Compassion Fatigue and Cancer Nurses
A National Survey of Cancer Nurses in New Zealand

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Abstract

Background: Nurses are at risk of compassion fatigue by the very nature of their work in being witness to patients and families during traumatic situations. Cancer nurses are especially vulnerable because of the close association and relationships they have with family/whānau often over extended periods of time. This may result in the nurse experiencing compassion fatigue that can impact on their ability to carry out their role. Without support and intervention, nurses may leave the profession at a time when there is a shortage of skilled cancer nurses in New Zealand which ultimately can result in poorer patient outcomes.

Objective: The purpose of this study was to identify the experiences of New Zealand cancer nurses whose primary role is to care for patients aged 20 or older and their family/whānau and to describe the factors that may influence care. One of the aims of the study was to look at whether nurses received training on managing the stressors of caring for cancer patients either during their training or while in the cancer workplace setting and whether nurses working in a peripheral (satellite) cancer centre were more at risk than their colleagues in the larger regional centres.

Method: A quantitative descriptive and anonymous survey was carried out using the Professional Quality of Life (ProQOL) questionnaire that scores compassion fatigue, compassion satisfaction and burnout. Members of the Cancer Nurses' Section of the New Zealand Nurses Organisation (NZNO) took part in an online survey.

Results: Nurses on the whole were happy, satisfied with their work and believed they made a difference in their care of cancer patients. However some felt overwhelmed by their case loads, did not feel management supported or understood their roles as cancer nurses; were preoccupied with patients they cared for; had difficulty separating their work and personal life; suffered insomnia, felt trapped, worn out, on edge and bogged down by the system; with some nurses experiencing depression. Although nurses working at a peripheral cancer centre did not have a greater risk of compassion fatigue than nurses working at regional cancer centres, the findings did show that nurses in the public health system, clinical nurse educators and those aged 20-35 had an increased risk of compassion fatigue. Conversely, those with the highest level of compassion satisfaction were also clinical nurse educators. A major finding for the group as a whole was the lack of opportunity for education on managing the stressors of caring for cancer patients.

Preliminary findings were presented at the national Cancer Nurses' Section/NZNO Haematology and Oncology Conference in 2013.

Discussion: Providing nurses with the tools to manage self-care is essential to their well-being and ability to carry out our roles effectively and with compassion. Cancer nurses need to be aware of the symptoms of compassion fatigue and know when to seek professional assistance to manage a balance between work and home-life. Cancer nurses may be able to assist colleagues who are experiencing compassion fatigue and Health organisations that employ cancer nurses could benefit from providing nurses with education at the time of their cancer training and offer on-going education once nurses are in the work place. By ensuring cancer nurses are supported to care for cancer patients may result in a decreased risk of compassion fatigue and its subsequent negative outcomes for the nurse, patients and the organisation.

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This journey would not have been possible without the help and support of many people.

To my dearest daughter Mel, this thesis is dedicated to your memory. You knew the true meaning of compassion for those who fell outside the ‘norms’ of society. I wish you could be here to celebrate with me.

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CHAPTER 1

INTRODUCTION

Background

Compassion fatigue was first noted in nursing literature in 1992 by Social Worker, Carla Joinson, who described the emotional effects that nurses may experience following traumatic patient events (Joinson, 1992). In the 1980s, Physician Charles Figley, noticed symptoms of burnout amongst colleagues who had left the profession not because of burnout but because of what was described as work toxicity (Gould, 2005). Subsequently, Figley conducted a study amongst paediatric critical care nurses which showed there was a significant turnover of staff; however those that had utilised self-care as a method of prevention or reducing the effect of burnout were able to remain in their roles (Gould, 2005).

Figley noted the article by Joinson and recognised that compassion fatigue compared more closely with what Figley's colleagues had been experiencing rather than attributing it wholly to burnout. Figley believed that secondary traumatisation was a truer description but would subsequently use the term *compassion fatigue* as being more user-friendly (Bride, Radey, & Figley, 2007). Later Figley would join with others to conduct further research into compassion fatigue within the context of therapists' relationships with clients, and the experiences of first-line responders to traumatic events, in particular Hurricane Katrina. Hurricane Katrina devastated the Gulf Coast of the United States of America in 2005, killing 1300 people (Leavell, Aten, & Boan, 2012).

Compassion fatigue can present as anger, cynicism, desensitisation, avoidance of patients and situations; irritability, decreased concentration, insomnia, frequent sick leave, and errors in documentation and medications (Boyle, 2011). Nurses are witness to patients who suffer traumatic and adverse events. These events can be short or prolonged when a patient is undergoing stressful and prolonged treatments often over a period of years (Yoder, 2010). Patients who are cared for by nurses experiencing compassion fatigue were more likely to express dissatisfaction with their care (Potter et al., 2010). In addition, double duty caregiving, that is, nurses who are caring for their own relatives, were found to be at an increased risk of compassion fatigue because of difficulty in separating professional and personal boundaries (Ward-Griffin, St-Amant, & Brown, 2011).

According to Yoder (2010) nurses are caring for more acutely ill patients, needing more complex treatments often over prolonged periods of time. These treatments have an increased risk of side effects or critical events which requires the nurse to continually update their knowledge and skills. Despite best efforts, some patients will inevitably die. Nurses who administer care to patients in often stressful and life threatening situations over prolonged periods of time can find themselves at the epicentre of a patient or family's suffering making them more vulnerable to compassion fatigue (Coetzee & Klopper, 2010; Joinson, 1992).

The association between compassion fatigue and compassion satisfaction is not fully understood and it is possible for someone to experience compassion fatigue and compassion satisfaction at the same time. As symptoms progress, compassion fatigue may inevitably be the overwhelming factor resulting in the loss of compassion satisfaction which can impair the ability to provide effective care to those requiring help (Bride, et al., 2007).

Cancer nursing is defined as a specialty area of practice requiring specialist skills and knowledge with the requirement for advanced training to enable optimum care for patients undergoing highly complex and intensive therapies (Ministry of Health, 2009). Cancer nurses are witness to patient and family suffering during times of significant stress as patients endure cancer treatments that often have undesired effects or are ineffective in controlling or curing the cancer. If a patient dies, the nurse may be unable to process feelings and emotions and this can lead to symptoms of stress which can detrimentally affect the nurse, patients and colleagues, with the ultimate result of unattended grief leading to compassion fatigue, a phenomenon mainly associated with those in caring professions (Aycock & Boyle, 2009; Joinson, 1992; Kent, Anderson, & Owens, 2012; Wenzel, Shaha, Klimmek, & Krumm, 2011; Yoder, 2010).

Purpose of the study

There has been a number of national and international studies examining compassion fatigue in nursing populations, for example, emergency, palliative care, mental health and oncology. A small number of New Zealand studies have examined compassion fatigue and burnout amongst doctors, anaesthetic technicians and nurses (Butt, 2010; Hall, 2005; Huggard & Dixon, 2011; Kluger & Bryant, 2008). There have been no published New Zealand studies to date that have looked at this phenomenon amongst cancer nurses or factors that may contribute to a cancer nurse experiencing or avoiding compassion fatigue.

The purpose of this study was to identify the experiences of cancer nurses whose primary role is to care for cancer patients aged 20 or older and their family/whānau, and to describe the factors that may influence care, that is, age, ethnicity, relationship, clinical setting, health sector, spirituality, workloads, specialty, education, age and years of experience in cancer nursing. The study also sought to explore if nurses received education during their training or while in the workplace on the stressors of caring for cancer patients and whether working at either a peripheral (satellite) cancer treatment centre placed the nurse at greater risk of compassion fatigue, than their regional (metropolitan) counterparts.

It is anticipated that this research will add to the body of knowledge on compassion fatigue, enable cancer nurses to be aware of the symptoms and seek support if they believe themselves to be at risk, and provide health organisations with opportunities for consideration to be given to provide education and resources to ensure support in the workplace.

Research question

This research aimed to answer the question “What are the experiences of compassion fatigue for cancer nurses caring for adult patients within oncology and haematology inpatient and outpatient settings in New Zealand?” A national survey of cancer nurses working in inpatient and outpatient settings was carried out.

Definitions

Compassion satisfaction is the amount of enjoyment and satisfaction one feels about their work in caring for others (Stamm, 2010). Compassion fatigue is recognised as being associated with one’s exposure to another’s traumatic event and the subsequent symptomology associated with the syndrome (Day & Anderson, 2011; Sabo, 2008; Stamm, 2010; Yoder, 2010). Compassion fatigue has also been titled secondary traumatic stress disorder and secondary traumatic stress with some of the literature viewing them as one and the same (Craig & Sprang, 2010; Stamm, 2010). The terms are therefore used interchangeably throughout the thesis as some studies have used either terminology. Burnout is described in the literature as mainly associated with those working in organisations and environments upon which the worker has little control (Alacacioglu, Yavuzsen, Dirioz, Oztop, & Yilmaz, 2009). The terms ‘cancer nurse’ and ‘oncology nurse’ are defined as that which requires speciality skills and knowledge in the field of cancer (Ministry of Health, 2009). Oncology is a speciality area of practice that is concerned with the diagnosis and treatment of cancer (National Cancer Institute (n.d.).

CHAPTER 2

LITERATURE REVIEW

"The notion that working with people in pain extracts a significant cost from the caregiver is not new. Anyone who has sat at the bedside of a seriously ill or recently bereaved loved one knows the toll involved in devoting singular attention to the needs of another suffering person"

(Gentry, 2002)

Introduction

In this chapter a review of literature is presented including definitions of compassion fatigue, burnout, vicarious traumatisation, and secondary traumatic stress disorder (STSD). Factors that contribute to compassion fatigue will be described and discussed. The literature review considers a number of international and national studies of compassion fatigue among different health practitioners including nurses, medical practitioners, therapists and counsellors and in diverse clinical settings to provide comparison. Jean Watson's theory of nursing is discussed as a background to the concept of caring in nursing in the context of compassion fatigue and how this may impact on a nurse's ability to provide compassionate care to patients if the nurse is suffering from the syndrome.

Several studies have explored the incidence of compassion fatigue and burnout in nurses working in emergency departments, critical care units, hospice and oncology, and between public and private health sectors (Alacacioglu, Yavuzsen, Dirioz, Oztop, & Yilmaz, 2009; Cummings et al., 2008; Hooper, Craig, Janvrin, Wetsel, & Reimels, 2010; Koen, Van Eeden, & Wissing, 2011; Raftopoulos, Charalambous, & Talias, 2012).

Strategies to assist with compassion fatigue have been varied and include self-management, education, and counselling (Lee-Walton & Alvarez, 2010; Sinclair & Hamill, 2007). In addition, compassion fatigue has been attributed to those in other health care settings, that is, resident doctors, trauma specialists, therapists and social workers (Adams, Figley, & Boscarino, 2008; Craig & Sprang, 2010; Huggard & Dixon, 2011).

The focus of the literature review is compassion fatigue amongst health professionals, in particular cancer nurses and aspects associated with the development of compassion fatigue, factors that may increase the risk, and determine what strategies may assist in deceasing the risk of compassion fatigue.

Search strategy

Literature searches were carried out using EBSCO Host, Cumulative Index to Nursing and Allied Health (CINAHL), Medline, Wiley Online, Oncology nursing journals and Google scholar. The search used key words used such as ‘compassion fatigue’, ‘oncology’, ‘nurs*’, ‘emergency’, ‘cancer’, ’acute’. The search was confined to studies and articles from 2006-2012, although some references are older to give an historical perspective. Google searches using ‘compassion fatigue”, “nurses” and “cancer” returned 182,000 articles. Adding ‘oncology’, narrowed the search to 29,000 and ‘New Zealand” returned 7540 results however most of the latter were overseas studies that included commentary on several countries including New Zealand.

Theoretical framework – Jean Watson’s theory of nursing

Watson’s concept of caring in nursing evolved in the 1970s to better describe the role of nursing as a distinct profession separated from, but at the same time complementing medicine. Watson further defined the science of caring as embracing a humanitarian process that includes phenomena and experiences which involve the arts, humanity and sciences (Watson, 2009).

According to Watson (2009) caring is grounded in ontological relationships, philosophical, ethical principles and beliefs where one views the world as being connected and unified as a whole. From a nursing perspective, the ontological relationship that exists between the nurse and patient is based on a mutual connectedness that is fundamental to human dignity and the importance of a shared relationship that is not solely from a medical or clinical model.

The art of human caring is centred on honoring the whole person and creating a healing environment that includes practices that embrace quality of life and inner healing as central to nursing responsibilities and which is often seen by patients as positively contributing to their outcomes (Watson, 2009). This framework for caring includes attending to basic human needs, humanistic approaches, sensitivity, and fostering hope and trust, in which the nurse needs to be able to accept both positive and negative feelings that may occur during the relationship. Creating an environment that is healing physically, emotionally, spiritually and tending to the existential dimensions of life, death and the soul is seen as essential to the nurse-patient relationship (Watson, 2007).

Health organisations overseas, in particular nursing and health administrators have been at the forefront of looking at how this care can be delivered that is not simply from a ‘fix it’ mentality, but rather creatively looking at models that can enhance patient care by changing systems to include patient and staff orientated actions. Some examples include dimming the lights to ‘calm’ down the busy atmosphere of the unit, emphasising human-caring as integral to the organisation by the use of appropriate language and poster displays, and responding to spiritual needs of patient and staff by providing time-out areas for reflection and meditation. These changes are assisting in transforming patient care to one that provides compassionate, knowledgeable and caring practices that are enhancing patient care and satisfaction (Watson, 2009).

Compassion

Compassion is an awareness of another's distress or suffering with a desire to provide relief and is at the very foundation of nursing practice (Boyle, 2011). Nurses are caring for more acutely ill patients who need complex treatments often over prolonged periods of time. These treatments are often associated with increased risks of side effects or critical events with nurses being required to continually update their skills and knowledge. The general public expects that they and their loved ones will receive the best care when they enter the health system, and yet despite best efforts some patients will inevitably die (Yoder, 2010).

For a health system to be unable to provide optimum compassionate care places the hospital, management and professional staff in disrepute. Such was the experience of a hospital within the National Health System (NHS) in the United Kingdom (UK). Following a public outcry over the care of patients during the period of 2005-2009, the UK Government commissioned a public enquiry into the culture between the NHS Trust that was responsible for the management of the hospital, direct line managers and staff involved in direct patient care. Patients were described as being cared for in "*appalling*" conditions that included being left in soiled bed clothing, were unable to feed themselves, requests for assistance to be toileted were ignored, standards of cleaning were poor and there had been an increase in mortality rate during the specified period not in line with other NHS hospitals (Francis, 2013, p.13). Nurses were singled out as appearing to be unable to provide patients with the basic necessities of life and were seen to be lacking compassion for patients and their families. Management were accused of being more concerned with financial issues rather than giving staff the support necessary to carry out their jobs in the manner that would be expected of a professional care giver. The inquiry recommended national nursing standards to include training on compassion and care, and the provision of on-going professional development to ensure nurses maintained these standards. In addition, nurses in management positions were to spend more time on the floor ensuring that standards are being met and working alongside their staff (Francis, 2013).

The report does not mention compassion fatigue or burnout which may in part explain some of the behaviours of the staff concerned. It appears that the report did not consider these to be factors in its overall consideration of the events that occurred nor does it advise training in the recognition of burnout or compassion fatigue in the recommendations.

Although the NHS example is extreme, patients elsewhere are expressing dissatisfaction with nursing care. In an American study, patients reported that nurses were less inclined to listen to their concerns or explain things in a way that they understood and were less likely to receive adequate pain control. In addition, patients reported a lack of respect and dignity during care (Heffernan, Griffin, McNulty, & Fitzpatrick, 2010). According to the study by Heffernan, et al. (2010) for nurses to provide compassionate care, they must first have compassion for themselves, be aware of their own emotions and have the ability to confront and address thoughts and emotions that may be painful. Having the ability to monitor their own and other's feelings and to be able to differentiate between feelings to guide thoughts and actions is described as having emotional intelligence. An element of self-compassion is humanity that refers to the shared experience and understanding of suffering despite or because of factors such as culture, genetics and environmental situations. Acknowledging humanity allows us to recognise these factors that make each individual unique and enables compassion and understanding of our fellow human beings (Heffernan, et al., 2010).

The relationship between a nurse and patient is concerned with establishing a connectedness that involves the giving of self to the patient and having the skills and knowledge to enable that care to be skilled and competent, while at the same time maintaining professional boundaries that include respect and compassion (Halldorsdottir, 2008).

Compassion fatigue

The notion of compassion fatigue was first introduced in nursing literature by social worker, Carla Joinson who described the emotional effects that nurses and others in the caring professions may experience following exposure to traumatic patient events (Joinson, 1992). Describing burnout which can arise in any environment or work setting, Joinson (1992) states that it is mainly associated with those working in organisations and environments upon which the worker has little control whereas compassion fatigue is unique in affecting those in caring professions such as nursing. It is asserted by Joinson (1992) that the main factors of compassion fatigue are its ability to emotionally devastate the carer; a propensity for those in caring professions to have personalities that make them more susceptible; an inability for the carer to recognise the symptoms; and organisational factors that may make it inevitable. Furthermore, if a nurse is exposed to colleagues who are experiencing compassion fatigue, the nurse may inevitably become involved to the extent that they themselves start to experience symptoms (Joinson, 1992). Figley (as cited in Coetzee and Klopper, 2010) asserts that nurses who administer care to patients in stressful and life threatening situations over prolonged periods of time can find themselves at the epicentre of a patient or family's suffering making them more vulnerable to compassion fatigue. Compassion fatigue is associated with a caregiver's lack of empathy brought about by the exposure to a traumatising situation or witness to the suffering of others and is associated with those in clinical settings or emergency workers who respond to traumatic situations (Adams, et al., 2008).

Symptoms

Compassion fatigue can present as anger, cynicism, increased alcohol and drug use, desensitisation, avoidance of patients and situations; irritability, decreased concentration, insomnia, frequent sick leave, and errors in documentation and medications. It can also present in the development of physical symptoms such as memory changes, headaches, abdominal pain, hypertension, weight changes and neck stiffness (Boyle, 2011; Fetter, 2012; Lombardo & Eyre, 2011). Symptoms are shown in Table 1 below.

Table 1 – Symptoms of compassion fatigue

<table>
<tr><th colspan="2">Symptoms of compassion fatigue</th></tr>
<tr><th>WORK RELATED</th><th>EMOTIONAL</th></tr>
<tr><td>Avoidance or dread of working with certain patients
Reduced inability to feel empathy towards patients or families
Frequent use of sick days
Lack of joyfulness</td><td rowspan="3">Mood swings
Restlessness
Irritability
Oversensitivity
Anxiety
Excessive use of substances: nicotine, alcohol, illicit drugs
Depression
Anger and resentment
Loss of objectivity
Memory issues
Poor concentration, focus and judgment</td></tr>
<tr><th>PHYSICAL</th></tr>
<tr><td>Headaches
Digestive problems: diarrhoea, constipation, upset stomach
Muscle tension
Sleep disturbances: inability to sleep, insomnia, too much sleep
Fatigue
Cardiac symptoms: chest pain/pressure, palpitations, tachycardia</td></tr>
</table>

Lombardo & Eyre, 2011, p.3

Definitions

Researchers differ about a definition of compassion fatigue, with some describing similarities with vicarious traumatisation, secondary traumatic stress disorder and burnout (Day & Anderson, 2011; Sabo, 2008; Yoder, 2010). Other terms include *emotional contagion, empathic distress*, *wounded healer*, *secondary victimisation*, and *soul pain*. The multiple definitions of compassion fatigue have led to an inability to identify interventions to manage the syndrome in the clinical setting (Boyle, 2011).

Secondary traumatic stress disorder

Secondary traumatic stress disorder (STSD) has been defined as affecting "*those who are caring for people who are directly experiencing a traumatic experience"* (Figley (1995) as cited in

Aycock and Boyle, 2009). Figley later coined STSD as compassion fatigue as it was thought to be a more user friendly term.

An American study of 129 nurses in a trauma and emergency centre examined the correlation between STSD, utilisation of coping strategies, and personal and environmental factors. Nurses who consented to participate in the study were given a two-part Penn Inventory questionnaire, including collection of demographics (age, gender, ethnicity, and marital status). Nursing history demographics included education, years of experience (general and emergency nursing). The Penn Inventory (PI) was chosen as the instrument to administer the questionnaire. The Penn Inventory is a 26-item measure that assesses post-traumatic stress disorder (PTSD) symptoms. Participation involved validation of one statement from a four-item sentence that described how frequent or intense their feelings were during the previous week. Scores were assigned between 0-3. The inventory has a total score of 0-78 with a score of 35 or greater being indicative of PTSD (Von Rueden et al., 2010).

The median Penn Inventory was 17.5. Nine nurses were recorded as having a score of 35 or more therefore exhibiting signs of STSD. This group had less nursing experience both in general and trauma settings and recorded lower support systems. Of this group, one participant utilised religion as a coping mechanism. The majority of nurses indicated exercise and hobbies as ranking higher than religion (Von Rueden, et al., 2010). The study was small and authors concede that the findings cannot be generalised to nurses in other trauma or emergency centres however it is interesting to note that overall nurses did not rate religion higher in their choice of coping strategies (Von Rueden, et al., 2010).

Vicarious Traumatisation

Vicarious traumatisation (VT) is commonly used amongst therapists and counsellors to describe the emotional effects of counselling others and the therapist’s own inner response when engaging in empathic relationships with clients (Sinclair & Hamill, 2007). It is common for a person to experience anxiety when exposed to a traumatic event with symptoms lasting for a short period of time following the event before they generally resolve. These symptoms can be emotional and physiological; however some may go on to develop into STSD, a condition that provokes extreme mood changes and behaviour both emotional and physiological (Gates & Gillespie, 2008).

