January 2022

Factors Associated With New Hospital Nurses' Self-Efficacy In Providing Palliative End-Of-Life Care

Penny Marie Brriese

FACTORS ASSOCIATED WITH NEW HOSPITAL NURSES' SELF-EFFICACY IN PROVIDING PALLIATIVE END-OF-LIFE CARE

by

Penny Marie Briese
Bachelor of Science in Nursing, University of Jamestown, 2004
Masters of Science in Nursing, University of North Dakota, 2010

A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Grand Forks, North Dakota

August
2022

Name: Penny Briese

Degree: Doctor of Philosophy

This document, submitted in partial fulfillment of the requirements for the degree from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

Dr. Darlene Hanson, Co-Chairperson

Dr. Tracy Evanson, Co-Chairperson

Dr. Rhoda Owens, Committee Member

Dr. Maher El-Masri, Committee Member

Dr. Kenneth Flanagan, Member as Large

This document is being submitted by the appointed advisory committee as having met all the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

Chris Nelson
Dean of the School of Graduate Studies

7/26/2022
Date

PERMISSION

Title Factors Associated with New Hospital Nurses' Self-Efficacy in Providing Palliative End-of-Life Care

Department College of Nursing and Professional Disciplines

Degree Doctor of Philosophy

In presenting this dissertation in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my dissertation work or, in her absence, by the Chairperson of the department or the dean of the School of Graduate Studies. It is understood that any copying or publication or other use of this dissertation or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my dissertation.

Penny Briese
June 2022

Table of Contents

LIST OF FIGURES

LIST OF TABLES

APPENDICES

Acknowledgments

It is with the greatest respect and appreciation that I acknowledge my committee; my advisors, Dr. Darlene Hanson and Dr. Tracy Evanson. You have seen me through some of my darkest days and have always been supportive and encouraging. I certainly would not have made it through without the two of you. To Dr. Rhoda Owens and Dr. Kenneth Flanagan, a most sincere thank you for coming on board in the 11th hour, after COVID-19 sent the original plan for this study into a tailspin! Your willingness to take me on as an advisee has made all the difference. And finally, Dr. Maher El-Masri. There are no words. Your continued support and, most importantly, your friendship has made me not only a better statistician, but also a better nursing instructor and nurse researcher. You are and will remain a beacon of light in my teaching the Nursing Research course.

To my PhD classmates; WE DID IT! Dr. Jennifer Eccles, I thank you for your weekly "pokes" and visits, keeping me on track and encouraging me. Dr. Tim Fuss, for your unwavering support and making sure we had some fun along the way (I still have the video of the "Charlie Brown" dance!). Dr. Renee Colsch, aka "Tinkerbell". Your drive and determination remains an inspiration to me. We have been on many adventures together and without all of you and your constant friendship, encouragement and advice, I would have thrown in the towel long ago. I look forward to many more adventures!

To my dear friend, Wendy Hournbuckle, who has stood by me, fed me, advised me, directed and guided me in where to go next, I thank you most sincerely. Your experience, expertise and constant support has been invaluable. I am honored to be your colleague.

To my children and grandchildren, Bray and Sarah Fox, Tristan Fox, William Fox and Cameron Stoopes, Caetlin and Steven May, Astrid May and Orren May, I wish to say a gigantic "thank you" for understanding my moods on those days when I was overwhelmed by it all. You have been my rock and foundation since I began this incredible journey and I hope I have made you all proud.

And finally, to my dear husband and love of my life, Dr. Lee Briese. Even though you did beat me to the finish line, you tolerated my bouts of uncertainty and kept on encouraging me to see this through. I thank God for bringing you into my life. I could not have done any of this without you and look forward to a lifetime of us saying, "Good morning Doctor!" to one another.

“To die, to sleep;
To sleep: perchance to dream: aye, there's the rub;
For in that sleep of death what dreams may come
When we have shuffled off this mortal coil,
Must give us pause:”

(Hamlet, Act III, Scene 1 ~ William Shakespeare)

'"Tis a vile thing to die, my gracious lord, when men are unprepared and look not for it."

(Richard III, Act III, Scene II, Line 64 ~ William Shakespeare)

ABSTRACT

Introduction: Self-efficacy is defined as confidence in one's competence; the ability to successfully accomplish tasks and achieve favorable outcomes (Bandura, 1997). Many nurses today say they feel their undergraduate education was inadequate for them to feel competent to provide palliative and EOL patient care. (Chiplaskey, 2016; Scherlin & Quinn, 2016; Zheng et al., 2018).). Inadequate EOL preparation also results in nurses experiencing distress, death anxiety, burnout, feeling overwhelmed and leaving practice within just a few years (Friedman et al., 2011; Gaw, 2012; Kovner et al., 2006; Parry, 2008; Silverstein, 2017, November 28; Suzuki et al., 2008; Wilson & Kirshbaum, 2013). This is particularly troubling in light of the global nursing shortage; studies indicate that 17.5%-48% of new nurses leave their first job within one year and 33.5% of new nurses will leave within the first two years. Further, 37% of new nurses had at least considered changing jobs (Androus, 2021; Kovner, et al., 2007; Kovner, et al., 2014; Labrague & McEnroe-Petitte, 2018). Little is known about what factors affect new nurses' self-efficacy to provide palliative end-of-life (EOL) care, particularly in rural hospital settings. The purpose of this exploratory correlational doctoral study was to identify demographic, educational, and experiential factors which may be associated with new nurses' self-efficacy to provide quality palliative patient care at EOL.

Methods: A survey was developed and sent via email to new nurses, those licensed within the past three years within the upper Midwest United States. The survey included demographic questions, the Palliative Care Self-efficacy Scale (Phillips et al., 2011) and the Rosenber (1965) Self-esteem Scale. Results of the survey were analyzed using descriptive statistics, Pearson correlation, ANOVA and simple multiple linear regression. Eight factors were included in the final linear regression model. Bandura's Self-efficacy Theory (SET) was the study framework

Results: The sample included 221 completed surveys. Mean self-efficacy score was 36.7(±8.4) out of a possible 48 points. Participants were primarily White females, aged 20-29 and holding Bachelor of Science degrees. Five factors were found to be significantly associated with new nurses' self-efficacy to provide palliative EOL care ($p \leq .05$). Self-efficacy and experiencing the death of a family member were both positively associated (ß = .181 ;p = .008 and ß = ..185; p = .031 respectively). Factors negatively associated with new nurse self-efficacy were the number of deaths experienced; 1-5 death experiences (ß = -.310; p = .016), 6-10 death experiences (ß =-.248; p = .038), and 10 or more deaths (ß = -.358; p = .010). This is in complete opposition to the SET concept of mastery experience.

Conclusions: Nurses need support, especially new nurses as they transition into practice. The current literature indicates that even experienced nurses are lacking self-efficacy to provide EOL patient care. It is important that nurse managers evaluate all nurses for their feelings of self-efficacy prior to assigning them a dying patient and develop policies that require debriefing following the death, especially for new nurses just transitioning into practice. Recommendations for education are to follow new national guidelines and continue to prepare nursing students to care for patients at end-of-life care, evaluating them for self-efficacy prior to them graduating. Further research should be conducted with a larger, more diverse sample and focus on factors found to be non-significant in this study, such as nurse residency programs, yet supported by the nursing literature. Qualitative or mixed methods designs may provide an answer as to why new nurses felt less self-efficacious despite multiple experience with caring for a patient at EOL. Special consideration should be given to continuing to investigate rural settings.

CHAPTER I: INTRODUCTION

Chapter one will describe the problem of interest, that being the self-efficacy of new nurses to provide palliative End-of-Life (EOL) patient care. It will define the purpose statement, research question and clarify the specific aims of the proposed study. The significance of the study will also be presented, as will the theoretical framework and conceptual and operational definitions.

Problem Statement

Nurses today are finding themselves working with critically ill and dying patients at an unprecedented rate. According to current statistics, someone dies every 11.14 seconds in the United States, equating to 7,755 people dying every single day (IndexMundi, 2020). This number does not account for the number of daily deaths related to the current COVID-19 pandemic, deaths which are occurring too rapidly to keep an accurate count (IndexMundi, 2020). Contemporary concerns about COVID-19 have brought conversations about death, dying, and healthcare at EOL to the forefront (Gupta et al., 2020; Lamas, 2020, August 4). Despite the fact that most people express a wish to die in their homes, nearly 70% of people will die in some kind of healthcare facility under the care of nurses (Shaw & Abbot, 2017).

Many nurses today say they feel their undergraduate education was inadequate for them to feel competent to provide palliative and EOL patient care. (Chiplaskey, 2016; Scherlin & Quinn, 2016; Zheng et al., 2018). Current research has shown that inadequate palliative and EOL education, combined with negative attitudes towards death, has led to increased stress and

frustration in nurses and even outright avoidance of caring for dying patients (Bui et al., 2020; Puente-Fernandez et al., 2020). According to Liu et al. (2014), the ability of the nurse to provide competent care can either positively or negatively impact patient outcomes; lack of nurses' self-efficacy leads to poor outcomes for the patient (Caton & Klemm, 2006; Kent et al., 2012). Thus, it is important to study factors affecting new nurses' self-efficacy to care for the dying patient.

Many new nurses report that they feel unprepared for assigned tasks and unsupported by their peers and superiors. This leaves them feeling burned out, anxious, inadequate, overwhelmed, and even contemplating leaving nursing within the just the first few years of practice (Friedman et al., 2011; Gaw, 2012; Kovner et al., 2006; Parry, 2008; Silverstein, 2017, November 28; Suzuki et al., 2008; Wilson & Kirshbaum, 2013). This is especially troubling for rural and remote areas where nursing shortages are even more prevalent (Warren & Smalley, 2014). Also of particular concern for nurses working in rural and remote locations is that they are often tasked with caring for friends or even family members at EOL. This adds an additional level of stress for the nurse caring for a dying patient and their family.

Even when new nurses say they received adequate undergraduate palliative EOL education, there may be other factors, such as age, gender, or a previous experience with death which may impact a new nurse's ability to care for a dying patient. According to the Institute of Medicine (2010), "Perceptions and views about death are also influenced by a wide array of social, cultural, economic, geographic, spiritual, and religious beliefs and experiences" (p. xi). To date, many of these factors have remained largely unexplored in the EOL palliative care literature.

Purpose of the Study

The purpose of this exploratory correlational doctoral study is to identify factors which may be associated with new nurses' self-efficacy to provide quality palliative patient care at

EOL. The overarching goal of this study is to provide nurse administrators information with which to help identify new nurses who may need assistance in becoming self-efficacious in providing EOL palliative patient care. This will add to the body of nursing knowledge in order to use the science to improve nursing practice.

Research Question

The research question for this study is:

1. What factors affect new nurses' self-efficacy to provide palliative care at EOL?

Specific Aims

The specific aims of the study will be:

1. Identify demographic factors that are independently associated with self-efficacy (age, gender and race).
2. Identify educational factors that are independently associated with self-efficacy (curriculum on EOL, degree held, continuing education).
3. Identify EOL experiences that are independently associated with self-efficacy (prior experiences with death; personal or professional).
4. Identify geographical settings that are independently associated with self-efficacy (rural VS non-rural).
5. Identify workplace support that is independently associated with self-efficacy (preceptor/mentor/residency program and/or continuing education).
6. Identify areas of practice in the hospital setting that are independently associated with self-efficacy (medical/surgical, intensive care, emergency department, pediatrics, oncology, maternal/child, mental health, or multiple areas.

These factors will be assessed and correlated with participant's self-reported self-efficacy to provide palliative EOL patient care, as measured by their scores on the Palliative Care Self-efficacy Scale (Phillips et al., 2011).

Significance of the Study

In order for nurse administrators to ensure quality patient care, favorable outcomes, and nursing staff satisfaction with their assignments, it is vital that they are aware of factors that may potentially be related to new nurses' self-efficacy in providing palliative patient care at EOL. If strongly correlated factors can be identified, nurse leaders may then be able to match and partner new nurses who may struggle with palliative EOL cares with more experienced staff to guide them in providing care to dying patients and their families. Nurse administrators, as well as nurse educators, may be able to tailor educational opportunities to support new nurses in their transition to practice. They may be able to foster the development of mentorship or Nurse Residency programs at their facilities, the effectiveness of which has been shown to be very beneficial in assisting new nurses in becoming more self-efficacious in providing specialty palliative and EOL cares (Perron et al., 2019; Theisen & Sandau, 2015). As previously stated, these factors may be assessed for and/or anticipated when working with new nurses, allowing mentors to more easily guide new nurses through the process of palliative EOL patient care. The findings of this study will add to the bodies of knowledge in both the nursing practice and education arenas, particularly the field of continuing nursing education. Although beyond the scope of this proposed study, it is believed that increasing new nurses' self-efficacy to provide palliative EOL patient care will ultimately result in increased job satisfaction and retention of new nurses and, ultimately, improved patient outcomes. Armed with the knowledge of factors that may affect new nurses' self-efficacy to provide palliative EOL patient care, nurse educators

and mentors may be better equipped to foster new nurses' feelings of self-efficacy. Recommendations will be made for future research into the relationship of new nurses' self-efficacy in providing palliative patient care and retention of new nurses.

Theoretical Framework.

Bandura's Self-efficacy Theory (SET)

As stated earlier, self-efficacy is defined as confidence in one's competence; the ability to successfully accomplish tasks and achieve favorable outcomes (Akhtar, 2008; Bandura, 1997). First developed as a behavioral psychological theory in the late 1970's, Bandura's Self-efficacy Theory (SET) has been refined over the years to include applications in many professional fields, including nursing. According to Bandura (1997), when a person feels they are unable to control the events happening in their lives, they begin to feel apprehensive and apathetic. It is important to create environments and social systems that are supportive of the development of self-efficacy so that individuals can achieve a feeling of self-esteem which, although similar in nature to self-efficacy, is a perception of one's personal value as compared to self-efficacy, which is one's belief in their ability to achieve a goal (Bandura, 1997). Self-efficacy is a complex, multifaceted concept, constructed through a combination of experiences that when practiced, even if said experiences are at first unpleasant or perceived as threatening, eventually lead to feelings of mastery and a reduction in avoidance behaviors (Akhtar, 2008; Bandura, 1997). Failure undermines feelings of self-efficacy, often leading to avoidance behaviors related to the task at hand (Puente-Fernandez, et al. 2020).

Primary Concepts of SET

There are four concepts underlying SET: mastery experiences, vicarious experiences, verbal persuasion, and emotional and physiological states.

Mastery experiences. Humans are not born with innate knowledge of even the most basic tasks like walking or feeding themselves. Children are often told "practice makes perfect" when learning a new skill and this is one of the primary tenets of self-efficacy, according to SET (Akhtar, 2008). Mastery experiences are structured activities designed so as to learn a skill or improve performance through repeated practice (Bandura, 1997). Beliefs about one's capabilities are often shaped by factors such as age, gender, ethnicity and socioeconomic status, and the relationship between personal and social factors often determines a person's vocational choices (Bandura, 1997). There are two sub-divisions to this concept. "Coping" mastery occurs when success is achieved through sheer tenacity and repetition of a skill; this can also be a very useful observational teaching strategy, as learners watch how perseverance aids in mastering a skill. "Guided" mastery is another method; this is the introduction of increasingly difficult tasks once easier tasks have been mastered, building the learner's feelings of self-efficacy. This is a useful strategy often utilized by workplace supervisors to role-model ways of overcoming interpersonal problems in the workplace, helping to improve organizational morale and productivity (Bandura, 1997).

Vicarious experiences. Humans also learn by observing others. Observing competent role models and imitating their behaviors is an effective method for learning to successfully complete tasks. A new nurse will often observe their preceptor performing a skill as part of their orientation. However, certain demographics such as age, gender, ethnicity and socioeconomic status largely determine the type of role models available to learners. Additionally, tasks learned through mere observation do not encourage the formation of critical thinking skills nor the ability to apply learning beyond the observed tasks. This stumbling block can be overcome through

abstract modeling, during which the role model verbalizes their thought processes and strategies out loud while performing tasks (Bandura, 1997).

Verbal persuasion. The importance of mentors as coaches/role models cannot be overlooked (Akhtar, 2008). Self-efficacy is more easily obtained when role models provide positive feedback of a learner's performance. For example, a preceptor would talk out loud while demonstrating a skill for a new nurse. Verbal persuasion alone may not create lasting changes in self-efficacy, however positive feedback tends to encourage greater effort on the part of the learner to succeed. Success dissipates feelings of doubt, promoting belief in oneself; this is foundational in the formation of self-efficacy. Caution must be exercised when providing verbal persuasion, however; falsely raising a learners beliefs in their abilities will only cause disappointment when they realize their lack of ability, undermining the relationship between them and the role model (Bandra, 1997).

Emotional and physiological states. Self-esteem and self-efficacy go hand-in-hand (Bandura, 1997). One's emotional and physical state can influence how experiences are interpreted and remembered. People having high self-esteem will interpret their feelings during times of stress as challenging and energizing while those with low-self-esteem will interpret their feelings as a sense of failure (Bandura, 1997). These intense moods can either boost or undermine one's confidence in oneself. Referred to by Bandura (1997) as "mood-biased recollection" (p. 111), memories of situations often invoke strong emotions and therefore the way in which an experience is remembered will often influence the attitude with which a learner again approaches the same task. People judge themselves based upon their feelings of self-esteem, which is affected by both their physical and psychological health. Positive thinking as well as being physically healthy tend to improve feelings of self-efficacy (Akhtar, 2008).

Assumptions and limitations. A primary assumption of this theory is that the learner is open to learning a new skill. Prior negative experiences relating to the task at hand may prohibit learning, as memories of prior failure will inhibit learning. This is particularly true if the learner suffers from low self-esteem. They may not respond to verbal persuasion or believe they have done a good job, even if they in fact have succeeded at the task. Alternatively, should the learner possess extremely high self-esteem, they may falsely overrate their ability to perform a task and may not respond well to correction. Self-esteem is also a fluid concept that changes over time and in response to other experiences and physical health. Thus, both of these situations are limitations of this theory. Limitations of the theory also include the fact that not all concepts must be present for learning to occur. Not everyone is a visual our auditory learner; some learn best by reading and practicing skills on their own. This would align with the first concept; mastery experiences. However, many learners utilize a combination of processes to learn, thus the theory may only be partially utilized.

Conceptual and Operational Definitions

Palliative care and EOL care are terms which are often used interchangeably, however there are subtle differences. While palliative care is initiated sooner, often right after a patient receives a life-threatening or life-limiting diagnosis, EOL patient care revolves around pain and symptom relief during the last few months or even hours of life (National Palliative Care Research Center, 2013b). Palliative care is aimed at improving the quality of life for patients and their families through communication about goals of care, early identification and treatment of pain, and treatment for psychological and spiritual problems as well as physical issues (National Palliative Care Research Center, 2013b).

The terms mentor and preceptor are also often used interchangeably, however they too have subtle differences in meaning related to depth and length of time of the relationship of new nurse and experienced nurse. Table 1 provides both conceptual and operational definitions for the concepts and variables utilized in this study.

