

A GROUNDED THEORY STUDY OF POSTTRAUMATIC GROWTH AND
WISDOM IN A SAMPLE OF ONCOLOGY NURSES

by

Tanya Vishnevsky

A dissertation submitted to the faculty of
The University of North Carolina at Charlotte
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in
Health Psychology

Charlotte

2013

Approved by:

Dr. Ryan P. Kilmer

Dr. Arnie Cann

Dr. Suzanne C. Danhauer

Dr. Margaret M. Quinlan

©2013
Tanya Vishnevsky
ALL RIGHTS RESERVED

ABSTRACT

TANYA VISHNEVSKY. A grounded theory study of posttraumatic growth and wisdom in a sample of oncology nurses. (Under the direction of DR. RYAN P. KILMER and DR. ARNIE CANN).

This study utilized a grounded theory approach to examine the degree to which oncology nurses report posttraumatic growth (PTG) and wisdom as a result of caring for patients. Open-ended interviews were conducted with 30 oncology nurses; interviews were designed to elicit information regarding how nurses had positively changed as a result of their work experience. Findings were grouped into four major themes that coincided with the primary aims of the study: *Loss and Challenges to Nurses' Assumptive Worlds, Posttraumatic Growth, Wisdom, and The Relationship Between PTG and Wisdom*. Overall, nurses unanimously cited examples of PTG and wisdom that resulted from their work. Subthemes of *Posttraumatic Growth* were largely consistent with the five domains of PTG and included *Appreciation of life, New perspective, Relating to Others, Spiritual/Religious Growth, and Personal Strength*. Subthemes of wisdom were more varied, reflecting the diversity of this construct in the context of oncology nursing. A number of other related themes emerged from the data, including *Positive Consequences* and *Professional Knowledge/Expertise*. Findings suggest that the relationship between PTG and wisdom was circuitous and constantly evolving, although there was some evidence for a positive association between these two constructs. The theme of *Benevolence* also appeared to be closely related to PTG and wisdom. Limitations and suggestions for future research are also presented.

ACKNOWLEDGMENTS

First and foremost, I would like to thank my wonderful husband for making all of this possible. Your unwavering support (not to mention your feeble attempts at a reward system) helped me keep going, even when it seemed like there was no end in sight. Nate, you were with me all along this journey – much of this was written while you were kicking around in my belly. And thank you to my wonderful parents, grandparents and extended family who believed in me when I was not so sure.

To my dear friends Eylin, Sevrine, Serena, Maggie, Aundrea, and Katrina – you provided a sounding board, a captive audience, and a shoulder to cry on when I needed it most. I could not have done it without you!

A special thank you to my mentors, Ryan Kilmer and Arnie Cann. Your support and guidance have helped to shape me into the person I am today. Ryan, I cannot thank you enough for the many hours you spent thoughtfully responding to drafts of manuscripts and assignments, as well as the time you spent with me in your office discussing everything from professional development to our families. Arnie, thank you for always making time for our meetings – I know I would have never gotten anything accomplished without your constant support, your humor, and your gentle nudges to stay on task. Thank you both for all that you have done throughout the years.

To Suzanne Danhauer, your mentorship has influenced me in more ways than I can count. From setting me on my career path, to teaching me relaxation and breathing, to setting an example for great leadership and work-life balance, I will forever be grateful to have you in my life.

Thank you to Maggie Quinlan for being the fearless qualitative researcher in a sea of quantitative folks. Your advice and support helped me stay sane in this process.

Lastly, thank you to my trusted research assistant, Chantal, who went above and beyond in every way. From spending countless hours on transcription to all your time sitting with me at the coffee shop going through coding, I would probably still be coding if it were not for all of your help!

TABLE OF CONTENTS

LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS	xi
CHAPTER 1: INTRODUCTION	1
1.1 Purpose of the Study	3
CHAPTER 2: LITERATURE REVIEW	4
2.1 Description of Posttraumatic Growth	4
2.2 The Assumptive World and Revision of Core Beliefs	7
2.3 Vicarious Posttraumatic Growth	10
2.4 The rationale for Examining Posttraumatic Growth in Oncology Nurses	12
2.5 Wisdom	14
2.6 Measures of Wisdom	16
2.7 The Emergence of Wisdom Following a Traumatic Event	20
2.8 The relationship Between Wisdom and Posttraumatic Growth	22
2.9 Rationale for Taking a Grounded Theory Approach	23
2.10 Gaps in Knowledge	23
CHAPTER 3: METHODS	25
3.1 Overview	25
3.2 Researcher Perspective	25
3.3 Recruitment	26
3.4 Sampling	27
3.5 Data Collection	28

3.6 Analysis	29
CHAPTER 4: RESULTS	32
4.1 Description of the Sample	32
4.2 Overview of Results	32
4.3 Relationships, loss, and challenges to nurses' assumptive worlds	33
4.3.1 Relationships with Patients	33
4.3.2 Setting Boundaries	36
4.3.3 Emotional Impact of Loss	39
4.3.4 Challenges to the Assumptive World	42
4.4 Posttraumatic Growth	46
4.4.1 Appreciation of Life	47
4.4.2 New Perspective on Life	51
4.4.3 Relating to Others	53
4.4.4 Spiritual/Religious Growth	54
4.4.5 Personal Strength	55
4.4.6 Vicarious PTG	56
4.4.7 Positive Consequences	58
4.5 Wisdom	62
4.5.1 Professional Knowledge	73
4.6 The Relationship Between PTG and Wisdom	78

CHAPTER 5: DISCUSSION	85
5.1 Challenges to Nurses' Assumptive World	85
5.2 Posttraumatic Growth	87
5.3 Wisdom	98
5.4 The Relationship Between Posttraumatic Growth and Wisdom	105
5.5 Study Contributions, Limitations, and Future Directions	110
REFERENCES	113
APPENDIX A: CONSENT FORM	124
APPENDIX B: INTERVIEW GUIDE	126

LIST OF TABLES

TABLE 4.1: Subthemes, frequency, and content of relationships with patients	34
TABLE 4.2: Subthemes, frequency and content of setting boundaries	37
TABLE 4.3: Subthemes, frequency and content of core beliefs	43
TABLE 4.4: Subthemes, frequency and content of posttraumatic growth	48
TABLE 4.5: Subthemes, frequency and content of positive consequences	59
TABLE 4.6: Subthemes, frequency and content of wisdom	64
TABLE 4.7: Subthemes, frequency and content of professional knowledge	74
TABLE 4.8: Subthemes, frequency and content of benevolence	82

LIST OF FIGURES

FIGURE 5.1: Comparison of percent coverage of PTG to percent coverage of wisdom across interviews	80
FIGURE 5.2: Schematic representation of the relationship between PTG and wisdom	107

LIST OF ABBREVIATIONS

PTG	Posttraumatic growth
PTGI	Posttraumatic growth inventory
PTSD	Posttraumatic stress disorder

CHAPTER 1: INTRODUCTION

The aim of this study was to examine the degree to which oncology nurses report posttraumatic growth (PTG) and wisdom as a result of caring for patients. PTG is a multidimensional construct defined as positive psychological change experienced as a result of the struggle following a traumatic event or a major crisis (Calhoun & Tedeschi, 2004). Wisdom, in the general sense, refers to individuals who are considered to be “exceptionally mature, integrated, satisfied with life, able to make decisions in difficult and uncertain life matters, and capable of dealing with any crisis and obstacle that they encounter” (Ardelt, 2005, p.7). However, in this particular study, the focus is on specific experiences that can provoke or further develop wisdom, namely experiences that are perceived as difficult, challenging, or traumatic.

There is considerable support for the occurrence of PTG following a variety of personally experienced traumatic events (Calhoun & Tedeschi, 2004). Furthermore, some studies suggest that PTG can occur vicariously to someone who is close to the individual experiencing the trauma, such as the spouse of a cancer patient (e.g., Thornton & Perez, 2006; Weiss, 2002). However, most of the research on vicarious PTG has focused on those in the “helping professions” such as therapists and social workers (e.g., Arnold, Calhoun, Tedeschi, & Cann, 2005; Calhoun, Tedeschi, & Selby, 2001; Putterman, 2005). One group that has received relatively little attention in the vicarious

PTG literature is nurses. Oncology nurses in particular, are exposed to a wide range of highly stressful circumstances. These nurses watch firsthand as patients struggle to cope with the sequelae of cancer: diagnosis, highly invasive cancer treatment, and for a large portion of patients, eventual progression of the disease, and subsequent death. These traumatic experiences may lead to an upheaval of nurses' assumptive world (i.e., their understanding of the world, themselves and relationships with others; Janof-Bulman, 1992) and this upheaval is theorized to act as a catalyst for PTG (Tedeschi & Calhoun, 1996). Only three studies to date have examined the occurrence of PTG among nurses (i.e., Lev-Wiesel, Goldblatt, Eisikovits, & Admi, 2009; Shiri, Wexler, Meiner, & Kreitler, 2008; Taubman-Ben-Ari & Weintroub, 2008). While these studies provide preliminary evidence that nurses do indeed experience vicarious PTG, further research is needed to elucidate the process by which this occurs.

In addition, a handful of studies have explored the possibility of the emergence of wisdom following a traumatic event (e.g., Aldwin & Levenson, 2001; Ardel, 1998; Wink & Helson, 1997), and some have even suggested that psychological growth may accompany wisdom (Bluck & Glück, 2004; Staudinger & Glück, 2011). However, while theoretical models (e.g., Calhoun & Tedeschi, 2006) point to a connection between PTG and wisdom, to my knowledge, no research to date has examined this relationship. In light of these limitations, this study employed grounded theory approach to understand oncology nurses' experience of caring for cancer patients, the nature of the relationship between PTG and wisdom, and the context in which PTG and wisdom emerge.

1.1 Purpose of the Study

Grounded theory espouses a flexible and open approach that enables theories to materialize as data are being collected and analyzed (Charmaz, 2006; Strauss & Corbin, 1998). Therefore, the aims of this study were designed to be sufficiently broad to capture a variety of experiences and to allow for the development of more specific theories once data had been collected and systematically analyzed. Overall, the study had four primary aims:

- 1) To examine the circumstances that lead nurses to challenge and redefine their assumptive world.
- 2) To examine whether the PTG reported by oncology nurses is experienced directly, as a personal experience of a stressful event, or vicariously, as an observer of a stressful event experienced by patients, and to determine the distinction between the two processes.
- 3) To examine the degree to which oncology nurses report wisdom as a result of caring for cancer patients, and if so, the characteristics of their wisdom experiences.
- 4) To determine the context and specific mechanisms of the relationship between traumatic experiences, PTG, and wisdom.

CHAPTER 2: LITERATURE REVIEW

2.1 Description of Posttraumatic Growth

Although the negative consequences of trauma have been well-documented (e.g., Brown, Fulton, Wilkeson, & Petty, 2000), many individuals also report being impacted positively in some ways by traumatic events. PTG has been shown to occur among people facing a variety of stressful circumstances including cancer (e.g., Cordova, Cunningham, Carlson, & Andrykowski, 2001), transportation accidents (Joseph, Williams, & Yule, 1993), terrorism (e.g., Milam et al., 2005), sexual assault (e.g., Frazier, Conlon, & Glaser, 2001; McMillen, Zuravin, & Rideout, 1995) and bereavement (e.g., Lehman et al., 1993).

According to Tedeschi and Calhoun (1996) and subsequent research (i.e., Palmer, Graca, & Ochietti, 2012; Taku, Cann, Calhoun, & Tedeschi, 2008), reports of PTG can be categorized into five domains: the perception of greater personal strength, the emergence of new possibilities in life, increased value of relationships with others, greater appreciation of life, and spiritual growth. *Personal strength* involves feeling “vulnerable yet stronger,” and is epitomized by the notion that after surviving the worst one can now handle anything (Calhoun & Tedeschi, 2006, p. 5). *New possibilities* include the development of different interests and hobbies, and for some, a new life path that may be related to the traumatic event. *Relating to others* may involve the strengthening of relationships that existed before the trauma, the building of new

relationships, and generally feeling more connected to others who have had similar experiences (Calhoun & Tedeschi, 2006). Some individuals also report feeling a greater sense of compassion for others, more intimacy and understanding in relationships, and greater likelihood of self-disclosure (Tedeschi & Calhoun, 2004). *Appreciation of life* involves a shift in priorities, having a better sense of what is important in life and not worrying about the “little things” (Calhoun & Tedeschi, 2006). Lastly, *spiritual growth* may include a greater sense of purpose or meaning, life satisfaction, or clarity in existential matters. Research suggests that there is substantial variability in the degree to which religion is a component of this domain, particularly in geographical regions that tend to be more secular (Calhoun & Tedeschi, 2006).

Calhoun and Tedeschi’s (2006) PTG model provides a general framework for how growth is theorized to occur. First, it is the cognitive work that occurs following a traumatic event, not the event itself, that is posited to result in PTG (see Tedeschi & Calhoun, 2004). In order to produce growth, the event must be “seismic,” that is, powerful enough to lead to a significant upheaval of previously held beliefs (Calhoun & Tedeschi, 1998; Cann et al., 2010). In turn, an individual must struggle to come to terms with a new reality in which “assumptions about the benevolence, predictability, and controllability of the world... one’s safety... and one’s identity and future are challenged” (Tedeschi & Calhoun, 2004, p. 5; see also Janoff-Bulman, 2006).

As an individual is coping with the aftermath of the traumatic event, the development of PTG may be influenced by a number of factors. An individual must successfully manage the emotional distress that occurs after experiencing trauma (Calhoun & Tedeschi, 2004). This is usually a gradual process and involves shifting

from automatic, intrusive cognitions to purposeful reflection. It is only after the initial shock of the trauma has passed that the PTG process can begin (Calhoun & Tedeschi, 2004). Self-disclosure is another potential contributor to the PTG process. Talking with close friends and family about the traumatic event can provide a mechanism for further developing a trauma narrative and facilitating schema change (Tedeschi & Calhoun, 1996). Additionally, the tendency to ruminate on constructive issues (i.e., reevaluating personal strengths, appreciating existing relationships, etc.) has been suggested as a mechanism leading to greater reports of PTG (Janoff-Bulman, 1992, 2006; Tedeschi & Calhoun, 2004; Watkins, 2008). Thus, as an individual deliberately tries to make sense of the event, problem solve, and begin to integrate the trauma and one's new reality into his or her understanding of the world, PTG is more likely to arise. Lastly, proximal and distal socio-cultural influences affect the development of PTG. Distal cultural elements are broad cultural messages that are present in a particular society while proximate cultural influences refer to small communities or neighborhoods as well as an individual's direct social context, including family and friends (Calhoun & Tedeschi, 2006). A person's broad cultural background, and even more importantly, the proximate culture, will influence the possibilities for PTG. For instance, if close friends and family convey that a traumatic event was not "a big deal," the traumatized person is less likely to report PTG (Calhoun & Tedeschi, 2006). On the other hand, if models of PTG exist or if close others' reactions are congruent with the experience of the trauma survivor, then PTG is more likely to occur.

It is important to note that because each person reacts and interprets adversity differently, the extent to which an individual experiences PTG, as well as the specific

domains of growth, will also vary (Calhoun & Tedeschi, 2006). Clearly, not everyone will report PTG after trauma (Calhoun & Tedeschi, 2006). However, the model of PTG outlined above suggests that individuals with particular cognitive processing styles or who are exposed to supportive social contexts may be more likely to experience PTG. Tedeschi, Calhoun and Cann (2007) also stress that PTG can coexist with reports of distress. Indeed, the PTG model is predicated on the notion that a person will experience discomfort and distress as they struggle to come to terms with the aftermath of their traumatic experience. Yet, studies have shown that an individual is far more likely to grow from a traumatic experience than to develop posttraumatic stress disorder (PTSD) or another psychiatric illness (Tedeschi, 1999; Tedeschi & Calhoun, 2004). Moreover, some models suggest that this distress not only serves to catalyze the growth process, but to maintain PTG as well (Tedeschi & Calhoun, 2004). A number of studies have suggested that the relationship between PTG and distress is curvilinear (Butler et al., 2005; Kleim & Ehlers, 2009; Laufer & Solomon, 2006) – that is, a moderate level of distress is likely to be associated with the highest levels of PTG; too little distress will not lead to an upheaval of previously held beliefs, while too much distress will impede the recovery process by limiting the psychological and cognitive resources available to devote to PTG.

2.2 The Assumptive World and Revision of Core Beliefs

The development of PTG is theorized to be more likely among individuals whose assumptive world has been seriously challenged by the traumatic event (Tedeschi & Calhoun, 2004). The assumptive world is a set of cognitive schemas that include, for instance, our understanding of fairness and justice, our predictions of people's behavior,

and beliefs of how events should unfold (Janoff-Bulman, 1992). One of the most fundamental assumptions for individuals raised in Western culture is the belief in a just world, which is the notion that we, as individuals, are sheltered from misfortune as long as we “do the right thing” (Janoff-Bulman, 2006). These schemas are based on individuals’ experiences and serve as working models for interpreting events and making predictions about the future (Janoff-Bulman, 2006). By adulthood, these assumptions are typically quite stable and largely go unchallenged by everyday experiences. Indeed, these fundamental assumptions are typically reinforced over time as individuals develop theories about why others experience misfortune (i.e. “they must have done something to deserve it”). In most instances, truly traumatic events shatter beliefs of a just world and challenge one’s sense of safety and security (Janoff-Bulman, 1992). Because these beliefs are blueprints for understanding events and people’s behaviors, individuals are often unprepared psychologically when they are challenged. It is not surprising then, that individuals report experiencing high levels of distress as they struggle to rebuild a system of beliefs that allows for the presence of tragedy in their own lives (Tedeschi & Calhoun, 2004). As Janoff-Bulman (2006) asserts, “trauma is about confronting the terror of our own existence, a task for which we are dramatically unprepared psychologically” (p. 85). Thus, traumas that present a serious threat to an individual’s assumptive world are thought to have the greatest potential for producing both distress and growth (Tedeschi & Calhoun, 2004).

To successfully cope with a trauma, an individual usually must develop a new, more complex assumptive world; one that can account for tragedy and adversity while still presenting a positive and efficacious view of self (Janoff-Bulman, 2006). Persons

with such a revised assumptive world would likely acknowledge the uncertainty of life, the importance of context, and the different ways in which people might experience and deal with adversity. While the world may not seem so safe or predictable, they also realize that they can still survive in this more complicated world. As individuals are processing and revising their core beliefs, they often recognize positive changes that have resulted from their experience (Cann et al., 2010; Linley & Joseph, 2004; Phelps, Williams, Raichle, Turner, & Ehde, 2008).

In a study examining the validity of the Core Beliefs Inventory (CBI), a new measure of disruption to the assumptive world, Cann and colleagues (2010) found that greater reported disruption to the assumptive world in the immediate aftermath of a highly stressful experience was consistently related to greater subsequent reports of PTG. This finding held across three independent samples, including two groups of college students with a variety of traumatic experiences and a sample of adult acute leukemia patients. Higher scores on the CBI were not only positively related to the total PTGI score, as measured by the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996), but also to each of the five domains of growth. Thus, consistent with PTG theory, this study suggested that, for many individuals exposed to trauma, facing a threat to one's assumptive world may be associated with the development of PTG. In addition, there may be circumstances where seeing another person suffer, particularly a close family member or friend, may also lead to the disruption of core beliefs and the subsequent development of PTG.

2.3 Vicarious Posttraumatic Growth

Evidence suggests that the effects associated with traumas and other stressful events occur not only among individuals who have been directly impacted by a trauma, but also to people who are close to them. The literature on “vicarious traumatization” and “compassion fatigue” indicates that trauma or major crises can have negative psychological consequences for others, even when they have not directly experienced the event themselves but have seen clear challenges to their assumptive world as a witness/observer (Figley, 1995; Pearlman & Sackvitne, 1995). In recent years, researchers have also begun to examine the potential for psychological growth among persons who are close to the individual experiencing trauma. A number of studies have looked at PTG among spouses of cancer survivors (e.g., Manne, Ostroff, & Winkel, 2004; Thornton & Perez, 2006; Weiss, 2002). These studies have consistently found that individuals reported significant positive changes as a result of dealing with the challenges associated with their spouse’s cancer. For instance, in a sample of men who were spouses of breast cancer survivors, 88% cited significant, long-lasting positive changes (Weiss, 2002). Some of these changes included a shift in priorities, the development of deeper understanding and compassion for others, increased self-efficacy, and a stronger religious faith. Moreover, in a study of PTG in prostate cancer survivors and their partners, partners reported comparable levels of PTG to those communicated by the survivors themselves (Thornton & Perez, 2006). Thus, while spouses did not directly experience cancer, they experienced many of the psychological consequences of the illness as a result of the intimate relationship with the person experiencing the trauma.

In addition to individuals who have deep and long standing relationships with the person directly experiencing the traumatic event, vicarious PTG has been documented among medical and mental health professionals working with individuals exposed to trauma. Reports of growth have been documented among hospice workers (Calhoun, Tedeschi, & Selby, 2001), psychotherapists (Arnold, Calhoun, Tedeschi & Cann, 2005; Linley, Joseph, & Loumidis, 2005; Linley & Joseph, 2007; Samios, Rodzik, & Abel, 2012), social workers (Shamai & Ron, 2009; Putterman, 2005), ambulance workers (Shakespeare-Finch, Smith, & Gow, 2003), disaster volunteers (Barton, 2005; Karanci, 2005; Linley & Joseph, 2006), and funeral directors (Linley & Joseph, 2005). These positive changes are similar to patterns of PTG that occur in persons directly impacted by a traumatic event. The evidence suggests that professionals are personally impacted, and in some ways shaken, by working with clients who are coping with a traumatic experience.

Existing research provides support for the co-existence of distress and growth among this population. In a qualitative study of 21 psychotherapists, 100% of the sample reported experiencing some PTSD symptoms as a result of their work, such as trauma-based thoughts, images, or dreams (Arnold et al., 2005). Several of the psychotherapists in this study noted feeling more vulnerable as a result of their work, yet this shift led to a positive change in their outlook, such as living life more fully or treating others more kindly. Thus, for some, distress from working closely with those experiencing trauma served as a catalyst for the questioning of their assumptive world and the development of PTG.

It is important to note that vicarious and direct PTG (i.e., positive change that is a result of personally experiencing trauma) may be difficult to disentangle; experiencing trauma vicariously may still result in direct PTG depending on how the individual interprets the experience. For example, an oncology nurse may find the illness and/or death of a patient to be personally impactful, thus leading to direct PTG. On the other hand, observing the patient's pain and resilience while struggling with a life threatening illness may result in vicarious PTG. Accordingly, this study sought to further examine the distinction between vicarious and direct posttraumatic growth among oncology nurses.

2.4 The Rationale for Examining Posttraumatic Growth in Oncology Nurses

Although PTG among nurses has received little attention, this group of professionals often works most closely and extensively with those who are coping with potentially traumatic medical conditions, so they are regularly exposed to events that could lead to the experience of vicarious PTG. One of the greatest stressors reported by nurses is exposure to the actual or threatened death of a patient (Lambert et al., 2004; Xianyu & Lambert, 2006). Because of the high mortality rate associated with many cancers (Jemal et al., 2004), oncology nurses are particularly likely to encounter death and dying on a routine basis. As they work closely with patients, it is unlikely that nurses can avoid confronting the reality that bad things are happening to good people. In many instances, nurses also work closely with family members, so they see and feel the impact that the patient's experience has on close others. Nurses' assumptive worlds are likely to be shaken as they are faced with human suffering and exposed to events that contradict their core beliefs, such as belief in a just world. As previously held schemas are put into

question, new beliefs and assumptions may be created that are more complex and provide a more balanced understanding of pain and suffering. This process may also be more gradual than for those experiencing direct PTG since nurses encounter multiple patients who face serious illness or death over an extended period of time (as opposed to one isolated traumatic experience).

There is some evidence that nurses do indeed experience vicarious PTG as a result of extended and close contact with those who face health-related traumas. In a study of doctors and nurses in a pediatric hemato-oncology intensive care unit in Israel, both groups of health providers reported PTG (Taubman-Ben-Ari & Weintroub, 2008). However, nurses reported significantly higher levels of both secondary traumatization and PTG, as compared to doctors. The authors suggested that these findings reflect the fact that nurses work much more closely and intimately with patients and for longer periods of time. Another study examined PTG among a sample of doctors, nurses and psychotherapists who were treating victims of politically-motivated violence in two hospitals in Israel (Shiri et al., 2008). Similar to the study by Taubman-Ben-Ari and Weintroub (2008), nurses and psychotherapists reported significantly more PTG and traumatic stress than doctors. Shiri and colleagues (2008) also found support for a curvilinear relationship between PTG and traumatic stress symptoms, such that professionals with moderate levels of traumatic stress symptoms reported the highest levels of PTG. Continuing this line of research, Lev-Wiesel and colleagues (2009) examined posttraumatic stress symptoms and PTG among Israeli social workers and nurses who worked with survivors of the Lebanon-Israel war. The authors found that nurses reported more PTG than social workers serving the same population. Notably,

Lev-Wiesel and colleagues (2009) found no difference in PTG scores between nurses who were directly exposed to war-traumatic events versus nurses who only had indirect contact via patients. The authors argued that the difference in PTGI scores may have been because nurses spent longer periods of time with patients, had ongoing contact with peers and supervisors in the hospital, and participated in various peer group activities. These activities may have enabled nurses to more fully process and integrate their experiences, thereby resulting in higher PTG scores.

