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Oncology Nurses' Development of Coping Mechanisms to Avoid Burnout and Foster Resilience

Alberto N. Sarmiento
Walden University

Walden University

College of Nursing

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Alberto N. Sarmiento

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Review Committee
Dr. Deborah Lewis, Committee Chairperson, Nursing Faculty
Dr. Maria Ojeda, Committee Member, Nursing Faculty
Dr. Janice Long, University Reviewer, Nursing Faculty

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

Walden University
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Abstract

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Alberto N. Sarmiento

MA, Rutgers University, 2014

BS, Seton Hall University, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Cancer is a leading cause of death in the United States. Individuals diagnosed with the disease experience physiological and psychological burdens due to its effects. As a result, cancer care constantly exposes health care professionals to challenging personal and professional demands. Effective coping mechanisms are associated with better well-being and career longevity for nurses and improved outcomes for patients. Although researchers have examined resilience and burnout among health care professionals, they have not fully considered these concepts in terms of oncology nurses' professional experiences or explored what factors may mitigate burnout for these professionals. The purpose of this qualitative study was to investigate the lived experience of oncology nurses to better understand their development of protective mechanisms to manage work-related stressors. The Neuman systems model provided the theoretical framework for this study. A purposeful sample of five oncology nurses participated in two semi-structured interviews. An interpretative phenomenological analysis was conducted, which included case-by-case and cross-analysis. Four central themes were identified: (a) processing experiences, (b) utilizing supportive resources, (c) gaining and applying knowledge, and (d) transforming relationships. The findings reveal that the participants learned to see beyond the context of their immediate environment, which played a significant role in fostering career longevity and well-being for them as nurses and ensuring quality care for their patients. The results support positive social change by providing a greater understanding of the lived experience of oncology nurses, who constantly adapt and combat the negative effects of traumatic workplace environments.

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Dedication

The courage to complete my PhD was grounded in faith. I dedicate this work to my family: my mother, Helen Sarmiento; my father, Kocsis Sarmiento; and my sister, Nohelia Sarmiento. I could not have completed this work without their support and encouragement. I dedicate this work to my cancer patients, who inspired me to do this work.

Acknowledgments

I can do all things through Christ who strengthens me.

--Philippians 4:13

I did not do this work alone. First, I give God all glory for giving me the capacity to complete this program. The process of doing so has been arduous, but with the help of individuals who God who placed in my path I was able to complete this work. Throughout my studies, I have been surrounded by encouraging family, friends, and colleagues. I am most grateful for my parents, Helen and Kocsis Sarmiento, and my sister, Nohelia Sarmiento. You believed in me and supported me. I am grateful for my friends, whose resilience has inspired me throughout this journey. Thank you always for your patience and understanding.

I am grateful for the five participants whose time and commitment allowed me to journey with them through their experiences. It is a privilege to have been a witness to your journey.

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Chapter 1: Introduction to the Study

Cancer affects a wide range of Americans each year. In 2019, the U.S. Department of Health and Human Services estimated that, in 2020, approximately 1.8 million Americans would be living with cancer and that there would be an estimated 606,520 cancer-related deaths in the United States. Cancer is the second most common cause of death in the United States, surpassed only by heart disease. It is a chronic and potentially life-threatening illness that has profound physical and psychological effects on patients and their families.

From a societal standpoint, cancer remains a dreaded illness that is often associated with images of death, pain, and suffering to patients and health care professionals alike (Bast et al., 2017; Odeniyi et al., 2014). Given the potentially challenging situations posed in the patient population and innate responsibility to care, working in the specialty of oncology can be a source of substantial stress for the oncology nurse (Jouybari et al., 2019; Wazqar, 2018). Though high levels of stress are often encountered in nursing, caring for adults with cancer is one of the most challenging areas in the profession (Hildebrandt, 2012). The inherent nature of the nursing profession, to be empathetic, can potentially place the oncology nurse in a variety of unfavorable situations (Boyle, 2015; Kane, 2009). Oncology nurses who experience feelings of high levels of stress are in jeopardy of leaving the specialty (Hlubocky et al., 2016). Stress levels in the oncology workforce are disproportionally higher because the oncology nurse maintains long-standing relationships with patients and families during lengthy treatment regimens; a significant number of these patients face end-of-life circumstances (Bast et

al., 2017). The oncology nurse is more likely to experience immense emotional distress as they remain intimately present throughout the cancer care spectrum, from diagnosis to survivorship or end of life (Jouybari et al., 2019). The stress may also stem from conflict with colleagues, inadequate preparation, lack of support, high workload, and uncertainty concerning cancer-care treatment (Ko & Kiser-Larson, 2016).

Secondary exposure to trauma is another risk factor for oncology nurses. Given the inherent complexity of cancer care, the oncology nurse often encounters and witnesses traumatic and tragic outcomes in everyday clinical practice (Rappaport & Seidman, 2000). The ramifications of repeated exposure to trauma in the workplace setting leads to long-lasting detrimental consequences, such as burnout (Hall et al., 2016). Oncology nurses experience burnout due to repeated exposure to stressful clinical situations compounded with the demanding needs of oncology patients (Jones, 2017). The burnout experiences by oncology nurses may lead to dissatisfaction with their profession, and an intention to leave their position (Shang et al., 2013).

However, although some oncology nurses succumb to adversity and leave the specialty, others stay and thrive (Shockney, 2019). Considering the burden of cancer, which affects a significant proportion of the population, it is in the public's best interest to retain highly qualified oncology nurses to provide high-quality cancer care (Shang et al., 2013). Oncology nurses play a central role in optimizing care provided to patients who have cancer in the presence of these stressful factors (Hildebrandt, 2012). Most oncology nurses remain authentically present, which has a positive effect on the recovery and self-care of patients (Jouybari et al., 2019). Some nurses can effectively cope and thrive in the

face of potentially stressful conditions, while others experience serious, negative consequences, and leave the specialty (Hunnibell et al., 2008). A better understanding of why oncology nurses remain in this specialty is merited and may support the development of effective interventions to retain nurses in oncology.

Background

In response to an evolving landscape in cancer care, The Institute of Medicine called for improvement in the quality of cancer care delivery and research (Murphy & Mollica, 2016). In the United States, there is an increased demand for health care services, and in turn, the need for more nurses to provide care. Although the number of nurses graduating from prelicensure programs has increased, there is a growing workforce gap in the number of oncology nurses (Lockhart et al., 2013). Although statistics on nursing shortages specific to oncology are not readily available, the growing number of cancer diagnosis, coupled with the estimated number of survivors, signals an imminent challenge in the recruitment and retention of highly qualified oncology nurses (Henry, 2014; Lagerlund et al., 2015; Toh et al., 2012). Retention is a critical factor in ensuring that the care that cancer patients receive is not jeopardized (Hildebrandt, 2012). Multiple studies have identified a correlational relationship between favorable nursing environments and desirable outcomes, such as low nurse turnover rates and low nurse burnout (Wells-English et al., 2019).

Burnout is a psychological syndrome that is characterized by emotional, physical, and spiritual enervation and categorized in three domains: physical and emotional exhaustion, cynicism and depersonalization, and infectiveness (Lehto et al., 2018;

Rushton et al., 2015). Unresolved burnout is associated with a deleterious effect on nurses' health, psychological and physical symptoms, and diminished productivity (Hunsaker et al., 2015). Multiple studies have documented the prevalence of burnout in stressful nursing clinical settings such as emergency medicine, intensive care, and oncology and those that serve specific patient populations (e.g., vulnerable children, terminally ill individuals, and patients with HIV/AIDS; Henry, 2014; Toh et al., 2012).

Nursing is a demanding, stressful occupation chiefly because of challenges associated with the practice. Nurses experience higher levels of stress than other professional disciplines as they have to adapt to various clinical settings and are exposed to diverse patient conditions (Chow et al., 2018). Moreover, different practice settings might demand different behaviors or strategies for nurses to remain within their respective workplace (Ang et al., 2018). Stress can cause burnout and potentially lead to distress, having detrimental effects on well-being and longevity in the individual's professional role (Yılmaz, 2017). Because working in a stressful environment does not necessarily lead to distress, some individuals succumb to adversity while others thrive (Ledesma, 2014). One factor known to prolong longevity in stressful nursing specialties, such as oncology nursing, is resilience (Ablett & Jones, 2007; Hlubocky et al., 2016).

Resilience has been postulated as a critical attribute enabling nurses to cope and maintain healthy, stable functioning. Resilience is viewed as the ability to grow and positively adapt to stressful situations. Factors that support resilience are both internal and external, including role models, social support, self-care, problem-solving, and coping strategies (Southwick, & Charney, 2018). Resilience, from a nursing perspective,

has two different constructs. One is the ability to bounce back from adversity, frustration, or misfortune, and the second is the positive adjustment outcomes of that particular adversity (Ledesma, 2014). The term is multidimensional, encompassing the paradigm of person, environment, health, and nursing (Gillman et al., 2015). However, this definition does not entirely convey the experience of a nurse who develops resilience (Kornhaber & Wilson, 2011). This study may clarify additional factors that might support nurses' longevity beyond resilience.

Problem Statement

Approximately 50% of practicing nurses experience substantial symptoms associated with burnout. Burnout is a work-related syndrome that manifests as a result of the interaction between a nurse and their workplace environment in response to repeated, chronic stress (Mudallal et al., 2017). Oncology is a specialty area at an increased risk for burnout, given the demanding nature of the work (Kleiner & Wallace, 2017). A common perception in the profession is that oncology nurses can cope with the stressors with little or no consequences. Several studies have demonstrated a negative relationship between nursing retention and burnout among oncology nurses (Davis et al., 2013). Stress and burnout are strongly associated with the intention to leave the specialty; however, some nurses choose to remain (Scammell, 2016). A gap exists in the literature when exploring the presence of burnout and oncology nurses' decision to stay in the specialty.

Oncology nurses work daily with cancer patients and their families, often providing care to the same individuals for extended periods of time. In their role, oncology nurses can develop a special rapport with patients (Wu et al., 2016). Oncology

nurses are continuously subjected to highly stressful circumstances in their professional capacity as both the participant and observer during one of life's most stressful events, making them particularly vulnerable to burnout (Hunnibell et al., 2008; Zander et al., 2009). Burnout is a condition characterized by emotional, physical, and spiritual enervation that usually develops gradually and intensifies over time (Lehto et al., 2018). Burnout is a pressing issue in oncology nursing because it directly impacts patient care, patient satisfaction, nurse retention, and overall organizational success (Kutluturkan et al., 2016). Nurses should be encouraged to build upon their strengths and thrive in the face of adversity and learn to adapt to stress positively (Scammell, 2016). The key to avoiding a pernicious emotional state is resilience.

Resilience is the ability to adapt well to adversity, tragedy, and significant workplace stressors and is a factor known to help mitigate or prevent burnout (Batcheller et al., 2015; Jackson et al., 2007; The Road to Resilience, n.d). The topics of burnout and resilience are well addressed in the literature; however, little is published regarding additional factors that may contribute to an oncology provider's decision to remain in the specialty. Multiple studies have been conducted regarding oncology nursing and burnout. Yet, there is a current gap in the research on oncology nurses' professional experiences, how they are related to the well-cited concepts of resilience and burnout, and what additional factors may mitigate burnout (Gómez-Urquiza et al., 2016). Factors that contribute to oncology nurses decision to remain in the field differ between nurses; it is necessary, therefore, to understand variations in those factors (Waizer, 2019). Exploring the complex nature of oncology nurses' roles, through a qualitative approach,

can illuminate tailored resolutions that support longevity in the oncology nursing role (Finley & Sheppard, 2017; Lim et al., 2016).

Purpose of the Study

The purpose of this qualitative study was to explore the lived experiences of oncology nurses who demonstrate resilience to mitigate the effects of burnout. Although resilience is widely recognized as a tool for buffering the impact of burnout, few evidence-based studies are available on other equally effective protective factors (Mealer et al., 2017). Protective factors are individual responses to threats that protect the individual from the impact of risk factors and commonly include personal attributes and characteristics (Rew & Horner, 2003). Exploring these protective processes may provide insight that stakeholders can use to reduce harm that corresponds with burnout, such as turnover, and increase positive outcomes within the oncology nursing profession (Mealer et al., 2014). Ultimately, this study may help to explain the experiences of oncology nurses and clarify what strategies they use to support longevity in that role ().

Research Question

Some nurses can effectively cope and thrive in the face of potentially stressful situations, while others experience serious, negative consequences (Hunnibell et al., 2008). The ability to remain resilient may improve a nurse's wellness and benefit health care organizations. Yet there remains a knowledge gap about other protective factors equally effective and equivalent to resilience. To guide my examination of the study phenomenon, I developed the following research question: What are the lived

experiences of oncology nurses that help promote resilience and mitigate the effects of burnout and that affect their decision to remain in this specialty of oncology nursing?

Theoretical Framework

A theoretical framework encompasses the theory or theories that an investigator selects to explain a particular phenomenon (Hsieh & Shannon, 2005). A theoretical framework is a group of statements composed of concepts that explain an individual's experience of the study phenomenon. Two distinct types are descriptive or prescriptive. Descriptive encompasses understanding the interaction between a set of variables, and prescriptive involves anticipating a particular set of outcomes. The term *theoretical framework* is synonymous with theory, theoretical model, and theoretical system. A theoretical framework serves as a guide for investigators to organize existing knowledge and aid in making discoveries for the discipline of nursing (Fitzpatrick, 2018).

Neuman System Model

In a well-developed study, an investigatory relies on a theoretical framework to guide their investigation. The framework is the lens that the researcher uses to interpret existing evidence. It is derived from the stance of the researcher and the theories of a particular discipline (Lederman & Lederman, 2015). As a researcher, it is essential to select an appropriate theoretical framework that provides the reason for exploring the selected phenomenon. The Neuman system model (NSM) provided the framework to examine the lived experience of resilience from an oncology nurse's perspective. The NSM is a nursing theory that links individuals' reaction to stress and mechanisms for rebuilding. Fitzpatrick and McCarthy (2014) stated that the theory can be applied to

determine the effectiveness of nursing interventions in helping individuals cope with life-threatening conditions. Alternatively, it can be used to assess potential solutions for burnout in oncology nurses.

I selected the NSM because it provides insights into how individuals react to potential stressors from within and without the system (Masters, 2015). Neuman emphasized that the causes of stress can be identified and remedied through nursing interventions for maintenance of system wellness (McEwen & Wills, 2011). In applying the NSM to the concepts of resiliency and burnout, an individual oncology nurse is a client system, and burnout is a syndrome that develops as a reaction from perceived stress in the environment (Günüşen et al., 2009; Potter et al., 2010). The attraction of the NSM as a conceptual framework for nurse resilience lies in its focus on client system's stress and reaction to stress as well as close relation to theories of coping (Günüşen et al., 2009; Masters, 2015). It is also important to note that, through the process of discovery, other system factors may be identified that contribute to oncology nurses' longevity in their role.

Interpretative Phenomenological Analysis

Interpretative phenomenological analysis (IPA) is a qualitative research approach that includes concepts from three areas of philosophical knowledge: phenomenology, hermeneutics, and idiography (Smith et al., 2009). Phenomenology is a philosophical approach that is committed to the study of experience. Its importance and relevance to IPA is that it provides the investigator with a source of ideas on how to examine and understand the lived experience. The second major philosophical underpinning of IPA

stems from hermeneutics. Hermeneutics is the study of interpretation. In IPA, the investigator is trying to unravel the context of a participant's conception of experience (Smith et al., 2009). Finally, IPA also has theoretical roots in ideography. Ideography is committed to the exploration and development of in-depth descriptions from the phenomenon under study (Smith et al., 2009; Tuffour, 2017). IPA draws from the three concepts to style its particular way of working (Fade, 2004). The integration of NSM and IPA supported the examination of participants' lived experience as oncology nurses and interpretation of factors that support their career longevity.

Nature of the Study

In this study, I used a qualitative phenomenological approach that involved application of IPA. IPA is a useful qualitative tool in health care-related research because it allows investigators an insider perspective into the lived experience of participants (Cassidy et al., 2010). An IPA method enables both participants and the researcher to arrive at a coconstructed understanding of participants' experiences through open dialogue that allows for sharing and interpretation of various perspectives (Smith et al., 2009). An understanding of IPA is necessary to intimately explore the "lifeworld" of an oncology nurse to offer an alternative perspective other than resilience that attenuates the effects of burnout (Glasper & Rees, 2016).

A phenomenological approach was most fitting for this in-depth investigation due to its potential to yield extensive data into situations that oncology nurses face daily and the sense they make of these experiences (Glasper & Rees, 2016). The method involves the investigator interpreting phenomena and discovering similarities by generating

themes (McIntosh-Scott et al., 2013). IPA also is explicitly idiographic, and for this reason, the sample size tends to be small to facilitate a detailed analysis of the data generated (Smith & Osborn, 2014). Participants are purposively selected to ensure a homogenous sample that can provide rich, detailed data about their perceptions on the phenomenon being studied. IPA is a suitable methodology for exploring topics that are intricate, ambiguous, and emotional (Smith & Osborn, 2014). These features made it appropriate for use in this research.

Definitions

The following definitions are presented to provide clarity and transparency regarding the use of selected terms in this study:

Burnout: An environmentally driven, cumulative stress syndrome manifested by physical, emotional, and mental exhaustion that is particularly prominent in health care occupations such as nursing (Wu et al., 2016). The onset of burnout can be insidious, and it occurs as a result of an individual's inability to cope with the environment they exist within (Murali et al., 2018; Shockney, 2019). In the specialty of oncology, burnout is directly linked to high turnover rates and difficulty retaining health care staff (Shockney, 2019).

Oncology nurse: An RN with an associate or baccalaureate degree who has more than 1 year of experience with additional specialized training or certification in oncology (Shockney, 2019).