Table 1

Conceptual and Operational Definitions

Concept/Variable	Conceptual Definition	Operational Definition	Type of Concept/Variable
Self-efficacy	Confidence in one's competence to reach a goal and achieve a favorable outcome (Bandura, 1997).	Self-reported participant scores on the Palliative Care Self-efficacy Scale.	Theoretical concept and dependent variable
Self-esteem	A perception of one's personal value (Bandura, 1997). Captures fourth concept of SET.	Self-reported participant scores on the Rosenberg (1965) Self-esteem Scale.	Theoretical concept independent variable.
Mentor	"A one-to-one long-term trusting relationship (spanning months to many years) that develops over time between a novice and a more experienced practitioner and promotes support during transition periods, teaching/learning, increased coping skills, and a safe environment for sharing and discovery." (American Nurses Association, 2020).	Identified and self-reported by participant.	Independent variable
Preceptor	"An experienced nurse who serves as a short-term clinical teacher, role model, supporter, supervisor, and evaluator to a nurse orientee who is acclimating to the complexities of patient care and the role of professional nurse in a given clinical setting and during work hours." (American Nurses Association, 2020).	Identified and self-reported by participant.	Independent variable

Table #1 cont. Conceptual and Operational Definitions

Residency program	An educational program for new nurses, typically one year in length, which provides them with the tools and support they need to successfully transition into practice and remain in the nursing profession. The three pillars of a residency program focus on leadership, patient outcomes, and professional development (American Association of Colleges of Nursing, 2020).	Identified and self-reported by participant.	Independent variable
Palliative care	Nursing care aimed at improving the quality of life for patients and their families; includes communication about goals of care, early identification and treatment of pain, and treatment for psychological and spiritual problems as well as physical (National Palliative Care Research Center, 2013b).	Self-reported participant scores on the Palliative Care Self-efficacy Scale.	Definition
End of life care	Nursing interventions for the dying patient that are in compliance with ELNEC recommendations; vitals assessment, pain assessment and treatment, skin assessment and comfort, mucous membrane dryness, respiratory distress, signs of imminent death, and cessation of life. (Sherman, et al., 2002)	Self-reported participant scores on the Palliative Care Self-efficacy Scale.	Definition
New nurse	Advanced Beginner nurses; stage 2 of Benner's Novice to Expert Nursing Theory (Benner, 1982).	Nurses within their first three years of obtaining licensure; self-reported by participants.	Demographic concept
Rural	"Any population, housing, or territory NOT in an urban area". (U.S. Department of Agriculture, 2019).	Rural Urban Commuting Area (RUCA) codes define rurality based on zip-code. It is a 10 code classification system (Rural Information Hub, 2021).Rural coded 4-10.	Demographic concept

Table #1 cont. Conceptual and Operational Definitions.

Non-rural	Urban; areas of population between 2,500 (“urban clusters”) and 50,000 (U.S. Department of Agriculture, 2019).	Rural Urban Commuting Area (RUCA) codes define rurality based on zip-code. This is a 10 code classification system that identifies rural and non-rural communities (Rural Information Hub, 2021). Non-rural is identified by a code of 1-3.	Demographic concept

Chapter I Summary

The problem of the increasing pressures faced by new nurses has become very apparent in today’s society, particularly in light of the COVID-19 pandemic. New nurses are expected to care for complex patients, many of whom are dying. The increasing number of patients from the aging Baby Boomers generation, who present to the healthcare arena in need of palliative EOL nursing care may potentially overwhelm the abilities of the newly graduated advanced beginner nurses. These new nurses report a lack of EOL education in their undergraduate experiences and, faced with feelings of uncertainty in their abilities to provide palliative EOL patient care, may choose to change jobs or leave the nursing profession altogether. Caring for a dying patient with little to no education on palliative care can be a daunting experience. The purpose of this exploratory quantitative correlational dissertation research study is to identify factors which may affect new nurses’ self-efficacy to provide quality palliative patient care at EOL. By identifying said factors, nurse educators and experienced palliative EOL care nurse mentors can best support students and new nurses, facilitating their sense of self-efficacy in providing palliative EOL patient care.

Chapter II will explore what is already known in the literature about palliative EOL nursing education, factors affecting new nurses' self-efficacy, the role of the nurse mentor and nurse residency programs.

CHAPTER II: REVIEW OF THE LITERATURE

The purpose of this exploratory quantitative correlational doctoral study is to identify factors which may affect new nurses' self-efficacy to provide quality palliative patient care at EOL. This chapter will include an overview of Benner's nursing theory as it relates to the concept of self-efficacy. It will also include a description of the search process and integrative review/synthesis of the relevant literature demonstrating what is already known about factors affecting new nurses' self-efficacy at caring for patients at the end-of-life. Gaps in the literature will also be presented.

Self-efficacy and Benner's From Novice to Expert Nursing Theory

Self-efficacy is defined as confidence in one's competence; the ability to successfully accomplish tasks and achieve favorable outcomes (Akhtar, 2008; Bandura, 1997). Henderson et al. (2016) explored graduating nurses' self-efficacy in providing palliative EOL care and found that there was a gap between what was being taught regarding palliative patient care and the expectations of the healthcare industry. This correlates with what nurses themselves have reported, regarding their undergraduate preparation (Chiplaskey, 2016). According to Burns and Poster (2008), this gap has long been widely accepted in the health care arena. However, in order to provide quality palliative EOL patient care, nurses require specialized knowledge and skills with which to assess for, and respond to, the unique needs of dying patients (American Association of Colleges of Nursing, 2017a; Kunkel et al., 2016; Pesut et al., 2014). According to Lippe (2019) and Kirkpatrick et al. (2017), there are 17 competencies put forth by the American

Association of Colleges related to providing quality patient care, including the specialized care required at EOL. Due to the burgeoning and rapidly aging Baby Boomer population and ever-increasing nursing shortages, particularly shortages of specialty Hospice EOL nurses in rural and remote locations (United States Census Bureau, 2019; Warren & Smalley, 2014), new nurses ~~are~~ often tasked with caring for dying patients early on in their careers. While gaps are expected between what they learned in nursing school and what they need to know in order to provide safe, independent patient care, this uncertainty can lead to dissatisfaction with their work and unfavorable outcomes for both nurse and patient (Burns & Poster, 2008).

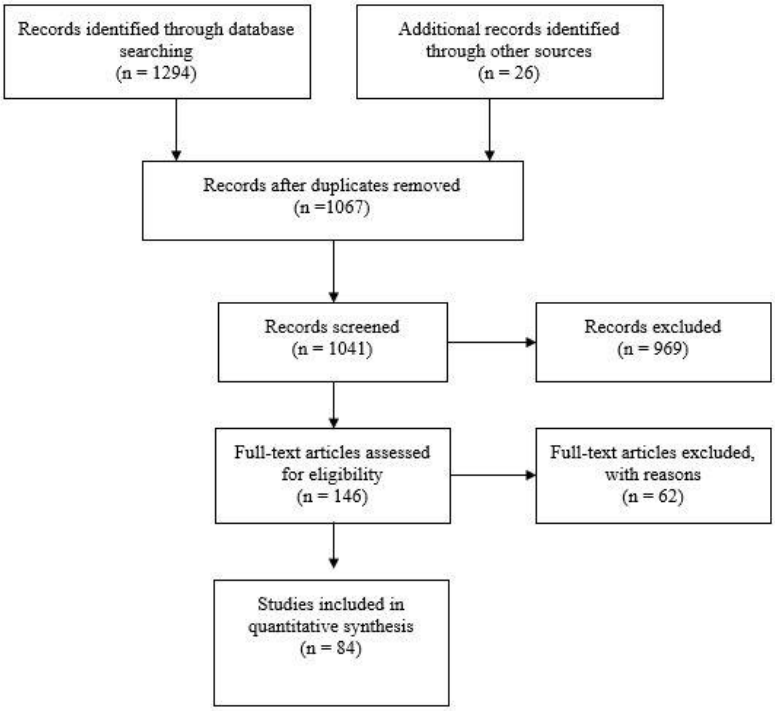
According to Patricia Benner's From Novice to Expert Nursing Theory (1982), new nurses are considered "Advanced Beginners". They may demonstrate acceptable skills performance and have had some patient experiences but they are not yet competent in their nursing cares. Competence is achieved only after two or three years of nursing experience. Advanced Beginners do not yet recognize patterns and thus, are not yet ready to plan ahead or anticipate patient needs (Petiprin, 2016). Newly graduated nurses fall into this Advanced Beginner category (Burns & Poster, 2008). These new nurses are unable to prioritize, provide or report relevant patient information, cannot rationalize nursing care and do not yet know the significance of lab values. These new nurses have not yet developed competence, which is the third stage of Benner's theory, until they are able to visualize, understand, and plan out their patient goals. Then, utilizing their own judgement, competent nurses are able to independently choose what actions they deem will result in favorable patient outcomes (Burns & Poster, 2008). Benner's theory further states that nurses become experts only through experience (1982). Nurses "develop skills and understanding of patient care over time through a sound educational base as well as a multitude of experiences" (Nursing Theories, 2011, Sept. 16, para. 1).

Search Strategy

The terms "nurs*, self-efficacy AND palliative OR end of life" were entered into the OVID, CINAHL Complete and PubMed databases (See Figure 1). Articles included were limited to full-text articles on studies performed in the United States, published in academic journals written in English, and published between 2010 and 2020. The search resulted in over 1,000 items.

Figure 1

PRISMA Diagram of Literature Review



Titles and abstracts were scanned and reviewed for relevance and duplicates removed. Priority was given to level I and II evidence; systematic reviews and randomized controlled trials. Additional articles were identified through other sources, such as open internet searches, "snowball" searches, identification of landmark studies, articles referred by colleagues and

published dissertations on the topic. In total, 146 items were reviewed with 62 being removed for a variety of reasons, such as studies being undertaken in foreign countries but published in American journals. In total, 84 items were reviewed and included.

Integrative Review of Relevant Literature

Expectations of the Nursing Workforce

In recent years, knowledge pertaining to competent palliative care during EOL has become a priority for all healthcare providers (National Institute of Nursing Research, 2016, September). Professional education and development of nurses in providing palliative care is vital; the attending nurse is responsible for the provision of not only physical but also psychological care of both patient and family/loved ones (Institute of Medicine, 2015). Communication and ensuring that the patients' wishes are honored at EOL is also a priority (National Institute of Nursing Research, 2020). Nurse educators want newly graduated nurses to feel self-efficacious in their ability to provide quality palliative care. However, as previously stated, research shows that undergraduate nursing curriculum regarding palliative care and EOL issues is often either lacking entirely or provides inadequate preparation for newly graduated nurses entering into practice to care for a dying patient (Chiplaskey, 2016; Gillan et al., 2014; Scherlin & Quinn, 2016). Yet with so many nurses expected to retire there will soon be a lack of experienced mentors for new nurses; this is of particular concern in light of current research suggesting that mentoring is very beneficial in the development of self-efficacy in new nurses (Kennedy et al., 2020, May/June; Usher et al., 2015). The most current statistics indicate that as of 2013, more than half (55%) of the nurses working in the United States were over the age of 50 and facing retirement within the next 10-15 years; 700,000 nurses are expected to retire from the workforce by the year 2024 which will leave an estimated 1.2 million nursing positions vacant

(American Association of Colleges of Nursing, 2017b; Grant, 2016; Juraschek et al., 2012; Richardson, 2011; U.S. Department of Health and Human Services Health Resources and Services Administration (HRSA), 2013). In response to this anticipated need, many schools of nursing have been challenged to increase their numbers of students, however, due to shortages of classroom space, lack of nursing faculty, and lack of clinical settings and preceptors, schools of nursing have actually been forced to turn away qualified applicants at an alarming rate (American Association of Colleges of Nursing, 2017b). This makes the retention of newly graduated and licensed nurses an even more crucial endeavor in order to ensure an adequate nursing workforce in the future, particularly in rural areas where shortages are worse and are already negatively impacting patient care (Long & Weinert, 1989; Nelson, 2009; Burrows et al., 2012).

Self-efficacy Related to Undergraduate Palliative and EOL Education

The importance of palliative care and EOL education in undergraduate nursing programs was first brought to light in 1997 by the American Academy of Colleges of Nursing (AACN) document, "Peaceful Death: Recommended Competencies and Curricular Guidelines for End-of-Life Nursing Care" (American Association of Colleges of Nursing (AACN), 1998). This landmark work has often been referenced in EOL nursing research and has laid the foundation for the development of the End-of-Life Nursing Education Consortium (ELNEC) train-the-trainer program (American Association of Colleges of Nursing, 2016). Provision of EOL care has become a priority of other governmental institutions as well, such as the National Institute of Health (2010), the National Institute of Nursing Research (NINR) (2016, September), and the NINR Office of End-of-Life Palliative Care Research (OEPCR) (National Institute of Nursing Research, n.d.), all of which have supported research or provided guidance for graduate nurses

regarding palliative EOL patient care. Newly updated AACN (2021, February 18) educational guidelines for baccalaureate nursing education state that there are four recognized "spheres of care" (p. 1) in which nurses must be competent, the fourth being "hospice/palliative/supportive care which includes end-of-life care as well as palliative and supportive care for individuals requiring extended care, those with complex, chronic disease states, or those requiring rehabilitative care" (p. 6).

Despite all of these recommendations, a review of the relevant literature indicates that schools of nursing are simply not providing adequate undergraduate EOL education and graduate nurses feel ill-prepared to care for dying patients (Chiplaskey, 2016; Duclose-Miller, 2011; Moreland et al., 2012; Scherlin & Quinn, 2016; Shaw & Abbot, 2017; Twibell et al., 2012, June). Undergraduate clinical experiences also often do not provide the opportunity for student nurses to care for a dying patient either (Burns & Poster, 2008; Kunkel et al., 2016).

EOL Simulation. The literature is rich with studies involving the effectiveness of EOL simulation building self-efficacy, the confidence in one's competence, in undergraduate nursing students (Fabro et al., 2014; Gillan et al., 2014; Hamilton, 2010; Kirkpatrick et al., 2017; Kunkel et al., 2016; Moreland et al., 2012; Shaw & Abbott, 2017). By including high-fidelity EOL simulation in nursing undergraduate curriculum, new nurses enter into practice more knowledgeable and with more confidence in their ability to provide care to the dying patient (Shaw & Abbott, 2017).

Self-efficacy and the New Nurse

Cost of lack of continuing education. The ability of new nurses to adequately address EOL issues and provide palliative care remains largely unstudied (Aebersold & Tschannen, 2013; National Palliative Care Research Center, 2013a). However what research there is

suggests that inadequate EOL preparation can lead to nurses experiencing death anxiety, stress, and burnout (Kent et al., 2012). Regardless of their practice setting, new nurses are required to be oriented to their workplace policies and procedures including policies and procedures related to the provision of EOL patient care (Twibell et al., 2012, June). Yet many nurses feel they did not receive adequate orientation and/or training in their workplace, and lack of continuing nursing education after employment impacts both job dissatisfaction and nursing turnover (Clark & Springer, 2012). One study found that 23% of nurses experienced the death of a patient within the first year of their practice and that those experiences impacted their lives, both personally and professionally, for many years after the event (Kent et al., 2012). "Inadequate preparation and lack of support of newly graduated and inexperienced nurses can lead… to the development of negative attitudes to care of the dying, increased death anxiety, and subsequent avoidance of death and dying" (Kent et al., 2012, p. 1256). In a society that does not embrace death as the natural end to life, there is also a deeply felt sense of failure and inadequacy on the part of the nurse when a patient dies (Chiplaskey, 2016), and such feelings of inadequacy may be a contributing factor to the problem of nurses leaving practice (Duclose-Miller, 2011).

Nurses' stress and anxiety related to lack of knowledge and self-efficacy to provide patient care has been found to be a factor in them either changing jobs or leaving the profession (Duclose-Miller, 2011). Over 10% of the current nursing workforce is comprised of new nurses (Clark & Springer, 2012) and studies indicate that 17.5% of new nurses leave their first job within one year and 33.5% of new nurses will leave within the first two years. Further, 37% of new nurses had at least considered changing jobs (Androus, 2021; Kovner, et al., 2007; Kovner, et al., 2014). Other studies indicate that 30-57% of new nurses will either change positions or leave nursing practice entirely within the first three years of practice (Duclose-Miller, 2011; MacKusick &

Minick, 2010). Estimating the cost of orienting and training a newly graduated nurse at $82,000 (Twibell et al., 2012, June), it is easy to see how the loss of new nurses could significantly impact healthcare facilities, particularly in rural areas where financial difficulties often mean the closure of vital small healthcare facilities (Long & Weinert, 1989; Nelson, 2009).

Self-efficacy and Experience with EOL

The focus of EOL palliative nursing care is symptom management, alleviation of pain, and advocating for the rights and desires of dying patients and their families (Robert Wood Johnson Foundation, 2012, September 27). The literature shows both positive and negative aspects of nurses caring for the dying. Many nurses find they have difficulty shifting their thoughts from curative cares to providing for EOL, particularly identifying, understanding, and treating changes in physical symptoms and pain as experienced by the dying patient (St. Louis, 2016, October 24). One older study indicated that even experienced nurses benefit from EOL simulation training; tether-less simulators make it possible to bring simulation into the nursing orientation arena as well, leading to less stress and anxiety, greater retention of new nurses in practice, and better patient outcomes (Dellasega et al., 2009).

Mentoring and Nurse Residency Programs

The first one to two years of nursing practice are vital to developing new nurses' job satisfaction and self-efficacy to provide patient care (Clark & Springer, 2012). The importance of preceptors and mentors cannot be stressed enough; feeling that they are valued and part of the healthcare team builds new nurses' confidence and willingness to remain in the profession (Clark & Springer, 2012). The cost of interventions, such as nurse residency and internship programs, however, are often prohibitive; such programs are estimated to cost between $45,000-$75,000 (Burns & Poster, 2008). Residency programs also often differ in length, from a few months to a year or more. Additionally, nurse residency programs vary in structure; from classroom and

case-study scenarios, to simulation-based programs wherein new nurses develop clinical decision-making, to hands-on preceptorships which have the new nurse working side-by-side with a more experienced nurse (Walsh, 2018). The value of having supportive preceptors cannot be stressed enough. They are the ones who will foster those feelings of self-efficacy in new nurses (Theisen and Sandau, 2015) and may potentially be the reason they remain in the profession.

Gaps in the Literature

Throughout the literature, there was a distinct lack of current inquiry regarding demographic factors affecting practicing nurses' self-efficacy to provide EOL patient care. One older study from Norway utilized qualitative interviews from 9 professional EOL nurses, both male and female, aged 30-65 years and with 10-39 years of experience. The researchers found that experience with dying patients increased nurses' knowledge and satisfaction with their jobs, and that repeated encounters with dying patients and their families increased nurses' feelings of having provided good EOL care (Wallerstedt & Andershed, 2007). But only two current studies were identified that addressed factors such as age and gender of the nurse, time in practice, level of degree conferred, and how exposure to death correlated with nurses' self-efficacy to provide palliative EOL care (Dehghani et al., 2020; Hsu & Chen, 2019). These studies were performed in Iran and Taiwan, respectively. The Dehghani et al. (2020) study was a quasi-experimental, pre-test/post-test design utilizing 40 participants. The researchers provided four sessions of palliative care training. Demographic data and self-efficacy questionnaires were utilized for data collection. SPSS version 16 was used for analysis, using descriptive and inferential statistics. The participants' mean age was 38.6 years, they were predominantly female (85%) and the majority held a Bachelor's Degree in Nursing (92.5%). The average length of work experience was 14.25

years. The researchers found that even as older nurses with high degrees and lengthy work experience, ongoing palliative care training and support from nurse administrators significantly improved nurses' perceived self-efficacy and ability to provide both psychological support and symptom management for dying patients ($p \leq .05$). The results of the Hsu & Chen (2019) study were not available in English; information could only be gleaned from the abstract. The purpose of this descriptive, correlational study was to explore variables that correlated with the self-efficacy of registered nurses (RN's) in providing EOL care. Data was collected from 214 RNs via a questionnaire on knowledge, attitudes, and self-efficacy. Results indicated that the nurses had average knowledge, attitudes and self-efficacy of EOL patient care (12.99 ± 1.63, 46.74 ± 4.39, and 48.46 ± 10.37 respectively). Pearson product-moment correlation showed significant and positive correlations between the three variables. Multiple regression analysis also showed significant positive correlations between self-efficacy and type of work unit, nurse experience, knowledge and attitude towards EOL care in general.