Taken as a whole, these studies provide preliminary evidence for the existence of vicarious PTG among nurses. However, additional research is needed to further examine the context and the specific mechanisms by which this occurs.

2.5 Wisdom

As Tedeschi and Calhoun (2004) have suggested in their model of PTG, exposure to trauma and the cognitive changes that often follow may be related to additional positive outcomes. One such potential outcome is the development of wisdom. The construct of wisdom has captured the interest of philosophers and academics alike for many centuries (Birren & Svensson, 2005) and, within the field of psychology, wisdom has been the subject of research for over two decades (Yang, 2008). Despite the growing research, no single understanding of wisdom has emerged. There are also multiple conceptualizations for the categorization of wisdom. Some authors have proposed that wisdom falls into two categories: practical and transcendent wisdom (Le, 2008a; Wink & Helson, 1997). Practical wisdom involves the ability to solve complex real-world problems and understand human nature (Baltes & Staudinger, 2000). On the other hand, transcendent wisdom entails knowledge and understanding of existential problems,

feeling connected to future and past generations, as well as the ability to let go of personal biases, subjectivity, and self-centeredness (Levenson, Jennings, Aldwin, & Shiraishi, 2005). A more recent review proposed that psychological wisdom should be divided into personal and general wisdom (Mickler & Staudinger, 2008; Staudinger & Glück, 2011). In this framework, personal wisdom refers to insight into the self and one's own life, whereas general wisdom refers to insight into life in general from an observer's perspective. In addition to these broad categorizations, researchers have focused on more specific components of wisdom. Some have defined wisdom as superior cognitive functioning or intellectual development (e.g., Arlin, 1990; Erikson, Erikson, & Kivnick, 1986; Kramer, 2000; Labouvie-Vief, 2003), while others have suggested that wisdom is a combination of specific personality characteristics, such as cognitive, reflective and affective competence (Ardelt, 2003; Birren & Fisher, 1990).

Consistent with the Western cultural view that people grow “older and wiser,” many theories on the development of wisdom suggest that it is more evident in later age (Smith, Dixon, & Baltes, 1989; Staudinger, & Baltes, 1996; Staudinger, Lopez, & Baltes, 1997; Tornstam & Toernqvist, 2000). For instance, older adults (up to 80 years of age) tend to be top scorers on measures of wisdom-related performance (e.g., Baltes, Staudinger, Maercker, & Smith, 1995; Smith & Baltes, 1990). However, more recent research suggests that wisdom does not have to occur later in life (Baltes & Staudinger, 2000). In a study of personal wisdom narratives, Bluck and Glück (2004) found that all age groups (adolescents ages 15-20, young adults ages 30-40, and older adults ages 60-70) reported having gained wisdom. Moreover, both young and older adults reported having learned valuable lessons from their life experience. Similarly, in a study on the

development of wisdom, Pasupathi, Staudinger, and Baltes (2001) demonstrated that young adults (ages 21-37) had a marked increase in wisdom, as compared to adolescents (ages 14-20), suggesting that wisdom develops quite rapidly from adolescence to adulthood. Thus, while older age may provide opportunities for a larger range of experiences, it is not necessarily a prerequisite for wisdom. Young people also have the potential for wisdom, particularly in times of hardship or challenging circumstances (Staudinger & Glück, 2011).

2.6 Measures of Wisdom

The empirical assessment of wisdom is in its infancy, making it an ideal area for exploration using a grounded theory approach. The following section reviews existing measures of wisdom, their limitations, as well as thematic components of wisdom that have been uncovered in previous research.

Given the broad nature of the construct and its manifold definitions, attempts at assessing wisdom have resulted in a multitude of measures, each positing a slightly different conceptualization of wisdom (Ardelt, 2003). Within the field of psychology, researchers have debated about the core elements of wisdom, the relative importance of these various elements, and the process by which wisdom is attained (Baltes & Smith, 2008).

One approach that has received considerable attention in the psychological literature is the Berlin Wisdom Paradigm (Baltes & Smith, 2008). This paradigm “combines a broad definition of wisdom as excellence in mind and virtue with a specific characterization of wisdom as an expert knowledge system dealing with the conduct and understanding of life” (Baltes & Smith, 2008, p.58). According to this paradigm, along

with factual knowledge and strategic knowledge, a person who is wise must meet three additional meta-criteria: lifespan contextualism, value relativism, and the recognition of uncertainty. *Lifespan contextualism* is “knowledge that considers the many themes and contexts of life (e.g., education, family, work, friends, leisure, the public good of society, etc.), their interrelations and cultural variations, and, in addition, incorporates a lifetime temporal perspective (i.e., past, present, future)” (Baltes & Staudinger, 2000, p. 125-126). *Value relativism* involves the understanding that other people’s values, beliefs, and goals may be different from one’s own (Baltes & Smith, 2008). The last meta-criterion, *recognition of uncertainty*, is the acknowledgement that humans do not (and cannot) know everything and cannot predict the future; it is the “appreciation of the fact that the validity of human information processing itself is essentially limited... and that individuals have access only to select parts of reality” (Baltes & Staudinger, 2000, p. 126). A major limitation of Baltes and colleagues’ measure of wisdom is that it requires extensive training to administer and score (see Staudinger, Smith, & Baltes, 1994). Also, subjects are asked to respond to hypothetical situations that may or may not pertain to their personal experiences; their ratings are based exclusively on wisdom-related performance in cognitive decision-making (Webster, 2003).

While the Berlin Wisdom Paradigm is designed to reflect general wisdom, a number of other measures have been created to capture personal/transcendent wisdom. For instance, the Three-Dimensional Wisdom Scale (3D-WS; Ardel, 1997; 2003) is a measure of personal wisdom that proposes three components of wisdom: cognitive, affective, and reflective. The cognitive dimension involves efforts to understand life and the deeper meaning of phenomena. The affective dimension involves the development of

compassion and love for others, with a decrease in negative emotions towards others. The reflective dimension includes being able to look at situations from multiple perspectives, along with the development of self-awareness and insight. A recent comparison of the 3D-WS to another measure of wisdom, the Self-Assessed Wisdom Scale (SAWS), was not able to replicate the dimensional structure obtained by Ardel (2003) and noted a social desirability response bias (Taylor, Bates, & Webster, 2011). The SAWS (Webster 2003; 2007) is comprised of 5 interrelated dimensions: life experience, emotion regulation, reminiscence and reflectiveness, openness, and humor. The original 30-item scale had questionable psychometric properties (i.e., poor reliability) and was subsequently revised, with noted improvements in reliability and construct validity (Webster, 2007).

Taking a slightly different approach to wisdom, Levenson and colleagues (2005) devised a measure of personal wisdom that is aimed at capturing developmental change, that is, wisdom that emerges as one ages. This measure, called the Adult Self-Transcendence Inventory (ASTI), asks individuals to respond to items “compared to five years ago” (Levenson et al., 2005). To date, only four published studies (from the same research group) have used this measure (e.g., Jennings et al., 2006; Le, 2005; Le, 2008b; Le & Levenson, 2005). Moreover, the ASTI is intended to specifically measure wisdom that results from the natural aging process and requires an individual to accurately recall change over the course of 5 years. In addition, Wink & Helson (1997) have attempted to develop separate measures of practical and transcendent wisdom, but the resulting measures have not been widely used and have questionable psychometric properties (Brown & Greene, 2006).

Another more recent measure of personal wisdom is a performance-based measure that was adapted from the Berlin Wisdom Paradigm (Mickler & Staudinger, 2008). This measure asks individuals to think aloud about themselves as a friend might, noting typical behaviors, actions during difficult situations, reasoning for this behavior, and strengths/weaknesses. Participants' reflections are then rated based on two basic criteria and three meta criteria: self-knowledge, available heuristics for growth and self-regulation, the ability to reflect on and have insight in the causes of one's behavior, self-relativism (i.e., being able to evaluate oneself objectively), and tolerance for ambiguity. According to Mickler and Staudinger (2008), this measure demonstrated good convergent validity and was related to measures of personality growth, ego development, benevolent personal values, and psychological mindedness. However, methodologically, asking an individual to describe her/his approach to being a friend and how others likely view them is not likely to elicit all aspects of personal wisdom, particularly the kind of wisdom that may arise following experience with trauma.

To summarize, there are multiple theories and approaches to measuring wisdom within the psychological literature. Some of these measures are either too general or overly simplistic (Ardelt, 2003). Others have questionable psychometric properties or have not been widely used (Staudinger & Glück, 2011). Thus, while there are multiple measures of wisdom in existence, there is not, as yet, a 'gold standard' and, particularly salient for this project, no measure to date has specifically assessed the development of wisdom that occurs as a result of a traumatic experience. Therefore, additional research is needed to determine how to best capture wisdom that arises following trauma or adversity.

2.7 The Emergence of Wisdom Following a Traumatic Event

Some authors have suggested that traumatic experiences and life crises can facilitate wisdom, and transcendent/personal wisdom in particular (Aldwin & Levenson, 2001; Ardel, 1998; Baltes et al., 1995; Staudinger & Glück, 2011; Wink & Helson, 1997). According to Le (2008a), wisdom that is a result of experiencing trauma involves three processes. First, successfully overcoming trauma may involve developing new ways of coping that, in turn, foster self-development and a new understanding of oneself, others, and the world (Aldwin & Levenson, 2004; Janoff-Bulman, 2006). Second, traumatic experiences may facilitate introspection and lead individuals to reexamine their lives from a new perspective, which subsequently contributes to a reduction of self-centeredness and an acknowledgement of their own limitations (Le, 2008a). Third, stressful experiences may necessitate the shifting of cognitive schemas, making them more elaborate and complex, such as acknowledging that life may not always be fair.

There is some empirical evidence that supports the emergence of wisdom following a traumatic event. Wink and Helson (1997) examined practical and transcendent wisdom in a sample of women in their 50s. The authors found that women who experienced divorce, which was assumed to be an adverse experience, scored higher on practical wisdom. In support of the idea that stressful experiences can facilitate wisdom at any age, younger women who experienced divorce scored higher than younger women who were not divorced. In addition, Wink and Helson found that women who were psychotherapists, professionals who often encounter stressful and traumatic experiences via their clients, scored the highest on both practical and transcendent wisdom, even when controlling for education level. This finding was consistent with a

study by Staudinger (1996), who found that persons who were nominated as “wise” tended to be human service professionals. Similarly, Lyster (1996) found that the majority of those nominated as wise were ministers, mental health professionals or educators. Lyster also noted that wise persons appeared able to make meaning out of both positive and negative experiences and use both for self-development; wise individuals were also seemingly able to transform adversity into growth-affirming experiences.

The development of wisdom has also been reported for persons experiencing trauma as a result of a macrosocial event. For example, Ardel (1998) found a relationship between wisdom and psychological health among those experiencing the Great Depression. More specifically, she uncovered that individuals who were classified as wise in older age were more psychologically healthy during the Depression, even though they experienced the same financial hardships as those individuals who were classified as relatively low on wisdom. Ardel concluded that since wisdom and psychological health are related, wisdom may be acquired by successfully overcoming hardship. The most recent study of wisdom following a traumatic experience is from a sample of military servicemen who had combat exposure (Jennings et al., 2006). Jennings and colleagues found that moderate levels of combat were associated with higher levels of wisdom ten years later. In addition, individuals who perceived benefits from their experience and utilized more adaptive coping strategies had higher wisdom scores. In this case, perceived benefits included items such as “[I] learned to cope with adversity” and “[I had] a broader perspective of things.” The authors concluded that it

was not the experience of adversity itself, but the way individuals interpreted and coped with that experience, that led to wisdom.

2.8 The Relationship Between Wisdom and Posttraumatic Growth

To date, no study has specifically examined the relationship between wisdom and PTG. Nonetheless, research using related constructs, such as personal growth, suggests that individuals who grow wiser following a traumatic event may also report growth (Staudinger & Glück, 2011). As Bluck and Glück (2004) found, experiences in which people coped with challenging circumstances and were able to reinterpret them in a positive light or make things better using their own resources were most likely to elicit wisdom. Indeed, many of the reported “life lessons” in the study overlap with domains of PTG. For instance, one participant stated that he “learned to live in the here and now. Not to be wasteful, but to sometimes allow [himself] things that make life more pleasant – to be a little freer and not delay everything. You never know what the future holds” (Bluck & Glück, 2004, p. 561). Such a statement is consistent with the PTG domain of greater appreciation of life. In addition, Helson and Srivastava (2001) found a positive relationship between wisdom and Ryff’s (1989) construct of Personal Growth, defined as openness to new experiences, improvement in oneself, realizing one’s potential, and self effectiveness/self knowledge. Consistent with these findings, Jennings and colleagues’ (2006) demonstrated that perceived benefits were related to wisdom. Thus, even though personal growth, perceived benefits, and PTG are not identical constructs (Tedeschi & Calhoun, 2004), these findings provide preliminary support for a connection between wisdom and positive change.

2.9 Rationale for Taking a Grounded Theory Approach

Grounded theory is a qualitative approach whereby theory is derived from data, typically without preconceived hypotheses that may lead the researcher in a particular direction (Strauss & Corbin, 1998). To foster the emergence of the most fitting theories, this method requires the researcher to simultaneously collect and analyze data (Charmaz, 2006). As Strauss and Corbin (1998) assert, “grounded theories, because they are drawn from data, are likely to offer insight, enhance understanding and provide a meaningful guide to action” (p. 12). This is an optimal methodological approach for an underdeveloped area of research, and allows for a flexible and exploratory approach to data collection and analysis.

Furthermore, grounded theory methodology can potentially yield data that are richer and more meaningful than quantitative measures. When participants are not constrained by the metrics of a questionnaire and can use their own words to describe experiences, feelings, etc., their responses can help paint a picture that is more detailed and insightful than quantitative measures. Utilizing grounded theory in the present study allowed for the development of a better conceptual understanding of wisdom and PTG as they relate to the experience of oncology nurses. Such an approach enables the refinement of constructs as well as examining what “wisdom” and “PTG” mean to each participant.

2.10 Gaps in Knowledge

This study addressed an important gap in the literature – how wisdom is related to PTG and the specific mechanisms of this relationship in a population of healthcare providers. To date, only three studies have examined whether nurses experience PTG as

a result of their professional activities (Shiri et al., 2008; Lev-Wiesel et al., 2009; Taubman-Ben-Ari & Weintroub, 2008). Although the researchers found that nurses do indeed report PTG, all of the studies were conducted in Israel and it is unclear whether these results would be replicated with American nurses. Therefore, this study is: (a) the first to examine the construct of PTG in a North American sample of nurses; and (b) one of the first to specifically examine wisdom that arises following adversity and its relationship to PTG.

CHAPTER 3: METHODS

3.1 Overview

The project's primary purpose was to elucidate whether one consequence of experiencing trauma, either directly or vicariously, is the development of PTG and wisdom. Qualitative interviews were conducted with oncology nurses at a large hospital in the southeastern United States. This population was targeted for the examination of PTG and wisdom since these nurses are frequently exposed to potentially traumatic circumstances, including death, as a result of caring for their patients. Such experiences may lead nurses to engage in similar cognitive processes as those directly experiencing these illnesses (i.e., patients and family members), thereby resulting in PTG and increased wisdom.

3.2 Researcher Perspective

An important tenet of grounded research is reflexivity, or self awareness, of the researcher (Charmaz, 2000; Strauss & Corbin, 1998). Given that the researcher is at the heart of both data collection and analysis, personal biases must be acknowledged and kept in the forefront (Charmaz, 2000). Therefore, it is important to note that my personal experiences as a practicum student have informed the development of this study. As part of my doctoral training, I worked as an "intern" for Cancer Patient Support Program at this particular hospital and worked closely with cancer patients and oncology nurses.

Becoming close to, and subsequently losing, multiple patients impacted me deeply. This personal experience has led me to view the world very differently and, to some extent, has led to PTG and gained wisdom. Thus, I developed this study with the anticipation that some nurses may have had similar experiences as a result of working closely with patients. In order to maintain as much objectivity as possible during the data collection and analysis process, my ideas, personal observations and reactions to interviews were recorded as memos and were demarcated from data that were collected directly from participants. Moreover, steps were taken to ensure the credibility of the data (see Analysis section below).

3.3 Recruitment

All participants were recruited specifically from the Comprehensive Cancer Center. Nurses were recruited through several contacts in the inpatient and outpatient nursing departments (e.g., Research Associate for Nursing Education and Research, Nursing/ Data Coordinator, Nurse Educator). These contacts sent out an email to nurses within their department explaining the study and included the recruitment flyer as an attachment. In addition, some snowball sampling was utilized as several nurses who had participated in the study referred a colleague to the study. The recruitment flyer describing the study was also posted in staff break rooms. Nurses interested in participating were asked to contact the researcher by phone or email to schedule an interview. At the time of the interview, eligible participants were provided with a consent form describing the study (see Appendix A).

3.4 Sampling

Two purposeful sampling methods were employed in this study: criterion sampling involves selecting participants who meet a particular pre-specified requirement (Patton, 1990) while theoretical sampling involves obtaining participants that help to fill gaps in theory, i.e., “to discover variations among concepts and to densify categories in terms of their properties and dimensions” (Strauss & Corbin, 1998, p. 201). Theoretical sampling is founded on the idea that participants should be purposively selected in order to capture the most diverse occurrences of a phenomenon (Shakespeare-Finch & Copping, 2006). This approach allows for adjustments to be made as a theory evolves (Charmaz, 2006; Strauss, 1987). During the initial recruitment and data collection phase, criterion sampling was used to recruit a diverse sample of nurses with a range of experience in the field. Thus, efforts were made to recruit nurses with a range of years worked (i.e., from those who have recently graduated to nurses who have been in the oncology field for decades) as well as from a variety of units (i.e., both inpatient and outpatient units) and specializations (i.e., radiation oncology, hematology/oncology and surgical oncology). Exclusion criteria were intentionally broad to ensure a diverse sample; participants needed to be licensed nurses who worked at least part-time on an oncology floor, were at least 18 years of age and were fluent in English. Once initial data analysis was carried out, theoretical sampling was used to help further the development of theory.

In grounded theory research, sample size cannot be determined in advance as participant sampling, data collection and analysis occur simultaneously. Data collection continues until saturation, (i.e., the point at which new data no longer provide new

theoretical insights) has been achieved (Charmaz, 2006; Miles & Huberman, 1994). In this case, saturation was achieved when interviews provided no additional information on PTG and wisdom among nurses (N = 30 interviews).

3.5 Data Collection

As part of the grounded theory framework, one-on-one, semi-structured interviews were conducted with oncology nurses. All interviews were conducted face-to-face and digitally recorded. Participants were first asked to describe how their experience caring for patients with cancer had impacted them personally. At the end of the interview, participants were invited to provide any additional information about their experience as an oncology nurse. If the topic of wisdom and PTG did not arise spontaneously, probes were used to elicit more specific information. An interview guide was developed at the beginning of the study and was continuously refined to most effectively capture the categories and concepts of interest (see Appendix B). Memos of my thoughts, impressions, and interpretations were kept to aid in thematic construction (Strauss & Corbin, 1998).

Interviews took place on-site. The length of the interviews varied from 20-90 minutes depending on the individual. Participants were compensated for their time with a \$20 Target gift card. The rationale for compensation was to provide incentive for nurses to speak with the interviewer during their break or once their shift had ended. No medical records were reviewed for this study.

To disseminate preliminary findings and to ensure data were transcribed and coded accurately, I followed up with two of the participants via email/phone and presented some of the emerging themes from the analysis. Both participants who were

contacted agreed with the accuracy of the transcripts and indicated that the thematic categories were an accurate reflection of their interviews.

3.6 Analysis

Interviews were recorded and transcribed verbatim. A team composed of the researcher and four research assistants were responsible for all transcription and coding. All transcripts were reviewed in their entirety by the researcher to ensure accuracy. NVivo 9 (QSR International Pty Ltd, 2007), a qualitative data analysis program, was used to code transcripts and determine thematic components. As stated earlier, the grounded theory approach dictates that sampling, data collection and analysis occur in unison to enable constant comparison (Charmaz, 2006; Strauss & Corbin, 1998). In order to maintain objectivity, the researcher must continuously compare interview to interview and category to category.

Data analysis was guided by the basic grounded theory principles outlined by Strauss and Corbin (1998). The first level of analysis involved line-by-line coding whereby a code was assigned to every meaningful line or group of lines in a selected text. Each line of text was read multiple times and codes were compared within and between interviews. To ensure consistency in coding, a subset of interviews was read and coded by multiple members of the research team. Team members were familiar with grounded theory coding strategies and discussed the process of coding with the author. When a coder identified a new theme (with the agreement of the research team), a thematic category referred to as a “node” and accompanying node definition were created in NVivo.

Second-level analysis involved grouping codes into subcategories and larger themes (see Charmaz, 2006; Strauss, 1987; Strauss & Corbin, 1998). Consistent with the specific aims, the main objective of second-level data analysis was to determine whether themes of PTG and wisdom were present and to examine the relationship between these two constructs. Throughout this more in-depth coding process new nodes and node definitions were added as broader thematic categories evolved, and node organization and tree structure (i.e., the relationships between nodes) were changed to more accurately reflect the data. All coding decisions were made via consensus. Disagreements were discussed until all research team members agreed to the particular coding. Second-level analysis continued until theoretical saturation was achieved and no new themes related to PTG or wisdom emerged.

To address credibility (i.e., internal validity in quantitative terms), within-case auditing was carried out to ensure that all coded text matched the coding criteria (i.e., overcoding) and that content that should *not* have been coded according to the criteria was excluded (i.e., undercoding; Miles & Huberman, 1994). This process was accomplished by having experienced team members who were not part of the initial coding process (Dr. Arnie Cann, dissertation co-chair, and Dr. Margaret Quinlan, dissertation committee member and expert in qualitative research methods) code a randomly selected transcript (20-25% of each transcript) and compare them with the original coding. A 70% or higher concordance rate was considered to be indicative of high credibility. In the current study, the concordance rates were 90% and 82%; there were few major disagreements in coding, with most discrepancies occurring at the subtheme level. All differences in coding were discussed and resolved. Coding for the

remaining transcripts was revised to reflect these changes. In addition, a colleague who was not an expert in PTG or wisdom was asked to code a selected transcript; the concordance rate was 73% and provided additional credibility as it suggested that coding was not dependant on knowledge of existing theories of PTG/wisdom.

To further enhance trustworthiness of the data, expert debriefing took place to ensure themes were coded accurately. The researcher reviewed the coded data with members of the Posttraumatic Growth Research Team (including Drs. Richard Tedeschi and Lawrence Calhoun, the developers of the construct “posttraumatic growth”) and revised the coding scheme according to the team’s recommendations. As mentioned earlier, member checks were also employed with a subset of participants to confirm accurate interpretation of their narratives and to correct any errors in transcription.

CHAPTER 4: RESULTS

4.1 Description of the Sample

All 30 participants were oncology nurses. The average length of nursing experience was 16.28 years ($SD = 12.35$), with a range of 1.5 to 37 years. The average length of nursing experience specific to oncology was 13.58 years ($SD = 12.07$). The sample was almost exclusively female (97% female). Nurses were selected from a variety of units, including Inpatient Hematology/Oncology (27%), Oncology Research (23%), Apheresis (17%), Bone Marrow Transplant (13%), Outpatient Oncology (7%), and other oncology-related units (12%).

4.2 Overview of Results

The results are organized to address the four primary study aims. The first section presents experiences and events that challenged nurses' assumptive worlds. For nurses in this sample, upheaval of core beliefs tended to be precipitated by the death of a patient with whom a nurse had developed a particularly close relationship. Therefore, themes related to relationships between nurses and patients and death/loss are presented in this section. The second section presents themes related to nurses' reports of growth as a result of their work in oncology. Themes consistent with the five domains of PTG are described, along with other positive consequences that did not meet criteria to be classified as PTG. Themes related to vicarious PTG are also presented in this section. The third section presents themes related to wisdom. Along with traditional

conceptualizations of wisdom, themes related to professional knowledge/wisdom are also described. Lastly, the fourth section describes findings that highlight the relationship between PTG and wisdom; the theme of *Benevolence*, a construct that is proposed to be the result of both PTG and wisdom, is presented.