Resilience: The dynamic interaction between risk and protective factors characterized by the capacity of an individual to recover, adapt, and thrive amidst

adversity (Smith et al., 2015; Turner, 2014). Resilience is also characterized by the ability to absorb disruptive change and, at the same, display minimal dysfunctional behaviors (Murali et al., 2018).

Retention: An effort by employers to encourage individuals to voluntarily remain within an organization by having strategies and practices that address diverse needs (Khalid & Nawab, 2018).

Assumptions

In research, assumptions are statements that are believed to be true without empirical evidence to support them (Marshall & Rossman, 2016). Sources of assumptions in nursing research include accepted truths, theories, previous research, and nursing practice (Grove et al., 2014; Powers & Knapp, 2005). Research assumptions are embedded in a study and cannot be avoided as every perspective holds, to some degree, a concealed assumption (Dimitrios & Antigoni, 2019). The avoidance of study assumptions may also render the research findings invalid (Suresh, 2014). I had the following assumptions when developing this study:

- Individuals are aware of the experiences that affect their life choices (Suresh, 2014).
- Risk and protective factors are present in every individual throughout the life continuum.
- The participants of this study would understand their roles in research and would be experts on the subject matter.

- The participants in the study would discuss their personal experiences and provide vivid, honest, and accurate responses to the interview questions to the best of their ability.

Scope and Delimitations

Delimitations of a qualitative study are limiting parameters or boundaries in the scope of the study that arise from the exclusion and inclusion criteria selected during the development of the study. Unlike limitations, delimitations arbitrarily narrow the scope of the project. Delimitations help avoid overgeneralization and limit conclusions, thus resulting in higher quality research and avoid the pursuit of endless points (Simon & Goes, 2010; Sensing, 2011). There are two principal types of delimitations in research studies, theoretical and methodological. Theoretical delimitations restrict the generalizability of research findings because of the use of specific theoretical concepts (Suresh, 2014). Methodological delimitations result from a conscious methodological choice made by the researcher (e.g., regarding the objective of the study, proposed research question, the phenomenon of interest, method of investigation, time period for the study, location of the study, representativeness of selected sample, and design; Bloomberg & Volpe, 2015; Suresh, 2014).

For this study, the first delimiting choice was the use of a qualitative paradigm to explore the study phenomenon. A qualitative approach was appropriate for this study because it was primarily concerned with the study of nurse participants in their natural settings (Taylor, 2010). I focused on participants' workplace setting to gather more insight on its meaning to them. This focus was consistent with consistent with the aim of

qualitative research to understand the intricacy of individual life by examining individuals' perspectives. Use of a qualitative methodology, because it emphasizes the importance of context, is helpful in understanding how nurses experience their work environment (Heppner et al., 2016). Quantitative exploration involves different types of data and was not appropriate to answer the selected research question (Gray et al., 2016).

The process of IPA was the best means to identify protective factors and to answer the research question. IPA inquiry offers an adaptable and accessible approach for gaining an in-depth understanding of participants' lived experience. It enables the investigator to appreciate the subjective experiences of participants (Pringle et al., 2011). After an exhaustive investigation of multiple approaches, I concluded that IPA was appropriate for this study because it provides a way to explore, describe, interpret, and situate the subjective lived experience of individuals (Tuffour, 2017). In contrast with other approaches, IPA delivers the most straightforward, applicable, and functioning methodology regarding the process of individual adaptation to the environment and the context of that experience (Tappen, 2015).

I selected participants from inpatient oncology units to yield the greatest probability of yielding a sample of nurses who had experienced the phenomenon under study. I did so because it was not feasible to obtain information on protective factors from all nurses in every oncology setting. Oncology nurses working in an inpatient setting are exposed to potentially challenging situations at a higher rate than nurses in other areas (Russell, 2016). Adverse circumstances are a known catalyst to burnout (Davis et al., 2013). I focused on the high acuity setting of adult inpatient oncology to obtain a sample

of nurses with experience of burnout risk and protective factors. Accordingly, delimitations were particular to participants and the setting of the research. RNs currently working part-time or full-time in an adult inpatient oncology unit were eligible for the study. Participants had to have more than 1 year of experience of work experience.

Limitations

In contrast to delimitations, the limitations of a study are restrictions that are not within the investigator's control (Grove et al., 2014). Limitations are weaknesses that constrain the research while delimitations are boundaries around the research (Holloway & Galvin, 2016). Qualitative research has inherent limitations because it is conducted in natural settings, which are challenging to duplicate with future studies (Merriam & Tisdell, 2016). Moreover, IPA also has intrinsic limitations due to the subjectivity of the gathered data (Tuffour, 2017). One of the limitations of qualitative research is the lack of generalizability. Generalizability refers to the extent to which the potential findings of a study apply to a broader population of oncology nurses. The lack of generalizability may not be a problem because the goal of this study is to provide detailed descriptions rather than typical findings (see Green & Thorogood, 2018). Another limitation centers on the small sample size from one particular location (New Jersey or New York). The participants may not be a typical representation of all oncology nurses.

Significance

Oncology nurses deliver the majority of care for cancer patients across the continuum from diagnosis to end of life. They have been identified as a group at high risk for burnout (Wu et al., 2016). They witness patients' pain, suffering, and trauma at all

phases of the disease process, which is sometimes over a prolonged period, and can experience continuing stress in an attempt to maintain a balance between empathy and emotional boundaries (Zander et al., 2009). Because working in a stressful environment does not necessarily lead to distress, the protective factors that promote a sense of well-being merit further investigation. One factor is resilience (Ablett & Jones, 2007).

In this qualitative research study, I sought to discover protective factors, other than resilience, that support nurses in preserving employment in a specialty with known challenges. Moreover, I sought to explore topics that support oncology nurses in preserving their well-being and that foster quality of patient care. The results of this study may demonstrate the benefits of such protective factors and employee retention. The study may also explain the competencies that are associated with these mechanisms and consider how they have the potential to help individuals cope with the physical and emotional demands inherent in health care professions. With more understanding of the distress experienced by oncology nurses and the need to enhance or develop protective factors, nurses in the specialty can potentially recognize opportunities for intervention and focus on efforts on retention.

Protective factors may be a significant predictor of sustainability in the workforce. There is an appreciation for the meaning of resilience in nursing science (Abdollahi et al., 2014). However, when discussed concerning the preservation of oncology nurses in high-intensity environments, the contextual aspect of resilience is often lost (Barratt, 2018). In this study, I examined resilience as a means of identifying another protective factor that contributes to retention and positively influences environmental adversity. The findings

of the study may contribute to positive social change by reinforcing the important protective factors against perceived stress among oncology nurses. High levels of resilience affect nurses' attitudes towards the profession and work-life, thus positively influencing health care services provided by oncology nurses to patients, families, and society (Cope et al., 2016).

Summary

Oncology nurses care for patients with challenging medical, psychological, and spiritual dilemmas in everyday practice. The nature of their work, the innate complexity of cancer, and the focus in nursing on being caring and empathetic can place an emotional and physical strain on oncology nurses (Boyle, 2015; Kane, 2009). Oncology nurses who experience feelings of high levels of stress are in jeopardy of leaving the specialty (Hlubocky et al., 2016). Some oncology nurses succumb to adversity and leave the specialty whereas others thrive in an oncology specialty despite facing numerous challenges (Shockney, 2019). One of the critical factors that make these nurses unique and successful is resilience (Hunnibell et al., 2008).

Nurse resilience is the capability of a nurse to overcome perceived hardship and successfully respond to challenging encounters (Thomas & Revell, 2016). Resilience enables nurses to cope well with substantial adversity to maintain healthy and stable psychological and physiological functioning (Yılmaz, 2017). Resilience is associated with well-being for nurses, work longevity, and improved quality of patient care. Despite the best efforts to build resilience, some nurses succumb to emotional distress (Ablett & Jones, 2007). The goal of this qualitative study is to explore other protective factors,

similar or equivalent to resilience, for nurses who continue to work in high-stress environments and maintain a sense of well-being. Qualitative methodology was suitable for this study given my insider perspective. Also, qualitative methodology is appropriate for analyzing data involving staff attitudes and beliefs (Ablett & Jones, 2007). I discuss the methodology for the study in greater detail in Chapter 3. In Chapter 2, I present the literature review that supports this investigation.

Chapter 2: Literature Review

Introduction

This study centers on the concepts of resilience, burnout, retention, and individual life experience and their relevance to target population of oncology nurses. In this chapter, I review key literature related to the study topic. The purpose of this literature review is to present an overview of the relevant literature that identifies the gap in nursing knowledge and offers compelling evidence regarding the need for the study. The fundamental aim of a literature review is to critically examine and synthesize the literature on the selected topic (Pan, 2016). It was necessary to review the history of such elements to serve as background for the current study (see Marshall & Rossman, 2016).

This chapter will begin with a discussion of the literature strategy. In the section that follows, I will provide an overview of the NSM, which was the theoretical foundation for the study. In the literature review that follows, I will focus primarily on the interaction between the key concepts, specifically pertaining to the unique nature and challenges of oncology nursing.

Literature Search Strategy

To find relevant information on the research topic, I conducted an extensive search of academic libraries, databases, websites, and textbooks. Primary contributors of information included the Walden University Library databases, CINAHL (Cumulative Index of Nursing and Allied Health Literature) Plus with Full Text, ScienceDirect, PubMed, and EBSCOhost. The Google Scholar search engine was another source of peer-reviewed literature. I also searched for information on the Oncology Nursing

Society (ONS) website. The literature review includes seminal and current literature (see Pan, 2016), most notably from 2015 to 2020. Keywords included *resilience*, *nurse*, *oncology*, *qualitative*, and *burnout.* The selected references include recent contributions of nursing resilience.

Theoretical Foundation

Nursing science is shaped by philosophies, theories, research, and practice. Theories offer a particular lens for examining a phenomenon that concerns a discipline (here, nursing). Theory informs nursing practice, generates knowledge, describes or explains nursing, and enhances evidence-based nursing (Rutty, 1998). The science of nursing benefits from the use of theory as a basis for research (Hodges et al., 2005). The alignment of NSM with the needs of cancer patients and caregivers made it a fitting theoretical framework for this study. The NSM can be adapted to a variety of different situations and interpreted in various ways. The NSM is a wellness model that reflects on living organisms as open client systems in interaction with the environmental stressors that threaten optimal client system stability (Fitzpatrick, 2017). A client system may be defined as a single client, a group, a community, or a social issue (Ahmadi & Sadeghi, 2017). The client system is open to environments but is protected by a core structure and a series of circular layers of buffers known as lines of defense (Meleis, 2011). An individual organism has a central core structure, which includes fundamental survival factors that are universal (Masters, 2014).

Progressing inwards, there are three defense lines encountered: flexible, normal, and resistance. The outermost layer is the flexible line of defense and forms a boundary

surrounding the underlying core structure. The function of this defense line is to maintain the individual's normal balance, fight the invasions of stressors, and prevent stressors from affecting the client system (Bademli & Duman, 2017). The inner layer is the normal line of defense and is another component of the client system. The normal defense line reflects the individual's usual general state of wellness. The concentric broken circles surrounding the basic structure represent the lines of resistance and become involuntarily activated following the invasion of the normal line of defense by stressors (Masters, 2014). All the lines combined protect the core structure from reacting to stress (Meleis, 2011.

The NSM describes stressors as potential tension-producing environmental forces that may disrupt the system's balance and stability, sometimes causing physical, emotional, or social crises. Stressors are intrapersonal, interpersonal, and extrapersonal (Wu et al., 2016). The effect of these stressors may be either positive or negative, depending on the client's perception. Intrapersonal factors include interactions that occur within the boundary of the client system. Interpersonal factors arise from the interaction between two or more individuals. Extra-personal factors comply with all interactions occurring outside the client (Masters, 2014; Ahmadi & Sadeghi, 2017). Every individual is exposed to many stressors that threaten their system throughout their life. Defend mechanisms respond to stressors to prevent them from reaching the central core (Bademli & Duman, 2017). This study demonstrates the application of the NSM to the care of patients with cancer.

An oncology nurse's unique perception in managing cancer-related care can be considered as a stressor in the caregiving experience. In the NSM, the use of effective coping mechanisms prevents stressors from injuring the individual's defense, consequently protecting the basic core structure. More than one stressor can be imposed on the client system at any time. In the circumstances of an oncology nurse, stressors may occur within-person, (i.e., personality characteristics) between the individual, (i.e., unrealistic role expectations) and outside the individual (i.e., organizational). The mentioned stress threatens the integrity of the lines of defense, and the system then goes into the process of reconstitution to return to natural wellness (İnan & Üstün, 2016). The use of effective coping methods enables the oncology nurse's system in the balance against stressors (Hlubocky et al., 2016). To achieve a state of wellness, individuals use the available potential of the five variables: physiological, psychological, sociocultural, developmental, and spiritual.

The NSM has been applied to a variety of nursing specialties, including multiple sclerosis, family nursing, mental health nursing of older adults, and nursing women who have been abuse. In applying the NSM to oncology nursing, the oncology nurse is the open client system interacting with the five dimensions to attain system wellness. The constant dynamic state of interaction directly affects an individual's response to stress and determine the strength of protection provided by the lines of defense. In this sense, the lines of defense can be conceptualized as protective factors to manage, reduce, and prevent stress reactions. If the line of defense is inadequate, burnout may occur as a core response.

Literature Review Related to Key Variables and/or Concepts

The underlying purpose of this section is to uncover what is known in the literature within the categories of oncology nursing and retention, resilience, and burnout. Literature from the field of nursing and medicine were considered to gain an overview of existing knowledge and on the subject matter. It is essential to review the history of the topics above to set the background for the current study. This systematic literature review may raise awareness on the seriousness of burnout and the importance of resilience and retention to providing a foundation of understanding in conjunction with the advancement nursing profession.

A systematic literature search was conducted using the mentioned databases. Articles representing all types of oncology nursing and retention were reviewed for search. Articles within the time frame of 2000 to 2020 from the United States were accepted for inclusion in the review. The initial search between 2010 and 2020 yield minimal data. One international article was included. A total of 12 articles were identified using the search terms. Articles that did not focus solely on oncology nursing retention were excluded. One article that focused on pediatric oncology disregarded.

Definition of Nurse Retention

The conventional definition of nurse retention is to prevent turnover and keep nurses in an organization's employment (Jones & Gates, 2007). First, not all nurses who leave do so because of negative experiences, or the impact of leaving is necessarily negative. Second, not all turnover is voluntary, as some nurses will leave because of unforeseen reasons. Finally, not all turnover will be nurses leaving the profession, as

some nurses move to a different specialty. Nevertheless, there is a likelihood that there is a potential cost incurred and a negative impact on patient care with nurse turnover (Halter et al., 2017). It is essential to distinguish and be clear that nurse turnover maintains a constant definition and focus throughout this study, which is a nurse leaving the oncology specialty.

There have been a variety of approaches to studying retention. One common practice is building mathematical models to explain turnover in terms of demographic and organizational variables. For example, in a study by Davis et al., (2013), the participants completed a demographic data form, the Nursing Satisfaction and Retention Survey, and the Maslach Burnout Inventory. The investigators concluded that oncology nurses who rely on supportive social networks as a coping mechanism experience lower levels of burnout. Another common approach is to survey nurses and explore their perceptions about retention. In another study by Hildebrant (2012), various strategies identify to increase oncology nurse retention include a supportive work environment, debriefing sessions with colleagues, end-of-life education, and modifying patient care assignments. The works mentioned suggests that the best approach towards studying nurse retention is specific to the institution, specialty, and survey of the nursing staff.

Factors Associated 24rim Nurse Turnover

With a worldwide shortage of oncology nurses, identifying and understanding the reasons why nurses leave their place of employment is essential. Stress, anxiety, and coping are the most prevalent processes for oncology nurses. Evidence suggests that common factors such as organizational, high work-related demands, inadequate staffing,

lack of resources, and demographics may affect retention. In the context of cancer care delivery, a significant theme in the literature is that nurses in oncology not only provide physical care but also minister to the patient's psychological needs. Nurses encounter complex work environments witnessing life-threatening disease, delivering futile care, difficult patient and family situations, individuals in distress. These factors are known contributors to job dissatisfaction, stress, and burnout. Without proper balance, oncology nurses are at high risk for adverse consequences. Negative consequences increase the likelihood of resignations and leaving the specialty (Barrett & Yates, 2002; Toh et al., 2012; Wittenberg-Lyles et al., 2014).