There is very little written regarding rural and urban differences in the delivery of palliative and EOL patient care (Rainsford et al., 2017). No studies were identified that explored the concept of self-efficacy related to new nurses working in rural vs non-rural settings.

Chapter II Summary

This chapter included a description of the search process and an integrative review/synthesis of the relevant literature, demonstrating what is already known about the problem. Gaps in the literature were also presented. Personal, professional, and sociocultural factors affecting new nurses' ability to adequately address EOL issues and confidently provide competent, self-efficacious palliative care remain largely unstudied. Lack of undergraduate palliative and EOL care education undermines new nurses' self-efficacy, affecting not only the

provision of physical cares but also communication with patients and their families. Patient outcomes are directly impacted by the ability of the nurse to provide competent care. Lack of nurses' self-efficacy may lead to poor outcomes for patients. Inadequate EOL preparation also results in nurses experiencing distress, death anxiety, burnout, and leaving practice. Continuing education, mentoring and residency programs show potential for mitigating these issues, creating a less stressful, more satisfying EOL experience for patients, families and nurses. As previously stated, regardless of age, gender, level of degree conferred or time in practice, the value of ongoing palliative EOL care training and support of management staff is vital. Type of work unit, nurse experience, knowledge and attitude towards EOL also appear to affect nurses' perceived self-efficacy. However, there is very little literature regarding personal demographics and how they relate to self-efficacy, nor were any studies identified comparing self-efficacy of nurses providing palliative EOL care in both rural and non-rural hospital settings.

Chapter Three will provide information about the study methodology and research design. The population, sample and settings will be described, and the recruitment plan will be outlined. Inclusion and exclusion criteria will be detailed and clarified, as will protection of human subjects. Finally, measurement tools, data collection processes and logistics, and statistical data analysis will be described.

CHAPTER III: METHODOLOGY

This chapter will include information about the study methodology and research design. The population and sample will be described and the recruitment plan will be outlined. Inclusion and exclusion criteria will be detailed and clarified, as will protection of human subjects. Instruments, data collection processes for the instruments, logistics, and statistical data analysis will be described. Finally, cleaning and screening of the final database, data input and the analysis process will be clarified.

Research Design

Quantitative research methods, such as surveys, are appropriate when a researcher wishes to obtain and utilize numeric information through formal measurement and statistical analysis (Polit & Beck, 2022). The focal concept for this study is self-efficacy, which is a very complex and abstract concept requiring psychometric measurement. Utilizing Bandura's SET as the foundational theory, the researcher was able to quantify the abstract variable of interest through the use of an electronic survey which contained demographic items and content from two separate instruments. The four primary concepts of SET (mastery experiences, vicarious experiences, verbal persuasion, and emotional and physiological states) were measured by utilizing an online Qualtrics survey that collected numeric data regarding participants' perceptions of their self-efficacy to provide palliative patient care at EOL within the hospital setting. This online survey design was appropriate for this study because, due to the size and

geographical location of the potential participant pool, it was not feasible to meet participants in person for the purpose of data collection.

Population and Sample

The population of interest for this study was new nurses within their first three years of licensure who provide patient care to dying patients in a hospital setting. This time-frame was chosen, based on the definition of an advanced beginner nurse, as outlined by Benner's theory (1982). Advanced beginner nurses are considered those who demonstrate acceptable skills performance and have had some patient experiences but they are not yet considered competent in their nursing cares (Benner, 1982). Utilizing targeted sampling, a non-randomized sample was drawn from a pool of RNs who had been licensed between June 1st, 2018 and May 31st, 2021, and were licensed within the upper Midwest United States. Targeted sampling was the method of choice because these states provided a sample of nurses who work in both rural and non-rural settings. The researcher was looking specifically at new nurses providing palliative EOL patient care in the hospital setting. The rationale for limiting this study to the hospital settings was that 60% of the nursing workforce currently works in the hospital setting (Schnur, 2020), thus hospitals are the most likely setting in which a new nurse would reasonably be expected to be working and caring for dying patients. Datasets of nurse contact information was available through state Boards of Nursing.

Sampling Procedures

Four data sets were used for this study. These datasets came from four upper-Midwest United States: Minnesota, South Dakota, Wyoming and Nebraska. The lists contained 177,929 email addresses. After cleaning and screening, the datasets for the desired licensure dates, the

datasets collectively contained 32,792 potential participants; MN (22,487), SD (3,347), NE (5,997) and WY (961) (Appendix A).

Sample size. A power analysis indicated that for a small to medium effect size of .1 with an alpha of .05, assuming power of 80% for a final model of 10 factors, sample size of 172 respondents would be required. Factoring for a 30% return rate provided a potential sample of 7,247 participants. Factoring for a very conservative 5% return rate resulted in an anticipated 1,208 responses. Thus, it was anticipated that the researcher would be able to obtain an adequate sample of 172 respondents. Attrition was not anticipated to be an issue, as the entire survey was estimated to take no more than 15 minutes to complete.

Setting. The setting for this study was in the virtual realm. New nurses were asked to fill out a secure, online survey. The researcher collected survey data via Qualtrics and performed data analysis via SPSS 28.0.0.0 on a personal computer. All data was reported in aggregate form. No individual data was reported.

Recruitment plan. The researcher contacted boards of nursing in the four-state area, requesting a comprehensive contact list of newly graduated nurses (licensed within the past three years) within the respective states. The cost of these lists ranged from $20-00-$200.00. One state offered the list for free, however they required additional paperwork stating specifically for what purpose the database was to be used. Utilizing purposive targeted sampling, and after removing multiple double, triple and even quadruple email entries in the databases, the primary researcher compiled a final master email list and Qualtrics sent out a total of 32,210 emails (Appendix B), inviting new nurses to participate in the survey. Information regarding the study (Appendix C) and a link to the survey were provided in these emails. Survey information was given prior to them beginning the survey (Appendix D). An incentive of a $10 coffee card was offered to the

first 200 participants who completed the online survey. This card was made available as a download following the completion of the survey. After collecting more than 200 surveys, it was clear that there was not enough representation from rural nurses to make any sort of meaningful comparison between rural and non-rural nurses. With approval from the University of North Dakota Institutional Review Board (IRB), a second round of invitations was sent out via Qualtrics to participants who had not received the original invitation (Appendix E). This time, the survey included the question, "Do you work in a rural healthcare setting?" and no coffee card incentive. This second round resulted in an additional 69 surveys over a two-week period. The total number of returned surveys was 416.

Inclusion and exclusion criteria. All new Registered Nurses, defined as having become licensed within the past 3 years, who were working in the hospital setting and licensed within the four upper Midwest states as noted were considered for inclusion. Exclusion criteria was having been licensed for more than three years, not participating in direct patient care in a hospital setting, and having had any prior professional training or certification in palliative EOL patient cares. Exclusionary criteria during the second round of recruitment sampling also included NOT working in a rural hospital setting.

Human Subjects Protection

Permission for the study was obtained through the University of North Dakota IRB; reciprocity was granted by the IRB of the university where the researcher is employed (Appendix F). As stated previously, IRB was applied for and approved for the second round of participant recruitment as well. All participant information was kept strictly confidential, with only the PI having access to the email address databank. This was made clear to the participants, along with the promise that their emails would not be utilized for any other purpose, other than this survey.

No participant names were used; participants were identified only by a number in the SPSS database. Demographic data was protected in the same fashion. The benefits to the participants was that they had the opportunity to self-evaluate their perceptions of self-efficacy regarding their abilities to provide palliative EOL care.

Data security and disposal. SPSS data analysis files were kept secured on a computer used solely for the purpose of this study. This computer, which was password protected, was also kept in the researcher's possession at all times or locked in a secure filing cabinet in her office. State databases containing participant email information will be deleted from the researcher's computer following the completion of the study. Statistical analysis data will be kept securely for a minimum of three years in this fashion and may be utilized at a future date for secondary analysis, upon IRB approval for a secondary study. After three years, all electronic files and programs will be erased from the computer. Paper files will be shredded.

Instrumentation

Qualtrics. The survey tool chosen for this study was Qualtrics, a web-based, online survey tool that allows researchers to build surveys, collect data and evaluate research. This tool was available to the researcher, free of charge, through the University of North Dakota. University support staff was also available to assist the researcher. There were a few unanticipated problems with sending out such a large number of emails through Qualtrics, but with consultation and assistance from technology experts, a total of 32,210 emails invitations were sent over a period of 14 days.

Palliative Care Self-efficacy Scale. The 12-item Palliative Care Self-efficacy Scale" (Phillips et al., 2011) was selected for this study based upon both its relevance to the research question, its established validity and reliability, and its brevity. The instrument was acquired and

developed from the first section (12 questions) of the Tool 2.1: Palliative Care Providers' Views and Attitudes instrument (Eagar et al., 2003), a more in-depth, 67-item survey designed to measure professional caregivers, both nurses and nurses' aides', self-reported capacity for palliative care symptom management and EOL decision-making. This 67-item instrument has a Cronbach's alpha of 0.88 for internal consistency and reliability. While there are multiple instruments that measure nurses' skills and attitudes towards palliative and EOL patient care, as well as communication with patients and their families (Bui et al., 2020; Carman et al., 2016; Isaacson et al., 2019; Leombruni et al., 2014; Ross et al., 1996), the Phillips et al. (2011) Palliative Care Self-efficacy Scale questions are designed to measure a nurse's self-reported level of self-efficacy to both care for a dying patient and to interact with the patient's family (Appendix G). Permission was obtained from the author to utilize the instrument (Appendix H).

The 12 questions are separated into two sub-sections: Factor 1: Perceived Capability to Answer End-of-Life Care Concerns and Factor 2: Perceived Capability to Respond to Patient's End-of-Life Symptoms (Phillips et al., 2011). These 12 questions measure three of the four concepts of Bandura's SET: mastery experiences, vicarious experiences and verbal persuasion. During its validation study, the overall Cronbach's alpha for this instrument was 0.92, with the two subsections measuring 0.87 and 0.91 respectively. Participants are asked to rate themselves on a scale of 1-4: (1) need further basic instruction; (2) confident to perform with close supervision/coaching; (3) confident to perform with minimal consultation; or (4) confident to perform independently (Phillips et al., 2011). Scores are then tabulated and typically, means are compared pre-test/post-test fashion following some sort of intervention. For the purpose of this study, however, multiple linear regression analysis of the data was run to assess correlations between instrument scores and participants' demographic factors

Rosenberg Self-esteem Scale. Researchers cannot simply look at a participant and tell if they have high or low self-efficacy. Self-esteem is a strong predictor of self-efficacy. Therefore, to ensure that the fourth concept of Bandura's SET was captured by the data, participants were also asked to complete the Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965) (Appendix I). This instrument is a 10-item scale that measures both positive and negative feelings of self-worth. It utilizes a 4-point Likert scale, ranging from "strongly agree" to "strongly disagree". The RSE has been shown to be valid and reliable; it has a reported internal consistency rating of .92 and stability rating of between .85 and .88. It has been compared to the Coopersmith Self-Esteem Inventory and has been shown to have excellent equivalency. Scoring of the RSE involves correlating self-esteem responses of "disagree" or "strongly disagree" on questions 1, 3, 4, 7 and 10 with low self-esteem. Conversely, responses of "strongly agree" or "agree" on questions 2, 5, 6, 8 and 9 correlate with high self-esteem. For participant's responses were reverse-scored for the negatively-worded questions (Rosenberg, 1965).

Demographics. Personal and professional attributes of new nurses remain largely unstudied. As this study was looking at new RNs within their first three years of practice and providing direct patient care in the hospital setting, five of the demographic questions were intended to eliminate those participants who do not meet this criteria; questions 1, 3, 4 and 13 (Appendix J). As there are several ways to obtain an RN degree, question 2 was specifically designed to differentiate responders' levels of education. A death experience can be very different, depending upon where the nurse works; question 5 captured data relating to area of practice. Questions 6-9 addressed undergraduate and continuing education in EOL and questions 10-11 asked about participation in any sort of residency program or mentorship. Questions 12-14a inquired about prior experiences with death, either personally or professionally. The question

regarding the zip code of the participant's work facility was intended to be able to differentiate rural versus non-rural facilities; correlations were to be run to determine which practice area has higher rates of residency programs as well as participation by state. And finally, questions 15 and 16 asked about participant's age and gender and question 17 enquired as to participant's race. All of these demographics were to be used in performing multiple linear regression models.

In order to capture the essence of the first concept of Bandura's SET (1997), mastery experiences, the researcher asked questions about caring for a dying patient, including the number of experiences the participants may have had (Appendix J, questions 11, 12, 12a, 13, 14a and 14b). The second concept, vicarious experiences, was addressed by asking if participants are in a residency or mentorship program and, if so, have they had a preceptor/mentor guide them through the care of a dying patient (Appendix J), questions 10 and 11). The third concept of the SET, verbal persuasion, was also covered by asking about preceptor/mentorship programs (Appendix J), questions 10 and 11). The final concept of SET, emotional and physiological states, was measured in proxy as "self-esteem", utilizing the Rosenberg Self-esteem Scale (Appendix I).

Data Collection

The researcher was interested in mean self-efficacy scores, as reported on the Palliative Care Self-Esteem Scale (Phillips et al., 2011), mean self-esteem scores as measured by the Rosenberg Self-Esteem Scale (Fetzer Institute, 2021), as well as participants' demographic data, all of which were numerically coded for entry into SPSS. Variables with multiple options were dummy coded in order to run multiple linear regressions. Rural and non-rural settings were identified and separated via RUCA codes. Descriptive statistics were also used to report participation by state. Factors investigated for possible correlations with high or low self-efficacy

include new nurses' age, gender, race, level of licensure, pre-licensure EOL education, pre-licensure experience with death (personal or professional), number of exposures to death, and participation in a nurse residency program. Missing data was deemed to be minimal and random. Variables were explored and mean input was utilized to fill in missing data in the following fashion: question 1(degree held (n = 1; mean BSN), Self-Esteem Question (SEQ)2 (n = 3; mean 3), SEQ3 (n = 1; mean 3), SEQ7 (n = 1; mean 3), SEQ9 (n = 1; mean 3), SEQ11 (n = 1; mean 3), SEQ12 (n = 2; mean 3), Rosenberg3 (n = 1; mean 3), Rosenberg6 (n = 1; mean 3).

Data Analysis

Utilizing SPSS version 28.0.0.0, the researcher ran parametric measurements of central tendencies on the Palliative Care Self-efficacy Scale (Phillips et al, 2011) and the Rosenberg Self-Esteem Scale (Rosenberg, 1965), as well as descriptive statistics on demographic data.. There are no cut-off scores for either of these instruments; high mean scores equated to high self-efficacy and low means equated to low self-efficacy.

Three linear regression models were run. The first model was run, associating self-esteem scores and demographic characteristics that met the inclusion criteria for regression with the scores on the first six questions of the Phillips et al. (2011) instrument (psychosocial aspect of self-efficacy). The second model associated qualified demographics to the last six questions (self-efficacy and physical care of the patient),and the third model was run for all factors that met the inclusionary criteria and summed scores of both subscales of the Phillips et al. (2011) instrument for overall correlations. This data was all then analyzed to determine directionality, strength, and statistical significance (or lack thereof) of correlations between the participants' demographic data, self-esteem and self-efficacy scores. Linear regression was used because, following correlation, it allowed for prediction of the outcome variable, in this case, high or low

self-efficacy scores, based upon reported self-esteem and demographic factors. It also adjusted for significant collinearity amongst the variables. All data was reported in aggregate form. No individual data was reported.

Limitations and Anticipated Challenges

This study involved a pool of new RNs from a four state area in the upper Midwest United States (Wyoming, South Dakota, Nebraska, and Minnesota). Databases were not available from two other states under consideration for inclusion in this study; their Century Codes forbade them from sharing such lists, even for a price. This reduced the number of potential participants. Also, this area of the United States is inhabited largely by people of Caucasian European descent and has minimal ethnic diversity, thus the findings may not be generalizable to other, more culturally diverse locations. Data collected was comprised of subjective self-reported evaluations of participants' beliefs in their own self-efficacy via the Palliative Care Self-efficacy Scale (Appendix G), the Rosenberg Self-esteem Scale (Appendix I), and participant self-reported demographic information (Appendix J). Therefore, the risk of response bias must also be taken into consideration. Assessment of rural versus urban differences based on zip codes of where the participants work may not provide an accurate picture, as many nurses "commute away" from rural communities to larger cities for employment (Johansen et al., 2018). And although much has been said about nurse retention, the ability to evaluate the correlations between self-efficacy in providing palliative patient care at EOL, and retention of new nurses in practice is beyond the scope of this study and will be a recommendation for future research related to this topic. The researcher also accepts that new nurses may work in facilities other than the hospital setting. Nurses working in long-term care facilities may also be new and caring for dying patients. Another limitation of this study is the

nature of self-reporting of participants' self-efficacy; those who identify themselves as having high self-esteem may overestimate their self-efficacy as well. However, given the anonymous nature of this survey, the researcher feels this to be a minimal risk to the outcome of the study. Additionally, the researcher had never before used Qualtrics as a method of data collection; she attended training and met with university trainers for guidance.

Chapter III Summary

This chapter described the study methodology and outlined the research design. It described the population, sample and settings, and the recruitment plan was outlined. Participant inclusion and exclusion criteria was detailed and clarified, as were protection of participants' rights. Finally, measurement tools, data collection processes and logistics, and statistical data analysis were described. Chapter IV will describe the results of the study.

CHAPTER IV: RESULTS

As stated in Chapter 1, the purpose of this exploratory, correlational dissertation research study is to identify factors which may be associated with new nurses' self-efficacy to provide quality palliative patient care at EOL. This chapter will summarize the collected demographic data, discuss different statistical tests that were run, and results of the statistical analysis of the data overall.

Sample

In total, the Qualtrics database yielded 416 responses that were listed as 100% complete. This data was downloaded into an Excel file and entered into SPSS version 28.0.0.0 for analysis. Visual screening of the data resulted in the removal of 181 surveys; 169 surveys were lost because disqualifying questions had ruled them out and 12 surveys were lost because of incomplete data; they simply did not answer any of the questions on the Phillips et al. (2011) and Rosenberg (1965) instruments. Five additional responses were removed because either the zip codes were not valid (n = 2) or they had 10% or more overall missing data on the Phillips et al. (2011) and Rosenberg (1965) instruments (n = 3). This resulted in a final dataset of 221 completed surveys. There was minor missing data and it appeared to be random with no discernable pattern. Mean input was utilized to fix missing data, as described in Chapter 3.

Demographics. The sample was 91.9% female (n = 203) and 86.4% White (n = 191). The participants were primarily between the ages of 20-29 (66.1%; n = 146) and the vast majority of participants indicated they were prepared for practice at the Bachelors of Science level (78.3%; n = 173). Refer to Table 2 for more detailed sample demographic information.

Undergraduate EOL preparation. While 15.4% of participants (n = 34) reported having neither simulated nor classroom EOL instruction in their undergraduate preparation, the majority of participants reported having EOL simulation of either 1 hour (45.2%; n = 100) or 2-5 hours (29.0%; n = 64). Regarding EOL classroom instruction, half of the participants who responded "yes" (50.2%) reported receiving between 2-5 hours of EOL classroom instruction (n = 111). An additional 12.2% (n = 27) reported they received at least 1 hour of EOL classroom instruction.

Residency experiences. Over half of the respondents reported they had participated in a residency program (52.0%; n = 115). Of the participants who reported being part of a residency program, 60% reported that their preceptor had guided them through the death of a patient (n = 69).

Personal experience with death. Respondents were queried as to whether or not they had a personal experience a death and 86.0% reported they already had (n = 190), whether it was the death of a family member (76.0%; n = 168) or a friend (14.0%; n = 11).

Professional experience with death. Of those who stated they had already had a professional experience with death (93.2%; n = 206), 83.5% reported being RNs at the time of the death (n = 172); 6.8% of participants reported they had yet to experience a death as a healthcare professional (n = 15).

