

Resilience: Semi-Structured Interviews
with Oncology Nurses

by

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Abstract

Oncology nurses care for patients before, during, and after treatment. Relationships are built, and some patients do not survive. These nurses tend to be at a higher risk for burnout, compassion fatigue, job instability, unhealthy lifestyle choices, and depression. Compassion fatigue and burnout has been researched in nursing, showing that nurses who are more resilient, experience less compassion fatigue and burnout.

The purpose of this project is to explore the relationship between resilience and oncology nurses through semi-structured interviews and identify key themes discussed by participants.

Information gathered in this qualitative project was obtained using semi-structured interviews. The semi-structured interviews were guided by questions adapted from the four concepts of Polk's Theory of Resilience; dispositional pattern, relational pattern, situational pattern, and philosophical pattern. Interviews from fifteen to forty minutes in length conducted via Zoom were recorded, transcribed, and analyzed noting significant themes related to resilience. The sample for this project included oncology nurses who work with various organizations throughout the northeastern region of the United States.

Responses from oncology nurses aligned with prior studies on resilience in oncology nurses. Five major themes were established from the data. *Support* was a main theme found amongst the participants, key words participants used were: teamwork, co-workers, and family. *Self-Preservation* was the second theme found amongst participants, participants used the words: walls, withdraw, internalization, or self-care. The third theme found by interviewing participants was *Empathy*, participants used words such as empath, caring, compassionate, quality of life preservation. The fourth theme found among participants was *Humor*, they used the word communication as well. Several participants discussed the importance of having a sense of humor when dealing with cancer patients and often the difficult discussions surround death. The fifth theme of note found by interviewing participants is the *Perspective* that people develop over time, words used include life experience, maturity, perspective, passion, positivity. Over half of the participants discussed personal growth or development they acquired during their careers and lives.

Knowing what makes career oncology nurses resilient, may inform healthcare professionals, and prevent compassion fatigue, burnout, and staff turnover while helping promote provider well-being.

Keywords: *resilience, burnout, compassion fatigue, empathy, oncology nurse*

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Background/Statement of the Problem

Oncology nurses care for patients before, during, and after treatment. Relationships are built, and sadly, some patients do not survive. What drives Oncology nurses to continue? How are they able to continue caring for their patients, when time after time, they are forced to cope with the death of patients who have become like family? With increased resilience, nurses are able to cope with and overcome emotional hardships. What makes these oncology nurses resilient? The purpose of this project is to describe the relationship between resilience and oncology nurses through interviews and analysis of key themes identified by participants. The results of these interviews could help change oncology nursing for the better. By understanding what makes career oncology nurses resilient, healthcare organizations, teams and individual nurses can benefit from focused interventions that help others become resilient, and hopefully decreasing burnout, and compassion fatigue. Burnout and compassion fatigue have been studied in oncology nurses, with studies finding that nurses who experience burnout and compassion fatigue are at times, less effective caregivers, and can lead to poor outcomes for patients (Drury et al., 2014).

Each year, the number of people diagnosed with cancer climbs. People are living and dying of cancer in the home and in the hospital. There will be over 1.8 million new cases of cancer diagnosed in the United States in 2020 (National Institute of Health, 2020). These patients are faced with various treatment options, starting as soon as they are diagnosed, they often are faced with complex decisions regarding their cancer care. That means that 1.8 million new patients will have questions that need answers (American Cancer Society, 2020). Patients need support and guidance during their care

delivery no matter the setting. Nurses deliver oncology interventional care, as well as emotional support for patients and families (Kutlurkan, 2016).

Cancer has become a chronic illness in many instances. People are living longer with their diagnosis and treatments are evolving. However certain treatments for some cancers can put the patient at an increased risk for developing other types of cancers in the future, or late-term disabling cardiac effects. One example is the treatment of Non-Hodgkin Lymphoma, which uses various medication protocols in treatment, one in particular is doxorubicin (NCCN, 2020). This medication can help patients enter a complete remission; however, it can put them at a much greater risk of developing leukemia later in life as well as, cardiac abnormalities, dysfunction, and diminishing cardiac output, which in some instances can be irreversible (UpToDate, 2020). This requires patients to experience prolonged relationships with oncology nurses, during their initial diagnosis, any relapse of the disease, and in the event a secondary cancer develops. These patients may interact with the same oncology nurses for many years, which can be difficult for the oncology professionals over time.

Cancer care in the United States is delivered in a myriad of locations, and in every one of those locations patient's come in contact with oncology nurses. In the home setting, inpatient hospital units, outpatient oncology and infusion settings, radiation therapy centers, and surgical treatment centers: the oncology nurses are there to educate the patients. The prescribers write and discuss the regimen, but nursing takes on a different role. Many hospital organizations have specific oncology nurses who teach patients what to expect with treatment, prior to treatment, if they need any procedures done to safely receive chemotherapy, during treatment, and post chemotherapy, when the

patients are educated on what they can expect to happen to their bodies over the next several days and weeks following treatment. Much of the education given to patients comes from the Oncology Nursing Society (ONS). The ONS provides various resources for providers to educate patients including chemotherapy induced nausea and vomiting (CINV), information for caregivers, sexuality and cancer, and so many more topics (ONS, 2020).

In recent years, many nursing organizations have studied the topic of burnout within their membership. Burnout, described as emotional exhaustion and depersonalization, is a condition that mainly affects people who work in areas providing services to others (De La Fuente-Solana et al., 2017). The literature states that nurses with anxiety and depression are more at risk for developing burnout however, personality traits such as agreeableness, openness, and extraversion seem to protect nurses from burnout (De La Fuente-Solana, 2017). Burnout causes many nurses to leave the nursing profession and studies indicate that continued exposure to stress for extended periods of time can lead to burnout (Kutlurkan et al., 2016). Stress is not just a busy shift; it can be the constant bombardment of difficult emotional interactions. Patients experiencing noxious cancer side effects and dying on a very frequent basis can be traumatizing to many nurses (Kutlurkan et al., 2016).

Stress and burnout make it difficult for nurses caring for cancer patients. While many nursing organizations offer support or training programs that help to emotionally support nurses, including the Oncology Nursing Society (ONS) and the American Association for Critical Care Nurses (AACN), there is no standard support following stressful patient and family situations or emotional support (Stone, 2018). Some

individual hospital systems in the United States have developed programs to assist staff after stressful or traumatizing events (Stone, 2018). At a hospital system in Cleveland, Ohio, a crisis tool was developed and named *Code Lavender* (Stone, 2018). This tool can be used for staff debriefings after difficult situations arise. It involves debriefing and relaxation, and participants are encouraged to speak for 2 minutes each, following several prompts from the spiritual team spokesperson (Stone, 2018). Research shows that *Code Lavender* does not diminish rates of burnout or stress, but it is described as “psychological first aid” to help support staff or families after a traumatic event (Stone, 2018). If interventions like *Code Lavender* could be further studied and used throughout more hospital systems, one may see improvements in nurse burnout.

Many hospitals have emotional support lines or employee assistance programs. If an employee, nurse or any other staff, is having a difficult time, they can call a phone number and talk with a mental health professional, these professionals often refer the worker to local mental health providers if indicated. *Coastline EAP* is one of the companies used by local hospitals. On the *Coastline EAP* website, there are resources for staff (Coastline EAP, 2020). Information and articles are available on a variety of different topics; *self-esteem*, *keeping your spirit healthy*, *trauma response*, and *managers guide to grief* (Coastline EAP, 2020) are some of the many topics listed (Coastline EAP, 2020).

Different nursing organizations offer various ways to support their members. The *Oncology Nursing Society Rhode Island and Southeastern Massachusetts Chapter* conducts yearly retreats that provide different workshops that focus on the mental and spiritual well-being of oncology nurses. Having a specialty organization that support its

membership is highly important in oncology nursing, where burnout and compassion fatigue can be devastating for patients and oncology nurse caregivers (Kutlurkan et al., 2016). Overall, there is a gap in the literature on oncology nurse resilience and well-being.

Literature Review

A review of literature was completed using various databases: PubMed, CINAHL, Google Scholar, Medline, and Oncology Nursing Society article database. Key words used were: *Cancer, Nursing, Oncology Nursing, Resilience, Oncology Nursing Resilience, Oncology Nursing Burnout, Compassion Fatigue nursing, Compassion Fatigue Oncology Nursing*. Articles were selected based on relevance; older articles greater than 7 years were included if thought to be seminal articles on the study of resilience. All articles retrieved were in English.