Impact of Nurse Turnover on Patients

Nurse turnover is a national concern that is also costly for health care organizations. In the context of the work environment, it directly impacts the quality and safety of patient care. There is relatively scant research on the intricate connection of turnover patterns, staffing levels, and nurse and patient care outcomes on the specialty of oncology. One published study stressed the shortage of qualified professional oncology nurses as an ongoing concern, especially given the anticipated needs of an aging population (Jirasakhiran & Gullatte, 2005). Another article examined the relationship between adequate specialized nursing staff and patient outcomes. The investigator concluded as cancer rates rise, and treatments become more complex; the number of cancer survivors increases. The demand for nurses with skills that are appropriate to meet the needs of cancer patients will escalate as well. The need for oncology nurses to be experts in this specialty is necessary, particularly in regard to patient and safety

outcomes, because a shortage in experienced nurses will bring about a delay in services (Williamson, 2008)

Furthermore, of significance to administrators are the financial implications of recruitment and retention. There is a wide range of studies that focuses on estimating the cost of nurse turnover. One study examined the various impact of experienced oncology nurses leaving the specialty, such as replacement costs, cost of hiring a replacement, and lost productivity. The investigators applied a financial value to element and combined, the cost of turnover can be significant to health care organizations (Barrett & Yates, 2002)

Strategies for Reducing Oncology Nurse Turnover

Oncology nurse retention centers on preventing turnover and maintaining nurses in an organization's employment so that the care of patients with cancer is not jeopardized. Oncology nurses benefit from programs that foster psychosocial wellness in the workplace, thus potentially increasing retention. As such, four common strategies for oncology nurse retention are identified in the literature: creating a positive work environment, peer-debriefing, end-of-life education, and grief training (Hildebrandt, 2012). One article identified emotional intelligence as another factor that may significantly influence the retention of oncology nurses. Emotional intelligence is the heightened awareness and capability an individual has to control and express emotions to handle interpersonal relationships appropriately. The impact of the development of emotional intelligence may potentially attenuate the harmful effects of high-stress environments on oncology nurses (Codier et al., 2012)

Factors that have a positive impact on reducing turnover rates and both patient satisfaction and safety has also been addressed in the literature. The following elements have been identified as necessary to oncology nurse retention: recognition of oncology as a specialty, understanding life experience and acknowledging expressions of gratitude from patients (Raingruber & Wolf, 2015; Lagerlund et al., 2015). Other articles highlight leadership, recognition, gratification, positive work environments, and ongoing professional education as themes that contribute to retention (Bakker et al., 2010; Cummings et al., 2008). The strategies listed are affected by the interaction of various intrinsic and extrinsic factors, which are difficult to apply universally due to the complexity of the interrelationships. This suggests that the best nurse retention strategies are specific to the specialty or institution. Therefore, tactics to improve retention must be individualized by matching findings from ongoing assessment to identified demands. However, there is scant research to assess the uniqueness of what sustains and motives an oncology nurse to continue in daily practice, despite complex work environments.

Oncology Nurses and Resilience

An integrative literature review was conducted with the mentioned databases with the keywords *resilience*, *oncology*, *nurse,* and *cancer*. Search research was limited to English language and full-text, peer-viewed articles published from 2010 to 2020. To summarize, nine articles were retrieved, yielding eight eligible studies. Relevant articles were read and reviewed, and the data was extracted for synthesis. Articles that did not focus exclusively on provider resilience were disregarded.

Definition of Resilience

The science of resilience, specifically in oncology, is emerging with research efforts aimed at understanding and intervening with nurses to promote health in the face of adversity. Challenges remain, including the need for a single, unified definition of resilience among health care professionals. In a contemporary inquiry, the term resilience holds a central role in nursing and has taken on several meanings. Resilience has been examined in various nursing specialties other than oncology leading to an inconsistent definition of this phenomenon in the discipline. A consensus on a comprehensive definition of resilience has not yet been gained in the literature. Presently, there are two general constructs of resilience. Some investigators conceptualize resilience as a dynamic process in which an individual demonstrates the ability and capacity to adapt to adversity that promotes physical and mental well-being successfully. Others define resilience as the capacity to recover from adversity or trauma. As a result, a recurring discussion point is whether resilience is a trait, process, outcome, combination of the three (Lim et al., 2016; Gillman et al., 2015). One particular nursing study defined resilience as an inherent life force present to a varying degree in every individual manifested by the presence of specific traits, and when applied, the individual can cope or recover from adversity (Grafton et al., 2010). Resilience, for the purpose of this study, is defined the human capacity to deal with, overcome, and be strengthen or evolved by adverse experiences. The process of resilience extends beyond the definition of rebound. What remains questionable is if resilience can be learned or is inherited.

Components of Nurse Resilience

Resilience is an essential personal characteristic in the management of professional and organizational workplace stress. The literature emphasizes that having an understanding of the promoting features of resiliency is necessary to understand what is most influential in resilience and its outcomes. There is little consensus about how to promote resilience in the oncology nursing specialty; however, some elements are addressed in the literature. Therefore, it is not easy to draw firm conclusions on what promotes resilience, particularly as it relates to nursing. However, a general commonality in the literature is that resilience is associated with the constructs of survival, recovery, and thriving. The research suggests that individuals respond to trauma or adversity in these three ways. From a personal perspective, the described constructs translate to an individual's baseline characteristics (i.e., skills, traits, and knowledge), processes or insights that evolve, and psychosocial outcomes. Emotionally resilient nurses may display some or all of the mentioned qualities of resilience to a greater degree. From an organizational standpoint, effective promotion of resilience includes fostering connections, providing education and training to develop behaviors that aid in stress and recovery, and assist in processing emotions (Gosselin et al., 2015; Rishel, 2015). Although individuals must take responsibility for developing personal strategies, it is equally important to differentiate individual resilience from elements of organizational support.

Another article described the synergy among self-perception, social competence, structured style, perception of future, and social resources as factors that structure resilience. The goals of this study were to ultimately understand the antecedents that

promote resilience, mitigate the effects of stress, and explore the processes by which nurses continue to work in oncology care while maintaining a sense of well-being. Through resilience, the nurses have increased self-awareness and made sense of challenging work situations. Overall, the researchers determined that the job-person fit is essential as well as the nurses' intention that they had chosen to work in this specialty could make a difference in their patient's lives are integral factors that foster resilience (Kutluturkan et al., 2016). All studies correlate that resilience has a protecting effect on stressors and subsequent similar episodes.

In a qualitative study by Zander et al. (2009), the investigators set to explore coping strategies that sustain resilience in pediatric oncology nurses. Five pediatric oncology nurses were interviewed about their perception of resilience and preferred coping strategies in their daily work. Using thematic analysis, the researchers proposed orientation programs, clinical supervision, supportive work environments, and advanced insight as interventions to promote resilience. In conclusion, within the process of establishing nursing resilience, individual and organizational mechanism are of high importance.

Impact of Nurse Resilience on Patients and Health Care Organizations

Examining resiliency in the context of oncology is a unique concept for the nursing profession. Resilience is perceived as an imperative quality for nurses to possess because of the stressful nature of the profession. Resilient nurses can cope with their work environment effectively and maintain healthy and stable psychological functioning.

The benefits of fostering resilience is essential for oncology nurses, including retention, enhancement of career satisfaction, and optimal patient care.

The American Society of Clinical Oncology group predicted that the growing number of cancer survivors coupled with the aging U.S. population are projected to outpace the oncology workforce. Moreover, the ONS noted that nurses with experience and specialty training are becoming increasingly rare. The challenge is to retain nurses with oncology expertise to mentor younger nurses. Failure to retain experienced nurses can negatively impact patient care (National Academies of Sciences; Engineering; and Medicine et al., 2019). The presence of resiliency was found to be the strongest predictor of the likelihood of retention of seasoned and highly credible nurses.

There is evidence in the literature that resilience has a favorable moderating effect between job distress and satisfaction. There is a growing body of research that shows that nurse resilience does impact patient outcomes, survival, and the occurrence of adverse events. This suggests that the ability to be resilient has a protective effect on a demanding work setting. Nurses who are highly resistant to stress typically have positive nurse to patient, family, and collegial interactions. In a mixed qualitative and quantitative exploration of resilience, the authors linked it to improved health outcomes and nurse well-being. Resilience is strongly associated with physiological and psychological health; moreover, nurses who experience high levels of resilience have a higher quality of work-life balance. The investigators concluded that resilience is an important process that can build nurses' resources to address the negative emotional dissonance in an oncology nursing work environment (Jakel et al., 2016).

Oncology Nurses and Burnout

A systematic literature search was conducted using the mentioned databases. Articles representing all types of oncologic nursing and burnout were reviewed for search. Articles within the time frame of 2015 to 2020 from the USA were accepted for inclusion in the review. A total of six articles were identified using the search terms. One article that focused on human service professional was excluded.

Definition of Burnout

Burnout is a negative, progressive, and cumulative stress reaction resulting from the relationship between an individual and their work. The fundamental elements of burnout is based on the longitudinal ramifications of psychological, emotional, social, spiritual, and physical health depletion of nursing professionals. Burnout disorder is manifested by the presence of three principal dimensions of emotional exhaustion, depersonalization, and a diminished sense of accomplishment (Cañadas-De la Fuente et al., 2018). Emotional exhaustion refers to an individual's feeling of physical and emotional exertion of resources. Depersonalization is the development of negative emotions directed at patients. Low personal accomplishment is the feeling of futility concerning the individual's work. These dimensions are dynamic and build in duration and severity over time (Gómez-Urquiza et al., 2016). Nurses suffering from burnout tend to be less productive, more error-prone, and have low morale.

Causes of Retention Failure

One key reason for the failure to retain experienced nurses is burnout. Burnout is more likely to cause nurses to leave nursing altogether. Risk factors of burnout are

internal or external causes that increase an individual's chance of developing the syndrome. Factors that contribute to burnout have been widely discussed in the literature. The prevalence of burnout is high in the nursing workforce but, moreover, in the specialty of oncology. The increased incidence of cancer diagnoses ensures that oncology nurses will be faced with more challenges in their work than before. A variety of factors can cause burnout. Possible causes of burnout can be categorized into three main domains: individual vulnerabilities, work-related attitudes, and organizational characteristics. Biographical characteristics include age, gender, work experience, marital status, and level of education. Gender does not directly cause burnout but is linked to other factors such as role expectation or role-taking. Likewise, age is not a cause of burnout, but it may be linked to other factors such as occupational socialization. Personality traits include hardiness, loss of control, self-esteem, perfectionism, extroversion, and coping styles. The role of personality traits in the development of burnout is not straightforward. A particular personality characteristic does not necessarily imply causality, but rather a combination of a situation match with personality may foster burnout. Last, organizational factors include workload, direct patient contact, social support from colleagues or superior, and lack of feedback (Naholi et al., 2015; Boyle & Bush, 2018).

Burnout can occur to oncology professional such as social workers, hospice professional, allied health care professional but more so in nurses and physicians. The prevalence of burnout is high in oncology especially among those taking are of patient with advanced malignancy. A variety of contributing factors, when combined, can

cause burnout. The literature demonstrates that the stressful situations and strains over an extended period of time are coupled with the demands of oncology are strongly linked with burnout. In addition to the rigor of their work, oncology nurses frequently neglect theiremotional experiences. The lack of perception of their own health also leads to ineffective coping behaviors (Ko & Kiser-Larson, 2016). Other reasons include unrealistic expectations, poor management practices, lack of good working relationship with physicians and colleagues, and inconsistent organizational policies.

Impact of Burnout on Nurses' Health and Work Performance

The literature suggests that the long-term effects of burnout may have a potential detrimental effect on the physical and mental health of nurses, but its consequences also extend into work performance. The effects can range from mild to severe. Many of the indices reviewed above may have a short-term impact on health. Burnout, however, develops over chronic exposure. When faced with stressors nurses may employ positive or negative coping strategies. The consequences associated with burnout can be divided into three categories: personal health, patient care, and health care impact (Giarelli et al., 2016).

The evidence suggests that burnout can lead to poor health outcomes such as depression, anxiety, and substance abuse. In a meta-analytic study, the investigators outlined various negative effects including insomnia, irritability, and alcohol or drug consumption. (Cañadas-De la Fuente et al., 2018). The impact of burnout can have a direct negative effect on the care provided throughout patients' illness and recovery as well ultimately affecting quality of care and patient outcomes. In a quantitative study by

Russell et., (2016) the authors concluded that nurses who felt symptoms associated with burnout have more pronounced patient safety risks. This may be consistent with failure of interpersonal relationships, increased medical errors, suboptimal quality of patient care, low job satisfaction, and increased risk of malpractice. Adverse effects of burnout also impact health care organizations correlating with increased absenteeism or sick leave, increased retention and turnover rates affecting the economy of the administration, low job satisfaction and reduced productivity Burnout places a heavy burden on the health care system as nurses attempt to maintain and adequate balance to meet the increasing demands of cancer care (Russell, 2016).

Oncology nurse burnout is a significant problem in the profession. It is common, but preventable and reversible. Burnout had adverse outcomes on nurse well-being, patient care, and the health care system. There is a need for self-awareness among nurses and organizational support among management for systematic application of evidence-based interventions to attenuate burnout.

Strategies for Reducing Nurse Burnout

Interventions to reduce burnout typically focuses on self-care or coping skills training, other literature suggests that organization interventions are also essential. Learning how to engage in self-care and self-care strategies in an essential step in being able to care for patient, families, and colleagues. Self-care is an important strategy for oncology nurses as it may have tremendous influence on burnout and attrition. The emphasis of burnout attenuation focuses on recognizing adverse effects of work-related stress on health and acknowledging nurses' interpretation of emotional experiences.

Some independent strategies include breathing and meditation, other such as tai chi, yoga, and reiki require attendance at a formal program. Deep breath and meditation are stress-reducing relaxation exercises which are fairly easy to do and can be done anywhere at any time. They conclude that engaging in mindful meditation program may reduce stress levels in nurses. The techniques can be done in conjunction with other methods and on an individual bases or in a group. The literature also emphasis complementary alternative medicine (CAM) as an alternative technique to reduce burnout. Some CAM therapies include herbal remedies, acupuncture, homeopathy, massage therapy, and special diets. It is important for an oncology nurse to have understanding and basic knowledge of these practice in maintaining balance and promoting self-healing (Jang et al., 2016).

A correlational study by Sullivan et al. (2019) revealed that the influence of organizational support and intervention can minimize burnout and foster positive coping strategies among pediatric oncology nurses. Health care organizations interventions manifest as healthy and supportive work environments such as practice model changes including systematic nursing supervision and psycho-oncological training programs. Examples of programs include expressive writing or journaling workshops, employee assistance programs, on and off-site retreats, and mindfulness-based workshops. Such organizational interventions, however, are often challenging to due acceptance of practice changes and funding. Nonetheless, the literature emphasizes that by employing tailored interventions it can impact the experience of burnout for nurses, specifically in the practice of oncology (Wu et al., 2016; Giarelli et al., 2016). Organizations that implement

burnout interventions may experience increased retention, minimize turnover, and increase patient satisfactions.

The present-day oncology nurse is at great risk for burnout once work stressors coupled with life pressure exceed the ability to manage. Burnout is a driver of nurse turnover and also has implication for retention. Both the prevention of burnout as well as established burnout must be targeted using effective tailored strategies and interventions on an individual and organizational level.

Summary and Conclusion

This chapter provided a review of the literature on the concepts of retention, resilience, and burnout. The literature review presented an overview of the characteristics of each and how they relate to the science of oncology nursing, which motivates the aims of this dissertation study. Oncology nurses frequently experience various stressful circumstances in the workplace that can potentially lead to physical, mental, and psychosocial health problems such as burnout. Burnout is partially responsible for poor workforce retention in oncology. Effective coping strategies and self-care competencies, similar to resilience, offset the adverse risk of burnout, reducing nursing turnover. In Chapter 3, will present information on the selected methodology.

Chapter 3: Research Method

Introduction

Chapter 3 includes a discussion of the research design and rationale, as well as an outline of the role of researcher, methodology, and issues of trustworthiness. The purpose of this study was to explore the lived experiences of oncology nurses who demonstrate resilience to mitigate the effects of burnout. I wanted to understand and describe oncology nurses' experience of protective factors and investigate the meaning of these experiences. As I discuss in the chapter, the selected study design was the best approach to answer the research question. By using the chosen methodology, I was able to probe participating nurses' experiences and perceptions, including those regarding factors that they perceived as beneficial in helping them remain in oncology despite distress encountered in the clinical environment.

Research Design and Rationale

The research question was: What are the lived experiences of oncology nurses that help promote resilience and mitigate the effects of burnout and that affect their decision to remain in this specialty of oncology nursing? The selection of a suitable research design and appropriate methodology for collecting data that will illuminate the phenomenon of interest is a significant decision for investigators. The research design is the overall approach of the study that details all the major elements of the research. In qualitative studies, the design describes the planned outline for data gathering, including the investigator's belief about the nature of the information to be generated (Houser, 2011). The selection of the appropriate study strategy depends upon the research

question (Omair, 2015). The match between a well-constructed research question and the best possible answer is the goal of the research design process.

The research question for this study aligned with an interpretative phenomenological approach. IPA research is concerned with providing detailed examinations of participants' lived experience and involves observation of a phenomenon in its natural setting (Smith et al., 2022). Researchers often use IPA when little is known about the question at hand and when baseline knowledge is necessary to be able to design effective nursing practices. IPA is particularly useful for examining topics that are complex, ambiguous, and emotionally laden. As a method of study, IPA is participant oriented. Its use gives researchers the best opportunity to understand the human experience through analysis of the participants' description of that experience without distortion (Fitzpatrick & Kazer, 2011). A phenomenological approach fit conceptually with this study and the research question because, similar to nursing, phenomenology considers the whole person and recognizes the value of their experience. Another advantageous element of the approach is the bonding relationship it allows between the participants and investigator.

Phenomenology is central to the interpretive paradigm and is concerned with the lived experience of humans relating to a common phenomenon (Chesnay, 2014). Two fundamental approaches that underpin the phenomenology paradigm are descriptive and hermeneutic (interpretative). Both methods are concerned with the human experience and are therefore considered by multiple investigators to be the foundation of nursing science (Parahoo, 2014). Phenomenology is rooted in the naturalist paradigm, which presumes

that reality is not fixed but instead based on subjective individual realities (Mole et al., 2019)

Descriptive phenomenology, developed by Husserl, is a useful approach when the researcher seeks to learn about, better comprehend, and describe phenomena significant to the human experience (Chesnay, 2014). Descriptive phenomenologists insist on the accurate description of the human experience by approaching the data with no preconceptions about the phenomenon (Profetto-McGrath et al., 2010). Subsequently, phenomenologists such as Heidegger built on Husserl's theories and developed interpretive tradition. The foundation of interpretative style is that it is impossible to detach the mind of preconceptions and neutrally approach the phenomenon; instead, the investigator uses their own experiences to interpret those of others (Lopez & Willis, 2004).