Number of deaths experienced as a professional. The majority of participants reported having experienced a death as a professional (n = 206). Among those, 41.4% experienced more than 10 deaths (n = 85). The remaining participants stated they had experienced 1-5 deaths (38.3%; n = 79) and 6-10 deaths (20.4%; n = 42).

Work setting. Participants worked in a multitude of hospital settings, however more than half of the participants indicated that they worked in one of three areas; 30.8% in Medical/Surgical (n = 68), 16.7% in Intensive Care (n = 37), and 10.9% in the Emergency Department (n = 24).

Rural/ Non-rural. Of the 221 surveys, 91.4% were assigned RUCA codes below 7 (non-rural: n = 202) based on the zip code of where they worked, and 8.6% were RUCA codes of 7 or greater (rural: n = 19).

Table 2

Characteristics of Participants

Variable	**Values**
Age	*n* (%)
20-29	146 (66.1)
30-39	48 (21.7)
40-49	21 (9.5)
50 or older	6 (2.7)
Sex n (%)	
male	17 (7.7)
female	203 (91.9)
other	1 (0.5)
Race	
White	191 (86.4)
Black	4 (1.8)
Latinix	4 (1.8)
Native American/Native Alaskan	1 (0.5)
Asian	11 (5.0)
Native Hawaiian/Pacific Islander	1 (0.5)
Biracial/Multiracial	5 (2.3)
Other	4 (1.8)
Education n (%)	
AAS	5 (2.3)
Diploma	0
ADN	29 (13.1)
BSN	173 (78.3)
MS	10 (4.5)
PHD	0
DNP	3 (1.4)
other	1 (0.5)
Area of Practice n (%)	
Medical/Surgical	68 (30.8)
Intensive Care	37 (16.7)
Emergency Department	24 (10.9)
Pediatrics	9 (4.1)

Table #2 cont. Characteristics of Participants

Oncology	14 (6.3)
Maternal/Child	14 (6.3)
Mental Health	8 (3.6)
Multiple areas	11 (5.0)
other	36 (16.3)
End-of-Life Education n (%)	
no	34 (15.4)
yes	187 (84.6)
End-of-Life Simulation hours n (%)	
0	34 (15.4)
1	100 (45.2)
2-5	64 (29.0)
6-10	16 (7.2)
More than 10	7 (3.2)
End-of-Life Classroom n (%)	
0	34 (15.4)
1	27 (12.2)
2-5	111 (50.2)
6-10	31 (14.0)
More than 10	18 (8.1)
Residency participation n (%)	
no	106 (48.0)
yes	115 (52.0)
Preceptor guide through a death n (%)	
Not in a residency	106 (48.0)
no	46 (20.8)
yes	69 (31.2)
Personal death experience n (%)	
no	31 (14.0)
yes	190 (86.0)
Relationship to dying person n (%)	
No personal experience	31 (14.0)
Friend	11 (14.0)
Family	168 (76.0)
other	11 (5.0)
Professional death experience n (%)	
no	15 (6.8)
yes	206 (93.2)
Role in professional death experience n (%)	
No professional experience	15 (6.8)
CNA	21 (9.5)
LPN	5 (2.3)
RN	172 (77.8)
other	8 (3.6)
How many professional death experiences n (%)	
0	15 (6.8)
1-5	79 (35.7)
6-10	42 (19.0)
More than 10	85 (38.5)
RUCA code of workplace n (%)	
Non-rural	202 (91.4)
Rural	19 (8.6)

Self-Efficacy Scale

As stated previously, the Phillips et al. (2011) Palliative Care Self-efficacy Scale is comprised of 12 questions, half of which have to do with the nurse's ability to manage psychosocial aspects of dying, including talking with the patient's family, and half of which ask about the nurse's physical care of the dying patient (Appendix G). Questions are scored on a scale of 1-4 with a possible range of total scores from 12-48. See Table 3. There are no cut points for this instrument; the higher the score, the higher the perceived self-efficacy.

The overall mean self-efficacy score was 36.7 (range 13-48, SD ±8.4) out of a possible 48 points. Median total score was 38, mode 44 (n = 20). Participants scored themselves between 1 and 4 on all questions (Table 3). The mean score for the first six questions on psychosocial skills was 17.1 (range 6-24; SD ± 4.5) out of a possible 24 points; median and mode scores were both 18 (n = 23). For the last six questions pertaining to physical skills, the mean score was 19.7 (range 7-24, SD ±4.3) out of a possible 24 points, with median score of 21 and mode of 24 (n = 56). See table 3 for descriptive statistic details for each question of the scale.

Table 3

Self-reported Scores of the Palliative Care Self-efficacy Scale (Phillips et al., 2011)

Questions	**Frequencies**				
Please answer the following 12 questions, rating your feelings of self-efficacy in providing palliative End-of-Life patient cares.	*Mean*	*Median*	*Mode*	SD ±	*Range*
1. Answering patients questions about the dying process.	2.8	3	3	.97	1-4
2. Supporting the patient or family member when they become upset.	3.1	3	3	.89	1-4
3. Informing people of the support services available.	2.7	3	3	.96	1-4
4. Discussing different environmental options (e.g. hospital, home, family).	2.7	3	3	.96	1-4

Table #3 cont. Self-reported scores of the Pallliative Care Self-efficacy Scale (Phillips et al., 2011

5. Discussing patient's wishes for after their death.	2.8	3	3	.97	1-4
6. Answering queries about the effects of certain medications.	3	3	3	.88	1-4
7. Reacting to reports of pain from the patient.	3.5	4	4	.75	1-4
8. Reacting to and coping with terminal delirium.	3	3	3	.93	1-4
9. Reacting to and coping with terminal dyspnea (breathlessness).	3.1	3	4	.94	1-4
10. Reacting to and coping with nausea/vomiting.	3.4	4	4	.82	1-4
11. Reacting to and coping with reports of constipation.	3.5	4	4	.82	1-4
12. Reacting to and coping with limited patient decision-making capacity.	3.2	4	4	.86	1-4

Self-Esteem Scale

The Rosenberg (1965) Self-esteem Scale is comprised of 10 questions, scored from 1-4, with a range of possible scores from 12-48, with questions 2, 5, 6, 8 and 9 being reverse scored. There are no established cut points for this instrument either; higher scores indicate higher self-esteem. Overall mean score was 31.9 (range 13-40, SD $\pm$ 4.5), median 31 and mode 30 (n = 25). See Table 4 for detailed descriptive statistics for each item on the tool.

Table 4

Self-reported Scores on the Self-esteem Scale (Rosenberg, 1965)

Questions	**Frequencies**				
Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.	*Mean*	*Median*	*Mode*	SD $\pm$	*Range*

Table #4 cont. Self-reported Scores on the Self-esteem Scale (Rosenberg, 1965).

1. On the whole, I am satisfied with myself.	3.2	3	3	.57	1-4
2. At times I think I am no good at all.	3	3	3	.76	1-4
3. I feel that I have a number of good qualities.	3.4	3	3	.5	2-4
4. I am able to do things as well as most other people.	3.3	3	3	.5	2-4
5. I feel I do not have much to be proud of.	3.4	3	3	.63	1-4
6. I certainly feel useless at times.	3	3.8	3	.8	1-4
7. I feel that I'm a person of worth, at least on an equal plane with others.	3.3	3	3	.54	1-4
8. I wish I could have more respect for myself.	2.7	3	3	.82	1-4
9. All in all, I am inclined to feel that I am a failure.	3.4	3	3	.65	1-4
10. I take a positive attitude toward myself.	3.2	3	3	.61	1-4

Preliminary Crude Analysis.

In order to determine which variables to include in the final linear regression model, crude analysis of the data was performed. ANOVA or Pearson correlation was run for each variable to determine significant associations with self-efficacy scores; any variable with a *p* value of .25 or less was included in the final step-wise regression model.

Pearson correlation indicated that participant self-esteem score was significantly associated with self-efficacy ($p = .005$).

Dichotomous variable categories not having a minimum 90/10 split could not be meaningfully correlated. Wherever possible, variables were dummy-coded with "no" responses becoming 0. This allowed for negative responses to be included in analysis for inclusion in the final regression model. Additionally, variables with multiple options that had very small numbers of responses were recoded into groups by combining those with smaller numbers together and coding them as "other". See Table 5 for results of crude ANOVA analysis.

The variables age and race did not make it into the linear regression model because they had a *p* value of greater than .25 in the univariate analysis and therefore, there was no association between age and race with self-efficacy. Because the gender variable was truncated and failed to meet the 90/10 requirement, even with the inclusion of the single participant who identified as "other", it could not be meaningfully analyzed as an independent factor and was not included in the linear regression model.

Educational factors, including the number of hours of undergraduate EOL classroom or simulation instruction, and nursing degree held were also not included in the linear regression model as they all had a *p* value of greater than .25.

Personal experiences with death, be that of a family member or friend, both met the criteria for inclusion in the final regression model (p = .147). The variable role played in the professional death (RN or Other) was also found to be associated with self-efficacy (*p* = .118) and was included in the final model as well. The variable number of deaths experienced as a professional (*p* = .299) was only slightly greater than the required *p* of .25. Following further consideration, it was agreed upon that this was close enough to meeting the requirement and all three levels of the variable number of deaths (1-5, 6-10, and more than 10) were included in the final linear regression model.

The factor geographical location, rural versus non-rural, was truncated, failing to meet the 90/10 requirement, thus it could not be meaningfully analyzed as an independent factor and was not included in the linear regression model.

Participation in a residency program and having a preceptor guide the new nurse through the death of a patient had no significant association with self-efficacy as evidenced by *p* values of greater than .25, therefore they were not included in the final regression model.

Area of work was shown to have no independent association with self-efficacy, as indicated by *p* values of greater than .25. These factors were not included in the final linear regression model.

Table 5

ANOVA

Independent Variable	**n**	***Mean elf-efficacy score* (±SD)**	***Range***	**F**	***p***
Degree				.329	.720
Associate (AAN, ADN)	34	37.5 (7.2)	15-47		
Bachelors	173	36.5 (8.6)	13-48		
Graduate (MS, DNP, Other)	13	37.8 (8.1)	18-47		
Area of Practice				.741	.546
Medical/Surgical	68	37.2 (7.3)	19-47		
Intensive Care	37	34.9 (9.6)	13-48		
Emergency Department	24	36.9 (9.9)	15-48		
Other (Peds, Onco, Mat/Child, Multi, Other)	92	37.1 (8.4)	15-48		
EOL Education					
Simulation (hours)				1.035	.378
None	34	36.7 (8.3)	15-48		
1	100	37.6 (8.4)	13-48		
2-5	64	36.2 (7.9)	15-48		
6-10+	23	34.5 (8.4)	19-47		
Classroom (hours)				.836	.475
None	34	36.7 (8.3)	15-48		
1	27	39.1 (7.4)	24-48		
2-5	111	36.2) (8.7)	13-48		
6-10+	49	36.6 (8.1)	18-48		
Residency Participation					
Preceptor guidance through a death.				.490	.613
Not in residency program	106	37.3 (8.5)	13-48		

Table #5 cont. ANOVA

No	46	36.5 (7.8)	19-48		
Yes	69	36.1 (8.4)	15-48		
Experience with Dying Person					
Personal experience: relationship				2.117	.147*
No experience	31	34.7 (9.2)	15-48		
Family	168	36.5 (8.5)	16-48		
Friend or "other"	22	37.1 (8.2	13-48		
Professional experience: role				2.154	.118*
No experience	15	40.7 (6.2)	29-48		
RN	172	36.2 (8.3)	15-48		
Other (CNA, LPN, "other')	34	37.6 (9.2)	13-48		
How many professional death experiences?				1.232	.299
No experience	15	40.7 (6.2)	29-48		
1-5	79	36.5 (7.7)	20-48		
6-10	42	36.8 (9.0)	15-48		
More than 10	85	36.2 (8.4)	13-48		
Age				.087	.917
20-29	146	36.6 (8.7)	13-48		
30-39	48	37.0 (8.3)	18-48		
40 and or older	27	37.1 (6.6)	17-48		
Race				.575	.449
White	191	36.9 (8.2)	13-48		
Other (Black, Latinx, Native American/Alaskan Native, Asian, Native Hawaiian/Pacific Islander, Biracial/Multiracial, other)	30	35.7 (9.1)	18-48		

Mean Self-efficacy score 36.7 (±8.4).
*indicates significance ($p \leq .25$)

Adjusted Analysis

Based on ANOVA and Pearson correlations, there were three variables that met the requirements for inclusion in the overall final linear regression model; self-esteem scores, experiencing a personal death, and role when experiencing a professional death. The decision was made to run simple linear regression rather than step-wise and force the model to include the fourth variable, number of deaths, based on the *p* value being so very close to meeting the required p .25 or less ($p = .299$). The final simple linear regression model resulted in self-esteem

and experiencing the death of a family member both being positively associated with self-efficacy (p = .008 and p = .031, respectively). Experiencing the death of a friend or other was found to be insignificant. The number of deaths experienced as a professional nurse (1-5 (p = .016). 6-10 (p = .038), and 10 or more (p = .010) were all significantly negatively associated with self-efficacy (p < .05). Role when experiencing a personal death was insignificant. Tolerance and Variance Inflation factors for each variable were acceptable. See Table 6.

Table 6

Variables Independently Associated with Overall Self-Efficacy

Variables	***SE***	**ß;*p***	***Tolerance***	***Variance Inflation Factor (VIF)***
Self-esteem score	.125	.181;.008*	.957	1.045
Personal experience with death (relationship)				
Family	1.664	.185;.031*	.599	1.668
Friend or Other	2.425	.104;.232	.574	1.743
Number of deaths				
1-5	2,368	-.330;.016*	.235	4.257
6-10	2,516	-.248;.038*	.311	3.221
10 or more	2.368	-.358;.010*	.228	4.386
Role in professional death				
RN	3.995	.090;.206	.875	1.167
CNA, LPN, Other	1.718	.004;.956	.787	1.271

Constant ß;p (28.295;<.001; R^2 =.042)
*indicates significance ($p \leq .05$)

For overall self-efficacy, the model summary and ANOVA summary indicate that the overall model of 8 independent variables significantly predicts overall self-efficacy, R^2= .076,

R^2_{adj}=.042, $F(8,212) = 2.192$, p = .029. Based upon the ß values, the highest contributing factor to new nurses' self-efficacy to care for patients at EOL is experiencing 10 or more deaths (ß = -.358). This negative ß indicates an inverse relationship between the variable and self-efficacy (*p* = .010), meaning 10 or more death experiences makes new nurses feel less self-efficacious. The next variables which negatively contributed to self-efficacy, in descending order, are experiencing 1-5 deaths (ß = -.330) and experiencing 6-10 deaths (ß = -.248). The variables that had the most positive contribution to new nurses' feelings of self-efficacy were experiencing the death of a family member (ß = .185) and having high self-esteem (ß = .182). The remaining variables, experiencing the death of a friend or other and role in a professional death, did not significantly affect new nurses' self-efficacy. Based on the R^2_{adj}, the model overall explained only 4.2% of the variance. With the exception of the variable which involved the number of deaths nurses experienced, the tolerance levels were all very high. The same held true for the variance inflation factors; all were very close to 1, with the exception of the variable number of deaths. This indicates that there was multicolinearity within these variables. This was not an unanticipated finding.

Self-efficacy Subscales; Psychological and Physical. For the sake of curiosity, simple linear regression was also run on the separate psychological and physical sub-scores of the Phillips et al. (2011) self-efficacy instrument. See Table 7.

Table 7

Variables Independently Associated with Psychological and Physical Sub-scores

	Psychological Scores		**Physical Scores**	
Variables	***SE***	**ß;*p***	***SE***	**ß;*p***
Self- esteem score	.068	.175;.011*	.065	.182;.008*
Personal experience with death (relationship)				

Table #7 cont. Variables Independently Associated with Psychological and Physical Sub-scores.				
Family	.895	.186;.031*	.864	.177;.039*
Friend or Other	1.305	.089;.308	1.260	.107;.219
Number of deaths				
1-5	1.275	-.303.028* .	1.230	-.311;.023*
6-10	1.354	-.234;.051	1.307	-.253;.034*
10 or more	1.274	-.342;.015*	1.230	-.320.022*
Role in Professional death				
RN	2.151	.070;.329	2.076	.100;.164
CNA, LPN, Other	.925	-.017;.823	,893	.019;.803

Psychological Scores constant ß;*p* (12.681; <.001; R^2= .068)
Physical Scores constant ß;*p* (15.106;<.001; R^2 =.076)
*indicates significance ($p \leq .05$)

The model summary and the ANOVA summary indicate that the overall model of 8 variables significantly predicts psychological sub-scores on the Phillips et al. (2011) instrument (R^2 = .064, R^2_{adj} = .038, $F(6,214 = 2.429$, p = .027.) The 8 variables include, in ascending order of contribution to psychological sub-scores are: experiencing 10 or more deaths (ß = -.342), 1-5 deaths (ß = -.303), and 1-5 deaths (ß = -.303). Once again, this negative ß indicates that the number of deaths negatively affected participants' psychological self-efficacy. Variables with positive contributions to psychological self–efficacy were; experiencing the death of a family member (ß = .186) and self-esteem scores (ß = .175). Experiencing the death of a friend and the role in experiencing a professional death did not significantly contribute to psychological self-efficacy. Being a CNA/LPN/other, however, was noted to be negatively associated. Based on the R^2_{adj}, the model overall explained only 6.4% of the variance.

For the physical self-efficacy sub-score on the Phillips et al. (2011) instrument, the model summary and ANOVA summary indicate that the overall model of 8 independent variables

significantly predicts scores, $R^2 = .076$, $R^2_{adj} = .038$, $F(8,212) = 2.177$, $p = .030$. As with the overall model, the ß scores followed the same pattern of negative and positive contribution to new nurses' self-efficacy; highest contributing factors were once again experiencing 10 or more deaths (ß = -.320), 1-5 deaths (ß = -.311), and 1-5 deaths (ß = -.253), again in a negatively associated fashion. Positively associated factors, in descending order of contribution, were self-esteem scores (ß = .182) and experiencing the death of a family member (ß = .177). Again, experiencing the death of a friend and the role in experiencing a professional death did not significantly contribute to physical self-efficacy. Based on the R^2_{adj}, the model overall explained only 7.6% of the variance (see Table 7).

Chapter IV Summary

This chapter summarized the collected demographic data and results of the statistical analysis of the data overall. Participant self-efficacy and self-esteem scores were reported in tabular format, as were the results of coding and crude data analysis techniques. Crude analysis of the data resulted in 8 variables that met the criteria for inclusion in the final linear regression model. The results of linear regression showed that the number of deaths experienced negatively affected new nurses' self-efficacy to provide palliative EOL patient care. Self-esteem was also significantly associated with self-efficacy but in a positive fashion, as was a prior experience with the death of a family member. Chapter 5 will discuss these findings with regard to each aim of the study and in relation to current literature. Recommendations for education, practice, research and policy will be discussed. The potential effect of the COVID-19 pandemic on the study findings will also be discussed, as will the findings as they relate to the four concepts of Bandura's SET (mastery experiences, vicarious experiences, verbal persuasion and emotional and physiological states). Limitations of the study and lessons learned will also be discussed.

CHAPTER V: DISCUSSION

The purpose of this doctoral study was to identify multiple factors associated with new nurses' self-efficacy to provide EOL patient care, with the hope of informing nurse managers so they may better support new nurses as they transition into practice. This chapter will discuss these findings with regard to each aim of the study and in relation to current literature. The potential effect of the COVID-19 pandemic on the study findings will also be discussed, as will the findings as they relate to the four concepts of Bandura's SET (mastery experiences, vicarious experiences, verbal persuasion and emotional and physiological states). Recommendations for education, practice, research and policy will be discussed. Limitations of the study and lessons learned will also be discussed.