According to the National Institutes of Health: National Cancer Institute, an estimated 1.8 million new cases of cancer will be diagnosed in the United States in 2020 (National Institute of Health, 2020). The estimated number of deaths for 2020 could reach 606,520 men and women combined. In 2016, 1,658,716 new cases of cancer were reported (Centers for Disease Control and Prevention: Statistics Working Group, 2019). Cancer is a disease defined by the rapid growth of cells in the body that divide without stopping and have the ability to spread to other areas of the body. In cancer care, or oncology, cancer can be divided into two groups; solid tumors, which are solid groups or masses of cancer tissue like breast cancer, or liquid tumors, blood cancers, like leukemia, that are found in the blood and bone marrow (UpToDate, 2020). In the United States, in 2020, there will be an estimated, 1,806,950 new cancer cases and 606,520 cancer deaths. Of these new cancer cases, 178,520 cases will be liquid tumors, like leukemias and lymphomas, and the remaining cases will be solid tumors like breast, lung, prostate, and colorectal. An estimated 606,520 cancer deaths will occur in 2020. (American Cancer Society, 2020).

Rhode Island Statistics

Of the greater than one million new cases of cancer nationally, 436 new cases of cancer were reported in Rhode Island and 156 deaths, all races, ethnicities, male, female, and all age groups included in the data extrapolation (Health and Human Services: Statistics Working Group, 2019). While these numbers do not seem exceptionally large when compared to deaths from other causes, each death causes a large impact and ripples through the lives of loved ones and caregivers of these patients. The two most common types of cancer per 100,000 people in Rhode Island in 2016 were female breast and prostate cancer (Health and Human Services: Statistics Working Group, 2019). These two types of cancer are also the most common new cancers nationally. The most deaths caused by cancer in 2016 in the United States are from lung and bronchial cancer and female breast cancer, Rhode Island also follows that trend. When a patient receives a cancer diagnosis, it can be life changing. This diagnosis can create feelings of depression, anxiety, and distress (American Cancer Society, 2020). It also involves mourning the loss of a previous life, of what “could have been”, and often changing of family dynamics (American Cancer Society, 2020). These patients can find solace in the support provided by oncology nurses during these times of anxiety and distress, and can help demystify the imminent future.

Cancer Treatment

Cancer treatment is based on the type of cancer detected and now, more frequently tailored to a patient’s genetic markers (Capalbo et al., 2019). Genetic markers are used to look for gene mutations (American Cancer Society, 2017). These mutations are categorized as either inherent, passed down genetically or acquired, like changes to

DNA based on exposure to the sun and substances such as tobacco (American Cancer Society, 2017). Genetic testing should be offered to many different types of patients. People with a strong family history of cancer, family members with cancer at a young age, a family member with multiple different cancers, and certain ethnicities are some of the types of people who benefit from genetic marker testing (American Cancer Society, 2017). There are home based genetic tests which are more of a screening tool, and professional tests with genetic counselors to determine your risk of cancer (American Cancer Society, 2017). These tests can be very useful in determining which treatments would be most beneficial for the patient. Over the years, the treatment options have progressed. The times of chemotherapy and radiotherapy alone are being left behind and new novel targeted treatments are coming to the forefront of cancer treatments like precision medicine, targeted therapy, and immunotherapy. Nurses, nurse navigators, and social workers generally are a source of information for the financial assistance for these medications. There are many assistance programs available, and the oncology team helps patients navigate this difficult system (American Cancer Society, 2019)

There are various treatment options available depending on the patient's diagnosis, including oral chemotherapy or intravenous chemotherapy, surgery, radiotherapy or radiation therapy, immunotherapy, hormone therapy, targeted therapy, and stem cell transplant (National Institute of Health, 2020). Chemotherapy can be given by various routes depending on the type of cancer being treated. Oncology nurses educate patients on treatment options and give patients the tools and information they need to make informed decisions (Martinez, 2015).

Oncology nurses help manage side effects of patient's chemotherapy. Patients do not come to infusion centers or hospitals for medications and leave. There are side effects to medications, nausea, vomiting, diarrhea, hair loss, infection, mood changes, and countless other side effects to manage. The nurse is there to advocate for the patient, assist in obtaining orders for medications, administering medications, and following up on the effect of the medication. The patient sees the oncologist for a few minutes during the day if hospitalized, and depending on the type of chemotherapy the patient is getting in the outpatient setting, they could be seen by a provider as little as once monthly. Meaning that the patient's lifeline to symptom management can be greatly impacted by the oncology nurse. Many patients worry greatly about the potential side effects, which in many cases can be dose limiting, or can end up stopping the treatment depending on the severity of the side effects, this is why it is so important for the patient to trust the nurse and come to the nurse with questions or concerns (Griffiths & Pascoe, 2014).

Oncology Nurses

Chemotherapy in a hospital or clinical setting cannot be administered by all registered nurses. The nurse who administers chemotherapy in the United States must hold a chemotherapy and immunotherapy certificate (Oncology Nursing Society, 2020). The certificate ensures that the chemotherapy is being given safely by a competent nurse who has had a rigorous 15-hour chemotherapy and immunotherapy course. While other courses are available for nurses who are not giving chemotherapy that frequently, this course offered by the Oncology Nursing Society provides the background information, pharmacology, and pathophysiology a nurse administering chemotherapy requires to manage these patients. The course also includes information on possible side effect and

drug reactions, testing, drug administration, and key laboratory values to evaluate. This information is essential for nurses to educate patients. These nurses are generally called oncology nurses. Oncology nurses are “nurses who specialize in treating and caring for patients who have cancer (NIH, 2020)”, they can work at the bedside, in the inpatient setting of a hospital or medical center, or they can work in the outpatient setting, in a cancer center or other satellite office. Chemotherapy can also be given in the home setting as oral medications or small pumps with concentrated chemotherapy doses scheduled to be given over a course of several days (ONS, 2020). While these roles are incredibly different, they are equally important in helping provide the best care for patients and families.

Oncology nurses are vital in helping support and reassure the patient, answer questions, and manage acute cancer symptoms. For these nurses to continue to work with this group of patients, they must be resilient. When a person makes the transition from worker, spouse, friend, or parent, and finds themselves as a patient, they often find their world change in an instant. The oncology nurse fills the unique position, being there to assist with the new aspect of their lives. Oncology nurses have special training with chemotherapy medications and immunotherapy medications, but they often find themselves assisting in the psychosocial aspects of patients’ lives. By supporting patients’ medical and psychosocial needs, medication administration, psychological support, and linking up with the social work and case manager, oncology nurses find themselves building meaningful relationships with patients (ONS, 2020).

Compassion Fatigue

Relationships built with patients can be wonderful and fulfilling, but they can also be emotionally draining when patients do not do well. Compassion fatigue is when nurses do not experience the same compassionate feelings towards caring for patients, it can be described as feeling more emotionally exhausted, depersonalization, and being unable to care for patients effectively (Drury et al., 2014). Symptoms of compassion fatigue can include sadness, depression, anxiety, flashbacks, cynicism and poor self-esteem. Drury and colleagues found that compassion fatigue is known to lead to unsafe environments for patients as some nurses are not as involved with their patients care and moving toward burnout. Compassion fatigue has been found to “reduce productivity, increase staff turnover and sick days, and lead to job dissatisfaction (Drury et al., 2014).”

Burnout Among Oncology Nurses

Supporting the mental health of nurses is important, which has led to research on resilience and burnout among nurses working in oncology. Kutlukturkan, Sozeri, Uysal, & Bay (2016) examined resilience and burnout rates among oncology nurses. Research has shown that continued exposure to stress for extended periods of time can lead to burnout (Kutlukturkan et al., 2016). Burnout is a condition that mainly affects people who work in areas providing services to others (De la Fuente-Solana et al., 2017). Maslach and Jackson (1980), the authors of one of the most well used burnout measurements, The Maslach Burnout Inventory, a psychological assessment of twenty-two symptoms pertaining to burnout, defined burnout in three stages, depersonalization, emotional exhaustion, and low personal accomplishment (Maslach and Jackson (1980), as cited in, De la Fuente-Solana et al., 2017). There are many factors that can attribute to burnout and stress among oncology nurses; insufficient supplies (vitals machines, IV pumps, and

poles), inadequate staffing, extensive chemotherapy regimens, and occupational safety related to chemotherapy exposure and administration logistics. Burnout manifests as emotional exhaustion, where depersonalization can occur, and nurses seem cold, aloof, and disinterested in patients (Kutluturkan et al., 2016). These nurses then attempt to push themselves away from the emotions of patients because it becomes too psychologically exhausting.

Burnout has been shown, to have negative effects on a person's wellbeing including emotional, physical, or mental health (Kutluturkan et al., 2016; De la Fuente Solano et al., 2017; Gilman, 2015). Researchers have examined the concept of resilience, and the effect on reduction of burnout in oncology nursing staff (Kutluturkan et al., 2016). Increasing resilience allows the nurse to cope with barriers and negative situations, and in turn increase their inner strength. By enhancing resilience adaptation, less burnout can likely be experienced (Kutluturkan et al., 2016).

