for “personhood-based” knowledge for a change in behavior to occur. This type of knowledge influences social comfort which is also supported by the correlation between the two subscales of the DAS in this study. The quantitative study by Kokkonen et al. (2014) on dementia care staff recognized that an awareness of personhood was associated with a greater sense of achievement at work ($p = 0.22$, $p\text{-value} = <0.05$). Surr et al. (2016) evaluated the efficacy of a training program in improving the attitudes of acute hospital staff in England. They concluded that the Personhood subscale of the Approaches to Dementia Questionnaire (ADQ) measured “a greater depth of knowledge” which significantly increased their caring efficacy. The studies mentioned using general measures of caring or geriatric self-efficacy.

The series of studies by Hunter et al. (2013) indicated that more positive beliefs on personhood were associated with the likelihood of choosing analgesics and non-pharmacological interventions over psychotropic medications in dementia. They used the Personhood in Dementia Questionnaire (PDQ) which they developed as part of the study and a vignette to identify behavioral intentions of healthcare providers.

Level of Knowledge and Demographics

Table 19

Chi-Square Tests for DKAS Overall by Demographic Variables

Demographic Variable	χ^2	df	p-value	Cramer's V
Age	15.572	4	0.004	0.207

Nursing Experience	18.498	4	0.001	0.225
Post-Graduate Training	2.528	2	0.282	0.118

Age ($\chi^2 (4) = 15.572$, $p = 0.004$) and length of experience ($\chi^2 (4) = 18.498$, $p = 0.001$) were significantly associated with dementia knowledge. Younger nurses (26 years and below) and those aged 27–42 had varied knowledge levels whereas older nurses (43–58) had fewer low scores. This indicates a moderate effect of age on knowledge. Nurses with 6–10 years of experience had the highest proportion of moderate scores, while those with more than 10 years achieved more high scores, suggesting a moderate influence of experience on knowledge.

These findings are supported by several studies. The study of Lin et al. (2017) evidenced that age and nursing experience were significantly correlated with Dementia Care Knowledge (DCK) scores in Taiwanese nurses. These findings have been consistent over time as the literature review by Yaghmour (2021) reported that dementia knowledge was higher for those who had more experiences and have higher educational levels. Scerri and Scerri (2013) studied nursing students in Malta and found that their dementia knowledge increased with age and experience as more mature students already have “tacit knowledge.”

Post-graduate training was not associated with an increase in dementia knowledge ($\chi^2 (2) = 2.528$, $p = .282$). This is different from the findings of several studies. Keogh et al. (2020) found that hospital staff in Ireland who had previous dementia training had higher perceived dementia knowledge. Zhao et al. (2020) reported that training, searching for dementia information, and willingness to train were significant predictors of dementia knowledge. This is comparable to the study by Lin

et al. (2017) where those who had dementia training had significantly higher scores than those who did not. However, it is important to note that more than half of the participants in the previous study (63.6%) had training compared to only 2.7% who had training in the current study which could have affected the results.

An increase in dementia knowledge after training was also consistently described by literature reviews (Evripidou et al., 2018; Yaghmour, 2021). However, limitations of studies measuring self-efficacy after training include only immediate impact and there is limited data whether this can be sustained over time (Elvish et al., 2014). Following a training program in an acute hospital in London, the SCIDS scores of participants improved from pre-training to a follow-up three months after implementation (Sampson et al., 2017). This is supported by the findings of Scerri and Scerri (2019) which indicate that training has a cumulative effect on knowledge overtime and advocated for continuous development programs as opposed to single training days. The meta-synthesis by Turner et al. (2017) echoed these findings and suggested further training for care staff which are tailored towards hospital ward environments. Moreover, training should be directed towards staff with senior and managerial roles.

Discussions

Summary of Relationship of Variables

Table 20

Summary of Spearman Correlations Between DKAS, DAS, and SCIDS

Variables	SCIDS	p-value
DKAS	0.143	0.054
DAS	0.243	0.001
DAS Social Comfort	0.151	<0.05
DAS Dementia Knowledge	0.275	<0.01

Table 20 is presented to summarize the relationship of the independent and dependent variables as presented in the Conceptual Framework of the study, which was based on the Self-Efficacy Theory by Albert Bandura and the Theory of Transpersonal Caring by Jean Watson. The results of the study also support the propositions of both theories which will be explained below.

Propositions

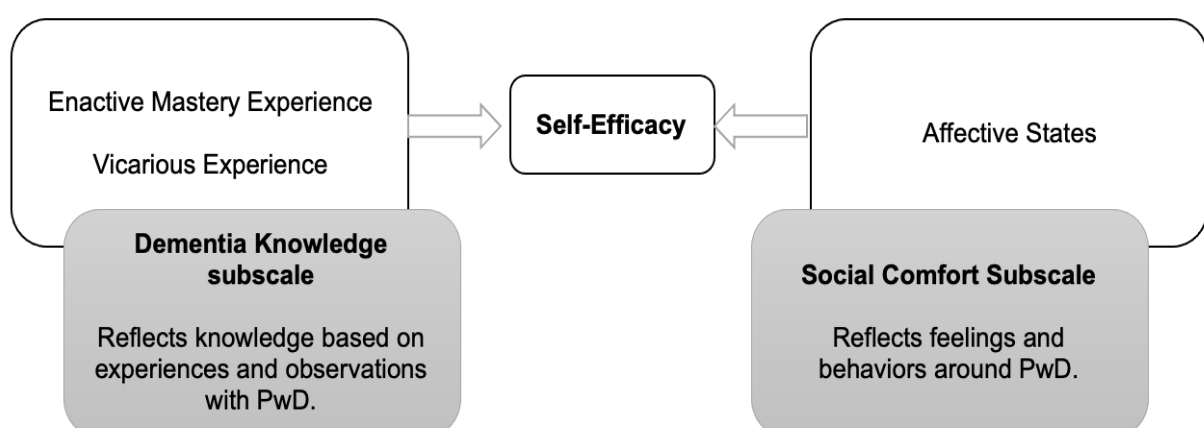
Self-Efficacy Theory by Albert Bandura

Knowledge is a determinant of self-efficacy but has low variability and cannot be changed immediately. Therefore, individuals have less personal control over knowledge compared to other factors affecting self-efficacy such as attitudes. Variables with a higher personal control, influence self-efficacy more than those with a low variability. The current study found a very weak, non-significant correlation between knowledge (measured by the DKAS) and self-efficacy (Spearman $p = 0.143$, $p\text{-value} = 0.054$). On the other hand, attitudes and self-efficacy were significantly correlated (Spearman $p = 0.243$, $p\text{-value} = 0.001$) supporting the proposition above. The respondents had limited knowledge on dementia as indicated in the results, which

can explain the relationship between knowledge and self-efficacy in this study. There is evidence suggesting that a higher level of knowledge is needed to influence self-efficacy dementia care.

