

# Compassion Fatigue and Burnout: Prevalence Among Oncology Nurses

**Patricia Potter, RN, PhD, FAAN, Teresa Deshields, PhD,  
Joyce Divanbeigi, RN, MSN, Julie Berger, D.Min, BCC, Doreen Cipriano, BSN, OCN®,  
Lori Norris, RN, BSN, OCN®, and Sarah Olsen, RN, BSN**

This descriptive, cross-sectional survey was conducted in inpatient nursing units and outpatient clinics in a cancer center in the midwestern United States. The sample of 153 healthcare providers included RNs, medical assistants, and radiology technicians. The fourth revision of the 30-item Professional Quality of Life (ProQOL R-IV) scale was used for measuring compassion fatigue, compassion satisfaction, and burnout. A series of cross tab analyses examined the relationship between participant demographics and three ProQOL R-IV subscales. The study sample scored similarly on compassion satisfaction and burnout when compared with participants who used the ProQOL R-IV in previous studies. Value exists in analyzing the prevalence of burnout and compassion fatigue among oncology healthcare providers. Understanding the needs of distinct demographic groups offers valuable direction for intervention program development. Applying internal evidence in the design of a relevant stress-reduction program will better equip healthcare providers to recognize and manage compassion fatigue and burnout.

Hospitals throughout the United States struggle to deal with a diminishing RN workforce (Robert Wood Johnson Foundation, 2002). Considerable resources are spent in recruiting RNs, as well as other healthcare providers, and in developing sustainable programs for staff retention. The International Council of Nurses (ICN) released important information in 2006 regarding the global nursing shortage and solutions for it. The ICN (Oulton, 2006) identified six priority areas for action: policy intervention, macroeconomics and health sector funding, workforce planning and policy, retention and recruitment, nursing leadership, and positive practice environments. Recognizing the workplace demands and challenges faced by oncology nurses, more cancer centers are drawing attention to issues involving workplace stress (McVicar, 2003) and psychosocial factors such as burnout and compassion fatigue (McHolm, 2006; Sinclair & Hamill, 2007). Medland, Howard-Ruben, and Whitaker (2004) argued that fostering psychosocial wellness in the workplace is a crucial strategy for promoting oncology nurse retention and improving practice environments.

Caring for patients with cancer generates significant work-related stress that can result in employee dissatisfaction and mental exhaustion (Ferrans, 1990). The stress comes in part from burnout, the chronic psychological syndrome of perceived demands from work outweighing perceived resources in the work environment (Gentry & Baranowsky, 1998). Compassion fatigue,

## At a Glance

- ◆ Caring for patients with cancer can generate work-related stress, causing nurses to feel dissatisfied with their employers and mentally exhausted.
- ◆ Oncology staff working on inpatient units are most likely to have high-risk compassion satisfaction scores.
- ◆ Baccalaureate-prepared RNs had the highest percentage of high-risk scores for compassion fatigue, and graduate-prepared nurses are at the highest risk for burnout.

the traumatization of helpers through their efforts at helping others, is a relational source of stress that also weighs heavily on oncology nurses. A growing body of research suggests that

Patricia Potter, RN, PhD, FAAN, is a research scientist, Teresa Deshields, PhD, is a manager, Joyce Divanbeigi, RN, MSN, is a clinical nurse administrator, Julie Berger, D.Min, BCC, is a chaplain, Doreen Cipriano, BSN, OCN®, is an assistant nurse manager, Lori Norris, RN, BSN, OCN®, is a nurse manager, and Sarah Olsen, RN, BSN, is a clinical research coordinator, all in Siteman Cancer Center at Barnes-Jewish Hospital and Washington University Medical Center in St. Louis, MO. (First submission February 2010. Accepted for publication March 9, 2010.)

