2023

Integrating Palliative Care in the Cardiac Surgery ICU

Katherine Rodman
Walden University

Walden University

College of Nursing

This is to certify that the doctoral study by

Katherine K. Rodman

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Mary Catherine Garner, Committee Chairperson, Nursing Faculty
Dr. Camilla Jaekel, Committee Member, Nursing Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2023

Abstract

Integrating Palliative Care in the Cardiac Surgery ICU

by

Katherine K. Rodman

MS, Virginia Commonwealth University, 2008

BS, James Madison University, 2003

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

August 2023

Abstract

Over the last decade, patients who remain critically ill but in the chronic stage have become a subset of patients who often remain in the cardiac intensive care unit (CICU) for many months. Palliative care in the ICU has an important role and is well recognized by various studies to alleviate physical symptoms due to invasive treatments, to set patient-centered goals of care, and to provide end-of-life care. This acute care facility does not have guidelines for clinicians to use when introducing and managing palliative care for terminal heart failure patients during long term stays in the ICU. The clinical practice question is: Will an interprofessional team reach agreement on the guidelines for introducing and managing palliative care for terminally ill heart failure patients. The synergy model for patient care was the theoretical framework used to guide the literature review and first draft of the guideline. An interprofessional team used the modified delphi model to review and revise the guidelines. Once consensus was reached, the AGREE II tool demonstrated agreement in all seven domains. The clinical practice guideline empowers any member of the clinical team to initiate palliative care discussions and formally consult palliative care experts. Daily multidisciplinary rounds occur in this unit. If the patient meets the clinical criteria, the team can follow the algorithm in the guideline to support the involvement of palliative care providers. Empowering nurses to initiate this process allows the professional to practice to the extent of their education and experience. The introduction of a palliative care clinical practice guideline in the cardiac surgery ICU can improve the quality of life for patients and support family members in end-of-life care.

Integrating Palliative Care in the Cardiac Surgery ICU

by

Katherine K. Rodman

MS, Virginia Commonwealth University, 2008

BS, James Madison University, 2003

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

August 2023

Acknowledgments

I would like to thank Dr. Catherine Garner for her guidance, support, and wisdom in completing this project.

Table of Contents

List of Figures iii

Section 1: Nature of the Project 1

- Introduction 1
- Purpose 2
- Sources of Evidence 2
- Approach or Procedural Steps 6
- Significance 6
- Context for the Doctoral Project 8
- Alignment 8

Section 2: Background and Context 9

- Introduction 9
- Concepts, Models, and Theories 9
- Relevance to Nursing Practice 11
- Local Background and Context 14
- Role of the DNP Student 14
- Role of the Project Team 14
- Summary 15

Section 3: Collection and Analysis of Evidence 16

- Introduction 16
- Sources of Evidence 16
- Evidence Generated for the Doctoral Project 20

Protection of Human Subject........21

Summary........21

Section 4: Collection and Analysis of Evidence........22

Introduction........22

Findings and Implications........23

Recommendations........25

Strengths and Limitations of the Project........29

Section 5: Dissemination Plan........30

Analysis of Self........30

Summary........33

References........34

List of Figures

Figure 1. Domain Results 27

Section 1: Nature of the Project

Introduction

Managing the end-of-life (EOL) journey with critically ill-patients can be a complex process. In the field of cardiothoracic surgery there are numerous heart devices that are used to treat patients with heart failure, which can further complicate the EOL process. In the last decade these devices have improved dramatically, which has allowed advanced heart failure patients to live longer lives with less symptoms, improving quality of life (McIlvennan et al., 2019). Over time, mechanical circulatory support (MCS) patients can develop complications that cause them to be admitted to the intensive care unit (ICU). Given these patients' complicated physiology, long-term sequelae can include injury to multiple organ systems and extended in hospital stays with limited disposition options. These patients often stay in the ICU for many weeks or months, navigating clinical improvements and setbacks (Pak et al., 2020). These experiences are physically and emotionally taxing on patients and families.

Over the last decade, patients who remain critically ill but in the chronic stage have become their own subset of patients and often remain in the ICU for many months (Mercandante et al, 2018). Palliative care in the ICU has an important role (Mercandante et al, 2018). This role "is well recognized by various studies to alleviate physical symptoms due to invasive treatments, to set patient-centered goals of care, and to provide end-of-life care" (Ito et al., 2022). This acute care facility does not have guidelines for clinicians to use when introducing and managing palliative care for terminal heart failure patients during long term stays in the ICU. This gap in practice illustrates the need for using evidence-based literature to offer this transition program to improve the quality of life for this population and to provide support for family members and caregivers during this difficult period. The COVID-19 pandemic highlighted the importance of nurse involvement in the palliative care process in the ICU. According to Rosa et al. (2020) "there has never been a greater need to integrate palliative care into the ICU setting." Nurses in the cardiac surgery ICU are poised to advocate for complex patients by approaching each patient holistically and providing patient-centered care (Rosa et al., 2020). A formal evidence-based integrated palliative care program can empower the CSICU nurses to advocate for patients while serving as integral members of the multidisciplinary team.

Purpose

This acute care facility does not have guidelines for clinicians to use when introducing and managing palliative care for terminal heart failure patients during long term stays in the ICU. The practice-focused question for this project was: will an interprofessional team reach agreement on the guidelines for introducing and managing palliative care for terminally ill heart failure patients in the ICU at this acute care hospital? The introduction of palliative care in the cardiac surgery ICU has the potential to improve the quality of life for patients and support family members in end-of-life care (McIlvennan et al., 2019).

Sources of Evidence

One of the many goals of healthcare providers is to improve the quality of life for all patients. While quality is relative to each individual patient, it remains a core principle in patient care delivery. In reviewing literature on this topic, there is evidence that the quality of life in the heart failure patient with a left ventricular assist device (LVAD) is greatly impacted after the device is implanted, and there is a significant impact to their physical, emotional, and psychological being (Adams & Wrightson, 2018). Moreover, the literature supports the need for improved psychosocial support when it comes to discussing goals of care and end-of-life issues in LVAD patients (McIlvennan et al., 2019). After reviewing over 4,000 MCS device patient death experiences from a national database over an 8-year period, McIlvennan et al. stated that over 75% of MCS device patients die in the hospital, most often in the ICU (2019). The same study showed that prior to implant patients did not wish to die in the hospital, but instead wished to die at home (McIlvennan et al., 2019).

While palliative care consultation prior to implant is required by the Center for Medicare and Medicaid services, continued palliative care involvement throughout device implant is not required and is rarely used until the end-of-life is imminent (Kitko et al., 2016). Adams and Wrightson (2018) showed that, due to the lack of ongoing palliative care involvement and goals of care discussions, when these patients reach the end-of life in the hospital, patients and their caregivers are often unprepared for discussions regarding end-of-life. Overwhelmingly, Adams and Wrightson (2018) showed that there is a need for improved communication regarding the end-of-life between patients, their caregivers, and the healthcare team that is caring for them. (Adams & Wrightson, 2018)

Heart failure and MCS patients must have a strong caregiver support system in place to be successful. In a recent qualitative study performed by Johns Hopkins, the importance of "dyadic congruence" regarding end-of-life in LVAD patients was highlighted (DeGroot et al., 2021). The results showed feelings of uncertainty about dying among the patients and their caregivers, and both "found it difficult to have in-depth end-of-life conversations" (DeGroot al., 2021). The need for addressing this topic over the long-term with both members of the dyad was evident (DeGroot et al., 2021).