Self-efficacy is formed by enactive mastery experience, vicarious experience, verbal persuasion, and physiological and affective states. It is not within the scope of the study to explore verbal persuasion and physiological states. The influence of attitudes on self-efficacy has been supported by the findings of the study. However, it is important to acknowledge that attitudes have a cognitive component based on the tripartite model of attitude structure as discussed in the review of literature (Breckler, 1984). The Dementia Attitudes Scale was based on this model and the cognitive items (10 of 20 items) were covered on the Dementia Knowledge subscale. The Social Comfort subscale covers the affective and behavioral factors items (10 of 20 items). The definitions of the factors proposed by Bandura overlap with the subscales of the DAS as presented below:

Figure 5. Determinants of Self-Efficacy and Corresponding DAS Subscale



This supports the second proposition and to an extent, the first proposition. Knowledge was correlated with self-efficacy in this sample. However, it was not

knowledge as measured by the DKAS but instead knowledge measured by the DAS (Spearman $p = 0.275$, $p\text{-value} = 0.001$).

Enactive mastery experience is the most effective source of self-efficacy. This was supported by the findings of the study which found that the Dementia Knowledge subscale on the DAS, which reflects enactive mastery experience, had the highest correlation with self-efficacy (Spearman $p = 0.275$, $p\text{-value} = 0.001$) compared to other variables in the study.

Theory of Transpersonal Caring by Jean Watson

The essence of Jean Watson's theory is authentic caring that preserves the dignity and wholeness of the person. This holistic approach to care values and regard for "personhood" overlaps with the elements of person-centered care, which is the gold standard for dementia care (Kitwood, 1997). The following propositions of Transpersonal Caring Theory were supported by the current study and will be discussed below.

Biomedical knowledge and knowledge of human behavior are required to provide humanistic care, but it is not enough. The current study found a very weak, non-significant correlation between knowledge (measured by the DKAS) and self-efficacy (Spearman $p = 0.143$, $p\text{-value} = 0.054$). Despite having limited knowledge, nurses had a high level of self-efficacy in dementia care which was influenced by their attitudes toward PwD. The cognitive component of the DAS, which was correlated with self-efficacy (Spearman $p = 0.275$, $p\text{-value} = 0.001$), reflects the humanistic values of Filipino nurses which is important in the caring process and represents a higher level of knowledge. This higher level of knowledge or "caring knowledge" encompasses

ethical, intuitive, and personal ways of knowing and being (Watson & Smith, 2002, as cited in Fitzpatrick & Whall, 2005). This type of knowledge comes from the nurses' life histories and previous experiences (Watson, 1996, as cited in George, 2002). For example, the respondents believed that PwD had different needs, history, and backgrounds. Moreover, kindness and interaction were deemed to be important in taking care of this patient group. Collectively, this means that they felt they were able to sustain personhood by using this knowledge to interact with PwD, change their ways of working around PwD, and preserve their dignity.

Genuineness, sincerity, and intentionality when caring increases nurses' self-efficacy. These factors represent the affective and behavioral aspects of attitudes which were correlated with self-efficacy (Spearman $\rho = 0.151$, $p\text{-value} = <0.05$) which represent an exploration of one's values and beliefs (Watson, 1996, as cited in George, 2002). The majority of the participants agree that care for PwD is rewarding ($M = 5.04$, $SD = 1.23$). They were confident, comfortable, and relaxed around PwD and would not avoid them. This can be explained by a high level of filial piety and a culture that values and respects older people in the Philippines. Despite having low knowledge, the positive attitudes of Filipino nurses influence their self-efficacy in taking care of PwD. They have a high level of professionalism and feel that they are able to deal with care challenges in dementia care. The carative factors identified by Watson are believed to be instrumental in promoting dignity and go beyond procedures, tasks, treatments, and technology in nursing (Alligood, 2010). Some Carative Factors were mapped against items on the SCIDS scale and are shown below.

Table 21*Carative Factors and SCIDS Items*

Watson's Carative Factors	SCIDS Items	Mean (M)
Formation of humanistic-altruistic value system	1 Understand the feelings of PwD	2.81
	2 Understand the way PwD interact with the people and things around them	2.81
Development of helping-trust relationships	3 Engage a person with dementia in a conversation?	2.81
	5 Use information about their past when talking	3.05
Expression of positive and negative feelings	13 Deal with behavior that challenges	3.13
Creative problem-solving	4 Balance the needs of the person with dementia with their relative's wishes and the service's limitations	2.87
	6 Change your work to match the changing needs of PwD	2.65
	17 Engage a person with dementia in creative activities during your normal working day	3.08
Supportive environment	14 Decide what to do about risk (such as harm to self or others) in a person with dementia	3.02
	15 Offer stimulation (for the mind, the senses, and the body) to a person with dementia in your daily work	3.02
Assistance with human needs	12 Deal with personal care, such as incontinence in a person with dementia	3.16

The carative factors are nurse-patient interactions that improve the care experience. Table 20 shows how the items in the SCIDS correspond with the factors as supported by the expanded definitions of Alligood (2010). The perceived ability to provide transpersonal care through the carative factors can be connected with the respondents' perceived self-efficacy. Therefore, the proposition that positive attitudes including its cognitive, affective, and behavioral aspects can influence the self-efficacy and/or perceived ability to provide holistic care is supported by the results of the study.

Chapter V

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary

The study reported the level of knowledge, attitudes, and self-efficacy of Filipino nurses around dementia care in two health institutions in Metro Manila. It also identified whether there is a relationship between knowledge and self-efficacy, attitudes and self-efficacy, and knowledge and the socio-demographic profile of the respondents. The findings were described and analyzed to meet the objectives while being guided by the Self-Efficacy Theory by Albert Bandura and the Theory of Transpersonal Caring by Jean Watson.

The data collection period ran from 17 February to 8 April 2025 following approval from the institutional review boards of Jose R. Reyes Memorial Medical Center and Cardinal Santos Medical Center. A total of 182 responses were analyzed. The majority of the respondents were between 27 and 42 years of age (64.8%) and have 2 to 5 years of nursing experience (44.0%). The majority of the respondents (97.3%) did not have any post-graduate training and/or education in dementia care.

The majority of the respondents have low (9.9%) to moderate (67.0%) levels of overall dementia care knowledge as evidenced by their scores on the DKAS, making up a total of 76.9%. Only 23.1% have high levels of knowledge. The overall mean score is 26.88 (out of a maximum of 50). Nearly all participants (98.4%) reported positive attitudes towards dementia care as evidenced by high scores on the DAS. There was consistency in the result for both of its subscales with an overall mean score of 99.48 (out of a maximum of 140). Lastly, 76.9% of the respondents scored

high on the SCIDS indicating a high self-reported level of self-efficacy. The mean score for the SCIDS is 52.37 (out of a maximum of 68). Taken together, these results suggest that Filipino nurses have low to moderate dementia knowledge and positive attitudes towards dementia care. They also have a generally high level of self-efficacy.