Many organizations, like the American Nurses Association, Oncology Nursing Society, and Sigma Theta Tau International Nursing Society have conducted studies and published information on the importance of protecting the psychological health of nurses (ONS, 2020). Studies have shown that working in high stress, fast-paced environments, by less experienced nursing professionals leads to higher rates of staff turnover, job dissatisfaction, and ultimately leaving the nursing profession (Kutluturkan et al., 2016). However, when surveying hospitals in general, one finds numerous career-long, bed-side nurses who continue to work in oncology. It remains unclear how some nurses are able to continue to work in the high stress, emotionally, and psychologically demanding environments day in and day out and some cannot. The work nurses perform can be very

stressful. Gillman (2015) found that nurses who worked more overtime, night shifts, and working in the inpatient rather than outpatient setting all seemed to correlate with lower levels of job satisfaction, and in some cases impacting the mental health and happiness of nurses (Gillman, 2015). By having support from the management, colleagues one can go to in times of stress, and education on coping mechanisms for stressful situations at work, help nurses experience a more balanced life (Gillman, 2015).

Resilience

The word resilience is derived from the Latin word *resiliere* meaning to “spring back” (Dictionary.com, 2020). Like a rubber band, stretching but not breaking, returning to its original form, the concept of resilience can be applied to people, not just objects. Giordiano (1997) discusses personal characteristics associated with resilience. These qualities include: self-confidence, resourcefulness, curiosity, self-discipline, level-headedness and flexibility paired with problem-solving ability and emotional stamina. The ability to adapt and change are key qualities of a resilient individual (Oksuz, 2018). By possessing some or all these qualities, these individuals could have lower levels of burnout and potentially higher levels of resilience.

Over the last twenty years, the concept of resilience has been examined in the literature. Resilience was initially described as a personality trait, resilience is now known to be something that can be reinforced and grown, as well as depleted (Kutlurkan et al., 2016). Kutlurkan et al. found the more experience the oncology nurses had, the higher they rated their job satisfaction and autonomy as a professional nurse. Oncology nurses must adapt to provide the best care possible to patients. In a study by Kutlurkan et al., (2016) researchers found that many newer nurses, defined as nurses

with less than ten years working with oncology patients, reported higher stress levels than those working eleven years or more. Kutlurkan and colleagues found that many of the newer nurses do not have fully developed coping skills, like behaviors, thoughts, or emotions that are used to adjust to the changes in life, these skills can be humor, relaxation, physical recreation, and venting (Kutlurkan et al., 2016). Without these coping skills, nurses can potentially develop compassion fatigue and burnout faster. Kutlurkan found that resilience plays a major role in the longevity of many oncology nursing professionals (2016).

Resilience has been described metaphorically as “a tree which bends but does not break” (Koh et al., 2020). Being able to adapt and bounce back in the face of trauma is key to resilience (Koh et al., 2020). This group of researchers also found collective resilience to be particularly important. Some of the participants describe working as a team and that the team is always stronger than the individual. The researchers found that this ‘team mindset’ helped foster resilience and grew bonds between the workers. Workers learn from each other and help each other become more resilient providers (Koh et al., 2020). To be resilient providers the participants of the study had to know when to take care of themselves. One participant describing it as, “if you’re empty, what can you give to your patients, there must be time taken to recharge” (Koh et al., 2020, p.105). Recharging is critical when caring for terminally ill patients. The researchers found that struggling, changing mindset, adapting, and resilience create the four points of the model for transformational growth (Koh et al., 2020).

Researchers discuss adaptation when describing resilience. Resilience being a dynamic interaction between stress and adaption (Luthar, 1991). However, one does not

just adapt. There must be a catalyst: adversity. Adversity can be stress that nurses face daily, in oncology nurses face the death and dying of patients frequently, but other risks include long working hours, increased patient acuity, work-life imbalances, and the economic climate (Black, 2020). Adversity is met with problem solving, which is an essential strategy for the survival of the individual (Jackson et al., 2007).

After an extensive review of literature at the time of the completion of this paper, and using various search databases, there is a gap in the literature describing the experience of oncology nurses. Interviews with oncology nurses completed for this major project can fill that gap in knowledge, and more fully understanding resilience and oncology nursing.

Theoretical Framework

The Theory of Resilience is being used for this major project describing resilience in oncology nurses. There are several theorists that discuss resilience, this project focuses on the Theory of Resilience developed by Laura Polk (1997). This theory will be used to further explain the resilience of oncology nurses.

Polk's theory of resilience has four major concepts; dispositional pattern, relational pattern, situational pattern, and philosophical pattern (Polk, 1997). Dispositional pattern is described by Polk as physical and ego-related psychosocial attributes that contribute to the manifestation of resilience (Polk, 1997). Polk refers to psychosocial attributes such as self-worth and personal competence. The physical characteristics referred to in this theory are intrinsic and genetic factors that include intelligence, health, and temperament (Polk, 1997). The relational pattern refers to roles and relationships that influence resilience (Polk, 1997). By cultivating relationships, one can look to positive role models, and seek out assistance. The third concept discussed is situational pattern. Much like the theory derived from Lazarus and Folkman on resilience, the situational pattern is that successful coping from the stressful stimuli allows adaptation, "the capacity of a person to survive and flourish" (Lazarus & Folkman, 1984, p. 182). Perceived stress, coping, and reappraisal are key to adaptation. Once the individual processes the incoming stress, coping can occur, and there can be an adjustment to the perceived stress, where it is then re-appraised. Finally, the fourth concept of Polk's Theory of Resilience is philosophical pattern. The philosophical pattern is driven by personal beliefs, self-esteem and knowing the value of oneself is an important aspect of resilience (Polk, 1997). Using this construct, there is a realization

that each person has a special, extraordinary path in life and one must maintain a balanced perspective in order to flourish (Polk, 1997).

With the four concepts of dispositional, relational, situational, and psychosocial patterns being the backbone of the theory, Polk further pulls in principles from Rogers (1970) and Neuman's (1978) theories and further develops the theory of resilience. Discussing energy fields, openness, pattern, and pan dimensionality as fundamental to the Nursing Model of Resilience (Polk, 1997). This theory links the emotional, psychological, physical, and the spiritual, which is what seemingly makes people resilient. Polk often references nursing theorists Newman and Rogers in her work.

Polk created a visual model for the Theory of Resilience (Appendix A). Polk's Theory of Resilience applies to oncology nurse's resilience, because if one can determine what drives resilience, one may be able to create an environment that fosters growth and further support oncology nurses. If nurses can adequately and appropriately cope with stress, they may be less likely to burnout and experience less compassion fatigue. Therefore, the more resilient the individual, the more time they might remain in oncology nursing.

The work done by Polk is relevant socially and cross-culturally. Everyone faces stress in their lives in one way or another, and people have different experiences with that stress. The four concepts help to understand resilience from the nursing viewpoint. Further exploration of resilience in oncology nurses may provide knowledge to support oncology nurses and may be used to help create and foster resilience interprofessionally. By personally understanding resilience, it can be used to center and balance oneself and realize when changes must be made in order to survive and thrive.

Method

Semi-structured interview techniques were used to explore the experiences of oncology nurses in relation to how they describe resilience. A purposive sampling technique was used to garner participants for this study. By using purposive sampling, we began with volunteers that arose through snowballing techniques, selecting participants in this manner was most beneficial to the study, and allowed for screening of participants early using inclusion and exclusion criteria specified below.

The sample for this project included oncology nurses who are members of the Rhode Island and Southeastern Massachusetts chapter of the Oncology Nursing Society (ONS). These oncology nurses work in various inpatient and outpatient settings throughout Rhode Island and Southeastern Massachusetts. Nurses were notified by the local chapter via an email from the chapter president. In the initial email, nurses were provided a description of the study and student contact information if any questions arose prior to consent and scheduling of the qualitative interview. The email included the informed consent (Appendix B) so participants had adequate time to review prior to the scheduled interview. Interview questions (Appendix C) were sent to participants in advance to review prior to the scheduled interview.

Inclusion Criteria

Nurses who currently work with oncology patients with at least eighteen months of experience in the inpatient or outpatient oncology setting were included in this study. The nurses must be working with patients frequently, administering the chemotherapy to these patients or if not currently administering, familiar with chemotherapy regimens and protocols. Nurses were not excluded if they were not board-certified oncology nurses.

Exclusion criteria

Traveling nurses, float pool nurses, nurses who are training, nurses with less than eighteen months of experience, and all other oncology staff that are not registered nurses were excluded. Nurses who are not current members of the Rhode Island and Southeastern Massachusetts chapter of the Oncology Nursing Society were excluded from the study.

Sampling Method

The sampling method used was purposive sampling. Purposive sampling is when the participant population is selected using a specific group, in this project the RI and SE Massachusetts chapter of the Oncology Nursing Society (ONS) membership will be used as the purposive sampling group (Polit, 2017). The signed letter of approval from the Oncology Nursing Society Rhode Island and Southeastern Massachusetts Chapter is included in Appendix D. A welcome email (Appendix E) was sent to the membership via their email registered through the Oncology Nursing Society. The email discussed the interview process and include contact information for this project. A notification on the Rhode Island and Southeastern Massachusetts Oncology Nursing Society social media group was sent to see if any nurses would be interested in participating.