Burnout

Sabo (2008) differentiates between compassion fatigue, burnout and VT as distinct from each other. Burnout has historically been understood as the relationship between the caregiver and the receiver (patient/client) but has since been attributed to those that work in a variety of settings, whether that is in health or in the broader context within the occupational sector generally (Sabo, 2008). According to Maslach, Schaufeli and Leiter, (as cited in Sabo (2011), burnout is described as a *"…a syndrome of emotional exhaustion, depersonalisation, and reduced accomplishments that can occur among individuals who do 'people work' of some kind" (n.p)*. Those thought to be at higher risk of experiencing burnout can be individuals with traits such as type A personality, coping styles and what is referred to as the "big five", that is, those who are neurotic, extroverted, open to experience, agreeable and conscientious. Nurses who set unrealistic expectations that every patient will have a positive outcome are more prone to experiencing burnout. Sabo (2011) cautions that more research is needed to examine if there are any causal links between these five factors. Factors that include patient to nurse ratio, increased acuity and complexity of patients, support from peers and leaders, education, collaboration, and level of autonomy are all thought to play a role in the development of burnout over time (Sabo, 2011).

Adams, Figley and Boscarino (2008) distinguish between burnout and compassion fatigue by describing burnout as connected with physical, emotional and mental exhaustion which is associated with long-term exposure to work-place environment and stressors, whereas compassion fatigue, described as secondary stress, has a rapid onset and recovery from symptoms. Carers are faced with the recognition that those they care for with a chronic condition will never fully recover. In order to provide the best care, they must put aside their personal feelings but at the same time be able to respond empathically and with compassion (Adams, et al., 2008; Figley, 2002).

Since Joinson's publication, researchers, including nurses, have explored compassion fatigue, and burnout in different nursing and medical groups and within specialties such as emergency departments, intensive care units, hospice, and oncology. Patients who are cared for by nurses experiencing compassion fatigue were more likely to express dissatisfaction with their care (Potter, et al., 2010). In addition, double duty caregiving, that is, nurses who are caring for their own relatives, were found to be at an increased risk of compassion fatigue because of the difficulty in separating professional and personal boundaries (Ward-Griffin, et al., 2011). Studies have identified risk factors, encouraged management, nurses and organisations to support nurses suffering from or at risk of compassion fatigue, and recommended management strategies to assist with coping with compassion fatigue (Aycock & Boyle, 2009; Potter, et al., 2010).

Compassion fatigue and burnout in other occupational settings

Not unique to nurses, compassion fatigue has been observed in other work groups and settings. Gentry, a trauma specialist, took part in critical debriefing sessions for emergency workers in the aftermath of the terrorist attacks on the World Trade Centre in New York in September

2001. Those involved in the rescue and aftermath found themselves having recurring images and nightmares of the events which were attributed to STSD (Gentry, 2002).

In a New Zealand cross-sectional study of resident doctors, a Professional Quality of Life (ProQOL) survey was carried out on two hundred and fifty three resident doctors (Huggard & Dixon, 2011). The ProQOL questionnaire is a tool that measures compassion fatigue, compassion satisfaction and burnout and the positive and negative effects of working with people who have experienced stressful events. The questionnaire has been validated in more than 200 literature reviews (Berry-Cabán, Beder, & Weagraff, 2011; Potter, et al., 2010; Stamm, 2010).

The results showed that one in six and one in five respectively were found to be at risk of compassion fatigue or burnout. There were some limitations to the study which showed a low response rate of 23%. The study was carried out in one District Health Board (DHB) region therefore cannot be generalised to all resident doctors. The authors of the study noted that only those interested in the survey may have responded. In addition, there may have been an increased risk of compassion fatigue for doctors who were covering colleagues leave at the time the survey was carried out and whose workload may have impacted on their feelings at the time they took the survey and a longitudinal study may have given more definitive results. However, the findings were viewed with concern and the authors of the study called for approaches that included education on the stressors of caring that could mitigate the risk of compassion fatigue experienced by doctors exposed to a patient's suffering (Huggard & Dixon, 2011).

An Australian study examined burnout amongst 740 members of the Clinical Oncological Society of Australia whose membership includes oncologists, nurses, scientists and allied health groups (Girgis, Hansen, & Goldstein, 2008). The study found that there were significant levels of burnout comparable with overseas studies with work place issues identified as poor management, inability to take sufficient leave, workloads and institutional demands. Conversely, participants who had direct patient contact and who had received communication skills training reported higher levels of personal accomplishment than those who had not or had received inadequate communication training. The study recommended regular staff screening to enable early identification of those at risk of burnout to include those who took inadequate leave, had significant patient contact and who had not attended communication training (Girgis, et al., 2008).

Resilience in nursing

The very qualities of compassion that draw nurses to oncology nursing can also be the cause of work related stress for those nurses who may not be able to cope with the negative aspects of their work and may lack resiliency. Resiliency is described as the ability to positively adapt psychologically and emotionally following exposure to adverse situations (Grafton, Gillespie, & Henderson, 2010). Humour and optimism as well as having future goals are seen as positive attributes in those who exhibit resiliency (Hodges, Keeley, & Troyan, 2008). Grafton, et al. (2010) describe the resilient nurse as one who can '*transform a disastrous day into a growth experience and then move forward in practice rather than leave and seek a new career*" (p.699). Nurses who are able to utilise emotional and psychological self-awareness are better equipped to deal with stressful situations and exhibit resiliency in stressful situations (Grafton, et al., 2010).

Lack of emotional stability on the part of the nurse can impact on patient outcomes. In a study of 263 nurses in the public and private sector, findings showed that providing safe staffing and years of experience may not be enough to mitigate negative patient outcomes. It was suggested that emotional stability was an important factor in patient safety and that this coupled with safe staffing levels and experience further reduces the risk of poorer outcomes (Teng, Chang, & Hsu, 2009).

Public versus private health nurses

Koen, van Eeden and Wissing (2011) carried out a study of nurses working in public and private health care. The research found that nurses in public health systems had less resilience and more risk of burnout than those in the private setting. This was thought in part to be due to unsatisfactory working conditions, poor wages, increased workloads, complexities and acuteness of patient care and inadequate staffing levels. Studies have also found that nurses in the public health setting who were experiencing increased levels of fatigue and burnout were exposed to more acute situations as opposed to the private setting which are mainly concerned with patients who may be having elective surgery, non-acute treatments or rehabilitation (Koen, et al., 2011; Raftopoulos, et al., 2012).

Cancer nurses

Cancer nursing is recognised internationally as an area of practice that requires specialty skills and knowledge. Cancer nurses provide complex and advanced care to cancer patients that include administration of intensive treatment regimes, education on side effect management, and psychosocial support (Faithfull, 2005).

Cancer nurses are acknowledged for their compassion in caring for patients who are living with, or dying from cancer, in particular those patients whose cancer may progress despite treatment and this can place the nurse at an increased risk of developing compassion fatigue (Fetter, 2012). The very nature of the nurse's work and the close relationships with patients and families can lead to conflict in a perceived inability to tell patients their prognosis (typically the doctor's domain), lack of clarity around resuscitation status, loss of hope (patient and nurse), caring for the dying, ethical dilemmas around treatment decisions, and challenges with achieving adequate pain control (Aycock & Boyle, 2008; Cohen, Ferrell, Vrabel, Visovsky, & Schaefer, 2010; Wenzel, et al., 2011; Yoder, 2010; Zander, Hutton, & King, 2010).

A number of studies have addressed the impact of increased workloads, hours worked and challenges encountered by nurses who are at a greater risk of compassion fatigue or burnout because of the psychological impact of caring for patients with a life threatening illness (Alacacioglu, et al., 2009; Aycock & Boyle, 2008; Cohen, et al., 2010; Yoder, 2010)

In a quantitative Turkish study, Alacacioglu et al. (2009) examined burnout levels between cancer nurses who worked within a clinical setting and cancer physicians who divided their time between clinical, personal and academic responsibilities. One hundred and thirty three nurses were interviewed in a face to face setting in which demographic details were collected. The researchers adapted the Maslach Burnout Inventory (MBI). The MBI looks at subscales of *emotional exhaustion*– a feeling of emotional exhaustion and being overwhelmed by work; *depersonalisation*– not feeling connected with the work place, distancing self from patients, an impersonal response to the recipient of care, and avoidance of contact with people/patients; and *personal accomplishment* – feelings of worth and accomplishment in the workplace setting. The study revealed there were lower levels of personal accomplishment and higher levels of emotional exhaustion and depersonalisation among nurses. Married physicians were less likely to suffer from burnout, although no significant difference was found between single and married nurses. No data was given on nurses or physicians that may have been in relationships but not traditionally married. This could have provided insight into whether those that are single are predisposed to burnout compared to those in relationships (Alacacioglu, et al., 2009).

Higher levels of depersonalisation and exhaustion were seen in the younger age groups, that is, aged 29 years or less perhaps reflecting inexperience of the stress of caring for cancer patients (Alacacioglu, et al., 2009). In a study of trauma therapists those who were young and had less experience were more likely to experience burnout as opposed to those who were more experienced and who showed greater levels of compassion satisfaction (Craig & Sprang, 2010).

Alacacioglu et al. (2009) claim that higher levels of emotional exhaustion and depersonalisation amongst nurses may be due to their being female, and spending more time with patients which may make "*he*r" more sensitive to any events. The same comment is not attributed to female physicians. As no male nurses were included in the study, it is difficult to know whether symptoms of burnout would be as prevalent amongst this group. The comment regarding female nurses' emotional responses may show bias as the study did not elaborate on whether attempts were made to include male nurses and it is difficult to determine if any male nurses worked in this setting or in other specialties within the hospital which might have given a different perspective. In addition, the study could be stereotyping female nurses as being more emotional than male nurses although the same comment is not attributed to the female physicians.

In Turkey, female nurses are the predominant factor in the workplace setting (Özdemir, Akansel, & Tunk, 2008). This is similar to other parts of the world including New Zealand where 7% of the nursing workforce is male (The Nursing Council of New Zealand, 2012). Other factors thought to impact on burnout levels were influences within the health care system in Turkey, including low wages, inadequate equipment, long working hours, staff-patient ratios; ambiguous job descriptions and lack of educational opportunities (Alacacioglu, et al., 2009).

Although burnout has been the traditional term used to describe these phenomena as in the study by Alacacioglu et al. (2009), Aycock and Boyle (2009) state that it does not truly reflect the depth of sadness and despair that nurses can experience and suggest that compassion fatigue is a more accurate description. Aycock and Boyle (2009), assert that cancer nurses may develop distress related to the close relationships established with patients and their families. This can lead to nurses being adversely affected physically, emotionally, socially and spiritually.

The aim of the study by Aycock and Boyle (2009) was to look at what resources were available to nurses to assist them in managing the effects of compassion fatigue. The survey was sent to 231 Chapters of the Oncology Nurses Society (USA) which has a national membership of approximately 12,600 (Oncology Nurses’ Society, n.d.). Sixty two Chapters submitted at least one response, and although the response from the Chapters was small (27%), it provided some insight into the levels of compassion fatigue and what supports were available.

The study reflected the need for organisational supports for cancer nurses that would provide them with the tools to manage the emotional impact of their work. The study found that nurses who are constantly exposed to caring for dying patients may not be aware of the effect of the continual effects of grief, and this can become a “*powder keg”* threatening to explode, particularly for those nurses who develop close interpersonal relationships with patients (Aycock & Boyle, 2009). This was a theme also reflected in the study by Alacacioglu et al. (2009). In addition, nurses who felt isolated, overwhelmed, unappreciated and unable to acknowledge the risk to their emotions have an increased prevalence of compassion fatigue. Aycock and Boyle (2009) assert that nurses and managers need to be aware of the symptoms of compassion fatigue both in themselves and colleagues and take active steps to address and manage the syndrome by incorporating self-help strategies in their personal and work lives, and addressing factors in the work environment that may need to change.

Potter et al. (2010) carried out a descriptive quantitative study to examine the occurrence of burnout and compassion fatigue amongst staff working at a cancer medical centre. The study was conducted among staff working in inpatient units, outpatient chemotherapy units and physician offices. One hundred and fifty three staff, including 132 nurses, took part in the study. The Professional Quality of Life Version 5 (ProQOL) questionnaire was used to measure compassion fatigue, burnout and compassion satisfaction. Although not part of their study, Potter et al. (2010) noted that definitive results are more consistent if used over a period of time rather than a single event when a participant might score high on the burnout or compassion fatigue scale because of their frame of mind on the day they completed the questionnaire. Factors contributing to the low compassion satisfaction scores for inpatient staff included higher patient acuity, more regular contact with patients who are dying, complications of treatment, severity of symptoms, ambiguity of role definitions, workloads, support from colleagues, and inadequate staffing. In addition, a nurse’s self-expectations, education (theory versus reality) and the work situation may impact on how the nurse copes with work stress. Stressors for nurses working in outpatients included repeated contact with patients who attend for regular treatments, ethical disquiet regarding treatment options, both of which are particularly prevalent in this setting although it could also be argued that nurses working in inpatient units are also exposed to the same stressors.

Yoder (2010) undertook a study of nurses in an American hospital. Nurses working in oncology, home care, intensive care, medical/surgical units and an emergency department participated in a three-part survey. The first and second part of the survey consisted of demographics (age, education, nursing experience, and working setting), and a ProQOL questionnaire. The third part invited comment on the nurse’s experience of compassion fatigue and what strategies were used to deal with it. The aims of the study were to find the levels of compassion fatigue amongst the different nursing groups; the correlations between compassion fatigue, burnout and compassion satisfaction; what situations cause compassion fatigue and what approaches nurses find helpful in managing compassion fatigue. It was suggested the emotional burden of caring for patients who are dying or suffering may prove devastating for nurses with inexperience or the skills to manage in these situations. This theory is also supported by Wenzel et al. (2011). A common theme during analysis that signified burnout, were workloads, nurses frequently working overtime, management decisions and not feeling supported in the work environment whereas compassion fatigue was attributed in part to a nurse’s perceived inability to “rescue’ patients from either their diagnosis or those that were being cared for following victimisation by a significant other, and challenging behaviour by a patient or significant other. An interesting finding was that cancer nurses who identified as being religious experienced less compassion fatigue. Spirituality and praying were seen as positive factors in coping with the effects of compassion fatigue.

Wenzel et al. (2011) carried out a qualitative study of nurses from paediatric and adult inpatient and outpatient areas at a cancer centre. Nurses took part in focus groups to identify bereavement in the workplace, supports for dealing with grief and loss and strategies to support personal function and resilience. The sessions were recorded for later transcription and analysis. Participants were asked to describe patient situations in which they experienced sorrow or loss, what they found did or did not assist them in coping, and what they felt would be crucial factors in programmes designed to assist other nurses going through the same experience. Content analysis was used to examine the data identifying categories and themes related to the burden of nursing care. Two major themes were identified – work-related loss (loss of life and hope, factors in the workplace that intensify bereavement and loss; and external misconceived perceptions and understandings. The second theme of interactions and resources looked at strength of individuals, team strengths during debriefing and discussion, and regeneration through relationships with patients and families. Finally, the transcripts were examined to determine the nurse's recommendations for improving structural workplace support.

While some nurses acknowledged close attachments and subsequent loss of the patient as demanding, other nurses admitted avoiding getting attached to patients because it was not felt to be wise to do so. In addition to the emotional aspects of caring, nurses reported work issues such as inadequate breaks and the inability to debrief or to find time to rest which intensified bereavement as factors in trying to deal with losses. Nurses found it was not always helpful to discuss events outside the workplace because of misperceptions about their role. In the study, the authors identified the real risks for nurses who are inexperienced and may not have the skills to cope with the emotional demands of the work involved in caring for cancer patients. The effect can also occur for nurses who lack sufficient support mechanisms. This can lead to anxiety, anger, irritability, loss of control and what is described as "*intrusive imagery*" a recalling of events - real or imagined, that can occur without warning (Wenzel, et al., 2011, p.272).

Wenzel et al. (2011) reported that the nurses who worked in a large teaching hospital found the work demanding emotionally, physically and personally with often inadequate supports to care for patients with more complex demands. Patients who deteriorated rapidly or died suddenly were especially difficult situations for nurses who expressed feelings of powerlessness and said they often had little time to come to terms and manage losses due to the needs of other patients and time factors. In addition, dealing with patients who have relapsed due to progression of the disease was particularly challenging, often with the patient wanting to continue treatment in the hopes that things will improve. Nurses felt especially conflicted in situations where family or medical teams wished to continue treatments described as "*last ditch efforts*" (p.276), a view which is supported by other studies (Cohen et al., 2010; Potter et al., 2010; Alacacioglu et al., 2009; Aycock and Boyle 2009).

As well as describing emotional and psychological aspects of caring for cancer patients, the focus groups in the research by Wenzel et al. (2011) identified strategies that they considered could assist nurses in dealing with the demands of the role such as religion, physical exercise, talking with a partner, friend or family member, team debriefs, access to social workers and chaplains, and positive patient/family relationships. Nurses identified the importance of management support, having a quiet space on the unit, and being able to leave the floor to have time out. The authors assert that nursing programmes need to include more content on how to cope with grief and bereavement and ensure that nurses are supported to attend relevant workplace in-services which would assist in improving job satisfaction and reduced levels of compassion fatigue and burnout.

Nurses were only assessed at the time of the focus groups and not at the time of an event involving loss and bereavement, therefore individual interpretation of events needs to be treated with discretion. Nurses were not screened for any depression or mood disorders prior to taking part and the authors' state this should be considered by future researchers (Wenzel et al., 2011).

Although compassion fatigue is not specifically addressed in this study, the symptoms of loss and bereavement, stressors, and the dilemmas that nurses face with regards to ethical conflict are similar to other studies. What is noted were the levels of turnover and burnout observed in the workplace, which may have been attributed to nurses not being given the resources to cope with grief issues relating to the loss of their patients.

Moral distress

According to Aycock and Boyle (2009) moral distress can occur over time when cancer nurses are unable to perform nursing interventions which they perceive to be ethically correct. This leads to frustration and tension between physicians and nurses when there is conflict over the patient's wishes and goals of treatment (Aycock & Boyle, 2009). Although not specific to cancer nurses, in an unpublished New Zealand study of 412 nurses carried out by Dr Martin Woods of Massey University, a survey showed that nurses are morally distressed and considered leaving the profession because of factors that included not having enough time to administer care because of budget constraints, lack of support from management and peers, working with other nurses who were perceived to be incompetent, and ethical concerns when carrying out life-saving interventions on dying patients which were perceived to prolong death (Nursing Review, 2012). In a survey by the New Zealand Nurses' Organisation, nurses under the age of 30 do not feel there is enough education given during their training on the emotional challenges of nursing. This coupled with lack of experience in addressing conflict resolution, challenging behaviours and the stressors of the work environment are contributing to younger nurses seeking a change of employment (Clendon & Walker, 2011).

Spirituality

When a nurse does not have an awareness of their own spirituality or holds strong views on religion, this may prevent the nurse from understanding a patient's individual spirituality resulting in avoiding the issue altogether (Noble & Jones, 2010). Some studies indicate that nurses who were deemed to be religious or spiritual did not appear to have the same risk of compassion fatigue than those who do not aspire to any beliefs (Yoder, 2010).

The practice of religion is founded in traditional beliefs of a generally organised group of people with common beliefs and practices concerning the sacred, that is, a belief in God or other deity, such as within an Eastern faith (Koenig, 2009). Whilst religion is seen as belonging to a specific group or sect, spirituality has been defined as a "*sense of life, meaning, purpose, or power from within or from a transcendent source such as God"* and *"finding one's place and meaningful purpose in the greater scheme of the universe"* (Grafton et al., 2010, p.703).

Spirituality and religion are seen to be separate entities to some and intertwined to others. The concept of spirituality is challenging to define given that individuals have their own interpretation based on their personal belief system which may relate to traditional religion or a more humanistic belief and therefore some nurses may see spiritual counselling as the role of the chaplain or spiritual advisor, and not integral to nursing care. In some counties spirituality has been challenged as being part of the nurse's role. Some nurses believe that spirituality is multifaceted, that it can be confused with religion and is more about life's meaning and what happens after a person dies (Bahrami, 2011; Chan, 2010; Chung, Wong, & Chan, 2007; Rykkje, Eriksson, & Råholm, 2011).

Cultural safety and spirituality

Since the 1990s, cultural safety has been a component of the nursing curriculum in New Zealand (The Nursing Council of New Zealand, 2011). Its aim is to raise awareness of the needs of the Māori people, and prejudices that may occur in the health system that can impact negatively particularly on the provision of culturally sensitive nursing care. It has been suggested that a nurse's own definition of culture influenced their interactions with patients and may not allow for a personal connectedness between the nurse and Māori patients (Theunissen, 2011).

Māori health is based on a wellness model that encompasses Te Taha Hinengaro (psychological health), Te Taha Wairua (spiritual health), Te Taha Tinana (physical health) and Te Taha whānau (family health). Wairuatanga is embedded in the belief that all living things have a life force, that is, mauri and spirit and if there is an imbalance between the two illnesses can occur. Utilising the Māori definition of health assists the nurse to provide nursing care that takes into account wairua which is appropriate for Māori, and may also support the nurse when caring for patients of other cultures (Barton & Wilson, 2008; Theunissen, 2011).

In 2011, The Nursing Council of New Zealand (2011) broadened its definition of culture to include "*age or generation, gender, sexual orientation, occupation, socio-economic status, ethnic origin or migrant experience, religious or spiritual belief and disability"* as a component of cultural safety education (The Nursing Council of New Zealand, 2011, p.5).