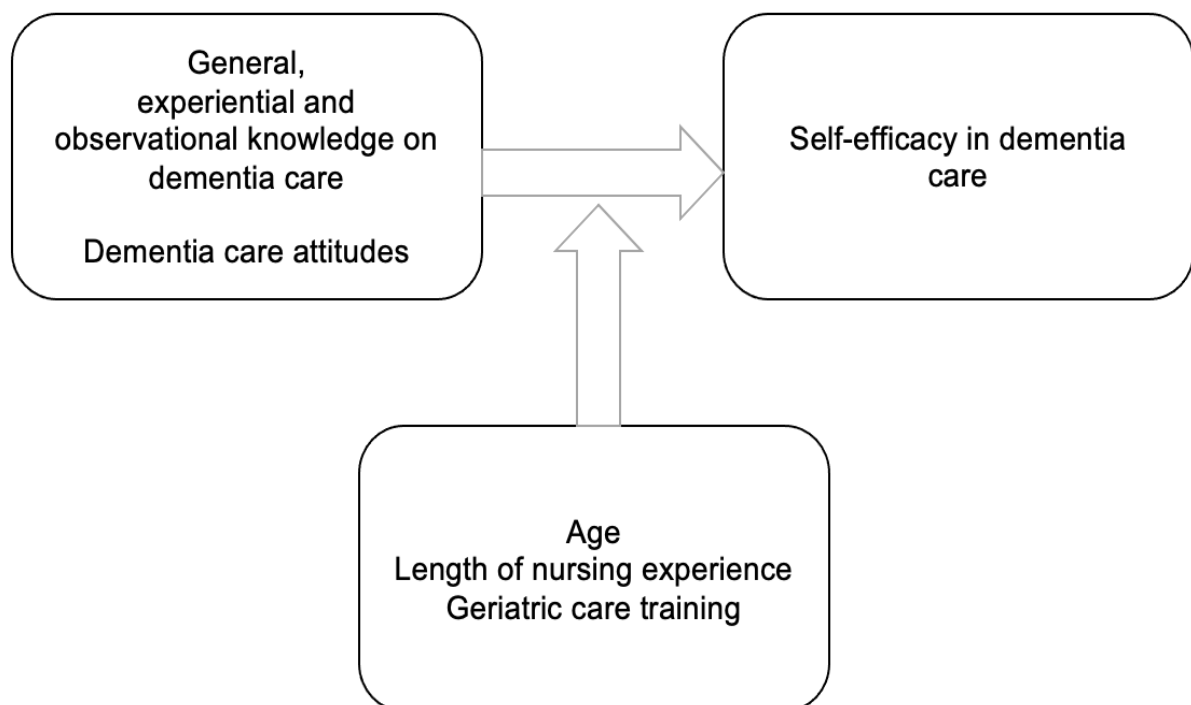
The relationships of the variables were also determined. A very weak positive, non-significant correlation was found between dementia knowledge and self-efficacy (Spearman $\rho = 0.143$; p -value = 0.054). A weak positive, significant correlation was observed between attitudes and self-efficacy in dementia care (Spearman $\rho = 0.243$, $p = 0.001$). Age ($\chi^2 (4) = 15.572$, $p = 0.004$) and length of experience ($\chi^2 (4) = 18.498$, $p = 0.001$) were significantly associated with dementia knowledge. However, post-graduate geriatric training was not associated with dementia knowledge ($\chi^2 (2) = 2.528$, $p = 0.282$).

The correlations between the subscales of the DAS and the overall self-efficacy of the respondents were also identified. The Dementia Knowledge subscale of the DAS had a weak but significant correlation with self-efficacy (Spearman $\rho = 0.275$, p -value = 0.001). The Social Comfort subscale of the DAS had a very weak, significant correlation with self-efficacy (Spearman $\rho = 0.151$, p -value = 0.05). Overall, the Dementia Knowledge subscale of the DAS had the highest correlation with self-efficacy when compared with DKAS Overall, DAS Overall, and the Social Comfort Subscale of the DAS.

The directions of variables in the Conceptual Framework were supported by the findings of the study. However, a higher level of knowledge based on experience and observations of PwD is required to influence self-efficacy in dementia care. In line with that, the investigator presents an updated Conceptual Framework that reflects the findings of the study placed in the context of existing literature in dementia care in

hospitals. It is important to note that while general knowledge was not correlated with self-efficacy in this sample, this does not strictly mean that no relationship exists. The observed relationship is not strong enough to be considered statistically significant. It is also important to note that the level of knowledge was low which could have affected the results. It is widely accepted that knowledge is important in the provision of dementia care. However, there is limited and conflicting evidence in existing literature to support this. Training in geriatric care was also not correlated with self-efficacy in this sample, and this can be attributed to a very low percentage of respondents who had training. While training is deemed to be important in improving dementia care, it needs to be relevant and continuous for it to be useful and sustained in practice, as supported by evidence in literature.

Figure 6. Conceptual Framework on the Findings of the Study



The results of the study also supported and strengthened the following propositions of the Self-Efficacy Theory by Albert Bandura (numbers 1 to 3) and the Theory of Transpersonal Care by Jean Watson (numbers 4 to 5).

1. *General knowledge is a determinant of self-efficacy but may have less influence compared to other factors as it cannot be changed and/or internally controlled.*

This is supported by a very weak and non-significant correlation between general dementia knowledge and self-efficacy.

2. *Self-efficacy is formed by enactive mastery experience, vicarious experience, and affective states.* This is evidenced by a weak and significant correlation between dementia attitudes and self-efficacy. The positive beliefs, feelings, and behaviors of Filipino nurses towards PwD are associated with their high level of self-efficacy.

3. *Enactive mastery experience is the most effective source of self-efficacy.* The cognitive component of dementia attitudes representing enactive mastery and vicarious experience had the highest correlation with self-efficacy which was significant.

4. *Biomedical knowledge and knowledge of human behavior are required to provide humanistic care, but it is not enough.* This can be linked to the first proposition. The humanistic values of Filipino nurses formed from experience and observation as reflected in the Dementia Knowledge subscale of the DAS which are parallel to the Carative Factors by Jean Watson influenced their self-efficacy. This was despite limited general knowledge on dementia care.

5. *Genuineness, sincerity, and intentionality when caring increases nurses' self-efficacy.* Despite having low levels of knowledge, the positive attitudes of Filipino nurses influence their self-efficacy in taking care of PwD. They have a

high level of professionalism and feel that they are able to deal with care challenges in dementia care.

Based on the results of the study, the following conclusions are made in reference to the hypotheses of the study:

H1: There is a significant relationship between the level of knowledge and self-efficacy in dementia care in older persons among Filipino nurses.

The null hypothesis cannot be rejected which means that there is no significant relationship between the level of knowledge and self-efficacy in dementia care in older persons among Filipino nurses.

H2: There is a significant relationship between the attitudes and self-efficacy in dementia care in older persons among Filipino nurses.

The null hypothesis is rejected in favor of the alternative hypothesis which means that there is a significant relationship between the attitudes and self-efficacy in dementia care in older persons among Filipino nurses.

H3: There is a significant relationship between the demographic profile (age, length of experience, and training on geriatric care) and level of knowledge in dementia care in older persons among Filipino nurses.

H3a: For age and length of experience, the null hypothesis is rejected in favor of the alternative hypothesis which means that there is a significant relationship between the age and length of experience of nurses and the level of knowledge in dementia care in older persons among Filipino nurses.

H3b: For training on geriatric care, the null hypothesis cannot be rejected which means that there is no significant relationship between training on geriatric care and level of knowledge in dementia care in older persons among Filipino nurses.