Introduction

The planning phase of this study began nearly four years ago, prior to the outbreak of the COVID-19 pandemic. There was no way to foresee such an event happening, thus there was no consideration given to the effect of a highly contagious, global pandemic and how they might affect the study outcomes when developing the methodology of this study. There was no literature yet as there had been no research done on the effect of the COVID-19 pandemic on the nursing profession. Given the sensitive nature of the topic of death and the sheer number of deaths caused by COVID-19, compounded by the very nature of the death of a COVID-19 patient, there is little doubt that the pandemic affected the outcome of this study; one simply cannot look at the findings without viewing it through the lens of the COVID-19 pandemic

This dissertation study was unique in that it looked at multiple demographic, educational, and experiential factors that may affect new nurses' self-efficacy in providing palliative EOL patient care. Many of these factors have been studied independently in relation to nurses' self-efficacy to provide patient care in other areas of practice, but the focus of this study being on the self-efficacy of newly licensed nurses within their first three years of practice caring for patients at EOL has not been seen before in the literature. Generic demographic factors such as age, gender and race are almost always included in nursing research studies, however this study attempted to look at demographic factors in combination with different educational degrees, workplace settings and geographical location (rural versus non-rural areas), seeking to identify combinations of factors that may indicate a new nurse who has not yet achieved feelings of self-efficacy to care for a dying patient. Although the majority of factors in this study were found to have no association with new nurse self-efficacy to provide EOL patient care, five were significantly associated with new nurse self-efficacy and there were some interesting findings that may have implications for education, practice, research and policy.

Specific Aims for this Study

Aim 1. Demographic factors that are independently associated with self-efficacy (age, gender and race). Age was not found to be a significant factor affecting new nurses' self-efficacy to provide palliative EOL patient care. The majority of the nurses who responded to the survey were between the ages of 20-29. This was not a surprising finding, as the targeted population for this study was new nurses, within three years of licensure. The average age of college graduates today is 23 for traditional students who go straight from high school to college (Subramanian, 2022). However, there has been a surge in non-traditional, older students, aged 20-24, who already have work experience and are entering college for the first time. This has

raised the age of most college graduates to 25-29 (Subramanian, 2022). This trend of non-traditional students returning to school may account for the few participants who reported being older, despite being a new nurse. These older new RNs may have already had life experiences with death that affected their self-efficacy, whether that was the death of a friend or a family member. They may also have had prior life experiences as CNAs or LPNs that affected their self-efficacy to care for a dying patient. However, the assumption cannot be made that with increasing age comes experience. At present, no additional studies were found that looked specifically at age as a factor in self-efficacy in providing EOL patient care, however the age of the nurse has been studied with regard to self-efficacy and death anxiety. One systematic review indicated that younger nurses < 30 years old who lack the skills and experience to deal with emotional situations, particularly caring for dying patients, often experience death anxiety, frustration, irritation and even anger in response to a patient death (Peters et al., 2013). These feelings can negatively impact future patient care. Thus, age remains an important factor and one that warrants further study.

The sample was predominantly female. This was not a surprising finding, as the literature shows that the vast majority of the nurses today are female; men comprise only 12.7% of today's nursing workforce. (National Academy of Sciences, 2021). However, there were still fewer male respondents than the national average of male nurses and, as stated previously, there were not enough male participants in this study to make any meaningful comparison of gender and self-efficacy scores. Had there been a larger sample, gender could have perhaps been included in the analysis. The current literature was lacking with regard to research looking specifically at gender and self-efficacy to care for dying patients, thus it would be an important factor for further study in connection with self-efficacy to care for dying patients.

Race was also not found to be a significant factor associated with self-efficacy. Although there was some racial diversity in the sample, there was not enough to make any meaningful comparison of race as a factor affecting self-efficacy. The sample was overwhelmingly White which, given the geographical setting of the sample, was not surprising. The most current National Council of State Boards of Nursing (NCSBN)(2020b) survey reports that 80.7% of the nursing workforce is Caucasian. The racial profile for this study exceeded that number, possibly because of the racial make-up of the specific states chosen for recruiting nurses. According to U.S. Census Bureau (2020) data, the Midwest region of the United States is 75% Caucasian. Data pertaining to race is often collected as a demographic factor in nursing studies, however there was nothing found in the literature that specifically addressed race as affecting self-efficacy in caring for a dying patient.

Aim 2. Educational factors that are independently associated with self-efficacy (curriculum on EOL, degree held). Undergraduate education on EOL was not found to be a significant factor affecting new nurses' self-efficacy. Neither undergraduate classroom instruction, EOL simulation, nor the number of hours of classroom or simulation were found to be significant factors affecting new nurses' self-efficacy. Nearly half of the participants in this study reported having at least one hour of EOL simulation and between 2-5 hours of classroom EOL instruction. These numbers of hours are reflective of that which are found in the literature. One recent study of undergraduate senior nursing students preparing for entry to practice found that a combination of two hours of classroom EOL instruction followed by an EOL simulation experience was very well received; participants strongly agreed that simulation enhanced their understanding of what they had learned in the classroom about all that is required when caring for a patient at EOL (Murch & Perlow, 2019). Most schools of nursing include, at minimum,

some didactic classroom instruction on EOL patient care, yet studies continue to show that nurses feel unprepared to care for the dying, even specialty oncology nurses. One such study reported that 71% of oncology nurses have said their knowledge of pain control at EOL was deficient; 59% stated they were not prepared to manage symptoms of a dying patient, and 62% stated their overall EOL education was inadequate (Hebert et al., 2011). In another study of practicing oncology nurses, half of the participants reported that they had received less than two hours overall of EOL undergraduate education and a quarter of them reported feeling inadequate in performing EOL patient care (White & Coyne, 2011). These were experienced, practicing oncology nurses, some with 10 years of experience, reporting that they still felt unprepared to care for dying patients. This lack of undergraduate preparation was not reflected in this study. There was a very small percentage of participants who reported receiving zero EOL undergraduate instruction, but the majority reported at having between 1-5 hours of EOL simulation and 2-5 hours of classroom EOL instruction. Had this study had a larger sample, there may have been some association found between undergraduate EOL instruction and new nurses' self-efficacy. This certainly warrants further study.

The educational degree held by participants was not a significant factor associated with nurse self-efficacy in this study, either. It is possible that regardless of degree held, these nurses still did not receive adequate preparation at the undergraduate level to feel self-efficacious in providing EOL patient care. The research shows that schools of nursing tend to be lacking in EOL or provide inadequate preparation for newly graduated nurses entering into practice (Chiplaskey, 2016; Gillan et al., 2014; Scherlin & Quinn, 2016).

The overwhelming majority of participants reported being BSN degrees, far exceeding the national statistics which state 42% of nurses in the United States reported having a BSN

degree (National Council of State Boards of Nursing, 2020b). This may be due in part to the large number of specialty hospitals located in Minnesota, including the Mayo Clinic, which would require nurses to be prepared at the BSN level. Nurses provide the bulk of patient care in the hospital setting and due to the current nursing shortage, nurses today are being asked to do more and more with fewer resources. As stated previously, nearly 70% of people will die in some kind of healthcare facility under the care of nurses (Shaw and Abbot, 2017). The degree held by the nurse as a vital factor in patient safety, mortality and outcomes has long been studied (Aiken et al., 2002; Aiken et al, 2012). The nursing literature states that increasing the number of BSN prepared nurses on staff reduces patient falls and mortality, however nothing was found in the literature regarding the association of nursing degree held and nurse self-efficacy at EOL.

Aim 3. EOL experiences that are independently associated with self-efficacy (prior experiences with death; personal or professional, relationship to dying person, role as a professional, and number of professional deaths). While no significance was found between personal experience with the death of a friend, personal experience with the death of a family member was found to be significantly associated with new nurse self-efficacy to provide EOL patient care. Nurses often report that they were inspired to become a nurse following a personal death experience (Brown, 2012, April 29), but there were no studies identified in the nursing literature that looked at prior personal experiences with death as a factor affecting new nurses' self-efficacy to provide EOL patient care. The second concept of Bandura's SET states that self-efficacy is increased by vicarious experiences; watching others be successful in performing a task. It is quite possible that experiencing the death of a family member and watching how their loved one was cared for has remained with these new nurses and affects their self-efficacy to provide similar EOL patient care. This would be an interesting topic for further research.

The role of the nurse when experiencing a professional death was not significantly associated with new nurse self-efficacy. Several participants reported experiencing a death while working as a CNA or LPN, thus the number of deaths that are reported while working as a newly licensed nurse are likely from more recent experience and very possibly influenced by COVID-19 deaths. The vast majority of participants reported being a BSN when experiencing a professional death. This was not surprising, given previous findings in the literature regarding the number of BSN-prepared nurses in the workplace.

The number of professional death experiences reported by new nurses in this study was found to be significant for all three divisions (1-5, 6-10, and more than 10 deaths). However, this variable was found to be inversely associated with new nurse self-efficacy, and the higher number of deaths experienced, the more negative association there was with self-efficacy. This was a very interesting finding as it stands in direct opposition to the first concept of Bandura's SET; mastery experiences. Bandura (1997) theorized that the more experience one has in a given skill or task, the more self-efficacious a person feels in succeeding in that task and creating a favorable outcome. It may be that new nurses in this study were tasked with caring for dying patients before they were ready, due to the COVID-19 pandemic, and that no matter what the care they provided, their patients died anyway. Having to deal with shortages of personal protective equipment and concerns about catching the virus themselves or bringing it home to their families may also have impacted these new nurses' self-efficacy. Cognitive failure related to both lack of PPE and concerns about catching the virus have been reported (Arnetz et al., 2021). It is plausible that new nurses simply feel like failures for not being able to provide adequate EOL patient care in a time of a global pandemic and scored themselves low on the self-efficacy scale. Failure is a very highly associated with low self-efficacy (Bandura, 1997,

Chiplaskey, 2016, Puente-Fernandez, et al. 2020). Failure is also very strongly associated with low self-esteem, which was also found to be a factor significantly associated with new nurses' self-efficacy. It was interesting to note that participants reporting no experience with a professional death scored themselves higher on the self-efficacy scale than those who reported experiencing a death. This may be attributed to the fact that they had not had the opportunity to test their EOL knowledge and patient care skills, whereas RNs with experience have a more realistic understanding of their actual self-efficacy.

Aim 4. Geographical settings that are independently associated with self-efficacy (rural versus non-rural). Due to lack of data, it was not possible to assess geographical setting (rural versus non-rural) and any possible effect that location has on self-efficacy in this study. As stated in chapter 2, there is an overall lack of research regarding rural nurses' self-efficacy in providing palliative EOL patient care. Existing literature tends to focus on rural nurses knowledge and understanding of the process of caring for dying patients rather than their feelings of self-efficacy to perform adequate and appropriate EOL patient care. Recent studies have found that although providing palliative and EOL nursing care in rural settings is beneficial to patients, allowing them to remain in their home communities and near their families, nurses practicing in rural settings often lack understanding of palliative care concepts and the differences between palliative and EOL care (Evans, 2018; Tasseff et al., 2018).

Of interest in this dissertation study is the fact that Minnesota had a much larger potential pool of nurses who met the inclusion criteria due primarily to the sheer size and population of the state. The majority of returned surveys came from that state but not all of these returned surveys were included in the statistical analysis however, due to missing data, This large number of responses was anticipated, however, as Minnesota is home to several large, well-renowned

healthcare facilities including Mayo Clinic. It was an important state to include in this study as it has a good mix of rural and non-rural designated settings (Rural Information Hub, 2021). Of further interest was the fact that, although licensed in the four upper Midwest states, several participants reported working outside the four-state area; additional states reported included Arizona, California, Colorado, Hawaii, Iowa, Louisiana, Maryland, Michigan, North Carolina, Ohio, Oregon, Tennessee, Texas and Utah. This finding could be the result of nurses holding multi-state licensure or working out of state as travel nurses. Travel nurses are hired to fill gaps in staffing, often in rural areas and most recently because of the COvID-19 pandemic (Siegler, 2020, March 23).It would be interesting to replicate this study and add questions regarding travel nurses' experiences in rural areas and feelings of self-efficacy caring for dying patients.

Aim 5. Workplace support that is independently associated with self-efficacy (preceptor/mentor/residency program and guidance through a death). Over half of the participants in this study reported having participated in a residency program. Of those in a program, over half again reported that their preceptor had guided them through the death of a patient. Yet neither participation in a residency program nor having a preceptor guide participants through a professional death experience found to be a significant factor affecting nurse self-efficacy. This was a surprising finding, as the impact of nurse residency programs is well-known throughout the literature. The most common form of nurse residency program is a clinical preceptorships, in which a new nurse is assigned to an experienced nurse to work and guide them as they transition into practice. These programs typically last between six to twelve months, during which time a trained preceptor or mentor helps the new nurse identify their strengths and areas for continued growth, supports them in their clinical decision-making, and fosters a healthy work-place environment, all while role modeling what it means to be a

professional nurse (Rush et al., 2013). These programs are known for the support and guidance they provide for new nurses as they transition into practice, increasing confidence and reducing the risk of early burnout (Cochran, 2017). And yet, in this study participation in a residency program was not found to be significant. It could be that the sample in this study was simply too small to detect this variable's effect on this group of new nurses' self-efficacy. Or it could also be that the preceptor was not experienced enough themselves in caring for dying patients and did not provide the participant with a positive vicarious experiences from which to build self-efficacy.

And although new nurse retention was not a focus of this study, nurse residency programs have also been shown to be very successful in retaining new nurses in practice (American Association of Colleges of Nursing, 2020; Van Camp & Chappy, 2017).

Aim 6. Areas of practice in the hospital setting that are independently associated with self-efficacy (medical/surgical, intensive care, emergency department, pediatrics, oncology, maternal/child, mental health, or multiple areas). Workplace was not a significant factor affecting new nurses' self-efficacy at EOL. This was a surprising finding. The three main reported work locations in this study were Medical/Surgical, ICU, and ER. This was not surprising, as these are common hospital areas in which nurses care for dying patients. The type of dying patients in these three areas, however, are not the same. There are two primary types of death that occur in the hospital setting; expected and unexpected (Naik, 2013). Medical/Surgical settings are where terminal and dying patients are often admitted to receive palliative EOL cares over time. ICU nurses care for the most critically injured and ill patients, including those dying from COVID-19, and death is a common outcome. Death in the ER setting is often traumatic (Naik, 2013). No literature was found related specifically to self-efficacy and new nurse work

location, however one recent study by Kurnia et al. (2020) investigated self-efficacy as a factor in providing palliative care in the ICU setting. They found that years in practice, knowledge related to palliative care and a positive attitude towards death were important factors related to nurse self-efficacy to provide palliative care. It was interesting to note that in this study, the nurses who reported working in the ICU scored themselves lower on self-efficacy that nurses in Medical/Surgical and ER units. This may again be an effect of the COVID-19 pandemic and the sheer number of deaths that occurred in ICU settings and feelings of failure, as previously discussed. Further study is warranted.

Theoretical Framework

Bandura's SET. Although rarely utilized as a foundational theoretical framework for nursing research, the concept of self-efficacy is beginning to show up more frequently in health-promotion literature and textbooks. According to Shorey & Lopez, (2021), Bandura's SET is a useful theory for health education and promotion because people who have strong feelings of self-efficacy tend to set high goals for themselves and have a greater commitment to achieving those goals; motivation leads to perseverance to accomplish said goals. Self-efficacy has been studied by nurse researchers as to how it affects self-management of chronic illnesses such as diabetes (Amer et al., 2018; Liu, 2012), cancer (White et al., 2017), and asthma (Chen et al, 2017), just to name a few. Successful management of chronic illnesses such as these depend on having relevant knowledge about the situation, self-managing symptoms, and support from family and caregivers (Amer et al., 2018; Chen et al., 2017; Liu, 2012; White et al., 2017). Nurses supporting patients as they navigate new and daunting situations, such as becoming a teen-aged parent (Sims & Skarbek, 2019), has been shown to build new parents' feelings of self-efficacy; "confidence (the ability to trust oneself) and competence (the ability to perform in a

given situation) emerged as the most prominent defining attributes of parental self-efficacy" (Shorey & Lopez, 2021, p. 147). Confidence in one's competence is the most basic definition of self-efficacy utilized in this study (Akhtar, 2008; Bandura, 1997).

The concept of support as it relates to self-efficacy is also of great interest with regard to nurses identifying and reporting managerial support as being one of the major components to their job satisfaction; as previously stated, nurses who feel unsupported by their peers and managers tend to burn out more quickly and even contemplate leaving the profession (Friedman et al., 2011; Gaw, 2012; Kovner et al., 2006; Parry, 2008; Silverstein, 2017, November 28; Wilson & Kirshbaum, 2013).

Of the four concepts of SET, the findings of this study both contradicted and supported both the first, second, and the fourth concepts. In contradiction to expectations of the first concept, mastery experiences, regardless of the mastery in caring for dying patients the new nurses may have gained, based on the number of deaths they experienced, they did not report feeling any more self-efficacious in caring for dying patients. ß scores actually indicated increasing negative association with self-efficacy with increased professional experience with death. This could be a positive thing, however. According to the literature, the more dis-satisfied people are with their efforts, the harder they work to accomplish their goals (Shorey & Lopez, 2021).

The second concept, vicarious experiences, was supported via the finding that new nurses having experienced a personal death involving a family member was associated with feelings of self-efficacy. This experience may or may not have occurred prior to them becoming licensed, thus it is possible that they would have been observing the nurse caring for their dying family member. Utilizing the Rosenberg (1965) self-esteem scale as a proxy for the fourth concept,

emotional and physiological states, self-esteem scores were significantly correlated with overall mean self-efficacy scores. So even though this dissertation study did not find significant correlations between most participant characteristics and their self-reported self-efficacy scores, it did support the theory to some degree and lead to more questions, laying the foundation for a body of work for this researcher to continue exploring new nurses' perceptions of self-efficacy, particularly regarding of the effect of the COVID-19 pandemic on this cohort.

Implications

Education. New guidelines put forth by the AACN continue to recommend that schools of nursing emphasize EOL education in their curricula for undergraduate nurses; Hospice/Palliative Care is the fourth concept in the *4 Spheres of Care* model that helps guide educators preparing nurses for entry into practice (American Association of Colleges of Nursing, 2021). New and improved *Clinical Practice Guidelines for Quality Palliative Care* from the National Consensus Project (NCP) emphasize the elements of patient assessment, caregiver support and education, coordination of care and improving culturally sensitive patient care at EOL; interdisciplinary communication is key, regardless of where EOL patient care is provided (Ferrell et al., 2019).

The current literature is clear; the COVID-19 pandemic affected new nurses by interrupting their undergraduate education, leaving them feeling overwhelmed, experiencing burnout and even contemplating leaving practice (Crismon et al., 2021;Smith et al., 2021). Recent research found that up to 48% of new nurses leave during their first year of practice (Labrague & McEnroe-Petitte, 2018). Schools of nursing must continue to educate students on palliative EOL patient care, ensuring that they feel capable of providing such care when they enter into practice. Education appears to be key. And yet, according to Henderson et al. (2016),

gaps remain between expectations of new nurses and what they feel they are capable of doing for dying patients. This small, qualitative study explored the self-efficacy of BSN nurses preparing to graduate. Despite all participants having had a death experience during their undergraduate years, their responses did not reflect high self-efficacy for graduate expected capabilities (Henderson et al., 2016).

It is recommended that undergraduate nurses be assessed for feelings of self-efficacy to provide palliative EOL patient care prior to graduating and entering the workforce. Accurate and measurable evaluation of student nurses' ability to provide patient care is vital at the undergraduate level. Although not specific to EOL patient care, the use of instruments such as the "Nursing Student Self-Efficacy Instrument" (Stump et al., 2012) is highly recommended when evaluating students' perceived self-efficacy to provide patient care in all areas of nursing practice. In accordance with the third concept of SET, verbal persuasion (Bandura, 1997), educators at the undergraduate level should also provide encouragement and effective feedback, both formative and summative, when students are learning about palliative EOL patient care.