4.3 Relationships, Loss and Challenges to Nurses' Assumptive Worlds

4.3.1 Relationships with Patients

As Tedeschi and Calhoun (1996) suggested, the development of PTG generally presupposes the upheaval (or at least serious questioning) of one's assumptive world. When asked about their experiences working with cancer patients, 80% of nurses spoke about the deep emotional connection formed with their patients. It was these intense personal relationships and the subsequent distress nurses felt when these patients died that seemed to lead to an upheaval of nurses' assumptive worlds. Themes relating to *Relationships with Patients*, subthemes, frequencies, and sample quotes can be found in Table 4.1. This theme exemplifies the unique nature of the oncology nursing work environment. Unlike many other professions that have limited or merely casual social contact, oncology nurses emphasized the close and personal connection that was needed to care effectively for their patients. As one nurse explained:

The only limitations that the relationship has are the ones you put on it. Medicine has limitations. You can only give so much for so long. Radiation, you can only give so much for so long. You can only take out so many pieces of someone's brain. But a relationship is boundless. It goes as far as you let it go.

Overall, nurses described having intimate and close relationships with almost every patient. As one nurse described, patients see their nurses as a lifeline and depend on them both medically and emotionally.

Table 4.1. Subthemes, frequency and content of relationships with patients.

Superordinate theme	Subtheme	N	Frequency	Example of quote
Focusing on patient care	Nurses demonstrating to patients that they care	10	18	“I think that just letting the family know that you cared and that you wanted to be there.”
	Treating patients as family	12	16	“Some of ‘em, the patients felt like we’re family so they... They’ll open up sometimes. After they’ve known us a while...”
	Pulling for patients	4	11	“I guess I had pulled for him so much. I wanted him to get through this. He had faced so much...”
	Maintaining continuity with patients	3	4	“They’re our people, so we do get very possessive of our patients that we’ve had forever... But they rely on you. They trust us and they see 50 million doctors a day. They trust us [because] they see us repeatedly.”
	Putting patients at ease	3	4	“... Just... putting [patients] at ease... someone who’s first time treatment, they’re very, very nervous, very anxious, and just putting them at ease. And letting them know that it’s generally very anti-climactic to receive treatment.”
Forming relationships with patients		17	40	“In any aspect of nursing I think you become close to your patients, but especially in the outpatient setting, in this type of [oncology] setting, because you sit there. They come so frequently, and you get to know them and how this cancer affects their lives, but not only theirs but their loved ones, their husband, their wife, their brother, their sister.”
	Forming special bonds with certain patients	14	57	“It depended on how close I was with the patient. You... could go weeks and have several patients that pass away and of course you feel sorry for the family, but... you have the ones here and there throughout the years that you can remember everything that happened that day, and the funeral, and... just things that stick out in your mind. Just like any other situation in life.”

Note: N = the number of nurses who reported the theme; Frequency = the number of times the theme was cited.

Yes, it's very easy to 'cause these patients see you as a lifeline, you know not only what's going on with their disease but you bond with them on a personal level and so...you're... in pretty deep by the time they get through their first rounds of chemo.

However, most nurses also noted that the depth of the relationship varied from patient to patient.

Yeah, but there are... those certain patients that do... pull on your heart strings... and if they don't get better and it's time to say goodbye that's rough.

As this quote suggests, there are certain patients to whom a nurse may be particularly drawn. Although it may be difficult to explain why this connection develops with one patient and not another, nurses expect that they will be closer to some patients and not others.

Nurses also noted the discrepancy between the expectations friends and family had about their work and their actual experiences. Namely, the majority of nurses found their work to be innately rewarding while others expected oncology nursing to be "depressing." As one nurse explained:

People, I tell them I work in oncology, and they say, "oh, that must be depressing." And I say no. It's rewarding, because I get to share... I get to be the person, if their diagnosis means that they're terminal, I get to help them... And just make the most of the time they have left. I think it's very rewarding. I cannot say enough about that.

Thus, the majority of nurses found their work to be rewarding and fulfilling due to nature of the relationships developed with their patients. Nurses repeatedly stated that the high level of intimacy developed with their patients was unique to the oncology setting.

Overall, the theme of *Relationships with Patients* was at the center of almost every interview (n = 26). Relationships were the driving force behind the care nurses

delivered to patients and, oftentimes, these relationships were the sole motivation for remaining in oncology nursing, particularly during times of difficult or multiple losses.

4.3.2 Setting Boundaries

Because of the personal and intense nature of the relationships formed, some nurses felt that it was difficult at times to maintain emotional boundaries; this theme became labeled *Setting Boundaries* (see Table 4.2). The subthemes of *Crossing Boundaries* involved becoming overly emotionally involved with patients, which often led to difficulty coping with patients' deaths and an extended period of grief. Particularly early on in their nursing experience, several nurses spoke about getting too emotionally attached to patients and being unprepared for loss. For example, one nurse recalled her first experience in oncology.

The very first patient that I had up here that was... my very first patient that I took off of orientation... he was mine. It was his first admission here. He was a new diagnosis. Fell in love with the man, fell in love with the family because they reminded me a lot of me and my family. Reminded me a lot of my dad. And so... I could just tell, oh I just love him so much. He would come in and I always... request... him for my patient. And then... when he got very, very sick, it was very, very hard for me. I mean, ...I would just come to work and... you go into his room and... you don't want to cry because... it makes them cry because they see that you're really attached. And, I mean, just thinking about him just makes me just tearful but he died last January. [Crying]... Sometimes now I still think about him and I get the vapors. But... you just kind of have to... his wife and I we still exchange cards... from time to time and... that's okay. But you can't do that with every person because if you did that with every person, you'll leave here in six months.

This example highlights the challenges of maintaining an emotional boundary in the oncology setting, particularly as a novice nurse. Although there was a range in how much a nurse was willing to connect to patients, the majority of more experienced nurses

Table 4.2. Subthemes, frequency and content of setting boundaries.

Subtheme	N	Frequency	Example of quote
Separating oneself from the emotional impact of patients	13	25	“I’ve tried to push my own feelings away a little bit because I start feeling really burnt out and I start getting depressed too... And it’s hard not to do that because you do get close to these patients. But if you don’t... draw a line... [and] say I can’t... have all these emotions towards... this one patient or whatever, then every patient that you like is going to end up burning you out. And you’re going to end up really sad and depressed.”
Being able to close the door	10	19	“It also, I think, took some time initially for me to be able to pretty much leave... work at work... and focus on family and other things when I’m away from here. Otherwise... you can’t do the work.”
Balance	8	16	“You kind of have to balance that... delicate little line of... you want to be caring and compassionate for your patients but you also have to go into that self-preservation mode of I can’t get too attached to them because everybody that dies up here. You can’t get just fall to pieces. So... you kind of have to... be attached to some folks and kind of be really protective of them and make them... your patients and... it’s okay to allow yourself sometimes to get attached to those people and make them your own. And then other people you kind of have to take a stand back and say... I need somebody to rotate with me. I can’t take them all the time. I can tell I’m crossing that line...”
Crossing boundaries	8	15	“In nursing they teach you... you have to put up that wall, you can’t become close with all of them. But it’s hard... and you’re assessing them and you want them to tell you how they’re feeling and you can’t help but to... take that on.”

Note: N = the number of nurses who reported the theme; Frequency = the number of times the theme was cited.

interviewed (defined as having more than 5 years of experience) noted that maintaining emotional boundaries became easier over time. This subtheme became referred to as

“Being Able to Close the Door”:

And so, that day, just like a light switch and I... just found a way to learn. I discovered that it's like closing a door. When I come to work I open the door and I open my heart and I am compassionate with the patients who are here and I cry with them, I do whatever. But when I walk out the door I close that door to my heart as I leave here and I don't open it again until I come back the next day. I used to go to funerals and... write people cards and I would call them on the phone, but I was having a lot of trouble separating my work from my home. And so once I learned that I couldn't do that... But I think that's the only way I've been able to stay here for so long because I don't carry it home. And that... may sound kind of cold-hearted but you have to deal with it in whatever way you can.

Thus, through continued experience working with patients, most nurses found their unique approach to managing boundaries. The subtheme of *Balance* involved being able to separate work life from home life. As one nurse explained,

To be able to stay here... [I need] to keep a healthy emotional relationship with my coworkers, my family, and other patients... and keeping that balance. So, I've just had to learn [that] I come to work and then I go home, and when I go home I'm not at work anymore.

Finding this balance appeared to be a function of years of experience (e.g., more experienced nurses seemed to be more facile in establishing balance) and personal coping style. It appeared that nurses who described finding a way to give themselves fully when caring for patients while also being able to “close the door” were the most successful in maintaining their own emotional well-being across all settings.

Nevertheless, even the most experienced of nurses struggled to maintain boundaries with certain patients with whom they had developed a particularly strong bond. Almost half (43%) of nurses interviewed described struggling with *Separating Oneself from the Emotional Impact of Patients*. This subtheme included nurses'

understanding of boundaries and some of the strategies they used to establish these boundaries. For instance, one nurse spoke about the discrepancy between what she was taught at nursing school and her own perspective on becoming emotionally involved with patients.

When I was in nursing school they'd say you can't get involved. You're not... supposed to get involved. And yes you do... get involved... [I] go to the funerals if I can... I have to have some closure. But... you get to where you can do that... and you have wonderful, wonderful memories.

For the nurse above, becoming emotionally involved was inevitably part of the job; at the same time, she was able find means of closure, establish a balance, and “have wonderful memories” as a result of these experiences.

Hence, within this sample, 70% of nurses described struggling with their level of emotional involvement with patients. It appeared that nurses who chose to work in this setting expected and sought out intimate connections with their patients. Oftentimes, these deep and personal ties seemingly helped patients endure their cancer treatment while also keeping nurses engaged and committed to such difficult and draining work.

4.3.3 Emotional Impact of Loss

Over the course of multiple interviews, a pattern emerged whereby the most challenging experiences with loss were due to deep emotional connections formed with certain patients. As mentioned earlier, this tended to occur early in a nurse's career. One nurse referred to this experience as the patient that she “got burned by.”

The only time that it ever... the only two times within the 25 years in working with cancer patients that it has really ... hit me, as dreaded as the disease itself. And I mean that was when... I guess the first time ... um maybe the first time was whenever I had my very very first patient that I became so close to and that so many oncology nurses would refer to it as the patient that they got burned by. You knew that they were gonna be cured, you knew that everything was gonna be ok, it's that first patient that

you just get so close to, and you know it's gonna be all ok and then they die.

Following the interview quoted above, I routinely began to ask nurses about the “patient they got burned by.” Every nurse asked was able to identify such a patient. Overall, it appeared that nurses tended to get “burned” by these patients as novices, largely due to their lack of expertise upholding emotional boundaries.

In some cases, the most memorable and impactful losses were truly traumatic due to the circumstances surrounding the patients cancer treatment and subsequent death.

One nurse spoke about a patient whose face was severely disfigured after surgical attempts to address complications related to her cancer.

And ... [sighs] she developed ... a fungal infection in her sinuses, and when that happened ... she was taken downstairs to be evaluated and she was immediately taken to surgery and had excavations, so to speak, of her sinus cavities, which ... disfigured her tremendously in the face and ... we all sort of knew. I was prepared that this was just a very palliative thing, and it just really, really bothered me [laughs]... I'll never forget her... It... killed her not long... after the surgery but... the nurses had to go in and, I mean, she totally... would have been scary. I mean, they had to do packing and ... I'm sure there's a more scientific name but it was almost like a “face-ectomy.” A large part of her face was removed and nasal and... open cheek in order to be able to get into... It was horrendous and it was very early in my transplant career.

Another nurse described the death of a young patient that also occurred early in her career. The gruesome nature of this patient's death was perceived as highly traumatic for this nurse and subsequently changed the way she viewed death and dying.

I can think back to a very traumatic situation, very traumatic situation. I was a brand new nurse... I remember exactly what I was doing... Twenty-one year old had a – a disease called invasive aspergillosis ... I was walking down the hall and I saw him sit straight up in bed. And I said, what – what is it? What's wrong? Did you have a dream? And he just threw his head back, and blood just went – to the TV, to the entertainment center, the aspergillosis eroded his pulmonary artery... I had never seen so much blood in my entire life. Never seen it. I mean I can smell it, I can tell

you exactly what drugs I gave him, and what – where I gave them to him ‘cause I was the one who pushed the drugs in his code... So we had to literally sit there and watch him bleed out. Because I mean his – his heart did not stop beating. I mean he had to get to a point where every time we were compressing too, he was just – more blood was coming and we had to just sit there and wait... He was fully aware of what was happening. And it was – it was horrible. It was horrible.

Although such traumatic deaths are rare, they unfortunately happen often enough that most nurses can highlight at least one example of such a death. Thus, the quotes above highlight the range of experiences nurses encounter while facing death and dying in an oncology setting.

Early experiences with death also appear to set the stage for how nurses approach all new patients that follow. The majority of nurses interviewed (97%) stated that death and dying was a standard part of their work, regardless of the unit they worked on. Irrespective of the circumstances leading to a patient’s death, most nurses (67%) discussed the deep sense of loss that was felt after the death of a patient. This loss was amplified when a nurse became particularly emotionally attached to a patient. One nurse explained that the degree of loss experienced depended upon on the strength of the patient bond.

There’s been a lot of [deaths]....Some are harder than others, I think that every nurse... you treat all your patients the same, whether they’re your favorite or they’re someone you didn’t know that well, but there are always deaths that hit closer to home than others. And I don’t know what determines who you have that bond with and who you don’t...

As this quote illustrates, it is not always clear for nurses which patients will become ‘favorites.’ However, at any point in a nurse’s career, there are likely to be patients that are more memorable and with whom the emotional bond is stronger. These are also the patients whose experiences are most likely to challenge a nurse’s core beliefs.

4.3.4 Challenges to the Assumptive World

The upheaval of the assumptive world often related to a nurse's beliefs about the nature of death and dying, career objectives, and more general questioning of the fairness of life and events. Subthemes included *Revising Beliefs*, *Questioning One's Career Path* and *Questioning the Fairness of Life* (see Table 4.3). Revising beliefs included questioning and reworking longstanding notions about relationships, human nature, and the purpose of life. For instance, one nurse discussed revising her perspective on spending time off from work.

I just basically had to change little things and how I did it. And meaning that, I think in some ways my personal life took the hit versus my professional life... Aside from feeling guilty, yeah, I did get over that because there's nothing we can do. As far as maybe toning down what I did over the weekend, I stopped doing that too because I realized that some of these patients wanted to hear what people that are living and healthy do because they can't... like they would live vicariously through [the nurses].

For the nurse quoted above, a shift of perspective occurred after she realized that her patients did not want her to restrict her personal life. In fact, she found that patients wanted to live vicariously through her. Once she had this realization, she was able to more effectively manage the guilt she was experiencing and enjoy her time outside of work.

Another subtheme was *Questioning the Fairness of Life*. This theme involved struggling to understand and rationalize the occurrence of unpleasant phenomena and events that were part of life (e.g., death at an early age, suffering, "bad things happening to good people," etc.). For example, one nurse reported having to come terms with the fact that many young people die of cancer.

Table 4.3. Subthemes, frequency and content of core beliefs.

Subtheme	N	Frequency	Example of quote
Revising beliefs	11	38	“And I found out later when I started working that I was prejudice[d], that maybe I didn’t treat anyone who was not a Caucasian the same and I think that’s one of the things every year so has definitely changed. I do not feel that I am prejudice[d] now.”
Questioning one’s career path	7	12	“And [this patient’s death] made me stop in my tracks and think... What am I doing here? I can’t do this.”
Questioning the fairness of life	7	12	“Yeah, sometimes you’re just like, how is this happening and why is it nice people that always die and mean people live forever? It just seems to work out that way and you’re just like why? I mean, it does, but at the same time, you see so many things go well that shouldn’t go well that you’re like, it kind of cancels it out, I think. You have those big... is there is God and why is he doing this... And then you see things like people should die that don’t die or people that have, like, 80% blasts, which is really bad, and then they get one round of the chemo and then it goes to... zero.”

Note: N = the number of nurses who reported the theme; Frequency = the number of times the theme was cited

You don't understand why and ultimately you have to say I don't... know. It's... not in my hands, I'm not going to understand it fully at this point... And, and as much as possible, just be supportive of that family [and] that patient.

This quote exemplifies the cognitive work involved in questioning and revising one's core beliefs. The nurse quoted above spent substantial time processing and finding a way to come to terms with young people dying of cancer. For her, this process eventually led to accepting uncertainty and the lack of adequate explanation for certain occurrences in life.

A number of nurses spoke about *Questioning One's Career Path*, particularly after a difficult loss. While half of the nurses interviewed (47%) spontaneously reported high job satisfaction without any prompting, a substantial proportion (23%) also described the challenges of staying in a field in which patient survival is relatively low. One nurse described her struggle with seeing death and dying on a daily basis.

I have thought about that if I were a new nurse today, knowing what I know now, which... that's not possible. And maybe I'd like to be in labor delivery seeing the new life, except you see some of those that are... bad outcomes... you have to acknowledge that. But the majority is... a new start to a new life. How joyous the occasion. [Cancer] is a downer. You have to really work at not getting pulled down. You see death and dying every day; people who walk-in like skeletons... with no quality of life. So again, we back up and say, "Well then, that smile might be the smile that they need today. That care has to be the best care I could give them because they are fighting for their lives." And you go on with this, not that we always love it, but you do it because you love doing it.

This quote demonstrates the struggle that many nurses described facing at some point in their career. Given the constant exposure to suffering and death, it is expected that a nurse may question her/his career choice and even look for work in a different field. However, as the nurse above alluded to, in spite of having moments of uncertainty, there are more moments of feeling fulfilled and enriched by oncology work. Thus, the

dissonance between feeling rewarded and yet emotionally drained appeared to be a rather common phenomenon.

In addition to questioning one's career path, other nurses talked more generally about feeling disillusioned with cancer treatment after repeatedly seeing patients deteriorate despite the best medical intervention.

I go back and forth. Sometimes I can fall into that mode where... I'm back into... I'm helping you, I'm helping you, I'm helping you. And sometimes I feel like I get into that – how much good am I really doing anybody pumping... all these chemotherapy into them? And it's all about hope. It's about hope for them... but... you [get to] know the degrees of sickness and suffering people can go through.

This nurse is describing the fragile balance that exists in the oncology world between encouraging patients to continue to seek treatment (even when the odds of remission were rather low) and suggesting to patients that palliative treatment is best. Several of the nurses interviewed felt that oncologists tended to advocate for treatment, sometimes more for the benefit of research rather than the individual patient, and were less likely to encourage patients to seek palliative and hospice care. These nurses often felt caught in the balance, providing hope and encouragement to patients while feeling conflicted about the potential likelihood of treatment success. It also appeared that as a nurse obtained more experience, she or he was more likely to advocate for less aggressive intervention. This seemed attributable, at least in part, to the perception that for many patients, undergoing aggressive cancer treatment would involve unnecessary suffering and would still result in eventual death.

Nonetheless, most nurses were able to come to terms with the suffering that results from cancer treatment by instead focusing on the resilience and bravery of their

patients.

Oncology is intimidating and, a lot of times when the first time I tell someone what I do they're like "How do you do that every day? It's gotta be exhausting and depressing." And I've never thought of it that way. It is... if you take it home and let it affect you. Then you think wow, this person's so young and their disease is so aggressive, but... oncology patients are the most resilient I've seen. Very positive and appreciative for every little thing that you do.

As with the nurse quoted above, most nurses tended to ascribe a number of positive characteristics to patients as a whole. These included bravery, resilience and a positive attitude. Another nurse echoed this sentiment:

I find it very, just personally very enriching to me, to see people face something with a lot of... bravery and grace... That can be a very difficult situation.

On the whole, nurses tended to view their patients as exceptional human beings. The positive characteristics ascribed to patients tended to be centered on an optimistic outlook towards treatment, not complaining, and facing adversity with grace. Nurses reported that these attributes provided inspiration and motivated them to provide high levels of care in spite of the suffering, death, and intense emotional loss that were a daily part of oncology work.

4.4 Posttraumatic Growth

Themes related to positive consequences of working in oncology nursing featured prominently in almost every interview. Indeed, all nurses interviewed discussed at least one domain of posttraumatic growth in their personal experience (see Table 4.4). The subsections that follow address these in turn.

4.4.1 Appreciation of Life

The most common domain of PTG was *Appreciation of Life*, with every nurse interviewed citing at least one example of this domain. Overall, nurses consistently emphasized the value they placed on life and health. This comes as no surprise given that nurses see patients in arguably the most extreme state of illness and affliction. The theme of *Greater Appreciation of Life* was further subdivided into five subthemes: *Life/Each Day is Precious*, *Family/relationships*, *Not ‘Sweating the Small Stuff’*, *Changing Priorities*, and *The Little Things*.

Nurses commonly spoke about approaching life from the vantage point of their patients – living each day to the fullest and trying not to take anything for granted. As one nurse stated:

And I think watching people die early... You kinda think well maybe if I’m going to live, I should live now.

The sentiment of *Life/Each Day is Precious* was echoed by many nurses. Most felt that life needed to be lived in the moment, and placed emphasis on taking time to enjoy the present moment. Nurses noted that the stark contrast between the poor quality of life of their patients and the way they wanted to enjoy their lives while they were healthy.

Other nurses placed emphasis on *Family/Relationships*. As one nurse described, spending time with friends became the priority.

But I’m talkin’ about... doing *quality* [emphasized] things with people. You have a friend that you just haven’t gotten together with and they’ve been bugging you let’s just do lunch. “I’m too busy.” I... don’t try to be that busy anymore. I make the time... life is more precious to me.

Thus, for the nurse above, no excuse was important enough to disregard spending time with friends. There was also an emphasis on “doing quality things,” meaning that simply

Table 4.4. Subthemes, frequency and content of posttraumatic growth.

Superordinate theme	Subtheme	N	Frequency	Example of quote
Appreciation of life	Life/each day is precious	24	68	“I live every day like there’s not a tomorrow, because, a lot of my patients don’t have tomorrow.”
	Family/relationships	23	51	“I mean every minute, every minute that I have with my husband, my family, my kids, I just treasure it.”
New perspective	Not sweating the small stuff	18	47	“Don’t sweat the small stuff and just... everything doesn’t—or and isn’t going to work out like you’ve planned and like... chill out.”
	Changing priorities	21	44	“It changed the way... I wasn’t very materialist in the first place but... Going into [oncology nursing]... really changed your idea of materialism and what’s really important in the world.”
Relating to others	The little things	7	10	“You... appreciate the small things much, much more.”
	Personal strength	14	57	“I can say it’s given me a totally different outlook on my life, and especially now that I’m a mother and... I have a husband ... and the choices that I would make.”
Vicarious PTG	Relating to others	17	40	“It’s brought me closer to people and I don’t... take relationships for granted, I try to really... nurture my friends and... my family... and just be there for them.”
	Personal strength	5	9	“Well, I think the most striking thing is working with... patients... is kind of like they make me stronger.”
Vicarious PTG	Relating to others	2	4	“Sometimes-sometimes it makes me more, it makes me more brave seeing [patients’] bravery. It makes me share it.”
	Personal strength	2	4	“Sometimes-sometimes it makes me more, it makes me more brave seeing [patients’] bravery. It makes me share it.”

Note: N = the number of nurses who reported the theme; Frequency = the number of times the theme was cited

existing in the space did not necessarily imply spending time together. This change in value highlights an important shift that many nurses appeared to experience as a result of their work.

A number of nurses (60%) also spoke about *Not Sweating the Small Stuff*, which is the idea that most things in life that are initially perceived as important are actually relatively inconsequential and are not worth worrying over. For most nurses interviewed, this resulted in becoming less overwhelmed by trivial matters, such as housework. As one nurse described:

I think initially when I was younger, and I was a staff nurse, and I was able to go home every day to my family and my children, I definitely didn't sweat the small stuff. Coming home, if things were a mess, or things weren't picked up, or if things weren't done, I can remember my husband being agitated and I can remember thinking who cares? I get to come home. I mean there were people my age that were stuck in the hospital and maybe never coming home.

This quote illustrates the shift in perspective from worrying about a messy home to placing more importance on actually being home and spending time with family; it also illustrates the conflict that some nurses described between themselves and close family members who did not share their newfound perspective. In a similar vein, another nurse described her experience trying to wean her young daughter off a pacifier and the cognitive process involved in shifting her perspective.