To interpret experiences and meanings embedded in common life practices, a phenomenological researcher uses the Heideggerian/interpretative approach (Lopez & Willis, 2004). A key distinction between descriptive and interpretative phenomenology is that bracketing does not occur with the latter. Bracketing refers to the process of shedding all preconceived knowledge, biases, and preconceptions to grasp the essential lived experiences of those being studied (Profetto-McGrath et al., 2010). Heidegger argued that humans are embedded in their world to such an extent that it is not possible to have a detached standpoint of the participants' experiences (Guerrero-Castañeda et al., 2019). .Interpretative tradition presupposes a prior understanding of the phenomenon of interest on the part of the investigator (Reiners, 2012).

The core of this study is the investigation of individual nurses' experiences related to the phenomenon of interest. I probed participants' perception of this phenomenon and the meaning that they assigned to the construct. This particular stance is in alignment with Heidegger's central tenet. The Heideggerian approach provides a defendable framework in which to examine the extent of the human experience (Guerrero-Castañeda et al., 2019). This methodology offers a route for improving the understanding of the implications for nurses occupying oncology roles (Wilson, 2014).

Role of the Researcher

The role of the investigator in a qualitative study is explicitly clear: to monitor and limit bias, collecting, analyzing, and present the findings, and last, safeguard participants and their data. The hallmark of qualitative research is the process of data collection through investigative interviewing in an attempt to access the thoughts and feelings of study participants (Sutton & Austin, 2015). Sometimes the experiences being explore are relatively new in the participant's mind, whereas on other occasions reliving the past may be potentially difficult. This complex social interaction has the potential to be influenced by the researcher and the participant (Jack, 2008). To properly fulfill this role, the qualitative researcher also develops competence through the process of reflection (Doody & Noonan, 2013). This means that the investigator has to describe relevant aspects of self, including any biases, assumptions, expectations, and experiences to qualify one's ability to conduct the research.

Reflexivity is the practice whereby the investigator examines themself as a data collection instrument and analyzes the influence of personal and professional values,

beliefs, and experiences places on the research (Sutton & Austin, 2015). My central role as a nurse-researcher is emic that is as both observer and participant and thus raising the potential for bias, which could impact the outcome of the study. It is essential to engage in reflexivity to understand the effects of involvement in data and make decisions that protect the participant's integrity. Nurses are at an advantage because part of their educational curriculum involves developing skills in communication, teaching, and counseling, and these skills are particularly necessary when incorporated into a qualitative interview (Jack, 2008).

Health care investigators who conduct qualitative research have an enormous responsibility. The researcher has to both evaluate and interpret the data gathered during the investigative process. Considering the inherent nature of qualitative studies, the interaction between researchers and respondents can be ethically challenging. Therefore the formulation of ethical guidelines is essential in protecting privacy, minimizing harm, and respecting the shared experience of others (Sanjari et al., 2014). It is mainly argued that qualitative research deals with sensitive topics that can pose risks to the respondents and the researchers. The dilemma involves the conflict between obtaining rich, detailed, and accurate accounts while protecting the information of the individuals who provide the information. Therefore, it is imperative to outline a set of preventative measures to ensure the challenges above are maintained (Kelley, 2003).

Methodology

This section focusses on describing the participant selection logic, instrumentation, procedures for pilot study and procedures for recruitment, participation,

and data collection that will be used to conduct the study. As stated before, the purpose of this study is to understand, explore, and describe experiences of protective factors similar to resilience by nurses in an oncology clinical setting and investigate the meaning of these experiences held for them. The selected methodology offers the opportunity to probe deeply into nurses' experiences, including factors nurses themselves perceive as beneficial despite stress encountered in the clinical environment.

Participant Selection Logic

In agreement with the objective, approach, and framework of the study, I will try to recruit between three to six experienced oncology nurses through purposive sampling. The sample size of five to seven will support IPA by allowing for a concentrated focus on a small number of cases (Alase, 2017). The decision to use purposive sampling for this study stemmed from extensive research, indicating it is an important approach to supporting IPA (Alase, 2017). In purposive sampling, the investigator specifies the characteristics of a population of interest and then tries to solicit participants who have those characteristics. The recruitment of participants by purposive sampling ensures that the nurses who participate in the study have adequately experienced the phenomenon to provide a rich, thick description. The recruitment process will take place through an ONS chapter in the Northeast region of the United States.

The study was restricted to RNs with experience in caring for patients with cancer for more than 1 year. All participants must spend the majority of their working time providing direct nursing care to patients with cancer in an acute care hospital setting in the United States. RNs working on a unit with less than 1 year of experience will not

meet the study participation and eligibility criteria. The reason for exclusion of RN their first-year post-graduate because the literature suggests that coping strategies are significantly different for nurses who have more than 12 or more months of experience (Zander et al., 2013).

Instrumentation

Qualitative data analysis is a process that involves deducing and making sense of information, often from various sources, to illuminate the topic of interest. It is a process in which the investigators take descriptive information and offer an interpretation. Because qualitative analysis relies on an investigator's impression, it is essential that this process be systematic, structured, and transparent (Given, 2011). For the objective of my topic of interest, I would choose individual interviews. Logistically, it is more practical to search individual participants who fit vital characteristics rather than to put together an entire focus group of such people. The interview protocol is described in Appendix A.

Individual interviews are useful for exploring the participant's beliefs, values, feelings, understandings, experiences of a particular phenomenon. The goal of the one-on-one interview is to learn additional information about the factors that govern individual experiences (Turner, 2010). The most common distinction made between different types of research interviews is the degree of structure and standardization. Usually, the less structured an interview, the more in-depth and flexible the questioning (Gerrish & Lacey, 2013). Unstructured interview techniques are the preferred method of data collection in qualitative research approach. A semi-structured or focused interview is likely to be led by the participant agent than by the interviewer. It generates qualitative

data (Polit & Beck, 2010). A semi-structured in-depth interview is a valuable tool in qualitative research and is the most frequent source of data in nursing research (DeJonckheere & Vaughn, 2019). Semi-structured interviews offer the most reliable means of data collection solicited from the study participant and thus are the most commonly used approach in an exploratory setting (Stommel & Wills, 2004). Semi-structured interviews typically consist of a dialogue between the researcher and participant guided by a list of predetermined topics or broad questions that must be addressed in an interview supplemented by follow-up questions, probes, and comments. The goal of a semi-structure interview is to explore the phenomenon that is not yet well defined theoretically. Researchers use a written interview flexible protocol to ensure that all the question areas are covered (Polit & Beck, 2010). The interviewer's role is to encourage participants to talk freely about all the topics on the guide (Gerrish & Lacey, 2013). Therefore, allowing the researcher to collect open-ended data and explore participant's thoughts, feelings, and beliefs (DeJonckheere & Vaughn, 2019). With semi-structured interviews the coding is derived from the study participant's answers, which are then organized into meaningful categories.

Phenomenological tradition of qualitative method heavily relies on unstructured interview approaches (King & Horrocks, 2010). Semi-structured interviewing lies in the middle of the continuum from unstructured to structured. With semi-structure interviews, the investigator has a set of questions on schedule, but the interview is guided by the schedule rather than dictated by it (Lyons & Coyle, 2016). The participant is an active agent in shaping how the interview goes as the experiential expert. The advantage of a

semi-structured interview for IPA is that the investigator, in real time, is in a position to follow-up or probe interesting or important areas that may arise during the interview. It therefore requires a flexible data collection instrument (King & Horrocks, 2010; Smith, 2007). It is for this reason, Smith and Osborn described semi-structured interview as exemplary for IPA. The interview strategies used in an in-depth interview determines the type of information elicited from the participant (Fitzpatrick, 2018). This method typically consists of a conversation between the investigator and participant guided by a flexible interview schema supplemented by probes, questions, and comments (DeJonckheere & Vaughn, 2019). An interview protocol serves as a guide to systematically and comprehensively achieve optimal use of interview time (Jamshed, 2014). The timeline process of conducting a comprehensive interview is as follows: plan, develop, collect data, analyze data, and disseminate findings (Boyce & Neale, 2006). As far as the interview itself, it is conducted in phases including an introduction, operational, and conclusion.

Primary (researcher-developed) and secondary (published) data collection are two core forms in which data can be gathered. The former is collected by an investigational researcher through firsthand sources and the latter is retrieve through preexisting sources. Primary data sources include information collected and processed directly by the researcher. The six most common methods used by investigators in qualitative research are tests, questionnaires, interviews, focus groups, observation, and constructed, secondary, and existing data (Korrapati, 2016). The primary method of data collection in a phenomenological study is in-depth interview of participants who have experienced the

phenomenon. In-depth, semi-structured interviews are those in which the respondents have to answer preset open-ended questions. This interview style is utilized extensively in qualitative research as interviewing format with individuals. The interview process will be supported by interview protocols, which are tools designed to guide, customized, and standardize the process (Sutton & Austin, 2015**).** For this study, I intend to use one-on-one interviews via in-person, telephone, or voice over internet. Interviews that are done face-to-face are in-person interviews. Interviews conducted over the telephone are telephone interviews. Last, interviews conducted over the internet with software such as Zoom, Skype, or FaceTime are voice over internet, which provide voice and video across the internet in real-time connection. The researcher and participants can see each other and interact and even develop rapport (Lo Iacono et al., 2016). Audiotaping is the most common method for recording interview. Audiotaping is accurate, indisputable, and reliable but at the same time may be intimidating to some respondents. Audio recording may often dampen candor; therefore, I will assure the participants that the research records will be maintained for 5 years following completion of the study in a locked cabinet. The records will be destroyed after the 5 years. Working from an audio recording has several advantages including (a) reducing the risk of misrepresentation, transcriptions errors, and loss of context (b) provides a complete verbal record (c) can be studied much more in depth than notes (d) can be transcribed and coded by two independent researchers. The combination of audio recordings with field notes compliments the interview transcripts thereby providing a stronger data analysis. (Tinny, 2013; Tessier, 2012).

In-depth interviewing generates a great deal of important data; however, the data are unstructured and need to be thoroughly organized before researcher can make sense of it. The accuracy of the transcription plays a key role in accuracy of the data that is analyzed and with what degree of dependability. Transcription creates a verbatim text-based version of any original audio or video recording. Once the data are transcribed in a text format, they can be exported into a qualitative data analysis tool forming a seamless bridge between the initial interview recording and textual analysis. From there, the researchers can then conceptualize and organized the data for interpretation (Stuckey, 2014). In an effort to streamline the process without sacrificing the integrity of the research, I intend to use a computer assisted software program (REV) to transcribe the data. After transcribing the data, I read the transcripts and synchronized them with the original media to ensure transparency and authenticity. Spot-checking the work provided by the software reduces the risk for misinterpretation of content, effect of unfamiliar terminology, and language-specific errors (Poland, 1995).

Secondary data collection involves the gathering and use of data that were collected for a different purpose. The investigator reanalyzes the second data for a new purpose. Compared to primary data, secondary data are readily available (Chesnay, 2017). In phenomenological qualitative research, secondary data sources might include journals, books, novels, biographies, arts, and films. Two types of secondary data sources at will be primarily used in this study are peer-reviewed journals and books (Lavrakas, 2008).

Researcher-Developed Instrument

Nurse researchers are qualified to develop instruments that measure shared attributes of a specific population. Instrument development is a process by which the attributes are identified and a method to measure the characteristics is designed. Instrument development can occur in two ways. It may involve the construction of a new instrument from its basic components or modification of an existing instrument. Either method will substantially improve research capability beyond what currently exist. Developing an instrument centers on the identification of a concept through literature reviews (Davis, 1996; Zomorodi & Lynn, 2010). The results from the literature review strongly suggest that nurses' life experiences, particularly experiences that occurred in practice, can have a lasting impact on beliefs and subsequent behaviors. The most adequate instrument to capture life experiences particularly how the participants think, feel, or view a phenomenon is the researcher who can both collect and generate data. Interview data often leads to the development of new ideas, insights, and variation on a phenomenon the supplement what has already been explored (Waltz et al., 2016)

The concept of the researcher as a research instrument is a reflection of the emotional, physical and cognitive distance between the investigator and the participant and other data sources. Investigators use their sensory organs to observe, listen, and gather information in their consciousness where is then converted into phenomenological representations. The complexity of this study's phenomenon cannot be measured by external instruments, but it can only be revealed through a dialogue with individual and making inference about observed behaviors. Although the original events being measured are external, how the data are recorded and reported is filtered through the investigators

thinking (Pezalla et al., 2012; Yin, 2015). As the principal investigator, I will add meaning the data imputed from the collection process.

The interview questions are another useful instrument in qualitative research. Interview questions should be clear, concise, open-ended, and conversational in tone. Open-ended questions allow participants to tell their stories in their words and avoid "yes" or "no" answers. All the participants will be asked the same questions in the same order to elicit standardized objective data. This study's interview questions are crafted and heavily influenced by the literature review that reveals similar previous themes and questions. The subtleties involved in the various ways of asking the questions or probing questions may vary to elicit a more elaborate response (Bolderston, 2012; Qu & Dumay, 2011). To improve the validity of the questions, I will request the opinion of two experts in the health care field.

Content Validity. Content validity is a systematic assessment of the content of an instrument to ensure that it represents all facets relevant to the construct being studied. In other words, does the instrument cover the entire dimension is meant to measure? Instruments with a high degree of content validity are as representative as possible of all the items that are included in the concept under study. A quantitative instrument’s content validity represents how well the items of the scale reflect the description of the concept in the literature (Heale & Twycross, 2015). For qualitative interviews, which are designed to capture a complex phenomenon, content validity in the form of data authenticity and the soundness of the research design are most important. Ideally the best way to verify content validity of the interview protocol, for this study, is by asking feedback from two

doctoral prepared experts familiar with the subject matter and revise the questions accordingly (Ravitch & Carl, 2019).

Sufficiency of Instrument

The purpose of qualitative data is to make evident the characteristics of a participant's experience. The data are in the form of a description or account that enriches an understanding of human life as lived. The concern is not how much data were gathered or from how many sources but whether the data collected is sufficiently rich to understanding an experience (Calman et al., 2013). The investigator is interested in gaining an inclusive account of these descriptions. However, the initial description offered by the participant may be infective and constrained by a single one-shot interview. One-shot interview, in some circumstances, may not yield information of adequate quantity, quality, and validity. Serial qualitative interviewing is an alternative approach and is suitable technique for this study that aims to explore a complex and evolving process where time is needed to develop rapport between the participants and the investigator (Read, 2018).

Typically, the first interview focuses on developing a rapport and laying out the landscape of the area the researcher would like the participant to explore. Between the first and second interview, the participant will have had time to deeply reconstruct the details of the experience that is the topic of study. The second interview is more focused and allows for time to explore the experience in depth. High quality interview data usually involves at least two interview sessions with participants including a follow-up

interview to expand and clarify descriptions during the analytic process (Murray et al., 2009).

Procedures for Recruitment, Participations and Data Collection

In qualitative research, recruitment is the process whereby investigators identify and recruit participants to join the study. This process of how to select, access, inform, and retain participants requires a considerable amount of thought as it is vital to the success of the study (Newington & Metcalfe, 2014). The selection procedure for this study will involve a purposeful, homogenous sampling to gather the type and number of participants likely to offer data relevant to the research questions (Finlay & Ballinger, 2006). The eligibility criteria for participant recruitment were fourfold. Participants must be a RN, aged 18 and older, living in the United States, and with 1 year or more of work experience in an inpatient oncology setting.

Sample adequacy in a qualitative study pertains to the appropriateness of the sample composition and size (Vasileiou et al., 2018). The number of participants in a qualitative inquiry is often small because the depth of information and diversity in experiences are of interest. The theoretical principle of saturation often guides the number of participants to recruit. Data saturation is the point at which information collected begins to repeat itself, and further data collection becomes redundant, and no new information emerges (Bradshaw et al., 2017). The concept of data saturation, however, is contested with IPA research design. IPA study stresses the uniqueness of the individual experience and argue that data saturation cannot be truly reached (Bradshaw et al., 2017). Therefore, the purpose of recruitment is to seek variation and context of

participant's experiences rather than a large number of participants with those experiences (Hennink et al., 2020). A sample size suitable to meet the objectives of this study will consist of five to seven participants.

In terms of participant recruitment, I intend to invite oncology nurses in high-intensity care settings through the ONS New Jersey chapter via email. I intend to email the president of the New Jersey ONS chapter a brief description of the study as an invite and request to generate an email inviting potential candidates to participate (see Appendix B). The ONS professional nursing organization communicates with a wide audience of nurses and are highly supportive of nursing research activities and promotion of evidence-based nursing practice in NJ. Information about the study, including contact information of the lead investigator and detailed instructions for participation will be provided through the distribution flyer.

The target population for this study is adult RNs who had 1 or more year of current full-time work experience in an oncology clinical unit. Participants for this study will be selected from nurses in the target population who fit the inclusion criteria. The number of participants in a qualitative study is often small because the goal is to describe and interpret and construct meaning rather than to generalize, so large number of participants is neither practical nor beneficial. Participants for this study will be chosen based on a particular characteristics or experience that can contribute to a greater understanding of the phenomenon being studied (Howitt, 2016). The number of participants to be recruited in the study will be determined by the principle of data saturation. However, identifying the point of saturation can only begin after data

collection is underway. Reaching the point of saturation involves collecting and assessing the data then continuing to collect and assess the data until saturation has been reached. Therefore, the iterative process is necessary to identify the appropriate number of participants to uncover the phenomenon of interest. In a research proposal the investigator needs to have a predetermined number of participants to include in the study. The trend sample size for IPA study is generally of five to seven participants (Hennink et al., 2020). Participants will be invited to participate only if they read the consent form and return to me a written statement indicating consent.