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oncology nurses are at risk of burnout (Barnard, Street, & Love, 2006; Medland et al., 2004). Researchers also have shown that compassion fatigue can take a toll on the caregiving professional as well as the workplace, causing decreased productivity, more sick days used, and higher turnover (Pflifferling & Gilley, 2000). However, few validated reports have detailed the incidence and prevalence of compassion fatigue in oncology caregivers. A small number of studies (Perry, 2008; Sherman, Edwards, Simonton, & Mehta, 2006; Simon, Pryce, Roff, & Klemmack, 2005; Welsh, 1999) have investigated how oncology caregivers are affected by their work with patients with cancer. Cancer care providers tend to empathize with patients' losses, resulting in a personal sense of futility or failure in their care. However, Perry (2008) learned that exemplary oncology nurses were able to avoid compassion fatigue by creating moments of connection and making those moments matter.

Gaining a better understanding of the extent to which nurses and other oncology healthcare providers are affected by conditions such as burnout and compassion fatigue is critical for the development of a positive and nurturing practice environment. This study explored the prevalence of burnout and compassion fatigue among oncology healthcare providers working within a large oncology medical center. The study is the first step toward the ultimate design of a comprehensive mindfulness-based stress-reduction (MBSR) program to better equip healthcare providers to recognize and manage compassion fatigue and burnout.

## Literature Review

The condition of compassion fatigue was first identified by Joinson (1992) in a study of burnout in nurses who worked in an emergency department. The researcher identified behaviors that were characteristic of compassion fatigue, including chronic fatigue, irritability, dread going to work, aggravation of physical ailments, and a lack of joy in life. Figley (2002) later defined compassion fatigue as a state of tension and preoccupation with the individual or cumulative traumas of clients. The phenomenon of compassion fatigue emerges suddenly and without warning and includes a sense of helplessness and confusion. It has been described by Figley (2002) as the cost a caregiver experiences as a result of caring for others. Compassion fatigue results from giving high levels of energy and compassion over a prolonged period to those who are suffering, often without experiencing the positive outcomes of seeing patients improve (McHolm, 2006). Oncology nurses acquire compassion fatigue through repeated exposure to patients suffering the effects of trauma, such as side effects of aggressive treatment and the end stages of cancer.

In contrast, burnout is cumulative stress from the demands of daily life, a state of physical, emotional, and mental exhaustion caused by a depletion of the ability to cope with one's environment, particularly the work environment (Maslach, 1982). Burnout results from prolonged high levels of stress at work and, if not addressed, contributes to healthcare providers leaving the workplace (Medland et al., 2004). The concepts of compassion fatigue and burnout are closely related and sometimes ambiguously defined. Definitions of burnout more often point to envi-

ronment stressors, whereas definitions of compassion fatigue address the relational nature of the condition. Figley (2002) identified compassion fatigue as a form of burnout.

The phenomena of burnout and compassion fatigue are significant for healthcare organizations because of the demonstrated correlations to nurse retention and turnover, patient satisfaction, and patient safety (Garman, Corrigan, & Morris, 2002; Halbesleben, Wakefield, Wakefield, & Cooper, 2008). Halbesleben et al. (2008) suggested that, to understand the effects of burnout on healthcare providers, one must understand how burnout of the healthcare workforce results in changes in patient care. In a study conducted by Leiter, Harvie, and Frizzell (1998), an inverse correlation was found between nurse burnout and patient evaluations of the quality of care. Patients cared for on units where nurses felt exhausted or frequently expressed a desire to quit were less satisfied with their care. Vahey, Aiken, Sloane, Clarke, and Vargas (2004) found similar results in a study involving more than 800 nurses and 600 patients. In contrast, Friese (2005) showed the value of building and strengthening work environments to limit burnout and compassion fatigue. Friese (2005) demonstrated that emotional exhaustion is significantly lower among oncology nurses who work in Magnet<sup>®</sup>-designated hospitals. To date, no studies have been conducted on oncology units examining the prevalence of both compassion fatigue and burnout.

Healthcare providers benefit from targeted approaches for developing coping and stress management skills (Cohen-Katz, Wiley, Capuano, Baker, & Shapiro, 2004; Mackenzie, Poulin, & Seidman-Carlson, 2006). Interventions directed toward nurses who experience compassion fatigue are few and evident only in more recent literature. Most interventions, such as the Accelerated Recovery Program (ARP) developed by Gentry, Baranowsky, and Dunning (1997), focus on mental health and trauma workers. The ARP is designed to help professionals use strategies to address and resolve the symptoms and the cause of compassion fatigue while helping develop an integrated individual self-care discipline that enhances future resiliency (Gentry et al., 1997).