I was trying to get my daughter to take her passy away and I was obsessing about it... And [I] was like, "listen, is this gonna matter in five years? Is anybody gonna to remember in high school that she had it?" And I was like no... And it's like, put it all in perspective... To sit down and take your problem and break it down. To put it in perspective and realize... it... is it worth wasting all your good energy on this piddly little thing? Because she got rid of her passy... She's four and she doesn't have a passy anymore. But at that time... I was like "oh my god I'm supposed to have the passy taken away at two and she's supposed to do

this...” But it’s like... does it really matter? ...Is this gonna matter in five years? And that’s the phrase that I use when I’m dealing with something... work, personal. Is this gonna matter in five years?

The nurse above was not only able to successfully negotiate a stressful personal experience by framing it as something that would not matter in five years, but she was also able to apply this framework to future experiences.

Related to the subtheme of *Family/Relationships*, many nurses spoke about *Changing Priorities*, such as placing less emphasis on obtaining money and actually taking time to spend with family.

I mean... before I worked, worked, worked so that I could provide this for my kids, and this for my kids, and this, and this. And... none of that really does matter. ‘Cause what if I do all that and they get cancer and die tomorrow, or I get cancer and die tomorrow... To me... I’m wiser because, I mean yeah I need my needs met but... just in the way you treat other people, and the way you take time for other people.

Hence, for some nurses, shifting priorities involved the realization that the accumulation of wealth for later was meaningless because there was no guarantee about what the future would hold; they realized the importance of valuing and experiencing the present.

The theme, *The Little Things*, related to nurses valuing things that they may have taken for granted in the past. This subtheme complements *Not Sweating the Small Stuff*. Nurses were able to identify aspects of their life that were unimportant while also appreciating “the simple things” and being mindful of the present. One nurse described her newfound appreciation for eating.

It really makes you appreciate home that much more. And just food. Food in general that you can eat... Our patients up here are so sensitive and so restricted and... they can’t eat anything because it makes them sick, or they can’t eat anything because it all tastes like cardboard... Just those simple little things... all the different things that come in season here. Just makes you appreciate it so much more.

As the nurse above explained, even something that typically goes unnoticed, such as eating, becomes incredibly valuable when one realizes that it cannot be taken for granted. Observing patients' experiences with not being able to eat helped this nurse appreciate a simple yet vital aspect of life.

In summary, all subthemes under the theme of *Appreciation of Life* encompassed the mentality of living in the present and enjoying the moment. Nurses overwhelmingly (and often spontaneously) cited examples of the appreciation they developed as a result of caring for oncology patients. This sense of appreciation was particularly evident in the way nurses approached their personal lives, especially in the way they related to family and the value they placed on life itself.

4.4.2 New Perspective on Life

In Tedeschi and Calhoun's (1996) conceptualization of PTG, the domain of *New Possibilities* refers to the development of new interests and possibly a new life path. This domain did not directly translate to the experiences of nurses in this sample. The majority of nurses interviewed considered their career to be the perfect fit due to the rewarding nature of the work. In this sample, the domain of *New Possibilities* more closely resembled a new outlook on life and the way that nurses would approach adversity. One nurse described shifting her perspective on having a bad day at work.

One night I'll never forget, I had the worst [night]... oh, it was terrible. There were two patients that I thought was going to die that night. We have five patients a piece and I don't know which one to leave the code card outside the room. Like it was that bad. It was the worst night I'd ever had in three years.... And I was like here I am throwing myself this big pity party. "That was the worst night ever. I can't believe what happened. I can't believe they gave me that assignment and blah, blah, blah..." And I was like... I'm at home. They're still there. And then I look at it and I just stop complaining. I do that a lot, because I used to complain a lot and I try

not to now, because it's just like... I get to go home at the end of this. They'll still be here and it's still going to suck for them and it's still going to be bad for their family. And I get to go home and watch TV and sleep in my own bed. And they don't even get to do that.

This nurse is describing a rather significant change in perspective, from being focused on the self to stepping back and placing her bad night into context. By taking a different perspective, she was able to realize that her bad night was still relatively minor compared to what her patients were experiencing. This way, she was able to switch focus to the positive aspects of her life (e.g., being able to go home and sleep in her own bed) instead of having a "pity party." As with other nurses who described shifting their perspective on life, this nurse was able to apply the process she described to other experiences and to place emphasis on the positive.

Similarly, when another nurse was asked whether working with oncology patients had changed her, she replied:

I think, like I said, it's the little things... And the choices I make day to day, and it has helped me to look at my life and how I want to live it.

The nurse quoted above described making an effort to be the best person she could be and making choices that reflected these efforts. She explained that watching patients undergo adversity helped her realize her own mortality and provided motivation to live life to the fullest. Thus, she developed a newfound perspective on how she wanted to approach every decision and every moment, making efforts to place value on what was truly important.

On the whole, nurses did not describe major changes in their life path as a result of their work. Instead, most changes were subtle and related more to a broader perspective on life and coping with adversity.

4.4.3 Relating to Others

In this sample, the domain of *Relating to Others* was closely associated with the subtheme of *Appreciating Family/Relationships*. The majority of nurses (77%) stated that they were appreciative of their family and friends; however, less than half (47%) described improvement in their relationships. It appeared that while nurses had a general sense that family and friends were important, it was far more difficult to initiate changes in existing relationships. For those who perceived an improvement in their relationships, these changes were quite meaningful. One nurse reported developing a closer relationship with her children as a result of making a conscious effort to spend quality time with them, something that she would have put off doing in the past.

And with the three year old... I do a lot more things with her, take her places... just [enjoy] the time that we have. And with the 11 year old too... but when he was her age, I just wasn't focusing so much on that 'cause it was like oh we have all the time in the world. And now... we see 27-year-old's coming in and dying. So I... look at... the value of the time now.

The nurse above described a rather significant shift in how she approached her family life. She no longer delayed spending quality time with her children; instead, she made a conscious effort to seek out new family activities and to enjoy every moment.

Another nurse noted coming from a family that was not particularly close or loving; after working in oncology she described making an active effort to become closer with her parents.

I have gotten a lot closer with my mom... You just think you have all this time and it's like, oh, we'll talk about that later or I'll ask her about her childhood later... And you start going, maybe I don't have that time... [Now] I don't want to waste that time. And I haven't...

For this nurse, after observing her patients and the way they related to family members, spending time with her own family became more valued, a stark contrast to the way she related to her family in the past. Unlike others who entered oncology nursing with a high emphasis placed on family, this particular nurse shifted her value system and behaviors in the context of her family relationships as a result of watching other families interact. Through these interactions with patients and family members, she discovered examples of relationships that she wanted to emulate in her own life.

In a career field that is founded on the development of intimate relationships, it is not surprising that the nurses also placed great importance on personal relationships. However, achieving PTG in the realm of one's own relationships was more challenging and took unique form depending on the nurse.

4.4.4 Spiritual/Religious Growth

Although the majority of nurses (67%) spoke about the importance of religion in caring for patients, less than one fourth (24%) discussed religious or spiritual growth. It appeared that most nurses felt that their sense of religion/spirituality was already developed before they began nursing. However, nurses who did acknowledge spiritual or religious growth had an interesting perspective. For instance, one nurse noted:

I guess I pray a little bit more... and pray in a different way. Because sometimes [patients] know the outcome's not going to be good. So... you just pray that... okay we know the outcome's not going to be good but maybe that they won't have as much pain, or as much vomiting, or as much... whatever. And before I came to this floor, it was on my way to work, "just give me a good day, help me not to lose it, help me to... just make it through my day." And... now, I do more of "whatever group I get, I get, whether they're harder patients or easier patients... I'm there for a reason, and I'm going to have that group for a reason, and just help me find out what that reason is and help me to be a blessing." Like I said, usually they end up being more of a... blessing.

Thus, the content of this nurse's prayer shifted from focusing on herself (i.e., alleviating her own discomfort) to focusing on helping others. To this nurse, this was an important shift in perspective that enabled her to be more empathic towards her patients. In addition, she developed more realistic expectations for what her prayers could accomplish. For instance, when a patient's outcome was "not going to be good," it was still possible to pray to alleviate their discomfort.

The remainder of the nurses who endorsed spiritual/religious growth reported praying more and a general sense of increased spirituality. As one nurse stated:

[Working in oncology nursing has] made me look at my own spirituality... And become closer with God and to talk to him... And I think that's been the biggest impact.

And so, for the nurses who cited spiritual and religious growth, feeling closer to God and having a greater desire to engage in prayer was a meaningful change. However, most nurses interviewed felt that their relationship with God had been well established before entering oncology nursing.

4.4.5 Personal Strength

The *Personal Strength* domain of PTG was cited least often (16%) in this sample. Within this domain, nurses talked about feeling newfound strength as a result of caring for oncology patients, and in some instances, feeling stronger after personal experiences with cancer. For example, one nurse described how she approached patients after her own battle with breast cancer.

I think just going through [cancer]... there... are certain things are just going to jump out at you, and make you stronger, and change the way you think about things... And – and it really has. I think that – I've got patients who will – they don't want to tell anybody. They don't want to tell their family... And... I think I handled it so well 'cause I do, I tell – there's no

secrets... I love to talk. And so I try to get [patients] to... talk about it because if you talk about it and make fun of it, it's not as scary.

In the quote above, personal strength was derived from the nurse's experiences fighting breast cancer. She noted that afterwards, she was willing to share her experiences with patients if she felt that they would benefit from the knowledge. Thus, she was able to use her own struggles with cancer, talk about her experiences, and convey to patients that being open and honest about her struggles has helped her grow and become stronger.

Other nurses who described examples of *Personal Strength* spoke about deriving their strength from patients' bravery.

Well, I think the most striking thing is working with oncology... patients is... [that] they make me stronger. I am humbled by the strength of people who have cancer and their families constantly, daily... I'm reminded of struggles that they have, make people on the whole stronger. I mean everybody has ups and downs, but I have to say that that's been kind of... When I started, I think that was the biggest surprise to myself – the strength people have and resistance to just get through things.

From the quote above, personal strength referred to approaching adversity with bravery and a positive attitude. Largely from observing patients, this nurse learned that experiencing hardship often leads to strength and was able to apply this lesson to both personal and professional life.

In sum, nurses derived personal strength from a number of sources – their own personal experiences with cancer, experiencing adversity while working with patients, and by observing the strength and resilience of patients undergoing cancer treatment.

4.4.6 Vicarious PTG

True instances of vicarious posttraumatic growth were rare in this sample. It appeared that most of the nurses interviewed did not simply learn by watching their patients' experiences with suffering and death; they also personally experienced anguish,

loss and grief following the death of favorite or memorable patients. In most cases, these emotions and the subsequent threat to the assumptive world were qualitatively no different from the death of a family member or close friend. Likewise, the examples cited of posttraumatic growth appeared to be personally gained and integrated into nurses' sense of self, as opposed to being achieved vicariously by watching others. The quote above (under the heading of *Personal Strength*) was one of the few examples that could also be considered vicarious PTG. Although this nurse reported feeling stronger, this strength appeared to be derived almost exclusively by observing her patients and their bravery. The other clear example of vicarious PTG was from a nurse who described feeling burned out as a result of "taking the work home." This nurse spoke in length about questioning one's career path and wondering if oncology work was the best fit. When prompted for examples of PTG this nurse spoke in a more cursory manner about lessons learned from patients. For instance, watching patients' bravery helped this nurse become more comfortable with death.

Yeah, I believe it's taken a lot of a... fear of death away from me... Sounds crazy workin' with ... folks who have cancer, but... seeing others' bravery and how much they grasp about life once they know that it's so valuable. Whether they live 10, 15 years or just months. Some of them, not all of them, but... I'd say, well I'd hate to grab a percentage, but I'd say a good deal of them... They turn around and say "hey... I've got a good thing here," and they... the relationships with their family. They just embrace those, and our valuables are not so... important... Sometimes... it makes me more... brave seeing their bravery. It makes me share it.

The quote above illustrates how it is possible to derive a number of domains of PTG (in this case appreciation of life and personal strength) by observing others' experiences. This nurse was able to learn and benefit simply by observing the growth achieved by

patients. However, it is not clear to what extent these domains of PTG were applied to this nurse's own life.

Later in the interview, the same nurse recalled how watching patients interact with their family members helped underscore the importance of the nurse's own family.

I think... the group of patients and what they faced has given me a better... love and acknowledgment of my family, and how important they are. 'Cause I see them grasp that and let go of some other things.

This quote suggests that this nurse's experience may not be solely vicarious. Observing patients and the value they place on relationships resulted in appreciation of the nurse's own family. Engaging in love and acknowledgment of one's own family is likely to result in better relationships.

As these quotes imply, the relationship between direct and vicarious PTG tended to be difficult to discern. Although nurses did not directly experience cancer, they experienced other "traumas" including the loss of memorable patients and disturbing medical events. Generally, the manner in which nurses spoke about their experiences suggested a more direct impact.

4.4.7 Positive Consequences

In addition to specific domains of PTG, many nurses mentioned other benefits of their nursing experience. These benefits did not meet criteria to be classified as PTG (that is, they did not fall under the five domains of PTG and were less substantial in content) but were nonetheless important consequences of change and growth. Subthemes included *Optimism*, *Focusing on/Appreciating One's Health*, *Patience*, *Being Inspired/Enriched by Patients*, and *More Confidence in One's Abilities*. Examples of each subtheme are provided in Table 4.5.

Table 4.5. Subthemes, frequency and content of positive consequences.

Subtheme	N	Frequency	Example of quote
Optimism	9	13	“I guess just one of the main things is just trying to keep a positive outlook on everything. Like we talked about, despite the fact of whatever may happen, whatever... can come up, just to try and remember that it's all... one way or another it'll work out... It could be worse.”
Focusing on/appreciating one's health	9	13	“I really value my health, my family's health.”
More confidence in one's abilities	8	9	“I'm a lot more confident, confident ... [sighs] I feel that there are very few situations that I'm put in, that I couldn't handle. I can handle, I can fix a lot of them.”
Patience	6	9	“I have a lot more patience now... Things that used to stress me out, or I'd get worked up over, I don't anymore.”
Being inspired/enriched by patients	5	7	“There [are] more moments of being inspired than there [are] of being depressed.”

Note: N = the number of nurses who reported the theme; Frequency = the number of times the theme was cited

One-third of the nurses interviewed noted a more positive outlook on life and a general sense of optimism. For instance, one nurse described how her work experience has led to the belief that human nature is more often virtuous than malevolent.

I guess I see it more positive than negative, because it's just like even in our little 14 bed unit, I see more positive things happen than negative. I mean, if people do die, it's just like family's always there and they're able to care for their family... It just makes me at least think like, wow. General society is good. That's the sector I see. Maybe if I worked in like, I don't know, med surg or trauma or something, I might feel differently, because they see a lot of bad things. And we see a lot of bad, too, but the majority of families are great. The majority of our patients are great. Families take care of them. They're close. Even if it's not family, friends come. Somebody comes and takes care of them and if someone doesn't come, then they're self-sufficient. They'll talk to you. They'll rely on you. They're not mean, they're not bitter about that. Most people are not bitter about what's going on, which is a crazy thought.

This quote exemplifies not only a changed perception about human nature but a broad and expansive sense of optimism. Such optimism is likely to impact the way that this nurse approaches and cares for patients, as well as how she engages in the world around her.

Other positive consequences related to being more appreciative of one's own health and making a conscious effort to maintain a healthy lifestyle. One nurse described focusing on her own self-care after seeing young patients struggle with cancer treatment.

I think taking care of myself... making sure I have a work life balance, and that that work life balance is healthy. Like... not taking care of myself by drinking every weekend but taking care of myself by going for a hike, or exercising, trying – trying to be more healthy in general. Because recognizing that if you do get sick, it's going to be better if you're healthy than if you're not. So I think my patients have kind of taught that... to me... just seeing people who are young but maybe not so healthy. And they really have a hard time going through it.

Thus, the nurse quoted above began engaging in a healthier lifestyle and making an effort to maintain a work-life balance. Of note, it appears that part of her effort to remain healthy is to ensure that if she were to get sick, she would have an easier time recovering.

Another subtheme was developing *More Confidence in One's Abilities*. For example, one nurse described the progression of being a novice nurse and feeling insecure about her nursing abilities to having confidence in her expertise as an oncology nurse.

And I think patients, especially oncology patients, because when they do become immune compromised and their counts are really low, they pay attention to everything you do. If you wash your hands, if you put your gloves on, if you clean things, and they pick up on it, and they definitely would say things like "You're the first person who's done that. The other nurses don't wear those gloves." So it does make me feel like, I am doing things the right way and I am confident in my skills now, and I wasn't before.

For this nurse, this confidence marked a next step in her professional development. She noted that this allowed her to shift her focus more to caring for patients, knowing that her medical knowledge and nursing skills were on par with those of her colleagues.

A number of nurses also reported developing more patience as a result of working in oncology nursing, and these skills applied to both work and home.

I think I'm becoming more patient, and um, you know... I think this day and age, especially being a mother and doing this, I was not a patient person, I wanted that instant gratification, and it's taught me to be patient.

As this quote suggests, learning to delay gratification is a skill that is difficult to master but is important both in dealing with patients and relating with family and friends. The nurse above noted that developing patience as part of her work experience also enabled her to be a better mother.

The final subtheme under the heading *Positive Consequences* was *Being Inspired/Enriched by Patients*. Overall, nurses spoke about the multiple positive attributes of their patients and how they served as role models and inspiration in their own lives. One nurse described the numerous ways that patients have inspired her and made her more of a positive person.

I think that just watching these patients... that even though they're going through all these bad things, and they're sick from the chemo, and I mean, it looks like they have this little black cloud over them that they're so positive and they never waver in their faith, and their religion, and they're always just so upbeat for the most part. It inspires you to be better because if they can be positive with all of these things going on in their life, you should be able to do it too. And so I think it's made me a more positive person by being around these patients.

Thus, for this nurse, patients served as the driving force for self-improvement and an improved outlook on life.

Overall, nurses reported multiple positive outcomes resulting from working in oncology that did not fall under the domains of PTG. These positive outcomes were quite varied and included improved personality characteristics such as optimism, patience, and confidence, as well a changed outlook on one's own health and feeling enriched by working with patients. Nurses considered these positive consequences to be important by-products of their work experience.

4.5 Wisdom

The theme of *Wisdom* encompassed a diversity of subthemes reflecting the many ways nurses reported growing wiser as a result of their oncology nursing experiences. These subthemes did not necessarily align with any particular model of wisdom and more broadly reflected experience gained working in a field in which suffering and death are common occurrences. The most often cited subtheme was *Uncertainty of Life* (see Table

4.6), which referred to the notion that life is unpredictable. This included unpredictability of getting cancer, maintaining one's current health status, and a broader idea that life can change at any moment. One nurse noted that life can be fragile:

I think [working in oncology has] made me realize the fragility of life, how one day you can be up and walking and doing well, and 30 days later you can be dead.

Another nurse described how discovering her own mortality has changed her approach to relationships.

It also makes you more aware of how your relationships with your own family and your friends need to be. Because when you find out that there is a limit to time, it – it becomes very, very precious. But shouldn't it always be? ...It's just like... that song by... Tim McGraw, *Live Like You Were Dying*. I mean that's very true. You know, it shouldn't take a devastating diagnosis to make you live your life. So I try to not shy away from things that I... would have before I did this... If the opportunity is there, I try to take it 'cause you don't know how many opportunities you might have.

Thus, the subtheme of *Uncertainty of Life* encompassed acknowledging life's unpredictability as well as one's own mortality. Realizing the existence of such uncertainty resulted in nurses placing more value in the present moment.

Another group of subthemes involved gained skills in understanding and interacting with people. Subthemes included *Empathy/Sympathy*, *Emotional Growth/Regulation*, and *Better Interpersonal Skills/Emotional Intelligence*. More than half of the sample cited *Empathy/Sympathy* as a skill that became further developed as a result of working with oncology patients. Within this subtheme, nurses spoke about feeling more connected to patients and family members, and being able to place people's reactions into context. As an example, one nurse described becoming more understanding when patients were angry.

Table 4.6. Subthemes, frequency and content of wisdom.

Subtheme	N	Frequency	Example of quote
Uncertainty of life	17	29	“You’re more afraid of things like because... you’re more aware of... that you’re not invincible. You’re a person too. This could happen to you too.”
Empathy/sympathy	16	27	“Okay, [the patient is] having a bad day if they’re yelling at me. Put yourself in their shoes. This is what they’re going through... It’s just more of... take a step back and be like, okay, they’re having a crappy day. It’s not... taking it out on me or anything.”
Using patients’ experiences to gain perspective on life	11	27	“You learn a lot about different people... You learn a lot about how you would deal with things too. Like, you kind of put yourself in that person’s position.”
Maturity	11	24	“My friends all the time they’re like, you... just think about things that people your age wouldn’t think about, and... it’s because of what I do for a living.”
Emotional growth/regulation	9	19	“I’m... a lot more calm, a lot more – not as quick to argue... Just more laid back.”
Respecting individual identities / differences	6	19	“And you learn how to deal with situations and how to see people as individuals, and not just as a diagnosis... ‘cause you have to treat each person differently.”
Greater range of life experiences	10	15	“Probably just having a better understanding about what people go through and different people of different backgrounds, and actually having the hands on with that experiencing from people who have AIDS, to have drug problems, to the most wealthiest people.”
Applying lessons learned from patients to one’s own life	7	15	“And again... just working with patients and seeing how they deal with things, they’re our best teachers. So I think you... internalize those lessons that we... learn from the patients we encounter every day... Those things are helpful in the way we chose to live our lives.”

Table 4.6 (continued).

Subtheme	N	Frequency	Example of quote
Acknowledging one's limitations	7	12	"I was afraid [that]... I would not give the right answer. And I hadn't learned yet that all I had to say is... I am here for you... I care and... there [are] no right answers."
Better interpersonal skills/ emotional intelligence	5	11	"I think I'm more open to ask questions, to be quiet, I think just to be... A lot of people want to talk all the time. I think there's a benefit of just sitting and being quiet, and letting people think, and then speak. I think that's helped me."
Shifting focus from the individual patient to oncology care as a whole	3	7	"I think as I've grown in my career... I think I've seen sometimes people die horrible deaths, and it has made me want to be a better nurse in terms of giving end-of-life care, improving end-of-life care, improving symptom management for patients."

Note: N = the number of nurses who reported the theme; Frequency = the number of times the theme was cited

I think I used to be like... Just maybe nursing in general has made me more... sympathetic towards other people. I used to... just be... [in] my own little bubble. It's not like... Well, I guess I was selfish, but I didn't realize I was selfish, because I didn't know any other way. And now that... your job's based on other people, you realize that everybody needs help and even if people are mean, they're usually mean for a reason, like something's going on. So, it's kind of made me understand people a lot more. So, still a lot of people are angry and they're angry because they're sick. And you're like, oh, they're just mean, but... they're just angry because they don't have any control.

This nurse was able to better handle her patients' reactions after placing them into context. This enabled her to take things less personally and better understand what her patients were going through.

Another nurse echoed the idea of learning to place others' reactions into context and teaching this skill to her children.

I think what my kids got from my working experience was that you never know what's on somebody else's plate... Like somebody might come up and bark at you or maybe a teacher was in a bad mood and I – I do think both of my daughters are... very sensitive to that now. Like... rather than... if somebody's having a bad day, rather than saying "oh that person was a jerk," ...well they might have somethin' going on. So I do think my kids have gotten that from me. And I think that's a good thing 'cause I think we all need a little bit of that.

Thus, through working with patients, many nurses learned to understand people's emotional reactions and place them into the larger context of the situation. This way, nurses were able to fully empathize with what others were experiencing without ego or becoming swept up by their own emotions.

In addition to learning to empathize/sympathize with patients, nurses also reported gaining proficiency in modulating and controlling their emotions and, in some cases, experiencing a greater range and depth of emotions. For example, within this

subtheme, labeled *Emotional Growth/Regulation* one nurse described becoming calmer after working with oncology patients.

The more that you deal with different people, the more you learn to deal with different people, you know? Like... when I was younger, I was a lot more... A lot more irritable. I... wouldn't deal with people's stuff and whatnot. But... as times went on and... the situations I have to deal with here and everything, I'm a lot more calm about things.

Another nurse found a change in the depth of her emotions (and, seemingly, her capacity to express them) as a result of her work.