A sampling frame defines the members of the population who are eligible to be included in a given sample. However, when the sampling frame is not known, non-probability sampling may be used. Different techniques of non-probability sampling exist but homogenous purposive sampling is the method of choice for this study. Homogenous purposive sampling is whereby an investigator selects participants on the basis of a judgement that the members have particular features in common (Chrisler & McCreary, 2010). The main objective of purposive sampling is to produce a sample to produce an inference about the topic of interest. Purposive recruitment is strengthened when the investigator makes a concerted effort to identify participants who meet the characteristics of the study. Therefore, volunteer bias if often an inherent part of purposive sampling. In an effort to minimize volunteer bias participants will be randomly selected in the order of participation until saturation is met while still adhering to the criteria of the study. Potential volunteer bias will be taken into count when analyzing and interpreting the data (Meinzen-Derr & Smith, 2014; Lewis et al., 2014). Individual face-to-face interviews

will be held whenever feasible for the participants. If the participant is not comfortable given the COVID-19 pandemic, the interview may be either conducted face-to-face, by telephone, or by video conferencing. To ensure privacy, I will perform all interviews in a private, quiet location. The goal of the interview is to establish a good rapport and have a comfortable dialogue with the participant. This will enable the participant to provide detailed accounts of the phenomenon under investigation. Verbal input from the interviewer should be minimal. The interview will begin with collection of demographic data which includes gender, age, race, years of nursing experience, and highest level of education level obtained (Smith, 2007). It a good idea to aim for broad questions which allows the participant to recount descriptive experiences or episodes. A schedule of between six to ten questions will tend to occupy between 45 to 90 minutes of conversion (Smith et al.,2009). It is imperative to conduct the semi-structured interview in a flexible and systematic manner. The researcher must first introduce themself to the participant and explain the purpose of the interview, the schedule, and ethical aspects. This provides the participant a fair idea of what to expect. Then the investigator must establish rapport, enabling a comfortable dialogue between the respondent and the investigator. As the interview progresses, the interviewer is an active listener and should remain as neutral as possible (Smith et al., 2009). The participant will be asked one question at a time and will be given time to finish answering the question before proceeding to the next question. The interview may conclude with a summary of the study followed by a thank you statement for the respondents (Rentala, 2018). Participation in the interview process may cause distress or anxiety for the participants related to recollection of traumatic events. I

plan to provide a study brief with contact information for a certified mental health counselor. The well-being, protection, and safety of participants necessarily includes a safe exit strategy and follow-up contact. Closure of the interview provides a smooth transition from an interactive experience back to everyday life (Salmons, 2014). The investigator needs to slowly reduce the established rapport and create a distance again before leaving the respondent. It would be irresponsible and not good practice to leave the interviewee in a vulnerable state. Therefore, ensuring interview participants are left in a positive frame of mind is important (Hennink et al., 2020) The researcher should signal the approaching closure of the interview by introducing summative questions to ascertain if the participants would like to share additional responses. The closing questions, which are usually broad and general, provide the participant the opportunity of a reflective closing experience. One form that is often helpful is a question that focuses on plans for the future (King & Horrocks, 2010). Finally, the interview will end with an expression of gratitude to the participant for their time and cooperation and reassuring confidentiality. The56rimarg phase will also include agreement on what the follow-up phase will be. I plan to give the interviewees the option to contact me, via phone or email, for any additional comments to add to the interview.

Data Analysis Plan

Because qualitative data are text-based, their analysis is via coding. There is no perfect process to code data, and there is no wrong process either. Coding is a personal filing system, and this is why there no exact manner to code data. (Schmidt & Brown, 2019). A code essentially is a concept that is given a name that most accurately

describes what is being said by the respondent. In an interview transcript, the researcher typically highlights a word, sentence, or paragraph that describes a specific phenomenon. This particular word, sentence, or paragraph is a meaning unit. The code should be as close to the language of the participant as possible. After adequately identifying these basic meaning units, the investigator organizes and groups them into categories. Similar codes gather together is a category. As the codes are gathered into categories, the next step is often when the investigator generates an abstract name or theme. Codes are different from a theme because they are succinct basic units where themes are expressed in longer phrases or sentences (Burns & Grove, 2010; De Chesnay, 2016). Given the innovation in software technology, using a computer-based application such as Nvivo to code data ensures the investigator is working more efficiently, thoroughly, and methodically. Nvivo is considered an ideal technique in the analysis of qualitative data and yields more professional results. It also gives the researcher more time to discover more themes and derive conclusions (AlYahmady & Al Abri, 2013).

Issues of Trustworthiness

Qualitative research embraces various standards to ensure trustworthiness; these are recognized as credibility, confirmability, transferability, and dependability. These standards are universal across many disciplines and are appropriate for evaluating qualitative studies (Morrow, 2005). Qualitative investigators consider credibility, transferability, confirmability, and dependability as trustworthiness criteria to ensure the rigor and quality of qualitative studies. These methods increased the methodological rigor of qualitative studies (Anney, 2014).

Credibility

Credibility refers to the level of confidence that the investigators and reader of the research have in the results of the findings to be true, credible, and believable. A qualitative investigator establishes credibility by adopting the following strategies: prolonged and varied field experience, time sampling, reflexivity, triangulation, member checking, peer examination, establishing authority of researchers, interview technique, and structural coherence. In this study, the methods that will be used to assure credibility include member checks, triangulation, and peer debriefing (Forero et al., 2018). Member checks mean the data and findings from data analysis are brought back to the participants to seek input for accuracy and interpretation. For example, the interview participants will be sent copies of the codes with excerpts from the data and asked to confirm that what is represented in the text is a true reflection of what occurred during the interview process. Triangulation is the process of using a different perspective in an investigation to produce understanding. A single method can never adequately shed light on a phenomenon; however, using multiple sources to corroborate the evidence can facilitate a deeper understanding. There are four types of triangulation: methods triangulation, triangulation of sources, analyst triangulation, and theory/perspective triangulation (Korstjens & Moser, 2017). For this study I plan to employ analyst triangulation. This technique allows for additional insights in the process of making sense of the data as it brings different viewpoints to enhance understanding. Analyst triangulation will include consult with my dissertation chair during the data analysis process to review the findings.

Confirmability

Confirmability refers to the degree of reliability and repeatability of the decision-making process in data collection and analysis. Confirmability ensures that the interpretation of the findings is not a product of the investigator's motives, values or bias but are clearly derived from the data. Studies may achieve confirmability through an audit trail, reflexive journal, and triangulation (Anney, 2014). To ensure confirmability for this study will employ analyst triangulation as previously indicated, and I will be developing an audit trail. An audit trail is a popular technique used to establish confirmability because it is a chronical evolution of the investigator's thinking and rationale for the choices and decision made during the research process. The investigators share with the reader what concepts were unique and interesting during the data collection, analysis, and interpretation (Bloomberg & Volpe, 2015).

Reflexivity is another technique useful in qualitative research, especially in phenomenological approach. Reflexivity is a valuable, critical self-reflection method that an investigator adopts when collecting and analyzing the data. To achieve reflexivity, a qualitative researcher may keep and maintain a reflexive journal. The journal entries document the internal dialogue of the investigator during the course of the study. In addition, the diary allows the researcher to continually examine biases and assumptions. I will enhance this study's confirmability by implementing a reflexive journaling (Bloomberg & Volpe, 2015).

Transferability

Transferability refers to the extent to which the findings of the study can be generalized or apply to a different discipline or setting. The investigator facilitates the transferability judgement by providing a thick descriptive data and the research process which enables the reader compare how well the research context fits other contexts (Rebar & Macnee, 2012; Anney, 2014). For this study, transferability will be achieved through provision of rich descriptions with as much detail as possible. The reader will be able to determine what context is transferable in their work with patients and negotiated with distress.

Dependability

Dependability is another standard for judging qualitative studies and it refers to the stability or consistency of the inquiry processes used over time. The research process whereby each step of inquiry should be transparent and clearly presented. The more consistent the investigator is during the research process, the more dependable are the results (Forero et al., 2018). Investigators can establish dependability through several means such as an audit trail, code-recode strategy, stepwise replication, peer examination and triangulation (Anney, 2014). The method to increase dependability of this study will include creating an audit trail. An audit trail consists of a thorough examination of the inquiry process and product to validate the data, whereby an investigator accounts for the research activities to show how the data was collected, recorded, and analyzed. The audit trail provides a mechanism for retroactive assessment of the conduct of the inquiry logic

(Given, 2008). An audit trail of this study will include creating a log of all decision made during the data collection as well as data analysis.

Ethical Procedures

Health care investigators who conduct research with human participants are bound by rules of ethical behaviors to ensure that the results reflect sound science. Ethics pertains to doing good and avoiding harm. Harm can be prevented or reduced through the application of appropriate ethical procedures. Thus, the protection of human participants in research is a top priority and responsibility of researchers (Kim, 2012). Fouka and Mantzorou (2011) delineated how ethical issues in conducting nursing research primarily involve informed consent, beneficence, respect for anonymity and confidentiality, and respect for privacy. I strove to maintain these principles when conducting this study.

Investigators must ensure that the procedural steps they follow are aligned with the three fundamental principles outlined in the *Belmont Report*, including respect for individuals, beneficence, and justice (Sanjari et al., 2014). These basic ethical principles provide a framework for institutional review boards to evaluate research involving human participants. First, the investigator must have clear protocols so that both parties involved in the research are informed of what is about to take place. All research participants must permit to be part of a study and must be given pertinent information to make an informed decision to participate. The three critical components of informed consent include information, understanding, voluntary agreement, and ethically suitable (Kim, 2012). Second, it is also necessary for the investigator to continuously update their knowledge and skills regarding methodology to enhance the process of carrying out studies. Third,

the investigator should refrain from inquiring private information that is not strictly associated with the research question. These recommendations focus on careful consideration of the respondents and the informed consent process (Kaiser, 2009).

Investigators face many ethical challenges in the process of qualitative research. Ethical considerations in qualitative research include obtaining informed consent to conduct the research (autonomy), maintaining confidentiality (beneficence), and risk-benefit ratio (justice) (Orb et al., 2001). In qualitative research study respect for the participant is honored by the principle of informed consent. The risks and benefits of the study need to be explained to the participant, so they are able to make an informed decision to participate or not. The respondent should be aware of the purpose, procedures, time period, risks versus benefits, and questions they may be asked as well as how is the data will be used and stored. Usually, consent is obtained through a written consent form stipulating that participation is voluntary and the participant have the right to withdraw from the study (Ary et al.,2018). Participants who volunteer for this study will be provided with information about the study via email (see Appendix B), which will include a consent form for individual review, before enrolling in the study. Also, at the onset of each interview, the participant will be again reminded that participation is voluntary, and they are free to withdraw at any time without penalty. A second ethical principle closely linked with research is beneficence. The principle of beneficence is concerned with offering respect to the participant through the assurance of confidentiality and anonymity. Anonymity means that the investigator cannot reveal the identity of the respondent or setting involved. Typically, anonymity is provided through the use of

pseudonyms. Confidentiality, on the other hand, is the practice of keeping information from a respondent in a study private (Allen, 2017). The researcher must refrain from sharing private information without the permission of the participants. I will maintain confidentiality by assigning a pseudonym to each participant that will not be equivalent to the respondent's real name, and by keeping identifying information in a locked file and conducting separate one-to-one interviews (Kaiser, 2009). The interviews will be conducted in a controlled, and private setting over telephone or in-person. I will initially contact potential respondents by phone or email to determine if the participant is willing to be interview and establish an available suitable time. I will explain approximately how long the interview will take and again provide contact information in case the participants want to withdraw or change the time. In an effort to minimize distractions for meaningful conversation to take place, mobile devices will be on silent mode (Bolderston, 2012). Last, adherence to the principle of justice involves calculating the risk-benefit ratio of the research.

One of the distinctive features of this principle is avoiding exploitation of the participants. The researcher applies the principle of justice by recognizing the vulnerability of the participants and contribution to the study. Potential harm is limited when interviews are used to collect data however the possibility of psychological harm from sensitive questions exists (Houghton et al., 2010; Fouka & Mantzorou, 2011). I will adhere to this principle offering a debriefing in the second interview. Debriefing informs the researcher about the research from the respondent's point of view. The debriefing may enrich the interpretation of the main data.

The topics studied in IPA tent to be highly personal and sensitive. Reasonable efforts should be made to deal with any kind of identified harm. Student researchers often lack the appropriate counselling skills to deal with significant stress. So, a suitable course of action for the participants will be contact a relevant professional capable of dealing with the matter (Howitt, 2016). The debriefing portion of the study will include the provision of referral sources for participants who feel the need for support after the interview. The informed consent provided to the participants will also disclose all potential risks. According to Carpenter and Speziale (2011), the researcher must pay attention to emotional and ethical issues that can arise in research, especially with vulnerable groups. If any participants are uncomfortable with the interview questions, they could terminate participation in the research study at any time without offering any reason and any negative consequence. If professional counseling was required related to participating in this study, the participants will have the option of seeking help from Substance Abuse and Mental Health Services Administration (SAMHSA). Referring the participants to the SAMHSA National Helpline is appropriate for distress caused by interviewing about intrinsically distressing matter. The SAMHSA is free, confidential, and all year-round 24-hour referral service for individuals and families facing mental or substance use disorders. SAMHSA information specialists connect individuals to local assistance and support. The toll free number for SAMHSA is 800-662-4357 (U.S. Department of Health & Human Services, 2020).

Qualitative researchers deal with sensitive topics that can pose risks to the respondents and the researchers. The dilemma involves the conflict between obtaining

rich, detailed, and accurate accounts while protecting the information of the individuals who provide the information. Therefore, it is imperative to be vigilant adhere to a set of preventative measures, such as those detailed above, to minimize risks associated with participation in a study (Kelley, 2003).

Summary

Qualitative nursing research guides understanding in practice and sets the foundation for future research. Knowing how to conduct research helps nurse investigators implement evidence-based practice successfully. Although qualitative research methods are emergent, advanced planning and careful consideration include a well-developed design. In this chapter, I provided a detail description of the research design for the study, as well as an outline of the methodology and a discussion of standards of rigor. Chapter 4 will include the findings of the study.

Chapter 4: Results

Introduction

Chapter 4 provides the analysis and interpretation of data. Chapter 4 captures key findings from the participants' perception on the concept of resilience. As I discussed in Chapter 3, qualitative phenomenological methods were well suited to the discovery of the protective mechanisms relevant to the lived experience of the participants. By exploring participants' lived experience, I sought a rich, detailed description of the phenomenon in a very specific context directly from the participants. Phenomenology involves a direct investigation of what is experience and how it is experienced (Ungar, 2003).

The purpose of this qualitative study was to explore the lived experiences of oncology nurses who demonstrate resilience to mitigate the effects of burnout. In conducting this phenomenological investigation, I wanted to give voice to the lived experience of oncology nurses. In this chapter, I present the results of the data analysis from five in-depth initial and five follow-up semistructured interviews with five participants. Chapter 4 includes analysis of the data gathered, including the personal narratives of nurses who have experience in a high-acuity setting. The narratives include elaboration into personal feelings and opinions of the narrators.

The purpose of the data analysis was to discover major themes and subthemes that illuminate the lived experience for the participating oncology nurses. The subthemes and themes that emerged provide valuable reference to exemplars of resilience. It is important to acknowledge that while the commonalities within the collective life stories will be highlighted, each individual’s story is unique. I highlighted unique excerpts from the

participants the exemplified the intent of the question. In Chapter 4, I summarize the themes that emerged from the semistructured interviews. Chapter 4 includes details on the setting, demographics, and data collection and analysis; evidence of trustworthiness; and results. The results of the study provided the answer to the research question, which was, What are the lived experiences of oncology nurses that help promote resilience and mitigate the effects of burnout and that affect their decision to remain in this specialty of oncology nursing?

Setting

The research setting is the physical, social, and cultural context in which a researcher conducts a study. Describing the research setting is important because the interpretation of the results may depend on it. Qualitative research is conducted in natural settings (cf., laboratory or controlled experiments) and the focus is mainly on meaning-making (Chesnay, 2017). Naturalistic settings are uncontrolled real-life situations. The researcher studies the phenomenon as is and does not manipulate the environment in an attempt to interpret or make sense of phenomena in terms of the meaning's participants bring to them (Groenewald, 2018; Moser & Korstjens, 2017). The more natural the settings, the more likely it is that researchers will have access to the processes that reflect ways of understanding and constructing meaning. Researchers who conduct phenomenological studies attempt to embody the lived experience of participants and the behavioral, emotive, and social meanings that these experiences have for them (Austin & Sutton, 2014). Phenomenology is carried out in a natural setting, mainly through

semistructured interviews, to permit an understanding of participant perspectives (Martiny et al., 2021).

. All interviews were conducted via the Zoom platform. I conducted 10 interviews and made an audio recording of each interview using the voice recording feature on Zoom. The participants chose the physical setting for their interview. All of the interviews were conducted in a secluded setting where conversation and digital audio recording could be accomplished privately without disturbances or distractions. I secluded myself in a private setting to protect the participant's privacy and placed the participants on speaker. I did not encounter any technical issues. The reception was clear with all of the participants. All the interviews were completed with no interruptions. None of the five participants reported any personal situations that negatively impacted their ability to successfully complete the interview.

Before the interview was conducted, the participant read and signed informed consent and was given the opportunity to asked questions. During the data collection process, I maintained a stance of openness to reach self-reflection, bracketing, and reduction. Following each interview, I transcribed the interview verbatim. Eventually, after analyzing the data, I started formulating judgments about emerging and recurring themes.

Demographics

The demographic data of respondents is useful to collect and should be examined carefully. Demographic data adds value to the analysis and interpretation portion of the study. Demographic data may explain what may be underlying a participant's perception

as well as similarities and differences among the individuals (Bloomberg, 2022). Demographic data collected in this study include gender, age, state of residency, highest/grade complete, years of experience as a nurse and oncology nurse, the setting of employment, and certification status.