Given what is already known about EOL simulation fostering self-efficacy in undergraduate nursing students, it is recommended that schools of nursing prepare students for entry to practice by including EOL simulation in their curriculum to help build self-efficacy and self-esteem. Clinical nursing instructors should also be knowledgeable, willing and able to provide guidance in EOL patient care to help build student self-esteem, should the opportunity arise.

Ongoing EOL education for new nurses will be addressed in the policy section.

Practice. Given some of the changes in the age demographic of new nurses, nurse managers cannot assume that older nurses possess self-efficacy when it comes to caring for

dying patients. Regardless of age, each new nurse should be evaluated for their feelings of self-efficacy to care for a dying patient. Although not evaluated in this study, gender must also be considered; nurse managers must also not assume that male nurses naturally possess self-efficacy to care for the dying, either. Every death is different, regardless of the cause or location. Nurses of all ages and genders require support.

While initial self-efficacy scores were high, findings from this study indicated that self-efficacy scores were negatively affected by increased numbers of professional deaths. This may be related to the COVID-19 pandemic and the overwhelming number of dying patients, compounded by the distress experienced by the patients and their families. It is of the utmost importance that new nurses are assessed by nurse managers for their self-efficacy to provide palliative EOL patient care and be provided with experienced nursing staff to assist them as needed. It is also recommended that nurse preceptors be ELNEC certified in order to effectively guide new nurses through the process of caring for a dying patient.

Nurse health is vital to job performance. In this study, self-esteem was used as a proxy for evaluating the fourth concept of Bandura's SET; emotional and physiological states. The COVID-19 pandemic has increased nurse stress and anxiety, not only regarding patient care but also in their personal lives due to the nurses' fears of contracting the virus or exposing others (Sampaio et al., 2021). Self-esteem has been found to serve a moderating role in reducing depression and anxiety in nurses, thus it is important that nurses be supported by efforts to improve their feelings of self-esteem (Zhao et al., 2022). More emphasis needs to be placed on the ensuring health of nurses, both physical, mental and emotional and supporting them. The practice of making nurses continue to work when they are ill themselves must stop.

Nurse self-efficacy was found to be associated with positive attitudes towards death and dying and inversely related to nurse burnout (Cabrera, 2018, Dec. 2, Zheng et al., 2022). Debriefing by nurse managers following a professional death, particularly an unexpected or traumatic death, is extremely important for nurse health. It is important that new nurses are able to step away from feelings of inadequacy and look at situations objectively. Libby et al. (2011) found that changing perspective and viewing situations from a third-person viewpoint increased feelings of self-efficacy. It is also recommended that new nurses be allowed time off to grieve the death of patients.

Although not the focus of this study, retention of new nurses is also an issue. According to the literature, one in five new nurses leaves practice within their first year; one in three leaves within the first two years (Walsh, 2018). Nurse managers must work on ways in which to retain their new nurses, the loss of which can be costly for healthcare facilities. Anxiety and nurse burnout are often reasons for nurses leaving the profession; self-efficacy has been shown to be a mediating factor in both anxiety and burnout (Xhao et al., 2022). Thus, it is important for nurse managers to foster and promote feelings of self-efficacy in nursing staff through ongoing education and training (Kurnia et al., 2020). Ongoing EOL education and support is important for new nurses to help them transition to practice and feel self-efficacious in caring for dying patients and their families. The nursing literature supports this concept. Although new nurses may have learned the general concepts of patient care in other undergraduate courses, ongoing education following licensure in the form of specialty certification programs, such as ELNEC, can help new nurses put the pieces together, improving practicing nurses' knowledge and attitudes towards dying patients, resulting in more positive outcomes for nurses, patients and their families (O'Shea & Mager, 2019).

Research. The fact that there were so many variables that did not make it into the final analysis of this study indicate that there are many additional factors affecting new nurse self-efficacy that remain to be studied. Given what is already known about the benefits of residency programs, the fact that there was no association detected in this study between participation in a residency program or having a preceptor guide participants through a death and new nurses' self-efficacy warrants further study. Self-efficacy to care for dying patients in various geographical settings is another area that needs further research. There not having been enough respondents from rural work settings to make a truly meaningful comparison to non-rural, it would be beneficial to repeat this study and try to capture more of the rural nurse experience with dying patients, once again focusing on their feelings of self-efficacy to provide quality EOL patient care. Based upon the existent literature, this focus is unique and warrants further exploration.

It would also be valuable to repeat this study in a more racially diverse rural setting to explore whether or not race is a factor, as well as explore how death is managed within different cultures. How death is perceived and care of the dying is very strongly rooted in culture (Gire, 2014); do racially diverse nurses express the same concerns when it comes to their feelings of self-efficacy? Transcultural self-efficacy is "a nurse's perception of his or her own ability to accomplish activities effectively for culturally diverse clients" (Berhanu et al., 2021, July 21, p. 1) and it varies, based on gender, experience, and desire to provide culturally appropriate care. Gender and new nurses' self-efficacy to care for the dying would be another important area of study and could be performed either as a stand-alone factor or done in concordance with culture. It would also be interesting to repeat this study with a larger sample and include questions specific to caring for COVID-19 patients. The number of nurses who reported working outside

of their original state of licensure gave rise to questions regarding compact state or multi-state licensure; this would be another important question to ask in future studies.

The most interesting finding of this study was the inverse relationship of death experiences with new nurses' feelings of self-efficacy. This was in complete opposition to SET, which states that as a result of mastery experiences, people gain self-efficacy. This did not appear to be the case in this study. If repeating this study, consideration should be given to performing qualitative or a mixed-methods study to better understand the "why", meaning to find out from the nurses' perspective, exactly what it is about experiencing multiple deaths that makes them feel less self-efficacious.

And although no significant association was found in this study between residency program participation and new nurses' self-efficacy, there is a wealth of literature regarding the benefits of residency programs not only supporting new nurses as they make this transition, but also in retaining them in practice (Clark & Springer, 2012; Duclose-Miller, 2011; Perron et al., 2019). However, none of these studies looked specifically at the differences between residency experiences of new nurses working in rural versus non-rural settings. This would be another area to consider for research as well.

Policy. New nurses transitioning into practice are just learning how to make important clinical decisions and receive constructive feedback, yet they report that they feel under-supported in developing these skills (Cochran, 2017; Walsh, 2018). The death of a patient can be very stressful, especially for inexperienced nurses. Providing opportunities for nurses to reflect on their death experiences, even allowing time for them to grieve, helps nurses to cope with death and provide better support to dying patients and their families (Zheng et al, 2018). Nurse managers should create policies requiring debriefing sessions for their new nurses;

debriefing allows nurses time to discuss their feelings in a safe environment and see that they are supported by their peers (Zheng, et al., 2018). Policies should be in place that require new nurses to receive debriefings following their first professional death experience, particularly if that death was unexpected or traumatic or any death experience that the new nurse found difficult. This policy should not be exclusive to only new nurses; more experienced nurses would also benefit from debriefing following the death of a patient.

Creating policies that ensure that new nurses receive ongoing education in EOL is also important. Formal EOL education such as ELNEC includes role-playing which can increase new nurses' feelings of self-efficacy through mastery experiences (American Association of Colleges of Nursing, 2016). As new nurses are often assigned the role of preceptor sooner in their career than may be optimal, it is vital that this training take place early on as well. Healthcare facilities should ensure that EOL continuing education is provided to all nurses, regardless of time in practice.

Discussion of Findings within the Context of the COVID-19-Pandemic

It is very likely that the COVID-19 pandemic affected the outcomes of this study. New nurses have experienced unprecedented and rapid changes to the delivery of their undergraduate coursework, having to adapt to virtual platforms for content delivery and simulated clinical experiences (White et al., 2021). It is not known how much, if any, EOL curriculum was provided; most simulation experiences were provided virtually. Additionally, all nurses faced the uncertainty of caring for patients with a novel and contagious virus. They have had to continue working under the strain and fear of bringing the virus home to their families or contracting it themselves (Fauteux, 2021). In August of 2020, a survey of nearly 65,000 RNs working in medical/surgical or ICU units reported that they were experiencing high percentages of burnout

(42%) and intended to leave the profession of nursing (24%); these numbers were reported even before the beginning of the COVID-19 pandemic (Fauteaux, 2021). Nurse burnout has increased as a result of COVID-19, leading to young nurses feeling inadequate and emotionally exhausted; lack of support from peers and management was a major contributing factor reported by the nurses (Galanis, et al., 2021). Nurses working in rural communities were already at a disadvantage when COVID-19 hit; rural facilities typically have fewer beds and specialty healthcare items such as ventilators (Slonim et al., 2020). Obtaining adequate supplies of personal protective equipment (PPE) also tends to be a challenge in rural healthcare facilities, even under normal circumstances (Sullivan, 2020, May 19). PPE shortages were made considerably worse because of COVID-19; in one survey by National Nurses United, 81% of both rural and non-rural nurses reported having to reuse dirty facemasks and protective gowns (Akhtar, 2021, March 10). In light of all this, one could certainly pose the question as to whether or not experiencing COVID-19 deaths influenced this study's rural sub-sample's feelings of self-efficacy to care for the dying, and even their willingness to participate in the study at all.

Lessons Learned

Data collection took longer than anticipated for this study, stretching on for four weeks due to issues with both emails "failing" and lack of rural nurse responses. The $10.00 coffee card incentive proved to be very valuable. During the first round of recruiting, the quota of 200 was achieved within four days; without the coffee card incentive, the researchers only received 69 additional responses over a two-week period, some of which may have been initiated during the first round of invitations. Even with the addition of the question, "Do you work in a rural healthcare setting?", not all of the additional responses were actually from rural nurses, based on the RUCA codes. The number of nurses recruited from the four databases who reported working

outside the four-state area was also a surprise. It is possible that these new nurses might be travelers, but there is no way to ascertain this for certain. It may also be that these nurses are licensed in one state but work in another with a multi-state license. When collecting demographic information, researchers should consider that many nurses might work in multiple locations, so it is important to clarify those demographic items that would capture that data. The design of this study was also a limitation, as there were a lot of possible factors affecting new nurses' self-efficacy, the majority of which were found to be insignificant. For subsequent studies on this topic, it would be wise to do multiple studies looking at fewer variables at a time to facilitate data analysis and discussion.

Limitations

A major limitation of this study was the limited number of rural nurses who completed both the Phillips et al. (2011) and Rosenberg (1965) instruments. Despite extending the recruitment period, there were not enough responses from rural participants to make any meaningful comparison of rural to non-rural nurses' self-efficacy scores. Of particular interest to note is the fact that of the respondents who answered "yes" to the question "Do you work in a rural healthcare setting?" question, several actually did not according to the RUCA codes. It is likely that people do not truly know how their workplace is designated according to RUCA codes: rural or non-rural. It is also possible that there are pockets of perceived rurality within the designated "micropolitan" RUCA areas.

There was also a distinct lack of male representation in the sample so gender could not be included as a factor in this study. Studies examining gender differences in nurses' self-efficacy were not found in the literature, thus it would be a good topic for future research. There was also an overwhelming racial representation by White nurses in this study. Different cultures view

death and have different ideas about caring for the dying. Thus, both of these need further investigation regarding their effect on self-efficacy to care for dying patients.

Another limitation was the reported places of work; several of the reported "other" locations raised speculation as to whether or not the participants actually cared for dying patients, e.g. Hemodialysis, Plastic Surgery, Rehabilitation, etc.

Emailing surveys also proved to be complicated. The Qualtrics limit on e-mailed survey distribution was reached on the first survey attempt, so it took multiple days to get all of the surveys sent. And a second email distribution was needed to reach more participants, particularly from those who identified as working in a "rural" setting. For this second round of invitations, permission was granted by the IRB to remove the incentive coffee card, as there were no more funds available for this incentive. The decision to continue sampling was also based on the appraisal of preliminary data, indicating that with the numbers of rural participants who had completed the first round of surveys, we would not reach the 90% threshold required to do a meaningful comparison of rural to non-rural, based on RUCA codes. Despite a second round of sampling, there still were not enough participants from rural settings to allow for meaningful analysis of this variable.

Although Bandura himself states that self-esteem is a very important attribute contributing to the concept of self-efficacy, particularly regarding the fourth concept of emotional and physiological state, the Rosenberg (1965) Self-efficacy Scale does not ask questions that would not adequately capture the physical status of the respondents; being physically incapable of providing patient care could be a very significant contributing factor to nurses' feelings of self-efficacy. It may be that a different self-esteem instrument would more

adequately assess physical status; perhaps the development of such an instrument is in this researcher's future.

Conclusion

New nurses face increasing pressures from society and the profession of nursing as they transition into practice, moving from advanced beginners to competent nurses. Achieving self-efficacy, the confidence in one's competence, is a vital part of making this transition. New nurses are expected to care for multiple and complex patients, many of whom are elderly and are dying. The COVID-19 pandemic has made it even more vital to study new nurses' self-efficacy to care for dying patients. Research has shown that many nurses received little to no undergraduate instruction in EOL patient care. Thus they enter into practice lacking self-efficacy, feeling unsupported and unsure of what is expected of them. This may lead to dissatisfaction with their chosen profession and has caused many new nurses to leave the profession within just a few years of practice. There is little research informing nurse leaders regarding individual demographic characteristics that may affect new nurses' feelings of self-efficacy in providing palliative and EOL patient care. This study looked at demographics such as nurses' age, race, gender, level of education, amount of undergraduate EOL instruction, area of practice, participation in residency programs, prior experience with death and geographic location of the workplace. While most factors were found to be insignificant, the number of deaths experienced as a professional, death of a family member, and feelings of self-esteem were all found to be significantly associated with new nurses' self-efficacy to provide palliative EOL patient care. Utilizing Bandura's SET as a foundation, this study found that increasing numbers of death experiences were negatively associated with self-efficacy; this is in complete contradiction to

the first concept of self-efficacy; mastery experiences. This finding may be related to the COVID-19 pandemic and warrants further research.

References

Aebersold, M., & Tschannen, D. (2013, May 31). Simulation in nursing practice: The impact on patient care. *The Online Journal of Issues in Nursing, 18*(2). http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-18-2013/No2-May-2013/Simulation-in-Nursing-Practice.html

Aiken LH, Clarke SP, Sloane DM, Sochalski J, & Silber JH. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association, 288*: 1987-1993.

Aiken, L.H., Cimiotti, J.P., Sloane, D.M., Smith, H.L., Flynn, L. & Neff, D.F. (2012). The effects of nurse staffing and nurse education on patient deaths in hospitals with different nurse work environments. *Medical Care, 49*(12), doi: 10.1097/MLR.0b013e3182330b6e

Akhtar, M. (2008). *What is self-efficacy? Bandura's 4 sources. Efficacy belief.* http://positivepsychology.org.uk/self-efficacy-definition-bandura-meaning/

Akhtar, A. (2021, March 10). A majority of nurses in a survey say they are still reusing protective gear like masks and gowns a year into the pandemic. *Insider.* https://www.advisory.com/daily-briefing/2020/05/19/rural-hospitals-ppe

Amer, F.A., Mohamed, M.S., Elbur, A.I., Abdelaziz, S.I., & Elrayah, Z.A. (2018). Influence of self-efficacy management on adherence to self-care activities and treatment outcomes among diabetes mellitus type 2. *Pharmacy Practice, 16*(4), 1274.

American Association of Colleges of Nursing (AACN). (1998). *Peaceful death. Recommended competencies and curricular guidelines for end-of-life nursing care.* https://files.eric.ed.gov/fulltext/ED453706.pdf

American Association of Colleges of Nursing (AACN). (2016). *CARES: Competencies and recommendations for educating undergraduate nursing students. Preparing nurses to care for the seriously ill and their families.* http://www.aacnnursing.org/Portals/42/ELNEC/PDF/New-Palliative-Care-Competencies.pdf?ver=2017-07-27-151036-973

American Association of Colleges of Nursing (AACN). (2017a). *About ELNEC*. http://www.aacnnursing.org/ELNEC/About

American Association of Colleges of Nursing (AACN). (2017b). *Fact sheet: Nursing shortage.* https://www.coursehero.com/file/30088688/Nursing-Shortage-Factsheet-2017pdf/

American Association of Colleges of Nursing (AACN). (2020). *Vizient/AACN nurse residency programs.* https://www.aacnnursing.org/Nurse-Residency-Program

American Association of Colleges of Nursing (AACN). (2021, February 18). *The essentials: Core competencies for professional nursing education.* Washington, DC: American Association of Colleges of Nursing

American Nurses Association. (2020). *Mentoring definitions.* https://www.anamass.org/page/61#:~:text=A%20mentor%20is%20an%20experienced,to%20the%20less%20experienced%20individual.&text=Precepting%20is%20different%20than%20mentoring.

Androus, A.B. (2021, January 29). *The (not so) great escape: Why new nurses are leaving the profession*. https://www.registerednursing.org/articles/why-new-nurses-leaving-profession/

Arnetz, J.E., Arble, E., Sudan, S., & Arnetz, B.B. (2021). Workplace cognitive failure among nurses during the COVD-19 pandemic. *International Journal of Environmental Research and Public Health, 18*(19), (online). Doi: 103390/ijerph181910294

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W.H. Freeman

Benner, P. (1982). From novice to expert. *American Journal of Nursing, 82*(3), 402-407.

Berhanu, R.D., Tesema, A.A., Deme, M.B., & Kanfe, S.G. (2021, July 22). Perceived transcultural self-efficacy and its associated factors among nurses in Ethiopia: A cross-sectional study. *PLOS ONE* (online), 1-13. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8297891/pdf/pone.0254643.pdf

Brown, K. (2012, April 29). *Death: The reason I became a nurse.* https://allnurses.com/death-the-reason-i-became-t429974/

Bui, B.N., Halifax, E., David, D., Hunt, L., Uy, E., Ritchie, C., & Stephens, C. (2020). Understanding nursing home staff attitudes toward death and dying. A survey. *American Journal of Nursing, 120*(8), 24-31. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7877445/

Burns, P, & Poster, E. C. (2008). Competency development in new registered nurse graduates: Closing the gap between education and practice. *The Journal of Continuing Education in Nursing, 39*(2), 67-73.

Burrows, E., Suh, Ryung, & Hamann, D. (2012). *Health care workforce distribution and shortage issues in rural America.* National Rural Health Association Policy Brief. https://www.ruralhealthweb.org/getattachment/Advocate/Policy-Documents/HealthCareWorkforceDistributionandShortageJanuary2012.pdf.aspx?lang=en-US

Cabrera, R. (2018, December 2). *Short staffing: 6 awful things that happen when there's not enough nurses.* Nurselabs. https://nurseslabs.com/short-staffing-6-awful-things-happen-theres-not-enough-nurses/

Carman, M., Sloane, R., Molloy, M., Flint, E., & Phillips, B. (2016). Implementation of a learning bundle to promote end-of-life education for prelicensure nursing students. *Journal of Hospice & Palliative Care*, *18*(4), 356-363. DOI: 10.1097/NJH.0000000000000258

Caton, A.P., & Klemm, P. (2006). Introduction of novice oncology nurses to end-of-life care. *Clinical Journal of Oncology Nursing, 10*(5), 604-608.

Chen, S.Y., Sheu, S., Chang, C.S., Wang, T.H., & Huang, M.S. (2017). The effects of the self-efficacy method on adult asthmatic patient self-care behavior. *Journal of Nursing Research, 18*(4), 266-274.