The Cranleigh Report

Cancer is the leading cause of death in New Zealand and accounts for 30% of all deaths with nearly 20,000 people diagnosed with cancer annually. The provision of medical oncology services has been challenged due to the increasing complexity of cancer treatments and options available which has led to pressure being placed on the services and facilities which has threatened sustainability. In response the Ministry commissioned Cranleigh Health in 2011 to undertake a review of Medical Oncology services in New Zealand and to propose new models of care (Cranleigh Health, 2011)

Cranleigh Health interviewed a number of medical oncologists and nurses in New Zealand at regional and peripheral cancer treatment centres and found that the availability of increasingly complex treatment modalities for people with cancer coupled with a shortage of medical oncologists, particularly at peripheral/satellite regions has required nurses to take on increased responsibilities causing role confusion and delineation. Combined with nurses being unable to have readily available access to an oncologist or haematologist, the report notes that this has the potential for nurses to work outside their scope of practice. In addition, nurses reported that these extra responsibilities are not acknowledged which lead to low morale (Cranleigh Health, 2011).

It was also identified that there are limited opportunities for nurses wishing to undertake specialist post-graduate cancer education within New Zealand and no current national standards or training for nurses wishing to specialise in caring for patients with cancer who undergo chemotherapy and related cancer treatments. Most training is delivered by District Health Boards using their own standards, policies and procedures (Cranleigh Health, 2011). Longer treatment trajectories, complex care coordination of cancer patients and higher workloads are putting additional pressure on cancer nurses and facilities (Cranleigh Health, 2011).

Included in the recommendations for change, the report proposed increasing the scope of practice for specialist cancer nurses to better support the oncologists, an increase of 20% in nursing and medical oncologist resource at all centres, and the development of national postgraduate training for nurses wishing to specialise in cancer care (Cranleigh Health, 2011).

Summary

This chapter has discussed literature associated with compassion, compassion fatigue, compassion satisfaction and burnout and identifies a number of issues. As noted in the Cranleigh Report (2011), cancer nurses in New Zealand have reported taking on increased responsibilities in the absence of access to medical oncologists and this coupled with a lack of postgraduate education may lead to low morale and some nurses working outside their scope of practice. Of note in the literature, nurses in cancer care are at an increased risk of compassion fatigue because of their close association with patients and families, conflicts and ethical dilemmas around treatment goals, being witness to traumatic events and associated work place environments that may make them more prone to compassion fatigue.

Findings from research have shown that lack of education, increased workloads and lack of support from colleagues and management, and those working in the public health sector had an increased risk of compassion fatigue and burnout. In addition, nurses who felt overwhelmed, unappreciated and isolated were thought to be more at risk of compassion fatigue.

Researchers are unable to come to a unified opinion on the definition of compassion fatigue resulting in difficulty in deciding on appropriate treatment strategies. Some strategies for the management of compassion fatigue have been suggested which vary between self-management and organisations being encouraged to provide nursing staff with opportunities to receive education on work related stressors and access to professional counselling.

If spirituality in the context of cultural safety and Māori health within the New Zealand context is not taken into account it can have an impact on the wairua (spiritual health) of Māori people. According to the literature, nurses who perceive themselves as spiritual or aspire to a traditional religion may be less at risk of compassion fatigue. Conversely, the definition of spirituality is complex and does not have a one-shoe-fit all approach. Nurses may therefore not consider spirituality to be their responsibility in the delivery of patient care and may see this as more in the realm of the chaplain or other spiritual advisor.

The literature is unclear on definitions and similarities of burnout and compassion fatigue. Some symptoms may overlap with others making it a challenge to differentiate between the two although triggers for events may more accurately reflect one or the other syndrome (Yoder, 2010). The definition of either burnout or compassion fatigue and its similarities with VT and STSD disorder, are likely to continue to be debated in literature as researchers struggle to come to a consensus decision about the differences and similarities between the two. It is not the purpose of this thesis to debate the definition of compassion fatigue, but to explore the factors recognised as being associated with compassion fatigue, compassion satisfaction and burnout and the potential for cancer nurses to be exposed through their close relationships with patients with cancer.

The next chapter will describe the methodology undertaken in the research. The research design, sample, survey design and tool, dependent and independent variables, data collection, and analysis tool will be described and discussed.

CHAPTER 3

METHODOLOGY

Introduction

This chapter describes the methodology chosen to explore the experiences of nurses whose primary role is to care for cancer patients aged 20 years or older and their family/whānau and to explore factors that may increase or decrease the risk of compassion fatigue.

Whilst there have been numerous overseas studies of compassion fatigue amongst cancer nurses, there have been no published studies to date in New Zealand amongst this specialty group of nurses. This researcher wished to determine whether there were similarities between cancer nurses in New Zealand that could be compared with overseas studies or if there are characteristics within the New Zealand setting that may or may not contribute to a nurse experiencing compassion fatigue.

The research design

The research design provides the structure that is used for preparing, administration and analysis of a study and provides the blueprint for explaining the research question or hypotheses (Sousa, Driessnack, & Mendes, 2007).

A descriptive, non-experimental, purposive convenience sampling of cancer nurses who are members of the Cancer Nurses' Section of the New Zealand Nurses Organisation was chosen as being representative of the cancer nursing workforce in New Zealand. The design was quantitative utilising a web-based questionnaire and taken at one point in time, that is, cross sectional.

Quantitative research utilises a philosophy that underpins a positivist paradigm approach. The advantage of this approach is that it is grounded in examining causes, interactions and how these interrelate and influence outcomes. It is based on objective analysis and interpretation, with the view that the studies will reflect what is known already about the subject, what new information will be found, what can be deduced from results by applying to variables and the interrelationships between them. A quantitative approach does not require the researcher to be directly involved therefore the researcher cannot influence the study participants in how they respond to the subject matter. It provides a more accurate approach to data collection compared with qualitative research which can be open to subjective interpretation of participant's comments that may not reflect a true picture of a group as a whole (Polit, Beck, & Hungler, 2001; Schneider, Whitehead, Elliott, Lobiondo-Wood, & Haber, 2007; Sousa, et al., 2007). However, a disadvantage of using quantitative research is that it may not be possible to understand fully what is occurring within a defined group through data analysis alone (Polit & Beck, 2008; Schneider, et al., 2007; Sousa, et al., 2007).

Polit and Beck (2010b) refer to the '*model of generalisation'* that quantitative researchers utilise when identifying the population they wish to study (p.1457). The population is described as those who have shared characteristics which the researcher selects as being representative of the population being studied. By selecting a desired group, each member of that group has an equal chance of participating in the study (Polit & Beck, 2010b).

Cross-sectional research involves the collection of data at one point in time and is used to describe phenomena at a single point of collection. It therefore cannot interpret results other than what applies at the time the research was carried out (Polit & Beck, 2008). The current research endeavoured to explore what experiences cancer nurses had of compassion fatigue in the context of administering a Professional Quality of Life V (ProQOL) 2010 questionnaire on one occasion.

The ProQOL V is a 30 point questionnaire that scores for compassion fatigue, burnout and compassion satisfaction utilising a Likert scale, that is, 1-never, 2- rarely, 3- sometimes, 4-often, 5- very often (Stamm, 2010). In previous versions of the scale, the term *compassion fatigue* was used, however in later versions of the ProQOL Stamm changed the wording to *secondary traumatic stress* (STS) although both terms are used interchangeably. Participants select which scale best reflects their feelings on the day that they take the questionnaire.

The three scales measure separate constructs of compassion fatigue, compassion satisfaction and burnout. According to Stamm (2010), the compassion fatigue scale is distinct with a variance of 2% (r=.23; co-σ = 5%, *n*= 1187) with STS and 5% variance (r=.14; co-σ=2%; *n*=1187) with burnout, however Stamm (2010) points out that these two scales measure different paradigms thought to be replicating the common distress shared between the two conditions. According to Stamm (2010), the shared variance between the two scales is 34% (r=.58; co-σ = *n*= 1187). These measure the negative effects but are different in that the STS scale measures fear which the burnout scale does not. The ProQOL V survey was adapted minimally to include the use of the term '*cancer nurse'*. These changes are permissible by the authors (Stamm, 2010).

The average score for compassion satisfaction is 50 (SD 10; alpha scale reliability .88). Approximately 25% score higher than 57, 25% have a score around 50 indicative of average levels of compassion satisfaction, and those with low levels of compassion satisfaction have average scores of 43 or less. Those with scores below 40 may have difficulties with their job or environment. Burnout has an average score of 50 (alpha scale reliability .75). Twenty five per cent score above 57, a further quarter score below 43. Scores below 18 reflect positive feelings about the work environment and how someone feels about their ability to do their work. The average score for STS is 50 (SD 10, alpha scale reliability .81). Twenty five per cent score below 43, a further 25% score above 57. Those with scores above 57 may be experiencing situations that are causing distress. Stamm (2010) suggests those with high levels of burnout and secondary traumatic stress should consider seeking professional counselling or advice.

Surveys

Surveys are an efficient and cost effective method of surveying large numbers of people particularly if using an online service to administer the survey. Because they are self-administered, participants may feel more inclined to respond honestly to sensitive questions as opposed to those asked in a face-face environment. Surveys can also be generalised to a specific group if using the random sampling method (Sivo, Saunders, Chang, & Jiang, 2006)

Surveys have been used widely since the 1930s in industry and more recently in the health sciences. They are carried out on the phone, through mail and more recently via the internet (Reitz & Anderson, 2013). Surveys use systematic sampling to measure features of the study population with numerical accuracy to find answers to questions about how people feel in a particular way or how often they carry out a particular activity. According to Polit and Beck (2010a) a survey gathers information which measures the frequency, distribution and characteristics that interrelate within a given population. It collects information on a participant’s knowledge, opinions and attitudes towards a particular subject matter that enables estimates to be taken from the sample that can be applied to a whole population with a degree of certainty (Polit & Beck, 2010a).

The benefits of using an online survey allows the researcher to see results in real time and has been used extensively as a methodology particularly in the social sciences. The rationale for this method allows the gathering of data on the population, characteristics unique to the group being studied, interpretation of variables as they apply to the group and can be applied both in the qualitative and quantitative setting (Buchanan & Hvizdak, 2009). According to Van Selm and Jankowski (2006), internet surveys are a convenient method of reaching people who are domiciled in different geographical regions. Younger people may find the use of online surveys less time consuming than the paper/pen method whereas those less internet-savvy may be uncomfortable using this method. However, a disadvantage for researchers utilising online surveys may be the time spent analysing and correcting technical problems before the survey goes live or during its administration. The researcher may have little control over who responds to the survey as participants can pass it on to others (Hunter, 2012). In addition, there may be restricted access to the internet at some workplaces or in the home setting and this could limit the desired result (Van Selm & Jankowski, 2006).

The cancer nurse survey

The survey consisted of 52 questions that included a mandatory informed consent question before participants could proceed further in the survey. The three dependent variables were compassion satisfaction, burnout and compassion fatigue. The independent variables were composed of thirteen demographic questions, that is, age, gender, relationship status, whether the participant was the primary care giver for family/whānau, ethnicity, clinical specialty, clinical setting, nursing title, whether the participant worked in the public or private health sector, the district health board region where they lived, years of experience in cancer nursing, and hours worked. The ProQOL questionnaire consisted of 30 questions and this researcher asked participants an additional eight questions that included consideration of culture when caring for patients/whānau as applied to the Nursing Council of New Zealand definition; whether education on managing the stressors of caring for cancer patients was received during cancer training or once in the workplace; the Treaty of Waitangi principles in nursing care, confidentiality when considering accessing counselling; and organisational and colleague support (Appendix 3).

A free text question asked participants to define their spirituality in the context of a specific religion or belief including God, a Higher Power, the Universe, life or relationship to others. The rationale for this question came from research which suggests that nurses who belong to a particular religion or belief have less risk of developing compassion fatigue. A pilot group of non-cancer nurses and Master's students took part in the survey and following feedback some changes were made.

Sample

The Cancer Nurses' Section has a membership of over 600 throughout New Zealand and is the public voice for cancer nurses. The Cancer Nurses' Section Committee meets throughout the year to discuss matters of concern to cancer nurses and communicates regularly with the Ministry to ensure that the cancer nurse's voice is heard. No rewards were offered either to the committee members or to those that took part in the survey. Nurses could anonymously choose whether or not they wished to take part in the study without risk of bias on the part of the researcher. Although three clinical specialties were chosen for the study, this researcher did not predetermine the numbers required from each specialty therefore there was no weight applied to any given group.

The sample meets the criteria for convenience sampling and purposive sampling. A convenience sample chooses participants who are available for the purposes of a study however a disadvantage is that it may not reach certain areas of the population. Purposive sampling is a method of choosing participants who share particular characteristics (Tong, Sainsbury, & Craig, 2007).

Ethical considerations

Research has the potential to be of benefit to both the research subject and the researcher especially if the findings can be of value to a specific group of individuals, however research can also be burdensome, and expose participants to an invasion of privacy or cause physical or emotional harm. According to Polit and Beck (2008) the three fundamental principles in relation to research ethics are justice, which is grounded in the principle that all are equal and no one person or group will have preference over another; respect for human dignity which refers to the principle that participants have the right to informed consent and be able to decide freely to participate or withdraw from a study without fear of coercion, and beneficence, which infers that the research will cause no harm, that participants will be protected from exploitation, and researchers will strive to avoid or mitigate the risks to study participants.

In addition, truthfulness, fidelity, confidentiality and privacy underpin the rules that must be observed in any research to protect participants and this includes anonymity of participants and those who may not be taking part in the study but nevertheless must be protected by the maintenance of confidentiality (Coughlan, Cronin, & Ryan, 2007).

Any research that has the potential to involve Māori is of interest to Māori, and is important in terms of reducing inequalities; therefore Māori must be considered in any research (Hudson, Milne, Reynolds, Russell, & Smith, 2010). Māori were not the focus of the survey of cancer nurses, and it is unknown what percentage of the Cancer Nurses' Section membership are Māori, however, all nurses need to understand and take into account the principles of the Treaty of Waitangi when providing health care to Māori. It is in this context that a question was included to address these principles. A meeting was held with a senior Māori clinical workforce development coordinator who approved the cultural question included in the survey (see Appendix 1).

The survey was anonymous via a web link to Survey Monkey®. To protect anonymity further, participants were advised that District Health Boards would not be identified in the study or from any information disseminated from the study. Information about the researcher, the study, and the intent of the survey was provided in the preamble.

Question 1 asked participants to indicate they had informed consent by clicking on the “I agree” button and if they chose not to do so, they could not proceed further with the survey. Participants were provided with the researcher’s contact details should they wish to obtain further information about the study. No personal details were collected, that is names, addresses, or phone numbers and the internet service provider’s (ISP) identifying address was not tracked therefore this researcher did not know which computer the participant accessed to take part the survey and participants were not offered any incentive to take part in the survey.

Due to the nature of the survey which asked participants their feelings about the positive and negative impact of their work, some questions had the potential to cause discomfort and may have raised issues for those who felt they could be suffering from symptoms of compassion fatigue. The contact details of the Employee Assistance Programme (EAP) were provided and participants were advised to contact EAP or their medical practitioner for further assessment if the survey raised issues for them. Participants were given the option of leaving the survey at any time without completion if they chose to do so.

Data storage was on Survey Monkey® which could only be accessed with a log-in and password and on a home computer with a password known only to the researcher. At the end of the research, all information pertaining to the study, including participant’s answers was destroyed in a secure disposal area.

Ethical approval was obtained from the Eastern Institute of Technology Ethics Committee to carry out the research (see Appendix 2). Permission was not required from the District Health Board (DHB) in which the researcher was employed as no research was carried out on staff at this organisation.

Survey design

Survey Monkey® is a web-based company that is designed to enable researchers to develop surveys. Researchers have the option of using templates or creating their own questionnaires. A link is attributed to individual surveys which Survey Monkey® can send out on the researcher’s behalf. It can be posted on another website, or sent via electronic mail (e-mail). Those wishing to take part in the survey can follow the link to the website. To preserve anonymity, the survey was designed so that individual computers could only be used on one occasion. This reduced the risk of a participant responding more than once to the survey, however it also limited access to the survey for those in the workplace who may not have internet access at home.

Data collection

Information about the survey was distributed through the Cancer Nurses’ Section national committee. An article was placed in the Cancer Nurses’ Section newsletter (*Cancernet)* that included information describing the research and the intention of the survey (see Appendix 3). A link to the survey was also placed on the Cancer Nurses' Section website. Finally, an e-mail was sent out by the New Zealand Nurses Organisation to the membership. The last method proved to be the most effective means of gaining a response. Nurses working in Medical Oncology, Radiation Oncology and Haematology were invited to take part in the survey.

Data analysis

Items were coded and scored. The IBM Statistical Programme for the Social Sciences (SPSS) Version 21 was used to analyse the data. A chi-square test assessed for statistically significant differences between the variables of compassion fatigue, compassion satisfaction and burnout. The t-test was used to explore whether there were differences between two groups that were statistically significant. The t-test is used when the researcher wishes to compare two groups on a dependent variable. The formula is based on the group being measured, the variable and the sample size. A maximum limit is set as being probable if the null hypotheses are correct (Polit & Beck, 2008).

Where there were more than two groups, ANOVA (analysis of variance) was used to compare differences. ANOVA is applied to test the means when there are three or more groups from the same population, by extracting the total variable and dividing into two parts - that which can be attributed to the independent variable, and variability due to other data (Polit & Beck, 2008). The *p*-values are used to determine if there are differences between groups and if so, if it is statistically significant. That is, if the *p*-value is high (>0.05) it is probable that the groups being compared are not different therefore the null hypothesis is correct. However, if the *p*-value is low (< 0.05), it is likely that the groups being compared are different, i.e., the null hypotheses is not true (Polit & Beck, 2008). For this current research, a *p*-value of <0.05 was considered to be statistically significant.

Reliability and validity

Research instruments need to be accurate and well established with consistent scores achievable when repeated and tested across different settings and studies. Reliability and validity are important models that should be considered with any research. Validity refers to whether the tool measures what it is meant to measure and reliability refers to whether the tool provides dependable results in data that can be replicated between those participating in the study and in other research (Mateo & Kirchhoff, 2009).

The ProQOL questionnaire has undergone psychometric testing to improve reliability and validity. It has been validated in over 200 research papers and is well constructed over three subscales measuring individual paradigms (Berry-Cabán, et al., 2011; Lawson & Myers, 2011;

Stamm, 2010). The ProQOL survey may elicit more accurate results if it is administered sequentially to the same group of participants (Potter, et al., 2010; Stamm, 2010). The survey was tested by a pilot group of Master's students and non-cancer nurses and found to be consistent, reliable and stable. The survey was administered once to participants of this study.

Limitations

The study was not open to all cancer nurses, that is, those working in a surgical, paediatric, palliative or other cancer settings, therefore the findings could not be seen to reflect the feelings of the cancer nursing population as a whole. Nurses could choose whether or not they wished to participate in the study which could result in the sampling showing bias towards the three specialty groups that took part.

The survey did not consider whether nurses had access to informal or formal debriefing following critical events, nor did it set out to determine if they had sought professional counselling because of stressors caring for cancer patients or experienced in the workplace.

Summary

This chapter has described the methodology chosen for the research and has described and discussed the research and survey design, ethical considerations, the sample, data collection methods, analysis and reliability and validity. The next chapter will present the research findings and will discuss the statistical significance between independent variables and analysis as applied to the whole sample group.

CHAPTER 4

FINDINGS

Introduction

This chapter will present the findings of the survey. The demographics included gender, age; relationship status; whether the participant was the primary care giver for family/whānau; ethnicity; cancer specialty (*medical oncology, radiation oncology, haematology*); which health sector a participant was primarily employed (*public or private*); which setting a participant worked (*public inpatient setting, public outpatient chemotherapy or clinic; private inpatient setting, private outpatient chemotherapy or clinic)*; nursing title (*nurse manager, nurse practitioner, clinical nurse educator, clinical nurse specialist, nurse coordinator, specialty clinical nurse, registered nurse*) years of experience in cancer nursing, and hours worked (*fulltime, part-time, casual*). Participants were asked to define their spirituality within the context of belonging to a specific religion or belief, life, relationship to others, belief in God, a Higher Power or the Universe.

To protect anonymity, DHBs are not identified in this thesis. There are twenty DHBs in New Zealand divided into regions. Fifteen are in the North Island and five in the South Island (Ministry of Health, 2012) Participants from seventeen DHBs took part in the survey. Participants were further divided into regional cancer treatment centres that provide a full range of cancer treatments and peripheral cancer treatment centres that provide some, but not all cancer treatments.

One hundred and eighteen participants commenced the study, with 102 completing all questions and 105 completing most questions. The frequencies may not total the number of completed responses as participants were given the choice of missing questions and where appropriate this is shown as missing data. Some participants may have categorised themselves more than once, for example, when defining their nursing title and this is noted where it appears to have occurred.

The raw (unchanged) data from a participant's answers were converted to t-scores using the ProQOL V scoring system to ascertain the mean score of the whole group for each dependent variable. Compassion satisfaction had a mean score (*M*) of 35.33 and a standard deviation (*SD*) of 4.40. Compassion fatigue had a standard *M* of 23.38 and a *SD* of 5.42 and burnout had a *M* of 23.54 and a *SD* of 4.88. A *p*-value of <0.05 was considered to be statistically significant. Percentages are taken from the total number (*n*105) of responses.

This study found the majority of participants had average levels of compassion satisfaction (*n*=88) with a small group (*n*=7) having high scores. Burnout scores showed a slightly larger majority of average levels (*n*=54) compared with low levels (*n*=51). No one scored high on the burnout scale. Compassion fatigue scores were evenly scored with *n*=53 showing average risk and *n*=52 having low risk.