As saturation was reached, data collection ended. The sample consistent of five female participants each participant was interviewed twice. The mean age of the respondents was 49.5 years and ranged between 42 and 62. The years of experience ranged from 8 to 30 years as a nurse with a mean of 25 years. The years of experience as an oncology nurse range from 5 to 20 with a mean of 15.8 years. All of the demographic information pertaining to the study participants is shown in Table 1.

All of the participants for this study were female RNs presently working in oncology from various hospitals across the United States. After reviewing the information on the recruitment flyer posted on the ONS website, nurses who volunteered to participate self-identified as a nurse who met the inclusion criteria. RNs volunteering to be involved in the study indicated they had 1 or more years of current work experience in oncology.

Although the demographic data demonstrated individual differences in age, total number of experiences as an RN, experience as an oncology RN, experience in various clinical areas, and levels of education, there were also similarities discovered through the course of the study. Parallels in thoughts, feelings, and perceptions were revealed during the interview process. Connections and commonalities in the lived experience and meaning of the experience for the participants were discovered.

Table 1

Participant Demographics

Variable	No.	*M* (years)
Age		49.5
Gender		
Male	0	
Female	5	
Highest degree		
Associate	0	
Bachelor's	2	
Master's	2	
PhD	1	
Number of years of experience as an RN		25
Number of years of experience as an oncology nurse		15.8
Employment setting		
Inpatient	0	
Outpatient	5	
Certified as an oncology nurse		
Certified	4	
Not certified	1	

Data Collection

In this phenomenological study, I collected data from five participants who had experienced the phenomenon. I wanted to capture as rich a narrative as possible from each participant. A large sample size would negate this premise and would be inconsistent with answering the research question. Creswell (2013) suggests five to 25 participants for phenomenological studies. The suggestion can help the researcher estimate how many participants need, ultimately, the required number depends on when saturation is reached. Focusing on a small number of participants, the researcher can generate extensive narrative data and gain an in-depth picture of the participants.

The primary data for this study were solicited from five oncology nurses with 1 or more years of professional experience working in the United States. Each participant was interviewed twice. All interviews were conducted the agreed time of contact. All of the interviews lasted between 45 to 60 minutes. All interviews were conducted using the semi-structed interview protocol (see Appendix A). I audio-recorded and transcribed all of the interviews. There were no technical difficulties encountered in the audio recording. All of the participants spoke loudly and clearly into their receivers.

Location, Frequency, and Duration of Data Collection

Following Institutional Review Board approval from Walden University, I began to implement the outlined recruitment strategies. The response from the oncology nurses was overwhelmingly enthusiastic. The volunteers replied via email indicating interest in participating. Phone contact was made with potential participants and interview times were scheduled. I contacted each of the five participants to schedule the interviews. An interview confirmation email was sent to each participant which included a copy of the informed consent as well as confirmation of the date, time, and Zoom meeting ID. The data was collected between May 2021 to August 2021.

The participants were reminded, in the beginning of the interview, that involvement was voluntary and could withdraw from the study at any time. The consent document was reviewed with each volunteer and signatures were obtained. The interviews were conducted via a Zoom platform. The interviews began with collection of demographic data followed by the selected open-ended questions designed to invite participants to share their lived experience of resilience. Before the interview began, I

asked the participants to speak and allow me to record to ensure I could clearly capture their voices.

The tenet of phenomenology is that the meaning of a lived experience can only be captured through one-one-one interactions between the participant and researcher (Neubauer et al., 2019). A variety of methods can be used in phenomenologically based research, including semi-structured interviews, conversations, and observations. The general principle involved is of minimum structure and maximum depth. Therefore, the establishment of a good relationship and empathy with the participant is critical to gaining depth of information.

In a phenomenological study, information is gathered from individuals who experienced or lived a phenomenon using interviews, journals, and observations. The data collection consistent of a total of ten semi-structure interviews of seven open-ended questions. Each participant was interviewed twice and were encouraged to fully explain their experience. The initial interview was designed to establish rapport with the participant. All the interviews were conducted in a private setting. The interview setting was free as possible from background noise and interruptions. The interview protocol was used to provide a foundational structure for each interview. The participants are identified by initials only. Interview lengths ranged from 45 to 60 minutes.

The interview was divided into four sections. The first section was to gather demographic and background information. Following this, the interview then progressed to two transition questions, then four key questions, and, last, one closing question. Each participant was encouraged to provide as many details as possible related to the

experience. During the course of the interview, follow-up questions were used to clarify information or phrases the participants used. The interview concluded with a closing question. The closing question allotted participants time to reflect and share any additional information. Closing questions minimize distress from discussing personal and professional experiences as it can be a time to debrief and process emotions (Sowicz et al., 2019).

With each interview question probed for more information and asked clarifying questions as needed to prompt a deeper reflection and answer to each question. There was flexibility to address any needs that the participant may have had (i.e., personal needs, restroom breaks, fatigue). I gave the participating nurse the opportunity at the end of the interview to elaborate on or clarify the previous conversation. Comfort and privacy are important aspects for participation; thus, the interviews were conducted one-on-one at a time chosen by the participants over a virtual platform. I recognized that participation may have caused distress for the volunteers; therefore, I provided a pamphlet with contact numbers for mental health services at the conclusion of the interview.

A research interview comprises of a dialogue as well listening. The researcher must listen intently to gauge when a participant is done responding. Holistic approaches to qualitative research emphasize listening as a key skill in the interview process (Creswell, 2013). All of the participants often began with descriptive explanation and progress to deeper disclosure of their feelings and as they became more comfortable in the process. Each participant was encouraged to provide as many details as they could to

recall an experience. I paid close attention to shifts in the rhythm of the interview and revisit topics where deeper reflection is needed.

Process for Recording Data

With the permission of all the interviewees, the interviews were audio-recorded via a virtual platform. I recorded the conversations using the Zoom digital audio-recording feature. The audio recording sessions concluded at the end of the participants response to the final prompt. I did not encounter any technical issues. The audio reception was clear with all of the participants. All of the participants completed the interviews with no interruptions. The data from the audio-recording was stored electronically on a hard drive. The audio was transcribed verbatim. Each interview was recorded separately and was labeled with a code when the interview took place and participants initials. The interview transcriptions were also stored electronically on a hard drive.

Field notes are the secondary data collection method for this qualitive research study. Field notes by the researcher are crucial in research to retain data gathered. The researcher must be disciplined to record as comprehensively as possible without judgmental evaluation preventing prematurely categorizing data into the researcher's bias. It is important to note that field notes are already a step into data analysis (Groenewald, 2004).

I took notes during the interviews and wrote down general notes after each interview was complete. The field notes were written with varying degrees of proximity to the data collection. Field notes were written concurrently, post interview, and during analysis. I documented my own thoughts and experiences with the phenomenon of

interest. The field notes were scanned and stored on a hard drive. Transcribing was laborious and time-consuming but was easier with each session. The transcriptions were maintained in a password protected digital file. In the Data Analysis section, I explain the steps that were used to analyze the transcripts that were produced from the audiotaped interviews with each nurse.

Variations in Data Collection

The quality of data collection is vital for accurate analysis. Despite every effort to ensure the study is carried out as planned, there were minor variations. Some of the semi-structured interviews assumed a conversational tone while others were highly standardized. The flexibility of the semi-structured interviews; however, allowed for variation in follow-up questions to responses that warrant further elaboration.

Data Analysis

Phenomenology is a significant methodological tradition in qualitative research. It enables investigators to set aside perceptions of a phenomenon and give meaning to the participant's experience. The essence of the experience is described and communicated in such a manner that it sheds light on insight that was previously unavailable (Wirihana et al., 2018). The data analysis process in phenomenology starts with examining statements from the participants description of the shared phenomenon. The researcher then uses an analysis method to identify themes from which a general description of the phenomenon emerges. Data analysis for this study followed a horizontal process using the six-step Smith's method of IPA. IPA is suitable for this study as it allows for the unique interpretation of data for everyone who encounters it. Smith's method of data analysis in

phenomenological research provides a practical method for understanding the range and depth of interpretative phenomenology. This empirical-phenomenology analysis consists of six steps structured to support the qualitative research process. Most importantly, it allows for the description of a process that brings new meaning to the phenomena. The steps are described in a horizontal fashion however the process is dynamic, and the researcher can navigate back and forth through the steps. At every step of this process, I reflected on my on-going ideas from the interviews.

The process of data collection and data analysis occurred sequentially. Data analysis was conducted in several sequential steps according to IPA (Smith et al., 2022). I used two methods of data collection, interviews, and journaling, then synthesized these two sets. The recruitment of new participants into the study was complete once data redundancy occurred. The analytical process includes transcribing and checking, coding, and theming. The interviews were transcribed verbatim that allowed for qualitative data analysis and then transferred to MSWord text file. No identifying information was included, and the participants were referred by initials. The first step of IPA is data immersion. I familiarized myself with the data by reading and re-reading through all the participants accounts several times. Each transcript was reread to obtain a general about the content as a whole. I also listened to the audio-recording more than once (Step 1). The transcript was reviewed through listening to the audio while examining the written transcript simultaneously. I noted personal ideas which arose during this initial process of analysis relevant to the phenomenon under investigation. Before analyzing the transcripts, I documented my own thoughts and experiences with the phenomenon under

study to separate my initial thoughts about the transcript and interview from the actual interview. As the transcripts were reviewed, I expected to find statements related to main points of interest in regard to the research question such as overall current situation, professional and personal experiences, current challenges, resilience strategies, and coping mechanisms. With each transcribed interview, I noted distinction and similarities between specific and broad descriptions and interpretation of events. I identified all statements in the accounts that are of direct relevance to the phenomenon understudy when the transcripts were reviewed, each transcript was noted with descriptive, linguistic, and interpretative comments.

The next phase of IPA is the detailed notation about how participants communicated their thoughts, feelings, and experiences. Specifically, I looked for patterns and relationships among the descriptive, linguistic, and interpretative comments within the transcript (Step 2). Descriptive comments focus on the content of what the participants said about a person, place, or event. Linguistic comments focus on use of language and is manifested through specific words or phrases, pronoun use, pauses, laughter, repetition, or metaphor use. The final level of annotation deals with conceptual comments (Smith et al., 2022). At this stage, analysis was more interpretive, and I shifted the focus towards the meaning behind specific sections of the transcript, engaging at a more interrogative level. Comments were labeled “D,” “L,” and “C” for distinction—for example,

- D: It has been a journey.
- L: Touches

- C: Life is a journey full of ups and downs.

For example, when asked what being an oncology nurse has been, AK replied “being an oncology nurse has been a journey and it touches your soul.” After the initial analysis, interviews were then summarized, which are presented in the results section.

As I reviewed the transcripts, each one was uploaded into NVivo ® as a source file. Meanings were formulated from words, phrases, and significant statements that seem to represent the intent of the question. The formulated meanings were then sorted and coded into categories. This was accomplished by means of manual coding and electronic coding through creation of nodes in NVivo. After the initial codes were developed, the data was further reduced by developing clusters of subthemes. Each group of subthemes was assigned a label that further explained the relationship between them, or a theme. A chart was constructed as a visual explanation of how the codes, subthemes, and themes were associated with the transcripts. The emergent themes were selected based on frequency within each participant case (Step 3).

Data coding in IPA occurs in three cycles. The first cycle is a process that codes lengthy responses into meaningful statements. This process helps investigators break-down the responses into a manageable format. The second cycle is another condensation process that reduce the first statements into fewer words to move close to core statements of what the participants were actually expressing. This stage allows investigators to narrow down to extremely few words the participant’s responses. In the third cycle, the investigators captures the central meaning of the participant’s lived experience in one or two words (Smith & Nizza, 2021; Smith et al., 2022).

In this study, I compiled a list of participants' core statements relevant to the research question and used numeration to determine the frequency similar statements were mentioned among the participants. For example, all the participants talked at some length about debriefing when describing the period of time following an adverse encounter in practice. The code word "process" was derived from significant statements of "it's a process" when asked coping strategies. Other significant statements included "this too shall pass" or "staying in the moment." This information was then used for the next step in data analysis. When coding, I meticulously and methodically break down the responses without diminishing or misrepresenting the lived experiences. I reviewed all the transcripts and complete a third round of coding, finishing with a total of 59 codes. The codes were not analyzed for meaning at this stage of the process. I compiled all the codes and organized them into a two-column list for analysis. The codes in the first column were as follows:

- strength
- courage
- reward
- connect
- brave
- inspire
- humble
- wishes
- credibility

- hope
- relationships
- dying with dignity
- rewarding experience
- advocate
- support
- interdisciplinary
- coping
- kind

The second column included the following codes:

- compassion
- appreciation
- teachers
- teaching
- education
- being present
- human being
- life
- gratitude
- dignity
- compassion
- empathy

- patience
- process
- support system
- gratitude
- knowledgeable
- courteous
- considerate

The interview questions were used to structure the coding process, where each question's content helped in labeling codes so that analysis of similarities and differences across interview is possible. For each question, the words and phrases that seemed to highlight the focus of the interview question was name a code. I made a list of similar statements and used numeration to determine the frequency with which these were made among the participants. Categories were created using the participants own words to capture the essence of the phenomenon. For example, all the participants talked at some length about how oncology nursing is a calling. All the participants also discussed how their source of strength comes from a Higher Power, family, and friends. These statements were compiled for further analysis. The NVivo software served in loading interview data into a format for analysis. Each transcript was uploaded into NVivo as a source file. Codes were then combined into categories or clusters based on similarities and then into themes (Step 4).

The emerging themes from this study are the combination of the participant's description and my interpretations. The intention of this process is to take significant

statement and group them into meaningful units. The exploration and coding processes of the interviews facilitates understanding the context of the participant's responses and identification of emerging themes. The key words reported by all participants describe the phenomenon in a manner that would be recognizable by anyone experiencing the same phenomenon. Common statements among participants were identified and grouped to identify principal subthemes and themes that flow between the individuals despite differences in experience. The cluster of subthemes that reflected a particular experience was then merged to create a principal theme. I identified eight subthemes and four themes. The eight subthemes included examination and verbalization of feelings, utilization of internal and external resources, education and experience, and transactional and transformational experiences. This point in data analysis then leads to Step 6, where the findings of study were integrated into a full and inclusive description of resilience.

The data gathered provided an accurate depiction of the general description, common features, and connections of protective factors that promote resilience. In Step 6, I condensed the exhaustive description down to a short, dense, statement that captures aspects essential to the phenomenon. I identified four central themes. The major themes included processing experiences, utilization of resources, gaining and applying knowledge, and transforming relationships. The final step is to develop a composite summary in relation to the research question. The most common theme among the interviews is the idea that recovery is possible. Chapter 5 includes a discussion of the findings.

The data analysis section of the study is challenging yet is an important part of phenomenological research. Smith's steps for interpretative phenomenological analysis provide a guideline for analysis and aligns with the aim of this study. IPA is described in a linear progression however the process is dynamic, and the goal is an overall forward direction toward the final analysis. The products that emerged from this process represent the goal of this phenomenological study. The general structural description of resilience, in this study, is contextualized in within the experiences of oncology nurses.

Discrepant Cases

As they begin to collect data and identify emergent theoretical constructs, the investigator might also look for discrepant cases in the findings. Discrepant cases are those participants who offered information in their response not found in other interviews. Identifying and analyzing discrepant cases is a key part in the logic of validity testing in qualitative research (Smith & Nizza, 2021). As I reviewed the data, I did not identify any discrepant cases.

Evidence of Trustworthiness

The ultimate goal of this study is to create new knowledge through research and place it into practice. Therefore, it is of upmost importance that this study is recognized as familiar and understood as legitimate by researchers, colleagues, and stakeholders. The truth value qualitative research is crucial to the integrity of the findings. Trustworthiness is one way that investigators can persuade the reader that the research findings are worthy of attention. Qualitative investigators must demonstrate that data analysis has been conducted in a precise, consistent, and exhaustive manner and reveal the analysis

methods with transparency so the reader can determine whether the process is credible (Chesnay, 2017). There are four corresponding measures of trustworthiness that researchers must identify their presence or absence: credibility, dependability, transferability, and confirmability (Nowell et al., 2017). These criteria and used procedures will be discussed in the following paragraphs.

Credibility

Credibility is the most important criterion in establishing trustworthiness. Credibility is present when the research findings mirror the views of the participants to demonstrate the truth in the data. There are many available techniques to establish credibility such as triangulation and member checking. This study relied on triangulation.to establish credibility. Triangulation involves the use of multiple data sources to develop a more complete understanding of phenomena. Triangulation is utilized to ensure the findings are well developed. There are for types of triangulations: methodological, investigator, theory, and data. This study relied on methodological and data triangulation (Nowell et al., 2017) to establish credibility.

Methodological triangulation is the use of multiple methodologies of data collection about the same topic to ensure consistency in the findings. The intention is to minimize the deficiencies and biases that may come from any single method. The strengths of one method may compensate for the weaknesses of another. If the findings from all the methods are similar conclusion, then credibility has been established (Noble & Heale, 2019). I combined various within-method techniques including interviews, and field notes to promote credibility through methodological triangulation. I established a

good bond with the participants encouraging them to disclose their experiences honestly. I used an iterative questioning process to clarify participant's responses, such as rephrasing questions. Last, I examined previous literature findings and made an assessment of how my own findings compare to past findings.

Data triangulation refers to the collection of data from different types of sources to gain multiple perspectives (Nowell et al., 2017). There are three subtypes of data triangulation: time, space, and person. I employed time, space, and person triangulation. I collected data from participants at different points in time (each participant was interviewed twice). Participants worked in different oncologic settings and encompassed a broad range of individual backgrounds and experience.