The patient care team for MCS device patients includes a multidisciplinary team made up of physicians specializing in cardiac surgery, cardiology and palliative care, nurse practitioners, nurses, social workers, pharmacists, psychologists, and physical therapy. The reviewed literature showed that most of the health care team, especially members of the ICU team, feel unprepared to have end-of-life discussions with complex MCS patients (Pandey et al., 2021). Pandey et al. also stated "the complexity of end-of-life care for the LVAD-implanted patient has led to strong support for the involvement of palliative care specialists" (2021). Using a retrospective study to review LVAD patients at one large academic institution, Pandey et al. were able to identify a lack of palliative care and hospice services used by the health care team (2021).

For various reasons health care providers caring for MCS patients often avoid the topic of death until it is imminent. Providers taking care of LVAD patients "must do a better job educating their patients about end-of-life" (Thompson & Moser, 2020). Thompson and Moser document a clear disconnect between patients and their providers when it comes to EOL (2020). In these cases, palliative care specialists can be helpful.

The most common reason behind the health care team not using palliative and hospice services was the perception that those teams did not have the right resources in place to manage the complex patients (Wordingham et al., 2017). Furthermore, Wordingham et al. found that when palliative care teams were asked to be involved in care of the MCS patient, it was often later during the hospitalization and EOL process, which created a challenge when developing a trusting relationship with patients and caregivers (2017). Palliative care involvement pre and post implant allows continued rapport to be built between the palliative care provider and the patient (Wordingham et al., 2017). Palliative care teams also have expertise in communication strategies that help facilitate difficult discussions regarding end-of-life and goals of care (Wordingham et al., 2017).

Given the acuity of illness and the complexity of the patients, working in the intensive care unit is challenging for health care providers. ICU nurses often spend more time with their patients than any other healthcare team member. Because ICU nurses are consistently present with their patients, the nurse often may have to facilitate conversations around the topic of death. Riegel et al. (2021) described the experience of ICU team members managing end-of-life and the variances between nurses' experience and other provider experiences. Nurses and team members expressed their need for further emotional and psychological support when managing end-of-life experiences with patients (Riegel et al., 2021). While this study was performed by using a survey given to a self-selected group of ICU providers in a single ICU, the results can likely be considered for other ICUs as well (Riegel et al., 2021).

Approach or Procedural Steps

In this project, I followed the Walden Guidelines for Clinical Guidelines. The intended setting for the project was a 14-bed cardiac surgery ICU at an urban, academic, tertiary care hospital. This is a collaborative academic environment that supports quality improvement projects. I identified the role of each multidisciplinary team member and what their daily responsibilities are. I created a draft practice guideline that best represents the data obtained. I placed this document in a Google to allow simultaneous review and comments by all invited team members, including the CSICU nurse practitioners, the nurse clinician, the intensivist director of the ICU, the palliative care nurse practitioner, social work, VAD coordinators, and care coordination. I used the Rand Corporation modified Delphi model, in which three to four rounds of review result in an acceptable guideline (Rand Corporation, 2001). I then asked the team to score the guideline using the AGREE II tool (Brouwers et al., 2010). Once consensus was reached, the team forwarded the document to the appropriate leadership committees for approval to implement this program.

Significance

Patients suffering from chronic critical illness are affected physically, emotionally, and psychologically. In the ICU setting, the focus is largely on the physical needs of the patient instead of a holistic approach to care. In a recent study, Shen and Wellman (2019) found that palliative and hospice care have a stigma associated with them which “may be a barrier to utilization” (Shen & Wellman, 2019, p. 375). The positive social impacts of this study include improving end-of-life care in heart failure patients in the ICU while also destigmatizing palliative and hospice care. Patients and families will benefit from this project as well as the nurses and healthcare provider teams that are caring for these patients.

The key stakeholders that will be impacted by the implementation of a palliative care program in the CSICU are the patients, families, nurses, and other members of the healthcare team. I used the synergy model for patient care, developed by the American Association of Critical Care Nurses (AACN) in the 1990s, to guide this project. As stated by Melanie McEwan in *Theoretical Basis for Nursing*, “the purpose of the Synergy Model is to articulate nurses’ contributions, activities, and outcomes with regard to caring for critically ill patients” (2019). Synergy is driven by the concept that positive outcomes are achieved by a complementary relationship between the needs of the patients and the competencies of the nurse (Becker et al., 2006; Smith, 2006). It is with this assumption within the Synergy Model that a process can be developed to improve the end-of-life care of the complicated ICU mechanical circulatory support patient. Approaching the patient in a more holistic manner with consistent family involvement and organized multidisciplinary family meetings, is an example of the synergy model applied to practice (Pandey et al., 2021; Wordingham et al., 2017).

Palliative care programs have been adapted into various ICU settings and patient populations and this palliative care project could also be translated into other inpatient environments. After creating a multidisciplinary end-of-life team in a burn ICU at an academic tertiary care center, Wessman et. al. (2017) created communication tools for providers to navigate difficult discussions with patients and their families, and pamphlets for the families to understand the EOL process . Furthermore, education sessions that included role-play and simulation were held for nurses, physician, and ancillary staff to enhance end-of-life care knowledge (Wessman et al., 2017). After implementing these interventions, it was evident that there were benefits. These benefits included those noted by Wessman et al. (2017): "improving caregivers' perceptions regarding EOL/GOC issues, lowering self-perceived work stress, and fostering critical care team growth."

Context for the Doctoral Project

I protected human subjects in this project by not including identifiable information of the institution, location of the project, or any demographic information. I did not work clinically with patients or include patient subjects. Given the complexity of this population of patients, there are ethical challenges that surround end-of-life care. By creating a clinician guideline that all team members support, the ethical issues could be improved (Pak et al., 2020).

Alignment

The literature I reviewed and the clinicians in the environment support the practice problem. This hospital ICU does not have guidelines for clinicians to use when introducing and managing palliative care for terminal heart failure patients during long term stays in the ICU. By creating a standardized practice guideline for palliative care integration in the cardiac surgery ICU for heart failure patients, the practice problem with be addressed and likely improved (McEwan & Wills, 2019, Chapter 11).

Section 2: Background and Context

Introduction

Integrating palliative care principles in the critical care setting has become more necessary as patients live longer after advanced medical therapies. Historically, the oncology population has been the focus of palliative care therapies however, critical care providers have identified a need for palliative care therapies in the ICU (Spoljar et al., 2020). While critical care nurses and clinical providers are frequently responsible for having end-of-life discussions with patients and families, palliative care specialists have training to address the needs and concerns of these complex patients.

This acute care facility does not have guidelines for clinicians to use when introducing and managing palliative care for terminal heart failure patients during long term stays in the ICU. The practice-focused question was: Will an interprofessional team reach agreement on the guidelines for introducing and managing palliative care for terminally-ill heart failure patients in the ICU at this acute care hospital? The introduction of palliative care in the cardiac surgery ICU has the potential to improve the quality of life for patients and support family members in end-of-life care (McIlvennan et al., 2019).