Seven participants scored high levels for compassion satisfaction. Of the seven, participants recorded their beliefs as atheist, mediumship, humanistic, life as a spiritual belief, Christian and one participant stated they had no spiritual beliefs.

Findings are shown in two parts. Part 1 shows analysis from cross tabulation between independent variables of age, relationship status, primary care giver, ethnicity, cancer centre, specialty, health sector, clinical setting, nursing title, years of experience and hours worked. Part 2 shows analysis performed on the whole group (*n*=105).

Part One – Cross Tabulation

Question 2 – What is your age?

Table 2 and 2a shows the age distribution and scoring. The model age category of the entire sample was 46-55 years. No respondents were under 20 and 3 respondents were over the age of 65. There was statistical significance for compassion fatigue in the age groups 20-35 with a *p*-value of 0.026.

Table 2 - Age distribution of sample

Age group	**N* (%)**
Under 20	0 (0)
20-25	6 (5.7)
26-35	10 (9.5)
36-45	21 (20)
46-55	42 (40)
56-65	23 (21.9)
65 or over	3 (2.9)
Total	105 (100)

* Missing data = 13

Table 2a Age distribution of sample scores

		n	Mean	Std. Deviation	Std. Error	*p*-value
Compassion satisfaction t score	20-25	6	53.1414	11.08378	4.52493	
	26-35	10	49.4889	9.59232	3.03336	
	36-45	21	49.4676	8.93423	1.94961	
	46-55	42	49.7338	10.67882	1.64778	
	56-64	23	49.9167	10.48315	2.18589	
	>65	3	53.5141	8.94489	5.16433	
	Total	105	50.0000	10.00000	.97590	0.959
Burnout t score	20-25	6	54.9101	7.40007	3.02106	
	26-35	10	52.6498	12.89293	4.07710	
	36-45	21	48.1195	7.39751	1.61427	
	46-55	42	51.7285	10.05272	1.55117	
	56-64	23	47.1781	10.07104	2.09996	
	>65	3	41.9463	13.57588	7.83804	
	Total	105	50.0000	10.00000	.97590	0.158
Compassion Fatigue t score	20-25	6	55.9335	16.42177	6.70416	
	26-35	10	53.9326	9.85940	3.11782	
	36-45	21	44.1098	6.75742	1.47459	
	46-55	42	51.6025	8.75797	1.35138	
	56-64	23	49.6460	10.23841	2.13486	
	>65	3	46.5352	16.90170	9.75820	
	Total	105	50.0000	10.00000	.97590	0.026

Question 3 – Gender

Gender distribution was female (*n*=104 99%), male (*n*=1, 1%). No-one identified as transgender. Table 3 shows gender distribution. Missing data = 13

Table 3 shows gender distribution.

Table 3 – Gender

Gender	**N* (%)**
Female	109 (99)
Male	1 (1.0)
Transgender	0 (0)
Total	105 (100)

*Missing data - 13

Question 4 - Relationship status

The majority of respondents were married (*n*=73) or in a relationship (*n*=14). There was no statistical difference in relationship status when compared with the variables of age, years of experience, and primary care giver or to the group as a whole. The distribution of relationship status and scoring is shown in Table 4 and 4a below.

Table 4 – Relationship status

Relationship status	**N* (%)**
Married	73 (70.1)
In a relationship	14 (13.5)
Divorced	6 (5.8)
Single	11 (10.6)
Total	104 (100)

* Missing data = 14

Table 4a - Relationship status scores

		N	Mean	Std. Dev.	Std. Error	*p*-value
CS t score	Married	73	49.9912	9.55981	1.11889	
	In a relation	14	49.8403	10.62027	2.83839	
	Divorced	6	47.5508	14.67525	5.99115	
	Single	11	51.2778	11.00076	3.31685	
	Total	104	49.9662	10.04240	.98474	0.913
BO t score	Married	73	49.3685	9.28296	1.08649	
	In a relation	14	51.8235	11.37487	3.04006	
	Divorced	6	57.9018	10.75273	4.38978	
	Single	11	46.9021	11.52014	3.47345	
	Total	104	49.9304	10.02285	.98282	0.136
CF t score	Married	73	49.3925	9.09601	1.06461	
	In a relation	14	52.1655	11.29728	3.01933	
	Divorced	6	52.2954	11.31610	4.61978	
	Single	11	48.5747	13.20183	3.98050	
	Total	104	49.8467	9.92375	.97310	0.697

Question 5 – Are you the primary care-giver for your family/whānau?

Participants were asked to indicate whether they were the primary care giver for family/whānau and were given the choice of recording *yes*, *no* or *not applicable*. Those who recorded *not applicable* were added to the *no* scores for the purposes of analysis. There was no statistical difference between those that indicated they were the primary care giver and those participants who were not caring for family/whānau. Distribution of primary care givers and scoring is shown in Table 5 and 5a below.

Table 5 – Primary care giver

Primary Care Giver	**N* (%)**
Yes	47 (44.76)
No	58 (55.23)
Total	**105 (100)**

***** Missing data = 13

Table 5a - Primary care giver scores

		N	Mean	Std. Deviation	Std. Error	*p*-value
CS t score	No	58	50.9694	10.14395	1.33197	
	Yes	47	48.8037	9.79457	1.42869	
	Total	105	50.0000	10.00000	.97590	0.272
BO t score	No	58	48.9497	10.12707	1.32975	
	Yes	47	51.2961	9.79273	1.42842	
	Total	105	50.0000	10.00000	.97590	0.234
CFt score	No	58	48.8769	9.55781	1.25500	
	Yes	47	51.3859	10.45645	1.52523	
	Total	105	50.0000	10.00000	.97590	0.203

Question 6 – What is your Ethnicity?

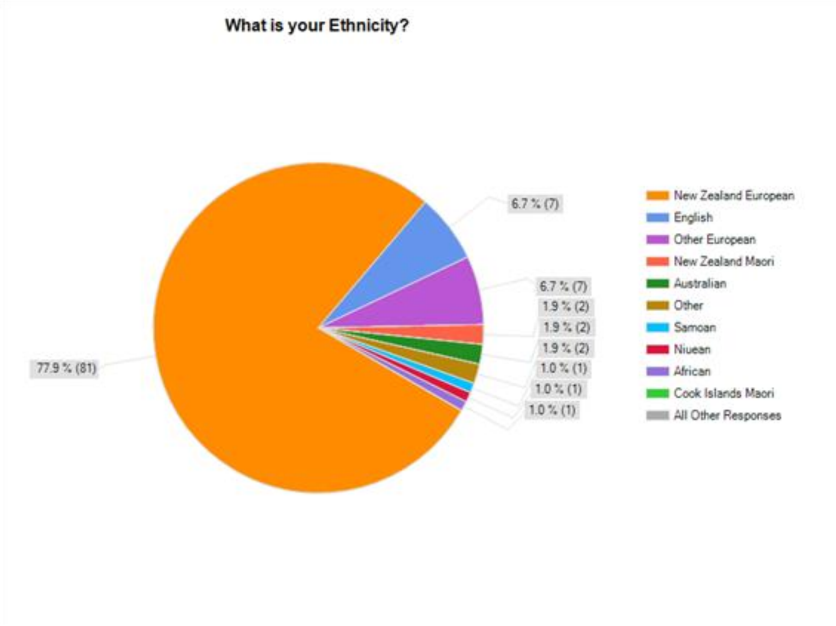
Distribution of Ethnicity can be seen below. Some respondents recorded duel ethnicity. The majority of respondents were New Zealand European (*n*=81). Distribution of ethnicity is shown in Table 6 and Figure 1.

Table 6 - Ethnicity

Ethnicity	**N* (%)**	**Ethnicity**	**N* (%)**
New Zealand European	81 (77.9)	Samoan	1 (1.0)
New Zealand Māori	2 (1.9)	Nieuean	1 (1.0)
English	7 (6.7)	Cook Island Māori	1 (1.0)
Australian	2 (1.9)	African	1 (1.0)
Other European	7 (6.7)	Other (Scottish)	1 (1.0)
Total	**104 (100)**		

*Missing Data = 13

Figure 1 - Ethnicity



Q7. Spirituality

This question asked participants to define their spirituality within the context of belonging to a specific religion or belief, life, relationships to others, belief in God, a Higher Power or the Universe. There were ninety three responses. The majority (*n*=29, 31.19%) recorded Christianity as defining their spirituality. The next most often recorded responses were humanistic (*n*=19, 20.43%) and higher power/universe (*n*=18, 19.35%). Other responses included religious (unspecified) (*n*=7, 7.53%); undecided (*n*=7, 7.52%); agnostic (*n*=6, 6.45%); Buddhist (*n*=4, 4.3%) and atheist (*n*=3, 3.23%). Some defined their spirituality in more than one way, that is, a participant may have chosen both humanistic and atheist, whilst others defined themselves as humanistic and having a belief in a higher power. Seven participants scored high levels for compassion satisfaction. Of the seven, participants recorded their beliefs as atheist (*n=1)*, mediumship (*n*=1), humanistic (*n*=1), life as a spiritual belief (*n*=1), Christian (*n*=2) and no beliefs at all (*n*=1). Table 7 shows the distribution of beliefs.

Table 7- Spirituality

Spiritual Belief	**N***	**(%)**
Christianity	29	(31.19)
Higher Power/Universe	18	(19.35)
Humanistic	19	(20.43)
Agnostic	6	(6.45)
Religious unspecified	7	(7.52)
Buddhist	4	(4.30)
Atheist	3	(3.23)
Undecided	7	(7.52)
Total	**93**	**100**

*Missing Data = 25

Question 8 – In which District Health Board region do you live?

For the purposes of anonymity, the District Health Board where the participant worked is not identified. Participants were coded according to living in an area that had either a regional main treatment centre where the full range of cancer treatments are administered or a peripheral (satellite) region where some cancer treatments were provided however some patients may need to travel to a regional centre for further treatment. There were no significant statistical differences between participants who lived or worked in a regional or peripheral centre. Table 8 shows the distribution between regional and peripheral cancer centres.

Table 8 – Cancer Centre

Cancer centre		*n*	Mean	Std. Deviation	Std. Error Mean	*p*-value
CS t score	Regional Cancer Centre	59	51.0504	9.92014	1.29149	
	Peripheral centres	46	48.6527	10.04840	1.48156	0.762
BO t score	Regional Cancer Centre	59	50.0367	9.62944	1.25365	
	Peripheral centres	46	49.9529	10.56378	1.55754	0.795
CF t score	Regional Cancer Centre	59	49.5052	10.52011	1.36960	
	Peripheral centres	46	50.6346	9.36662	1.38103	0.969

*Missing Data = 13

Question 9 – Please indicate your cancer nursing specialty

The participant’s nursing specialty can be seen in the table below. There were no statistical differences in *p*-value between the specialties. The specialties and scores are shown in Table 9 and 9a below.

Table 9 – Nursing specialty

Nursing Specialty	**N* (%)**
Medical Oncology	63 (67)
Radiation Oncology	12 (12.8)
Haematology	19 (20.2)
Total	**94 (100)**

*Missing Data = 24

Table 9a - Nursing Specialty scores

		n	Mean	Std. Deviation	Std. Error	*p*-value
CS t score	Medical Oncology	63	49.6095	10.71678	1.35019	
	Radiation Oncology	12	55.3776	8.51973	2.45943	
	Haematology	19	49.7478	9.00841	2.06667	
	Total	94	50.3738	10.22569	1.05470	0.194
BO t score	Medical Oncology	63	50.9687	10.38727	1.30867	
	Radiation Oncology	12	43.7745	9.88571	2.85376	
	Haematology	19	48.7344	8.37882	1.92223	
	Total	94	49.5987	10.14290	1.04616	0.071
CF t score	Medical Oncology	63	50.3176	10.07849	1.26977	
	Radiation Oncology	12	45.4741	9.84558	2.84217	
	Haematology	19	50.0456	8.94934	2.05312	
	Total	94	49.6443	9.86246	1.01724	0.294

Question 10 – Please indicate the health sector in which you are employed

The following table shows the distribution of participants between the public and private health sector. There was a statistical significance in *p*-value scores for burnout (*p*-0.013) and compassion fatigue (*p*-0.008) for those working in the public setting. Table 10 and 10a show the distribution and scoring.

Table 10 – Health sector distribution

Health Sector	**N* (%)**
Public	98 (94.2)
Private	7 (6.8)
Total	**104 (100)**

*Missing Data = 14

Table 10a – Health sector scores

		n	Mean	Std. Deviation	Std. Error	*p*-value
CS t score	Public	98	50.0000	10.17445	1.02777	
	Private	7	50.0000	7.73111	2.92209	
	Total	105	50.0000	10.00000	.97590	1.000
BO t score	Public	98	50.6431	9.86848	.99687	
	Private	7	40.9965	7.58837	2.86813	
	Total	105	50.0000	10.00000	.97590	0.013
CF t score	Public	98	50.6806	9.94487	1.00458	
	Private	7	40.4717	4.57781	1.73025	
	Total	105	50.0000	10.00000	.97590	0.008

Question 11 – Please indicate where you work

Respondents were asked to indicate all areas in which they worked therefore the totals (*n*=131) reflect nurses who indicated they worked across different settings (Table 11). Participants were then divided into either working in an inpatient or outpatient setting (Table 11a). There was no statistical significance between settings.

Table 11– Clinical setting – all areas

Clinical Setting	**N* (%)**
Public Inpatient Unit	44 (33.5)
Public Outpatient Chemotherapy Unit	43 (32.5)
Public Outpatient Clinic	38 (29)
Private Inpatient Unit	2 (1.5)
Private Outpatient Chemotherapy Unit	3 (3)
Private Outpatient Clinic	1 (0.5)
Total	**131 (100)**

Table 11a – Clinical Setting – Inpatient/Outpatient

Clinical setting		*n*	Mean	Std. Deviation	Std. Error Mean	*p*-value
CS t score	Inpatient	42	48.9884	10.50610	1.62113	.496
	Outpatient	58	50.3911	9.86769	1.29569	
BO t score	Inpatient	42	52.2034	10.51895	1.62311	.124
	Outpatient	58	49.0873	9.43117	1.23837	
CF t score	Inpatient	42	51.6458	10.80700	1.66756	.208
	Outpatient	58	49.0651	9.46606	1.24295	

Question 12 – What is your title?

Participants were asked to record their nursing titles. Anomalies in the total number may indicate nurses who recorded more than one title. The majority (*n*=68) were registered nurses. There was statistical significance of *p*-values for clinical nurse educators who had the highest level of compassion satisfaction (*p*-.025) and compassion fatigue (*p*-.0006). Table 12 shows distribution of titles; Table 12a show scoring.

Table 12 -Nursing Title

Nursing Title	N* (%)
Nurse Manager [1]	8 (7.3)
Nurse Practitioner	0
Clinical Nurse Specialist	18 (16.6)
Clinical Nurse Educator	3 (2.7)
Nurse Coordinator	4 (3.7)
Specialty Clinical Nurse	8 (7.3)
Registered Nurse	68 (62.4)
Total	**109[2] (100)**

*Missing Data =9

[1] Clinical Nurse Manger, Clinical Charge Nurse, Associate Clinical Nurse Manager, Associate Charge Nurse

[2] Hold more than one title

Table 12a – Nursing title scores

		N	Mean	Std. Deviation	Std. Error	*p*-value
CS t score	NM[1]	8	53.5141	10.75780	3.80346	0.025
	CNS	18	55.5018	9.23258	2.17614	
	CNE	3	56.4957	13.47930	7.78228	
	SCN	8	43.4511	11.14912	3.94181	
	NCo[2]	4	47.9235	9.03758	4.51879	
	RN	64	48.6573	9.27216	1.15902	
	Total	105	50.0000	10.00000	.97590	
BO t score	NM[1]	8	44.2731	10.92400	3.86222	0.175
	CNS	18	47.8188	6.96983	1.64280	
	CNE	3	59.2314	13.96109	8.06044	
	SCN	8	54.2453	8.91941	3.15349	
	NCo[2]	4	51.7523	10.60060	5.30030	
	RN	64	50.2564	10.30538	1.28817	
	Total	105	50.0000	10.00000	.97590	
CFt score	NM[1]	8	38.6527	3.88926	1.37506	0.006
	CNS	18	49.3648	5.57667	1.31443	
	CNE	3	58.0557	16.90170	9.75820	
	SCN	8	45.9288	8.19288	2.89662	
	NCo[2]	4	51.3859	7.71751	3.85876	
	RN	64	51.6417	10.54148	1.31768	
	Total	105	50.0000	10.00000	.97590	

1 Nurse Manager,

2 Nurse Coordinator

Question 13 – Years of experience in cancer nursing

The majority of respondents (*n*=28) had five or less years of experience followed by 11-15 years (*n*=25). Three respondents had worked greater than 30 years. There were no statistical differences in *p*-value in years of nursing experience. Table 13 shows distribution of years of experience. Table 13a shows scoring.

Table 13 – Years of experience in cancer nursing

Years of experience in cancer nursing	**N* (%)**
0-5	28 (27)
6-10	19 (18.3)
11-15	25 (24)
16-20	10 (9.6)
21-30	17 (16.3)
>30	5 (4.8)
Total	**104 (100)**

*Missing Data = 14

Table 13a – Years of experience in cancer nursing scores

		N	Mean	Std. Deviation	Std. Error	*p*-value
CS t score	0-5	28	51.9168	10.59173	2.00165	
	6-10	19	49.2770	9.18681	2.10760	
	11-15	25	46.2687	9.77479	1.95496	
	16-20	10	52.6196	9.78728	3.09501	
	21-30	17	52.4617	10.28169	2.49367	
	>30	5	49.9361	6.44249	2.88117	
	Total	104	50.1382	9.94712	.97540	0.273
BO t score	0-5	28	48.7606	9.41167	1.77864	
	6-10	19	51.4636	11.04261	2.53335	
	11-15	25	52.9290	11.20384	2.24077	
	16-20	10	47.8631	8.41193	2.66009	
	21-30	17	47.2648	9.19392	2.22985	
	>30	5	50.0570	9.20473	4.11648	
	Total	104	49.9879	10.04766	.98525	0.465
CF t score	0-5	28	48.9822	10.47947	1.98043	
	6-10	19	53.6837	9.81160	2.25093	
	11-15	25	48.8393	10.35679	2.07136	
	16-20	10	48.4755	10.92095	3.45351	
	21-30	17	47.9619	8.55339	2.07450	
	>30	5	56.1154	7.67452	3.43215	
	Total	104	49.9342	10.02556	.98309	0.311

Question 14 – Hours worked (days)

The majority of respondents were part-time (*n*=54, 51.4%) compared with full-time respondents (*n*=50, 47.6%). Of those that worked part-time or casual, most worked 8-40 hours per week. Two respondents reported they worked 56-80 hours but did not indicate over what period these hours were worked. There was no statistical significance in *p*-value for those that worked fulltime, part-time or casual. Table 14 shows distribution of hours/days worked. Table 14a shows scoring.

Table 14 – Hours worked (days)

Hours Worked (days)	**N* (%)**
Fulltime	50 (47.6)
Part-Time	54 (51.4)
Casual	1 (1.0)
Total	**105 (100)**

*Missing Data = 13

Table 14a – Hours worked (days) scores

		n	Mean	Std. Deviation	Std. Error	*p*-value
CS t score	Fulltime	50	51.7698	10.92059	1.54440	
	Part-time	54	48.3376	8.95357	1.21843	
	Casual	1	51.2778			
	Total	105	50.0000	10.00000	.97590	0.216
BO t score	Fulltime	50	49.0997	11.09975	1.56974	
	Part-time	54	50.7735	8.98593	1.22283	
	Casual	1	53.2481			
	Total	105	50.0000	10.00000	.97590	0.663
CFt score	Fulltime	50	49.5669	10.64484	1.50541	
	Part-time	54	50.2743	9.50413	1.29335	
	Casual	1	56.8430			
	Total	105	50.0000	10.00000	.97590	0.743

Part Two - Whole group analysis

Analysis across the whole sample group is shown in the tables below

Compassion Satisfaction

Table 15 shows questions relating to compassion satisfaction. Figures 2-11 show the breakdown of participant values and percentages.

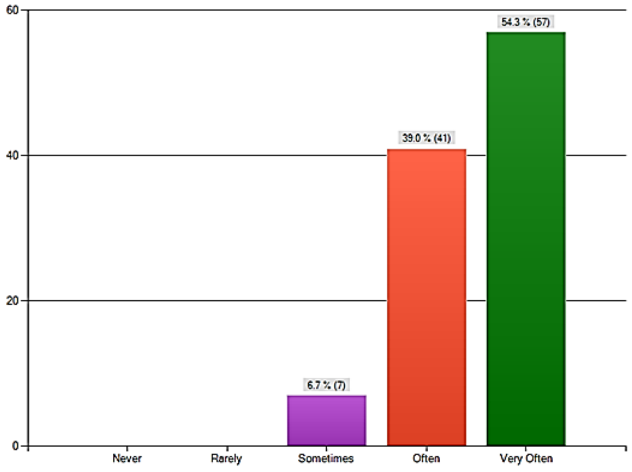
Table 15 - Compassion satisfaction questions

Question No.	**Compassion Satisfaction**	
	17	I get satisfaction from being able to help people
	20	I feel invigorated after working with those I care for
	26	I like my work as a cancer nurse
	30	I am pleased with how I am able to keep up with nursing techniques and protocols
	32	My work makes me feel satisfied
	34	I have happy thoughts and feelings about those I care for and how I could help them
	36	I believe I can make a difference through my work
	38	I am proud of what I can do to help cancer patients
	41	I have thoughts that I am a 'success' as a cancer nurse
	44	I am happy that I chose to do this work

Q17 - I get satisfaction from being able to help people

Participants were satisfied they were able to help people very often (*n*=57, 54.3%), often (*n*=41, 39%), and sometimes (*n*=7, 6.7%). Figure 2 shows breakdown of values and percentages.