[My best friend has] probably seen me cry maybe like four times. I'm very... I can be very stoic. It's weird, because in the hospital, I'm not like that. Outside the hospital, I am. It's very strange. It makes no sense. I guess I've learned to be more feeling... emotional in the hospital. And it's okay there, but I don't really feel like it's okay in real life. But she recently had a friend that died in Nashville. He had a brain tumor. And I sent this email, I was like I'm really sorry that happened and I'm here for you and blah, blah, blah. And she's like, "um, who are you?" She was just like, "you never talk with emotions. You're never mushy and all that type of stuff." She's like, "what happened?" She's like "I'm glad, but what's going on?" I was like, "I don't know. That's just what you do when people die."

So, in some instances, *Emotional Growth/Regulation* involved becoming less quick to anger and keeping calm during stressful situations. For others, it involved learning to expand and experience a greater depth of emotions.

As part of the subtheme of *Better Interpersonal Skills/Emotional Intelligence*, some nurses spoke about the value of silence and learning how to truly listen to others. For example, one nurse described her primary role as someone who listens to patients' stories.

There's so many times in – in a medical center where we really don't listen to the patient. But that's probably one of the best things we [could] do. The work that I do now... people talk about the family history. They... report people in the family who may have died from cancer, and I realize that each patient has a story. And each one of those family members... had

a story. So you learn to... listen to those stories and not just see those people as part of some pedigree... where they're faceless and so forth. So just... learning to I think be... with the patient where they are. And the stories that... we... are privy to over... the years, stick with me. I think... Clarissa Pinkola Estes... said something about how we are the keepers of the stories. And I think that's really true. We hear those stories. They became part of who we are. They influence how we interact with other people and... in some ways maybe that makes those stories kind of sacred.

The quote above highlights the importance nurses placed on taking the time to listen to their patients. Nurses also identified this skill as something that differentiated them from oncologists and allowed them to form closer and more intimate relationships.

Another subtheme was *Using Patients' Experiences to Gain Perspective on Life*.

One nurse spoke about learning from her patients to live life to the fullest.

That's why... I travel so much... Because [patients] are like, "oh, do you have a boyfriend?" after you see [them] every day for like a month. You stop talking about how you feel, how's your pain. You start saying like, "what's up? How was your date last night?" Or whatever, because they get to know you. And they're just like "don't put up with people who treat you bad and don't do this" and they'll tell you about their life experiences and... Like a lot of our people, since they are in somewhere on the spectrum of dying, they have that life is short mentality and they teach you that... Go do things you want to do and if you're complaining about something, they're like, "Well, stop. Don't do it then." You're like "I can't. I have to do something like that." And they're like, "So?" They all kind of have that same attitude towards the end.

The nurse above was able to integrate her patients' experiences and advice into the way she approached life. She made efforts to personify the "life is short mentality" of her patients by traveling and living fully in the present.

Another nurse described accumulating bits of knowledge and experience from every patient she has encountered.

I mean... you take all the people that I see and that I treat within a year... if I learn something new from one person, every single week that I'm here, that's a lot of little bits and pieces of things that I've learned... just from your life. I mean, if I picked up one thing from your life that you knew

that I didn't know before I met you... I mean to me that's just – that's – that's great.

This quote exemplifies the learning process that takes place when caring for oncology patients. Nurses care for individuals across all spans of life. They observe patients as they tackle life's most difficult moments and are often the ones with whom patients want to share their knowledge, experience, and advice. They also observe the way that patients interact with their family members and friends; nurses take note of the mistakes patients make and the regrets they may have. On the whole, these experiences help nurses accumulate a wealth of knowledge and wisdom that they can subsequently apply to their own lives.

A related subtheme, *Greater Range of Life Experiences*, encompassed observing and learning from the wealth and diversity of patient experiences. As one nurse stated:

Because here with this job, you are not just involved in your own life anymore. You are involved in all of those patient's lives. So you don't just take away from this job what you've learned as a person, what you've experienced, you take away what those other people are telling you about.... And it can be your patients, and it can be your co-workers, and it can be the doctors that you're working with. You take all of those personal experiences, and you – you put them into yourself.

Thus, nurses found that working with patients exposed them to life experiences that they otherwise would not experience firsthand, such as working with individuals across the life span and from various ethnic, racial, and religious backgrounds. This subtheme was differentiated from *Using Patients' Experiences to Gain Perspective on Life* because, while nurses may have been exposed to a greater range of life experiences, these examples did not explicitly involve applying this knowledge to one's own life.

Taking the subtheme of *Greater Range of Life Experiences* one step further, *Applying Lessons Learned From Patients to One's Own Life* involved not simply being a

passive observer of patient experiences but actively applying that knowledge to one's approach to life and changing the way life is lived. As one nurse eloquently stated:

I think patients are our best teachers and if we pay attention, we learn things. And – and those things, again, become a part of who we are and they shape how we interact with other people.

Another nurse echoed this sentiment.

Yeah. Because the experiences that you have here [in the hospital]... They overlap. I think with personal and work life... they do overlap. Because I've learned things from my patients and hopefully they've learned something from me that I've experienced in life.

Thus, nurses described interaction with patients as a constant learning process, and many nurses were able to apply the life experiences of their patients to their own lives.

Another subtheme that came up frequently was *Maturity*. Many of the nurses interviewed were relatively young (i.e., late 20s to early 30s) but their perspective on life and the way they conceptualized their experiences were indicative of an accelerated maturity. Most nurses attributed this maturity to caring for patients at the end of life.

Well I thought I was so old at 25 and you know, these very adult issues that I was handling... Because, like I said so many people have more died than lived and you cared for them until they died.

Another nurse described a maturity in her approach towards “having fun” that may not be perceived by others.

And so it kind of goes both ways a little bit. I think if you look from just outside, you're like, oh, she's just wild and crazy and likes to have fun and go out, isn't responsible. She doesn't have any kids... but if you knew the feelings behind it, you'd be like, wow. That's a mature feeling, I guess, behind the fun... Whenever I'm out, I'm like, I get to go out. I'm not neutropenic, I don't have to stay home. I can go out to restaurants with my friends... Most people don't see that. They'll just go out to a restaurant.

The quote above exemplified conducting one's life with a newfound perspective and maturity that may not necessarily be evident to others. This nurse, like many others interviewed, placed high value on truly enjoying the moment. However, she did so consciously and knowing that "having fun and going out" is something that she may not be able to do in the future.

Acknowledging One's Limitations related to wisdom and maturity that comes along with admitting mistakes and coming to terms with "not knowing it all." One nurse described how she had changed over the course of her nursing experience.

Well over the years you find out that you don't know anything. [Laughs]. Well you know your basics but there is always room for learning. And even though I've been in this department with the new drugs that are being developed every day... the new technology, the new ways of treatment... Years ago, when you were diagnosed with AML, it was a death sentence or you were going to spend, like, the last four-six months of your life in the hospital. Not so any more.... Everything is changed. You learn as things change and I hope to think that I am intelligent enough now to know that I don't know it all. And I don't want to come across that way because... there is nothing wrong with saying, "I don't know but I'll see if I can find the answer." And I say that a lot because I don't want to mislead somebody. If I don't know, I don't know... I'm not gonna try to make up something up, whereas years ago, I probably tried circle around a little bit and come up with something... just to get [someone] off my back...

As this quote demonstrates, acknowledging one's limitations is a skill that often takes some experience and practice. The nurse above was also able to engage in self-reflection, noting the way she handled herself as a novice nurse (e.g., having to "circle around" and "make something up") versus how she approaches uncertainty as an experienced nurse (e.g., saying "I don't know"). Indeed, her quote seems to reflect an association between coming into one's own as a professional (for example, being sufficiently secure and confident regarding one's own competence) and the capacity to readily acknowledge mistakes and one's limitations.

Another nurse described a similar path that started from believing she knew everything to acknowledging that others may know more.

Oh... well ten years ago I thought I knew everything. And now I realize that the healthcare field – nursing – is a constant learning, changing process. And that no question is a stupid question. And if you have a question by all means ask it. Because not asking it... can get you into some troubles. But that's one of the big things that I've learned because... coming out of nursing school "oh, I know everything." And "why are you silly old nurses doing it this way?" But to realize that... And a lot of nursing is on the job training. Even though they give you a foundation... the fundamentals, but it's on the job training and that's one thing I've told folks that I know who have gone to nursing school – do not get out of nursing school thinking you know everything. Because somebody is gonna plop you down in your spot... And to respect those nurses who have been there longer than you are because they do know. And the big thing... the other big thing is no question is a stupid question.

Thus, for some, wisdom arises when one is able to acquire humility and acknowledge that others may be more knowledgeable and experienced. In addition, there is an element of developing respect for others and remaining open to learning throughout one's nursing career.

Shifting Focus From the Individual to Oncology Care as a Whole involved changing perspective from individual patients (micro level) to wanting to improve patient care as a whole (macro level). For example, one nurse described being able to make changes to specific aspects of nursing care.

Now I find myself reading more – more like what I'm interested in like – like end-of-life issues, spirituality issues, pain issues, like prolonged grief that patients' families might have... And that I find myself not just learning about them but trying to make changes now... As a bedside nurse, you can't really do that. Plus you don't have that knowledge either. You're just – that's acquired knowledge that I've gotten over 30 years.

As this nurse described, a big shift occurs when she was able to change her focus from making a difference in one patient's life to changing the field of oncology as a whole.

She noted that this change was only possible after extended experience and 30 years of accumulated knowledge. This quote also speaks to the stages that some nurses go through as they transition from a novice nurse to experienced nurse – at first, the focus must be on procedural knowledge and ensuring that the correct medical protocol is being following. The next stage is developing confidence in one’s abilities as a nurse and being able to focus more on the individual patient. The final stage appears to be shifting focus on the greater good (e.g., improving a particular aspect of patient care, contributing towards research, working on improving policy, etc.).

In summary, elements of wisdom described by oncology nurses took many forms. Such forms included acknowledging uncertainty and one’s limitations, developing expertise in interpersonal matters, accumulating knowledge from patients, and applying this knowledge to one’s own life.

4.5.1 Professional Knowledge

In addition to the traditional conceptualization of wisdom, 97% of nurses also spoke about gaining professional “wisdom,” which involved specific job-related expertise (see Table 4.7). The most frequently cited subtheme was *Detailed Knowledge of Oncology Nursing*. Nurses spoke about the trajectory as an oncology nurse and the vast amount of knowledge that is necessary to care effectively for patients. For instance, one relatively novice nurse reflected on how much she had learned over the course of her career.

I am really smart now, and I really didn’t feel very smart especially when I started transplant. I mean, I guess I knew I had the potential. I guess I knew I could do it but, there was so much I didn’t know, and so much I had to learn the hard way. So yes, I’ve learned a whole lot.

Table 4.7. Subthemes, frequency and content of professional knowledge.

Subtheme	N	Frequency	Example of quote
Detailed knowledge of oncology nursing	19	29	“As... far as medical knowledge... it's internal medicine to the nth degree cause cancer's from head to toe. So... I've learned a lot while taking care of this group of the patients, definitely.”
Being attuned to patients' needs	15	25	“I can read people, I understand patients needs when they first walk in here.”
Making patients the priority	8	12	“When my patients come in, making sure that they know that they're my number one priority at that moment when they're with me.”
Desire to expand oncology knowledge	6	11	“But I think for myself it's... made me more knowledgeable to, on my own, seek out more research about what we do here and learn more about the diagnoses.”
Being assertive	7	11	“I think professionally beyond what I ever thought I could do... it's...it's unbelievable. I never thought, I was ah... assertive person, or a person who could take criticism or a person who could take these failures that we see with our patients.”
Growing into the role of oncology nurse	7	10	“But this... place is really... it's kind of helped... me grow into the nurse that I am.”
Insight on timing/when to expect death	5	10	“And we get that from talking about, oh, you're going to go and travel or we're going to go to the beach whenever you get better. You start having this conversation from when I get better to... the tone kind of changes. And you might not necessarily specifically say when I die, you just stop saying when I get discharged.”

Note: N = the number of nurses who reported the theme; Frequency = the number of times the theme was cited

A similar subtheme was the *Desire to Expand Oncology Knowledge*. A number of nurses spoke about their work as a continuous cycle of learning and adapting to new research on cancer treatments and techniques. As one nurse described,

You know, because [oncology nursing] has given me a desire to learn and to study the cancers and how they mutate and the treatments we give them, and that part of it.

So, for the nurse quoted above, working in oncology sparked an interest in learning more about cancer in general. This interest led her to seek out additional educational experiences outside of her regular work-related duties.

Another subtheme that commonly arose was *Being Attuned to Patients' Needs*.

Nurses felt that once they gained experience, they became better able to understand and discern the needs of their patients. One nurse explained that there is a range in how much patients want to know about their treatment. Once she realized this, she became more careful about how much information she would share with each individual.

It ranges... you have some patients who... want to know everything that there is to know about their therapy. They want to know side effects, what can happen, what can't happen... risks and benefits. And then you have patients who don't want to know anything, and they just need somebody to say, "it's gonna be okay," ...and bring them cookies... and hot chocolate, and that makes them the happiest person in the world.

This quote demonstrates the process that occurs as a nurse gains experience and develops a deeper understanding of patient needs. The nurse above learned to cater the kind of information and care provided to each patient, which allowed her to provide better patient care as a whole.

Another nurse described becoming more perceptive about whether patients were open to her sharing her own experiences with cancer.

I mean, until you've been there, you can't know... like if I had one lady whose mother's sick, and having gone through cancer [I'd] share my experience with her if she's open to it. You can always tell if they're not going to be open. You can get a feel for what they're thinking or even what they're going through.

Thus, working with numerous patients and learning to pick up on subtle cues enabled this nurse to quickly detect patients' receptiveness to hearing about her own personal journey with cancer.

Nurses also emphasized that caring for patients was their main priority. Some nurses discussed the evolution from a novice nurse and being more focused on techniques and "doing it right" to a seasoned nurse who puts patients first.

Oh, definitely, well, one big shift that took place kind of early on is... Coming out and becoming a nurse at a young age, 22... my focus then was on doing things right... wanting to get it right. So it felt like it was my focus on self, and... there was a shift to focusing on doing what's good for the patient, for their benefit, I could see that.

Other nurses spoke more generally about prioritizing patient care.

But to know that hopefully I made a little bit of difference in their lives... I think it's very important as a nurse, especially oncology, to take that extra time with your patients, just sit down... because they have a life outside these four walls. And a lot of times when you're an inpatient nurse, you realize that you're more task-oriented - add the antibiotics, this, this, this... But in [the outpatient] setting, to take that time to talk to them about... how this is really affecting them and... how it's impacting their family and if they are working, and things like that.

Hence, for many nurses the most important aspect of their job was to ensure that patients received the best care possible. The shift in focus from the technical/medical aspects of oncology work to the patient him- or herself appears to be central in nurses' trajectories towards professional wisdom.

The subtheme of *Being Assertive* referred to the process of gaining knowledge and experience as an oncology nurse and, subsequently, feeling more comfortable

asserting one's opinions and advocating for patients' needs. This theme was particularly salient for nurses in their interactions with doctors. One nurse explained how she became more comfortable questioning doctors' orders.

You know, the doctors prescribe it, but you're the one doing it. And first of all, do you know why you're doing it? ...First days out you'd be afraid to ask the doctor "Why am I doing this?" Oh, okay 'cause he said so. So it's like no, no, no, no. I mean, I remember calling attendings at two in the morning saying he is insisting I do this, and I do not feel confident at all. I'm so glad we're not doing that... tell him no. But... sometimes it's frustrating that you have to do that. But if you're not ... a person's life is at stake and you're responsible for their life.

For the nurse quoted above, being able to develop her own opinions and make decisions about medical interventions was a meaningful indicator of her growth as a nurse. Being able to actively engage in discussion with the attending oncologists indicated a level of confidence that she did not possess as a novice nurse.

Other nurses discussed the idea of *Growing Into the Role of Oncology Nurse*, which referred to the process of maturing professionally. As many nurses interviewed started out in oncology in their early 20s, several spoke about the growth and evolution that took place on a professional level. As one nurse described,

You know, to kind of take all those years of experience and really grow it into the nurse that I am instead of just, ah this little fraction here, that little fraction there. I did this. It's more cohesive now... . You know, nine, ten years ago I was – was 19 years old, just gotten out of high school, just gotten married... The concept of being a nurse, you know, the nurse on paper and the nurse in reality are such two grossly different things.

The nurse above was referring to the growth process that occurred over the first ten years of her nursing experience. While she may have had the title of oncology nurse when she first began, her professional identity took longer to develop. In that span of time, she also noted growing and developing personally.

The last subtheme was *Insight into Timing/When to Expect Death*. As death was such a common occurrence for all nurses interviewed, some nurses (17%) felt that they began to recognize patterns in the process of dying. One nurse learned that patients are usually the experts in their own prognosis.

I've learned that when people think they're dying, they usually really are. You know, if I walk in to see a patient and they say "I just feel like I'm dying," they usually are. I had a lady one day this week as an outpatient, and you usually you don't see outpatients that are that sick and... what she said to me was... it impacted me so much I actually went and told the physician, I said "I think you just need to be aware of this" and when she came in, sat in my chair, I asked how she was feeling and she said "well, I'm okay"... but she said "You know, I woke up this morning and it just felt like something was just sucking the life right out of my toes... I just want to curl over and go back to sleep and not wake up."

Another nurse described being able to discern when patients begin to decline.

You kind of know what's going on. You kind of know when things go from where you're treating them to when they're no longer treatable and I think, for me, that's when... like I know they're going to die and I'm not surprised.

Thus, in a field where individuals often decline and die from their illness, it is valuable skill to be able to pick up on subtle messages from patients about the state of their physical and mental health.

In brief, nurses spoke about a number of skills and experiences they gained while on the job. These skills allowed nurses to better interact with both patients and coworkers. Therefore, in addition to personal wisdom, the majority of nurses also reported gained knowledge and experience specific to the oncology setting.

4.6 The Relationship Between PTG and Wisdom

In general, the relationship between posttraumatic growth and wisdom tended to be circuitous. Examining all of the interviews as a whole, there did not appear to be a

pattern regarding the particular questions that elicited content related to the relationship between wisdom and PTG. It seemed that without prompting, nurses did not make a connection between these two constructs. By and large, content related to both PTG and wisdom was scattered throughout interviews. However, in response to some prompting, one nurse described a positive relationship between PTG and wisdom. Namely, she noted that the periods in her life that led her to acquire wisdom were the times when she struggled with adversity.

Personally, I think it's because, not so much of the rosy times of my life, but the down times in my life, like when my dad got sick, and my husband fell off the roof and...had multiple surgeries... he could've died. And a lot of things happened all at the same time. And I really got down. I mean I got depressed. But I think because of all of the lows, you learn from how to deal with that and become wiser.

Although the nurse quoted above never explicitly made a connection between PTG and wisdom, she equated wisdom with overcoming hardship and growing from the experience.

Given the high prevalence of thematic content related to both PTG and wisdom across all interviews, it was surprising that so few nurses spoke about the relationship between these two constructs. However, upon further examination of the data, a more subtle pattern emerged – there was a positive relationship between PTG and wisdom when comparing across individual interviews (see Figure 1). Using NVivo 9 Software (QSR International Pty Ltd, 2007), it was possible to compare the proportion of content coded for each interview under the theme of PTG (i.e., percent coverage) to the proportion of total content coded under the theme of wisdom per interview (see Figure 1). Thus, an interview with 10% coverage for *PTG* reflects one tenth of the total text that was coded under the theme *PTG* in the entire data set. Bivariate correlation confirmed

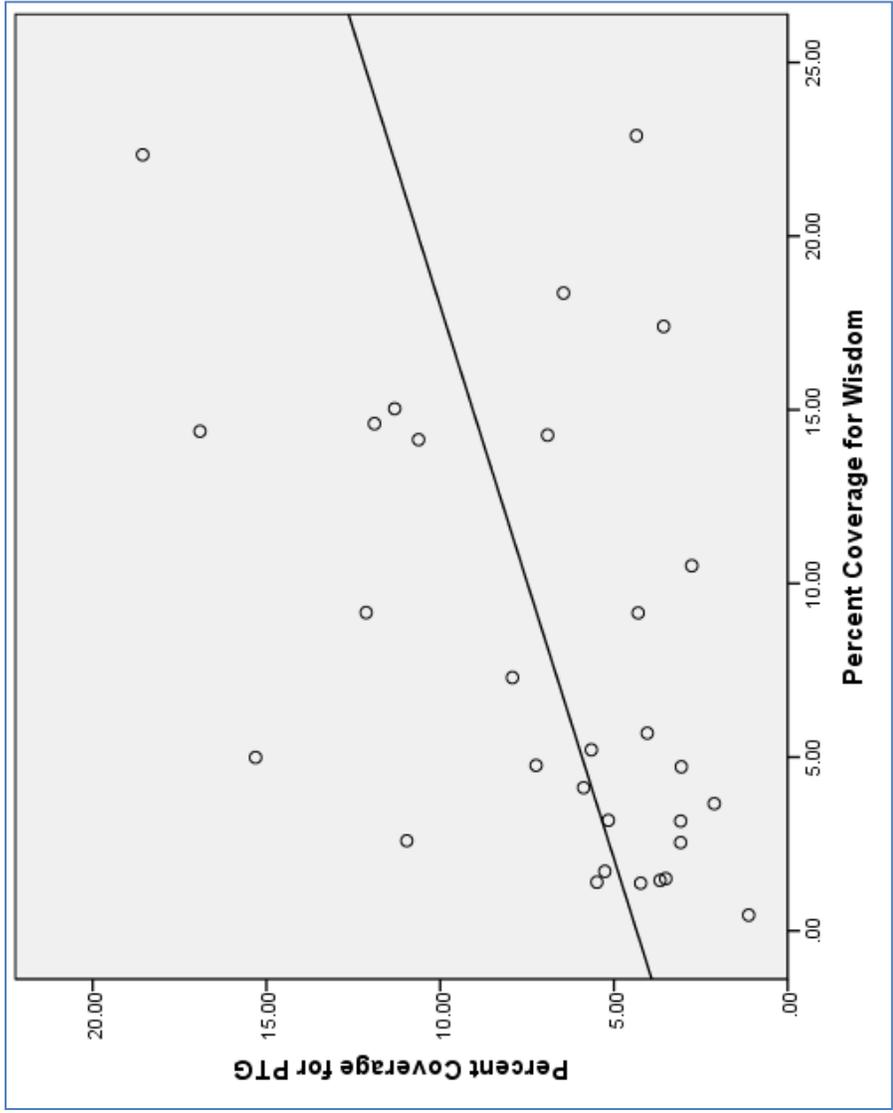


Figure 5.1. Comparison of percent coverage of PTG to percent coverage of wisdom across interviews.
 Note: The figure represents a comparison of the percent coverage for PTG versus percent coverage for wisdom by individual interview (N=30). Percent coverage refers to the proportion of content coded under a particular theme or subtheme.

that the relationship between percent coverage for PTG and percent coverage for wisdom across interviews was significant ($r = 0.46, p = .01$). These findings indicate that nurses who spoke at length about experiences related to PTG also tended to speak at length about experiences related to wisdom.

Another theme emerged that helped bridge the constructs of PTG and wisdom: *Benevolence*. As nurses discussed themes related to PTG and wisdom, they also noted a growing concern for the welfare of others. In many cases, this growing concern led to a change in the way that nurses approached interactions with others and well as tangible changes in behavior. Subthemes included *Altruism*, *Feeling Rewarded Through Benevolence*, *Wanting to Make a Difference*, *Being Selfless* and *Being Kinder/More Compassionate Towards Others* (see Table 4.8). The subtheme of *Altruism* involved the broad notion of wanting to help others. Approximately one third of nurses talked specifically about enjoying caring for patients.

[Patients' bravery and gratitude] makes me want to be a better nurse for them and take care of them as – as well as I can 'cause they – they are just, you know, such good people and they deserve the best care that I can give them.

One nurse described her effort to teach her daughter altruism.

What can [my daughter] do to help someone else's life be better, if they're having a miserable life? Just trying to help. You need help, okay, help yourself. But then get outside yourself and do something. What can you do for those around you? I feel that you are here for a purpose. What are you going to do about it? ... You're here you're today breathing, you're healthy ... how can you bring joy to someone else's life [said softly].

Thus, altruism was directed not only towards patients but nurses' personal lives and the greater community.

A related subtheme was *Feeling Rewarded Through Benevolence*, which was the

Table 4.8. Subthemes, frequency and content of benevolence.