Chiplaskey, L.M. (2016). End of life care. Are nurses educationally prepared? *RN Journal of Nursing* (electronic version). https://rn-journal.com/journal-of-nursing/end-of-life-care-are-nurses-educationally-prepared

Cochran, C. (2017). Effectiveness and best practice of nurse residency programs: A literature review. *MEDSURG Nursing*, *26*(1), 53–63. http://www.medsurgnursing.net

Clark, C.M. & Springer, P.J. (2012). Nurse residents' first-hand accounts on transition to practice. *Nursing Outlook, 60*(4), E4-E8. DOI:https://doiorg/10.1016/j.outlook.2011.08.00

Crismon, D., Mansfield, K.J., Hiatt, S.O, Christensen, S.S., & Coyes, K.G. (2021). COVID-19 pandemic impact on experiences and perceptions of nurse graduates. *Journal of Professional Nursing*, *37*(5), 857-865. https://doi.org/10.1016/j.profnurs.2021.06.008

Dehghani, F., Barkhordari-Sharifabad, M., Sedaghati-Kasbakhi, M., & Fallahazedeh, H. (2020). Effect of palliative care training on perceived self-efficacy of the nurses. *BMC Palliative Care*, *19*(1), 63. https://bmcpalliatcare.biomedcentral.com/articles/10.1186/s12904-020-00567-4

Dellasega, C., Gabbay, R., Durdock, K., & Martinez-King, N. (2009). An exploratory study of the orientation needs of experienced nurses. *The Journal of Continuing Education*, *40*(7), 311-316. 04 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3753794/

Duclose-Miller, P.A. (2011). Successful graduate nurse transition to practice: Meeting the challenge. *Nurse Leader*, *9*(4), 32-35, 49. https://doi.org/10.1016/j.mnl.2011.05.006

Eagar, K., Senior, K., Fildes, D., Quinsey, K., Owen, A., Yeatman, H., Gordon, R., & Posner, N. (2003). *The caring communities evaluation toolkit: A compendium of tools to aid in the evaluation of palliative care projects.* https://www.caresearch.com.au/Caresearch/Portals/0/Documents/WhatisPalliativeCare/Other%20National/Cebparac/cebparac-Appendix9_PallCare_ProvidersEvaluationTool2.1.pdf

Edwards, C., Hardin-Pierce, M., Anderson, D., & Rexford, T. (2020). Evaluation of self-efficacy and confidence levels among newly graduated nurses exposed to an end-of-life simulation: A comparison study. *Journal of Hospice and Palliative Care Nursing*, *22*(6), 304-311. doi: 10.1097/NJH.0000000000000698

Evans, C.A. (2018). Rural long-term care nurses' knowledge of palliative care. *Online Journal of Rural Nursing and Health Care*, *1*(2), 141-167. DOI: https://doi.org/10.14574/ojrnhc.v16i2.409

Fabro, K., Schaffer, M., & Scharton, J. (2014).The development, implementation and evaluation of an end-of-life simulation experience for baccalaureate nursing students. *Nursing Education Perspectives, 35*(1), 19-25. doi: 10:5840/11-593.1

Fauteaux, N. (2021). Covid 19: Impact on nurses and nursing. *American Journal of Nursing, 121*(5), 19-21. Doi: 10.1097/01.NAJ.0000751076.87046.19

Ferrell, B., Twaddle, M.L., Melnick, A., & Meier, D.E. (2019). National consensus project clinical guidelines for quality palliative care. 4th edition. *Journal of Palliative Medicine, 21*(12) (Epub). https://www.liebertpub.com/doi/10.1089/jpm.2018.0431?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub++0pubmed

Fetzer Institute. (2021). *Self report measures for love and compassion research: Self-esteem.* https://fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Self_Measures_for_Self-Esteem_ROSENBERG_SELF-ESTEEM.pdf

Friedman, M. I., Cooper, A. H., Click, E., & Fitzpatrick, J. J. (2011). Specialized new graduate RN critical care orientation: Retention and financial impact. *Nursing Economics,* 26(1), 7-14. PMID: 21469483.

Galanis, P., Vraka, I., Fragkou, D., Bilali, A., & Kaitelidou, D. (2021). Nurses' burnout and associated risk factors during the COVID-19 pandemic: A systematic review and meta-analysis. *Journal of Advanced Nursing, 77*(8), 3286-3302. DOI: 10.111/jan.14839

Gaw, J.J. (2012). *Graduate RN intent to leave: Social capital and organizational commitment. (*3551686) [Doctoral dissertation], Grand Canyon University, Proquest Dissertations Publishing

Gillan, P.C., van der Riet, P.J., & Jeong, S. (2014). End of life care education, past and present: A review of the literature. *Nurse Education Today, 34*(3), 331-342. DOI: 10.1016/j.nedt.2013.06.009

Gire, J. (2014). How death imitates life: Cultural influences on conceptions of death and dying. *Online Readings in Psychology and Culture, 6*(2). https://doi.org/109707/2307-0919.110

Grant, R. (2016). *The U.S. is running out of nurses.* https://www.theatlantic.com/health/archive/2016/02/nursing-shortage/459741/

Gupta, S., Hayek, S.S., Wang, W., Chan, L, Matthews, K.S., Melamed, M.L., Brenner, S.K., Leonberg-Yoo, A., Scheck, E.J., Radbel, J. Reiser, J., Bansal, A, Srivastava, A., Zhou, A.,Sutherland, A., Green, A., Shehata, A.M., Goyal, N. Vijayan, A., …& Leaf, D.E. (2020, Nov 1). Factors associated with death in critically ill patients with Coronavirus disease 2019 in the US. *JAMA Internal Medicine, 180*(11), 1436-1447. doi: 10.1001/jamainternmed.2020.3596.

Hamilton, C. A. (2010). The simulation imperative of end-of-life education. *Clinical Simulation in Nursing, 6*(4), e131-e138. doi:10.1016/j.ecns.2009.08.002

Health and Human Services (HRSA). (2013). *HRSA reports on nursing supply and education trends.* https://www.amnhealthcare.com/latest-healthcare-news/hrsa-reports-nursing-supply-education-trends/

Hebert, K., Moore, J., & Rooney, J. The nurse advocate in end-of-life. *The Ochsner Journal, 114*, 325-329. PMCID: PMC3241064

Henderson, A., Rowe, J., Watson, K., & Hitchen-Holmes, D. (2016). Graduating nurses' self-efficacy in palliative care practice: An exploratory study. *Nurse Education Today, 39*, 141-146. https://doi.org/10.1016/j.nedt.2016.01.005

Hsu, H.Y., & Chen, Y.M. (2019). The correlates of nurses' self-efficacy for end-of-life care]. *Hu Li Za Zhi, 66*(5):32-43. Chinese. doi: 10.6224/JN.201910_66(5).06

IndexMundi. (2020). *Death Clocks.* https://www.indexmundi.com/clocks/indicator/deaths

Institute of Medicine. (2010). *The future of nursing: Focus on education.* http://iom.nationalacademies.org/~/media/Files/Report%20Files/2010/The-Future-of-Nursing/Nursing%20Education%202010%20Brief.pdf

Institute of Medicine. (2015). *Dying in America: Improving quality and honoring individual preferences near the end of life.* Washington (DC): National Academies Press (US) DOI: 10.17226/18748

Isaacson, M.J., Minton, M.E., DaRosa, P., & Harming, S. (2019). Nurse comfort with palliative and end-of-life communication. A rural and urban comparison. *Journal of Hospice & Palliative Nursing, 21*(1), 38-45. DOI: 10.1097/NJH.0000000000000483

Johansen, L.J., Evanson, T.A., Ralph, J.L., Hunter, C., Hart, G. (2018). Experience of rural nurses who commute to larger communities. *Rural Nurse Organization, 18*(2), dissertation published online. http://doi.org/10.14574/ojrnhc.v18i2.540

Juraschek, S.P., Zhang, X., Ranganathan, V.K., & Lin, V. (2012). United States registered nurse workforce report card and shortage forecast. *American Journal of Medical Quality, 27*(3), 241-249. DOI: 10.1177/1062860611416634

Kennedy, J.A., Jenkins, S.H., Novotny, N., Astroth, K.M., & Woith, W.M. (2020, May/June). Lessons learned in implementation of an expert nurse mentor program. *Journal of Nurses Professional Development, 36*(3), 141-145.
DOI: http://dx.doi.org/10.1097/NND0000000000000624

Kent, B., Anderson, N.E., & Owens, R.G. (2012). Nurses' early experiences with patient death: The results of an on-line survey of registered nurses in New Zealand. *International Journal of Nursing Studies, 49*(10), 1255-1265. DOI: 10.1016/j.ijnurstu.2012.04.005

Kirkpatrick, A.J., Cantrell, M.A., & Smeltzer, S.C. (2017). Palliative care simulations in undergraduate nursing education: An integrative review. *Clinical Simulation in Nursing, 13*(9), 414-431. http://dx.doi.org/10.1016/j.ecns.2017.04.009.

Kovner, C., Brewer, C., Wu, Y., Cheng, Y., & Suzuki, M. (2006). Factors associated with work satisfaction of registered nurses. *Journal of Nursing Scholarship, 38*(1), 71-79. doi: 10.1111/j.1547-5069.2006.00080.x. PMID: 16579327

Kovner, C.T., Brewer, C. S., Fairchild, S., Poornima, S., Kim, H., & Djukic, M. (2007). Newly licensed RNs' characteristics, work attitudes, and intentions to work. *The American Journal of Nursing, 107*(9), 58-70.

Kovner, C.T., Brewer, C.S.,Fatehi, F. (2014). What does nurse turnover rate mean and what is the rate? *Policy and Politics in Nursing Practice, 15*(3-4), 64-71. https://doi.org/10.1177/1527154414547953

Kunkel, C., Kopp, W., & Hanson, M. (2016). A matter of life or death. End-of-life simulation to develop confidence in nursing students. *Nursing Education Perspectives*, 37(5), 285-286. DOI: 10.1097/01.NEP.0000000000000029

Labrague, L.J., & McEnroe-Petitt, D.M. (2018). Job stress in new nurses during the transition period: An integrative review. *International Nursing Review*, *65*(4), 491-404. Doi: 10.1111/inr.12425

Lamas, D.J. (2020, August 4). *"If I hadn't been transferred, I would have died".* https://www.nytimes.com/2020/08/04/opinion/sunday/covid-rural-hospitals.html

Leombruni, P., Miniotti, M., Bovero, A., Zizzi, F., Castelli, L., & Torta, R. (2014). Attitudes toward caring for dying patients: An overview among Italian nursing students and preliminary psychometrics of the FATCOD-B scale. *Journal of Nursing Education and Practice*, *4*(3), 188-196. DOI: 10.5430/jnep.v4n3p188

Libby, L. K., Valenti, G., Pfent, A., & Eibach, R. P. (2011). Seeing failure in your life: Imagery Perspective determines whether self-esteem shapes reactions to recalled and imagined failure. *Journal of Personality and Social Psychology. 101*(6), 1157-1173. doi: 10.1037/a0026105

Lippe, M. (2019). *Death isn't optional, so why is end-of-life education?* https://nursingcentered.sigmanursing.org/features/more-features/death-isn-t-optional-so-why-is-end-of-life-education

Liu, T. (2012) A concept analysis of self-efficacy among Chinese elderly with diabetes mellitus. *Nursing Forum, 47*(4), 226-235. Doi://10.1111/j.1744-6198.2012.00282.x.

Liu, Y., Avant, K.C., Aungsroch, Y., Zhang, X., & Jiang, P. (2014). Patient outcomes in the field of nursing: A concept analysis. *International Journal of Nursing Sciences, 1*(1), 69-74.

Long, K. A., & Weinert, C. (1989). Rural nursing: Developing the theory base. *Scholarly Inquiry for Nursing Practice, 3*(2), 113-127. PMID: 277454

MacKusick, C.I. & Minick, P. (2010). Why are nurses leaving? Findings from an initial qualitative study on nursing attrition. *MEDSURG Nursing, 19*(6), 335-340. PMID: 21337990

Moreland, S.S., Lemieux, M.L., & Myers, A. (2012). End-of-life care and the use of simulation in a baccalaureate nursing program. *International Journal of Nursing Education Scholarship, 9*(1), 1-16.

Murch C, & Perlow M. (2019). Enhancing end of life nursing education. *Madridge Journal of Nursing, 4*(1), 151-154. doi: 10.18689/mjn-1000127

Naik, S.B. (2013). Death in the hospital: Breaking the bad news to the bereaved family. Indian *Journal of Critical Care Medicine, 17*(3), 178-181. doi: 10.4103/0972-5229.117067

National Academy of Sciences (2021). *The future of nursing 2020-2030: Charting a path to achieve health equity. Chapter 3. The nursing workforce.* https://www.ncbi.nlm.nih.gov/books/NBK573922/

National Council of State Boards of Nursing. (2020a). *Active RN licenses.* https://www.ncsbn.org/6161.htm

National Council of State Boards of Nursing (2020b). *The 2020 national nursing survey summary.* https://www.ncsbn.org/2020_NNW_Executive_Summary.pdf

National Institute of Nursing Research (n.d). *Office of end-of-life research and palliative care (OEPCR).* https://www.ninr.nih.gov/researchandfunding/desp/oepcr#:~:text=The%20Office%20of%20End-of-Life%20and%20Palliative%20Care%20Research,research%20initiatives%3B%20Creation%20of%20opportunities%20for%20collaborative%20activities%3B

National Institute of Nursing Research (2016, September). *Spotlight on end-of-life and palliative care research.* https://www.ninr.nih.gov/researchandfunding/spotlights-on-nursing-research/spotlight-on-end-of-life-research

National Institute of Nursing Research (2020). *Palliative care. Conversations matter.* https://www.ninr.nih.gov/newsandinformation/conversationsmatter/conversations-matter-newportal

National Institute of Health (2010). *Fact sheet. End of life.* https://www.report.nih.gov/NIHfactsheets/Pdfs/EndOfLife(NINR).pdf https://www.ninr.nih.gov/sites/www.ninr.nih.gov/files/NINR_StratPlan2016_reduced.pdf

National Palliative Care Research Center. (2013a). *About the center. About palliative care. Why is palliative care research needed?* http://www.npcrc.org/content/15/About-Palliative-Care.aspx

National Palliative Care Research Center. (2013b). *Grants program. Areas of interest. Pain and symptom management.* http://www.npcrc.org/content/33/Areas-of-Interest.aspx

Nelson, W. (2009). *Handbook for rural health care ethics: A practical guide for professionals.* Lebanon, NH: Dartmouth College Press.

Nursing Theories. (2011, Sept. 16). *From novice to expert. Patricia E. Benner.* http://currentnursing.com/nursing_theory/Patricia_Benner_From_Novice_to_Expert.

O'Shea, E. R., & Mager, D. (2019, December). End-of-life nursing education: Enhancing nurse knowledge and attitudes. *Applied Nursing Research, 50* (Epub). DOI: 10.1016/j.apnr.2019.151197

Parry, J. (2008). Intention to leave the profession: Antecedents and role in nurse turnover. *Journal of Advanced Nursing,* 64(2), 157-167. DOI:10.1111/j.1365-2648.2008.04771.x

Perron, T., Gascoyne, M., Kallakavumal, T., Kelly, M., & Damagistris, N. (2019). Effectiveness of nurse residency programs. *Journal of Nursing Practice Applications & Research Reviews, 9*(2), 48-52. doi: https://doi.org/10.13178/jnparr.2019.09.02.0908

Pesut, B., Sawatzky, R., Stajuduhar, K.I., McLeod, B., Erbacker, L., & Chan, E.K.H. (2014). Educating nurses for palliative care: A scoping review. *Journal of Hospice & Palliative Nursing, 16*(1), 47-54. doi:10.1097/NJH.0000000000000021

Peters, L., Cant, R., Payne, S., O'connor, M., McDermott, F., Hood, K., Morphet, J., & Shimoinaba, K. (2013). How death anxiety impacts nurses' caring for patients at the end of life: A review of the literature. *The Open Nursing Journal, 7*, p 14-21. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3565229/pdf/TONURSJ-7-14.pdf

Petiprin, A. (2016). *Nursing theory. From novice to expert.* http://nursing-theory.org/theories-and-models/from-novice-to-expert.php

Phillips, J., Salamonson, Y, & Davidson, P.M. (2011). An instrument to assess nurses and care assistants' self-efficacy to provide a palliative approach to older people in residential aged care: A validation study. *International Journal of Nursing Studies, 48,* 1096-1100.

Polit, D. F. & Beck, C. T. (2022). *Essentials of nursing research. Appraising evidence for nursing practice. (10th ed.).* Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins.

Puente-Fernandez, D., Lozano-Romero, M.M., Montoya-Juarez, R., Marti-Garcia, C., Compos-Calderon, C., & Hueso-Montoro, C. (2020). Nursing professionals' attitudes, strategies, and care practices towards death: A systematic review of qualitative studies. *Journal of Nursing Scholarship, 52*(3). 301-310. Doi:10.1111/jnu.12550

Rainsford, S., MacLeod, R. D., Glasgow, .J. Phillips, C.B., Wiles, R.B., & Wilson, D.M. (2017). Rural end-of-life care from the experiences and perspectives of patients and family caregivers: A systematic literature review. *Palliative Medicine, 31*(10), 895-912. DOI: 10.1177/0269216316685234

Richardson, K.A. (2011). The impact of retiring baby boomers on nursing shortage. *Journal of Global Healthcare Systems, 1*(1), 1-16.

Robert Wood Johnson Foundation. (2012, September 27). *Advocates call on nurses to take leading role in palliative care.* https://www.rwjf.org/en/library/articles-and-news/2012/09/advocates-call-on-nurses-to-take-leading-role-in-palliative-care.html

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Ross, M.M., McDonald, B., & McGuiness, J. (1996). The palliative care quiz for nursing (PCQN): The development of an instrument to measure nurses' knowledge of palliative care. *Journal of Advanced Nursing*, 23, 126-137. DOI?

Rural Information Hub. (2021). *Rural-urban commuting area (RUCA) codes.* https://www.ruralhealthinfo.org/resources/769

Rush, K.L., Adamack, M., Gordon, J., Lilly, M. & Janke, R. (2013). Best practices of formal new graduate nurse transition programs: An integrative review. *International Journal of Nursing Studies, 50*(3), 345-356. https://doi.org/10.1016/j.ijnurstu.2012.06.009

Sampaio, F., Sequeira, C., & Teixeira, L. (2021). Impact of COVID-19 outbreak on nurses' mental health: A prospective cohort study. *Environmental Research, 194* (Epub). https://www.sciencedirect.com/science/article/pii/S0013935120315176?via%3Dihub

Scherlin, M.M., & Quinn, P.T. (2016). End-of-life simulation: Lessons learned. *Teaching and Learning in Nursing.* Advance online publication. doi:10.1016/j.teln.2016.05.002

Schnur, M.B. (2020, May 28). *US nurses in 2020: Who we are and where we work.* https://www.nursingcenter.com/ncblog/may-2020/u-s-nurses-in-2020

Shaw, P.A., & Abbott, M.A. (2017). High-fidelity simulation: Teaching end-of-life care. *Nurse Education Today, 49*, 8-11.

Sherman, D.W., Matzo, M.L., Rogers, S., McLaughlin, M., & Virani, R. (2002). Achieving quality end-of-life care: A focus of the End-of-Life Nursing Education Consortium (ENLAC) curriculum. *Journal of Professional Nursing, 18*(5), 255-262.