Conclusion

The results of the study indicated that Filipino nurses with at least two years of nursing experience working in general hospitals have inadequate dementia knowledge but have positive attitudes, and a high level of self-efficacy. Age and length of nursing experience were associated with higher dementia knowledge, but geriatric care training was not. The Filipino nurses' attitudes towards PwD were correlated with their self-efficacy in dementia care but general knowledge about dementia was not. Interestingly, knowledge that Filipino nurses gained from experiences and observations of PwD was correlated with their self-efficacy. This means that the self-efficacy of Filipino nurses can be understood through their enactive mastery and vicarious experience in nursing care. It is also recognized that Filipino nurses feel that they are able to provide transpersonal and person-centered care for people with dementia, representing a high level of caring knowledge. This can be owed to a high regard and respect for older people and values of filial piety which are inherent in the Filipino culture. Despite having low to moderate levels of general dementia knowledge, Filipino nurses' caring knowledge forms part of their positive attitudes, representing a deeper form of knowledge which can explain their high level of self-efficacy. This means that there is value in enhancing transpersonal communication and relationships between nurses and PwD and their families.

Recommendations

The following recommendations are made with respect to the findings of the study. The recommendations have also considered the influence of care settings and cultural factors in the knowledge, attitudes, and self-efficacy of Filipino nurses. It is the

investigator's hope for the findings to be used by the following stakeholders to improve the quality of care for PwD in Philippines hospitals.

Nursing Educators

The results of this study can help guide the direction for nursing education, training, and support. There is a lack of post-graduate and in-service training opportunities to improve nurses' knowledge on dementia care and to influence care practices. In particular, training should focus on dementia causes and characteristics, communication and behavior, and care considerations. In general, Filipino nurses still consider dementia to be a normal part of aging which is a common misconception. In addition, there is a need to increase awareness on the importance of person-centered principles when addressing the behavioral symptoms of PwD. There is also a requisite to review Bachelor of Nursing curriculums as education on general dementia knowledge might need to be embedded or refined. In-depth knowledge is required to influence self-efficacy, which means that exposure and education must be relevant and provided early on for future nurses in the Philippines.

Hospital Administrators and Nurse Leaders

Nurses with longer experiences have better self-efficacy and they can be mobilized to support a younger workforce on dementia care. With that being said, dementia training for faculty members, hospital administrators, and nurse leaders is imperative especially as there is a lack of dementia care specialists in the Philippines. There is also a need to support nurses in building relationships or in interacting with PwD in hospitals to continue increasing their self-efficacy and to assist families of PwD in hospitals who may be reluctant to approach healthcare professionals. Steps must be taken to ensure that the positive attitudes of nurses toward PwD is sustained and enhanced as they influence their self-efficacy. For example, programs that foster

positive interactions with PwD in hospitals might increase Filipino nurses' social comfort and experiential knowledge of dementia.

Dementia Policy Makers

The care environment and workload of nurses can influence their attitudes on dementia care (Yaghmour, 2021). Filipino nurses have a high level of self-efficacy and are willing to provide care that meets the specific needs of PwD despite restricted resources which might lead to less favorable attitudes in the long-term. Therefore, there is a need to increase resources and create supportive environments for dementia care in hospitals. There are stipulations made for older people and mental health patients but there is a lot of progress that needs to be made for PwD, especially in hospitals. There might be a need to shift investments toward training and/or programs that can enhance nurses' attitudes and their relationships with PwD.

Research

While there is evidence to suggest that self-rated self-efficacy can translate to care behaviors (Sampson et al., 2017), it is crucial to further understand how nurses' knowledge, attitudes, and self-efficacy can translate to better patient outcomes and quality care in dementia in the Philippine setting through research. Future research must investigate what variables can potentially influence positive attitudes towards dementia care, because they are associated with a higher level of self-efficacy in nurses. The current study is limited to hospitals in Metro Manila. Studying a variety of healthcare settings and healthcare professionals in the country is necessary to guide a national plan for dementia moving forward.

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APPENDICES

Appendix A

Request and approval for use of DKAS, DAS and SCIDS

DKAS

**Melissa Fiel** <missmelfiel@gmail.com>
to Claire.Eccleston ▾

Sat, 10 Oct 2020, 17:19 ☆ 😊 ↶ ⋮

Dear Claire,

Greetings!

My name is Melissa Fiel. I am a registered nurse working in England and currently completing my Masters of Arts in Nursing at the University of the Philippines Open University. I am looking into studying the knowledge of Filipino nurses about dementia for my thesis. Saying that, I would like to kindly request for an access/ permission to use the **DKAS**.

Hoping for your assistance in the matter.

Thank you so much.

Kind regards,

Melissa Fiel

**Claire Eccleston** <claire.eccleston@utas.edu.au>
to me ▾

Tue, 13 Oct 2020, 04:30 ☆ 😊 ↶ ⋮

Dear Melissa,

Thank you for your interest in the **DKAS** tool.

Please find attached the scale and scoring information as well as four publications about its development and validation. I am very happy for you to use the scale for your studies.

All the best with your thesis.

Kind regards,

Claire Eccleston

Dr Claire Eccleston | Lecturer, Course Coordinator (Bachelor and Diploma of Dementia Care)
Wickino Dementia Research & Education Centre

Melissa Fiel <missmelfiel@gmail.com>

10 Oct
2020, 17:19

to Claire.Eccleston

Dear Claire,

Greetings!

My name is Melissa Fiel. I am a registered nurse working in England and currently completing my Masters of Arts in Nursing at the University of the Philippines Open University. I am looking into studying the knowledge of Filipino nurses about dementia for my thesis. Saying that, I would like to kindly request for an access/ permission to use the DKAS.

Hoping for your assistance in the matter.

Thank you so much.

Kind regards,

Melissa Fiel

Claire Eccleston <claire.eccleston@utas.edu.au>

13 Oct
2020, 04:30

to me

Dear Melissa,

Thank you for your interest in the DKAS tool.

Please find attached the scale and scoring information as well as four publications about its development and validation. I am very happy for you to use the scale for your studies.

All the best with your thesis.

Kind regards,

Claire Eccleston

Dr Claire Eccleston | Lecturer, Course Coordinator (Bachelor and Diploma of Dementia Care)
Wicking Dementia Research & Education Centre
College of Health and Medicine | University of Tasmania | Private Bag 143, HOBART TAS 7001

t: +61 3 6226 4775 | e: claire.eccleston@utas.edu.au

Visiting address: Room 422e, Medical Science Building 1, Level 4, 17 Liverpool Street, Hobart

University of Tasmania Electronic Communications Policy (December, 2014).

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DAS



Melissa Fiel <missmelfiel@gmail.com>
to mcfadden ▾

Sat, 10 Oct 2020, 18:14 ☆ ☺ ↶ ⋮

Dear Susan,

My name is Melissa Fiel. I am a registered nurse working in England and currently completing my Masters of Arts in Nursing at the University of the Philippines Open University. I am looking into studying the knowledge and attitudes of Filipino nurses about dementia for my thesis. Saying that, I would like to kindly request for an access/ permission to use the Dementia Attitudes Scale (DAS).