Transferability

Transferability is the degree to which the results of the study can be transferred to other contexts, settings, situations, times, and populations. Transferability in qualitative research is synonymous with applicability and generalizability. Transferability is established by providing the reader with a thick description of the participants experience and research process. The information helps the reader construct the scene that surround the research study, so that participant's responses become meaningful to an outsider. (Korstjens & Moser, 2017). For this study, transferability was achieved with the provision of robust and detailed account of the participants experience. I also provided specific information and description about the methodology when writing the results. This allows the reader to make an informed judgement about whether the findings can be transferred to their own situation. In addition, oncology nurses working in an acute

setting would be able to determine what information is transferable in their lives as they continue their work.

Dependability

Dependability of the study refers to the stability and consistency of the inquiry processes used over time and conditions of the study. Dependability is achieved through utilization of consistent use of research methods throughout the study (Korstjens & Moser, 2017). I addressed dependability by the creation and maintenance of an audit trail including field notes, interview recordings, hard-copy transcripts log and interview protocol. I also created separate folders to store data for each participant.

The process logs are available for peer review should I be required to support the results of the study. The audit trail also includes any changes that may have occurred in the process. It is important to monitor changes that occur during the research path given the developmental nature of IPA. The audit trail enables an auditor to study the transparency of the research path.

Confirmability

Confirmability is the degree to which the findings of the study could be confirmed by other investigators. Confirmability concerns with the consistency of the findings and that interpretation processes are clearly derived from the data and not influenced by the investigator's biases. The criterion of confirmability is to verify the findings are shaped by the participants response more than by the researcher (Korstjens & Moser, 2017). All of the strategies listed earlier were utilized to established confirmability. The audit trail

previously described was employed for both confirmability and dependability of the study. I also maintained detailed notes of the decisions and analysis as it progressed.

Research bias occurs when an investigator inadvertently influences the results of their work. Such behavior can severely affect the impartiality of a study and reduces the value of the results. Researcher bias is understood to be in all forms of qualitative research, so I employed several strategies to minimize the influence (Given, 2008). Every effort was made to ensure I did not influence the content of the interview. The results of the study accurately reflect the participant's actual experience. I implemented a technique of critical self-awareness. I kept a dairy which included thoughts, ideas, and impressions that surrounded the interview so I could better understand how the shared experience are representative of the actual situations.

Results

The Results section is organized into four subsections. Each subsection has as its focus one of the four themes that were identified. The presentation of each theme centers on participants' shared narratives and personal meaning attributed to the phenomena (see Table 2). The narrative includes responses from the interviews. To ensure accuracy, I listened to the recording of each interview and conducted repeated transcript review.

The general description of resilience that developed from this study defines resilience a dynamic, complex, and multifaced process. The structural elements of the process emerged from the participants accounts. The participants descriptions express the cumulative effect of engaging in that process. Hence the analysis process revealed how the phenomenon is present withing the oncology nursing community.

Ten semi-structure in-depth interviews with five oncology nurses who have current experience working in a high acuity setting shed light on the research question. Although each individual story was unique, analysis of the data revealed similarities across experience. Interpretative phenomenological analysis was utilized to describe the phenomenon under study. This is accomplished by exploring subjective experiences of oncology nurses as a representative of the work in which they live. For this study, four themes from the data in response to the research question presented above. Themes were identified though manual coding and analysis utilizing NVivo® software. The four themes were (a) processing experiences, (b) utilization of supportive resources, (c) gaining and applying knowledge, and (d) transforming relationships

Table 2

Key Constructs, Subthemes, Themes, and Illustrative Responses

Illustrative response	Key construct	Subtheme	Theme
"It's a process" "This too shall pass" "The day will be over" "Staying in the moment" "It's a journey"	Remaining present Expressing feelings honestly Accepting the experience Learning from other's experiences Perseverance and moving forward Sharing experience with someone of trust	Examining and verbalizing feelings	Processing experiences
"Being an oncology nurse is gratifying and sets one on a rewarding path" "Being an oncology nurse touches the soul" "Oncology nurses are angels" "Take care of oneself and have compassion for patients" "It's my passion to be an oncology nurse" "It's an innate desire to be an oncology nurse" Be realistic" "Believe in yourself" "Have faith" "I take care of patients like I am taking care of my relatives" "I am here for you and then the patient kissed my hand"	Adaptation Gratitude Self-awareness of physical and emotional stressors Healthy lifestyle choices Work-life balance Self-care Mindfulness Specialty certification Enhancing skills Updating knowledge Positive outlook	Self-efficacy (internal resources) Self-care (internal resources) Empowerment (internal resources) Optimism (internal resources)	Utilizing supportive resources
"Leave work at work" "We use dark humor to make each other laugh" "Good teamwork"	Maintaining good relationships Getting help from relationships Colleagues Family Friends Peers	External resources	
"ONS certification" "Chemotherapy-biotherapy certification" "Autonomy"	Obtaining a degree (BSN, MSN, DNP, or PhD) Specialty certification Getting help from seasoned nurses Developing knowledge Self-awareness	Education Experience	Gaining and applying knowledge
"It's all about teamwork." "It's about building solid relationships with colleagues as well as with patients" "It's about developing new bonds"	Help from relationships Maintaining good relationships Connecting with others	Transactional Transformational	Transforming relationships

Note. ONS = Oncology Nursing Society; BSN = Bachelor of Science in Nursing degree; MSN = Master of Science in Nursing degree; DNP = Doctor of Nursing Practice degree; PhD = Doctor of Philosophy degree.

Theme 1: Processing Experiences

The first theme which emerged from the data analysis of individual nurse interviews is the processing of experiences with self and others. The importance of debriefing with peers after what is perceived as an adverse experience was emphasized by all participants. Processing is at tool employed for the purpose of encouraging the individual to reflect, describe, analyze and communicate what is happening. Discussing perceived troublesome experiences with colleagues, family, and friends is important because it places into words and words give the participants a meaning. The experiences are processed more deeply and effectively by using precise language. Three out of the five participants when describing the events following a traumatic experience share the commons phrases: “it’s process,” “this too shall pass,” and “staying in the moment.” Participants felt communication with others is an integral part of successful confronting and adapting to difficult experiences in patient care. Verbal and non-verbal forms of communication in connection with patient holds meaning for oncology nurses. Verbalizing negative experiences with someone of trust helps nurses sort through the situation and provides a different outlook on the experience.

Communication is essential to resilience because it breeds positive emotions instead of negative ones. Having a listener to the telling of an event is an absolutely essential component to healthy processing. Discussing difficult experiences provides a sense of comradery and support. KT shared a moment where she was just listening to her colleague speak about stressful her day and KT replied to her, “I am here for you.” The participants often found other nurses also share similar feelings. Talking through events

provided nurses with the opportunity to gain insight on how to survive these experiences successfully. Communication with others is a cathartic process for oncology nurses and unknowingly protects against emotional problems from developing. When asked what professional experiences have you had that have changed your ways of practicing oncology nursing, AK shared a challenging situation and recalls "[using] dark humor to make each other laugh." AK said, "it's important not to sit in those [negative] feelings."

Another aspect of processing experiences involves communication with family members or friends particularly after a stressing event in patient care. For example, AM said "I know the day will be over and I will be going home to my family." Talking through experiences with others helps oncology nurses with the process of "letting go." This provides a means for nurses to find closure to difficult experiences in patient care. In addition, the acknowledgement the gravity of their experiences from family or friends provides nurses with validation and support.

Effective communication with patients and their families is also beneficial for the oncology nurse. Listening to patients' and their families' stories of adversity, bring a sense of realization to the oncology nurse. Oncology nurses give patients hope, and patients give oncology nurses humbleness, gratitude, and contentment. AK shared a story where she took time of her busy clinic schedule to listen to a patient's story. AK realized in that moment that her patients are her teachers on life and on what really matters. BC said that you have to treat each patient like it was one's own family member and always listen to the patient. BC recalled taking care of a 46-year-old patient with Stage IV colon

cancer with metastasis to the liver. After listening to the patient's struggles, BC observed that "life is short, and we have to make the most of it."

Theme 2: Utilizing Supportive Resources

The second theme to emerge from analysis of individual interviews pertaining to difficult experiences in practice was utilization of supportive resources. Resilience is best defined as a successful adaption to a significant source of stress whereby internal and external resources interface with dynamic coping processes (Liu et al., 2020). Oncology nurses develop and capitalize inner and outer resources and adapt their response to face adversity effectively. Results of the study identified internal capacities and external resources that reduced the risk of suffering serious stress-related problems and minimize the long-term impact of adversity. Successful adaptation of hardship involves the interplay between both factors.

Certain individuals are able to sustain physical and psychological functioning when face by challenging situation. There are positive individual capacities linked with resilience. Internal capacities are personal attitudes including self-efficacy, self-care, empowerment, and optimism.

Self-efficacy development in oncology nurses involves the belief in one's ability to succeed in a particular situation. One example of strong self-efficacy is accepting a position as an oncology nurse without any oncologic experience but having the belief in the ability to perform the role well. Two participants (BC and AM) did not choose oncology rather oncology "choose" them and subsequently found to be a good fitting for them and had a firm belief that they were going to be successful in their role. BC reports

being initially placed in a medical-surgical unit then was transferred to oncology due to short staffing in that unit. AM was offered a position in oncology when coming to the United States from the Philippines, where she obtained her nursing degree. AK specifically said “be kind to yourself” when asked about advice she would give to nurses interested in oncology.

Self-care is conveyed as the actions an oncology nurse takes to promote well-being. For many nurses, allocating time and attention to personal well-being is paramount. Self-care has three distinct categories: emotional (i.e. staying present), spiritual (i.e. prayer, meditation) and physical (i.e. healthy diet, exercise, meditation, prayer, getting enough quality sleep, time-off). All of the participants collectively shared different strategies to overcome feelings of work-related frustration. Effective behaviors for work-related stress included education, work-life balance, mindfulness, growing and thriving. Coping strategies example of education included self-awareness. Strategies for mindfulness included taking time for self, self-reflection, staying connected with peers and family, and exercise and relaxation. Strategies for growing and thriving included talking or debriefing to other peers, friends, and family. Strategies for work-life balance include exercise, sleeping, sense of humor, meditation, and socializing with peers outside of work.

Empowerment is the ability to motivate self and other individuals to achieve positive outcomes in practice. The empowered oncology nurse is constantly enhancing their skills, updating their knowledge, and obtains specialty certification. When asked what advice you would give to nurses interested in oncology, KT said, “you have to

evaluate one's emotional strength before going into the field of oncology." In oncology, nurses are exposed to the raw reality of life, dealing with life-ending decisions. KT's advice is to take the good as well as the bad. TW's advice to familiarize with one's limitations. It is important to feel comfortable with the procedural aspect of work. TW added "don't be afraid to ask questions, it's okay if you don't know." Last, optimism is the integration of hope. A positive outlook toward the future is a protective mechanism associated with resilience for oncology nurses.

The qualities of a person alone are not sufficient to predict resilience but also rely on empowering external resources. Access to broad external resource network is a key element in creating resilience. The examination of elements of resilience at levels beyond self is an important area of focus. The oncology nurse is no an encapsulated system isolated from outside sources. External resources are those aspects outside of self, such as a social environment composed of family, friends, peer support, institutions, and community. KT said that being an oncology nurse allowed her to be part of a large professional institution opening the door for potential prospects such as education, research, and leadership. The most important supportive relationships are located proximal to the individual typically colleagues, friends and family members. Oncology nurse are distinguished by their ability to forge symbiotic relationships with other individuals to support adaptive measures. Supportive relationships hold meaning for the oncology nurse.

Resilience is a process that involves on the drawing and availability of internal and external resources to achieve positive outcomes. This two-dimensional outlook is

important for developing resilience. These protective factors contribute to strengthen the individual through the situational and relational experiences in the workforce. Internal qualities and external resources can independently or interactively. However, it is the combined effects of both internal and external strengths which demonstrate that nurses are able to cope with adversity more effectively and provides insight how to be best enhance resilience. Resilience and its positively associated factors, such as include utilization of supportive resources, attenuate the influence of job stress and encourage nurses to stay in the workforce.

Theme 3: Gaining and Applying Knowledge

The third theme which emerged from the analysis of individual interviews pertaining to particular difficult experience in practice is gaining and applying knowledge. There were two subthemes associated with this theme, education and experience. Nurses expressed that their knowledge is drawn from science and experience. Scientific knowledge is gained through education generated by research inquiry. Experience is derived from personal understanding generated by a period of involvement in a situation and it includes tradition, intuition, and tacit. The knowledge gained from theory provides the base for experience. Experience only comes with time and practice. None of these sources exist exclusively and nurses may apply them in making judgements.

Knowledge also refers to the recognizing and understanding of adverse experiences and ability adapt to challenges though the access of resources. Oncology nurses did not deny signs of adversity but acknowledged them. The nurses remained

present and demonstrate an attitude of acceptance rather than avoidance. KT shared a story of interdisciplinary care in a patient who had a rare appendiceal malignancy undergoing a complex procedure. The patient had a positive result from the procedure primarily due to an effort of multiple specialties. The experienced compelled KT. to learn more about rare cancer disorders. AM recalls of a time working in an inpatient unit and not being familiar with a specific therapy that a patient with ovarian cancer was receiving. AM said, “I thought of my mom when taking care of her [the patient].” AM spent time educating herself on therapy and also finding take-home reading education for the patient. From that moment forward, AM spent all her available time in reading on cancer, chemotherapy, and symptom management. AM also shared that oncology is not work but “her passion.” The passion she describes pushes her abilities in the field. AM’s advice it to full commit to helping other with cancer. For AK constantly updating one’s knowledge and skillset is essential. BC mention that educating herself on end-of-life symptom management transformed her perspective on patient care, focusing on quality over quantity

All suitable knowledge should be embedded appropriately into nursing care. In making clinical decisions to deliver care, oncology nurses draw on a range of sources of knowledge. Oncology nurses give patients care and treatment based on the best knowledge available. Oncology nurses described how years of experience has helped cope with stressful situations. All participants expressed a desired to continue in learning and education.

Theme 4: Transforming Relationships

The fourth theme which emerged from analysis of individual interviews pertaining to particular difficult experience in practice is transforming relationships. Relationships between individuals are core to the human existence. Interdependent relationships influences define how much each person experiences the world and influences an individual's behavior. The influence and quality of relationships can enhance or impede health care performance and ability to collaborate and provide care. Throughout their professional career, oncology nurses develop many interpersonal relationships with peers, patients, and families. There are two types of relationships, transactional and transformational. One is out of necessity and the other is out of desire, respectively. The latter add depth to one's personal growth and development. Oncology nurses must have the capacity to skillfully collaborate and effectively communicate across social and professional relationships to provide high quality care. Successful relationships are critical to healthy work environments. A healthy work environment positively impacts physical and psychological health, job satisfaction, retention of nurses and quality of care.

All of the participants discussed that oncology nursing is a great career choice for individuals who enjoy building ongoing relationships with patients, families, and peers. The participants shared that oncology nursing has its own unique requirements which can be emotionally and professionally taxing but rewarding. AK mentioned that oncology nursing is "learning how to build relationships with self and others." AK said that is also important to have a solid support system in place. KT said that the relationships she has

with her patients and families is what shapes her practice. KT is grateful that she is able to care for patients at a difficult period in their life. Every interaction an oncology nurse has with a patient is meaningful. BC specifically said that “being an oncology nurses touches the soul” and “it’s a rewarding experience to make a difference.” TW’s shared a story of her father being diagnosed with multiple myeloma and bother-in-law with acute leukemia, before becoming an oncology nurse. TW interaction with oncology nurse is the momentum that launch her oncology career. TW witness the compassion of the oncology nurses in the unit. TW treats each of her patient like her father and brother-in-law.

In the course of the interviews, the participants described the close, personal relationships they made with patients, their families, and peers. These connections are often what made a difference in their lives. The quality of the relationships with other individuals influences how emotionally resilient an oncology nurse is in face of a crisis. In general, the more quality social support a nurse can draw upon, the more flexible the nurse is during stressful situation. Having a support system places the individual in a greater sense of confidence and allows to approach life more optimistically. Since relationships are the source of social support, learning to transform these relationships is an essential skill for quickly bouncing back from adversity.

Summary

In Chapter 4, I described the results of the data collection and analysis. Trustworthiness was explained. Five oncology nurses with current oncology work experience were interviewed for this qualitative study as mean of investigating the lived experience of resilience for this population. Four themes emerged from the data attained

in this study. The findings of the themes that encapsulate the overall experience of nurses will be discussed in Chapter 5. Each theme will be discussed in detail and the findings were supported by participant statements. Chapter 5 will include an interpretation of the findings, limitations of study, recommendation for future research, and implications.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this qualitative phenomenological study was to identify what factors promote resilience and mitigate the side effects of burnout to motivates nurse to remain in an oncology specialty. I conducted a phenomenological investigation to describe the lived experiences and meaning of resilience for nurses in oncology practice. The findings from this study provide in-depth information of protective factors as experienced by oncology nurses. Also, they further understanding of resilience.

Researchers uncover the phenomenon by focusing on particular signs that are characteristic of the phenomenon itself (Neubauer et al., 2019). As discussed in Chapter 4, four themes emerged from data analysis. I discovered that resilience manifests through the following protective factors: managing and processing experiences, utilizing supportive resources, gaining and applying knowledge, and transforming relationships. These four major themes represent the protective factors that oncology nurses encounter in practice. Chapter 5 will include a discussion of the major findings within the context of NSM and the existing body of nursing literature. The conclusions were based on the purpose, research question, and results of the study. The chapter also includes a discussion of the limitations of the study, recommendations for further research and practice, implications for positive social change, and a conclusion to the study.