Concepts, Models, and Theories

The synergy model for patient care, developed by the American Association of Critical Care Nurses (AACN) in the 1990s, is a middle-range theoretical framework used to guide nurses in the acute and critical setting (McEwan & Wills, 2019, Chapter 11). As stated by McEwan (2019) in *Theoretical Basis for Nursing*, the purpose of the synergy model is used to articulate nurses' contributions, activities, and outcomes with regard to caring for critically-ill patients. The idea of synergy is driven by the concept that positive outcomes are achieved by a complementary relationship between the needs of the patients and the competencies of the nurse (Becker et al., 2006). The synergy model is based on five assumptions, the first of which is that each patient is a whole person: body, mind, and spirit (Smith, 2006). It is with this assumption within the synergy model that a process can be developed to improve the end-of-life care of the complicated ICU mechanical circulatory support patient. Approaching the patient in a more holistic manner, with consistent family involvement and organized multi-disciplinary family meetings, are examples of the synergy model applied to practice.

To translate the knowledge and new process to practice, I used the knowledge-to-action (KTA) model in this project. According to Field et al. (2014), the KTA model was created to “describe the process of moving knowledge into action” in order to help “deliver sustainable, evidence-based interventions” and improve quality of care. The KTA model is a logical approach to addressing the clinical practice issue of improving end-of-life care in complex critical care MCS patients. While the end-of-life research, often based in nursing theory, provides guidance for best practice in similar clinical situations, the multidisciplinary team often falls back to old familiar practices. The KTA model highlights the need to translate the newest evidence into practice so the multidisciplinary team can offer the highest quality care to the end-of-life for patients.

The peaceful end-of-life theory is a prescriptive middle-range nursing theory that aims to address the complexities of a terminally-ill patient by focusing on peaceful and meaningful living in the time that remains for the patients and their significant others

(Ruland & Moore, 1998). In the development of this theory, the assumption is made that all patients are individuals and the EOL process is a very personalized experience (Ruland & Moore, 1998). Given the complexity of ICU patients, it is beneficial that this theory allows for a unique and individualized approach to the EOL journey. This theory also supports a nurse-driven approach because nurses represent the first link in the triad multidisciplinary team, patient, and family (Zaccara et al., 2017). Application of this theory and the creation of a nurse-driven standard of care for EOL in critically-ill MCS patients, can result in a more holistic process for these complex patients.

Relevance to Nursing Practice

The International Association for Hospice and Palliative Care defines palliative care as the active holistic care of individuals across all ages with serious health-related suffering due to severe illness, and especially of those near the end-of-life" and it aims to improve the quality of life of patients, their families, and caregivers (Rosa et al., 2020). As healthcare providers with the closest contact with patients, nurses are key members of the palliative care process (Wantonoro et al., 2022). Many of the core principles of nursing are aligned with the principles and goals of palliative care. For this project, I reviewed 22 articles and narrowed them down to 16 articles to include in the literature review. The criteria for article inclusion included English-written and only full text peer reviewed articles. Of the 16 articles reviewed, there were five key articles that had the most information in creating the practice guideline.

McIlvennan et al. had the most robust study, reviewing over 18,000 LVAD implantations and over 4,000 MCS device patient death experiences from a national database over an 8-year period. The evidence showed that over 75% of MCS device patients die in the hospital, most often in the ICU (McIlvennan et al., 2019). The same study showed that prior to implant patients did not wish to die in the hospital, but instead wished to die at home (McIlvennan et al., 2019). Adams and Wrightson proposed the question of what quality of life is with an MCS device and the need for improved communication regarding end-of-life issues (2018). The evidence showed that due to the lack of ongoing palliative care involvement and goals of care discussions, patients and their caregivers are often unprepared for discussions regarding end-of-life (Adams & Wrightson, 2018).

While many studies highlighted the need for earlier palliative care intervention in the ICU, Sinha et al. created and trialed a protocol that integrated palliative care for heart failure patients in the ICU (2017). After the protocol was initiated, palliative care consults in the ICU increased to 96.6%, more than doubling the prior percentage. Furthermore, the protocol included a palliative care consult automatic trigger within the electronic medical record when patients met certain criteria (Sinha et al., 2017). Using a retrospective study to review left ventricular assist device (LVAD) patients at one large academic institution, Pandey et al. were able to identify a lack of palliative care and hospice services used by the health care team (2021). Moreover, the reviewed literature suggests that most of the health care team, especially members of the ICU team, feel unprepared to have end-of-life discussions with complex MCS patients (Pandey et al., 2021). When evaluating the need of a standardized process for palliative care involvement in the CSICU, the study by Riegal et al. describes the experience of ICU team members managing end-of-life and the variances between nurses' experience and other provider experiences (2021). While this study was performed by using a survey given to a self-selected group of ICU providers in a single ICU, the results can likely be considered for other ICUs as well (Riegel et al., 2021).

As the aging population continues to grow, the need for palliative care will grow as well. The COVID-19 pandemic has highlighted the value of nurses as frontline responders: combining skill, evidence-based practice, ethical integrity, technological savvy, endurance, and compassion, all while managing the most critically-ill patients (Rosa et al., 2020). The pandemic also brought the discussion of mental health wellness and moral distress for nurses to the forefront. ICU nurses and healthcare providers face moral challenges that can create increased stress and rates of burnout (Rosa et al., 2020). Collaboration between the multidisciplinary ICU team and palliative care specialists can improve quality of life of patients as they reach end-of-life as well as decrease stress of the healthcare providers managing these complex patients (McAndrew et al., 2021). With more palliative care focused education and training for ICU nurses, nurses could lead the change in palliative care implementation in critical care settings.

Nursing research surrounding palliative care has shown the positive effects of palliative care interventions and that implementing palliative care principles early can better address the physical, emotional and spiritual needs of patients (National Institute of Nursing Research [NINR], 2023). In 2010, the NINR published an extensive report reviewing palliative care practices and research over the previous 14 years. While the benefits of palliative care at the end-of-life were proven to be numerous, the results of the report also highlighted the need for more research on the topic (National Institute of Nursing Research [NINR], 2013). Medical, surgical, and pharmacological therapies have advanced tremendously over the last century so the role of palliative care has evolved from a specialty that focuses on symptom management surrounding imminent death, to a specialty that helps manage symptoms of long-term chronic diseases (NINR, 2023).

Local Background and Context

The setting for the project is a 14-bed cardiac surgery ICU at an urban, academic, tertiary care hospital. The project included a multidisciplinary team comprised of intensivists, cardiac surgeons, nurse practitioners, cardiologists, socials workers, nurses, and palliative care providers.

Role of the DNP Student

I will lead, guide, and organize this project and the project can be accomplished by identifying the role of each multidisciplinary team member and what the daily responsibilities are. I will critically review and synthesize the literature. I will use this to create a draft practice guideline that best represents the data obtained. I will lead the consensus process. I am a nurse practitioner in the cardiac surgery ICU and I do feel there is a need for more consistent involvement of palliative care services for the complex patients.