Hoping for your assistance in the matter.

Thank you so much.

Kind regards,



McFadden, Susan <mcfadden@uwosh.edu>
to me ▾

Sat, 10 Oct 2020, 22:14 ☆ ☺ ↶ ⋮

Dear Melissa: Thank you for your request to use the DAS. You have my permission and I wish you well with your research. Be sure to note the reverse scored items and the fact that there's a typo in the original article labeling the tables (should be Study 2 and Study 3 in the second part). I have attached a more recent paper about the DAS that might be helpful to you. All the best, Susan

Melissa Fiel <missmelfiel@gmail.com>

Sat, 10 Oct
2020, 18:14

to mcfadden

Dear Susan,

My name is Melissa Fiel. I am a registered nurse working in England and currently completing my Masters of Arts in Nursing at the University of the Philippines Open University. I am looking into studying the knowledge and attitudes of Filipino nurses about dementia for my thesis. Saying that, I would like to kindly request for an access/ permission to use the Dementia Attitudes Scale (DAS).

Hoping for your assistance in the matter.

Thank you so much.

Kind regards,

McFadden, Susan <mcfadden@uwosh.edu>

Sat, 10 Oct
2020, 22:14

to me

Dear Melissa: Thank you for your request to use the DAS. You have my permission and I wish you well with your research. Be sure to note the reverse scored items and the fact that there's a typo in the original article labeling the tables (should be Study 2 and Study 3 in the second part). I have attached a more recent paper about the DAS that might be helpful to you. All the best, Susan

SCIDS



Melissa Fiel <missmelfiel@gmail.com>
to a.k.schepers ▾

Wed, 1 Dec 2021, 13:06 ☆ 😊 ↩ ⋮

Dear Dr. Schepers,

Greetings!

My name is Melissa Fiel. I am a registered nurse working in Surrey, England and currently completing my Masters of Arts in Nursing at the University of the Philippines Open University. I am looking into studying the competence of Filipino nurses in dementia care for my thesis. Saying that, I would like to kindly request for an access/ permission to use the Sense of Competence in Dementia Care Staff (SCIDS) scale.

Hoping for your assistance in the matter.

Thank you so much.

Kind regards,

Melissa Fiel



a.k.schepers@web.de
to me ▾

Wed, 1 Dec 2021, 17:44 ☆

Hi Melissa,

Please go ahead and use the scale.

Good luck with your research!

Best wishes,

Astrid

Dr Astrid Schepers
Clinical Psychologist

Sent using the mobile mail app

Melissa Fiel <missmelfiel@gmail.com>

Wed, 1 Dec
2021, 13:06

to a.k.schepers

Dear Dr. Schepers,

Greetings!

My name is Melissa Fiel. I am a registered nurse working in Surrey, England and currently completing my Masters of Arts in Nursing at the University of the Philippines Open University. I am looking into studying the competence of Filipino nurses in dementia care for my thesis. Saying that, I would like to kindly request for an access/ permission to use the Sense of Competence in Dementia Care Staff (SCIDS) scale.

Hoping for your assistance in the matter.
Thank you so much.

Kind regards,

Melissa Fiel

a.k.schepers@web.de

Wed, 1 Dec
2021, 17:44

to me
Hi Melissa,
Please go ahead and use the scale.
Good luck with your research!

Best wishes,

Astrid
Dr Astrid Schepers
Clinical Psychologist

Sent using the mobile mail app

Appendix B

Participant Information Sheet

PARTICIPANT INFORMATION SHEET

This participant information sheet is made for nurses selected to participate in the research study entitled, "Knowledge, attitudes, and self-efficacy in dementia care among nurses in selected health institutions in Luzon."

Title of Project: N300 – Thesis (in partial fulfilment of the requirements for the degree Master of Arts in Nursing)

Principal Investigator: Melissa Margret Fiel

Name of Organization: University of the Philippines – Open University, Faculty of Management and Development Studies

Attached to this information sheet are the following:

1. Dementia Knowledge Assessment Scale
2. Dementia Attitudes Scale
3. Sense of Competence in Dementia Care Scale

Please be reminded that in answering these surveys, you are confirming that you have taken cared of a patient above 60 years of age (with or without dementia) in the last 6 months.

Hospital/ institution: _____

PERSONAL INFORMATION:

Age (Please tick ✓)

- ☐ 26 years and below
☐ 27 to 42
☐ 43 to 58
☐ 59 and above

Length of nursing experience (please tick ✓):

- ☐ 2-5 years
☐ 6-10 years
☐ More than 10 years

Have you had any post-graduate geriatric (elderly) care training? (Please tick ✓)

- ☐ YES – please specify: _____
☐ NO

Kindly proceed to answering the rest of the survey questionnaires. Thank you.

Appendix C: DKAS, DAS, and SCIDS

DEMENTIA KNOWLEDGE ASSESSMENT SCALE

Below are some statements about dementia. The statements are about the most common forms of dementia (those that occur most frequently). Please read each statement and tick (✓) the appropriate box to indicate how true or false you believe each statement to be. Please answer each question to the best of your knowledge.

If you do not know how to respond to a statement, please show us that you don't know by ticking (✓) the box on the right of the page.

Please DO NOT refer to any printed, online, or other information about dementia while you are undertaking the scale.

Statements about dementia		Response scale (please tick one box ✓)				I don't know
		False	Probably false	Probably true	True	
1	Dementia is a normal part of the ageing process.					
2	Alzheimer's disease is the most common form of dementia.					
3	People can recover from the most common forms of dementia.					
4	Dementia does not result from physical changes in the brain.					
5	Planning for end of life care is generally not necessary following a diagnosis of dementia.					
6	Blood vessel disease (vascular dementia) is the most common form of dementia.					
7	Most forms of dementia do not generally shorten a person's life.					
8	Having high blood pressure increases a person's risk of developing dementia.					
9	Maintaining a healthy lifestyle does not reduce the risk of developing the most common forms of dementia.					
10	Symptoms of depression can be mistaken for symptoms of dementia.					
11	Exercise is generally beneficial for people experiencing dementia.					
12	Early diagnosis of dementia does not generally improve quality of life for people experiencing the condition.					

1 3	The sudden onset of cognitive problems is characteristic of common forms of dementia.					
1 4	It is impossible to communicate with a person who has advanced dementia.					
1 5	A person experiencing advanced dementia will not generally respond to changes in their physical environment.					
1 6	It is important to correct a person with dementia when they are confused.					
1 7	People experiencing advanced dementia often communicate through body language.					
1 8	Uncharacteristic behaviours in a person experiencing dementia are generally a response to unmet needs.					
1 9	Medications are the most effective way of treating behavioural symptoms of dementia.					
2 0	People experiencing dementia do not generally have problems making decisions.					
2 1	Movement is generally affected in the later stages of dementia.					
2 2	People with advanced dementia may have difficulty speaking.					
2 3	People experiencing dementia often have difficulty learning new skills.					
2 4	Difficulty eating and drinking generally occurs in the later stages of dementia.					
2 5	Daily care for a person with advanced dementia is effective when it focuses on providing comfort.					