Data Collection

The volunteer oncology nurses were interviewed via the remote teleconferencing platform, Zoom. Recent world events, such as the novel coronavirus outbreak and the infectious disease COVID-19 has mandated that the interviews be conducted as virtual interviews, online scheduling and electronic communications with potential participants. The interviews consisted of thirty to forty-minute discussions. The interviews took place

in a private location, in a quiet space in their homes uninterrupted and focused on the interview. Interviews were scheduled via Zoom with links being sent to participants. The interviews were not conducted at participants workplace, thus reducing the risk of distraction, interruption, and to be sure this study was not impacting the care of patients. Interviews were recorded, as described in the informed consent and IRB approval, which was also discussed and confirmed with participants on the interview day prior to the start of recording.

The style of the interview was semi-structured in nature. This semi-structured interview was designed with questions created from the four constructs developed by Polk and using interviewing methods described by Rubin & Rubin (Appendix F). These questions served as an outline for the interview so the participants could discuss resilience. Using a digital recorder, the interviews were recorded and transcribed. The digital recorder interview was transferred to a password protected computer after each interview, the digital recording on the bio-metric and password protected handheld device was be deleted. The transcription was reviewed for clarity and accuracy. The electronic data was stored on a password protected USB that was kept in a locked file cabinet in this writer's office. The written notes were also kept in this writer's locked file cabinet, in the locked office, in this writers' home, that other individuals do not have access.

Being an oncology nurse and having connections in the oncology community in Rhode Island and Southeastern Massachusetts, it is important to discuss any potential unintentional bias that could surface during the interview. Rubin and Rubin's qualitative interviewing techniques was used to structure this interview (Rubin, 2005). Rubin and Rubin extensively discuss conversational partnerships. This interviewer planned to

become comfortable with the interviewee prior to starting the interview by establishing a rapport and learning something about the interviewee (Rubin, 2005). Interviewing can be taxing emotionally and psychologically, therefore, interviews were not scheduled close together to create a mental separation and allow interviewer time to gather the information and process while allowing time for de-briefing and re-centering. The interviewer asked every interviewee the same questions and checked for potential bias prior to interview, constantly reminding oneself that, these interviews are being conducted on a purely educational basis, and no answers given by any of the participants will affect their relationship, nor will anything be reported to their employers. Also, by taking brief field notes during the interview, one can cross check the recorded interview with any non-verbal cues that the interviewee may be presenting. Field notes were also jotted down after the interviews to debrief and note anything important or vital as to increase the credibility of the interviews. These semi-structured interview questions were peer reviewed by two local oncology nurses. Data was analyzed in regard to the questions created for these interviews and any additional discussions related to resilience.

These interviews, being reflective in nature, could potentially elicit a strong emotional response from participants. Prior to the commencement of the interviews, nurses were advised that they can stop the interview at any point if they feel uncomfortable or if they do not wish to discuss certain aspects of their personal or professional lives. Nurses were encouraged to use their employer assistance program if needed, or to reach out to family and friends for support, if feelings arise that they would like to discuss further. Nurses participating in this project, who have entered the study

after reviewing the consent, were not compensated for, nor was there payment made to the student researcher or Rhode Island College.

The project was submitted to the RIC IRB and approved in October 2020, interviews commenced from October to November 2020, which allowed time for transcription. The interview transcriptions were examined for common themes among the interviewees. Findings were shared via an electronic poster presentation at RIC in the December 2020.

Timeline	Goal
October 2020	Submitted to IRB
October 2020	Interviews
November 2020	Interviews/Transcribed
November 2020	Synthesized data, Themes
December 2020	Initial Write-Up
January 2021	Corrections
January 2021	Corrections
February-April 2021	Corrections Second Reader
April 2021	Final Submission

Each interview began with the collection of demographic data. The demographic data collected from participants can be found from participants in the table below (Table 1: Demographic Data). The majority of nurses (N=6) were 51-60 years old. Nurses in this study had (N=10) between 5 and 20 years of Oncology Nursing experience, with no nurses having less than 5 years of experience participating in this study. In this cohort of

oncology nurses (N=6) were in relationships. Eight out of ten (N=8) oncology nurses in this study also had children. The majority of participants in this study also had pets (N=7). Religious affiliation was noted in six (N=6) of the participants, and finally formal exercise program was endorsed by half of the participants (N=5) (during these interviews the gyms in Rhode Island were greatly affected by the COVID-19 pandemic and shut down several times, therefore many in the interviews said they were not currently doing formal exercise, however normally they do when their local gym is open).

Table 1: Demographic Data

Demographic Data N=10	
Age Range	Number of Nurses
20-30	2
31-40	
41-50	2
51-60	6
61+	
Years as Oncology Nurse	
1-5	
5-10	4
10-20	4
20+	2
Relationship Status	
With Partner	6

Without Partner	4
Children	
Yes	8
No	2
Pets	
Yes	7
No	3
Religious Affiliation	
Yes	6
No	4
Formal Exercise	
Yes	5
No	5

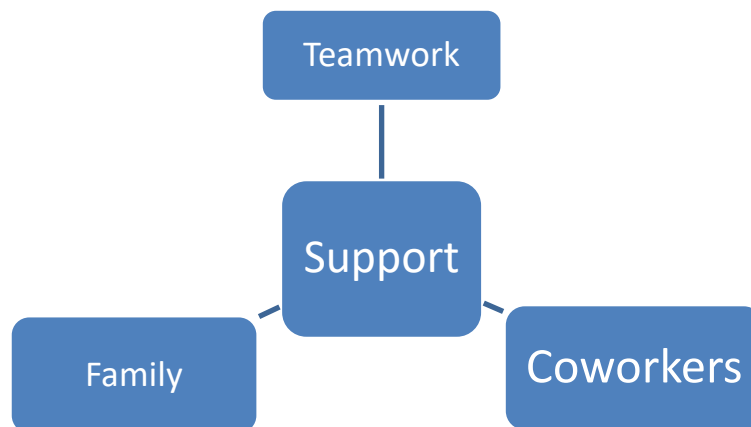
Results

Interviews were conducted with ten Oncology nurses over Zoom. Study participants were provided the questions to the interview in advance to allow time to reflect and prepare to provide their most thoughtful answers. After reviewing the interviews, coding was done to categorize the themes. Main themes identified as support, self-preservation, empathy, humor, and perspective that people develop over time. Field notes were jotted down during the Zoom interviews with each participant to further inform the analysis of the interviews. Supportive quotations from participants are found under each theme, as well as a diagram describing the possible relationship between the themes and subthemes. Participants are not identified but coded using an alphanumeric combination.

Major theme: Support

Support had key phrases from the participants such as teamwork, co-workers, and family as sub-themes. Participants who used key words such as teamwork, co-workers, or family, were coded as the main theme of support. The following includes a thematic diagram and table of supporting phrases and quotations from participants.

Throughout the interviews, ‘coworkers’ rose above the rest as the main phrase of support the nurses discussed. Over half of the interviewees discuss how having supportive nursing colleagues helps get them through a difficult day, which is consistent with previous resilience research.

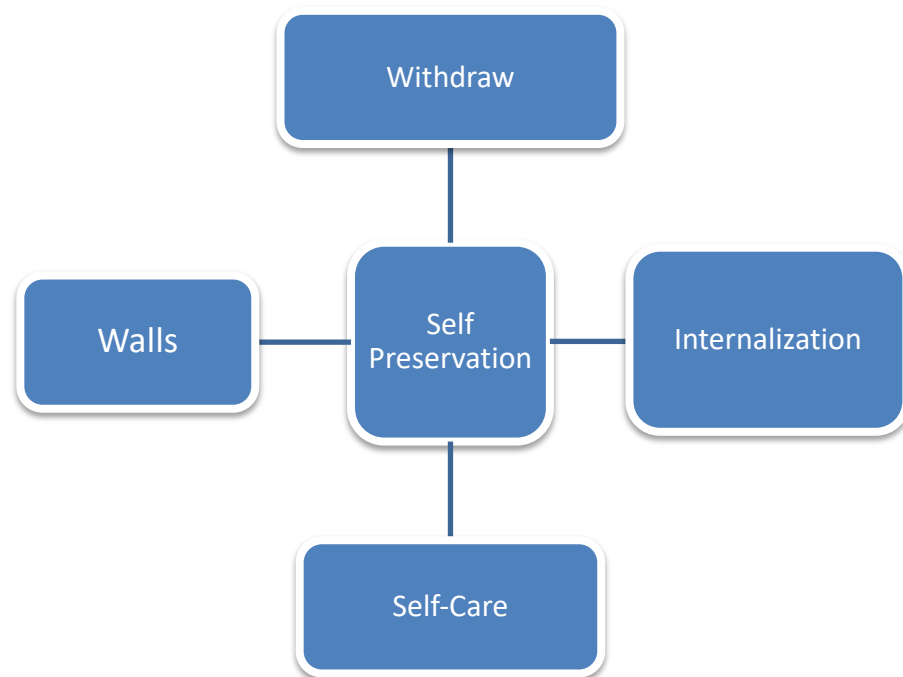


SUPPORT	
Participant	Quote
I12020	<i>[what gets you through a hard day?] “Probably co-workers the most...someone who understands the situation completely”</i>
I52020	<i>“Definitely co-workers, yeah, there a good sounding board. It’s just good to have that extra support when something’s going wrong”</i>
I82020	<i>“Having good peer support too, you know, my sister nurses”</i>
I42020	<i>“At the end of the day, being able to lean on coworkers when you’re having that really hard day, to just kind of [like] talk it out and kind of de-stress from the day”</i>
I22020	<i>“Knowing that my colleagues have my back when I need it.”</i>