Experts in the field of compassion fatigue have only now begun to understand the potential use and effectiveness of interventions in the field of nursing. With the concept of compassion fatigue becoming better understood, results from newer studies involving use of group interventions for nurses have been published (Cohen-Katz et al., 2004; Mackenzie et al., 2006). Cohen-Katz et al. (2004) and Mackenzie et al. (2006) primarily used the well-validated stress reduction model of an MBSR program developed by Kabat-Zinn (1990) and employed in many stress-management clinics across the United States. The MBSR program teaches participants to intentionally deal and cope with stress, pain, illness, and the demands of everyday life in an intentional way, based on the concept of mindfulness. Mindfulness is defined as being fully present to one's experience without judgment or resistance (Cohen-Katz et al., 2004). The interventions in the MBSR program aim to help participants respond more effectively to challenges to offset the adverse effects of stress.

Analyzing the prevalence of burnout and compassion fatigue within a healthcare organization is an essential first step for organizations that aim to implement programs such as MBSR or ARP and establish positive work environments. Therefore, the

purpose of this study was to explore the prevalence of burnout and compassion fatigue among oncology healthcare providers working within a large oncology medical center.

## Methods

### Design and Setting

This descriptive analysis of a quality-improvement evaluation of oncology healthcare staff was conducted at a large National Cancer Institute–designated cancer center in the midwestern United States. A group of nurse managers from the center’s outpatient oncology treatment centers formed a work group to examine the issue of compassion fatigue among the staff. Through observations and conversations with staff, the managers perceived the likelihood that their nurses, medical assistants, and technicians were experiencing symptoms of compassion fatigue and burnout. The decision was made to conduct a quality-improvement evaluation to include inpatient and outpatient oncology staff, which included five inpatient oncology units, four outpatient chemotherapy infusion areas, and three physician office practice areas. The evaluation involved the distribution of the fourth revision of

the Professional Quality of Life (ProQOL R-IV) scale to all eligible staff working in these settings.

### Procedure and Sample

The quality-improvement evaluation was approved by the Human Research Protection Office of the affiliated university and the cancer center’s Protocol Review and Monitoring Committee. Staff who worked in the designated oncology units were eligible to participate in the evaluation, including RNs (staff clinicians and advanced practice nurses), patient care technicians, medical assistants, and radiation therapy technologists. A total of 448 survey packets were distributed in staff mailboxes. An information brochure describing the evaluation was posted on all units and used by nurse managers for talking points during staff meetings. Completed information from the ProQOL R-IV scale was returned in specially marked envelopes placed in each clinical setting.

### Instrument

The quality-improvement team chose to use the 30-item ProQOL R-IV scale for measuring compassion fatigue, compassion satisfaction, and burnout (Stamm, 2009). The instrument