Figure 2 – I get satisfaction from being able to help people

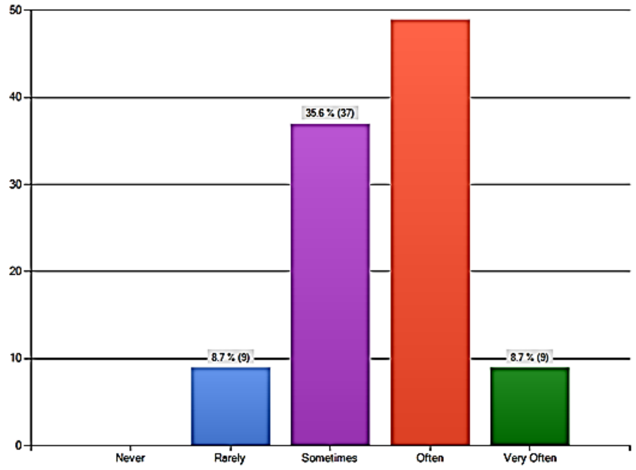


SurveyMonkey.com

Q20 - I feel invigorated after working with those I care for

Participants felt invigorated after working with those they cared for often (*n*=49, 47.2%), very often (*n*=9, 8.7%) and sometimes (*n*=37, 35.6%). A smaller group rarely felt invigorated, (*n*=9, 8.7%). Figure 3 shows breakdown of values and percentages.

Figure 3– I feel invigorated after working with those I care for

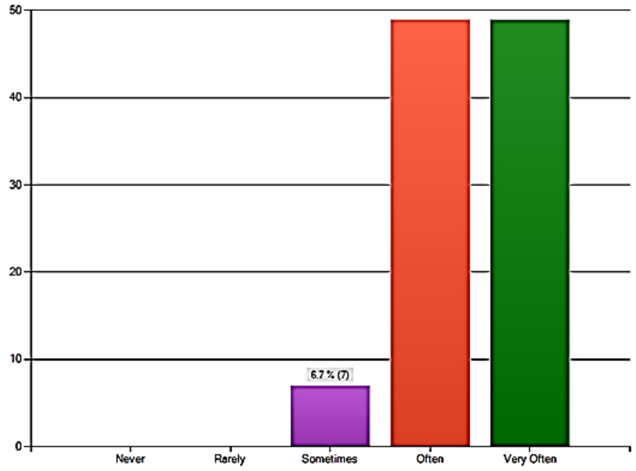


SurveyMonkey.com

Q26 - I like my work as a cancer nurse

Participants liked their work as a cancer nurse often (*n*=49, 46.7%) and very often (*n*=49, (46.7%). A smaller group said they sometimes liked their work as a cancer nurse (*n*=7, 6.7%). Figure 4 shows values and percentages.

Figure 4 – I like my work as a cancer nurse

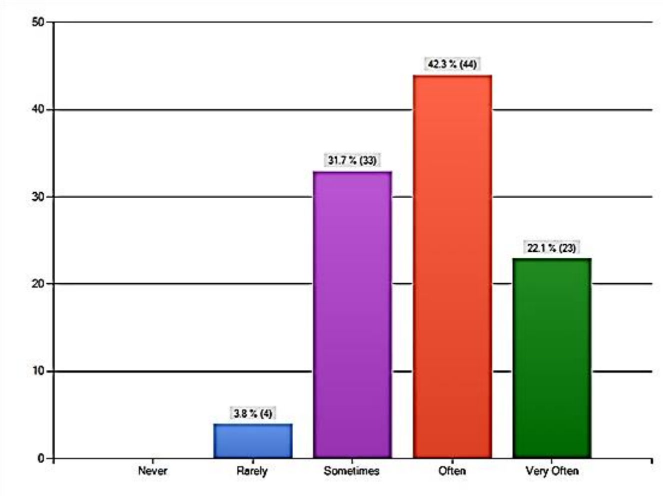


SurveyMonkey.com

Q30 - I am pleased with how I am able to keep up with nursing techniques and protocols

Participants felt pleased they were able to keep up with nursing techniques and protocols often (*n*=44, 42.3%), very often (*n*=23, 22.1%) or sometimes (*n*=33, 31.73%). A few participants stated they were rarely able to keep up (*n*=4, 3.8%). Figure 5 shows values and percentages.

Figure 5 – I am pleased with how I am able to keep up with nursing techniques and protocols

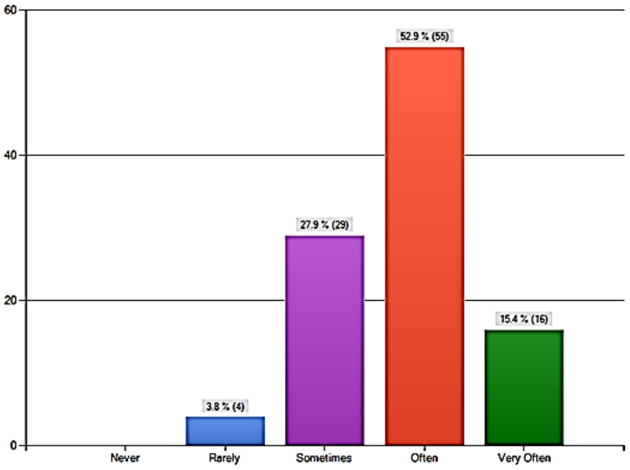


SurveyMonkey.com

Q32 - My work makes me feel satisfied

Participants were satisfied with their work often (*n*=55, 52.9%), very often (*n=16*, 15.4%), and sometimes (*n*=4, 27.9%). A small number were rarely satisfied with their work (*n=4*, 3.8%). Figure 6 shows values and percentages.

Figure 6 – My work makes me feel satisfied

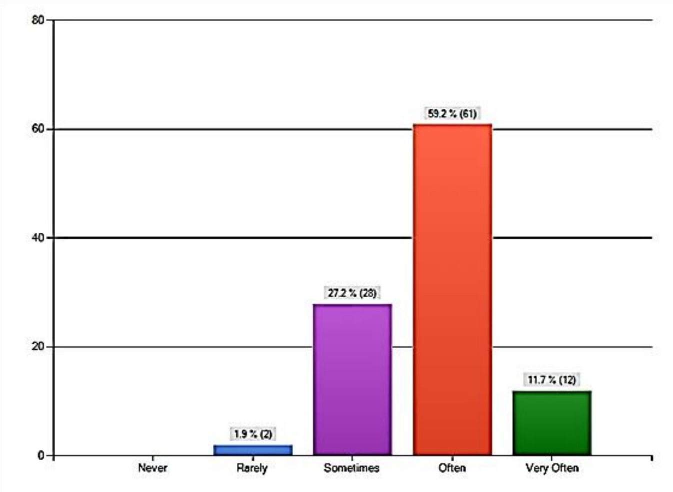


SurveyMonkey.com

Q34 - I have happy thoughts and feelings about those I care for and how I could help them

Participants had happy thoughts and feelings about those they cared for often (*n*=61, 59.2%), very often (*n*=12, 11.7%), and sometimes (*n*=29, 27.2%). Two participants said they rarely had happy thoughts or feelings (*n*=2, 1.9%). Figure 7 shows values and percentages.

Figure 7 – I have happy thoughts and feelings about those I care for and how I could help them

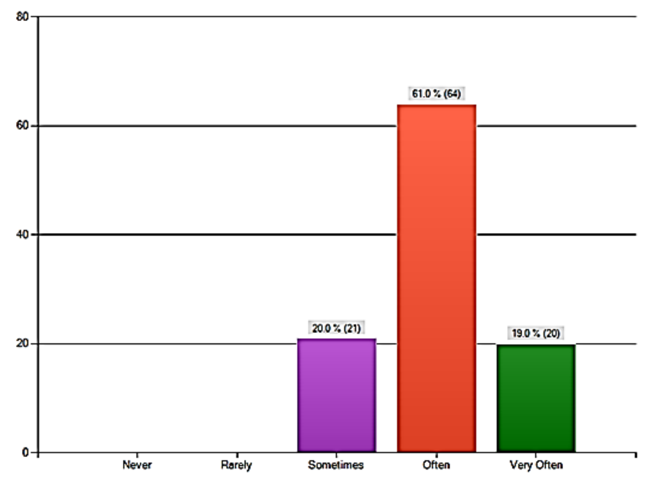


SurveyMonkey.com

Q36 - I believe I can make a difference through my work

Participants felt they could made a difference through their work often (*n*=64, 61%), very often (*n*=20, 19%), and sometimes (*n*=21, 20%). Figure 8 shows values and percentages.

Figure 8 – I believe I can make a difference through my work

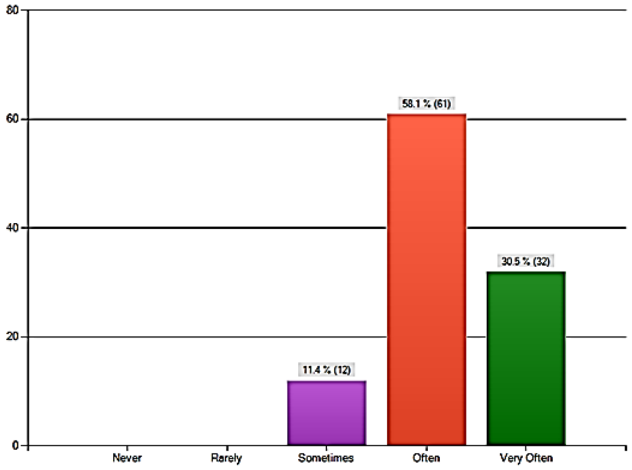


SurveyMonkey.com

Q38 - I am proud of what I can do to help cancer patients

Participants were proud of being able to help cancer patients often (*n*=61, 58.1%), very often (*n*=32, 30.5%), and sometimes (*n*=12, 11.4%). Figure 9 shows values and percentages.

Figure 9 – I am proud of what I can do to help cancer patients

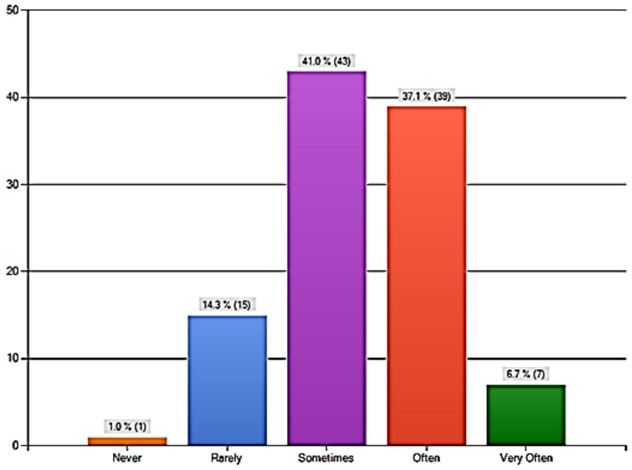


SurveyMonkey.com

Q41 - I have thoughts that I am a ‘success’ as a cancer nurse

Most participants felt there were a success as a cancer nurse sometimes (*n*=43, 41%), often (*n*=39, 37.1%) and very often (*n*=7, 6.7%). Some participants felt they were a rarely a success as a cancer nurse (*n*=15, 14.3%), and one participant did not feel they were a success (*n*=1, 1%). Figure 10 shows values and percentages.

Figure 10 – I have thoughts that I am a ‘success’ as a cancer nurse

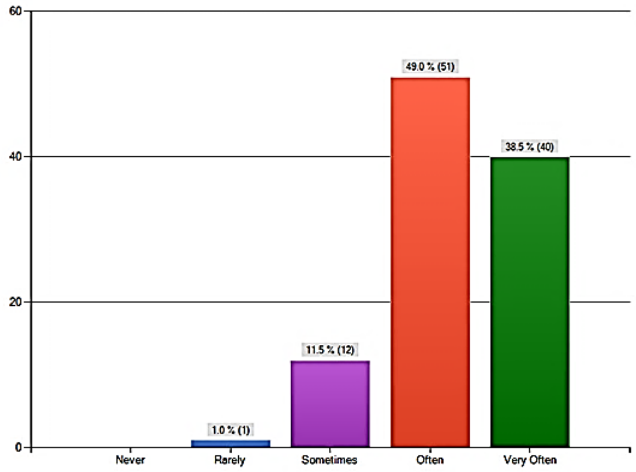


SurveyMonkey.com

Q44 - I am happy that I chose to do this work

Participants were happy that they chose to do cancer work often (*n*=51, 49%), very often (*n*=40, 38.5%), and sometimes (*n*=12, 11.5%). One participant was rarely happy in their choice of work (*n*=1, 1%). Figure 11 shows values and percentages.

Figure 11 – I am happy that I chose to do this work



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Compassion Fatigue questions

Compassion fatigue and burnout are separate constructs. Compassion fatigue measures fear and work-related trauma as a result of exposure to traumatic events (Stamm, 2010). Table 16 shows questions relating to compassion fatigue. Figures 12-21 show the questions relating to compassion fatigue.

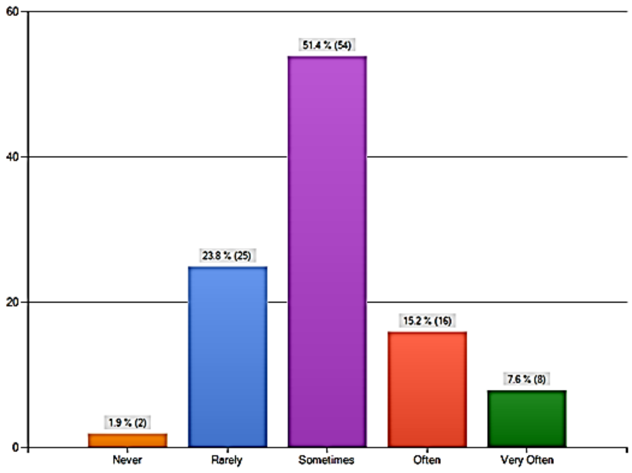
Table 16 – Compassion fatigue questions

Question No	Compassion Fatigue			
16	I am preoccupied with more than one person I care for	27	I feel depressed because of the traumatic experiences of the people I care for
19	I jump or am startled by unexpected sounds	28	I feel as though I am experiencing the trauma of someone that I have helped
21	I find it difficult to separate my personal life from my life as a cancer nurse	37	I avoid certain activities or situations because of people I care for
23	I think that I might have been affected by the traumatic experiences of those that I care for	39	As a result of my helping, I have intrusive frightening thoughts
25	Because of my caring, I have felt on edge about various things	42	I can't recall important parts of my work with cancer patients

Q16 - I am preoccupied with more than one patient I care for

The majority of participants felt preoccupied with more than one patient sometimes (*n*54, 51.4%), often (*n*=16, 15.2%) and very often (*n*=8, 7.6%). Some participants felt they were rarely (*n*=25, 23.8%) or never preoccupied (*n*=2, 1.9%). Figure 12 shows values and percentages.

Figure 12 – I am preoccupied with more than one patient I care for



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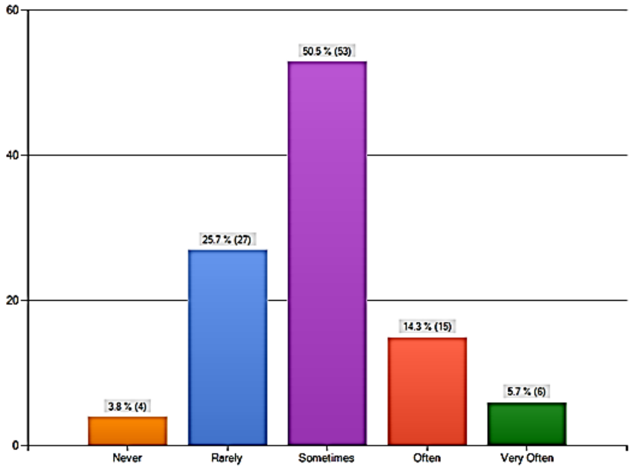
Q19 - I jump or am startled by unexpected sounds

The majority of participants said they were startled by unexpected sounds sometimes (*n*=53, 50.5%), often (*n*=15, 14.3%) and very often (*n*=7, 5.76%). Some nurses said they were rarely (*n*=27, 25.7%) or never startled (*n*=4, 3.8%). Figure 13 shows values and percentages.

Figure 13 – I jump or am startled by unexpected sounds



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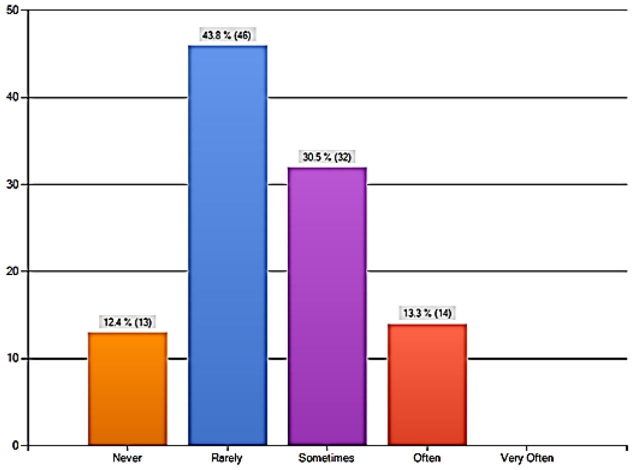
Q21 - I find it difficult to separate my personal life from my life as a cancer nurse

The majority of nurses rarely (*n*=46, 43.8%) or never had difficulty (*n*=13, 12.4%). Some participants had difficulty separating their personal life from their life as a cancer nurse often (*n*=14, 13.3%), and sometimes (*n*=32, 30.5%). Figure 14 values and percentages.

Figure 14 – I find it difficult to separate my personal life from my life as a cancer nurse



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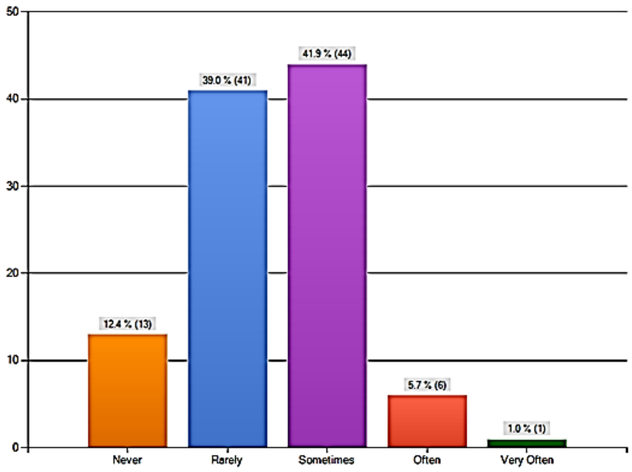
Q23. I think I might have been affected by the traumatic stress of those I care for

Participants felt affected by traumatic stress sometimes (*n*=44, 41.9%), often (*n*=6, 5.7%), or very often (*n*=1, 1%). Another group rarely (*n*=41, 39%) or never felt affected (*n*=13, 12.4%). Figure 15 shows values and percentages.

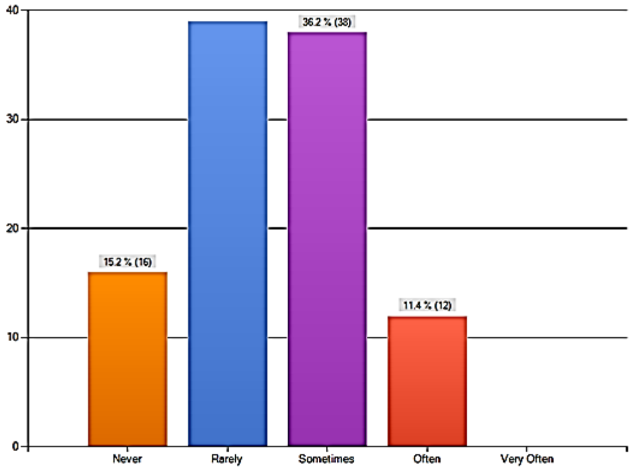
Figure 15 – I think I might have been affected by the traumatic stress of those I care for



Q25 - Because of my caring I have felt on edge about various things

The results for this question were closely divided between participants who rarely (*n*=39, 37.1%) or never (*n*=16, 15.2%) felt on edge, and those who felt on edge sometimes (*n*=38, 36.2%) or often (*n*=12, 11.4%). Figure 16 shows values and percentages.

Figure 16 – Because of my caring I have felt on edge about various things



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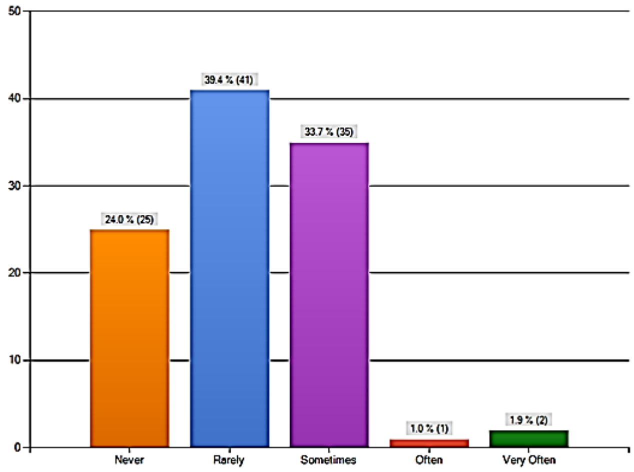
Q27. I feel depressed because of the traumatic experiences of the people I care for

Participants rarely (*n*=41, 39.4%) or never (*n*=25, 24%) felt depressed. However, a further third sometimes (*n*=35, 33.7%) felt depressed. Two participants (*n*=2, 1.92%) stated they were very often depressed and one participant was often depressed (*n*=1, 0.9%). Figure 17 shows values and percentages.