Major theme: Self-Preservation

The second major theme discovered from interviews with oncology nurses was self-preservation. Interviews had key phrases from the participants like withdraw, walls, internalization, and self-care, which were coded as the main theme of support. The

following includes a thematic diagram and table of supporting phrases and quotations from participants. The nurses talked about self-preservation differently. Some discussed things they do, like aromatherapy to relax and recharge. Others talked about how they have walls built up to protect themselves.

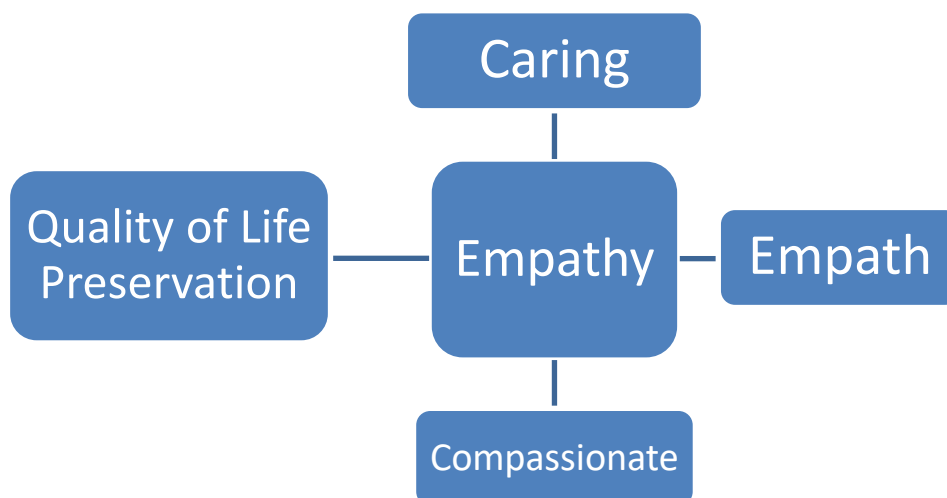


Self-Preservation	
Participant	Quote
I102020	<i>“You kind of have to have those walls, you have to have that element of self-preservation. You can’t. You have to know when you have to disconnect”.</i>
I92020	<i>“I tend to internalize and just really focus on the next task to get through the day”.</i>
I12020	<i>“I feel like I have a little wall, I would say, but you know, every once and a while there’s certain patients that, they breach that wall, and it’s...not a conscious decision, it’s not like ok I think you are particularly special...I can feel my emotions strongly for a...select situation”.</i>
I22020	<i>“I find I have to compartmentalize to a certain extent...so I’m able to be 100% when I’m here. But when I’m home, I can talk about it a little bit, but then I put it aside and I have to live my life outside of the hospital. You know, I love what I do, but that’s not my life, it can’t be.”</i>
I42020	<i>“When I feel stressed, I take a hot shower and I use aromatherapy and essential oils and try to relax, and I do a lot of breathing exercises and meditate...I need to take that time to relax and care about myself”.</i>

Major theme: Empathy

The third theme found from interviews with oncology nurses was empathy. The nurses used words like caring, quality of life preservation, empath, and compassionate, which were coded into the theme of empathy. The following includes a thematic diagram and table of supporting phrases and quotations from the participants.

Most of the participants discussed empathy in some way. It was interesting to see that from nurses with 6 years to more than 20 years of experience generally have a common conception of empathy. They talked about supporting the soul of the patient and the fragility of life. These are complex conversations to have with patients, especially when the oncology nurse starts to build the relationship with the patient. The nurses also discussed having extra empathy because of their own battles throughout their life's journey, and how they have become who they are today from working through those trying times.



Empathy	
Participant	Quote
I72020	<i>“I think we all have this, a certain compassion that other nurses don’t have”.</i>
I52020	<i>“Kind of support their soul, in a way, like they try to help them find meaning in whatever they’re going through, whether it’s suffering, whether they just don’t have much time left, or if they just want to figure out how they want to spend the rest of their time”.</i>
I42020	<i>“I think oncology nurses have an extra level of caring, because they know how fragile life is. It’s so sad. But this is how I think of it, it’s all in your mindset and how you perceive it, but I gave them another Christmas. They got to walk their daughter down the aisle. They saw the birth of their third grandchild, or their first grandchild, or they saw their kid’s birthday...I’m giving them quality of life too...I want to give them the best amount of time for as long as they can ...knowing they’re getting those moments because I’m helping them, it just makes me feel so good (I42020)”.</i>

Major theme: Humor

The fourth theme found from the interviews with oncology nurses was empathy.

The nurses used words like humor and communication, which were coded into the theme

of humor. The following includes a thematic diagram and table of supporting phrases and quotations from the participants.

Humor tended to be a common theme among several participants, which also aligns with resilience research on oncology nurses. One nurse talked about how you must be able to know almost instantly when you walk into a room what that patient needs for the day. Does the patient need to sit and have a tearful release, or do they need some hearty jokes and a really cleansing laugh? Using verbal and non-verbal cues, the oncology nurse becomes an expert in communication.

Communication is key in oncology nursing. Working in any high stress career, it is essential to have good listening and communication skills. Some of the nurses discussed how humor helped get them, and their patients, through difficult days by laughing together. The oncology nurse learns quickly about the importance of clear communication, and in high stress situations, patients can dissect every word, and one must choose their words carefully and clearly. Joking, laughing, sarcasm, helps people connect and bond over something.



Humor



Communication

Humor and Communication	
Participant	Quote
I52020	<i>“I found more and more a sense of humor. I think there’s a lot of big senses of humor in oncology...people really do have that trait, whether it’s [like the] overt or covert about it”.</i>
I102020	<i>“I think oncology nurses are special in the fact that they can read their patients moves a little bit. And so if they need a little bit of humor in their day they’re able to help them with that if they need just some emotional support and someone just to hear them, they can pick that up in their patients moves the way they act, the way they talk, they know when to lighten the mood and when to just be somber with them...we have the gift of being able to say, hey this guy needs me to joke, or just wants to cry. And I’m just going to sit with them while they cry. You can figure that out, you can tune into their emotions”.</i>
I82020	<i>“I try to listen, I try to listen, I try to teach, I think it helps me because I try to just be down to earth with them, you know, I’m not going to sugarcoat things for them and I try to be a realist...I let them cry, you know, their families don’t want them to cry, you know, families want them to be happy and upbeat all the time. Like you don’t need to be, you don’t have to be”.</i>

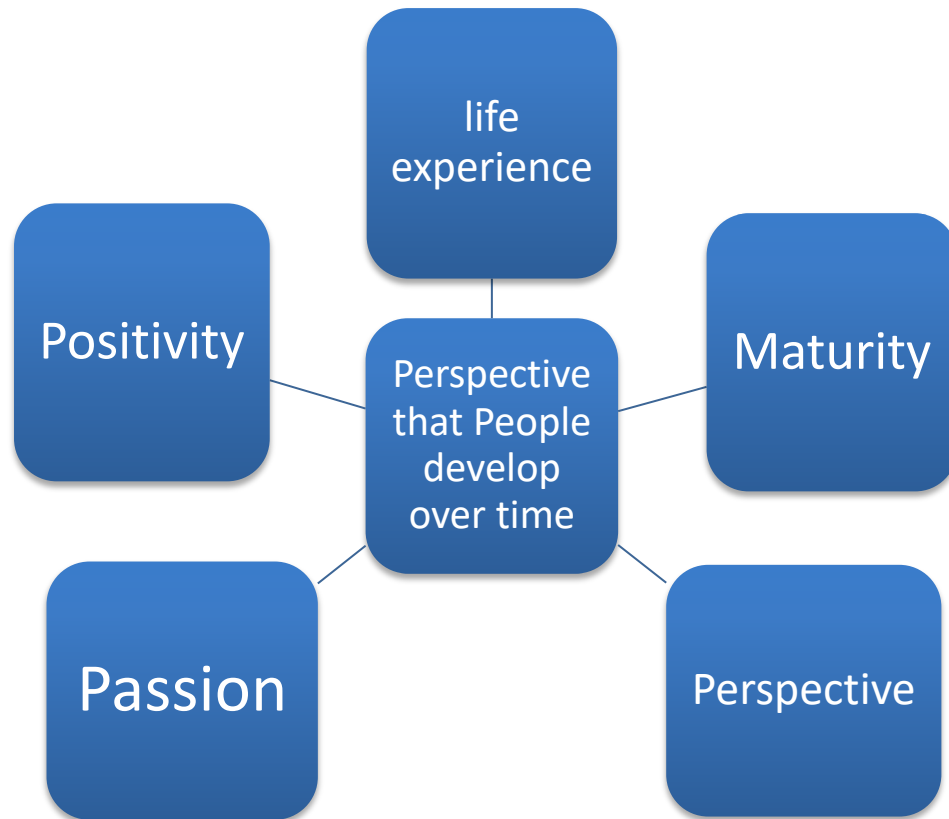
I82020	<p><i>“[responding to a question on thinking of a nurse who you consider resilient] So I think the person that I’m thinking of, she also employs like inappropriate humor and sarcasm”.</i></p>
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Major theme: Perspective that people develop over time