Table 1. Results of Cross Tab Analysis and Demographics of ProQOL R-IV Subscales

VARIABLE	COMPASSION SATISFACTION					BURNOUT					COMPASSION FATIGUE				
	HIGH RISK		LOW RISK		p	HIGH RISK		LOW RISK		p	HIGH RISK		LOW RISK		p
	n	%	n	%		n	%	n	%		n	%	n	%	
Setting (N = 154)					0.008					0.241					0.988
Inpatient	19	26	54	74		32	44	41	56		27	37	46	63	
Outpatient	7	9	74	91		27	33	54	67		28	35	53	65	
Years of healthcare experience (N = 150)					0.578					0.985					0.539
1–5	7	17	34	83		14	34	27	66		13	32	28	68	
6–10	6	27	16	73		10	46	12	55		9	41	13	59	
11–20	6	14	38	86		17	39	27	61		19	43	25	57	
21–43	7	16	36	84		16	37	27	63		13	30	30	70	
Years of oncology experience (N = 149)					0.986					0.655					0.274
1–5	13	18	59	82		28	39	44	61		26	36	46	64	
6–10	4	14	25	86		8	28	21	72		12	41	17	59	
11–20	6	19	25	81		14	45	17	55		14	45	17	55	
21–33	2	12	15	88		6	35	11	65		3	18	14	82	
Age groups of providers (N = 146)					0.426					1					0.427
21–35	14	23	48	77		23	37	39	63		21	34	41	66	
36–50	7	14	44	86		19	37	32	63		22	43	29	57	
51–72	5	15	28	85		13	39	20	61		10	30	23	70	
Education level of providers (N = 152)					0.539					1					0.641
High school or GED Certificate	2	33	4	68		3	50	3	50		2	33	4	67	
Diploma	–	–	5	100		2	40	3	60		1	20	4	80	
Associate degree	2	11	16	89		6	33	12	67		7	39	11	61	
Bachelor’s degree	8	21	30	79		14	37	24	63		10	26	28	74	
Advanced degree	13	18	58	82		27	38	44	62		30	42	41	58	
	1	7	13	93		6	43	8	57		5	36	9	64	

ProQOL R-IV—Professional Quality of Life (fourth revision)

Note. Because of rounding, not all percentages total 100.

is a fourth revision of the originally titled Compassion Fatigue Self-Test survey tool developed by Figley (1995). The scale has undergone psychometric evaluation in an effort to improve subscale reliability and validity (Figley & Stamm, 1996; Jenkins & Baird, 2002; Larsen, Stamm, & Davis, 2002). The ProQOL R-IV includes three 10-item subscales: compassion satisfaction, burnout, and compassion fatigue. Construct validity testing has verified that the subscales on the ProQOL R-IV do measure different constructs (Stamm, 2009). Compassion satisfaction ( $\alpha = 0.87$ ) is defined as the pleasure derived from being able to do your work well, burnout ( $\alpha = 0.72$ ) is defined as feelings of hopelessness and difficulties in dealing with work or in doing a job effectively, and trauma or compassion fatigue ( $\alpha = 0.8$ ) is defined as work-related secondary exposure to extremely stressful events.

Completion of the ProQOL R-IV involves selecting response choices on a 0 (never) to 5 (very often) Likert scale. A number of items required reverse coding so that high scores on all items indicate high compassion satisfaction, burnout, and compassion fatigue. Stamm (2009) strongly recommended the tool be used only for screening and not diagnostic purposes. Any definitive conclusions are best drawn when the tool is used over time and trends are identified. For example, a participant might score high on burnout because of his or her mood or feelings on a given day, which does not necessarily reflect a persistent issue with burnout. The tool has been used with more than 1,000 participants, including healthcare providers, children or family workers, and school personnel (Stamm, 2009).

## Data Analysis

Prior to analysis, the data were examined for outlying and missing data. Descriptive statistics were used to analyze demographic information, including age, number of years as a healthcare provider, number of years working in oncology, and education background. A series of cross tabs were calculated to show the relationship between demographics and total scores on each of the three subscales, using Pearson Chi square analysis. In the case when cross tabs analysis involved only two categories, such as inpatient versus outpatient nursing units, a Yates' Correction for Continuity was reported (see Table 1).

Although Stamm (2009) recommended reporting summed scores for the ProQOL R-IV across each of the three subscales, many users of the instrument prefer to have cut scores to indicate relative risks. A high- and low-risk methodology was used; cut scores were established based on the levels Stamm (2009) recommended for an indicator of concern for an institution. High-risk cut scores were set at scores of less than 32 for compassion satisfaction, greater than 23 for burnout, and greater than 18 for compassion fatigue.