Role of the Project Team

Team volunteers will be recruited from this hospital. This project can be accomplished by identifying the role of each multidisciplinary team member and what the daily responsibilities are. I will create a draft practice guideline that best represents the data obtained. This document will be placed in a Google document to allow simultaneous review and comments by all invited team members which includes the CSICU nurse practitioners, the nurse clinician, the intensivist director of the ICU, the palliative care nurse practitioner, social work, VAD coordinators, and care coordination. This is where they each will contribute their individual expertise. Once there is agreement reached by using the modified Delphi model, the group will assess the guideline using the AGREE II instrument.

Summary

Palliative care needs in CSICU are numerous and often only managed near the time of imminent death. This ICU does not have guidelines for clinicians to use when introducing and managing palliative care for terminal heart failure patients during long term stays in the ICU. By creating a standardized practice guideline for palliative care integration in the cardiac surgery ICU for heart failure patients, the practice problem with be addressed and likely improved (McEwan & Wills, 2019, Chapter 11). The next section will define the project specifics, including collection of evidence, and analysis of the data.

Section 3: Collection and Analysis of Evidence

Introduction

Integrating palliative care principles in the critical care setting has become more necessary as patients live longer after advanced medical therapies. Historically, the oncology population has been the focus of palliative care therapies however, critical care providers have identified a need for palliative care therapies in the ICU (Spoljar et al., 2020). While critical care nurses and clinical providers are frequently responsible for having end-of-life discussions with patients and families, palliative care specialists have training to address the needs and concerns of these complex patients.

This acute care facility does not have guidelines for clinicians to use when introducing and managing palliative care for terminal heart failure patients during long term stays in the ICU. The practice-focused question for this project was: Will an interprofessional team reach agreement on the guidelines for introducing and managing palliative care for terminally-ill heart failure patients in the ICU at this acute care hospital? The introduction of palliative care in the cardiac surgery ICU has the potential to improve the quality of life for patients and support family members in end-of-life care (McIlvennan et al., 2019). In this section, I will review the sources of evidence, the consensus approach, and desired outcome.

Sources of Evidence

The literature search began by using Pubmed, CINAHL, Medline, and ScienceDirect in the online Walden University library. The initial search terms included *palliative care in ICU, palliative care and critical care*, and *palliative care protocol ICU.*

After starting with those search terms, I expanded the search to include "*palliative care heart failure", "palliative care mechanical circulatory support",* and *"palliative care cardiac ICU".* The exhaustive search began in summer 2021 and continued through spring 2023. As new articles and studies were published along the way, they were reviewed and evaluated for inclusion in the literature review and project.

The introduction and use of palliative care in cardiovascular intensive care units (ICU) began as a necessity in the 1990s, when more patients were dying while in the ICU (Ito et al., 2022). One of the many goals of healthcare providers is to improve the quality of life for all patients. While quality is relative to each individual patient, it remains a core principle in patient care delivery. In reviewing literature on this topic, there is evidence that the quality of life in the heart failure patient with heart failure and a left ventricular assist device (LVAD) is greatly impacted after the device is implanted, and there is a significant impact to their physical, emotional, and psychological being (Adams & Wrightson, 2018). Moreover, the literature supports the need for improved psychosocial support when it comes to discussing goals of care and end-of-life issues in LVAD patients (McIlvennan et al., 2019). After reviewing over 4,000 MCS device patient death experiences from a national database over an 8-year period, McIlvennan et al. (2019) offered evidence that over 75% of MCS device patients die in the hospital, most often in the ICU. The same study showed that prior to implant patients did not wish to die in the hospital, but instead wished to die at home (McIlvennan et al., 2019). Sinha et al. created and implemented "a collaborative protocol between the palliative care team and the VAD team to ensure a multidisciplinary approach and timely palliative care consultation" while the patients were in the ICU (2017). After the protocol was initiated, palliative care consults in the ICU increased to 96.6%, more than doubling the prior percentage. The protocol included a palliative care consult automatic trigger within the electronic medical record when patients met certain criteria (Sinha et al., 2017). Studies such as these further solidify the need for a palliative care integration process in the CSICU.

Heart failure and MCS patients must have a strong caregiver support system in place to be successful. In a recent qualitative study performed by Johns Hopkins, the importance of "dyadic congruence" regarding end-of-life in LVAD patients is highlighted (DeGroot et al., 2021). DeGroot et al. (2021) notes there is uncertainty about dying among the patients and their caregivers, stating that both "found it difficult to have in-depth end-of-life conversations. " The need for addressing this topic over the long-term with both members of the dyad was evident (DeGroot et al., 2021).

The patient care team for MCS device patients includes a multidisciplinary team made up of physicians specializing in cardiac surgery, cardiology and palliative care, nurse practitioners, nurses, social workers, pharmacists, psychologists, and physical therapy. The reviewed literature suggests that most of the health care team, especially members of the ICU team, feel unprepared to have end-of-life discussions with complex MCS patients (Pandey et al., 2021). Pandey et al. also states "the complexity of end-of-life care for the LVAD-implanted patient has led to strong support for the involvement of palliative care specialists" (2021). Using a retrospective study to review LVAD patients at one large academic institution, Pandey et al. were able to identify a lack of palliative care and hospice services used by the health care team (2021).

For various reasons, health care providers caring for MCS patients often avoid the topic of death until it is imminent. The most common reason behind the health care team not using palliative and hospice services was the perception that those teams did not have the right resources in place to manage the complex patients (Wordingham et al., 2017). Furthermore, Wordingham, et al. found that when palliative care teams were asked to be involved in care of the MCS patient, it was often later during the hospitalization and EOL process, which created a challenge when developing a trusting relationship with patients and caregivers (2019). Palliative care involvement pre- and post-implant allows continued rapport to be built between the palliative care provider and the patient (Wordingham et al., 2017). Palliative care teams also have expertise in communication strategies that facilitate difficult discussions regarding end-of-life and goals of care (Wordingham et al., 2017).

The literature review resulted in three key sources to develop the draft guideline for this project. The most current publication by Ito et al. reviews palliative care recommendations for the critical care environment (2022). The authors describe the benefits of implementing palliative care in the critical care setting for patients, families, and clinicians. Furthermore, unit and system-based interventions are discussed with a specific process for palliative care triggers in the ICU (Ito et al., 2022). A deeper look into ICU and palliative care (PC) integration is reviewed in a Canadian study performed by Kyeremanteng et al., where an ICU-PC model is used in end-of-life cases which proved to be helpful when navigating palliation in ICU patients (2020). This study includes specific data regarding ICU nurse involvement in the end-of-life process which was important information when creating the clinical guideline (Kyeremanteng et al., 2020). The last most influential source in creating the clinical guideline was published by Mercadante et al. and it reviews the benefits, challenges, and detailed process of creating guidelines for palliative care in the ICU (2018). Most importantly, the authors discuss the importance of an “integrative model,” which was a key part of this project clinical guideline (Mercadante, 2018).