Figure 17 – I feel depressed because of the traumatic experiences of the people I care for



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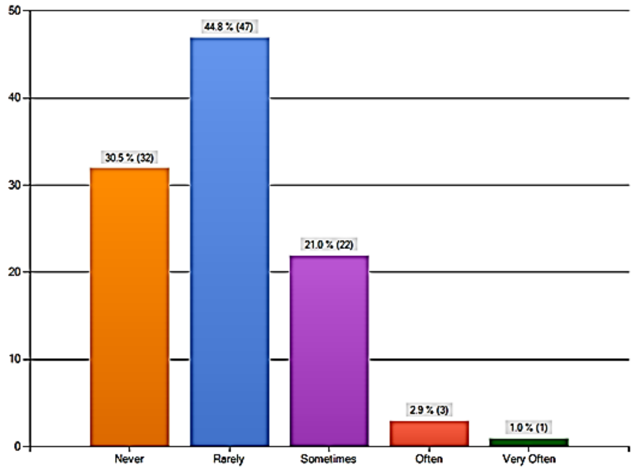
Q28 - I feel as though I am experiencing the trauma of someone I have helped

Participants rarely (*n*=47, 44.8%) or never (*n*=32, 30.5%) felt they were experiencing trauma as a result of helping someone. Several participants felt they experienced trauma sometimes (*n*=22, 21%), often (*n*=3, 2.9%) or very often (*n*=1, 1%). Figure 18 shows values and percentages.

Figure 18 – I feel as though I am experiencing the trauma of someone I have helped



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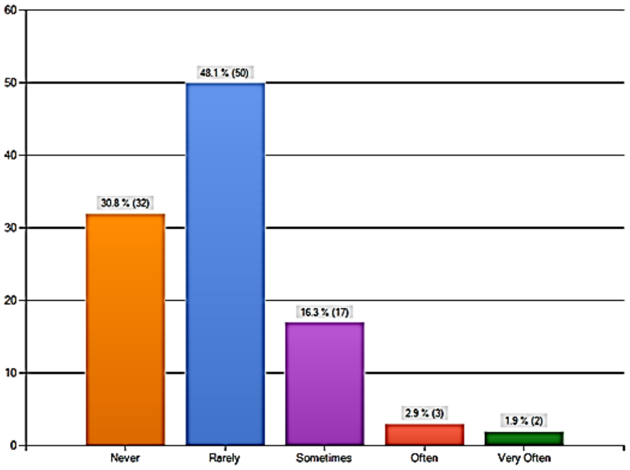
Q37 - I avoid certain activities or situations because they remind me of stressful experiences of the people I care for

The majority of participants rarely (*n*=50, 48.1%) or never (*n*=32, 30.8%) avoided activities or situations. Some participants avoided activities or situations sometimes (*n*=17, 16.3%), often (*n*=3, 2.9%) or very often (*n*=2, 1.9%). Figure 19 shows values and percentages.

Figure 19 – I avoid certain activities or situations because they remind me of stressful experiences of the people I care for



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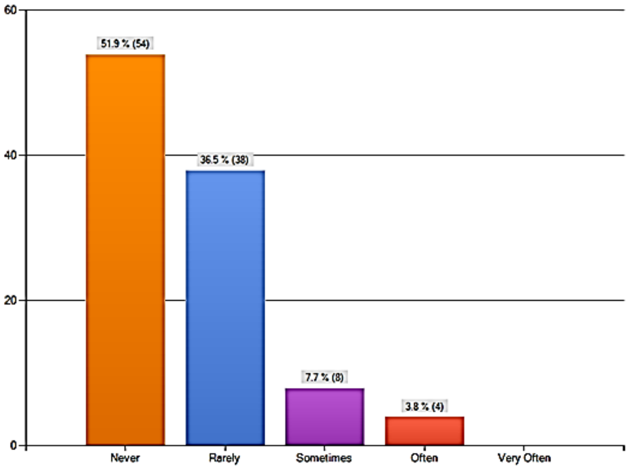
Q39 - As a result of my helping, I have intrusive, frightening thoughts

Most participants never (*n*=54, 51.9%) or rarely (*n*=38, 36.5%) had intrusive frightening thoughts. Others felt they sometimes (*n*=8, 7.7%) or often (*n*=4, 3.8%) had intrusive, frightening thoughts. Figure 20 shows values and percentages.

Figure 20 – As a result of my helping, I have intrusive frightening thoughts



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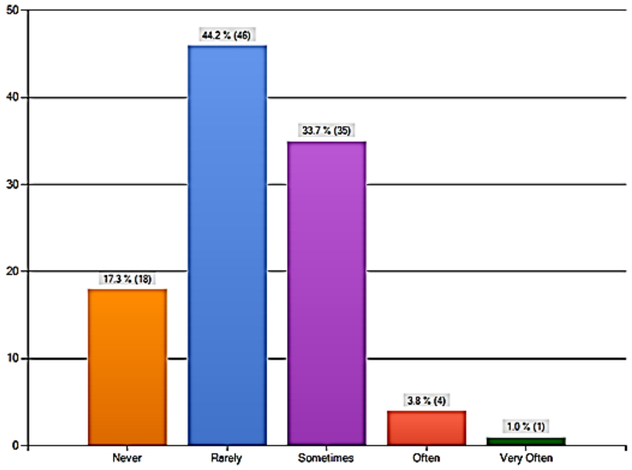
Q42 - I can’t recall important parts of my work with cancer patients

The majority of participants either rarely (*n*=46, 44.2%) or never (*n*=18, 17.3%) had difficulty recalling important parts of their cancer work. Just over a third sometimes (*n*=35, 33.7%), often (*n*=4, 3.8%) and very often (*n*=1, 1%) did have difficulty recalling important parts of their work. Figure 21 shows values and percentages.

Figure 21 – I can’t recall important parts of my work with cancer patients



SurveyMonkey.com

Burnout questions

Burnout is associated with frustration, depression, anger and exhaustion and relates to how someone feels about their work environment or organisation where they are employed (Stamm, 2010). Table 17 shows questions relating to burnout. Figures 22-31 show analysis of questions relating to burnout.

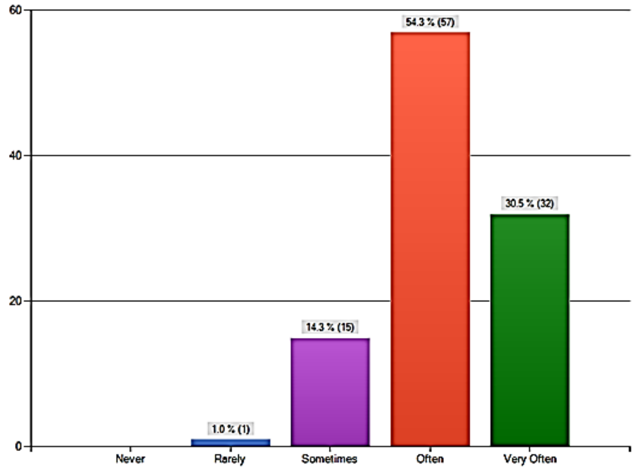
Table 17 – Burnout questions

Question No.	Burnout			
	15	I am happy	31	I am the person I have always wanted to be
	18	I feel connected to others	33	I feel worn out because of my work as a cancer nurse
	22	I am not as productive at work because I am losing sleep over traumatic experiences of those I care for	35	I feel overwhelmed because my case load seems endless
	24	I feel trapped by my job as a cancer nurse	40	I feel 'bogged down' by the system
	29	I have beliefs that sustain me	43	I am a very caring person

Q15 - I am happy

Participants were happy often (*n*=57, 54.3%), and very often (*n*=32, 30.5%). Nearly fifteen per cent (*n*=15, 14.3%) sometimes were happy. One person (*n*=1, 1%) felt they were rarely happy. Figure 22 shows values and percentages.

Figure 22 – I am happy



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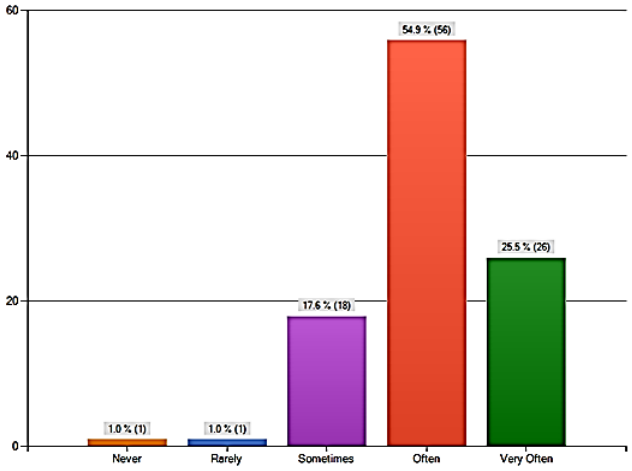
Q18 - I feel connected to others

Participants felt they were connected to others often (*n*=56, 54.9%) and a quarter felt they were very often connected (*n*=26, 25.5%). Others felt they were connected to others sometimes (*n*=18, 17.6%). Two participants rarely (*n*=1, 1%) or never (*n*=1, 1%) felt connected. Figure 23 shows values and percentages.

Figure 23 – I feel connected to others



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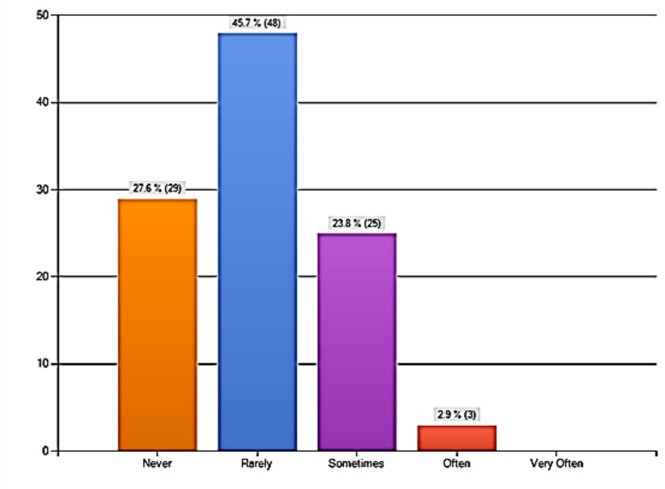
Q22 - I am not as productive at work because I am losing sleep over traumatic experiences of the cancer patients I care for

Participants rarely (*n*=48, 45.7%) or never (*n*=29, 27.6%) lost sleep or had problems with work productivity because of traumatic patient experiences. A quarter of participants recorded they sometimes (*n*=25, 23.8%), or often (*n*=3, 2.9%) had difficulty with work productivity because of traumatic experiences. Figure 24 shows values and percentages.

Figure 24 - I am not as productive at work because I am losing sleep over traumatic experiences of the cancer patients I care for



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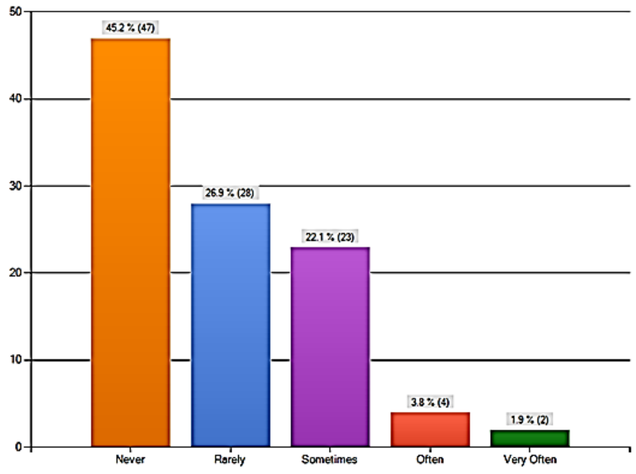
Q24 - I feel trapped by my job as a cancer nurse

The majority of participants never (*n*=47, 45.2%) or rarely (*n*=28, 26.9%) felt trapped by their job as cancer nurses. Others sometimes (*n*=23, 22.1%), often (*n*=4, 3.8%) and very often (*n*=2, 1.9%) felt trapped. Figure 25 shows values and percentages.

Figure 25 – I feel trapped by my job as a cancer nurse



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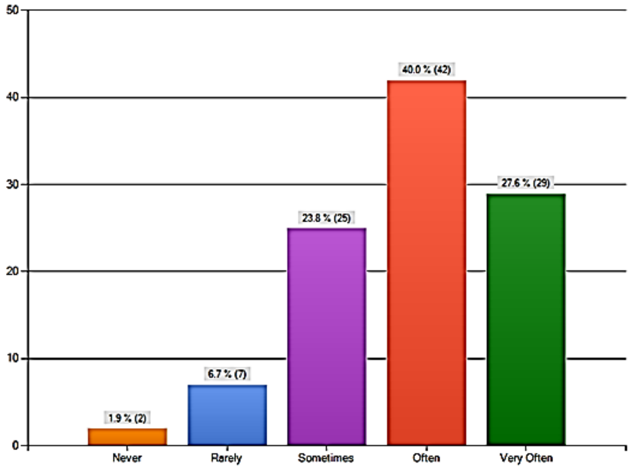
Q29 - I have beliefs that sustain me

Participants stated they had beliefs that sustained them often (*n*=42, 40%); very often (*n*=29, 27.6%) and sometimes (*n*=25, 23.8%). Some participants said they rarely had beliefs (*n*=7, 6.7%), and two participants (*n*=2, 1.9%) stated they never had beliefs. Figure 26 shows values and percentages.

Figure 26 – I have beliefs that sustain me



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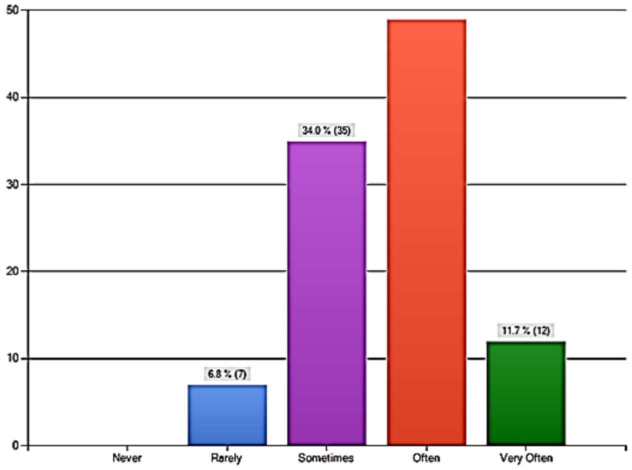
Q31 - I am the person I have always wanted to be

Most participants felt they were the person they always wanted to be often (*n*=49, 47.6%), very often (*n*=12, 11.7%), and sometimes (*n*=35, 34%). A small number of participants stated they rarely (*n*=7, 6.8%) felt this way. Figure 27 shows values and percentages.

Figure 27- I am the person I have always wanted to be



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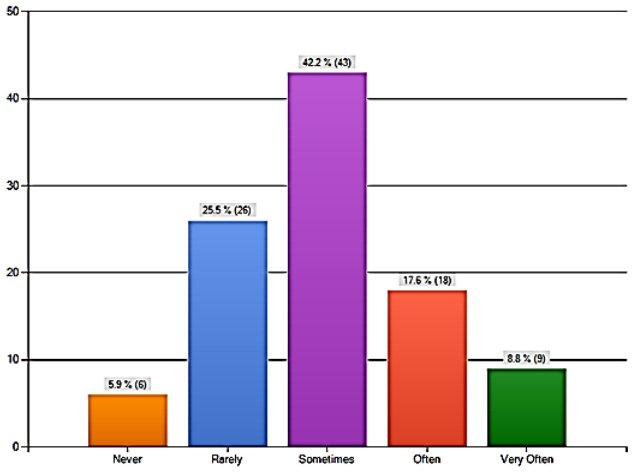
Q33 - I feel worn out because of my work as a cancer nurse

Participants felt worn out because of their work as a cancer nurse sometimes (*n*=43, 42.2%), often (*n*=18, 17.6%) or very often (*n*=9, 8.8%). Some participants rarely (*n*=26, 25.5%) or never (*n*=6, 5.9%) felt worn out by their work as cancer nurses. Figure 28 shows values and percentages.

Figure 28 – I feel worn out because of my work as a cancer nurse



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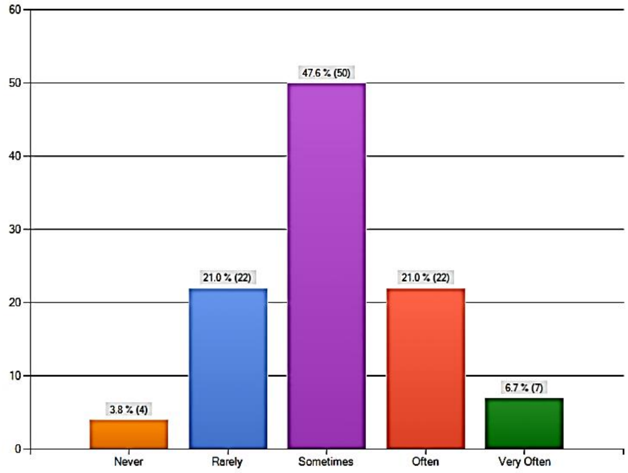
Q35 - I feel overwhelmed because my case load seems endless

Most participants sometimes (*n*=50, 47.6%), often (*n*=22, 21%) and very often (*n*=7, 6.7%) felt overwhelmed because of their case loads. Nearly twenty four per cent of participants rarely (*n*=22, 21%) or never (*n*=4, 3.8% felt overwhelmed. Figure 29 shows values and percentages.

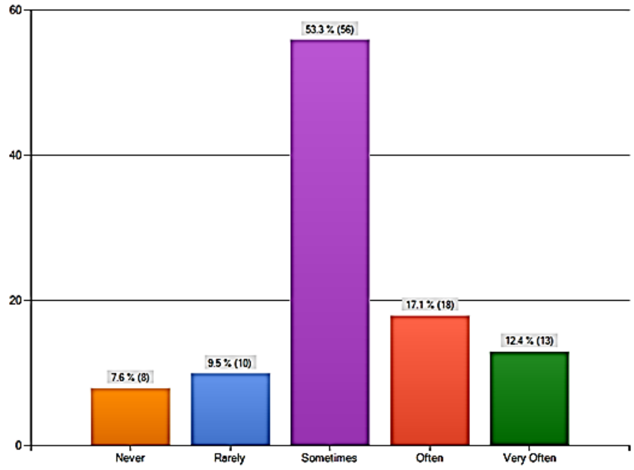
Figure 29 – I feel overwhelmed because my case load seems endless



Q40 - I feel bogged down by the system

The majority of participants felt bogged down by the system sometimes (*n* =56, 53.3%), often (*n*=18, 17.1%), and very often (*n*=13, 12.4%). Ten participants rarely (*n*=10, 9.5%) and eight participants never (*n*=8, 7.6%) felt bogged down. Figure 30 shows values and percentages.

Figure 30 – I feel bogged down by the system



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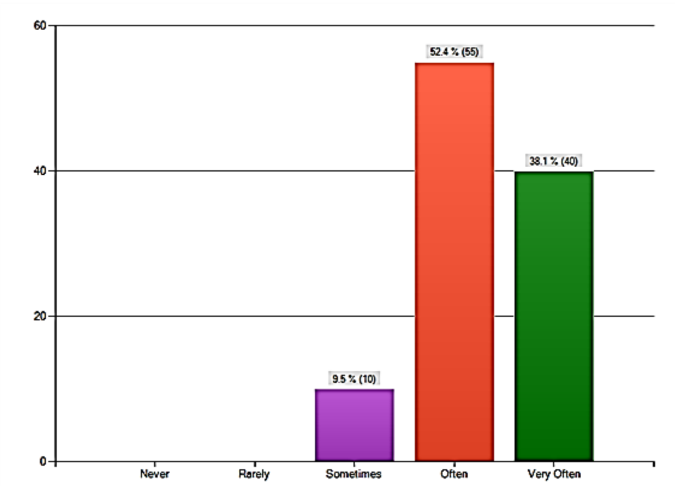
Q43 - I am a very caring person

The majority of participants felt they were a very caring person often (*n*=55, 52.4%) very often (*n*=40, 38.1%) and sometimes (*n*=10, 9.5%). Figure 31 shows values and percentages.

Figure 31 – I am a very caring person



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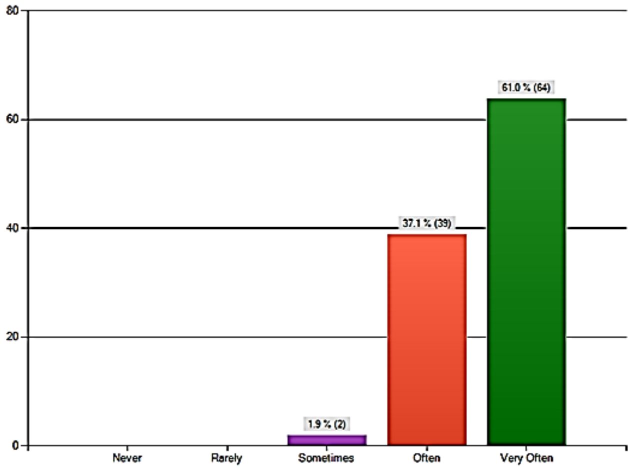
Additional questions

The final part of the survey contained an additional eight questions. Participants were asked to consider the New Zealand Nursing Council definition of culture when caring for patients; if they incorporated the Treaty of Waitangi principles when caring for Māori and their whānau; whether participants felt supported by their colleagues; had access either during or following their cancer training on the stressors of caring for cancer patients; whether they felt their organisation understood and supported their role as cancer nurses. Finally, participants were asked how comfortable they were about confidentiality if considering counselling and if they would be more likely to access this in a regional centre as opposed to a peripheral centre. Figures 32-39 show values and percentages.