## Results

A total of 153 healthcare providers participated in the study, for a response rate of 34%. Most respondents were RNs (see Table 2). The average compassion satisfaction score among all study participants was 38.3 (SD = 7.2). Stamm (2009) reported an average score among previous users of the ProQOL R-IV of 37. The average burnout score among the current study's par-

**Table 2. Participant Characteristics**

CHARACTERISTIC	$\bar{X}$	RANGE
Age (years)	39.9	21–63
Years in health care	14.8	1–4
Years in oncology	8.9	1–33

CHARACTERISTIC	n
<b>Job title</b>	
RN	132
Medical assistant	10
Patient care technician	6
Radiology technician	5
<b>Education</b>	
High school or GED	6
Certificate	5
Diploma	18
Associate degree	38
Bachelor's degree	71
Advanced degree	14
No response	1
<b>Oncology unit</b>	
Inpatient unit	72
Outpatient unit	47
Medical practice area	33
No response	1

**N = 153**

ticipants was 21.5 (SD = 6.4), which compared with an average score of 22 reported by Stamm (2009). The average compassion fatigue score among participants was 15.2 (SD = 6.6), which was higher than the average score of 13 reported by Stamm (2009).

Statistical analysis demonstrated the risk associated with each of the ProQOL R-IV subscales based on cut scores. These were compared with the study variables, including the participants' workplace setting (inpatient versus outpatient), years of healthcare experience, years of oncology experience, age, and level of education. Findings were statistically significant for the relationship between compassion satisfaction and work setting ( $p = 0.008$ ). Staff working on inpatient nursing units had the highest percentage of high-risk compassion satisfaction scores. Interestingly, the percentages of high-risk scores for compassion fatigue were relatively equal among inpatient and outpatient staff, 37% and 35%, respectively. Although 44% of inpatient staff scored at high risk for burnout compared to 33% for outpatient staff, the difference was not statistically significant.

A significant relationship was not found between years of general healthcare experience and the three ProQOL R-IV subscales. However, staff with 6–10 years of experience had the highest percentage of high-risk burnout and low compassion satisfaction scores. The staff with 11–20 years of general healthcare experience had the highest percentage of high-risk compassion fatigue scores, followed by those with 6–10 years of experience. No statistically significant relationships were found between oncology experience and the three ProQOL R-IV subscales; however, an interesting trend was noted that staff with 11–20 years of oncology experience had the highest percentage of high-risk scores for all three ProQOL R-IV subscales.



The other demographic variables were not significantly related to the ProQOL R-IV subscales, including age and education level. However, the results of high risk for burnout and compassion fatigue were interesting in regard to nurses' education level. Nurses with a bachelor's degree had the highest percentage of high-risk scores for compassion fatigue, and nurses with advanced degrees had the highest percentage of high-risk scores for burnout. Nurses with associate's degrees had the highest percentage of low compassion satisfaction scores.

## Discussion

The inpatient work setting has been described by other researchers as one that is particularly stressful (Buerhaus, Donelan, DesRoches, Lamkin, & Mallory, 2001). In this current study, inpatient healthcare staff had significantly lower compassion satisfaction scores than their colleagues working in outpatient settings. Although this study did not explore in depth the myriad factors that might contribute to the workplace stress, the literature offers some explanation. The factors contributing to inpatient workplace stress that differ from those of outpatient settings involve higher patient acuity, including exposure to more patient deaths; more complications of treatment and disease; and more severe clinical symptoms. In addition, environmental conditions such as inadequate staffing and weekend and evening hours may add additional burden.

The scores for burnout and compassion fatigue were statistically comparable between the inpatient and outpatient settings. Factors contributing to outpatient workplace stress are unique to the types of relationships that form between outpatient staff and patients with cancer and their families. Although some researchers have noted the observance of suffering, ethical concerns regarding treatment choices, and carryover stress from seeing patients repeatedly for treatments as stressors characteristic of the outpatient setting (Florio, Donnelly, & Zevon, 1998), an argument could be made that these same stressors are present in the inpatient setting. Interestingly, the outpatient area with the highest percentage of compassion satisfaction and lowest percentage of burnout and compassion fatigue was the breast health center. In this setting, nurses perform routine screening and diagnostic procedures and do not see the same patients frequently over time.