Evidence Generated for the Doctoral Project

This project follows the Walden Guidelines for Clinical Guidelines. The intended setting for the project is a 14-bed cardiac surgery ICU at an urban, academic, tertiary care hospital. This is a collaborative academic environment that supports quality improvement projects. This project can be accomplished by identifying the role of each multidisciplinary team member and what the responsibilities are by using a Team Charter. I will upload a synopsis of the literature and 2-3 key resources to an invitation only Google document file. I will create a draft practice guideline that best represents the data obtained. This document will be placed in a Google document to allow simultaneous review and comments by all invited team members which includes the CSICU nurse practitioners, the nurse clinician, the intensivist director of the ICU, the palliative care nurse practitioner, social work, VAD coordinators, and care coordination. The approach to consensus will use the Rand Corporation modified Delphi model, where 3 to 4 rounds of review should result in an acceptable guideline (Rand Corporation, 2001). The team will then be asked to score the guideline using the AGREE II tool (Brouwers et al., 2010). The six quality domains of the AGREE II tool include: scope and purpose, stakeholder involvement, rigour of development, clarity of presentation, applicability, and editorial independence (Brouwers et al., 2010). I will own the document and secure access with a password. Team member names will only be used internally during the project creation and for leadership approval. No names will be shared in any Walden associated document or publication. Once consensus has been reached, the team will forward the document to the appropriate leadership committees for approval to implement this program.

Protection of Human Subject

All of the participating team members will be professional volunteers. No patients or family members will be invited to participate in this initial step. The hospital administration considers this project to be an internal quality improvement project that coincides with the needs of the project environment. The project will be submitted to the Walden IRB for formal approval and no patients will be involved in the project.

Summary

Collecting and analyzing the data and evidence is an important part of developing a clinical guideline. The evidence has been thoroughly reviewed and it is evident there is a need for a practice guideline for integrating palliative care in the CSICU. The next step, Section 4, will present the results of the project and the implications to practice.

Section 4: Collection and Analysis of Evidence

Introduction

This scholarly project is the development of a clinical practice guideline for the early introduction of palliative care in a 14-bed cardiac surgery ICU at an urban, academic, tertiary care hospital. Patients suffering from chronic critical illness are affected physically, emotionally, and psychologically. In the ICU setting, the focus is largely on the physical needs of the patient instead of a holistic approach to care. This acute care facility does not have guidelines for clinicians to use when introducing and managing palliative care for terminal heart failure patients during long term stays in the ICU. The International Association for Hospice and Palliative Care defines palliative care as the active holistic care of individuals across all ages with serious health-related suffering due to severe illness, and especially of those near the end-of-life and it aims to improve the quality of life of patients, their families, and caregivers (Rosa et al., 2020). This gap in practice illustrates the need for a clinical practice guideline that facilitates the integration of palliative care in this setting.

The practice-focused question is: Will an interprofessional team reach agreement on the guidelines for early introduction and management of palliative care for terminally-ill heart failure patients in the ICU at this acute care hospital. The introduction of palliative care in the cardiac surgery ICU has the potential to improve the quality of life for patients and support family members in end-of-life care (McIlvennan et al., 2019).

Findings and Implications

One of the many goals of healthcare providers is to improve the quality of life for all patients. In reviewing literature from major databases on this topic, there is evidence that the quality of life in the heart failure patient with a LVAD is greatly impacted after the device is implanted, and there is a significant impact to their physical, emotional, and psychological being (Adams & Wrightson, 2018). Moreover, the literature supports the need for improved psychosocial support when it comes to discussing goals of care and end-of-life issues in patients with MCS devices (McIlvennan et al., 2019). After reviewing over 4,000 MCS device patient death experiences from a national database over an 8-year period, McIlvennan et al. (2019) offer evidence that over 75% of MCS device patients die in the hospital, most often in the ICU. While palliative care consultation prior to implant is required by the Center for Medicare and Medicaid services, continued palliative care involvement throughout device implant is not required and is rarely used until the end-of-life is imminent (Kitko et al., 2016).

Nursing research surrounding palliative care has shown the positive effects of palliative care interventions and that implementing palliative care principles early can better address the physical, emotional, and spiritual needs of patients (National Institute of Nursing Research [NINR], 2023). In 2010, the NINR published an extensive report reviewing palliative care practices and research over the previous fourteen years. While the benefits of palliative care at the end-of-life were proven to be numerous, the results of the report also highlighted the need for more research on the topic (National Institute of Nursing Research [NINR], 2013). Medical, surgical, and pharmacological therapies have advanced tremendously over the last century, so the role of palliative care has evolved from a specialty that focuses on symptom management surrounding imminent death, to a specialty that helps manage symptoms of long-term chronic diseases (NINR, 2023).

While many studies highlighted the need for earlier palliative care intervention in the ICU, Sinha et al. created and trialed a protocol that integrated palliative care for heart failure patients in the ICU (2017). After the protocol was initiated, palliative care consults in the ICU increased to 96.6%, more than doubling the prior percentage. The protocol included an automatic trigger for palliative care consult in the electronic medical record when patients met certain criteria (Sinha et al., 2017). Using a retrospective study to review LVAD patients at one large academic institution, Pandey et al. were able to identify a lack of palliative care and hospice services used by the health care team (2021). Moreover, the reviewed literature suggests that most of the health care team, especially members of the ICU team, feel unprepared to have end-of-life discussions with complex MCS patients (Pandey et al., 2021). When evaluating the need of a standardized process for palliative care involvement in the CSICU, the study by Riegal et al. describes the experience of ICU team members managing end-of-life and the variances between nurses' experience and other provider experiences (2021). While this study was performed by using a survey given to a self-selected group of ICU providers in a single ICU, the results can likely be considered for other ICUs as well (Riegel et al., 2021).

The positive social impacts of this study include improving end-of-life care in heart failure patients in the ICU while also destigmatizing palliative and hospice care. Patients and families will benefit from this project as well as the nurses and healthcare provider teams that are caring for these patients. Nurses in the cardiac surgery ICU (CSICU) are poised to advocate for complex patients by approaching each patient holistically and providing patient-centered care (Rosa et al., 2020). A formal evidence-based integrated palliative care program can empower the CSICU nurses to advocate for patients while serving as integral members of the multidisciplinary team.