Subtheme	N	Frequency	Example of quote
Altruism	12	32	"[Working in oncology has] definitely... given me... I feel more altruistic like I'll be more apt to volunteer for things or help out."
Feeling rewarded through benevolence	13	25	"So that's kind of my... reward is to get to go and be there for the family in their greatest time of need."
Wanting to make a difference	10	17	"...I feel like I'm doing something that's worthwhile.... I feel at peace with my career decisions."
Being selfless	4	10	"I will never forget one of the very first patients that I had when I started in this career way back in '76 was a gentleman, I still remember his name, I remember his daughter was a nurse in ICU, and... he had...an inoperable brain tumor and he told me one day before he died that he had decided... to donate his body to the medical center for research. And his comment, which still sticks in my mind was if we're not on this earth to help other people then what in the world are we here for?"
Being kinder/more compassionate towards others	3	5	"I think that [oncology nursing has] given me the initiative to be a better person to... just be kinder to people."

Note: N = the number of nurses who reported the theme; Frequency = the number of times the theme was cited

fulfillment nurses described feeling when caring for patients.

It's not a pat on the back, it's just a joy that you can make somebody happy in that time.

Most nurses interviewed emphasized the fulfillment they experienced as a result of their work. For instance, one nurse described her response to people when they learn that she works in oncology.

I just think the biggest thing that I always want people to know, is that it's not a sad job. When you tell someone that you're an oncology nurse they're like, "oh I'm so sorry." It is the best job in the whole world. Because even if you're not saving somebody's life, even if you're just doing palliative treatment, you are giving them the best care that you could in their greatest time of need. And so I always try to share that with people, that this is not a sad place to work; it's a rewarding place to work.

Hence, in spite of experiencing moments of sadness and loss, the majority of nurses felt that the positive and rewarding aspects of their work outweighed the negative. Most nurses also described their work as "the best job" and a perfect fit due to the sense of enrichment that came with caring for patients in their greatest time of need.

Another common subtheme was *Wanting to Make a Difference*. Many nurses described a drive for making an impact on patients' lives. As one nurse stated:

I think that I'm a much better person for having that gratification and having a job where I really feel like I'm making a difference.

Another nurse spoke about the consolation of possessing resources needed to alleviate a patient's physical distress.

I think being a nurse you're able... like, if they're in pain, you're the one who can to fix it. If they're nauseous, you're the one that can fix it. So it's kind of... good to be there, because you're the one that can actually do stuff and make it better.

Thus, in some instance, nurses felt that the rewarding aspect of their work came from being able to physically intervene and ease patients' suffering. In other cases, it was simply being able to make a difference by being present.

Similarly, the subtheme of *Being Selfless* involved changing focus from the self to others. One nurse reflected on her work with patients.

I absolutely love the work, love the opportunities to work with patients. There are times when I'm sitting with – with a patient and – and I realize how fortunate I am to be in the position to spend time with them, to get to know them, to hopefully be of some help in some way.

The last subtheme, *Being Kinder/More Compassionate*, was cited by three of the nurses.

It reflected a more general notion of being kind to others. For example, one nurse stated:

[Oncology nursing] makes me... I would say it makes me more compassionate.

To conclude, most of the nurses interviewed (70%) believed that benevolence was an important component of their work. This sense of altruism was evident in the way nurses perceived caring for patients and in their choice of profession. Benevolence also appeared to be related to both PTG and wisdom in this sample, as nurses frequently cited this theme as examples of both.

CHAPTER 5: DISCUSSION

This study sought to examine posttraumatic growth and wisdom in a sample of oncology nurses. The results provided support for the presence of both constructs and helped to elucidate nurses' experiences with trauma/adversity in the oncology setting. Moreover, these interviews allowed for the emergence of a cohesive model of PTG and wisdom, tying together other related constructs, including core beliefs/the assumptive world, vicarious PTG, and benevolence.

To parallel the results section, the discussion section is structured to correspond to the four major aims of this study: (1) challenges to nurses' assumptive worlds, (2) PTG, (3) wisdom, and (4) the relationship between PTG and wisdom. Each major set of findings will be discussed in turn.

5.1 Challenges to Nurses' Assumptive Worlds

The first study aim was to examine the circumstances that lead nurses to experience significant challenges to their core beliefs. For the majority of nurses in this sample, the loss of a memorable or favorite patient tended to prompt the examination and subsequent revision of the assumptive world. Themes related to the close and personal nature of relationships with patients were present in every interview. In fact, it was the possibility of developing such relationships that attracted many of the nurses to the field of oncology and led them to remain there. However, developing deep and intimate

connections with certain patients also resulted in grief and difficulty coping following their death. It was during this period of grief that the majority of questioning and revision of core beliefs occurred.

Nurses' reactions to the loss of a favorite patient are similar to those of other bereaved populations. Studies that have examined PTG among bereaved individuals (e.g., Armstrong & Shakespeare-Finch, 2011; Engelkemeyer & Marwit, 2008; Hogan & Schmidt, 2002; Lehman et al., 1993; Znoj, 2006) noted the presence of both distress as well as PTG in these samples. As in the current study, distress is often the driving force for the examination and revision of world assumptions (Armstrong & Shakespeare-Finch, 2011; Engelkemeyer & Marwit, 2008). Notably, a recent study found evidence for different amounts of growth depending on the strength of the relationship with the bereaved (Armstrong & Shakespeare-Finch, 2011). The authors examined levels of PTG among those who had lost a first-degree relative, a second-degree relative, or a non-related friend. Findings suggested that all three groups reported PTG; however, PTGI scores (and ratings of the severity of the trauma) were highest for first-degree relatives, followed by those for friends, with those who lost second-degree relatives reporting the lowest PTGI scores and severity ratings. The authors made particular note of the fact that it may be the strength of the bond with the bereaved individual, not necessarily the degree of relatedness that may impact levels of PTG. In the case of oncology nurses in the present sample, it appears that it was indeed the strength of the bond that differentiated nurses' levels of distress, the extent to which world assumptions were shattered and revised, and the amount of growth that was reported.

Another factor that seemed to determine the amount of PTG was the level of nursing experience at the time of the patient's death. Loss that occurred early in a nurse's career was more likely to result in the examination and revision of world assumptions as each subsequent experience with death and loss would be less novel and less of a threat to existing core beliefs. Once nurses experienced several patient deaths and developed effective strategies for maintaining emotional boundaries, they reported greater capacity for coping with subsequent deaths. Nonetheless, the loss of a favorite or memorable patient had the potential to cause substantial distress for any nurse, regardless of the length of nursing experience. In this period of distress, core beliefs continued to be revised to adapt to this new challenge to the assumptive world.

In addition to these major shifts in the assumptive world that occurred after a patient death, it appeared that the general accumulation of nursing experience also contributed to smaller and more continuous revision of core beliefs. As nurses were exposed to a variety of patients from different backgrounds and life experiences, a number of nurses appeared to expand their schemas regarding the nature of people, relationships, and more broadly, the cycle of life and death. These changes in core beliefs also related closely to the development of PTG and wisdom, which will be discussed in the following sections.

5.2 Posttraumatic Growth

The second aim of this study was to examine whether oncology nurses reported PTG as a result of caring for cancer patients. Given that every nurse interviewed reported at least one example of PTG, it can be concluded that posttraumatic growth is a viable construct among this sample. Many reports of PTG arose spontaneously following one of

the first questions: Has your experience caring for cancer patients impacted you personally? This open-ended line of questioning, without prompting for positive consequences of nurses' experiences, provided further evidence for the validity and salience of PTG in this sample.

The most often cited domain of PTG in this sample was *Appreciation of Life*, which involved developing a greater appreciation for life itself, as well as an appreciation of small but meaningful moments and an emphasis on what is truly important. This finding is not surprising given that nurses care for patients who are generally at the end of life and thus confront death on a daily basis. Armstrong and Shakespeare-Finch (2011) found that PTGI scores for *Appreciation of Life* were not significantly different across bereaved persons of first-degree relatives, second-degree relatives, or non-related friends. The authors concluded that this domain was equally applicable to any bereaved person regardless of the relationship because death results in "an individual becoming less complacent of their existence and thus appreciate [his/her] own life more; it serves as a reminder of the inevitable mortality of the human condition" (p. 134). This lesson certainly appears true for oncology nurses.

The second most frequently cited domain of PTG was *New Perspective on Life*. Although Tedeschi and Calhoun's (1996) five factor model of PTG includes *New Possibilities*, not *New Perspectives*, the theme of *New Perspective on Life* is consistent with the three broad dimensions of growth originally described by Tedeschi and Calhoun (1995; 1996): changes in perception of self, changes in interpersonal relationships, and changes in philosophy of life. Changes in philosophy of life include a changed sense of priorities, greater appreciation for each day, and greater sense of purpose and meaning in

life (Calhoun & Tedeschi, 2006; Taku et al., 2008). In this sample, the domain of *New Possibilities* per se did not appear to be as salient as for other populations. That is, although many nurses had moments when they questioned their career choice, particularly during times of loss and grief, most nurses felt that their work experience reaffirmed their current career and life path. Consistent with other studies of PTG in helping professionals (Cohen & Collens, 2012), the nurses in this sample tended to emphasize living life fully, enjoying every moment and making the most of their time away from work; nurses did not generally seek out new hobbies or interests because they felt fulfilled by their work with cancer patients. However, more than half of the nurses interviewed noted having a changed outlook on life. This change in outlook reflected a resolution to live life the way patients would if they were healthy. Nurses repeatedly referred to this perspective when dealing with adversity in their personal lives. The theme of *New Perspective on Life* likely intersects with other domains of PTG, particularly *Appreciation of Life*, as well as some of the content of questioning and/or revising world assumptions. Judging from these findings, it may be that Tedeschi and Calhoun's (1996) domain of *New Possibilities* is less relevant to those in the helping professions, or at least those functioning in this context. Additional research, particularly the administration of the PTGI, would help to further elucidate the nature of this domain among oncology nurses and its potential relationship with other domains of PTG.

The third domain, *Relating to Others*, was more homogenous in content than Tedeschi and Calhoun's (1996) conceptualization, which encompasses both deeper, more meaningful relationships and an increased sense of compassion towards others. In the current study, developing meaningful relationships and having an increased sense of

compassion were reported as two distinct categories of change – improvement in relationships exclusively involved family and friends while themes related to compassion focused exclusively on patients and the greater community. Thus, both the nature of the change and the type of relationship were clearly different across these two content areas. More specifically, when nurses discussed a perceived improvement in their relationships, they only included friends and family in their frame of reference. These improvements involved further developing or re-kindling connections outside of work. Alternatively, content related to compassion and altruism tended to be almost exclusively focused on patients, with a few nurses noting compassion that was directly to the greater community (e.g., teaching children to be more compassionate in general). Because these categories were clearly delineated, a separate theme of *Benevolence* was developed in order to capture content related to compassion, altruism, and benevolent acts towards patients and the community at large. Overall, these findings are consistent with both qualitative and quantitative studies of PTG among health professionals, noting reports of growth in the PTG domain of *Relating to Others* (e.g., Arnold et al., 2005; Cohen & Collens, 2012; Shakespeare-Finch et al., 2003; Shamai & Ron, 2008; Taubman-Ben-Ari & Weintraub, 2008). However, to my knowledge, the current study is the first within the PTG literature on helping professionals to propose a distinction between experiencing an improvement in the quality of relationships and altruism/benevolence.

That said, some preliminary evidence supports separating these two content areas. In a review of 20 qualitative studies on PTG among “trauma workers,” defined as any professional working with traumatized individuals, Cohen and Collens (2012) found several studies that reported examples of developing compassion, acceptance towards

others, and an increase in social, political, and community involvement. All of these examples appeared to be cited separately and in a different context from improved relationships. For those in the helping profession, this division may be a particularly important difference as one relates to an individual's personal life (i.e., family and friends) whereas the other relates to professional life (i.e., compassion towards patients/clients). Additional research is needed to validate this finding across other samples and to determine its significance in the development of PTG for this population.

Also, unlike the subtheme of *Greater Appreciation of Family/Relationships*, fewer nurses noted experiencing an actual improvement in relationships. Although most developed a sense of value for family and friends, fewer found the time and emotional resources needed to improve relationships. This comes as no surprise given nurses' strenuous schedules and the limited emotional resources that they have available after caring for patients. Nevertheless, those who did find an improvement in relationships reported positive changes in their lives that seemed particularly meaningful, such as the quality of relationships with their children and spouses. Few studies in the PTG literature have specifically examined the content of the PTG domain *Relating to Others*, particularly using qualitative methodology. Splevins and colleagues (2010), who interviewed interpreters working with trauma survivors, made brief mention of study participants feeling more open and intimate in their relationships. Cohen and Collens (2012) found multiple examples of themes related to appreciation of life, with some specifically mentioning valuing family and social ties; however, there only one study found an improvement in relationships, which involved better parenting/communication with children. Therefore, additional work is needed to understand the specific active

components of *Relating to Others* as it applies to helping professionals and to determine whether there is a meaningful difference between changing one's attitude towards close family and friends versus perceiving an actual improvement in these relationships.

Within the larger literature on PTG, accumulating evidence indicates that many individuals can experience both a strengthening and a decline in spirituality after a traumatic event (Pargament, Desai, & McConnell, 2006; Shaw, Joseph, & Linley, 2005). In the present study, the domain of *Spiritual/Religious Growth* arose relatively infrequently. Most nurses reported that their spiritual and/or religious beliefs were well-founded before beginning their career, and therefore, had no room to grow. The topic of religion and its importance arose often across interviews. One-third of nurses mentioned the importance of faith in oncology work, and another third discussed integrating religion and prayer into patient care. For many, it appeared to be assumed that religion and spirituality were naturally part of caring for patients. It is possible that for some nurses, the idea of religious or spiritual growth may be threatening to self-identity (Pargament et al., 2006). For instance, nurses who are raised within religiously-oriented families, particularly in the Southeastern US, may be expected to value and prioritize their religious beliefs from a young age. Prayer and attendance at church, or other faith-based activities, may be seen as naturally integrated into everyday life. Thus, for such individuals, religion and faith are vital aspects of life with little room for growth or change. Pargament and colleagues (2006) also suggest that the flexibility of an individual's spiritual orienting system, (i.e., the general frame of reference for one's religious beliefs) may determine how well they can cope with stressful events. Thus, if a person is rigid in her/his spiritual beliefs and cannot adapt these attitudes, behaviors, and

ways of coping in response to adversity, then PTG is less likely to develop in this domain. Further research in this area is warranted to support this notion.

The domain of *Personal Strength* was rarely cited by nurses in this sample. Nurses whose responses were seen as reflecting this domain felt that their sense of strength was either derived from watching patients or, in the case of one nurse, the personal experience of having cancer. As a comparison, in Armstrong and Shakespeare-Finch's (2011) study, individuals who lost a first-degree relative had significantly higher personal strength scores than those who lost a second-degree relative or friend. Therefore, the emergence of personal strength may be more likely after the loss of a close family member, as opposed to a more distant loss such as a patient. Consistent with this notion, when nurses were asked to compare the loss of close family member or friend to the loss of a patient, the majority stated that it was a vastly different experience. The loss of one's own family, particularly of a spouse, was significantly more difficult to cope with given the closeness and intimacy of the relationship as well as the change in role/responsibilities that occur following the loss. In contrast, nurses developed the expectation that they will lose some patients. As such, dealing with the death of a close patient may be trying, to be sure, but it was generally expected. Accordingly, losing a patient may not have the impact that is necessary to result in the development of personal strength.

Part of the second study aim was to attempt to understand the distinction between direct and vicarious PTG. Within the literature, there does not appear to be a clear definition of vicarious PTG, although most studies tend to be centered on helping professionals in medical/mental health contexts (e.g., Cohen & Collens, 2012). Existing

studies also suggest that vicarious PTG is essentially the opposite of vicarious traumatization (e.g., *growth* that occurs as a result of working with individuals exposed to trauma vs. developing *PTSD symptoms* as a result of working with individuals exposed to trauma; Gibbons, Murphy, & Joseph, 2011; Linley & Joseph, 2006; Splevins, Cohen, Joseph, Murray, & Bowley, 2010). However, as a sample population, nurses are at the intersection of vicarious and direct exposure to trauma as they observe others experiencing adversity but also experience trauma themselves through medical traumas and the loss of patients. Therefore, it would be inaccurate to say that nurses' experiences are completely vicarious. Instead, it is more likely that nurses undergo some elements of both vicarious and direct traumatization.

In the current study, there were few examples of purely vicarious PTG. A possible explanation may be because the experiences nurses perceived as most traumatic (and therefore most likely to lead to PTG) related to *shared* trauma, such as grief after the death of a favorite patient or witnessing a medical trauma. In fact, only two nurses cited examples that were coded as vicarious PTG. Three out of the four examples provided by these nurses involved observing patients' bravery/strength and attempting to apply this strength to one's own life. The other example of vicarious PTG involved gaining an appreciation of one's own family by watching patients interact with their family members. It is possible that there were other more subtle examples of vicarious PTG that were not coded, particularly in the domain of *Appreciation of Life*, as it is difficult to determine the source of the growth once an individual internalizes his/her experience.

Nurses care for multitudes of patients and, consequently, accumulate a wealth of experience, including participating in and witnessing countless interactions, discussions,

and trying moments. As they reflect on their experiences, it is impossible to determine which individual patient or particular interaction may have led to PTG – was it simply through observation or was it through the nurses' own emotional upheaval that followed after an encounter with a patient that was perceived as traumatic? Thus, in a retrospective study, these questions cannot be directly or accurately answered. It is most likely that all instances of PTG were a result of both vicarious and direct experiences. Therefore, the distinction between direct and vicarious PTG may be an unnecessary and artificial disaggregation that confers neither theoretical nor analytical benefit. Research focusing on vicarious PTG, the present study included, has found no evidence to suggest that PTG operates differently among individuals who were not directly exposed to a traumatic event (e.g., Cohen & Collens, 2012). It is more likely that other factors, such as the perceived impact of the event and the degree to which it shakes world assumptions, influence the development of PTG, regardless of whether the growth is experienced directly or vicariously.

In addition to the traditional conceptualization of PTG, nurses also cited examples of positive consequences that resulted from caring for oncology patients. These positive consequences were different, and perhaps less complex (i.e., not requiring a reworking of core beliefs), than the model of PTG outlined by Tedeschi and Calhoun (1996). However, it can be argued that these subthemes can be classified as vicarious growth. The most frequently cited subthemes of *Positive Consequences* included *Optimism* and *Focusing On/Appreciating One's Health*. Although arguably not as significant in scope as PTG, these positive consequences were viewed as meaningful gains by nurses interviewed. While not always explicitly stated, the subthemes of *Optimism* and

Focusing On/Appreciating One's Health appeared to be related to observing patients and subsequently applying lessons learned to one's own life. Multiple nurses described patients as surprisingly optimistic, with a positive attitude towards treatment and life in general. Similarly, nurses explained that watching individuals whose health was failing helped to reinforce the importance of maintaining good health while there was still time to intervene. Hence, nurses were able to pick up on life lessons both from observing patients' best attributes (i.e., a positive outlook) as well as what patients lacked (e.g., health). Additional research is needed to confirm these findings across other samples.

Overall, themes related to positive benefits of oncology nursing work were highly prevalent in this sample. It is also notable that the domains of PTG were clearly delineated and were, with one exception, consistent with the original domains derived from factor analysis of the PTGI (Tedeschi & Calhoun, 1996; Taku et al., 2008). As much of the content for the interviews in this study arose with minimal prompting about growth or positive change, these findings provide further validation for the PTGI and Tedeschi and Calhoun's (1996) conceptualization of PTG. Nurses' answers aligned well with the PTG domains, as well as to some of the content of individual items of the PTGI (e.g., "I put more effort into my relationships" and "I discovered that I'm stronger than I thought I was"). Such results provide a counterargument for the critique that the PTGI is not comprehensive in content (see Park & Lechner, 2006) as the content derived from interviews arose largely without direct solicitation. Moreover, the fact that all nurses interviewed reported PTG corroborates findings from existing studies on PTG among nurses (e.g., Lev-Wiesel et al., 2009; Shiri et al., 2008; Taubman-Ben-Ari & Weintroub, 2008) and suggests that this population warrants further attention. The literature on

vicarious PTG has focused predominantly on trauma workers; the current findings suggest that oncology nurses are a prime population for PTG research.

In addition, as Calhoun and Tedeschi have proposed in their recent work (e.g., Calhoun & Tedeschi, 2000, 2006; Tedeschi & Kilmer, 2005), there may be room for intervention that facilitates or sparks further development of PTG. Nurses, and other members of the helping professions, may be an ideal group for such interventions as they are repeatedly exposed to traumatic experiences as part of their work and are required to engage in professional development/continuing education. An intervention that assists nurses in developing a cognitive framework for processing their traumatic experiences may enable them to develop PTG earlier in their career and, possibly, to a greater extent. Tedeschi and Calhoun's (2009) model of the "expert companion" is one such example. This model suggests that skilled clinicians can guide an individual in processing their experiences related to trauma in a way that gently steers them towards the PTG model (e.g., questioning and restructuring world assumptions, thinking about positive consequences of their experiences, etc.; Calhoun & Tedeschi, 2013). Another possibility is the development of a group intervention through which nurses are directed to reflect on their experiences, similar to the interviews that were conducted for this study. Such an approach would utilize Tedeschi and Calhoun's (2009) notion of the expert companion in a group setting to help promote productive rumination, and facilitate both growth and wisdom. A group intervention may also reduce burnout in this population as it would allow nurses to have a formal means of processing their experiences with trauma. Anecdotally, at the end of many of the interviews, nurses noted that speaking to me was a unique opportunity to share their story and allowed them to reflect on their experiences in

a way that they have not done in the past. Although it may have been difficult for some to discuss emotionally charged content, most nurses expressed gratitude for having an opportunity to talk about their experiences.

These findings also suggest that it may be possible to develop a more global intervention using qualitative interviewing to promote the development of PTG and wisdom in any population that has experienced trauma. Qualitative interviewing has the capacity to promote introspection and a weaving of new and more complex narrative. Individuals may be asked to take a new perspective on their experience with trauma, one that allows for the emergence of positive changes. However, unlike psychotherapy, there is no need for direct clinical intervention or long-term follow-up – instead, the interview encourages the individual to initiate his/her own self-reflection that may eventually lead to the emergence of PTG and wisdom. Yet, to my knowledge, no such interventions have been developed. A first step in this process would be to carry out a small feasibility study to determine if qualitative interviewing actually contributes to the development of PTG/wisdom. Once feasibility has been established, specific lines of questioning can be developed for any population that has experienced trauma, allowing for group interventions as well as protocols that can potentially be completed via the internet.

5.3 Wisdom

The third study aim was to examine the degree to which oncology nurses report the development of wisdom as a result of caring for cancer patients. As with PTG, themes related to wisdom were highly prevalent in this sample, with all nurses citing at least one example of wisdom they felt developed as a result of their experiences. The

subthemes were diverse and reflected a variety of ways in which wisdom may arise among oncology nurses.

Although there are multiple conceptualizations of wisdom within the field of psychology, the use of a grounded theory approach to data collection and analysis made it possible to uncover examples of wisdom that were part of nurses' experience without necessarily ascribing to any particular framing of the construct. As a result, the subthemes reflected a broad range of categories that overlapped with a number of existing theories on wisdom. In an effort to better understand these subthemes and how they relate to the broader *Wisdom* construct, the prominent theories will be reviewed and links will be made between the current findings and these existing conceptualizations.

One of the most researched theories of wisdom comes from the Berlin Wisdom Paradigm (Baltes & Staudinger, 2000). This paradigm, which focuses on general wisdom, is comprised of the following: management of uncertainty, value relativism, factual knowledge, procedural knowledge, and lifespan contextualism, (Staudinger & Glück, 2011). Wisdom, according to the Berlin Wisdom Paradigm, cannot be evaluated based solely on self-reflection (Baltes & Staudinger, 2000). However, given the predominance of this paradigm in the psychological wisdom literature, it may be informative to determine the extent to which nurses' self-reflections are consistent with the five criteria. *Uncertainty of life* was the most cited subtheme of *Wisdom* and included examples that reflected acknowledging one's mortality, the unpredictability of cancer and other illnesses, and the fragility of life. This subtheme likely arises from observing patients, many of whom receive an unexpected cancer diagnosis and deteriorate quickly. The general message nurses echoed is to not take anything for granted. Value relativism

was coded under the subtheme *Respecting Differences* and included content such as seeing cancer patients as individuals, respecting differences in outlook towards treatment and the perception of pain, respecting religious differences, and, more generally, respecting people from all walks of life. Contrary to the label, Baltes and Staudinger's (2000) first criterion, rich factual knowledge, relates more to interpersonal skills than to general intelligence. Baltes and Staudinger define this criterion as "broad and deep general knowledge about human nature and life conditions, including emotions, motives, and the dynamic interaction of personal, interpersonal, and societal conditions" Stange & Kunzmann, 2010, p. 25). In the current study, this criterion was most applicable to the subtheme of *Better Interpersonal Skills*, which included being able to get along with different kinds of people, knowing how to communicate without arguing, being able to place people's reactions into context, and being a good listener. Thus, these three criteria were generally consistent with the data in this study.