Thank you for completing the Dementia Knowledge Assessment Scale (DKAS).

Annear, M., Toye, C., Elliot, K., McInerney, F., Eccleston, C., & Robinson, A. (2017). Dementia knowledge assessment scale (DKAS): confirmatory factor analysis and comparative subscale scores among an international cohort. *BMC Geriatrics*, 17(168), 1-11. <https://doi.org/10.01186/s12877-017-0552-y>

DEMENTIA ATTITUDES SCALE

Please rate each statement according to how much you agree or disagree with it. Circle 1, 2, 3, 4, 5, 6, or 7 according to how you feel in each case. *Please be honest. There are no right or wrong answers.* The acronym “ADRD” in each question stands for “Alzheimer’s disease and related dementias.”

Statements	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
1. It is rewarding to work with people who have ARD.	1	2	3	4	5	6	7
2. I am afraid of people with ARD.	1	2	3	4	5	6	7
3. People with ARD can be creative.	1	2	3	4	5	6	7
4. I feel confident around people with ARD	1	2	3	4	5	6	7
5. I am comfortable touching people with ARD.	1	2	3	4	5	6	7
6. I feel uncomfortable being around people with ARD.	1	2	3	4	5	6	7
7. Every person with ARD has different needs	1	2	3	4	5	6	7
8. I am not very familiar with ARD.	1	2	3	4	5	6	7
9. I would avoid an agitated person with ARD.	1	2	3	4	5	6	7
10. People with ARD like having familiar things nearby.	1	2	3	4	5	6	7
11. It is important to know the past history of people with ARD.	1	2	3	4	5	6	7
12. It is possible to enjoy interacting with people with ARD.	1	2	3	4	5	6	7
13. I feel relaxed around people with ARD.	1	2	3	4	5	6	7
14. People with ARD can enjoy life.	1	2	3	4	5	6	7
15. People with ARD can feel when others are kind to them.	1	2	3	4	5	6	7
16. I feel frustrated because I do not know how to help people with ARD.	1	2	3	4	5	6	7

Statements	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
17. I cannot imagine taking care of someone with ADRD.	1	2	3	4	5	6	7
18. I admire the coping skills of people with ADRD.	1	2	3	4	5	6	7
19. We can do a lot now to improve the lives of people with ADRD.	1	2	3	4	5	6	7
20. Difficult behaviors may be a form of communication for people with ADRD.	1	2	3	4	5	6	7

Thank you for completing the DAS.

O'Connor, M. & McFadden, S. (2010). Development and psychometric validation of the dementia attitudes scale. *International Journal of Alzheimer's Disease*, 2010, 1-10.
<https://doi.org/10.4061/2010/454218>

SENSE OF COMPETENCE IN DEMENTIA CARE STAFF (SCIDS) SCALE

Working with people with dementia is complex. It takes a lot of skill and ability. Staff need to be well supported in their work. The questions below try to find out how you feel about the things you might do in your work and where you might need more support. Please read each question and tick (✓) the appropriate box to indicate your response.

How well do you feel you can...	Not at all	A little bit	Quite a lot	Very much
1. Understand the feelings of a person with dementia?				
2. Understand the way a person with dementia interacts with the people and things around them?				
3. Engage a person with dementia in a conversation?				
4. Balance the needs of the person with dementia with their relative's wishes and the service's limitations?				
5. Use information about their past (such as what they used to do and their interests), when talking to a person with dementia?				
6. Change your work to match the changing needs of a person with dementia?				
7. Keep up a positive attitude towards the people you care for?				
8. Keep up a positive attitude towards the relatives of a person with dementia?				
9. Keep yourself motivated during a working day?				
10. Play an active role in your staff team?				
11. Protect the dignity of a person with dementia in your work?				
12. Deal with personal care, such as incontinence in a person with dementia?				
13. Deal with behavior that challenges in a person with dementia?				
14. Decide what to do about risk (such as harm to self or others) in a person with dementia?				
15. Offer stimulation (for the mind, the senses and the body) to a person with dementia in your daily work?				
16. Offer choice to a person with dementia in everyday care (such as what to wear, or what to do)?				
17. Engage a person with dementia in creative activities during your normal working day?				

Thank you for completing the SCIDS.

Schepers, A., Orrell, M., Shanahan, N. & Spector, A. (2012). Sense of competence in dementia care staff (SCIDS) scale: development, reliability and validity. *International Psychogeriatric Association*, 24 (7), 1153-1162.
<https://doi.org/10.1017/S104161021100247X>

Appendix D

QR Code and invitation to participate for CSMC



Participate in our study!

ELDERLY PATIENTS AND DEMENTIA CARE

KNOWLEDGE, ATTITUDES, AND SELF-EFFICACY IN
DEMENTIA CARE AMONG NURSES IN SELECTED
HEALTH INSTITUTIONS IN LUZON



Scan the QR!

For any questions or clarifications, please contact:
Ms Mel Fiel, RN at mgfiell@upou.edu.ph
Joy Gillera at 09989851206/Viber

Appendix E

Informed Consent Form



UNIVERSITY OF THE PHILIPPINES – OPEN UNIVERSITY

Informed Consent Form for Registered Nurses

This informed consent form is made for nurses selected to participate in the research entitled, “Knowledge, attitudes, and self-efficacy in dementia care among nurses in selected health institutions in Luzon.”

Principal Investigator: Melissa Margret Fiel

Name of Organization: University of the Philippines – Open University

Title of Project: N300 – Thesis (in partial fulfilment of the requirements for the degree Master of Arts in Nursing)

PART I: Information Sheet

Introduction

I, Melissa Margret Fiel, am a Master of Arts in Nursing student at the University of the Philippines – Open University. I am kindly inviting you to participate in my study about dementia care in the Philippine hospitals. The study aims to determine the correlation of nurses’ knowledge and attitudes to self-efficacy in dementia care. Please take time to reflect whether you would like to participate or not. If you find it difficult to understand certain words or concepts, feel free to ask for clarification any time.

Purpose of the research

The study would help me understand the knowledge and attitudes of Filipino nurses towards dementia. It also aims to measure the self-efficacy of nurses in dementia care. The expected rise of people with dementia in the Philippines will place a huge demand on our healthcare workforce. There is a paucity of research on dementia in the country. Findings of the study can be used to strengthen the push for a national plan for dementia and to create strategies that are context specific. Ultimately, the investigator would like to help improve the nursing care for people with dementia in hospital settings. The study would be beneficial to gather baseline data.

Participant selection

You have been chosen to participate in this research because your ward/area of practice caters to patients over 60 years old who may or may not have dementia. Selected level 2 and/or 3 public and private hospitals in Luzon were considered.

The following are inclusion criteria for the research study:

- a. Nurses with a current and valid Professional Regulation Commission (PRC) license
- b. With at least 2 years of nursing experience
- c. Who have taken care of an elderly patient (with or without dementia) in the last 6 months
- d. Working in acute medical/ surgical wards catering to patients above 60 years of age

The following are exclusion criteria for the research study:

- a. Nurses who have previously worked abroad
- b. Nurses working in specialist areas that do not cater to patient above 60 years of age
- c. Nurses who have worked in long-term institutions or care homes for the elderly

Voluntary participation

Please note that your participation in the study is completely voluntary and you may choose to withdraw anytime regardless of your reason. Non-participation and/or withdrawal from the study will not affect your rights and should not have any bearing on your performance review and/or evaluation. There is no intervention involved in the study. The study will adopt a descriptive-correlational quantitative design. You will only be asked to answer survey questionnaires at one point in time.