Lewis (1999) suggested that the intense and ongoing losses experienced in oncology care make oncology nurses very vulnerable to burnout. Numerous stressors have been identified specific to the oncology workplace, including the nature of cancer, complex treatments, death, a personal sense of failure and futility, intense involvement with patients and families, ethical issues in treatment, surrogate decision making, and palliative care issues (Kash & Breitbart, 1993; Najjar, Davis, Beck-Coon, & Doebbeling, 2009). Additional factors that correlate with nursing burnout are role ambiguity, workload, co-worker support, and positive reappraisal (Duquette, Kerouac, Sandhu, & Beaudet, 1994; Florio, Donnelly, & Zevon, 1998). The influence of years of general healthcare and oncology experience on compassion fatigue and burnout offers an interesting perspective. In this current study, the individuals who had worked 11–20 years

in oncology had the highest percentage of high-risk scores for all three ProQOL R-IV subscales. Individuals who had 6–10 years of general healthcare experience had higher percentages of risk scores for burnout and low compassion satisfaction in comparison to the other experience groups. Level of oncology and/or general healthcare experience might be important criteria for targeting interventions to help staff gain enhanced skills for dealing with stress.

In this study, a trend existed for increased risk for burnout and compassion fatigue among nurses with higher levels of education, but this trend did not reach statistical significance. Najjar et al. (2009) argued that higher levels of licensure and corresponding education degrees characterize professionals who also may have increased expectations for work satisfaction. The nature of oncology practice may produce tensions between a person's idealistic expectations and what actually occurs in practice. The talent among nurses with advanced degrees is an important resource for oncology programs; therefore, managers and administrators must understand the unique needs of this group, particularly their vulnerability to compassion fatigue and burnout.

## Limitations

The results of this study are limited by the small sample size, particularly with respect to a very small number of respondents who were medical assistants and radiology technicians. Additional studies should explore these professional groups. It also would be interesting to gather information pertaining to the incidence of compassion fatigue and burnout by surveying members of a professional nursing organization, such as the Oncology Nursing Society. The larger sample size would offer a broader range of analysis with regard to demographic variables. An additional limitation is the potential response bias. Those who chose not to respond to the survey could have had higher or lower levels of risk for burnout and compassion fatigue. Because the study is a cross-sectional design, the analysis does not provide an understanding of whether the prevalence of burnout and compassion fatigue changes over time.

The information that the authors collected also was limited by the constraints of this particular quality-improvement project. It would be helpful to gather information about the quality of the healthcare professional's work and to compare this with compassion satisfaction, compassion fatigue, and burnout. Likewise, it would be interesting to assess patient satisfaction with care and to examine how that interacts with the ProQOL R-IV subscales. Finally, it would be useful to determine the salient differences between inpatient and outpatient practice to address the different levels of compassion satisfaction between these work settings.

## Implications

Understanding the effects of caring for patients with cancer on professional caregivers is a responsibility of healthcare management. Although concepts such as compassion fatigue and burnout are multifactorial, Maslach and Leiter (1998) argued that the social environment of a workplace and the organizational structure are particularly relevant contributors. The

results of this study suggest the need for an intervention for staff at risk. In addition, the results establish an argument for the value of analyzing a workforce along multiple variables. Understanding the unique needs of demographic groups among staff can provide direction for appropriate program development. For example, the type of oncology setting and nurses' years of healthcare experience are just two factors that can influence the choice of any intervention program, both in terms of content development and design of course activities.

An aim of this study was to assess the work environment to gain support for the development of a program modeled on ARP (Gentry et al., 1997). A program has been developed and is currently being evaluated. It has involved the initial training of staff facilitators so that the program meets the unique needs of healthcare staff within the institution. The facilitators have presented an initial series of four 90-minute training sessions and a four-hour retreat, all designed to help RNs gain the skills needed to reduce their own compassion fatigue and burnout. The program is to be presented to two different groups of RNs. Pre- and postintervention evaluation will be conducted over six months and will involve use of the ProQOL R-IV, a nursing satisfaction measure, and qualitative evaluation of program features. The program is being conducted in a group setting, allowing for the essential component of dialogue between facilitator and attendees and among attendees themselves. Participants have the ability to address the difficulties they face in professional caregiving and learn through experiential participation. Findings will be used toward making recommendations for a hospitalwide ARP for all healthcare providers. Radziewicz (2001) stressed the priority of self-care relative to being healthy and providing quality care to patients and their families. Applying internal evidence in the design of an ARP will better prepare healthcare staff to care for themselves and the patients and families they serve.