Shorey, S., & Lopez, V. (2021). Self-efficacy in a nursing context. In: Haugen, G., & Eriksson, M. (eds) *Health promotion in health care- Vital theories and research.* Springer, Cham. https://doiorg/10.1007/978-3-030-63135-2_12

Siegler, K. (2020, March 23). Travel nurses, doctors fill gaps in rural coverage ahead of COVID-19. *NPR.* https://www.npr.org/2020/03/23/819324982/traveling-nurses-doctors-fill-gaps-in-rural-coverage-ahead-of-covid-19

Silverstein, J. (2017, November 28). *We're working nurses to death.* https://www.vice.com/en_us/article/43nkjd/nurses-overworked-stressed-burnout

Slonim, A.D., See, H., & Slonim, S. (2020). Challenges confronting rural hospitals accentuated during COVID-19. *Journal of Biomedical Research, 34*(6), 397-409. Doi: 10.7555/JBR.34.20202112

Smith, S Buckner, M., Jessee, M.A., Robbins, V., Horst, T., & Ivory, C. (2021). Impact of Covid-19 on new graduate nurses/ transition to practice. Loss or gain? *Nurse Educator, 46*(4), 200-214. doi: 10.1097/NNE.0000000000001042

St. Louis, J. (2016, October 24) *The transition from curative to palliative care.* https://thegatewayonline.ca/2016/10/curative-palliative-care/

Stump, G.S., Husman, J., & Brem, S.K. (2012). The nursing student self-efficacy scale development using item response theory. *Nursing Research, 1*(3), 149-158. doi: 10.1097/NNR.0b013e318253a750

Subramanian, P. (2022). *What is the average age of college students?* https://collegeonomics.com/what-is-the-average-age-of-college-graduates/

Sullivan, D. (2020, May 19). 3 ways rural hospitals can secure PPE amid the nationwide shortage. *Advisory Board.* https://www.advisory.com/daily-briefing/2020/05/19/rural-hospitals-ppe

Suzuki, E., Itomine, I., Saito, M., Katsuki, T., & Sato, C. (2008). Factors affecting the turnover of novice nurses at university hospitals: A two-year longitudinal study. *Japan Journal of Nursing Science, 5*(1), 9-21. DOI: 10.1111/j.1742-7924.2008.00095.x

Tasseff, T.L., Tavernier, S.S., Watkins, P.R., & Neill, K.S. (2018). Exploring perceptions of palliative care among rural dwelling providers, nurses, and adults using a convergent parallel design. *Online Journal of Rural Nursing and Health Care, 18*(2), 152-188. DOI: http://dx.doi.org/10.14574/ojrnhc.v18i2.527

Theisen, J.L., & Sandau, K.E. (2015). Competency of new graduate nurses: A review of their weaknesses and strategies for success. *The Journal of Continuing Education, 44*(9), 406-414. Doi: 10.3928/00220124-20130617-38

Twibell, R., St. Pierre, J., Johnson, D., Barton, D., Davis, C., Kidd, M., & Rook, G. (2012, June). Tripping over the welcome mat: Why new nurses don't stay and what the evidence says we can to about it. *American Nurse Today, 7*(6). https://www.americannursetoday.com/tripping-over-the-welcome-mat-why-new-nurses-dont-stay-and-what-the-evidence-says-we-can-do-about-it/

United States Census Bureau. (2019). *2020 census will help policymakers prepare for the incoming wave of aging boomers.*https://www.census.gov/library/stories/2019/12/by-2030-all-baby-boomers-will-be-age-65-or-older.html

U.S. Census Bureau (2020). *American Community Survey 5-year estimates.* http://censusreporter.org/profiles/02000US2-midwest-region/>

U.S. Department of Agriculture. (2019). *What is rural?* https://www.nal.usda.gov/ric/what-is-rural

U.S. Department of Health and Human Services Health Resources and Services Administration (HRSA). (2013). *The US nursing workforce: Trends in supply and education.* http://bhpr.hrsa.gov/healthworkforce/reports/nursingworkforce/nursingworkforcefullreport.pdf

Usher, B., DiNella, J., Ren, D, Liang, Z, & Tuite, P. (2015). Development of end-of-life peer nurse coaches. A hospital-based quality improvement project. *Journal of Hospice & Palliative Nursing 17*(6), 551-558. Doi: 10.1097/NJH.0000000000000198

Van Camp, J. & Chappy, S. (2017). The effectiveness of nurse residency program on retention: A systematic review. *AORN Journal, 106*(2), 128-144. doi: 10.1016/j.aorn.2017.06.003.

Wallerstedt, B. & Andershed, B. (2007). Caring for patients outside special palliative care settings: Experiences from a nursing perspective. *Scandinavian Journal of Caring Sciences, 21*(1):32-40. doi: 10.1111/j.1471-6712.2007.00430.x.

Walsh, A.L. (2018). Nurse residency programs and the benefits for new graduate nurses. *Pediatric Nursing, 44*(6), 275-279. http://www.pediatricnursing.net

Warren, J.C. & Smalley, K.B. (Eds.) (2014). *Rural public health: Best practices and preventive models.* New York: Springer

White, K.R., & Coyne, P.J. (2011). Nurses' perceptions of educational gaps in delivering end-of-life care. *Oncology Nursing Forum, 38*(6), 711-717. doi: 10.1188/11.ONF.711-717.

White, LL, Cohen, M.Z., Berger, A.M., Kupzyk, K.A., Swore-Fletcher, B.A., & Bierman, PJ. (2017). Perceived self-efficacy; a concept analysis for symptom management in patients with cancer. *Clinical Journal of Oncology Nursing, 21*(6), E272-279. Doi: 10.1188/17.CJON.E272-E279.

Wilson, J., & Kirshbaum, M. (2011). Effects of patient death on nursing staff: A literature review. *British Journal of Nursing, 20*(9), 559-563.

Zhao, X., Zhang, W., Yonggang, S., Song, Y., Si, H., & Zhu, L. (2022). Death anxiety, self-esteem, and health-related quality of life among geriatric caregivers during the COVID-19 pandemic. *Phychogeriatrics, 22*(2), 236-242. Doi: 10.1111/psyg.12807.

Zheng, R., Gua, Q., Dong, F., & Gao, L. (2022). Death self-efficacy, attitudes toward death and burnout among oncology nurses: A multicenter cross-sectional study. *Cancer Nursing, 45*(2), E388-E396. DOI: 10.1097/NCC.0000000000000839

Zheng, R., Lee, S. F., & Bloomer, M.J. (2018). How nurses cope with patient death. *Journal of Clinical Nursing, 27*, e39-e49. https://doi.org/10.1111/jocn.13975

Appendix A

Nurse Licensure by State

State	Registered Nurses	Potential Eligible Participants
Minnesota	116,929	22,487
South Dakota	18,799	3,347
Nebraska	32,324	5,997
Wyoming	9,626	961
Total	177,678	32,792

(National Council of State Boards of Nursing, 2020a)

Appendix B

Results of Emails Sent via Qualtrics.

State	Sent	Failed	Started	Completed	Bounced	Duplicates
MN	13,728	8,330	248	216	397	429
SD	1,666	1,743	59	54	75	28
WY	455	483	12	11	28	23
NE	2,345	3.460	78	66	114	192
Totals	18,194	14,016	397	347	614	672

Appendix C

Invitation to Participate in the Study

As a newly licensed nurse, you are being invited to participate in a study about providing palliative End-of-Life patient care.

The purpose of this dissertation research study is to identify factors which may affect newly licensed nurses' (particularly those licensed within the past three years) self-efficacy to provide quality palliative patient care at End-of-Life.

This is an online survey. You will be asked some general demographic questions about yourself, such as your age and gender, as well as your degree and licensure level. You will also be asked about previous experiences with dying persons.

Please take this survey on a personal computer of some kind.

You will answer questions regarding how you perceive you provide palliative care, both psychological and physical, and how you perceive your self-esteem. This survey should take you no more than approximately 10-15 minutes.

The first 200 participants to complete the survey will receive a $10.00 Starbucks gift card. Upon completion of the survey, you will receive an email directing you to the retrieval site. If you do not receive an email, please check your Spam folder before contacting Reward Genius customer service at 1-877-558-2646.

There is minimal risk involved with participating in this survey.

Appendix D

Study Information

UNIVERSITY OF NORTH DAKOTA
Institutional Review Board
Study Information Sheet

Below you will find some important information about the survey that you are being invited to complete. Please read this information, and if you agree to it, you will be taken to the first page of the survey.

Title of Project: Factors Associated with New Hospital Nurses' Self-efficacy in Providing Palliative End-of-Life Care

Investigators: Penny Briese, MS, RN
PhD Nursing Student
University of North Dakota
701-320-0010 penny.briese@und.edu

Dr. Darlene Hanson, PhD
(Dissertation Advisor)
University of North Dakota
701-777-4551 darlene.hanson@und.edu

Purpose: The purpose of this dissertation study is to identify factors which may be associated with new nurses' self-efficacy to provide palliative patient care at End-of-Life.

Participants: The survey is available to be answered by any Registered Nurse who has been licensed within the past three years, currently working in a hospital setting within the four state setting (MN, NE, WY, SD). I am seeking input from at least 200 nurses.

Procedures to be Followed: The survey is voluntary and you may skip any questions that you do not wish to answer. If you are one of the first 200 people to complete the survey, you will be directed to a site where you will receive a $10.00 Starbucks gift card. You may end the survey at any time. However, if you do not finish the survey you will forfeit the gift card. The survey will not ask for your name and your identity will not be known.

Risks: There are minimal risks in participating in this research.

Benefits: Nurses may benefit from reflecting on their abilities to provide palliative End-of-life cares. The findings of this study may be utilized in the future to tailor educational programs to support new nurses as they transition into practice.

Duration: It will take you approximately 10-15 minutes to complete the survey.

Statement of Confidentiality: Your identity will be protected to the greatest extent allowed by law. If this survey data is published or presented publicly, no information that would identify you will be included since your name is in no way linked to your responses. All publications resulting from this study will report results in aggregate form only. All survey data and study materials will be stored on a password protected computer and server at the University of North Dakota, and only members of the University of North Dakota Institutional Review Board, the investigators and members of the student's dissertation committee will have access to the data. Surveys and related study materials will be stored for a minimum of three years after the termination of the study. All survey responses that we receive will be treated confidentially and stored on a secure server. However, given that the surveys can be completed from any computer (e.g., personal, work, school), we are unable to guarantee the security of the computer on which you choose to enter your responses. As a participant in our study, we want you to be aware that certain "key logging" software programs exist that can be used to track or capture data that you enter and/or websites that you visit.

Right to Ask Questions:
Right to Ask Questions: The researcher conducting this study is Penny Briese, MS, RN, a nursing professor at the University of Jamestown and doctoral student at the University of North Dakota. If you have questions, concerns, or complaints about the research please contact Penny Briese at 701-320-0010, penny.briese@UND.edu or Dr. Darlene Hanson (Dissertation Chair) at 701-777-4551, darlene.hanson@UND.edu.

If you have questions regarding your rights as a research subject, you may contact The University of North Dakota Institutional Review Board at (701) 777-4279. You may also call this number with problems, complaints, or concerns about the research. Please call this number if you cannot reach research staff, or you wish to talk with someone who is an informed individual who is independent of the research team.

General information about being a research subject can be found on the University of North Dakota Institutional Review Board website "Information for Research Participants" http://und.edu/research/resources/human-subjects/research-participants.html

Costs/Compensation:
Costs/Compensation: There will be no financial cost to you. The only cost to you will be your time to complete the survey. The first 200 nurses who complete the survey will receive a $10.00 Starbucks gift card for participating in this study.

Voluntary Participation:
You do not have to participate in this research. You can stop your participation at any time with the understanding that you will forfeit the gift card. You do not have to answer any questions you do not want to answer.

Appendix E

Second Round of Emails Sent via Qualtrics

Sent	Failed	Started	Completed	Bounced	Duplicates
5959	0	99	69	11	45

Appendix F

Reciprocity Agreement

University of JAMESTOWN

December 16, 2021

To whom it may concern:

The Institutional Review Board (IRB) of the University of Jamestown will accept by reciprocity, and as the IRB of record, an IRB approval from the University of North Dakota (UND), as the reviewing IRB.

This letter meets the federal requirements for designation of another institution's IRB as the Reviewing IRB, as set forth in guidance issued by the Office for Human Research Protections' (OHRP), Terms of the Federalwide Assurance (FWA).

Institution or Organization Providing IRB Review (Institution A):
Name: University of North Dakota (UND)

Institution Relying on the Designated IRB (Institution B):
Name: University of Jamestown

The Officials signing below agree that University of Jamestown may rely on the designated IRB for review and continuing oversight of its human subjects research described below:

(___) This agreement applies to all human subjects research covered by Institution B's FWA.
(_X__) This agreement is limited to the following specific protocol(s):

Name of Research Project: Factors Associated with New Hospital Nurses' Self-efficacy in Providing Palliative End-of-Life Care
Name of Principal Investigator: Penny Briese, PhD(c), RN

The review performed by the designated IRB will meet the human subject protection requirements of University of Jamestown OHRP-approved FWA. The IRB at UND will follow written procedures for reporting its findings and actions to appropriate officials at University of Jamestown. Relevant minutes of IRB meetings will be made available to University of Jamestown upon request. University of Jamestown remains responsible for ensuring compliance with the IRB's determinations and with the Terms of its OHRP-approved FWA. This document must be kept on file by both parties and provided to OHRP upon request.

Signature of Signatory Official (UND):

John Mihelich Digitally signed by John Mihelich Date: 2022.01.12 13:56:48 -06'00'

Date: 1/12/2022

John Mihelich, Ph.D., Interim Vice President for Research and Economic Development

Signature of Signatory Official (University of Jamestown):

Date: 12/16/2021

Sara Voorhees, PT, PhD; IRB Chair

Appendix G

Questions on the 12-item Palliative Care Self-efficacy Scale

Questions

1. Answering patients questions about the dying process.
2. Supporting the patient or family member when they become upset.
3. Informing people of the support services available.
4. Discussing different environmental options (e.g., hospital, home, family).
5. Discussing patient's wishes for after their death.
6. Answering queries about the effects of certain medications.
7. Reacting to reports of pain from the patient.
8. Reacting to and coping with terminal delirium.
9. Reacting to and coping with terminal dyspnea (breathlessness).
10. Reacting to and coping with nausea/vomiting.
11. Reacting to and coping with reports of constipation.
12. Reacting to and coping with limited patient decision-making capacity.

The Palliative Care Self-efficacy Scale. (Phillips et al., 2011).

This instrument is scored from 1-4:

1: Need further basic instruction

2: Confident to perform with constant supervision/coaching

3: Confident to perform with minimal consultation

4: Confident to perform independently

Appendix H

Consent to Use Tool

CONSENT FORM

I, ____Jane Phillips_____ hereby grant permission, including non-exclusive world rights, to Penny Briese to use the portion of the work here cited for the purpose described below:

Work:

- Phillips, J, & Davidson, P.M. (2011). An instrument to assess nurses' and care assistants' self-efficacy to provide a palliative approach to older people in residential aged care: A validation study. *International Journal of Nursing Studies, 48*, 1096-1100.
- All publications and presentations will include the original citation for the original instrument as listed above.

Portion:

- Palliative Care Self-efficacy Scale and any scoring information.

Purpose:

- To utilize the Palliative Care Self-efficacy Scale as an instrument with which to measure newly licensed (three years or less of practice) nurses' self-efficacy to provide palliative patient care.
- The aim of this study is to identify factors such as level of licensure (RN/LPN), areas of practice (hospital vs long-term care), experiences with death (personal/professional), previous healthcare experience (CNA/EMT), amount of undergraduate palliative EOL care education, ongoing post-graduate education (mentorships/residency programs), and personal demographics (age/gender/ethnicity) and analyze the data for correlations with Palliative Care Self-efficacy Scale scores. By understanding how personal demographics affect self-efficacy to provide palliative EOL patient care, educators and nurse managers will be better able to tailor educational experiences to meet the needs of the learner.

Jane K Phillips

Signed: ___ _____ on _____
[Signature of copyright holder] [Date]

Name: _____ Jane Phillips_____
[Please Print]

_____Professor_____
[Title]

__24.8.2020_____
[Date]

Other persons to contact for consent:

Name(s): _____

Address(es): _____

1

Appendix I

Rosenberg Self-esteem Scale

Instructions: Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.

Strongly Agree Agree Disagree Strongly Disagree

2. At times I think I am no good at all.

Strongly Agree Agree Disagree Strongly Disagree

3. I feel that I have a number of good qualities.

Strongly Agree Agree Disagree Strongly Disagree

4. I am able to do things as well as most other people.

Strongly Agree Agree Disagree Strongly Disagree

5. I feel I do not have much to be proud of.

Strongly Agree Agree Disagree Strongly Disagree

6. I certainly feel useless at times.

Strongly Agree Agree Disagree Strongly Disagree

7. I feel that I'm a person of worth, at least on an equal plane with others.

Strongly Agree Agree Disagree Strongly Disagree

8. I wish I could have more respect for myself.

Strongly Agree Agree Disagree Strongly Disagree

9. All in all, I am inclined to feel that I am a failure.

Strongly Agree Agree Disagree Strongly Disagree

10. I take a positive attitude toward myself.

Strongly Agree Agree Disagree Strongly Disagree

Scoring: Items 2, 5, 6, 8, 9 are reverse scored. Give “Strongly Disagree” 1 point, “Disagree” 2 points, “Agree” 3 points, and “Strongly Agree” 4 points. Sum scores for all ten items. Keep scores on a continuous scale. Higher scores indicate higher self-esteem.

Fetzer Institute (2021).

Appendix J

Participant Demographic Questions

I have read the study information sheet and agree to participate in this survey. _____

1. Do you hold a Registered Nurse license? Yes ____ No_____ *

2. What is your highest degree earned in nursing? Certificate _____ AAS_____ Diploma _____

ADN ____ BSN _____ MS _____ PhD _____

DNP _____ Other (please specify)_____

3. Did you receive your license for your current nursing role within the past 3 years? Yes _____ No ____ * if no, jump to the "thank you but you do not qualify for this study"

4. Do you provide direct patient care in the hospital setting? Yes ____ No ____* if no, jump to the "thank you but you do not qualify for this study"

5. What is primary your area of practice? Medical/Surgical____ Intensive Care____

Emergency Department_____ Pediatric _____

Oncology _____ Maternal/Child _____

Mental Health _____ Multiple areas

Other _____ (Please specify)

6. Do you hold any professional End-of-Life certification? Yes ____ *if yes, jump to the "thank you but you do not qualify for this study.

No ____

7. Did you receive any End-of-Life instruction during your undergraduate studies? Yes ____* if yes, go to the highlighted

No ____

8. If yes, how many hours of End-of-Life simulation did you receive? 1 ___ 2-5 ___ 6-10 ___ More than 10___

9. If yes, how many hours of classroom End-of-Life instruction did you receive? 1 ___ 2-5 ___ 6-10___ More than 10 __

10. Have you participated in a nurse residency program? Yes____ *if yes, go to highlighted 11 No____

11. Have you had a preceptor guide you through caring for a dying patient? Yes _____ No _____

12a. Have you had any experience with a dying person in your personal life? Yes ____ * if yes, go to highlighted 12b No ____

12b. If yes, what was your relationship to the dying person: Friend ____ Family ____
Other (Please specify) _____

13. Have you ever cared for a dying patient in a professional role? Yes _____ *if yes, go to highlighted 14a

No _____ * if no, go to the "thank you, but you don't qualify for this study"

14a. If yes, what was your role in caring for the dying person? CNA ____ LPN _____ RN _____

Other (please specify) _____

14b. If yes, how many patients have you cared for that died? 1-5 ____ 6-10 ____ More than 10 _____

Zip code where you work _____ (for the purpose of determining rural VS non-rural and participation by state)

General demographics:

15. Age 20-29 ____ 30-39 _____ 40-49_____ 50 or older _____

16. Gender Male _____ Female _____ Non-binary_____ Other_____

17. Race White ___ Black ___ Latinx ___ Native American/Alaskan Native ___ Asian _____

Native Hawaiian/Pacific Islander _____ Biracial/Multiracial _____ Other ___

Question added for second round of recruitment; "Do you work in a rural healthcare setting?"