Procedures

After signing for consent to participate in the study, a participant information sheet will be given to collect your demographic information. The study will then require you to answer three questionnaire surveys which will be given at the same time. Care has been taken to ensure that statements and/or questions in the surveys are sensitive and non-derogatory towards people with dementia. Participant name/s will not be included in the forms and only the investigator will have access to the data collected. The questions or statements will require you to answer in Likert type response scales. You may change your answers any time before submitting the questionnaires if you need to.

Duration

You will only be required to answer the questionnaires during one point in time. The estimated time to complete all three questionnaires is 20 minutes. You are allowed to ask questions in relation to the study at any time before, during and after data collection. There is no follow-up required from the investigator after your participation.

Benefits

You will not be compensated for participating in the study. However, the results of the study will be useful in understanding the variables mentioned above and in expanding this area of research which is currently understudied in the Philippines.

Confidentiality

The investigator will work to ensure that confidentiality will be maintained throughout the duration of the study. You will not be asked to write your name in the participant information sheet and any of the questionnaires. The investigator will be the only one who can access the information using a password protected software. To support with data analysis, the researcher may share data or information with a statistician and/or her thesis adviser who will also ensure confidentiality.

Sharing the results

After the research study has been conducted and following successful completion of the thesis project, UPOU will be given the right to share and/or disseminate the results. The investigator may also pursue an application for publication following successful completion of the project.

Right to refuse or withdraw

You may refuse to participate and/or withdraw at any time during data collection. This would not affect your job performance review and/or evaluation. The investigator will be present throughout data collection should you wish to speak to her in relation to this. Please do not hesitate to say if you feel unsure, uncomfortable, or unable to continue participating.

Data management

The data will be kept in a password protected software and will be kept only for as long as necessary. Data might also need to be shared digitally with a statistician and/or thesis adviser/s due to certain physical limitations and restrictions. Secure institutional and/or academic emails will be used, and a record of data sharing will be kept.

Who to contact

You can contact the investigator via email at mgfiel1@upou.edu.ph for any questions and/or concerns relating to your participation in the study.

Part II: Certificate of Consent

I have been invited to participate in the research study entitled “Knowledge, attitudes, and self-efficacy in dementia care among nurses in selected health institutions in Luzon.” I have read the foregoing information and was given the opportunity to ask any question/s. The answers to the said questions have been satisfactory. I voluntarily consent to be a participant in the study.

Printed name of participant: _____

Signature of participant: _____

Date (mm/dd/yyyy): _____

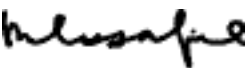
Statement by the researcher or person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

1. That they will be given an opportunity to ask questions about the study
2. That I will ensure questions are answered correctly and to the best of my ability
3. That they will not be coerced into giving consent, and their consent has been given freely and voluntarily.

A copy of this informed consent has been provided to the participant.

Name of investigator: Melissa Margret Fiel

Signature of investigator: 

Date:

Appendix F

Letter of Approval from JRRMMC



Republic of the Philippines
Department of Health
JOSE R. REYES MEMORIAL MEDICAL CENTER
INSTITUTIONAL REVIEW BOARD

PHREB Accreditation No.: L3-2022-025-02 and FERCAP PH-37 Recognized 2021
5th Floor, IRB Room, Main Bldg., Rizal Avenue, Sta. Cruz, Manila 1003
☎ 7321071-76 loc. 296 <http://www.jrrmmc.org> irb@jrrmmc.gov.ph



September 4, 2024

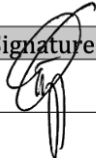
This is to certify that the following protocol and related documents have been approved by the Jose R. Reyes Memorial Medical Center IRB for implementation.

IRB Protocol No.	2024-028	Sponsor Protocol No.	N/A
Principal Investigator/s	MELISSA MARGARET FIEL	Sponsor	
Title	Knowledge, attitudes, and self-efficacy in dementia care among nurses in selected health institutions in Luzon		
Protocol Version No.	1	Version Date	July 4, 2024
ICF Version No.	1	Version Date	July 4, 2024
Other Documents	• Summary of Revision Form dated July 4, 2024 • Revised Protocol		
Type of Review	☐ Expedited ☒ Full board Approval date: August 21, 2024	Duration of Approval: August 21, 2024 August 20, 2025	Frequency of Continuing Review: Once a year

Investigator Responsibilities after Approval:

- Submit document amendments for IRB approval before implementing them.
- Submit the SAE and SUSAR reports to the IRB within 7 days.
- Submit the progress report every 12 months.
- Submit the final report after completion of protocol procedures at the study site.
- Report protocol deviation/violation.
- Comply with all relevant international and national guidelines and regulations.
- Abide by the principles of good clinical practice and ethical research.
- This approval is valid for a period of one year from the date of issue. Therefore, the PI must re-apply for a continuing ethics review.

*The Jose R. Reyes Memorial Medical Center Institutional Review Board is organized and operates according to the **Good Clinical Practice** and all applicable laws and regulations.*

IRB Chairperson	Signature	Date
MICHELLE Y. OTAYCO, MD, FPCP, FPSN, MMHoA		09/04/2024

Received by:

Name & Signature: _____

Date: _____

Appendix G

Letter of Approval from CSMC



CSMC RERC FORM 2H.2

CERTIFICATE OF APPROVAL INVESTIGATOR-INITIATED RESEARCH

Page 1 of 2

DATE 20 February 2025	
This is to certify that the following and related documents have been granted approval by the Cardinal Santos Medical Center – Research Ethics Review Committee for implementation.	
CSMC RERC CODE 2024-065	CSMC RC CODE CRC TM 2024-02
NAME OF RESEARCHER MELISSA MARGRET G. FIEL, RN	DEPARTMENT/ INSTITUTE Master of Arts in Nursing, University of the Philippines, Open University
CONSULTANT ADVISER (IF APPLICABLE), CO-INVESTIGATORS Nursing Research Coordinators: Kathreen Alexis Ferrer, RN and Julius Flores, RN Clinical Nurse Educators: Ma. Kristinielle Erish Q. Alviz, RN Kathreen Alexis C. Ferrer, RN Reilly Marzall E. Macairan, RN Mary Jane Penaroyo, RN Gian Carlo T. Tumanon, RN Harold Dame Zapata, RN Research Assistant: Joy Marie Gillera Statistician: Sofia Jean Carpio	
PROTOCOL TITLE Knowledge, Attitudes, and Self-efficacy in Dementia Care Among Nurses in Two Health Institutions in Metro Manila	
PROTOCOL VERSION NUMBER & VERSION DATE Study Protocol dated 17 January 2025	
INFORMED CONSENT FORM VERSION NUMBER & VERSION DATE Informed Consent Form for Registered Nurses	
OTHER DOCUMENTS Accomplished Declaration of Authorization for Non- CSMC Investigator Form Accomplished Agreement for Non-CSMC Investigator Form Survey Questionnaire and Patient Information Sheet Letter of Permission to Conduct Research to the CSMC Nursing Division Officer-in-Charge Letter of Endorsement from the CSMC Nursing Division, Nursing Research and Informatics Technical Review Certificate issued by CSMC Research Center dated 01 October 2024 Thesis Approval Sheet from the UP Open University Faculty of Management and Development Studies CV and Good Clinical Practice Certificate of the Principal Investigator- Melissa Margret G. Fiel, RN CV and Good Clinical Practice Certificates the following: Nursing Research Coordinators: Kathreen Alexis Ferrer, RN and Julius Flores, RN Clinical Nurse Educators: Ma. Kristinielle Erish Q. Alviz, RN Kathreen Alexis C. Ferrer, RN Reilly Marzall E. Macairan, RN Mary Jane Penaroyo, RN Gian Carlo T. Tumanon, RN Harold Dame Zapata, RN Research Assistant: Joy Marie Gillera Statistician: Sofia Jean Carpio	