Recommendations

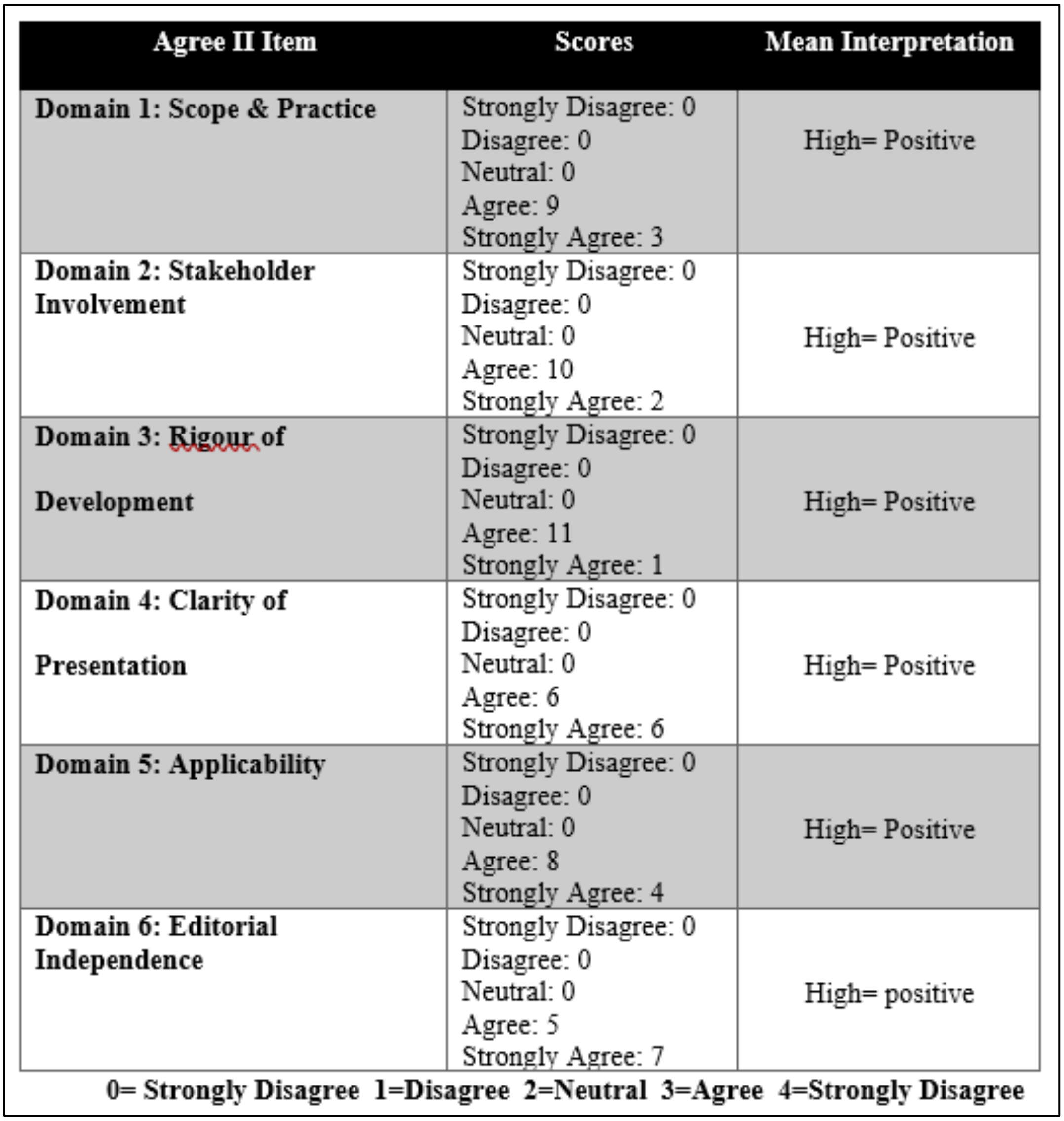
Twelve out of the 15 members from the multidisciplinary team participated in the review of the summary of evidence and a draft clinical practice guideline that I prepared. The expert clinical panel includes five CSICU nurse practitioners, one CSICU nurse clinician, the intensivist director of the ICU, the palliative care nurse practitioner, one social worker, two VAD coordinators, and the care coordinator. The secured document was placed in a Google document for each team member to review and provide feedback. Three rounds of review with expert feedback were performed and consensus was obtained using the Rand Corporation modified Delphi model (Rand Corporation, 2001). After feedback from the expert panel was analyzed the recommendations for implementation of palliative care guidelines includes approaching care decisions inconsistent with meaningful recovery for the chronic critical illness, advanced age and diagnosis, premature ICU readmission greater than or equal to two occurrences, length of stay greater than 10 ICU days, clinical team discretion, and patient/family request.

The clinical practice guideline empowers any member of the clinical team to initiate palliative care discussions and formally consult palliative care experts. Daily multidisciplinary rounds occur in the CSICU and if the patient meets the clinical criteria, the team can follow the algorithm in the guideline to support the involvement of palliative care providers. Once the palliative care team is consulted, there will be weekly rounds with the palliative care and CSICU teams to continue the process of palliative care management. Included in the weekly rounds with palliative care, there will be meetings with family members who are involved in the care of the patient. One of the many benefits of involving consistent palliative care in the management of these complex patients is the relationship of trust that can be built with the families. Wordingham et al. (2017) found that when palliative care teams were asked to be involved in care of the heart failure patient, it was often later during the hospitalization and EOL process, which created a challenge when developing a trusting relationship with patients and caregivers. Palliative care involvement pre- and postimplant allows continued rapport to be built between the palliative care provider and the patient (Wordingham et al., 2017). Palliative care teams also have expertise in communication strategies that help facilitate difficult discussions regarding end-of-life and goals of care (Wordingham et al., 2017).

Using the Likert Scale, the committee members scored each of the six domains of the Agree II instrument. Domain 1(scope and practice) and Domain 2 (stakeholder involvement) generated the most feedback, specifically regarding the patient inclusion criteria for the palliative care consult trigger.

Figure 1

Domain Results



Agree II Item	Scores	Mean Interpretation
Domain 1: Scope & Practice	Strongly Disagree: 0 Disagree: 0 Neutral: 0 Agree: 9 Strongly Agree: 3	High= Positive
Domain 2: Stakeholder Involvement	Strongly Disagree: 0 Disagree: 0 Neutral: 0 Agree: 10 Strongly Agree: 2	High= Positive
Domain 3: Rigour of Development	Strongly Disagree: 0 Disagree: 0 Neutral: 0 Agree: 11 Strongly Agree: 1	High= Positive
Domain 4: Clarity of Presentation	Strongly Disagree: 0 Disagree: 0 Neutral: 0 Agree: 6 Strongly Agree: 6	High= Positive
Domain 5: Applicability	Strongly Disagree: 0 Disagree: 0 Neutral: 0 Agree: 8 Strongly Agree: 4	High= Positive
Domain 6: Editorial Independence	Strongly Disagree: 0 Disagree: 0 Neutral: 0 Agree: 5 Strongly Agree: 7	High= positive

0= Strongly Disagree 1=Disagree 2=Neutral 3=Agree 4=Strongly Disagree

The impact of adopting this clinical practice guideline on the organization has the potential to improve the quality of life for patients and support family members in end-of-life care (McIlvennan et al., 2019). These patients often stay in the ICU for many weeks or months, navigating clinical improvements and setbacks (Pak et al., 2020). These experiences are not only physically and emotionally taxing on patients and families, but financially impactful as well. By integrating palliative care early in this patient population, overall healthcare costs for treating these patients can be decreased (National Institute of Nursing Research [NINR], 2023). By developing a clinical practice guideline from the literature by a self-selected group of ICU providers in a single ICU, the results can likely be considered for other ICUs in the organization as well (Riegel et al., 2021). ICU nurses often spend more time with their patients than any other healthcare team member. Because ICU nurses are consistently present with their patients, the nurse often may have to facilitate conversations around the topic of death. The creation of a nurse-driven standard of care for EOL in critically-ill MCS patients can offer a more holistic process for these complex patients and empower bedside ICU nurses to advocate for the needs of the patient.