However, two of Baltes and Staudinger's (2000) criteria were absent in this sample: procedural knowledge and lifespan contextualism. It is important to note that Baltes and his colleagues utilized case vignettes to measure wisdom according to the Berlin Wisdom Paradigm (e.g., Baltes & Staudinger, 2000), a methodology that is more conducive to uncovering examples of these two criteria. When nurses discussed the ways in which they had gained wisdom, they did not give any examples of newfound ways of dealing with dilemmas or conflicts (i.e., procedural knowledge). However, this may be due to the fact that procedural knowledge is a skill that needs to be demonstrated as opposed to discussed. Nurses may have indeed acquired procedural knowledge over the course of their work experience without consciously being aware of any changes. For

instance, some examples of *Better Interpersonal Skills* involved being able to get along with difficult patients. While not explicitly stated, it is likely that dealing with angry or difficult patients also required mitigating conflict. Baltes' third criterion, lifespan contextualism, was likely absent for the same reason. Nurses did not report making effort to consider multiple life domains, their interrelations or cultural variations. It is possible, however, that some nurses would be able to demonstrate this criterion if asked to reflect on a case vignette, but were unable to do so in an interview without additional prompting. An alternative explanation may be that the other three elements of wisdom are more salient for nurses in this context.

While the Berlin Wisdom Paradigm focuses on general wisdom, theories of personal wisdom tend to place more emphasis on overcoming adversity (Staudinger & Glück, 2011) and are thus more applicable to the current study. Ardel's (2003) three dimensional model of wisdom, which includes a cognitive, affective, and reflective component, appears to fit well with study findings. There were a number of subthemes that reflected the cognitive dimension, which refers to an individual's ability to understand the deeper meaning of things (e.g., human nature, the limitation of knowledge, and life's unpredictability). Subthemes consistent with this dimension included *Uncertainty of Life*, *Greater Range of Life Experiences*, *Applying Lessons Learned from Patients to One's Own Life*, and *Acknowledging One's Own Limitations*. Nurses commonly acknowledged life's uncertainties, particularly as they related to their own mortality. Many also spoke about gaining a better understanding about the range of human experiences and insight into human nature. In addition, a number of nurses noted acquiring more humility and being able to acknowledge not having all the answers.

Overall, it appears that Ardel's (2003) cognitive dimension captures a person's willingness for cognitive engagement – that is, to look for meaning while also realizing one's limitations. This dimension appeared to be highly applicable to nurses in this study, as the majority of nurses endorsed engaging in this process.

Examples of the affective dimension were also common in the current study and were classified under the subtheme *Empathy/Sympathy*. Ardel (2003) describes this dimension as including feelings and acts of sympathy, compassion, and positive emotions towards other people. In this study, *Empathy/Sympathy* encompassed feeling sympathetic towards others in general, as well as more specific efforts to understand the experiences of patients. It is not surprising that examples of *Empathy/Sympathy* were prevalent in this sample, given that patient relationships are such a vital aspect of oncology work. A logical consequence of developing deep relationships would be to connect with patients, understand their perspective, and sympathize with their experiences.

Lastly, Ardel's (2003) reflective dimension involves engaging in reflective thinking, being able to see events from multiple perspectives, and understanding the motivation of one's own and others' behavior. Although this dimension was not as clearly defined in this sample, a number of subthemes captured some of its components. The subtheme of *Emotional Growth/Regulation* included content related to enhanced self-awareness and insight. Within this subtheme, nurses provided examples of learning to control one's anger, being able to stay calm in difficult situations, and learning to experience emotions more deeply. In addition, the subthemes of *Empathy/Sympathy*, *Greater Range of Life Experiences*, and *Applying Lessons Learned from Patients to One's Own Life* had overlapping examples of approaching situations from patients'

perspective and attempting to understand the motivation of others. Moreover, the study interview process necessitated self-reflection and a high level of self-awareness. The goal of the interviews was to elicit as much information as possible with minimal prompting; nurses were asked to reflect on their entire nursing experience, identify patterns, note changes in perspective, and even report how they have changed from the perspective of a close family member or friend. The majority of nurses were able to answer such questions without hesitation, providing further support for the existence of this dimension.

The other theory of personal wisdom that has particular relevance to the current study comes from Webster (2003; 2007). Webster proposes five dimensions of wisdom: openness, emotional regulation, critical life experience, reminiscence/reflectiveness, and humor. Openness involves interest in new possibilities and a general willingness to entertain alternate points of views. Emotional regulation refers to the ability to differentiate between various emotions, particularly subtle nuances in feelings. Critical life experience involves experiencing trying and morally challenging situations. Reminiscence and reflectiveness involve introspection and self-reflection. Webster's theory is also one of the few that explicitly identifies humor as one of the dimensions of wisdom; he argues that humor is an important component of wisdom because it necessitates a social bonding and a constructive detachment from serious circumstances. Tying these five dimensions to the present study, nurses clearly demonstrated critical life experience by nature of their occupation. The subtheme of *Emotional Growth/Regulation*, which was discussed above, also fits well with the Webster's dimension of emotional regulation. Content related to reminiscence/ reflectiveness was

also discussed above as it overlaps with Ardel's (2003) reflective dimension. The openness dimension was less evident in this study, as nurses did not directly discuss openness to new ideas, values or experiences. However, part of this dimension is also the appreciation of multiple perspectives. Under the subtheme of *Empathy/Sympathy*, nurses reported making an effort to place interactions with patients into context (i.e., they may be upset or in pain). Similarly, the subtheme of *Respecting Differences* involved being considerate of multiple viewpoints, even when a nurse may have held a very different personal perspective. Although a decision was made not to classify humor as part of initial data analysis, nurses cited several examples of using humor as a coping mechanism. Humor appeared to be an effective coping strategy for both nurses and patients in an environment that would otherwise be extremely disheartening.

To conclude, content related to wisdom was the most difficult to untangle given the multitude of existing theories and classifications. It appears that theories of personal wisdom are more applicable to nurses' experiences than theories of general wisdom and reflect the direct and personal nature of the growth that occurs as a result of caring for oncology patients. In particular, Ardel's (2003) three-dimensional approach to wisdom seemed to best fit the current findings. Ardel's conceptualization is also arguably the broadest, allowing multiple subthemes to be categorized under one domain. However, no one theory or approach to wisdom fully captured all of the content discussed by nurses. It appears that posttraumatic wisdom, or wisdom that is acquired as a result of experiencing trauma or adversity, may have its own unique components. Few studies to date have empirically tested this notion. Future research is necessary to extend these findings to other populations and to determine the elements of posttraumatic wisdom.

Once this goal is accomplished, a measure can be developed and validated that specifically captures the nuances of wisdom that is acquired following trauma.

The last notable finding under the broader category of *Wisdom* was content related to professional knowledge and development. Although examples from this category were not classified as wisdom per se, a subset of nurses considered the knowledge and work-related expertise they gained to be synonymous with wisdom. Namely, when nurses were asked in what ways they had grown wiser, they would initially cite examples of professional wisdom before delving into personal wisdom. Almost all of the nurses interviewed (97%) cited at least one example of professional knowledge/experience. Subthemes of *Professional Knowledge/Experience* tended to involve the accumulation of oncology-specific knowledge, general nursing knowledge, and skills that enabled better patient care. Thus, while different from personal wisdom, professional experience and growth was an important component of how nurses described changing and growing wiser. Findings from a qualitative study of Manhattan clinicians following September 11, 2001 (Bauwens & Tosone, 2010) highlight the importance of “professional posttraumatic growth” and clinical wisdom that arises following adversity as the authors found that this was a major content area that arose during interviews. Thus, professional areas of growth must be considered when working with those in the helping professions as they appear to be both components of PTG/wisdom, as well a vital element of self-identity in this population.

5.4 The Relationship Between Posttraumatic Growth and Wisdom

The last study aim was to determine the context and specific mechanisms of the relationship between traumatic experiences, PTG, and wisdom. As expected, the

relationship between these constructs was complex due to their interrelatedness. Overall, study findings elucidated the fluid nature of PTG and wisdom. Both of these constructs evolve daily as individuals continue to process their experience, revise core beliefs, and formulate newfound understanding of the world around them. In the same vein, PTG and wisdom appear to have a mutually reinforcing relationship whereby the development of one serves to facilitate the development of the other. In the current study, this relationship was validated by the finding that nurses who had the highest percent coverage of *PTG* also tended to have the highest percent coverage of *Wisdom* and vice versa. While these findings are a first step in determining the relationship between these two constructs, it must be noted that percent coverage refers to the proportion of text that was labeled as a particular category. Therefore, it cannot account for the quality, depth, or richness of that text. For instance, a nurse who may have had only 5% coverage of *PTG* (meaning that the text accounted for 5% of the total text that was categorized as *PTG*) may have been more concise in her wording but the *content* of her interview may have been more meaningful or more relevant to the construct of posttraumatic growth than another nurse who had 10% coverage of *PTG*. Future research that utilizes the PTGI along with a quantitative measure of posttraumatic wisdom is needed to more adequately quantify the relationship between these constructs.

As PTG and wisdom are never static, a more appropriate representation of the relationship between these constructs is a circular one, with the development or evolution

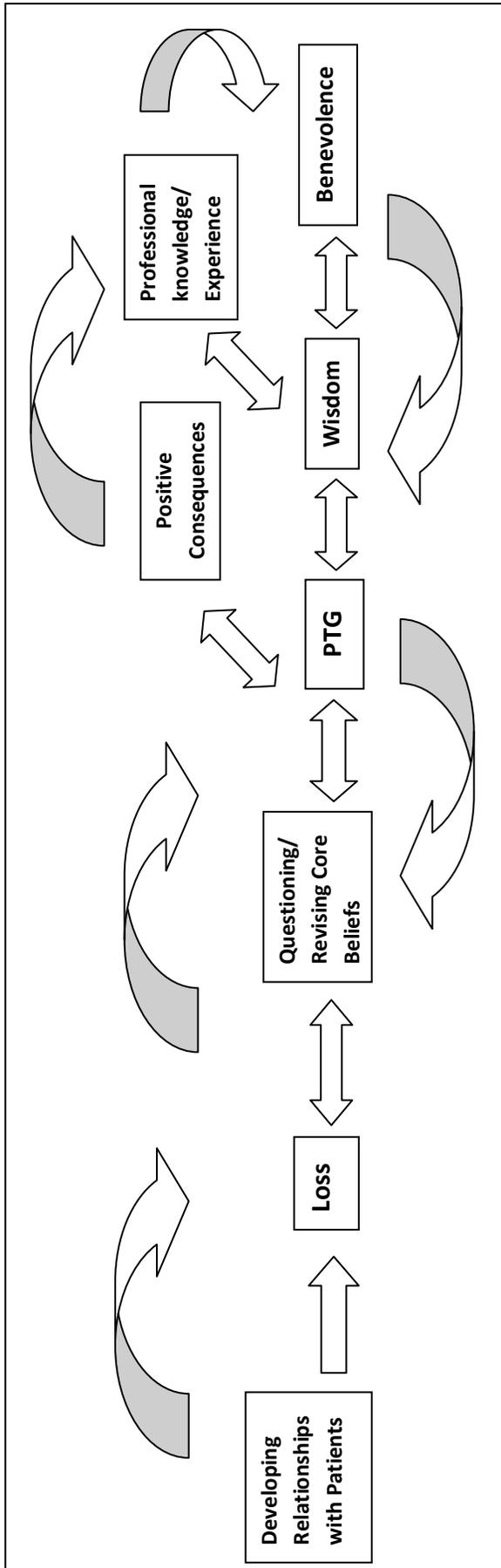


Figure 5.2. Schematic representation of the relationship between PTG and wisdom.

of one feeding into the evolution of the other. Figure 5.2 provides a schematic representation of the proposed relationship between PTG and wisdom. Among this sample of nurses, the development of intimate relationships with patients was at the heart of their profession – and the apparent ‘starting point’ for the phenomena examined here. It was through the experience of loss after the death of a favorite/memorable patient that nurses engaged in a ruminative process, leading to the questioning and revision of core beliefs and their assumptive world. This revision then led to a continuous and self-reinforcing pattern of the development of PTG, wisdom, and benevolence. For many, this process also resulted in other positive consequences, such as better emotional regulation, and professional growth/wisdom. An important point in this structural model is the dynamic nature of each component and the notion that all elements are constantly being shifted and expanded as nurses encounter new patients and new experiences with loss. The other proposition of the model is that the development of one component, such as wisdom, can foster the development of other components. In other words, each component is part of a mutually influential relationship and can serve to strengthen or initiate the development of another element in the model. Clearly, additional research is needed to provide support for this model.

The current study also helped to uncover an additional construct that appears to serve as relevant link between PTG and wisdom: *Benevolence*. Benevolence refers to both an attitude of compassion and selflessness as well as altruistic acts that are directed towards individuals or the greater community. The majority of nurses in the sample (70%) reported engaging in some form of benevolence. This behavior took many forms, including enjoying and feeling fulfilled serving patients and their families, teaching

children how to engage in benevolent acts, finding ways to carry out acts of kindness within their community, volunteering, and practicing compassion and kindness towards others. Given that oncology nurses typically select their profession due to an innate desire to help others, it is possible that this construct may be sample-specific. However, there is more evidence to support the contrary. Researchers have theorized that altruism is a component of both PTG and wisdom. For instance, Calhoun and Tedeschi (1998) noted that for some individuals, part of the growth process may be to engage in altruistic acts. More recently, Staub & Vollhardt (2008) suggested a relationship between PTG and “altruism born of suffering,” a construct that refers to altruism following a traumatic experience. Staub and Vollhardt suggest that individuals who have experienced trauma have the potential to develop a “prosocial value orientation,” which involves a positive view towards mankind, a concern about others’ welfare, and a feeling of responsibility towards others (Staub, 2003). This orientation, along with social support, is proposed to facilitate altruism following a traumatic experience. In the same vein, wisdom researchers have long suggested that altruism is an element of wisdom (Meeks & Jeste, 2009) – the affective dimension of Ardel’s (2003) three-dimensional wisdom scale, which involves feelings of sympathy, compassion, and love for others, constitutes an example. Of relevance to the current sample, there is some support for the emergence of altruism among helping professionals; several studies reported an increase in political and community involvement among trauma workers who reported PTG (e.g., Bauwens & Tosone, 2010; Illiffe & Steed, 2000; Satkunanayagam, Tunariu, & Tribe, 2010). Thus, although additional work is needed, there is preliminary evidence that the construct of benevolence may serve as a bridge between theories of PTG and wisdom.

5.5 Study Contributions, Limitations and Future Directions

The current study set out to determine whether oncology nurses experienced PTG and wisdom as a result of their work. Findings demonstrated support for the presence of both PTG and wisdom, as well as benevolence, professional growth/wisdom, and other positive outcomes. To my knowledge, this study is the first to examine the emergence of wisdom among oncology nurses. Furthermore, this study is the first to investigate PTG among American nurses and the first to explore the relationship between PTG and wisdom in this context. Its most basic findings were that nurses experience a range of positive outcomes as a result of working with oncology patients, much like other populations that have experienced trauma directly.

Moreover, findings from this study helped to contextualize the relationship between PTG, wisdom, and benevolence – a construct that has received relatively little attention within this framework. The grounded theory approach to data collection and analysis allowed for an in-depth look at nurses' experiences and the specific circumstances that facilitated the development of PTG and wisdom in this population. As Park and Lechner (2006) have suggested, one of the advantages of taking a qualitative approach is that it is better suited for capturing the nuances of an individual's experiences. This information is particularly vital in the early phases of research or when little information is known about a construct. In this instance, the construct of posttraumatic wisdom is in its infancy, providing an ideal target for a grounded theory study.

However, as with any grounded theory study, a potential limitation is that results may not be generalizable beyond this specific group of oncology nurses. One factor may

be regional and geographical differences across samples. For instance, this study was conducted in the southeastern US with a sample of nurses that may have been more religious/spiritual than those in the northeast or the west coast. While measures were put in place to maximize credibility and dependability, it is possible that interviewing a different set of participants would have resulted in different findings. Another related limitation is the heterogeneity of the sample in regards to experiences with adversity. Although nurses were intentionally selected to reflect a range of nursing experiences, some had both direct and vicarious exposure to trauma. For example, two nurses lost a spouse to cancer and two nurses spoke about their own personal cancer diagnosis. As such, it was difficult to untangle the extent to which these nurses' reports of PTG and wisdom were derived from personal experiences versus observing and learning from patients. Notably, in a study of emergency ambulance workers, Shakespeare-Finch and colleagues (2003) found that there was a significant difference between emergency personnel who personally experienced trauma in addition to their work (higher scores on the PTGI) and those who did not experience personal trauma (lower PTGI scores). It also bears mention that nurses in this sample were almost exclusively non-Hispanic Caucasian females; nurses of a different race/ethnicity/sex may have had different experiences professionally and personally, leading to differences in the development of PTG, wisdom, and related constructs.

Another limitation was the challenge of eliciting responses related to wisdom. Asking nurses if they have grown wiser as a result of their experiences was ineffective and typically left nurses unsure of how to answer. Content coded under the theme of *Wisdom* was derived from all sections of transcripts, typically at the same point of

discussion at content related to PTG. This limitation is a likely explanation as to why many measures of wisdom are based on case vignettes, hypothetical situations or indirect questioning. A qualitative approach allowed for the emergence of wisdom content via indirect questioning. However, a measure designed to capture posttraumatic wisdom must carefully construct responses in order to avoid response bias but also capture those individuals who are truly wise but humble.

To conclude, this study confirmed the existence of PTG and wisdom among American oncology nurses. In addition, taking a grounded theory approach to data collection and analysis allowed for the emergence of new constructs that have not traditionally been linked to PTG and wisdom. This approach also highlighted the complex and interconnected nature of the constructs involved. Future research should aim to establish the specific mechanisms that underlie the relationship between PTG, wisdom, and benevolence, and to ensure that theories modeling this relationship apply to a wide range of populations. Longitudinal work will be particularly valuable in determining how and when PTG and wisdom emerge. Once a model of PTG and posttraumatic wisdom has been validated, it will be possible to develop a measure specific to wisdom that arises following a traumatic event. In addition, interventions may be developed that are aimed at facilitating PTG, wisdom, and benevolence among helping professionals; once feasibility has been established, it may be possible to apply these interventions to anyone who has experienced trauma. Most fundamentally, the current study highlights the potential benefit of simply encouraging nurses to discuss their experiences with adversity, thereby providing a means to further process and develop a framework for uncovering the positive aspects of their work.

REFERENCES

- Aldwin, C. M., & Levenson, M. R. (2004). Posttraumatic growth; A developmental perspective. *Psychological Inquiry, 15*, 19-22. doi: 10.1207/s15327965pli1501_02
- Aldwin, C. M., & Levenson, M. R. (2001). Stress, coping, and health at mid-life: A developmental perspective. In M. E. Lachman (Ed.), *The handbook of midlife development* (pp. 118-124). New York: Wiley.
- Ardelt, M. (1997). Wisdom and life satisfaction in old age. *Journal of Gerontology: Psychological Sciences, 52B*, 15–27. doi: 10.1093/geronb/52B.1.P15
- Ardelt, M. (1998). Social crisis and individual growth: The long-term effects of the Great Depression. *Journal of Aging Studies, 12*, 291-314. doi: [http://dx.doi.org/10.1016/S0890-4065\(98\)90005-6](http://dx.doi.org/10.1016/S0890-4065(98)90005-6)
- Ardelt, M. (2003). Development and empirical assessment of a three-dimensional wisdom scale. *Research on Aging, 25*, 275–324. doi: 10.1177/0164027503025003004
- Ardelt, M. (2005). How wise people cope with crises and obstacles in life. *ReVision: A Journal of Consciousness and Transformation, 28*, 7-19.
- Arlin, E. K. (1990). Wisdom: The art of problem finding. In R. Sternberg (Ed.), *Wisdom: Its nature, origins and development* (pp. 230-243). Cambridge: Cambridge University Press.
- Armstrong, D., & Shakespeare-Finch, J. (2011). Relationship to the bereaved and perceptions of severity of trauma differentiate elements of posttraumatic growth. *OMEGA, 63*, 125-140. doi: 10.2190/OM.63.2.b
- Arnold, D., Calhoun, L. G., Tedeschi, R. G., & Cann, A. (2005). Lightness visible: Vicarious posttraumatic growth in psychotherapy. *Journal of Humanistic Psychology, 45*, 239-263.
- Baltes, P.B., & Smith, J. (2008). The fascination of wisdom: Its nature, ontogeny, and function. *Perspectives on Psychological Science, 3*, 56-64. doi: 10.1111/j.1745-6916.2008.00062.x
- Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *American Psychologist, 55*, 122-136. doi: 10.1037/0003-066X.55.1.122
- Baltes, P. B., Staudinger, U. M., Maercker, A., & Smith, J. (1995). People nominated as

wise: A comparative study of wisdom-related knowledge. *Psychology and Aging*, *10*, 155-166.

- Barton, E. A. (2005). *Posttraumatic growth, posttraumatic stress disorder and time in national humanitarian aid workers*. (Unpublished doctoral dissertation). Fuller Theological Seminary, School of Psychology, California. Retrieved September 24, 2009, from Dissertations & Theses: Full Text. (Publication No. AAT 3167579).
- Bauwens, J. & Tosone, C. (2010). Professional posttraumatic growth after a shared traumatic experience: Manhattan clinicians' perspectives on post-9/11 practice. *Journal of Loss and Trauma*, *15*, 498-517. doi: 10.1080/15325024.2010.519267
- Birren, J. E., & Fisher, L. M. (1990). Conceptualizing wisdom: The primacy of affect-cognition relations. In R.J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 317-332). New York: Cambridge University Press.
- Birren, J. E., & Svensson, C.M. (2005). Wisdom in history. In R.J. Sternberg & J. Jordan (Eds.), *A handbook of wisdom: Psychological perspectives* (pp. 3-31). New York: Cambridge University Press.
- Bluck, S., & Glück, J. (2004). Making things better and learning a lesson: Experiencing wisdom across the lifespan. *Journal of Personality*, *72*, 543-572. doi:10.1111/j.0022-3506.2004.00272.x
- Brown, S.C., & Greene, J.A. (2006). The Wisdom Development Scale (WDS): Translating the conceptual to the concrete. *Journal of College Student Development*, *47*, 1-19. doi: 10.1353/csd.2006.0002
- Brown, E., Fulton, M., Wilkeson, A., & Petty, F. (2000). The psychiatric sequelae of civilian trauma. *Comprehensive Psychiatry*, *41*, 19-23. doi:10.1016/S0010-440X(00)90126-3.
- Butler, L. D., Blasey, C. M., Garlan, R. W., McCaslin, S. E., Azarow, J., Chen, X. H., Desjardins, J. C., et al. (2005). Posttraumatic growth following the terrorist attacks of September 11, 2001: Cognitive, coping, and trauma symptom predictors in an internet convenience sample. *Traumatology*, *11*, 247-267. doi: 10.1177/153476560501100405
- Calhoun, L. G., & Tedeschi, R. G. (1998). Posttraumatic growth: Future directions. In R. G. Tedeschi, C. L. Park, & L. G. Calhoun (Eds.), *Posttraumatic growth: Positive change in the aftermath of crisis* (pp. 215-238). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Calhoun, L. G., & Tedeschi, R. G. (2000). Early posttraumatic interventions: Facilitating

- possibilities for growth. In J. M. Violanti, D. Paton, & C. Dunning (Eds.), *Posttraumatic stress intervention: Challenges, issues, and perspectives* (pp. 135-152). Springfield, IL: Charles C Thomas Publisher.
- Calhoun, L. G., & Tedeschi, R. G. (2004). Posttraumatic growth: A new perspective on psychotraumatology. *Psychiatric Times*, 21, Retrieved December 28, 2009, from <http://www.psychiatristimes.com/display/article/10168/54661?verify=0>.
- Calhoun, L. G., & Tedeschi, R. G. (Eds.). (2006). *Handbook of posttraumatic growth: Research and practice*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Calhoun, L. G., & Tedeschi, R. G. (Eds.). (2013). *Posttraumatic growth in clinical practice*. New York, NY: Routledge.
- Calhoun, L. G., Tedeschi, R. G., & Selby, J. W. (2001). *Spiritual change and psychological growth: Vicarious traumatization in hospice workers*. Poster presented at the annual meeting of the American Psychological Association, New Orleans, LA.
- Cann, A., Calhoun, L.G., Tedeschi, R.G., Kilmer, R.P., Gil-Rivas, V., Vishnevsky, T., & Danhauer, S.C. (2010). The Core Beliefs Inventory: A brief measure of disruption in the assumptive world. *Anxiety, Stress, & Coping: An International Journal*, 23, 19-34. doi: 10.1080/10615800802573013
- Charmaz, K. (2000). Grounded Theory Methodology: Objectivist and constructivist qualitative methods. In N. K. Denzin and Y. Lincoln (Eds.), *Handbook of Qualitative Research 2nd ed.*, (pp. 509-535). Thousand Oaks, CA: Sage.
- Charmaz, K. (2006) *Constructing Grounded Theory: A practical guide through qualitative analysis*. London: Sage.
- Cohen, K., & Collens, P. (2012, November 12). The impact of trauma work on trauma workers: A metasynthesis on vicarious trauma and vicarious posttraumatic growth. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. doi: 10.1037/a0030388
- Cordova, M. J., Cunningham, L. L. C., Carlson, C. R., & Andrykowski, M. A. (2001). Posttraumatic growth following breast cancer: A controlled comparison study. *Health Psychology*, 20, 176-185. doi:10.1037//0278-6133.20.3.176
- Engelkemeyer, S. M., & Marwit, S. J. (2008). Posttraumatic growth in bereaved parents. *Journal of Traumatic Stress*, 21, 344-346. doi: 10.1002/jts.20338
- Erikson, E. H., Erikson, J. M., & Kivnick H. Q. (1986). *Vital involvement in old age*. New York : Norton.