TYPE OF REVIEW	DATE OF APPROVAL	VALIDITY
☐ Expedited ☒ Full Board	19 February 2025	19 February 2026
The following RERC membership composition who reviewed your initial protocol at the 13 November 2024 board meeting.		
RERC MEMBER	POSITION	SPECIALTY
Pura R. Caisip, MD	Chair	Obstetrics and Gynecology
Anita Matilda Poblete, MD	Vice-Chair	Obstetrics and Gynecology
Patricia Mely Khu, MD	Member-Secretary	Ophthalmology
Philip U. Chua, MD	Member	IM-Cardiology
Maria Cynthia R. Duño, MD	Member	Pediatrics
Nimfa Baria, MD	Member	Anesthesiology
Dionisio Pelayo	Lay Member	Journalism
Jose Co Jaymalin II	Lay Member	Public Health
As Principal Investigator, you are expected to comply with the following requirements and responsibilities to the Research Ethics Review Committee during the conduct of your study in the center. 1. Submit protocol amendments for approval before implementation. (Use CSMCRERC Form 3A and 3B) 2. A final study report upon completion of your research. (Use CSMCRERC Form 3I) 3. Submit study related notifications. Note: You may access all post-approval forms through this link: POST-APPROVAL FORMS Furthermore, we would like to inform you that the Research Ethics Review Committee of Cardinal Santos Medical Center was organized and operates according to the laws and regulations of ICH-GCP.		
 PURA R. CAISIP, M.D. Chair, Research Ethics Review Committee		DATE SIGNED: 20 February 2025

02 April 2025

MELISSA MARGRET FIEL, RN
Principal Investigator

CSMC RERC CODE	2024-065
PROTOCOL TITLE	Knowledge, Attitudes, and Self-efficacy in Dementia Care among Nurses in Selected Health Institutions in Luzon

Dear Ms. Fiel:

We are pleased to inform you that the CSMC Research Ethics Review Committee has granted **APPROVAL** of the proposed amendments in your study during its board meeting **26 March 2025**. The following documents have been approved for the use in the conduct of your study.

1. **Study Protocol Chapters 1 – 3 Version 4**
2. **Original Research Protocol Form dated 17 January 2024**
3. **Informed Consent Form for Registered Nurses Version 2**

Please be reminded also that the board will require you to submit the following during the duration of your research.

1. A progress report and continuing review application of your research at least on an annual basis, at least one (1) month prior to annual renewal of approval. Progress report and continuing review application should be submitted on or before **19 January 2026**.
2. A final study status report upon completion of your research.

Furthermore, we would like to inform you that the Research Ethics Review Committee of Cardinal Santos Medical Center, composed of six (6) physicians and two (2) non-institutional and non-medical members, was organized and operates according to the laws and regulations of ICH-GCP.

Sincerely yours,



PURA R. CAISIP, MD, MPH
Chair, CSMC Research Ethics Review Committee

Office of CSMC Research Ethics Review Committee, 3rd Floor, Medical Arts Building (MAB) 1
10 Wilson St. Greenhills West San Juan City Metro Manila Philippines 1502
Telephone: +632 727-0001 local 3799
Secretariat Email: csmcethicscommittee@csmc.ph

Appendix H

Curriculum Vitae



Melissa Margret Guillermo Fiel

1 Rushmoor Close, Guildford, Surrey GU2 9UP
mgfiel1@up.edu.ph/ missmelfiel@gmail.com /(+77) 7481461507

Professional Nursing Licenses

- Nursing and Midwifery Council, United Kingdom /NMC PIN: 16D0113O
- Professional Regulation Commission, Philippines /Registration number: 0704941

EDUCATION

Bachelor of Science in Nursing, Cum Laude
Far Eastern University
Dr. Nicanor Reyes Medical Foundation
July 2007 to April 2011

POSTGRADUATE COURSES

Leading Educational Design
University of Surrey
Level 7, 15 credits
February 2025 to June 2025

Art of Learning and Teaching
University of Surrey
Level 7, 15 credits
September 2024 to June 2025

Supporting Education in Practice
University of Surrey
Level 7, 15 credits
November 2019 to January 2020

Leading and Managing Long Term Conditions
University of Surrey
Level 7, 15 credits
October to December 2018

Developing Skills and Supporting Quality Dementia Care in the Acute Environment
University of Surrey Level 7, 15 credits
March to May 2018

Mentorship Module
University of Surrey
Level 7, 15 credits
March to May 2017

REFERENCES

Analene Galvo
Senior Sister, Eashing Ward
Royal Surrey County Hospital
agalvo@nhs.net

Sally Whitehouse
Learning Environment Lead
Practice Development Team
Royal Surrey County Hospital
sallywhitehouse@nhs.net

WORK HISTORY

Clinical Practice Facilitator
Practice Development Team
Royal Surrey County Hospital
United Kingdom
May 2023 to present

Junior Sister/ Charge Nurse
Eashing Ward – Older People's Unit
Royal Surrey County Hospital
June 2017 to May 2023

Staff Nurse
Eashing Ward – Older People's Unit
Royal Surrey County Hospital
April 2016 to June 2017

Staff Nurse
Medical and Surgical Ward
Capitol Medical Center
Quezon City, Philippines
September 2013 to January 2015

TRAININGS AND QUALIFICATIONS

Good Clinical Practice Certificate
NIDA Clinical Trials Network
October 2022 (*expiry October 2025*)

NMC Practice Supervisor and Practice Assessor
Supporting Learners in Practice Update
September 2022

Raising Awareness around Dementia and Delirium
Annual Conference – RSCH
September 2022

The Edward Jenner Leadership Programme
NHS Leadership Academy
June to December 2018

Preventing Dementia – Massive Online Open Course
University of Tasmania, Wicking Dementia Research and Education Centre
August 2016

Understanding Dementia – Massive Online Open Course
University of Tasmania, Wicking Dementia Research and Education Centre
November 2015

Orientation to UK Healthcare
University of Surrey
May to July 2015