Beyond the organization, the positive social impacts of this study include improving end-of-life care in heart failure patients in the ICU while also de-stigmatizing palliative and hospice care. These guidelines have the potential to add to the palliative care professional literature. Patients and families will benefit from this project as well as the nurses and healthcare provider teams that are caring for these patients. The clinical practice guideline will serve as an evidenced-based guideline that can support and empower nurses, clinical team members, patients, and family members when navigating the difficult decisions surrounding palliative care. The primary limitation in conducting and completing this project included time and availability of the expert clinical panel and that this is specific to one unit in one acute care facility.

Strengths and Limitations of the Project

As a project strength, the clinical practice guideline can be adapted beyond one organization. Furthermore, the positive social impacts of this study include improving end-of-life care in heart failure patients in the ICU while also destigmatizing palliative and hospice care. These guidelines have the potential to add to the palliative care professional literature. Patients and families will benefit from this project as well as the nurses and healthcare provider teams that are caring for these patients. The clinical practice guideline will serve as an evidenced-based guideline that can support and empower nurses, clinical team members, patients, and family members when navigating the difficult decisions surrounding palliative care. The primary limitation in conducting and completing this project included time and availability of the expert clinical panel and that this is specific to one unit in one acute care facility.

Section 5: Dissemination Plan

Dissemination of the clinical practice guideline will begin by introducing the clinical practice guideline in the biweekly CSICU collaborative practice meeting. Members of the collaborative practice group will review the final guideline and agree on a go-live start date in the CSICU. Future recommendations for this project would be to expand the patient population beyond the CSICU and translating the palliative care clinical guideline to other ICU settings. The formative evaluation method for this project is a re-evaluation of the implementation process after 90 days to allow for further adjustments to be made with the hope of improving the overall function of the guideline. The summative measures will include patient and provider satisfaction, readmissions and length of stay, and the overall decrease in the cost of care for this population.

Analysis of Self

As a nurse practitioner in clinical practice, it is not always easy to see the larger picture of healthcare systems and their influence on communities. Working on the clinical project has been eye-opening and I have learned a tremendous amount about implementing and leading change at a system-level. Working on the clinical project has strengthened my leadership skills and improved my communication skills. The project process solidified my understanding of the impact of nursing leadership and how nurse leaders can effect change. Translating and disseminating evidence can be done in numerous ways. By remaining up to date in my knowledge on current issues within my practice, as a nurse leader I will be able to implement the most current evidence into clinical practice and improve the quality of care.

As I grow as a clinical provider as well as a leader, I hope to use my knowledge to influence young providers and encourage open-minded practice. The healthcare system has transformed, and hospitals are busier than ever. The underserved patient populations are relying on healthcare providers to manage them in a holistic manner, instead of as individual medical complaints. As a nurse practitioner treating underserved patients, I will ensure social and educational needs of all patients by advocating for disease prevention measures.

Doctorate-level academics are meant to challenge students, cultivate new ideas, strengthen leadership skills, and provide structure, guidance, and mentorship to form innovative ideas. The challenges that doctoral education creates offer opportunities to explore new strategies to manage unfamiliar discomfort while creating personal, professional, and academic growth opportunities. DNP-prepared nurses are trained to become nurse leaders and agents of change, which help to improve and transform the healthcare system (American Association of Colleges of Nursing [AACN], 2006). Developing a clinical practice guideline as my clinical project allowed me to see processes and change at a system level. As a nurse practitioner in clinical practice, it is not always easy to see the larger picture of healthcare systems and their influence on communities. Practicum has been eye-opening and along with the class content, I have learned a tremendous amount about implementing and leading change at a system-level.

As a clinical expert, nurse leader, and scholar, I will expand my focus to system-wide and professional growth, while honoring the core values of holistic, compassionate, and high-quality care. Collaborating with a multidisciplinary team, including PhD-prepared nurse colleagues, is necessary to achieve successful wide-spread change in an organization. This postmodernistic approach includes collaboration with team members with varying views, scientific processes, and methodologies to create positive change across a health-care system (McEwan & Wills, 2019). While clinical and advanced practice nurses may focus on self-imposed goals directly related to patients, doctoral-prepared nurses must keep interprofessional collaboration a high priority in their practice (Walden University, 2021).

As a nurse leader who is passionate about promoting quality improvement, the clinical project has allowed me to translate and disseminate evidence in clinical practice. By remaining up to date in my knowledge on current issues within my practice, as a nurse leader I will be able to implement the most current evidence into clinical practice and improve the quality of care.

New evidence is published frequently but translation of that evidence into clinical practice often lags behind (Curtis et al., 2017). As a nurse leader, one of my responsibilities is to assist in the translation of new evidence into practice with the goal of improving health outcomes. Nurses make up the largest healthcare workforce on the frontline so “nurse-led research is increasingly recognized as a critical pathway to practical, effective, and cost-effective ways of reducing hospital errors, cutting down on unnecessary costs and improving patient outcomes” (World Health Organization [WHO], 2012). As a DNP, it will be crucial to partner with community resources to assist in social influence and change. The leadership of the DNP can offer large-scale change using their knowledge and skills, while recruiting new nurses to become agents of change.

Summary

Palliative care needs in CSICU are numerous and often only managed near the time of imminent death. This ICU does not have guidelines for clinicians to use when introducing and managing palliative care for terminal heart failure patients during long term stays in the ICU. By creating a standardized practice guideline for palliative care integration in the cardiac surgery ICU for heart failure patients, the practice problem with be addressed and likely improved (McEwan & Wills, 2019, Chapter 11). Collaboration among the multidisciplinary ICU team and palliative care specialists can improve quality of life of patients as they reach end-of-life as well as decreasing the stress of the healthcare providers managing these complex patients (McAndrew et al., 2021). Nursing research surrounding palliative care has shown the positive effects of palliative care interventions and that implementing palliative care principles early in the course of treatment can better address the physical, emotional and spiritual needs of patients (National Institute of Nursing Research [NINR], 2023). As healthcare providers with the closest contact with patients, nurses are key members of the palliative care process (Wantonoro et al., 2022). Many of the core principles of nursing are aligned with the principles and goals of palliative care.

References

Adams, E. E., & Wrightson, M. L. (2018). Quality of life with an LVAD: A misunderstood concept. *Heart & Lung*, *47*, 177–183.

American Association of Colleges of Nursing & American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice*. https://www.aacnnursing.org/Portals/42/Publications/DNPEssentials.pdf

Becker, D., Kaplow, R., Muenzen, P. M., & Hartigan, C. (2006). Activities performed by the acute and critical care advanced practice nurse: American association of critical-care nurses study of practice. *American Journal of Critical Care*, *15*(2), 130–148.

Brouwers, M., Kho, M. E., Browman, G. P., Cluzeau, F., Feder, G., Fervers, B., Hanna, S., Makarski, J., & the AGREE Next Steps Consortium. (2010). AGREE II: Advancing guideline development, reporting and evaluation in healthcare. *Canadian Medical Association Journal*, *182*, 839–842. https://doi.org/10.1503/cmaj.090449

Curtis, K., Fry, M., Shaban, R. Z., & Considine, J. (2017). Translating research findings to clinical nursing practice. *Journal of Clinical Nursing*, *26*(5-6), 862–872. https://doi.org/10.1111/jocn.13586

DeGroot, L. G., Bidwell, J. T., Peeler, A. C., Larsen, L. T., Davidson, P. M., & Abshire, M. A. (2021). “Talking Around It”: A qualitative study exploring dyadic congruence in managing the uncertainty of living with a ventricular assist device.