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**Author Contact:** Patricia Potter, RN, PhD, FAAN, can be reached at pap1212@bjc.org, with copy to editor at CJONEditor@ons.org.

## References

- Barnard, D., Street, A., & Love, A.W. (2006). Relationships between stressors, work supports and burnout among cancer nurses. *Cancer Nursing, 29*, 338-345.
- Buerhaus, P., Donelan, K., DesRoches, C., Lamkin, L., & Mallory, G. (2001). State of the oncology nursing workforce: Problems and implications for strengthening the future. *Nursing Economics, 19*, 198-208.
- Cohen-Katz, J., Wiley, S.D., Capuano, T., Baker, D.M., & Shapiro, S. (2004). The effects of mindfulness-based stress reduction on nurse stress and burnout: A quantitative and qualitative study. *Holistic Nursing Practice, Nov.-Dec.*, 302-308.
- Duquette, A., Kerouac, S., Sandhu, B.K., & Beaudet, L. (1994). Factors related to nursing burnout: A review of empirical knowledge. *Issues in Mental Health Nursing, 15*, 337-358.
- Ferrans, C. (1990). Quality of life: Conceptual issues. *Seminars in Oncology Nursing, 6*, 248. doi: 10.1016/0749-2081(90)90026-2
- Figley, C.R. (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. New York, NY: Brunner Mazel.
- Figley, C.R. (2002). *Treating compassion fatigue*. New York, NY: Brunner-Routledge.
- Figley, C.R., & Stamm, B.H. (1996). Psychometric review of Compassion Fatigue Self Test. In B.H. Stamm (Ed.), *Measurement of stress, trauma and adaptation*. Lutherville, MD: Sidran Press.
- Florio, G.A., Donnelly, J.P., & Zevon, M.A. (1998). The structure of work-related stress and coping among oncology nurses in high-stress medical settings: A transactional analysis. *Journal of Occupational Health Psychology, 3*, 227-242. doi: 10.1037/1076-8998.3.3.227
- Frieze, C.R. (2005). Nurse practice environments and outcomes: Implications for oncology nursing. *Oncology Nursing Forum, 32*, 765-772. doi: 10.1188/05.ONF.765-772
- Garman, A., Corrigan, P., & Morris, S. (2002). Staff burnout and patient satisfaction: Evidence of relationships at the care unit level. *Journal of Occupational Health Psychology, 7*, 235-241. doi: 10.1037/1076-8998.7.3.235
- Gentry, J.E., & Baranowsky, A. (1998). *Treatment manual for the Accelerated Recovery Program: Set II*. Toronto, Ontario, Canada: Psych Inc.
- Gentry, J.E., Baranowsky, A., & Dunning, E. (1997). Accelerated Recovery Program for compassion fatigue. Presented at the 13th annual International Society for Traumatic Stress Studies Conference in Montreal, Quebec, Canada.
- Halbesleben, J., Wakefield, B., Wakefield, D., & Cooper, L. (2008). Nurse burnout and patient safety perception versus reporting behavior. *Western Journal of Nursing Research, 30*, 560-577. doi: 10.1177/0193945907311322
- Jenkins, S.R., & Baird, S. (2002). Secondary traumatic stress and vicarious trauma: A validation study. *Journal of Traumatic Stress, 15*, 423-432. doi: 10.1023/A:1020193526843
- Joinson, C. (1992). Coping with compassion fatigue. *Nursing, 22*, 116-120.
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness*. New York, NY: Bantam Doubleday Dell Publishing Group.
- Kash, K., & Breitbart, W. (1993). The stress of caring for cancer patients. In W. Breitbart and J.C. Holland (Eds.), *Psychiatric aspects of symptom management in cancer patients* (pp. 243-260). Washington, DC: American Psychiatric Press.
- Larsen, D., Stamm, B.H., & Davis, K. (2002). Telehealth for prevention and intervention of the negative effects of caregiving. Retrieved from <http://www.istss.org/publications/TS/Fall02/telehealth.htm>
- Leiter, M.P., Harvie, P., & Frizzell, C. (1998). The correspondence of patient satisfaction and nurse burnout. *Social Science and Medicine, 47*, 1611-1617. doi: 10.1016/S0277-9536(98)00207-X
- Lewis, A.E. (1999). Reducing burnout: Development of an oncology staff bereavement program. *Oncology Nursing Forum, 26*, 1065-1069.
- Mackenzie, C.S., Poulin, P.A., & Seidman-Carlson, R. (2006). A brief mindfulness-based stress reduction intervention for nurses and nurse aides. *Applied Nursing Research, 19*, 105-109.
- Maslach, C. (1982). *Burnout—The cost of caring*. Englewood Cliffs, NJ: Spectrum.