- Frazier, P., Conlon, A., & Glaser, T. (2001). Positive and negative life changes following sexual assault. *Journal of Consulting and Clinical Psychology, 69*, 1048-1055. doi: 10.1037/0022-006X.69.6.1048
- Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1-20). New York: Brunner-Routledge.
- Gibbons, S., Murphy, D., & Joseph, S. (2011). Countertransference and positive growth in social workers. *Journal of Social Work Practice, 25*, 17-30. doi: 10.1080/02650530903579246
- Helson, R., & Srivastava, S. (2001). Three paths of adult development: Conservers, Seekers, and Achievers. *Journal of Personality and Social Psychology, 80*, 995-1010. doi: 10.1037/0022-3514.80.6.995
- Hogan, N. S., & Schmidt, L. A. (2002). Testing the grief to personal growth model using structural equation modeling. *Death Studies, 26*, 615-634. doi: 10.1080/07481180290088338
- Iiffe, G., & Steed, L. G. (2000). Exploring the counselor's experience of working with perpetrators and survivors of domestic violence. *Journal of Interpersonal Violence, 15*, 393-412. doi: 10.1177/088626000015004004
- Janoff-Bulman, R. (1992). *Shattered assumptions*. New York: Free Press.
- Janoff-Bulman, R. (2006). Schema-change perspectives on posttraumatic growth. In L. G. Calhoun & R. G. Tedeschi, (Eds.) *Handbook of posttraumatic growth: Research and practice* (pp. 81-99). Mahwah, NJ: Lawrence Erlbaum Associates.
- Jemal, A., Tiwari, R. C., Murray, T., Ghafoor, A., Samuels, A., Ward, E., Feuer, E. J., et al. (2004). Cancer statistics, 2004. *CA: A Cancer Journal for Clinicians, 54*, 8-29. doi: 10.3322/canjclin.54.1.8
- Jennings, P. A., Aldwin, C. M., Spiro, A., & Mroczek, D. (2006). Combat exposure, perceived benefits of military service, and wisdom in later life. *Research on Aging, 28*, 115-134. doi: 10.1177/0164027505281549
- Joseph, S., Williams, R., & Yule, W. (1993). Changes in outlook following disaster: The preliminary development of a measure to assess positive and negative responses. *Journal of Traumatic Stress, 6*, 271-279. doi: 10.1007/BF00974121
- Karanci, N.A. (2005). Posttraumatic growth among Marmara Earthquake survivors involved in disaster preparedness as volunteers. *Traumatology, 11*, 307-323. doi: 10.1177/153476560501100409

- King, L. A., & Patterson, C. (2000). Reconstructing life goals after the birth of a child with Down Syndrome: Finding happiness and growing. *International Journal of Rehabilitation and Health, 5*, 17-30. doi: 10.1023/A:1012955018489
- Kleim, B., & Ehlers, A. (2009). Evidence for a curvilinear relationship between posttraumatic growth and posttrauma depression and PTSD in assault survivors. *Journal of Traumatic Stress, 22*, 45–52. doi: 10.1002/jts.20378
- Kramer, D.A. (2000). Wisdom as a classical source of human strength: Conceptualization and empirical inquiry. *Journal of Social and Clinical Psychology, 19*, 83-101. doi: 10.1521/jscp.2000.19.1.83
- Labouvie-Vief, G. (2003). Dynamic integration: Affect, cognition, and self in adulthood. *Current Directions in Psychological Science, 12*, 201-206. doi: 10.1046/j.0963-7214.2003.01262.x
- Lambert, V. A., Lambert, C. E., Itano, J., Inouye, J., Kim, S., Kuniviktikul, W., et al. (2004). Cross-cultural comparison of workplace stressors, ways of coping and demographic characteristics as predictors of physical and mental health among hospital nurses in Japan, Thailand, South Korea and the USA (Hawaii). *International Journal of Nursing Studies, 41*, 671-84. doi:10.1016/j.ijnurstu.2004.02.003
- Laufer, A., & Solomon, Z. (2006). Posttraumatic symptoms and posttraumatic growth among youth exposed to terror incidents. *Journal of Social and Clinical Psychology, 25*, 429-447. doi:10.1186/1477-7525-10-84
- Le, T. N. (2008a). Cultural values, life experiences, and wisdom. *International Journal of Aging and Human Development, 66*, 259-281. doi: 10.2190/AG.66.4.a
- Le, T. N. (2008b). Age differences in spirituality, mystical experiences and wisdom. *Aging & Society, 28*, 383-411. doi:10.1017/S0144686X0700685X.
- Le, T. N. (2005). A measure of immature love. *Individual Differences Research, 3*, 72-87.
- Le, T. N., & Levenson, M. (2005). Wisdom as self-transcendence: What's love (& individualism) got to do with it?. *Journal of Research in Personality, 39*, 443-457. doi:10.1016/j.jrp.2004.05.003.
- Lehman, D., Davis, C., DeLongis, A., Wortman, C., Bluck, S., Mandel, D., & Ellard, J. (1993). Positive and negative life changes following bereavement and their relations to adjustment. *Journal of Social and Clinical Psychology, 12*, 90-112. doi: 10.1521/jscp.1993.12.1.90
- Leshan, L., & Worthington, R. (1956). Personality as a factor in the pathogenesis of

cancer: A review of the literature. *British Journal of Medical Psychology*, 29, 49-55. doi: 10.1111/j.2044-8341.1956.tb01188.x

- Levenson, M. R., Jennings, P. A., Aldwin, C. M., & Shiraishi, R. W. (2005). Self-transcendence: Conceptualizations and measurements. *International Journal of Aging and Human Development*, 60, 127-143. doi: 10.2190/XXM-FYRA-7U0X-GRC0
- Lev-Wiesel, R., Goldblatt, H., Eisikovits, Z., & Admi, H. (2009). Growth in the shadow of war: The case of social workers and nurses working in a shared war reality. *British Journal of Social Work*, 39, 1154-1174. doi:10.1093/bjsw/bcn021
- Linley, P. A., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress*, 17, 11-21. doi: 10.1023/B:JOTS.0000014671.27856.7e
- Linley, P. A., & Joseph, S. (2005). Positive and negative changes following occupational death exposure. *Journal of Traumatic Stress*, 18, 751-758. doi: 10.1002/jts.20083
- Linley, P. A., & Joseph, S. (2006). The positive and negative effects of disaster work: A preliminary investigation. *Journal of Loss and Trauma*, 11, 229-245. doi:10.1080/15325020500494186
- Linley, P. A., & Joseph, S. (2007). Therapy work and therapists positive and negative well-being. *Journal of Social and Clinical Psychology*, 26, 385-403. doi:10.1521/jscp.2007.26.3.385
- Linley, P.A., Joseph, S., & Loumidis, K. (2005). Trauma work, sense of coherence, and positive and negative changes in therapists. *Psychotherapy and Psychosomatics*, 74, 185-188. doi: 10.1159/000084004
- Lyster, T. (1996). *A nomination approach to the study of wisdom in old age*. Unpublished doctoral dissertation, Concordia University, Montreal, Quebec, Canada.
- Manne, S., Ostroff, J., & Winkel, G. (2004). Posttraumatic growth after breast cancer: Patient, partner, and couple perspectives. *Psychosomatic Medicine*, 66, 442-454. doi: 10.1097/01.psy.0000127689.38525.7d
- McMillen, C., Zuravin, S., & Rideout, G. (1995). Perceived benefits from child sexual abuse. *Journal of Consulting and Clinical Psychology*, 63, 1037-1043.
- Meeks, T. W., & Jeste, D. V. (2009). Neurobiology of wisdom: A literature overview. *Archives of General Psychiatry*, 66, 355-365. doi: 10.1001/archgenpsychiatry.2009.8.

- Mickler, C., & Staudinger, U. M. (2008). Personal wisdom: Validation and age-related differences of a performance measure. *Psychology & Aging, 23*, 787-799. doi: 10.1037/a0013928
- Milam, J., Ritt-Olson, A., Tan, S., Unger, M., & Nezami, E. (2005). The September 11th 2001 terrorist attacks and reports of posttraumatic growth among a multi-ethnic sample of adolescents. *Traumatology, 11*: 233-246. doi: 10.1177/153476560501100404
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Pargament, K. I., Desai, K., & McConnell, K. (2006). Spirituality: A pathway to posttraumatic growth or decline? In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research and practice* (pp. 121-137). Mahwah, NJ: Erlbaum.
- Park, C. L., & Lechner, S. C. (2006). Measurement issues in assessing growth following stressful life experiences. In L. G. Calhoun & R. G. Tedeschi, (Eds.) *Handbook of posttraumatic growth: Research and practice* (pp. 81-99). Mahwah, NJ: Lawrence Erlbaum Associates.
- Palmer, G. A., Graca, J. J., & Occhietti, K. E. (2012). Confirmatory factor analysis of the Posttraumatic Growth Inventory in a veteran sample with posttraumatic stress disorder. *Journal of Loss and Trauma, 17*, 545-556. doi: 10.1080/15325024.2012.678779
- Pasupathi, M., Staudinger, U. M. & Baltes, P. B. (2001). Seeds of wisdom: Adolescents' knowledge and judgment about difficult life problems. *Developmental Psychology, 37*, 351 - 361. doi: apa.org/journals/dev/37/3/351.pdf
- Paton, D. (2006). Posttraumatic growth in disaster and emergency work. In L. G. Calhoun & R. G. Tedeschi, (Eds.) *Handbook of posttraumatic growth: Research and practice* (pp. 225-247). Mahwah, NJ: Lawrence Erlbaum Associates.
- Patton, M. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage Publications, Inc.
- Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. New York: W.W. Norton.
- Phelps, L. F., Williams, R. M., Raichle, K. A., Turner, A. P., & Ehde, D. M. (2008). The importance of cognitive processing to adjustment in the 1st year following

amputation. *Rehabilitation Psychology*, 53, 28-38. doi: 10.1037/0090-5550.53.1.28

- Putterman, I. (2005). *The relationship between posttraumatic growth and professional quality of life compassion fatigue/secondary trauma, compassion satisfaction, and burnout) among social workers in Texas*. (Unpublished doctoral dissertation). University of Houston, Texas. Retrieved September 24, 2009, from Dissertations & Theses: Full Text. (Publication No. AAT 3195963).
- QSR International Pty Ltd. (2007). *NVivo qualitative data analysis software*, Version 8.
- Samios, C., Rodzik, A. K., & Abel, L. M. (2012). Secondary traumatic stress and adjustment in therapists who work with sexual violence survivors: The moderating role of posttraumatic growth. *British Journal of Guidance & Counselling*, 40, 341-356. doi: 10.1080/03069885.2012.691463
- Shakespeare-Finch, J., & Copping, A. (2006). A grounded theory approach to understanding cultural differences in posttraumatic growth. *Journal of Loss & Trauma*, 11, 355-371. doi:10.1080/15325020600671949.
- Shakespeare-Finch, J. E., Smith, S. G., & Gow, K. M. (2003). The prevalence of post-traumatic growth in emergency ambulance personnel. *Traumatology*, 9, 58-71. doi: 10.1177/153476560300900104
- Shamai, M., & Ron, P. (2009). Helping direct and indirect victims of national terror: Experiences of Israeli social workers. *Qualitative Health Research*, 19, 42-54. doi:10.1177/1049732308327350
- Shaw, A., Joseph, S., & Linley, P. (2005). Religion, spirituality, and posttraumatic growth: A systematic review. *Mental Health, Religion & Culture*, 8, 1-11. doi:10.1080/1367467032000157981
- Shiri, S., Wexler, I. D., Meiner, Z., & Kreitler, S. (2008). Psychological impact of treating victims of terror: Post-traumatic growth and stress among hospital based health care personnel. *Psychotherapy and Psychosomatics*, 77, 315-318. doi: 10.1159/000142524
- Smith, J., Dixon, R.A., & Baltes, P. B. (1989). Expertise in life planning: A new research approach to investigating wisdom. In J. D. Sinnott, F. A. Richards, & C. Adams (Eds.), *Adult development: Comparisons and applications of developmental models* (Vol. 1, pp. 307-331). New York: Praeger.
- Smith, J., & Baltes, P. B. (1990). Wisdom-related knowledge: Age/cohort differences in responses to life planning problems. *Developmental Psychology*, 26, 494-505. doi: 10.1037/0012-1649.26.3.494

- Splevins, K. A., Cohen, K., Joseph, S. Murray, C., & Bowley, J. (2010). Vicarious posttraumatic growth among interpreters. *Qualitative Health Research, 20*, 1705-1716. doi: 10.1177/1049732310377457
- Stange, A., & Kunzmann, U. (2008). Fostering wisdom: A psychological perspective. In M. Ferrari & G. Potworoski (Eds.), *Teaching for wisdom: Cross-cultural perspectives on fostering wisdom* (pp. 23-36). New York, NY: Springer.
- Stanton, A. L., Bower, J. E., & Low, C. A. (2006). Posttraumatic growth after cancer. In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research and practice* (pp. 138-175). Mahwah, NJ: Erlbaum.
- Staub, E. (2003). *The psychology of good and evil: Why children, adults, and groups help and harm others*. New York: Cambridge University Press.
- Staub, E., & Vollhardt, J. (2008). Altruism born of suffering: The roots of caring and helping after victimization and other trauma. *American Journal of Orthopsychiatry, 78*, 267-280. doi: 10.1037/a0014223
- Staudinger, U. M. (1996). Wisdom and the social-interactive foundation of the mind. In P. B. Baltes & U. M. Staudinger (Eds.), *Interactive minds: Life-span perspectives on the social foundation of cognition* (pp.276-315). New York: Cambridge University Press.
- Staudinger, U. M., & Baltes, P. B. (1996). Interactive minds: A facilitative setting for wisdom-related performance? *Journal of Personality and Social Psychology, 71*, 746-762.
- Staudinger, U. M., & Glück, J. (2011). Psychological wisdom research: Commonalities and differences in a growing field. *Annual Review of Psychology, 62*, 215-241. doi: 10.1146/annurev.psych.121208.131659
- Staudinger, U. M., Lopez, D., & Baltes, P. B. (1997). The psychometric location of wisdom-related performance: Intelligence, personality, and more? *Personality and Social Psychology Bulletin, 23*, 1200-1214. doi: 10.1177/01461672972311007
- Staudinger, U. M., Smith, J., & Baltes, P. B. (1994). *Manual for the assessment of wisdom-related knowledge*. Berlin: Max Planck Institute for Human Development, Berlin, Germany.
- Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge, England: Cambridge University Press.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing Grounded Theory*. Thousand Oaks, California: Sage.

- Satkunanayagam, K., Tunariu, A., & Tribe, R. (2010). A qualitative exploration of mental health professionals' experience of working with survivors of trauma in Sri Lanka. *International Journal of Culture and Mental Health, 3*, 43-51. doi: 10.1080/17542861003593336
- Taku, K., Cann, A., Calhoun, L. G., & Tedeschi, R. G. (2008). The factor structure of the Posttraumatic Growth Inventory: A comparison of five models using confirmatory factor analysis. *Journal of Traumatic Stress, 21*, 158-164. doi: 10.1002/jts.20305
- Taubman-Ben-Ari, O., & Weintroub, A. (2008). Meaning in life and personal growth among pediatric physicians and nurses. *Death Studies, 32*, 621-645. doi:10.1080/07481180802215627
- Taylor, M., Bates, G., & Webster, J. D. (2011). Comparing the psychometric properties of two measures of wisdom: Predicting forgiveness and psychological well-Being with the Self-Assessed Wisdom Scale (SAWS) and the Three-Dimensional Wisdom Scale (3D-WS). *Experimental Aging Research, 37*, 129-141. doi: 10.1080/0361073X.2011.554508
- Tedeschi, R. G. (1999). Violence transformed: Posttraumatic growth in survivors and their societies. *Aggression and Violent Behavior, 4*, 319-341. doi: 10.1016/S1359-1789
- Tedeschi, R. G., & Calhoun, L. G. (1995). *Trauma and transformation: Growing in the aftermath of suffering*. Thousand Oaks, CA: Sage.
- Tedeschi, R.G. & Calhoun, L.G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*, 455-471. doi: 10.1002/jts.2490090305
- Tedeschi, R.G. & Calhoun, L.G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*, 1-18.
- Tedeschi, R. G., & Calhoun, L. G. (2009). The clinician as an expert companion. In C. L. Park, S. C. Lechner, M. H. Antoni, & A. L. Stanton (Eds.), *Medical illness and positive life change: Can crisis lead to personal transformation?* (pp. 215-235). Washington, DC: American Psychological Association.
- Tedeschi, R.G., Calhoun, L.G., & Cann, A. (2007). Evaluating resource gain: Understanding and misunderstanding posttraumatic growth. *Applied Psychology: An International Review, 56*, 396-406. doi: 10.1111/j.1464-0597.2007.00299.x
- Tedeschi, R. G., & Kilmer, R. P. (2005). Assessing strengths, resilience, and growth to

- guide clinical interventions. *Professional Psychology: Research and Practice*, 36, 230-237. doi: 10.1037/0735-7028.36.3.230
- Thornton, A. A., & Perez, M. A. (2006). Posttraumatic growth in prostate cancer survivors and their partners. *Psycho-oncology*, 15, 285-296. doi: 10.1002/pon.953
- Tornstam, L., & Toernqvist, M. (2000). Nursing staff's interpretations of "gerotranscendental behaviors" in the elderly. *Journal of Aging & Identity*, 5, 15-29. doi: 10.1023/A:1009593330962
- Watkins, E. (2008). Constructive and unconstructive repetitive thought. *Psychological Bulletin*, 134, 163-206. doi: 10.1037/0033-2909.134.2.163
- Webster, J. D. (2003). An exploratory analysis of a self-assessed wisdom scale. *Journal of Adult Development*, 10, 13-22. doi: 10.1023/A:1020782619051
- Webster, J. D. (2007). Measuring the character strength of wisdom. *The International Journal of Aging and Human Development*, 65, 163-183. doi: 10.2190/AG.65.2.d
- Weiss, T. (2002). Posttraumatic growth in women with breast cancer and their husbands: An intersubjective validation study. *Journal of Psychosocial Oncology*, 20, 65-80. doi: 10.1300/J077v20n02_04
- Wink, P., & Helson, R. (1997). Practical and transcendent wisdom: Their nature and some longitudinal findings. *Journal of Adult Development*, 4, 1-15. doi: 10.1007/BF02511845
- Xianyu, Y., & Lambert, V. A. (2006). Investigation of the relationships among workplace stressors, ways of coping, and the mental health of Chinese head nurses. *Nursing and Health Sciences*, 8, 147-55. doi: 10.1111/j.1442-2018.2006.00281.x
- Yang, S. Y. (2008). A process view of wisdom. *Journal of Adult Development*, 15, 62-75. doi: 10.1007/s10804-008-9037-8
- Znoj, H. (2006). Bereavement and posttraumatic growth. In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research and practice* (pp. 76-196). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

APPENDIX A: CONSENT FORM

Department Internal Medicine
Section of Hematology/Oncology

[HOSPITAL LOGO]

**World Assumptions, Posttraumatic Growth, and Contributing Factors in a
Population of New Nurses**

Informed Consent Form to Participate in Research
Suzanne C. Danhauer, Ph.D., Principal Investigator

Introduction

You are invited to be in a research study. Research studies are designed to gain scientific knowledge that may help other people in the future. You are being asked to take part in this study because you are a nurse at [name of hospital]. Your participation is voluntary. Please take your time in making your decision as to whether or not you wish to participate. Ask the study staff to explain any information contained in this informed consent document that you do not understand. You may also discuss the study with your friends and family.

Why Is This Study Being Done?

The purpose of this research study is to better understand the experience of oncology nurses at various points in their career.

How Many People Will Take Part in the Study?

Twenty people at [name of hospital] will take part in this study.

What Is Involved in the Study?

You will be interviewed and asked to describe various aspects of your nursing experience. Interviews are expected to take approximately 30 minutes to complete. You will be compensated for your time with a \$20 Target gift card. Interviews will be tape recorded and transcribed.

How Long Will I Be in the Study?

Your participation involves one interview.

What Are the Risks of the Study?

The risk of harm or discomfort that may happen as a result of taking part in this research study is not expected to be more than in daily life or from routine physical or psychological examinations or tests. You should discuss the risk of being in this study with the study staff.

Taking part in this research study may involve providing information that you consider confidential or private. Efforts, such as coding research records, keeping research records secure and allowing only authorized people to have access to research records, will be made to keep your information safe.

Are There Benefits to Taking Part in the Study?

While there are no direct benefits to participating, you will be sharing your experience and contributing a better understanding of nurses' occupational experiences.

What Are the Costs?

There are no costs to you for taking part in this study.

Will You Be Paid for Participating?

You will receive a \$20 Target gift card for your participation.

What Are My Rights as a Research Study Participant?

Taking part in this study is voluntary. You may choose not to take part or you may stop the interview at any time. Refusing to participate or leaving the study will not result in any penalty or loss of benefits to which you are entitled. The investigators also have the right to stop your participation in the study at any time. This could be because it is in your best interest or the study has stopped.

You will be given any new information we become aware of that would affect your willingness to continue to participate in the study.

Whom Do I Call if I Have Questions or Problems?

For questions about the study or in the event of a research-related injury, contact the study coordinator, Tanya Vishnevsky.

The Institutional Review Board (IRB) is a group of people who review the research to protect your rights. If you have a question about your rights as a research participant, you should contact the Chairman of the IRB at [phone number of IRB].

You will be given a copy of this signed consent form.

Signatures

I agree to take part in this study. I authorize the use and disclosure of my information as described in this consent and authorization form. If I have not already received a copy of the Privacy Notice, I may request one or one will be made available to me. I have had a chance to ask questions about being in this study and have those questions answered. By signing this consent and authorization form, I am not releasing or agreeing to release the investigator, the sponsor, the institution or its agents from liability for negligence.

Subject Name (Printed)

Subject Signature Date

Person Obtaining Consent Date

APPENDIX B: INTERVIEW GUIDE

Initial Open-ended Questions:

1. Please tell me a little bit about your nursing experience and the unit that you are currently working in.
2. Has your experience caring for cancer patients impacted you personally? How so?
3. Has your experience caring for cancer patients changed your perspective on life? How so?

Intermediate Questions:

1. As a nurse, you have seen patients struggling to cope with their illness, and some of them have died in their struggle. Can you tell me about a particular patient or experience that really impacted you? How have you coped with these stressful experiences?
2. Have there been any positive or beneficial changes that have resulted from your experience caring for cancer patients?
3. Have there been particular incidents that have prompted a change in you and encouraged transformation? Is it more an overall experience with working with patients?
4. Do you think that you are wiser as a result of your experience working with cancer patients? How so?
5. Have you experienced loss/ adversity in your own life? How was that experience different from your work with patients?
6. Have you noticed any changes over time? Please explain. (*If prompt necessary: Are you a different person now, as compared to when you first started working as an oncology nurse? How so?*)
7. What would other people see as differences in you? How would your family (*or spouse*) describe the differences in you?
8. Have you noticed a difference between yourself and others your age who are not nurses? Please explain.

Ending Questions:

1. Is there anything else you would like to share about your experience as an oncology nurse?