The final major theme discussed by participants was perspective that people develop over time. The nurses used words like life experience, maturity, perspective, positivity, and passion. The following includes a thematic diagram and table of supporting phrases and quotations from the participants.

This participant (I12020) discussed that having lived more, having more life experience, she believed is helpful in fostering resilience. Positivity was noted to be a key sub-theme discussed by participants. Oncology nurses that have a positive outlook tended to be more resilient, which coincides with previous research on resilience. This interviewee (I62020) talked about her own personal struggles and during the interview discussed how she stayed as a career oncology nurse because the patients need her and it was healing for her to help them.

Perspective that people develop over time was found to be a key theme throughout the interviews. Participants used words like life-experience, maturity, perspective, passion, and positivity. It was interesting to note that over half of the participants talked about this personal growth in some way. It seems to make life more manageable for the nurses that are having difficult days to picture the glass as half full.



Perspective that People develop over time	
Participant	Quote
I12020	<i>“a little more life experience, a little bit further down the road, a little less drama in other parts of your life, it’s probably helpful”.</i>
I32020	<i>“To know that there is light at the end of the tunnel and the sun will shine again and just keep doing what you’re doing because it is making a difference, even if at times it doesn’t feel like it is”.</i>
I22020	<i>“Volunteering, and my floor was the oncology floor...and I always loved it. I always felt like a kinship with the patients”.</i>
I22020	<i>“And then I got married and had kids, but once I finally settled, I was like oh I feel comfortable. I feel good with my skills and all that other stuff. I was like, you know what I really think I would be good at oncology”.</i>
I62020	<i>“What was appealing to me? Well, my experience with my grandmother with breast cancer was my driving force to go into a helping profession”.</i>

Several nurses talked about humor. Humor helps relieve the tension between staff and can help patients feel more at ease. It can make a difficult situation more manageable if staff can laugh together. Many of the nurses interviewed work together at a local institution, team bonding and team-building (pre-COVID-19 pandemic) were very important. When working together they had dinner outings, escape rooms, dog walks at

local parks, holiday parties and so many other group activities. Allowing staff time to bond and get together can help de-stress and foster team building (Koh et al., 2020). The local chapter of the Oncology Nursing Society usually has several events per year to help local oncology nurses' bond and de-stress with various presentations and interactive groups.

Throughout the interview there was another important theme identified by one of the participants. One participant discussed the passion for patient care. She talked about her passion "It's my passion for my career and my patients (I62020)", that was the response to what gets her through a hard day. "Because we get to be part of this journey with them, and they let us into this very like difficult but amazing part of their lives too at the same time, especially end of life, like it really makes us so we're that person for them, and makes us special to them, but they're also special to me because I learn so much from them...It's a privilege and an honor to be allowed to come into that (I62020)". While this did not categorize as a main theme, I believe that if focus group interviewing was done for this group of participants, one may find more main themes and more that links the nurses together.

Summary and Conclusions

It can be immensely difficult to be a nurse, and for oncology nurses there are many challenges. Throughout the interviews, this population reported that resilience can be built and strengthened, and these nurses are supported in many aspects of their lives. Losing a patient is difficult, hundreds of thousands of patients die every year, over 600,000. Being an oncology nurse can be difficult, those difficult situations can lead to burnout and compassion fatigue, contributing to workforce and organizational vulnerabilities. Although many nurses leave oncology before the first 12 months, others stay for decades serving this population. What drives Oncology nurses to continue? What makes these oncology nurses resilient? These nurses form therapeutic relationships supporting patients and families and it is important to find ways to support oncology nurses so they can continue to provide compassionate care to their patients. Literature shows that nurses with family support, co-worker support, and longevity working as an oncology nurse, tend to be more resilient (Kutluturkan et al., 2016). Resilience is the ability to return, day after day, to continue to provide the best care possible for these patients, like the rubber band that stretches, but does not break, and returns to center, these nurses continue on.

Throughout the interviews, it seems that participants reported having walls or a means of self-preservation was key in the longevity of career oncology nurses. Protecting oneself psychologically and emotionally does not mean the nurse is not giving “their all” to help their patients, it means that there is a division between work and home life or patient and self, and that helps them care for patients and provide a safe space for the nurses to recharge.

Many of the nurses had personal experiences or assisted loved ones, or grew their families, or just had a positive outlook on life, these experiences tended to be key features described in regards to resilience, which also aligns with previous research on resilience in this population (Kutlurkan et al., 2016).

This qualitative study intended to describe the relationship between resilience and oncology nurses. An extensive literature review was conducted using online databases. Topics reviewed included resilience, burnout, compassion-fatigue. A gap in the literature was identified in the areas of resilience in oncology nursing. Polk's Theory of Resilience (1996) was used to guide this study. Polk's theory categorizes resilience into four major concepts, dispositional pattern, situational pattern, relational pattern, and philosophical pattern.

Ten oncology nurses participated in the interview process. Interviews lasted from 15-40 minutes based on the responses of the participants. Data were organized and coded by question and individual participant. Key words were grouped under common themes, highlighted, and synthesized with similarly coded responses.

Five major themes were established from the data. *Support* was a main theme identified by the participants, key words participants used were: teamwork, co-workers, and family. *Self-Preservation* was the second theme found amongst participants, participants used the words: walls, withdraw, internalization, or self-care. The third theme found by interviewing participants was *empathy*, patients used words such as empath, caring, compassionate, quality of life preservation. The fourth theme found among participants was *humor*, they used the word communication as well. Several

participants discussed the importance of having a sense of humor when dealing with cancer patients and often the difficult discussions surround death. The fifth theme is the *perspective* that people develop over time, words used were life experience, maturity, perspective, passion, positivity. Over half of the participants discussed personal growth or development they have had during their careers and lives.

Demographic and background data, such as age, years as an oncology nurse, relationship status, religious affiliation, with or without children, with or without pets, and formal exercise program, extrapolated tended to align with previous studies on resilience in nursing. Previous studies collected background data, and found nurses that were older, had longer oncology careers, and children, tended to be more resilient (Kutlurkan et al., 2016). Self-preservation, could be coupled with having pets and formal exercise program, was also found in the more resilient nurses (Black, 2020).

The themes found through this research aligned with four major concepts of Polk's theory, and the themes and sub-themes found coincide with previous research on oncology nurses, with empathy, life experience, humor, and self-preservation being the most common responses (Kutlurkan et al., (2016). Oncology nurses use various methods of self-care to help retain and reinforce their resilience (deep breathing, taking breaks, aromatherapy, family support, humor, passion for patient care).

Throughout the interview process, these key themes were mentioned by most participants. These themes are further categorized according to the four major concepts by Polk. Many of the participants discussed *empathy*, which would be further categorized under the *dispositional pattern*, which can be described as psychosocial attributes that

contribute to the manifestation of resilience. *Support* is categorized under the *relational pattern*, which is further described as roles and relationships that influence resilience. *Self-preservation* is categorized under the *situational pattern*, which discussed perceived stress, coping, and reappraisal as contributing to resilience building. Finally, *humor*, *empathy*, and *perspective* that people develop over time, are placed under the *philosophical pattern*, driven by personal beliefs, self-esteem and knowing the value of oneself is an important aspect of resilience. The chart below links the Polk's Theory of Resilience to the findings of the oncology nurse interviews and categorizes the main themes below.