- Maslach, C., & Leiter, M. (1998). *The truth about burnout: How organizations cause personal stress and what to do about it*. San Francisco, CA: Jossey-Bass.
- McHolm, F. (2006). Rx for compassion fatigue. *Journal of Christian Nursing*, 23, 12-19.
- McVicar, A. (2003). Workplace stress in nursing: A literature review. *Journal of Advanced Nursing*, 44, 633-642. doi: 10.1046/j.0309-2402.2003.02853.x
- Medland, J., Howard-Ruben, J., & Whitaker, E. (2004). Fostering psychosocial wellness in oncology nurses: Addressing burnout and social support in the workplace. *Oncology Nursing Forum*, 31, 47-54. doi: 10.1188/04.ONF.47-54
- Najjar, N., Davis, L.W., Beck-Coon, K., & Doebbeling, C.C. (2009). Compassion fatigue: A review of the research to date and relevance to cancer-care providers. *Journal of Health Psychology*, 14, 267-277. doi: 10.1177/1359105308100211
- Oulton, J.A. (2006). The global nursing shortage: An overview of issues and actions. *Policy, Politics, and Nursing Practice*, 7(3, Suppl.), 34S-39S. doi: 10.1177/1527154406293968
- Perry, B. (2008). Why exemplary oncology nurses seem to avoid compassion fatigue. *Canadian Oncology Nursing Journal*, 18(2), 87-99.
- Pfifferling, J.H., & Gilley, K. (2000). Overcoming compassion fatigue. *Family Practice Management*, 7(4), 39-46. Retrieved from <http://www.aafp.org/fpm/20000400/39over.html>
- Radziewicz, R.M. (2001). Self-care for the caregiver. *Nursing Clinics of North America*, 36, 855-869.
- Robert Wood Johnson Foundation. (2002). *Health care's human crisis: The American nursing shortage*. Retrieved from <http://www.rwjf.org/files/newsroom/NursingReport/pdf>
- Sherman, A.C., Edwards, D., Simonton, S., & Mehta, P. (2006). Caregiver stress and burnout in an oncology unit. *Palliative and Supportive Care*, 4, 65-80. doi: 10.1017/S1478951506060081
- Simon, C., Pryce, J., Roff, L., & Klemmack, D. (2005). Secondary traumatic stress and oncology social work: Protecting compassion from fatigue and compromising the worker's worldview. *Journal of Psychosocial Oncology*, 23(4), 1-14. doi: 10.1300/J077v23n04\_01
- Sinclair, H.A., & Hamill, C. (2007). Does vicarious traumatization affect oncology nurses? A literature review. *European Journal of Oncology Nursing*, 11, 348-356. doi: 10.1016/j.ejon.2007.02.007
- Stamm, B.H. (2009). *The ProQOL manual*. Boise, IA: Sidran Press.
- Vahey, D., Aiken, L., Sloane, D., Clarke, S., & Vargas, D. (2004). Nurse burnout and patient satisfaction. *Medical Care*, 42(2, Suppl.), II-57-II-66.
- Welsh, D. (1999). Let's talk. Care for the caregiver: Strategies for avoiding compassion fatigue. *Clinical Journal of Oncology Nursing*, 3, 183-184.

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