Q45 - Culture

Participants were asked to consider the New Zealand Nursing Council definition of culture which includes age, generation, gender, sexual orientation, occupation, socioeconomic status, ethnic origin, migrant experience, religious or spiritual belief and disability and whether they were able to care for patients without it conflicting with their personal belief system. Participants felt they were able to care for patients without it conflicting with their personal belief system very often (*n*=64, 61%), and often (*n*=39, 37.1%). Two participants indicated they only sometimes did not feel conflicted (*n*=2, 1.9%). Figure 32 shows values and percentages.

Figure 32 - The New Zealand Nursing Council defines culture to include age, generation, gender, sexual orientation, occupation, socio-economic status, ethnic origin, migrant experience, religious or spiritual belief and disability. Thinking about this statement, please answer the following. I am able to care for patients from all walks of life without it conflicting with my personal belief system



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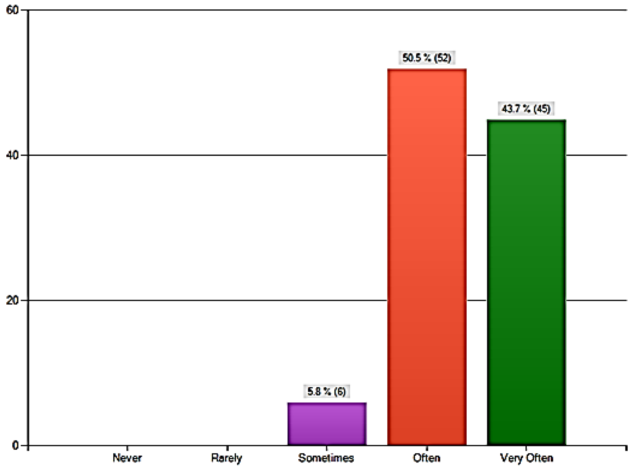
Q46 - Treaty of Waitangi

Participants were asked if they understood and incorporated the Treaty of Waitangi when caring for patients and their whānau. The majority of participants often (*n*=52, 50.5%) and very often (*n*=45, 43.7%) incorporated the Treaty of Waitangi when caring for Māori. Six participants (*n*=6, 5.8%) sometimes incorporated the Treaty of Waitangi. Figure 33 shows values and percentages.

Figure 33 – I understand and incorporate the Treaty of Waitangi when caring for Māori patients and their whānau

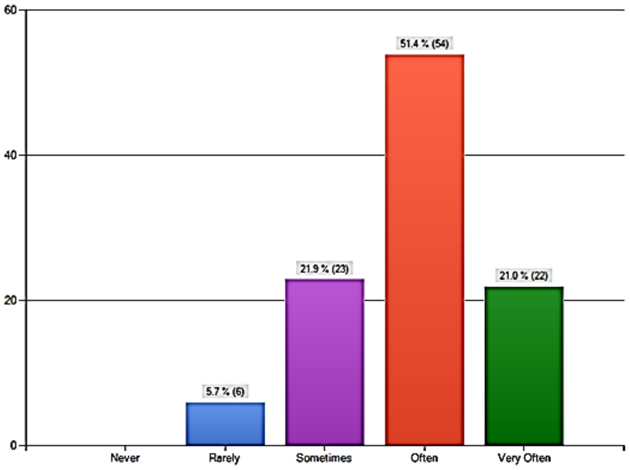


SurveyMonkey.com

Q47. Support of colleagues

Most participants felt they were supported by their colleagues often (*n*=54, 51.4%) often; and very often (*n*=22, 21%). Some participants felt they were supported only sometimes (*n*=23, 21.9%) and six participants reported they never felt supported (*n*=6, 5.7%). Figure 34 shows values and percentages.

Figure 34 - I feel supported by my colleagues



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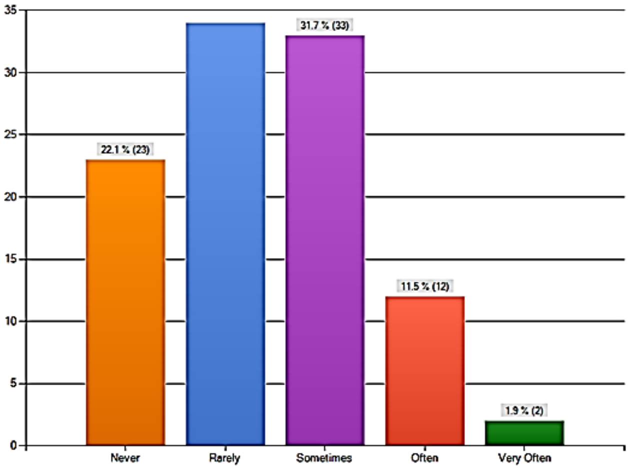
Q48. - During my cancer training, I received education on how to recognise and manage stress when caring for cancer patients

Most participants were never (*n*=23, 22.1%) or rarely (*n*=34, 32.7%) given education during cancer training on the stressors of caring for cancer patients. Some participants stated they sometimes (*n*=33, 31.7%) were given education, whilst a small group often (*n*=12, 11.5%) or very often (n=2, 1.9%) received education. In cross tabulation, those that worked in the public sector had rarely or no access to education (*p*-0.009). Although the findings showed that there is statistical significance between the public and private sector for this question, the sample size for the private sector (*n*=6) was too small to provide a robust result. The same conclusion is attributed to question 50 which asked participants if they were given the opportunity to attend education in the workplace. Figure 35 shows values and percentages.

Figure 35 - During my cancer training, I received education on how to recognise and manage stress when caring for cancer patients

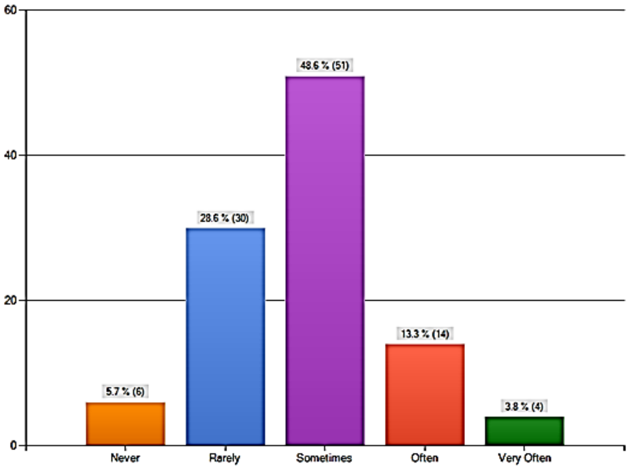


SurveyMonkey.com

Q49 - My organisation understands and supports the role and responsibilities of the cancer nurse

Participants stated their organisation understood and supported the role of the cancer nurse sometimes (*n*=51, 48.6%), often (*n*=14, 13.3%), and very often (*n*=4, 3.8%). Thirty four per cent of participants felt they rarely (*n*=30, 28.6%) or never (*n*=6, 5.7%) felt their role was understood or supported. Figure 36 shows values and percentages.

Figure 36 – My organisation understands and supports the role and responsibilities of the cancer nurse

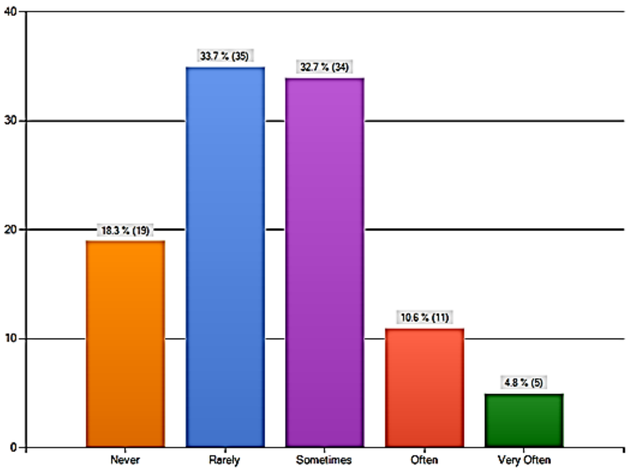


SurveyMonkey.com

Q50 - I am given the opportunity to attend education sessions and updates on managing stress in the workplace

The majority of participants rarely (*n*=35, 33.7%) or never (*n*=19, 18.3%) had the opportunity to attend education or updates on managing stress in the workplace. A third of participants had opportunities sometimes (*n*=34, 32.7%). A small group often (*n*=11, 10.6%) and very often (*n*=5, 4.8%) had opportunities to attend education sessions or updates. As with question 48, there was statistical significance between those that worked in the public and private health sectors, but as the sample was small for the private sector, the findings could not obtain a robust result. Figure 37 shows values and percentages.

Figure 37 – I am given the opportunity to attend education sessions and updates on managing stress in the workplace

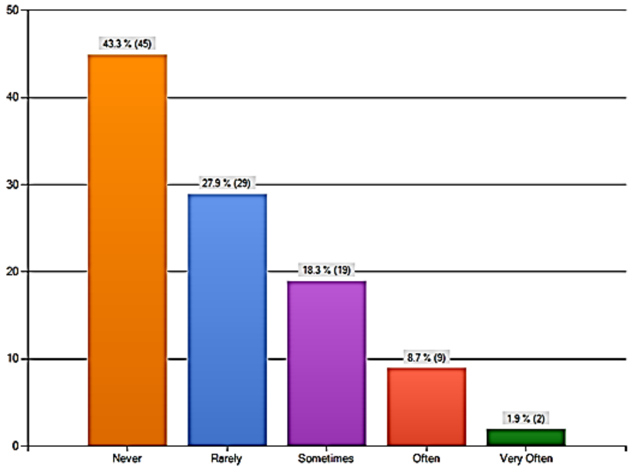


SurveyMonkey.com

Q51- I worry about confidentiality when considering counselling because of where I live/work

The majority of participants never (*n*=45, 43.3%) or rarely (*n*=29, 27.9%) worried about confidentiality when considering counselling because of where they worked. Twenty six per cent of participants sometimes (*n*=19, 18.3%) often (*n*=9, 8.7%) and very often (*n*=2, 1.9%) were worried about confidentiality when considering counselling. Figure 38 shows values and percentages.

Figure 38 – I worry about confidentiality when considering counselling because of where I live/work

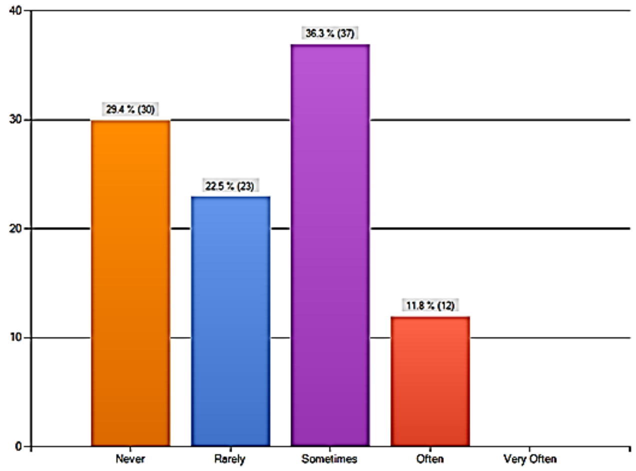


SurveyMonkey.com

Q52 - I am more likely to access confidential support in metropolitan (hub) regions

Participants were more likely to access confidential support in metropolitan hub regions sometimes (*n*=37, 36.3%), or often (*n*=12, 11.8%). Nearly 52% of participants said they would never (*n*=30, 29.4%) or rarely (*n*=23, 22.5%) access confidential support in metropolitan regions. Figure 39 shows values and percentages.

Figure 39 – I am more likely to access confidential support in metropolitan (hub) regions



SurveyMonkey.com

The table below shows the scoring for the three constructs of compassion satisfaction, burnout and compassion fatigue.

Table 18 - Compassion satisfaction, burnout and compassion fatigue

	CS	Burnout	CF
N	105	105	105
	0	0	0
Mean	35.333	23.543	23.381
Median	35.000	23.000	23.000
Std. Deviation	4.4021	4.8813	5.4232
Percentiles	32.000	20.000	19.500
	38.500	27.000	27.000

Summary

This chapter presented the findings from the survey. Analysis shows that participants who are between the ages of 20-35 have a higher risk of compassion fatigue (*p*- 0.026) when compared with other age groups. Clinical nurse educators were found to have higher levels of compassion satisfaction (*p*-0.025) and compassion fatigue (*p*-0.006) compared with those in other nursing positions. In addition, participants who work in the public setting are more at risk of burnout *(p*-0.013) and compassion fatigue (*p*.0.008) than those working in the private setting.

This research found the majority of nurses had average levels of compassion satisfaction (*n*=88) with a small group (*n*=7) having high scores. Burnout scores showed a slightly larger majority of average levels (*n*=54) compared with low levels (*n*=51). No one scored high on the burnout scale. Compassion fatigue scores were evenly scored with *n*=53 showing average risk and *n*=52 having low risk.

There was no statistical significance in relationship status, primary care givers, ethnicity, cancer specialty, clinical setting, years or experience and hours worked or between participants who worked in a regional or peripheral cancer centre. When analysis was applied to the whole survey sample, most nurses were happy, satisfied, felt they were a success as a cancer nurse and felt connected with others. Most also felt they made a difference and cared about their work as cancer nurse, had beliefs that sustained them in their work and did not feel trapped by their role as cancer nurses. Some participants felt preoccupied with more than one patient although most did not feel they had sleep issues connected with their work. Some participants did not feel supported by their colleagues or the organisation and the majority of participants felt overwhelmed by their case loads, worn out and bogged down by the system.

Most participants did not receive education during their training or were not given the opportunity to attend training once in the workplace on the stressors of caring for cancer patients. When cross-tabulation was performed between public and private participants with regards to question 48 and 50, statistical significance showed that those in the private sector may have had more access to education; however the sample size was too small to provide a robust result.

Twenty six per cent of participants were concerned about accessing confidential support because of where they worked or lived. Forty eight per cent of participants said they would be likely to access confidential support in metropolitan regions. When participants were asked to consider the New Zealand Nursing Council definition of culture and whether they were able to care for patients from all walks of life without it impacting on their personal belief systems most indicated they very often (61%), and often (37.1%) felt they were able to care for patients without conflict to their personal beliefs. Most participants either often (50.5%) or very often (43.7%) incorporated the Treaty of Waitangi principles when caring for patients and whānau.

The findings have shown that there are statistical significances of compassion fatigue for participants aged 20-25. Clinical nurse educators showed statistical significance for compassion fatigue and conversely for compassion satisfaction. Participants who worked in the public health sector had a greater risk of compassion fatigue and burnout compared with those in the private health sector. Lack of access to education either during training or in the workplace on the stressors of caring for cancer patients was higher in the public health sector than those in the private health sector however the numbers for the private sector were too small to provide a robust result. Most participants felt overwhelmed, worn out and bogged down by their workloads and the system.

The next chapter will discuss the findings in relation to the literature. Findings will be discussed in the context of international literature and comparisons will be made within the context of cancer nurses in other countries and settings.

CHAPTER FIVE

DISCUSSION

This chapter discusses the findings in relation to the New Zealand setting. Comparisons are made between New Zealand and international research. The study set out to examine the experiences of compassion fatigue for registered nurses whose primary role is caring for adult patients (20 years or older) and to describe the factors that may influence care, that is ethnicity religion/spirituality, workloads, education/training, age, area of work, clinical specialty and experience (years of cancer nursing). The study also sought to explore if there are factors that may increase or decrease the risk of compassion fatigue when working at peripheral (satellite) cancer treatment centres as opposed to those in regional metropolitan treatment centres.

Previous studies have shown that cancer nurses are especially vulnerable to compassion fatigue and burnout. Compassion is the very core of caring work and nurses are expected to provide compassionate care to patients and family/whānau and yet overseas experience shows us that this may not always be the case (Francis, 2013; Heffernan, et al., 2010). Cancer nurses have intense relationships with patients and families often over extended periods of time. External factors that contribute to compassion fatigue have been identified as increased workloads, complexities of treatments, the ethical dilemma of balancing medical orders with patient and family wishes and the psychological impact of caring (Alacacioglu, et al., 2009; Aycock & Boyle, 2009; Cohen, et al., 2010). This coupled with a perceived lack of colleague and organisational support is adding to the burden of a nurse’s caring work.

This research found the majority of nurses had average levels of compassion satisfaction (*n*=88) with a small group (*n*=7) having high scores. Burnout scores showed a slightly larger majority of average levels (*n*=54) compared with low levels (*n*=51). No nurse scored high on the burnout scale. Compassion fatigue scores were evenly scored with 50.4% (*n*=53) showing average risk and 49.5% (*n*=52) having low risk. The average *M* scores for compassion fatigue were surprising when compared with Stamm’s score of *M* 13.0 and this research which showed a score of *M* 23.38. Whilst the overall outcome scores of compassion satisfaction and burnout compared with overseas studies, the score for compassion fatigue in this research is nearly twice the score that Stamm records and other studies have reported. The scoring was stringently tested to ensure no error had been made and no reason could be found for this anomaly.

There were no significant differences of compassion fatigue, compassion satisfaction and burnout for those of different ethnicity, however, as the majority identified as New Zealand European (78%), no conclusions can be drawn from the analysis. Stamm (2010), reports that ethnicity has not been shown to be a factor in the risk of compassion fatigue or burnout. There were no statistical significances in this research for those that were the primary care giver for family members. This contrasts with the study by Ward-Griffin et al (2011) who found that those that cared for elderly family members were at a higher risk of compassion fatigue than those who did not. This current research only asked nurses to identify if they were the primary care giver for family members therefore no conclusions can be drawn from this current finding.

Nurses in this research who were married or in a relationship did not score higher levels of compassion fatigue compared with those who were divorced or single. The study by Alacacioglu, et al. (2009) found that married physicians were less likely to suffer from emotional exhaustion although no correlation could be found in their study between single and married nurses. Conversely, the study by Aycock and Boyle (2008) found that married nurses were seen to have less risk of compassion fatigue.

The study by Potter et al. (2010) found that while some of the stressors of caring for cancer patients may be different between settings; their findings did not support any significant difference in compassion fatigue or burnout between outpatient and inpatient settings. This current research also found no statistical significance between settings however, in this research some nurses indicated they worked between inpatient and outpatient settings, which may in part explain why there were no statistical differences found.

There was statistical significance of compassion fatigue and compassion satisfaction for clinical nurse educators. Stamm (2010) notes that the relationship between compassion satisfaction and compassion fatigue is unclear, but suggests there is a link between the two constructs. This can result in someone experiencing both compassion fatigue and compassion satisfaction at the same time (Bride, et al., 2007).

The hours a nurse worked did not show a higher risk of compassion fatigue between those that worked full time and part time although some nurses indicated they worked longer hours including overtime. This contrasts with the studies by Alacacioglu, et al. (2009), Cohen et al. (2010), and Yoder (2010), who found that the risk for burnout was higher in those that worked longer hours.

There were no variances between nurses working in a regional or peripheral cancer treatment centre. Similar studies were not found to compare with this finding, and further research could investigate this factor to see if there are any unique factors for nurses living in a particular region or peripheral area that may place them more at risk of compassion fatigue.

This study did show a statistical significance of compassion fatigue in the age bracket of 20-35, (*p*-value <0.026). According to Stamm (2010) age groups are not a factor in the development of compassion fatigue. However, this study does appear to confirm studies by Alacacioglu (2009) and Craig and Sprang (2010) who found that those in the younger age groups were more likely to experience compassion fatigue and burnout.

In this research nurses who work in the public health sector showed greater levels of compassion fatigue (*p*-0.008), and burnout (*p*-0.013). This compares with the studies by Koen et al. (2011) and Raftopoulos et al. 2012) that reported nurses working in a public health system are more at risk of burnout than those working in the private sector however the numbers are small for this study for those working in the private sector (*n*=8) compared with the public sector (*n*=96) and caution needs to be used when analysing the results.

Stressors caring for cancer patients

In this research nurses were asked if they received education either during training or once in the workplace on the stressors of caring for cancer patients. The findings showed that most nurses either rarely or never received education during their cancer training or given the opportunity to attend education once in the workplace. Lack of education regarding compassion fatigue, burnout and the stressors of caring for cancer patients featured strongly in the literature and was thought to contribute to compassion fatigue and burnout (Alacacioglu, et al., 2009; Sabo, 2011; Wenzel, et al., 2011).

Spirituality

Previous studies reported nurses were less likely to experience compassion fatigue or burnout if they belonged to a traditional religion, or practiced other forms of spirituality (Potter, et al., 2010; Yoder, 2010). One study purported that it was a nurse’s responsibility and duty of care to provide spiritual care to patients (Chan, 2010).

In this research the intent of the question was to ask nurses to define their spirituality in the context of believing in God, a Higher Power, the Universe, a traditional religion or life generally. Nurses were not asked if they believed it was their responsibility to provide spiritual care as this was not the intent of the question. Ninety three nurses reported widely and varying beliefs. Seven nurses had higher scores for compassion satisfaction. Of these, six nurses recorded Christianity, humanistic, life and mediumship as defining their spirituality; one nurse stated they did not have a belief in spirituality and one other identified themself as an atheist. Final conclusions cannot be drawn from this small sample, although it is interesting to note that of the seven who did have high levels of compassion satisfaction, two nurses either did not believe in the existence of God nor had a belief in spirituality at all.