Journal of Cardiovascular Nursing, *36*(3), 229–237.

Field, B., Booth, A., Ilott, I., & Gerrish, K. (2014). Using the knowledge to action framework in practice: A citation analysis and systematic review. *Implementation Sciences*, *9*(1).

Ito, K., George, N., Wilson, J., & et al. (2022). Primary palliative care recommendations for critical care clinicians. *Journal of Intensive Care*, *10*(20). https://doi.org/10.1186/s40560-022-00612-9

Kitko, L., Hupcey, J., Birriel, B., & Alonso, W. (2016). Patients' decision making process and expectations of a left ventricular assist device pre and post implantation. *Heart & Lung*, *45*, 95–99.

Kyeremanteng, K., Beckerleg, W., Wan, C., Vanderspank-Wright, B., D'Egidio, G., Sutherland, S., Hartwick, M., Gratton, V., & Sarti, A. (2019). Survey on barriers to critical care and palliative care integration. *American Journal of Hospice and Palliative Medicine*, *37*(2), 108–116.

McAndrew, N. S., Guttormson, J., Marks, S., Rhodes, M., Patel, J., & McCracken, C. (2021). Intensive care unit nurse: Could we call a palliative care consult? Intensive care unit provider: It's too early. Palliative care integration in the intensive care unit: The struggle to translate evidence into practice. *Dimensions of Critical Care Nursing*, *40*(1), 51–58. https://doi.org/10.1097/DCC.0000000000000451

McEwan, M., & Wills, E. M. (2019). Chapter 11: Overview of selected middle range nursing theories. In *Theoretical basis for nursing* (5th ed., pp. 223–252). Wolters

Kluwer.

McIlvennan, C. K., Grady, K. L., Matlock, D. D., Helmkamp, L. J., Abshire, M., & Allen, L. A. (2019). End of life for patients with left ventricular assist devices: Insights from INTERMACS. *The Journal of Heart and Lung Transplantation*, *38*(4).

Mercandante, S., Gregoretti, C., & Cortegiani, A. (2018). Palliative care in intensive care units: Why, where, what, who, when, how. *BMC Anesthesiology*, *18*(106). https://doi.org/10.1186/s12871-018-0574-9

National Institute of Nursing Research. (2013). *Building momentum: The science of end-of-life and palliative care: A review of research trends and funding, 1997-2010* [Report]. The National Institutes of Health, the National Institute of Nursing Research. https://www.ninr.nih.gov/sites/files/docs/NINR-Building-Momentum-508.pdf

National Institute of Nursing Research. (2023). *What is palliative care?* NIH: National Institute of Nursing Research. https://www.ninr.nih.gov/newsandinformation/what-is-palliative-care

Pak, E., Jones, C., & Mather, P. (2020). Ethical challenges in care of patients on mechanical circulatory support at end-of-life. *Current Heart Failure Report*, *17*, 153–160. https://doi.org/10.1007/s11897-020-00460-4

Pandey, D., Mahmood, A., Harounian, J., Fleming-Damon, C., Mencias, M., Portenoy, R., & Knotkova, H. (2021). Providing end-of-life care for patients with left ventricular assist devices: Experience of a hospice agency. *Journal of Pain and*

Symptom Management, *61*(5), 891–897.

Rand Corporation. (2001). *RAND Corporation*. Retrieved from the Library of Congress. https://www.loc.gov/item/lcwaN0000372/

Riegel, M., Randall, S., Ranse, K., & Buckley, T. (2021). Healthcare professionals' values about and experience with facilitating end-of-life care in the adult intensive care unit. *Intensive & Critical Care Nursing*, *65*, 1–8.

Rosa, W. E., Ferrell, B. R., & Wiencek, C. (2020). Increasing critical care nurse engagement pf palliative care during the COVID-19 pandemic. *Critical Care Nurse*, *40*(6), e28–e36. https://doi.org/10.4037/ccn2020946

Ruland, C. M., RN, PhD, & Moore, S. M., RN, PhD. (1998). Theory construction based on standards of care: A proposed theory of the peaceful end of life. *Nursing Outlook*, *46*, 169–175.

Shen, M. J., & Wellman, J. D. (2019). Evidence of palliative care stigma: The role of negative stereotypes in preventing willingness to use palliative care. *Palliative & supportive care*, *17*(4), 374–380. https://doi.org/10.1017/S1478951518000834

Sinha, S., Belcher, C., Torke, A., Howard, J., Caccamo, M., Slaven, J. E., & Gradus-Pizlo, I. (2017). Development of a protocol for successful palliative care consultation in population of patients receiving mechanical circulatory support. *Journal of Pain and Symptom Management*, *54*(4), 583–588. https://doi.org/10.1016/j.jpainsymman.2017.07.021

Smith, A. R., DNSc, APRN, BC. (2006). Using the synergy model to provide spiritual nursing care in critical care settings. *Critical Care Nurse*, *26*, 41–47.

Spoljar, D., Curkovic, M., Gastmans, C., Gordijn, B., Vrkic, D., Jozepovic, A., Vuletic, S., Tonkovic, D., & Borovecki, A. (2020). Ethical content of expert recommendations for end-of-life decision-making in intensive care units: A systematic review. *Journal of Critical Care*, *58*, 10–19. https://doi.org/10.1016/j.jcrc.2020.03.010.

Thompson, J. H., & Moser, D. (2020). Experiences with end-of-life care with a left ventricular assist device: An integrative review. *Heart & Lung*, *49*, 451–457.

Walden University. (2021). *DNP glossary* (Interactive media). Walden University Blackboard. https://mym.cdn.laureate-media.com/2dett4d/Walden/NURS/8114/DNPG/index.html#/

Wantonoro, W., Suryaningsih, E. K., Anita, D. C., & Nguyen, T. V. (2022). Palliative care: A concept analysis review. *SAGE open nursing*, *8*. https://doi.org/10.1177/23779608221117379

Wessman, B. T., Sona, C., & Schallom, M. (2017). Improving caregivers' perceptions regarding patient goals of care/end-of-life issues for the multidisciplinary critical care team. *Journal of Intensive Care Medicine*, *32*(1), 68–76.

Wordingham, S. E., McIlverson, C., Fendler, T., Behnken, A., Dunlay, S., Kirkpatrick, J., & Swetz, K. (2017). Palliative care clinicians caring for patients before and after continuous flow-left ventricular assist device. *Journal of Pain and Symptom Management*, *54*(4), 601–608.

World Health Organization. (2012). Enhancing nursing and midwifery capacity to contribute to the prevention, treatment and management of noncommunicable diseases in practice: Policy and advocacy, research and education. *Human Resources for Health Observer*, *12*, WHO Document Production Services, Geneva, Switzerland.

Zaccara, A. A. L., Geraldo de Costa, S. F., Lima, M. M., da Nobrega, de Sa Franca, J. R. F., da Nobrega Morais, G. S., & Fernandes, M. A. (2017). Analysis and assessment of the peaceful end of life theory according to Fawcett's criteria. *Texto Contexto Enferm*, *26*(4).