Polk Theory Patterns and Project Themes

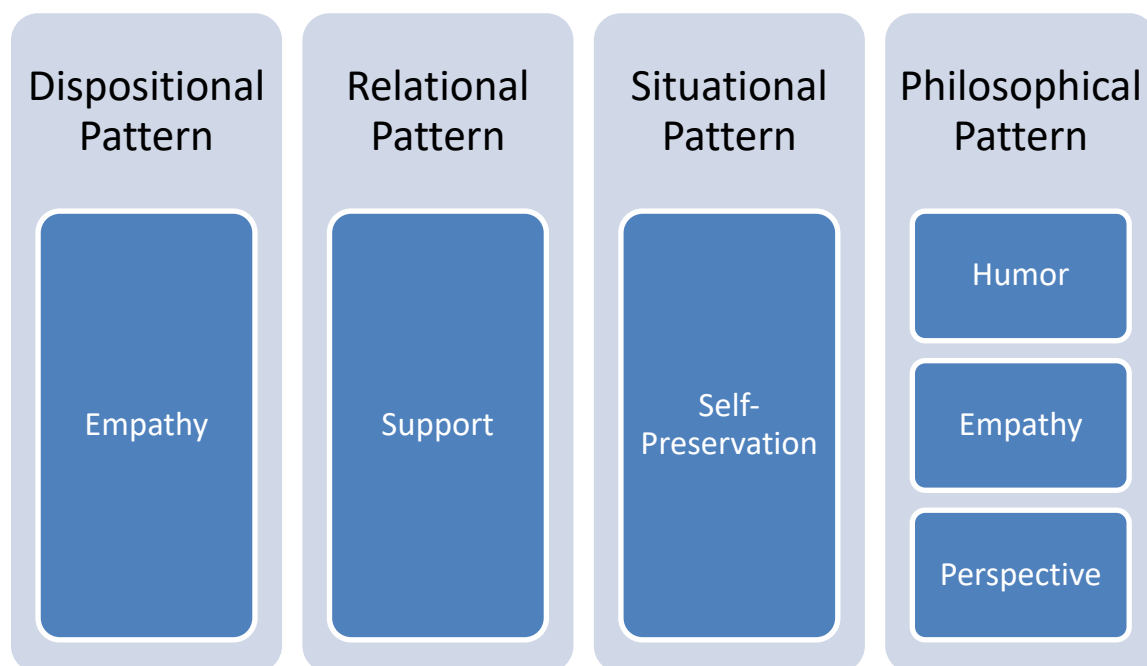


Chart 1 is used to illustrate the relationship of the four pillars of Polk's theory of resilience and the main themes found through the interviews with oncology nurses. The

four pillars are found in the light blue: Dispositional pattern, Relational Pattern, Situational Pattern, and Philosophical Pattern. While the coded themes are found in dark blue: Empathy, Support, Self-Preservation, Humor, and Perspective that people develop over time, which has been shortened to perspective for the chart.

Limitations

This study encountered various limitations. Recruitment was prolonged, delays in responses, potential participants not being signed up as part of the ONS listserv to receive emails, and the recruitment email was sent out only once from the local ONS chapter. However, snowball sampling began after the fourth participant, and possibly limited in size due to COVID-19 pandemic. The methods and procedures were adjusted several times due to the pandemic. This study was small in size, with 10 participants, however the themes appeared to achieve saturation at ten interviews. Initially, the study was designed to conduct in-person semi-structured interviews. After the pandemic took hold, it was evident that the interviews needed to be performed remotely, zoom interviews were scheduled. The Zoom interviewing was a barrier to communication, even though everything was done to make it more personable. Not being in front of and not being able to connect on a deeper level with the participant may have yielded different results than in-person interviewing. Looking into the eyes of a participant and looking into a black screen with the participant name on the screen is an entirely different experience. Some participants did not use the camera with the Zoom interview; therefore, this researcher was unable to see the participant and their non-verbal expressions during the interview process. If this study was to be done again, this researcher would look into the literature on interviewing via Zoom, as there is likely more literature on enhancing the virtual interview experience since the conception of this project and the start of the pandemic. It would be interesting to see how this project or responses would change if the project was conducted with in person interviews as originally planned. There may also be possible

bias as this researcher is an oncology nurse and could potentially, unintentionally, effect interviewing or analysis.

Recommendations and Implications for Advanced Nursing Practice

It is with great hope that the experience of the participants may be used to support oncology nurses and other clinicians working in highly stressful areas of healthcare. Further research on resilience in this population may inform organizations to design services and programs that could help others develop resilience, and ultimately decrease burnout, compassion fatigue and workforce vulnerabilities. Using the information from the themes identified in this project, *humor, self-preservation, empathy, support*, can be used to develop programs to strengthen oncology nurses.

The Advanced Practice Registered Nurse (APRN) can be vital in the development of these programs, education modules, retreats, and in-services that foster team building, personal growth, and communication to help increase resilience. The APRN also works as an advocate and as member of the multidisciplinary team to support interventions on a systems level. Understanding resilience may be useful in developing programs to help strengthen teams. APRNs also working in oncology would benefit from considering these strategies to develop resilience over time. It is recommended that continued research is dedicated to this population to further describe this phenomenon, and support the development of evidence-based programs to strengthen resilience in oncology nurses.

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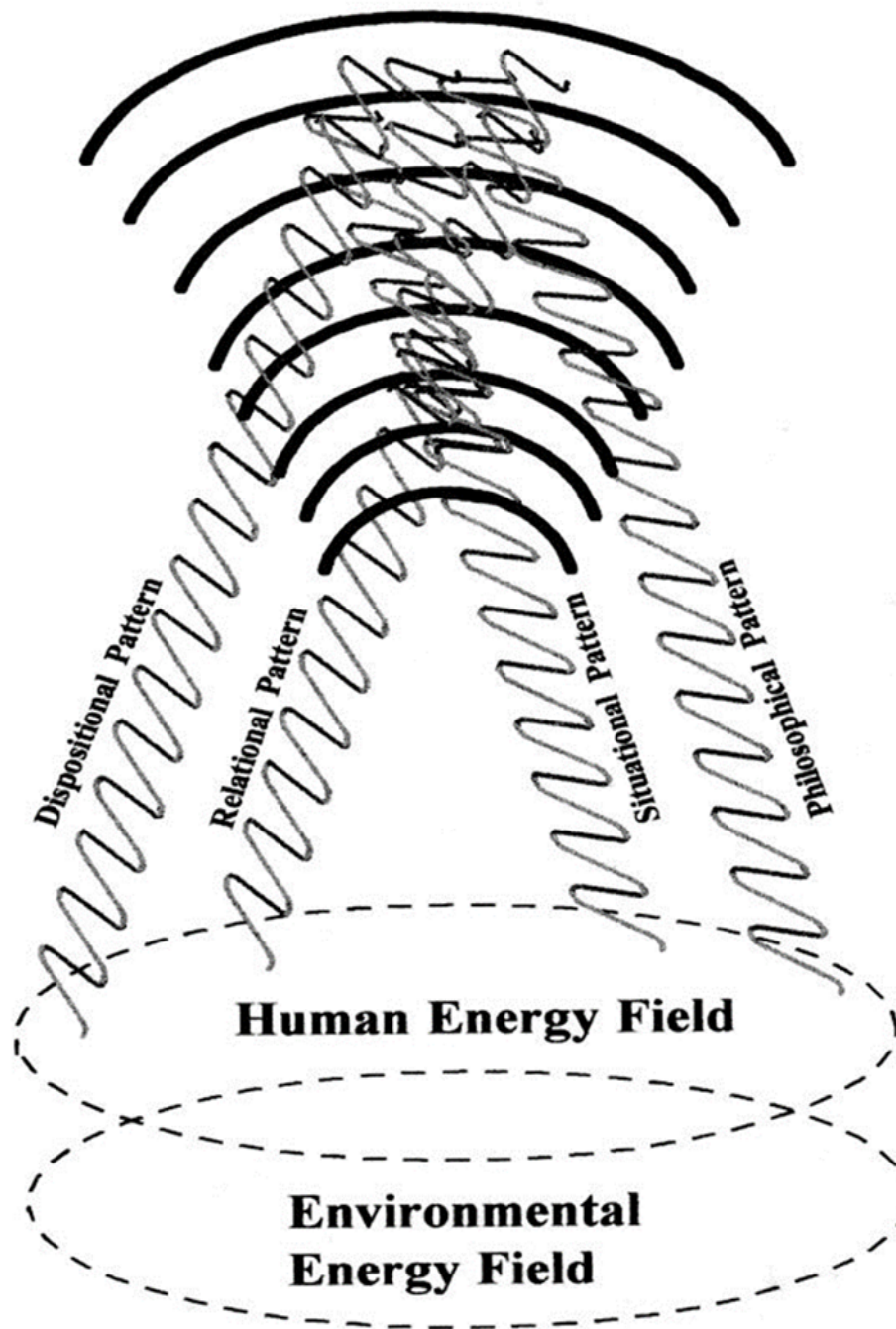
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Appendix A

Polk Theory of Resilience Model (1997)

Resilience



Appendix B

Informed Consent

Rhode Island College

RESILIENCE: INTERVIEWS WITH ONCOLOGY NURSES

You are being asked to participate in a research study that explores the topic of resilience in oncology nurses. Participation in this study is voluntary and involves a 30-45-minute interview with the researcher. You are being asked to participate because you are an oncology nurse in the state of Rhode Island or Southeastern Massachusetts who belongs to the Oncology Nursing Society (ONS): Rhode Island and Southeastern Massachusetts Chapter. Please read this form before choosing whether to participate in the study. Erika Leonard, BSN, RN, a graduate student in the School of Nursing at Rhode Island College, is conducting this research in collaboration with the faculty advisor Dr. Margaret Mock, a professor at Rhode Island College.