Interpretation of the Findings

The primary aim of this study was to explore the inner worlds of a small group of oncology nurses and to make meaning of their lived experience. The foundation of this

study lay in previous work in the nursing field. I sought to explore and describe strategies that promote resilience. The present study began with an understanding that resilience is a valued concept that is essential to nurses because it is related to important outcomes such as positive mental health, career satisfaction, turnover intentions, and burnout (Tarantino et al., 2013). However, health care providers may be challenged by their work, with evidence that oncology nurses are a high-risk group for maladies (Nissim et al., 2019.

The primary source of data were oncology RNs with 1 or more years of professional experience working the United States. I conducted semistructured interviews with five registered oncology nurses to gain insight into nurse perceptions of practice, approach, and promotion of resilience. The five participants responded to seven open-ended questions. The interview questions were developed and framed based on a critical review of the literature. The research process included tape recording and verbatim transcription of individual interviews followed by the use of the constant comparative method to analyze the data. The analysis reflects a comprehensive explanation of the researched data leading to the discoveries of themes and subthemes.

This study is aligned with the contemporary perspective of resilience, which places emphasis on traits for successful adaptation and factors that support human well-being (Dantzer et al., 2018). All participants encountered difficult events in patient care however they were able to thrive and remain in the clinical setting as evidence by career longevity. Four themes emerged from the data linked from nurses' experiences. A prominent theme is that resilience is a phenomenon resulting from the use of protective factors. Protective factors pertain to an individual's internal and external condition to

decrease the probability of negative outcomes (Dantzer et al., 2018). Four protective factors emerged from data analysis: processing experiences, utilizing supportive resources, gaining and applying knowledge, and transforming relationships.

As discussed in Chapter 2, resilience can be defined as a process, outcome, or capacity depending on the context. A unique view of resilience is that it manifests itself during adverse life situations that typically lead to maladjustment but promotes positive transformation (Zangaro et al., 2022). The four themes that emerged from the data provide evidence associated with experiences of resilience in the context of transformation. The NSM is appealing for this study as it provides the framework to describe an individual's reaction to stress while maintaining boundaries to protect stability. Neuman's model is useful in high acuity areas such as oncology because of the focus on attaining, regaining, and maintaining system stability. (Ahmadi & Sadeghi, 2017).

The NSM model is a systems model. The focus in a systems model is on the interaction of subsystem within the system. Within the NSM diagram, the participant is viewed as a holistic client system who interacts with the external and internal environment. The client system and the environment experience a mutual interactive relationship. The person influences and is influenced by the environment. The environment surrounding the client system is important to the understanding of an individual's response to stressors. The individual develops series of defenses that are used as protection to interact with the environment or defense lines (Ahmadi & Sadeghi, 2017). The participant is an active member in the research process. Self-

perception and self-assessment are crucial aspects to achieve and maintain wellness (Zangaro et al., 2022). Such was the premise of this study, which had as its primary focus exploring reactions of the client system.

The oncology nurse is the client system consisting of five interacting variables (physiologic, psychological, sociocultural, developmental, and spiritual) which function in time to attain, maintain, or retain system stability (Bademli & Duman, 2017b). The oncology nurse is surrounded by successive rings known as lines of defense. The lines of defense are the lines of resistance (innermost), normal lines of defense (middle), and flexible lines of defense (outermost). When the oncology nurse is not sufficiently protected by the flexible rings of defense, any stressor may pass through the normal ring and create a reaction. The normal lines of defense (NLD) of the oncology nurse are the patterns of response that develops to stress, such as the use of protective mechanism. The NLD is a dynamic state that can change over time and is determined by the five client variables. (Bademli & Duman, 2017b). The defense lines premise that comprises the model lent an understanding when dealing with the data obtained from the participants. The model allowed the phenomenon of resilience to be viewed in a coherent, congruent, and organized manner to that further understanding could be enhanced.

All of the participants engaged in this study demonstrate a deep sense of commitment to the profession of oncology nursing. All of the participants are driven to the specialty through a desire and passion to care for patients with cancer. The participants relate that oncology nursing is a calling and working in this specialty heightens their level of compassion and dedication for patients. As a profession, all

participants expressed, that oncology nursing is both one of the most challenging yet rewarding field. The oncology nurse must successfully connect with patients, family, and colleagues to build trust. Therefore, it takes a uniquely qualified individual to perform well in such field. The commonality among the responses is integrity, authenticity, compassion, and humility. All the participants expressed great gratitude to be part of the study.

Limitations of the Study

All research studies have limitations that need to be acknowledged. Limitations of the study are characteristics that are not within the investigator's control and can potentially impact the interpretation of the findings. IPA research has intrinsic limitations due to the subjectivity of the data gathered. Phenomenological qualitative research has three-fold central limitations. Phenomenology relies on the full and rich verbal accounts of participants who may not be able to expresses themselves particularly enough. The gathering of data and data analysis is labor intensive and time-consuming. Finally, research quality is dependent on the skills of the investigator and can be more easily influenced by the researcher's biases, beliefs, and values (Gerrish et al., 2013).

This research has several limitations. The first limitation is the possibility of researcher bias. Researcher bias occurs when the investigator influences the investigation in an effort to arrive at certain outcomes (Chesnay, 2014). Investigator bias can affect interpretation of the data. especially if the researcher is involved in the issue being examined. I employed several strategies to minimize its influence. I recorded and transcribed detailed answers to all the interview questions as a way of separating my

experience from that of the participants. I used a reflexive journal to document my thoughts, feelings, and experience throughout the collection and analysis process. Both strategies allowed me to reflect on how my experiences intersected with those of the participants.

The second limitation of this study is the intrinsic nature of qualitative study as it relies on the investigator's judgement of data gathering and analysis. The investigator's skills and personal idiosyncrasies potentially effect interpretation of the data. Moreover, the presence of the investigator during the data gatherings can affect the participants' responses. The participants could have withheld some of their personal in-depth experiences. Also, participants were required to reflect on past experiences, so it is possible that they might have selectively remembered or forgotten significant events.

Further, small sample size, which is characteristically small, can cast doubt whether participant experiences are typical. The small sample size limits the generalizability of the findings. Nevertheless, the sample size was sufficient of this study since theoretical and data saturation were reached and IPA investigators recommend samples sizes between four to ten participants. The study design purposefully did not account for demographic differences even though all the participants are from the United States. Disparity in the composition within the gender was significant as all participants were female. As such, analysis of whether the actual differences in responses occurred because of gender is nearly impossible predict. Further, all of the participants were above 40 years of age. The level of participant maturity may have influenced the way participants experience resilience.

Finally, another potential limitation related to the deliberate inclusion and exclusion criteria for participation. Although these criteria were based on previous literature search, it is recognized that study findings may not be applicable to nurses in other units, hospitals, or areas of the country. At best, the results from this research suggest that further research is warranted.

Recommendations

Oncology nurses are on the front lines of patient care and experience various challenges. Phenomenology is a powerful strategy that is uniquely positioned to support the exploration of these challenges. Four themes, which emerged from the data in study, indicate that the lived experiences of oncology nurses play a significant role in fostering career longevity as well as well-being. With the increasing pressures on the U.S. health care system, it is essential the profession of nursing continues increasing knowledge on the subject matter of resilience. There are various approaches in which future research could build upon this study.

Recommendations for this study rises from a phenomenological analysis process. The choice for this method of analysis emerged from an interest in the phenomena from both personal and professional motive. Therefore, it is recommended that future qualitative studies consider an alternative qualitative approach with an observer less intimate with the phenomenon. Perhaps other viewpoints would allow identification of concepts that would be missed by individuals who are immersed in the experience. The sample for this study was delimited to five to ten participants. A common issue with qualitative research is that small samples do not produce definitive conclusions or are

difficult to replicate, since participants experience may change over time. Therefore, another recommendation for future qualitative studies to include a longitudinal component with larger sample sizes and multiple regional sites. Longer study duration can yield a better understanding and greater knowledge of how resilience emerges and changes over time. Future studies should examine how individual from a variety of cultures, years of experience, and age experience resilience.

A better understanding of resilience requires knowledge of the presence of this phenomenon in other high-risk nursing settings. Future research should be conducted on other populations at risk for adverse or traumatic experiences such as critical care, emergency care, and academia. In addition, cross-analysis should be conducted to identify potential similarities and differences across these groups.

Future research should explore the idea of personality traits that foster resilience. The participants of this study presented the idea that oncology practice demands unique characteristics to properly function in areas of high acuity. The idea of resilience connected to certain personality types requires further exploration as well. As I was analyzing the data, it was not clearly understood if resilient characteristics were inter-related or inter-dependent.

Implications

Positive Social Change

The findings of this study have tangible implications to improve and preserve resilience in a clinical setting. Publication of the findings will offer insightful information

to individuals, organizations, and society. The results of this study will be shared with the members and representatives of ONS at a local and national level.

The findings from this study add to the body of nursing literature regarding the way in which oncology nurses experience resilience and the meaning it holds for them. The details within the four themes which emerged from the data analysis are congruent with findings from other publications. Strengthening the resilience in an oncology nurse work environment is achieved by processing experiences, utilization of supportive resources, gaining and applying knowledge, and transforming relationships.

The expression of emotions connected with adverse events allows nurses the opportunity to process and manage their experiences with an ultimate goal of releasing and moving forward. Moreover, the interactions between external and internal coping resources enables functioning across the continuum in response to varying needs and goals. Knowledge, gained by experience and theory, is as equally important and leads to holistic care of self and patients (Ramalisa et al., 2018). Finally, a well-developed network of relationships helps the oncology nurse rebound from setbacks.

The implication for positive social change includes an increase in knowledge base about protective factors and the effects the physical, mental, and spiritual well-being of oncology nurse. By understanding the protective mechanisms that foster resilience can be helpful in providing models that apply to nursing retention. In areas where supportive resources and avenues for communication are lacking, these elements can be amplified. In regard to health care and higher education organizations, is essential to integrate resilient and stress management techniques into practice including mindfulness,

meditation, and self-awareness. Furthermore, the understanding of these protective factors help organizations remain committed to growth and achievements of long-term sustainability of its workforce.

Theory

The philosophical and theoretical basis of the NSM provide the conceptual framework for this study. The NSM is a systems-based dynamic framework, and it provides an explanation how a system remains in balance against stressors. The client system may be an individual, family, group, or community (Bademli & Duman, 2017). The NSM focuses on the individual's response to stressors which are of extrapersonal, interpersonal, and intrapersonal origins. If the individual's three defenses cannot properly respond then instability occurs (Bourdeanu & Dee, 2013). The selection of the model for this study reflects the congruency between the manner in which oncology nurses experience resilience in an acute setting and the meaning resilience holds for them.

The NSM model diagram breaks down the four concepts of the nursing paradigm (environment, person, nursing, and health). The use of the model provides a framework for understanding the idea of adversity by outlining the relationship between parts and whole, the effects of circumstances, and the individual's contact with their environment. When oncology nurses begin to understand the relationship between self and the environment, better clinical decision can be made and therefore better chances of success in assisting a client return to wellness state (Turner & Kaylor, 2015). The NSM approach identifies the aspects of an individual that can strengthen their ability to withstand various vicissitudes of clinical practice.

Resilience is a dynamic process and building resilience in the face of adversity is key to positively adapt to an ever-changing health care system because of the stressors involved in practice (Eicher et al., 2015). This study bridges how resilience in studied in theory and practice in the field by indicators that drives an individual's success or failure in recovering from distress. The findings illustrate that resilience is rooted in open communication, highlighting the importance of support systems in the work environment, improving continual skills, and emphasizing positive and harmonious relationships. These themes combined give the individuals the resources to cope with adverse situations and ultimately be resilient.

Recommendations for Practice

This study has implications for a large body of research suggesting new ways of fostering resilience. Based on the findings of this study, health care workers can readily and practically implement protective factors to reduce the risk of stress-related events and minimize the long-term impacts of adverse events on the quality of life. Protective mechanisms may be internal or external. Literature on resilience has generally pointed towards social support the most essential external protective mechanism.

The findings of this study suggest that each of the four themes discussed earlier may be used to foster resilience in clinical practice. Incorporating these themes into practice can potentially increase employee performance and retention and also makes a compelling case for organizational restructure. An approach to facilitating nurses' resilience is through the maintenance of harmonious relationships. This approach

cultivates resilience by practice voicing concerns with repercussion which proves a therapeutic, freeing, and healing experience.

Conclusion

Resilience is multidimensional and learnable structure and existing literature on resilience shows the oncology nurses frequently encounter adversity, suggesting that this capacity is associated with career success and longevity (Kutluturkan et al., 2016). This study gleaned into insights from the lives of five oncology nurses working in high acuity settings related to their lived experiences in response to encounters with adversity in the workplace. Findings from the data confirmed that oncology nurses experience resilience when they are able to (a) processing experiences, (b) utilization of supportive resources, (c) gaining and applying knowledge, and (d) transforming relationships Oncology nurses' experiences with resilience included personal and valuable insights about life. Further, oncology nurses who experience resilience in a clinical setting has been associated with better health and well-being, work longevity, and improved quality of care (Gillman et al., 2015). The themes identified in this study include elements that can be applied to the nursing profession and provider a foundation for creating resilience training programs. One of the most pivotal points in this study centers on the importance of developing healthy relationships with self and others and a supportive working environment.

Overall, the results of this study demonstrate resilience as a strength-based capacity that helps nurses face the setbacks encountered in practice. The challenges of finding new and useful practical methods in alleviating adversity is significant to innovation. This perspective provides many opportunities for future research capable of

improving resilience and lead the profession of nursing in constructing effective training programs beginning in an educational setting bridging over to practice. Ultimately,

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Appendix A: Interview Protocol

I followed Castillo-Montoya's (2016) and Jacob and Furgerson's (2012) guidance in creating the interview protocol.

Part 1: Before the Interview

1. Contact participant.
2. Collect demographic information.
3. Discuss the purpose of the study.
4. Reiterate informed consent policy.
5. Schedule interview time either over the telephone or in person and give instructions for participation.

Part 2: Interview

1. Demonstrate appreciation to participant for interview.
2. Reiterate study purpose.
3. Reiterate informed consent.
4. Obtain permission for tape recording.

Part 3: After the Interview

1. Thank participant again.
2. Offer a list of resources for SAMHSA (toll-free number 800-662-4357 and website samhsa.gov).
3. Inform participant of the postcompletion process for the study.

Script Prior to the Interview:

I want to thank you once again for being willing to participate in the interview aspect of my study. As I mentioned to you before, my study seeks to understand the unique role of protective factors in the lived experiences of oncology nurses following a perceived challenging situation to continue delivering high-quality care for patients who have cancer. You have been selected as a participant of this study because you been identified as someone who has a great deal to share about the nursing experience in oncology practice.

The interview will be recorded as a part of qualitative research for doctoral dissertation work. Your interview answers will be transcribed verbatim for data analysis. For your information, only I will have access to the tapes which will be eventually destroyed after they are transcribed. I have planned this interview to last no longer 70 minutes. During this time, I have several questions that I would like to cover. Your name will not be used at all. You will be referred only by way of pseudonym. The information gathered may be used to designed additional studies on protective factors in the future.

Your participation to be a part of this study is voluntary. Once you start, you can withdraw from the study at any time without penalty. The results of the research study may be published but your identity will remain confidential, and your name will not be made know to any outside party. Also, you must sign a form devised to meet the school's IRB requirements. Essentially, this document states that (a) all information will be held confidential; (b) your participation is voluntary, and you may stop at any time if you feel

uncomfortable; and (c) we do not intend to inflict any harm. Thank you for your agreeing to participate.

Research question: What are the lived experiences of oncology nurses that help promote resilience and mitigate the effects of burnout and that affect their decision to remain in this specialty of oncology nursing?	
Type of question	Interview Question
Introductory Question Introductory questions are perceived as eliciting neutral and non-intrusive and are not threatening.	1. Collect basic demographic information: • Participant's initials • Gender • Age • State of residency • Highest level/grade completed • Number of years of experience as an RN • Number of years of experience as an Oncology RN • The setting of employment (inpatient or outpatient) • Oncology Nurse Certified?
Transition Questions Transitions questions link the introductory questions to the primary questions to be asked	1. Why did you choose oncology nursing? 2. What has being an oncology nurse been like for you?
Key Questions Key questions are mostly related to the RQ and purpose of the study	3. What professional experiences have you had that have changed your ways of practicing oncology nursing? 4. (If you are comfortable sharing) What personal experiences have you had that have changed your ways of practicing oncology nursing? 5. Consider a time when you felt frustrated or stressed in your role as an oncology nurse what strategies did you use to overcome or work through those feelings? 6. What advice would you give to nurses who are interested in oncology nursing?
Closing Questions	7. Before we conclude this interview, please add any additional information you believe important in order to understand better your personal experience of your role as an oncology nurse

Appendix B: Invitation Letter

Dear Nurse,

I am a PhD student at Walden University. If you are an oncology nurse with 1 year or more of inpatient experience, you are invited to participate in the study *The Lived Experience of Oncology Nurses: Why They Remain in the Specialty*. The purpose of this research study is to gain a meaningful understanding of the elements involved in the development of protective factors experienced by oncology nurses. As an oncology nurse you are in an ideal position to give valuable and firsthand information from your own perspective.

There is no compensation for participating in this research study. However, findings from this research will add valuable knowledge to the nursing profession and could lead to a greater understanding of resilience. Participation in this study involves two individual 60-minute interviews. Your participation is completely voluntary. Your responses and identity will be kept confidential. There are no consequences if you choose not to participate. Your choice to participate or not will not be shared with anyone. If you would like to participate, please suggest a day and time that suits you best, and I will do my best to accommodate. Please contact me via email [redacted] or mobile number [redacted].

Thank you for taking the time to read this email and for your anticipated participation. Thank you for your support.

Sincerely,

Alberto Sarmiento, MSN, RN, AGPCNP-BCS