Overall findings

When applied to the total study number (*n*=105), in general, the findings showed that cancer nurses are feeling "*overwhelmed", "bogged down"*, and *''worn out''*. Nearly 75% felt "*preoccupied with more than one patient they cared for".* Some found it difficult to separate their personal life from their life as a cancer nurse (44%), and were affected by the *traumatic stress of those they cared for* (48%). In addition some nurses felt *on edge* (47%) or *depressed* (33%).This compares with the studies of Yoder, (2008); Wenzel et al. (2010); Alacacioglu et al. (2009); Aycock & Boyle, (2009); Cohen et al. (2010) and Potter et al. (2010).

Although the results show that nurses may be experiencing average levels of compassion fatigue and burnout, overall the nurses indicated they felt happy (84%); liked their work as cancer nurses (93%); were happy that they chose to be cancer nurses (88%); felt proud of what they can do to help cancer patients (80%); felt that they were a success as a cancer nurse (84%); and were satisfied that they were able to help people (93%). Nurses on the whole felt supported by their colleagues (95%), however 34% felt that their organisation did not understand or support the role of the cancer nurse.

In order to do their work effectively, cancer nurses need to feel supported by their organisation (Boyle, 2011). In addition, education on managing the stressors of cancer nursing may contribute to nurses feeling more positively about their work and result in less risk of compassion fatigue and burnout. Nurses who are already feeling overwhelmed by environmental factors in the workplace, and are exposed to traumatic situations, such as a difficult death, or a family's demands, may leave the nurse exposed to the risk of compassion fatigue. Compassion fatigue and burnout can result in loss of reputation to an organisation if patient care is compromised due to staff being unable to cope with the pressures of work. As Huggard and Dixon (2011) note this in itself can put pressure on those that are covering for colleagues who are on sick leave. Compassion fatigue can impact on the nurse negatively and may result in that nurse leaving the profession. Nurses who experience compassion fatigue may become physically and emotionally unwell. Furthermore, loss of morale can lead to staff leaving the profession at a time when health institutions are experiencing an aging workforce and the risk of less skilled staff caring for cancer patients.

Nurses were asked if they were more likely to access confidential counselling in a metropolitan region. The intent of the question was to ascertain if nurses working in a peripheral, that is, a smaller DHB region were more comfortable in accessing counselling in a larger regional/metropolitan area because of concerns about confidentiality in their region. While the responses gave some insight into whether nurses worried about confidentiality and may have considered accessing support in metropolitan regions, in retrospect, the question could have been put more succinctly which may have provided a more definitive response that could have provided better interpretation of the answers.

Limitations

There are some limitations that may have impacted on the research findings. If a participant was experiencing negative feelings on the day they took the survey, this may have influenced their answers. Some nurses may not have been able to access the survey if they did not have access to the internet at their home or workplace and only those interested in the subject matter may have taken part. The link to the survey was open on the Cancer Nurses' Section website which any member of the public can access – this could have resulted in some taking the survey even though they were not cancer nurses. The link was included in an email sent to Cancer Nurses' Section members which may have been passed on to other nurses resulting in an unintentional 'snowball' effect. Anecdotal feedback would suggest that some non-Cancer Nurses' Section members responded to the survey, however as no ISP addresses or personal information was part of the survey, this cannot be verified.

Cancer nurses from other subgroups, for example, surgical, palliative care, were not included in the study therefore results are limited to the three specialities rather than to the 'whole' cancer nurse population. The NZNO does not keep statistics on the area of nursing where members of the Cancer Nurses Section work; therefore it is unknown how many nurses may have joined the Section because of an interest in cancer. There was an error in the age groups which was not discovered until the survey went 'live'' which related to the bracket of greater than 65 years of age. The symbol was placed < rather than >. This may have confused some nurses.

The overall return of 16.3% of total membership of the Cancer Nurses' Section does not reflect the whole membership therefore caution must be taken when interpreting the results. Other studies have found that a small sample size cannot be generalised to a whole population and further studies may elicit a wider and more robust analysis across the demographic range (Potter, et al., 2010).

This research was cross sectional therefore does not show if participants would have shown greater levels of compassion satisfaction, compassion fatigue or burnout if surveyed on more than one occasion which was also reflected in the study by Potter et al., (2010). Stamm (2010) suggests that monitoring over time may provide a clearer picture of how a participant may be feeling about their work and those they care for.

Implications of research

Although not part of this research, opportunities exist for further research to look at the availability and role of clinical supervision in cancer nursing and whether this may decrease the risk of compassion fatigue. Moral distress may be a factor in how a nurse copes with the intensity of their care for cancer patients and there is an opportunity for future studies to look at this in more detail amongst the cancer nurse population in New Zealand. Further research could also compare cancer nursing across multiple settings to also include surgical, paediatric and palliative care nurses which may find similar results. This research did not examine the reason why participants were feeling ‘worn out’ by their work as cancer nurses and whether this was due to lack of management support or workloads. There is an opportunity for future research to look at this in more detail.

Adding to the body of knowledge is important for nurses caring for cancer patients and for organisations that employ cancer nurses to ensure that they are provided with the tools to do their jobs effectively and to promote awareness of compassion fatigue and the risks to those who care for patients in very intimate and stressful situations. The importance of education and counselling has been reflected in the literature review. Nurse educators may wish to look at how information on compassion fatigue can be incorporated in cancer nursing training and opportunities provided for nurses to attend ongoing education once in the workplace. Nurses in this study have reported a lack of access to these opportunities which may assist health care organisations to reflect on what strategies could be put in place to assist cancer nurses who may be experiencing compassion fatigue, promote self-care and educate nurses to be aware of the signs and symptoms of compassion fatigue in themselves and others.

The availability of formal and informal debriefings after critical events may in part decrease the risk of compassion fatigue. In addition, support groups in the work place setting may contribute to a more positive work environment and assist those nurses who may feel isolated and overwhelmed by their work to access support from their colleagues.

The implications for nurses who find themselves emotionally unable to carry out their work can be devastating with nurses ultimately considering leaving the profession. This also has implications for the health sector that are already aware of an ageing workforce at a time when knowledge and skills in the area of cancer nursing are paramount.

CHAPTER SIX

CONCLUSION

This research set out to examine the experiences of compassion fatigue among cancer nurses working in the specialities of medical oncology, radiation oncology and haematology in inpatient and outpatient settings. There are a range of experiences that have been identified in this research that may contribute to a nurse having an increased risk of compassion fatigue including not having the opportunity to access education on managing stressors in the workplace and the potential for developing compassion fatigue through prolonged and intimate contact with patients and whānau over extended periods of time.

The question on Spirituality elicited some interesting responses and although the intent of the question was to define participant's spiritual beliefs, it did not ask whether a nurse's own spiritual beliefs may support them in their work. Research for this thesis showed that nurses who identify as being religious or spiritual may cope better with the demands of caring for patients (Bahrami, 2011; Chan, 2010; Chung, Wong, & Chan, 2007; Noble & Jones, 2010; Rykkje, Eriksson, & Råholm, 2011; Yoder 2010). Further research into this topic could be carried out to see if there are similar findings among cancer nurses in New Zealand.

Statistical significances in *p*-values for compassion fatigue and burnout were found for nurses who worked in the public sector compared with their private sector colleagues and for nurses between the ages of 20-35. Clinical Nurse Educators had a higher level of compassion satisfaction and compassion fatigue compared with other nursing titles. There was also statistical significance in *p*-values for compassion fatigue and burnout for those nurses who worked in the public health setting and who had less access to education on managing stressors for cancer patients, when compared with their private colleagues; however the sample size was too small to provide a rigorous result.

In general, the findings show that cancer nurses do not have the opportunity to access education to manage the stressors of caring for cancer patients and their whānau. Organisations in which cancer nurses are employed may find it useful to review what resources could be provided to cancer nurses in order for them to access assistance and support. Cancer nurses are not alone in experiencing compassion fatigue as the literature has shown that nurses in other specialties are also at risk, therefore, it may be of benefit for nurses to be offered education at study days, for example, it could be a component of the registered nurse mandatory study day programme or provided in another format such as an online education programme.

Overall the findings have shown that cancer nurses generally enjoy their work and are proud of what they are able to accomplish, however, as international research has shown, nurses caring for cancer patients are more likely to have an increased risk of compassion fatigue and burnout because of the very nature and intensity of the relationships they form with patients and family/whānau and stressors within the workplace environment.

In order to do their work effectively, cancer nurses need to be provided with education and the tools to manage the stressors of caring for cancer patients. Compassion fatigue can debilitate a nurse and workforce if the symptoms are not recognised early and appropriate supports not put in place to assist nurses to return to their full potential. Health organisations are in the best position to provide this support which could include the provision of in-services, and debriefing after critical events and clinical supervision.

Although the findings do show that some cancer nurses are more at risk of compassion fatigue and burnout, caution should be taken in interpreting the findings as being representative of the cancer nurse population in New Zealand as the sample size only represented 16% of the Cancer Nurses' Section.

Cancer nurses need also to be aware of their own emotional and psychological health, be able to recognise the signs and symptoms of compassion fatigue and to seek support if they perceive themselves to be experiencing symptoms of compassion fatigue. Cancer nurses as a group should be encouraged to look out for their colleagues who may be suffering emotionally because of their work with cancer patients and to assist them to seek support.

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Appendix 1

Letter from senior clinical development workforce manager

Treaty of Waitangi

WHAKAWATEATIA
HAWKE'S BAY
District Health Board

TŪRUKI
Māori Workforce Development Plan
www.tūruki.org.nz

24th May 2012

Moira Gillespie
Masters Student
C/- Villa 6
Hawkes Bay District Health Board
Hastings

Dear Moira

This is to confirm that we had a meeting to discuss your Master's research paper and the proposed survey of Compassion Fatigue among Cancer Nurses in New Zealand. I have reviewed the question as outlined below that you propose asking on the Treaty of Waitangi. This takes into account consideration of Maori in the survey.

Question:

I understand and incorporate the Treaty of Waitangi when caring for Maori patients and their whānau

Yours sincerely

Diane Wepa

Dianne Wepa
Senior Clinical Development Workforce Manager

Appendix 2

Eastern Institute of Technology Committee Ethics approval letter

E I T
EASTERN INSTITUTE OF TECHNOLOGY

Reference Number 26/12

30 July 2012

Moira Gillespie
Master of Nursing Student
C/- Faculty of Health Science
EIT Hawke's Bay

Dear Moira

Your research project *"What are the experiences of compassion fatigue for registered nurses caring for adult patients within oncology and haematology inpatient and outpatient settings in New Zealand* "refers.

Thank you for providing further information and responding to questions raised by the Reviewer's.

I am pleased to inform you that your research project was reviewed by the Research Ethics & Approvals Committee at their meeting held on 27 July 2012, and formally approved for two years.

You are reminded that should the proposal change in any significant way, then you must inform the Committee.

Please quote the above reference number on all correspondence to the Committee.

Please provide the Committee with a progress report after one year of the project and a brief summary at the conclusion.

The Committee wish you well for the project.

Yours sincerely

Jeanette Fifield
Secretary – Research Ethics & Approvals Committee

cc: Dr Elaine Papps

Eastern Institute of Technology
Hawke's Bay Campus 501 Gloucester Street, Taradale, Napier, New Zealand **P** 06 974 8000 **F** 06 974 8910 **E** info@eit.ac.nz **www.eit.ac.nz**
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Postal PO Box 640, Gisborne, 4010, New Zealand
Regional Learning Centres: Central Hawke's Bay, Flaxmere, Hastings, Maraenui, Napier, Ruatoria, Tokomaru Bay, Wairoa

Appendix 3

Cancer nurses survey

Cancer Nurses and Compassion Fatigue Survey

Compassion Fatigue and Cancer Nurses

My name is Moira Gillespie and I am a Master of Nursing Student at Eastern Institute of Technology, Napier New Zealand and a Cancer Nurse.
I am interested in Compassion Fatigue and its relation to New Zealand Cancer nurses.
I appreciate your time to complete the following survey. My contact details are given at the end of the survey should you wish to have more information on the study.
This survey has been approved by the Eastern Institute of Technology Research Ethics and Approvals Committee on 30th July 2012, Reference # 26/12

Cancer Nurses and Compassion Fatigue Survey

Compassion Fatigue and Cancer Nurses

Nurses are at the epicentre of caring for patients who suffer traumatic and adverse events. This is the case for Cancer nurses caring for patients who are enduring stressful and prolonged treatments sometimes over a period of years. Cancer nurses support patients on every step of their pathway from pre-diagnosis, diagnosis, treatment, surveillance and beyond for extended periods of time. Cancer treatments often have undesired effects, are ineffective in controlling or curing the cancer and can cause side effects for years following treatment. Cancer nurses form strong bonds with their patients and family/whānau. If a patient dies, the nurse may be unable to process their feelings and emotions and this can lead to symptoms of stress which can detrimentally affect the nurse, patients and colleagues, with the ultimate result of unattended grief leading to compassion fatigue, a phenomenon mainly associated with those in caring professions.

Cancer Nurses and Compassion Fatigue Survey

Participant Information

Description of the Survey:-

This is a confidential and anonymous national survey of New Zealand cancer nurses to gain an understanding of compassion fatigue and how it may affect you. The survey measures compassion fatigue, compassion satisfaction and burnout as well as seeking information on whether you are able to access education or counselling on the management of stress and how satisfied you are in your work.

What will participating in the research involve?

You are invited to participate in completing an online survey which will take approximately 15 minutes. You will answer questions about how you feel about your work as a cancer nurse.

What are the benefits and possible risks to you in participating in this research?

You will be contributing to knowledge about compassion fatigue and cancer nurses which may assist health care organisations to be aware of how compassion fatigue affects nurses and what may be required to support them. Some of the questions may make you feel uncomfortable. You can choose not to answer. If you feel that you may be experiencing symptoms of compassion fatigue and need professional advice,contact the Employee Assistance Programme on 0800 327 669 for free confidential advice. You may also wish to contact your medical practitioner or other counselling service as necessary.

You do not have to participate in this research if you do not wish to.

You can withdraw from the study during the time that you are answering the survey. If you do not want to continue, you can leave this website. When you click on the ‘done’ button at the end of the survey your answers will be submitted to the researcher.

Confidentiality:-

Your IP address is confidential and will not be recorded when you respond to the survey. Your workplace will not be identified in any publications or presentations. Only the researcher and supervisors will have access to the survey material. The results of the study will be available through the Eastern Institute of Technology.

Cancer Nurses and Compassion Fatigue Survey

Informed Consent

Eastern Institute of Technology
Informed Consent form for Online Survey

Project Title: Cancer Nurses Survey – Compassion Fatigue

I have read and I understand the Information for Research Participants as outlined in the survey information for volunteers taking part in this study. I understand that I can withdraw from this survey at any time by either leaving the website or by not completing/submitting the survey. I understand that should I do this, no record of my having accessed the website or identifying information will be recorded.

I understand that taking part in this study is voluntary (my choice) and that withdrawing from the survey will in no way affect my employment.

I understand that my participation in this study is confidential and that no material which could identify will be used in any reports on this study.

I have had time to consider whether to take part, and know who to contact if I have any questions about the study.

***1. I understand that by clicking the "Agree" button, I have consented to take part in this survey**

○ Agree

Cancer Nurses and Compassion Fatigue Survey

Compassion Fatigue Survey

2. What is your age?

○ <20
○ 20-25
○ 26-35
○ 36-45
○ 46-55
○ 56-65
○ <65

3. Gender

○ Male
○ Female
○ Transgender

4. Relationship Status

○ Married
○ In a Relationship
○ Divorced
○ Single

5. Are you the primary care-giver for your family/whānau, i.e., children, elderly relatives, or partner?

○ Yes
○ No
○ Not applicable

6. What is your Ethnicity?

○ New Zealand European
○ New Zealand Maori
○ English
○ Australian
○ Other European
○ Samoan
○ Cook Islands Maori
○ Tongan
○ Niuean
○ Tokelauan
○ Fijian
○ Other Pacific Peoples
○ Filipino
○ Chinese
○ Indian
○ Japanese
○ Korean
○ Cambodian
○ Other Asian
○ Middle Eastern
○ Latin American
○ African
○ Other

Other (please specify)

7. Spirituality is often associated with belonging to a specific religion or belief. It can also be about life, relationships to others, belief in God, a higher Power or the Universe. How would you define your spiritual beliefs?

8. In which District Health Board region do you live? (This information will not be identified in survey results or any publications, other than to identify a small or large District Health Board for the purposes of statistical analysis)

○ Northland
○ Waitemata
○ Auckland
○ Counties Manukau
○ Bay of Plenty
○ Waikato
○ Lakes
○ Tairawhiti
○ Hawkes Bay
○ Taranaki
○ Wanganui
○ MidCentral
○ Hutt
○ Capital and Coast
○ Wairarapa
○ Nelson/Marlborough
○ West Coast
○ Canterbury
○ South Canterbury
○ Southern

9. Please indicate your cancer nursing speciality

○ Medical Oncology
○ Radiation Oncology
○ Haematology

10. Please indicate the Health Sector in which you are primarily employed

○ Public Health Sector/District Health Board
○ Private Health Organisation, i.e., private hospital or clinic

11. Please indicate where you work (tick all that apply)

☐ Public Inpatient setting
☐ Private Inpatient setting
☐ Public Outpatient Chemotherapy Unit
☐ Private Outpatient Chemotherapy Unit
☐ Public Outpatient Clinic
☐ Private Outpatient Clinic

12. What is your Title? (tick all that apply)

☐ Nurse Manager (e.g., Clinical Nurse Manger, Clinical Charge Nurse, Associate Clinical Nurse Manager, Associate Charge Nurse)
☐ Nurse Practitioner
☐ Clinical Nurse Educator
☐ Clinical Nurse Specialist
☐ Nurse Coordinator
☐ Specialty Clinical Nurse
☐ Registered Nurse

13. Years of experience in cancer nursing

○ 0-5
○ 6-10
○ 11-15
○ 16-20
○ 21-30
○ >30

14. Hours worked (days)

○ Fulltime
○ Part-time
○ Casual
○ If part-time or casual, please indicate how many hours per week

Hours worked

☐

15. I am happy

○ Never

○ Rarely

○ Sometimes

○ Often

○ Very Often

16. I am preoccupied with more than one patient I care for

○ Never

○ Rarely

○ Sometimes

○ Often

○ Very Often

17. I get satisfaction from being able to help people

○ Never

○ Rarely

○ Sometimes

○ Often

○ Very Often

18. I feel connected to others

○ Never

○ Rarely

○ Sometimes

○ Often

○ Very Often

19. I jump or am startled by unexpected sounds

○ Never

○ Rarely

○ Sometimes

○ Often

○ Very Often

20. I feel invigorated after working with those I care for

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

21. I find it difficult to separate my personal life from my life as a cancer nurse

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

22. I am not as productive at work because I am losing sleep over traumatic experiences of the cancer patients I care for

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

23. I think that I might have been affected by the traumatic stress of those I care for

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

24. I feel trapped by my job as a cancer nurse

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

25. Because of my caring, I have felt 'on edge' about various things

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

26. I like my work as a cancer nurse

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

27. I feel depressed because of the traumatic experiences of the people I care for

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

28. I feel as though I am experiencing the trauma of someone I have helped

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

29. I have beliefs that sustain me

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

30. I am pleased with how I am able to keep up with nursing techniques and protocols

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

31. I am the person I have always wanted to be

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

32. My work makes me feel satisfied

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

33. I feel worn out because of my work as a cancer nurse

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

34. I have happy thoughts and feelings about those I care for and how I could help them

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

35. I feel overwhelmed because my case load seems endless

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

36. I believe I can make a difference through my work

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

37. I avoid certain activities or situations because they remind me of stressful experiences of the people I care for

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

38. I am proud of what I can do to help cancer patients

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

39. As a result of my helping, I have intrusive, frightening thoughts

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

40. I feel 'bogged down' by the system

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

41. I have thoughts that I am a 'success' as a cancer nurse

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

42. I can't recall important parts of my work with cancer patients

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

43. I am a very caring person

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

44. I am happy that I chose to do this work

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

45. The New Zealand Nursing Council defines culture to include ' age, generation, gender, sexual orientation, occupation, socioeconomic status, ethnic origin, migrant experience, religious or spiritual belief and disability'. Thinking about this statement, please answer the following.

I am able to care for patients from all walks of life without it conflicting with my personal belief system

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

46. I understand and incorporate the Treaty of Waitangi when caring for Maori patients and their Whanau

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

47. And finally, the last questions are about the organisation or region where you live and work.

I feel supported by my colleagues

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

48. During my cancer training, I received education on how to recognise and manage stress when caring for cancer patients

○ Never
○ Rarely
○ Sometimes
○ Often
○ Very Often

49. My organisation understands and supports the role and responsibilities of the cancer nurse

○ Never

○ Rarely

○ Sometimes

○ Often

○ Very Often

50. I am given the opportunity to attend education sessions and updates on managing stress in the workplace

○ Never

○ Rarely

○ Sometimes

○ Often

○ Very Often

51. I worry about confidentiality when considering counselling because of where I live/work

○ Never

○ Rarely

○ Sometimes

○ Often

○ Very Often

52. I am more likely to access confidential support in metropolitan (hub) regions

○ Never

○ Rarely

○ Sometimes

○ Often

○ Very Often

Cancer Nurses and Compassion Fatigue Survey

Contact Details

Thank you for taking part in this survey.
If you would like further information , please contact one of the following:

Moira Gillespie, Master of Nursing Student/Principal Researcher, Eastern Institute of Technology, Napier.
gillem1@student.eit.ac.nz

Dr Elaine Papps, Principal Supervisor, Eastern Institute of Technology, Napier
e.papps@eit.ac.nz

Alasdair Williamson, Associate Supervisor, Eastern Institute of Technology, Napier
AWilliamson@eit.ac.nz