Why this Study is Being Done (Purpose)

The purpose of this study is to explore Oncology nurses experience working with patients through interviews. We hope to use this information to better support Oncology nurses in the future.

What You Will Have to Do (Procedures) If you choose to be in the study:

After reviewing consent form, if interested in participating, you will email the researcher, Erika Leonard (eleonard_9070@email.ric.edu), including in the email a photo attachment of the signed consent form. Individual interviews will consist of 30-45-minute interviews.

Interviews can be scheduled via Zoom meeting. Interviews will start with demographic information and will be recorded audio for transcription. The recordings will be stored on password and fingerprint protected devices.

Who Can Participate in the Study (Inclusion and Exclusion Criteria)

Inclusion Criteria: To be in this study you must currently work with oncology patients and have at least eighteen months of experience in the inpatient or outpatient oncology setting. The nurses must be working with patients frequently, administering the chemotherapy to these patients or if not currently administering, familiar with chemotherapy regimens and protocols.

Exclusion Criteria: You cannot be in this study if you are a traveling nurse, float pool nurse, nurse who is currently training in oncology, nurse with less than eighteen months of experience, or any other oncology staff that is not a registered nurse. Nurses who are not current members of the Rhode Island and Southeastern Massachusetts chapter of the Oncology Nursing Society.

Risk or Discomfort

The risk or discomfort of participating in this survey is minimal. If you experience unwanted feelings or if you have personal concerns for yourself arise as a result of the interview or the institution you are employed by, we encourage you to reach out to your department manager, employee health, the employee assistance program at your institution, or risk management department at your institution. The researcher will not be responsible for payments or fees that are required of you as the participant if you chose to seek counseling as an additional alternative.

Benefits of Being in the Study

There are no known benefits.

Deciding Whether to Be in the Study

There is no obligation to participate in this study. If you choose not to participate, you will in no way be penalized. If you participate and decide to withdraw prior to or during the interview, it is your right to do so.

How Your Information will be Protected

Because this is a research study, results will be summarized and shared in published reports and presentations given related to the research. Participants names will not be used in any reports as data from interviews will be coded. Several steps will be taken to protect your identity and secure your information. The information will be kept on a password protected computer to which only the researcher has access to and seen only by the researcher and the faculty advisor.

If any problems arise with this study, the records may be viewed by the Rhode Island College Institutional Review Board responsible for protecting the rights and safety of people who participate in research. The information will be kept for a minimum of three years after the study is over, after which it will be destroyed.

Who to Contact

You can ask any questions you have now. If you have any questions later, you can contact Erika Leonard at eleonard_9070@email.ric.edu, or Dr. Margaret Mock at MMock@ric.edu.

If you think you were treated poorly in this study, have concerns or complaints, or would like to speak with someone other than the researcher about your rights or safety as a research participant, please contact the IRB Chair at IRB@ric.edu.

Statement of Consent

I have read and understand the information above. I am choosing to be in the study “Resilience: Interviews with Oncology Nurses”. I can withdraw at any time, without explanation. I have been given answers to the questions I asked, or I will contact the researcher with any questions that arise at a later date. I am at least 18 years of age). After contact with the researcher, Erika Leonard, please sign the bottom of the consent form and send via email attachment photo if agreeable to be interviewed for this project. By participating in this project, I understand that the interview will be video recorded for transcription.

I ___ agree ___ do not agree to be audio recorded for this study.

Do you want to be in the study? Yes ___ No ___

Print Name of Participant:

Signature of Participant:

Date:

Name of Researcher Obtaining Consent:

Appendix C

Interview Questions

Demographic & Background

Questions: Age range: 20-30 31-40 41-50 51-60 61+

Years as oncology nurse: 1-5/5-10/10-20/20+ Relationship status: With
Partner/Without Partner Children: Yes/No Pets: Yes/No Religious affiliation:
Yes/No

Formal Exercise: Yes/No

1. What gets you through a hard day?
2. What do you do when you feel stressed?
3. Have you ever felt emotionally exhausted after working a difficult shift, can you explain what you do to recharge yourself?
4. Have you ever felt like to needed to take time off of work because it was becoming too emotionally difficult?
5. Why did you decide to be an Oncology nurse? What was appealing to you?
6. Would you change your specialty if you could?
7. Can you describe a quality you have that may make it easier for you to care for these oncology patients?
8. In terms of supporting patients, what makes oncology nurses so special?
9. Would you consider yourself to be agreeable, conscientious, and open?
10. Is there a key ingredient you believe all oncology nurses need to have to have career longevity? Meaning do you think there is a personality trait that you believe makes them resilient?
11. What does resilience mean to you?
12. Think of a nurse whom you consider resilient. What is it you see in them that makes them resilient?
13. Think of an example when you felt resilient? How would you describe it?

Questions adapted from: Polachek, (2016)

Appendix D

Signed letter of approval ONS



Rhode Island & South Eastern Massachusetts Chapter
of
The Oncology Nursing Society

8/18/20

Dear Erika Leonard,

The Rhode Island and Southeastern Massachusetts Chapter of the Oncology Nursing Society (ONS) would be happy to assist you in your project, Resilience: Semi-Structured Interviews with Oncology Nurses. The Rhode Island and Southeastern Massachusetts Chapter of ONS board has discussed and agreed to approve your project that has been verified through your institutions IRB. We agree to distribute your contact information, consent document, and recruitment information via electronic mail to our membership. We are pleased to assist in promoting the education and research in the practice of Oncology Nursing. Thank you for contacting us and we look forward to reviewing the findings of your project.

Sincerely,

Jennifer Patullo BSN, RN, OCN

President of the Rhode Island and Southeastern Massachusetts
Chapter of the Oncology Nursing Society

Appendix E

Welcome Email: Potential Oncology Nursing Society Participants

Dear Valued RI & SE Mass Chapter ONS Member,

My name is Erika Leonard and I am a masters nursing student at Rhode Island College. Thank you for taking the time to read this email. I am working on a research project that focuses on the experience of Oncology Nurses working with patients through a personal interview. The interview will take 30-45 minutes with questions related to your experience as an Oncology Nurse. To be in this study you must currently work with Oncology patients and have at least 18 months of experience in the inpatient or outpatient oncology setting. The nurse must be working with patients frequently, administering the chemotherapy to these patients or if not currently administering, familiar with chemotherapy protocols. You cannot be in this study if you are a traveling nurse, float pool nurse, nurse who is currently training in oncology, nurse with less than 18 months of experience, any other Oncology staff that is not a registered nurse or nurses who are not current members of the RI & SE Mass Chapter of the Oncology Nursing Society. As a fellow member of the Oncology Nursing Society (ONS) and an Oncology Nurse myself, I hope you will help me with this research study.

After reading through the attached informed consent, please email me at eleonard_9070@email.ric.edu to set up an interview. Thank you for your support!

Sincerely,
Erika Leonard, BSN, RN
Rhode Island College School of Nursing
Contact Information:
Email: eleonard_9070@email.ric.edu
Phone: XXX-XXX-XXXX

Appendix F

Rubin and Rubin Interview Adaptation

Qualitative interviews are based on conversational partnerships (Rubin & Rubin, 2005). It is important to be comfortable while interviewing so one can relax and have the best interview possible. Rubin and Rubin recommend that prior to the interview the interviewer may gain confidence by learning something about the interviewee and the setting. The writers of qualitative interviewing also discuss that interviewees make mistakes, but they are rarely important. They discuss rephrasing questions or even the conversational partner will correct the interviewer if needed. As described in the method section of this project, interviews will not be scheduled back-to-back to allow the interviewer to calm down and regroup as described in the *Qualitative Interviewing* by Herbert and Irene Rubin (2005). Balancing the interviewer's personality and asking questions in a non-demanding way is key to successful interviewing. They continue by reinforcing the importance of empathy and actively listening to what the interviewee is saying. Also, as noted above in the method section, the interviewee will jot down notes taken from the interview on the interview transcripts after the interview. Rubin and Rubin note that being an insider may make the interviewer less threatening, and that by describing your project, your credentials, and where you work, interviewees often feel more comfortable, open up more, and do not feel as they are talking with a stranger.