

Evaluation of a Compassion Fatigue Resiliency Program for Oncology Nurses

Patricia Potter, RN, PhD, FAAN, Teresa Deshields, PhD, Julia Allen Berger, DMin, BCC, Marty Clarke, PA-C, PhD, Sarah Olsen, RN, BS, and Ling Chen, MSPH, PhD

Compassion fatigue is a concept that has been addressed with increasing frequency in the healthcare literature. First formally defined in 1995 by Charles Figley, PhD, compassion fatigue is the combination of secondary traumatic stress and burnout experienced by helping professionals and other care providers (Figley, 1995; Stamm, 1995). Burnout or cumulative stress is the state of physical, emotional, and mental exhaustion caused by a depletion of a person's ability to cope with one's environment (Maslach, 1982). In healthcare professionals, burnout is associated with increased turnover, employee absenteeism, poor coworker support, depersonalization, decreased performance, decreased patient satisfaction, and difficulty in recruiting and retaining staff (Garman, Corrigan, & Morris, 2002; Sundin, Hochwalder, & Lisspers, 2011; Vahey, Aiken, Sloane, Clarke, & Vargas, 2004).

Secondary traumatic stress has been defined as "the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1999, p. 10). Secondary traumatic stress is the trauma healthcare professionals experience as they provide care for others, and it correlates highly with burnout (Jones, 2004; Vahey et al., 2004; Yoder, 2010). The presence of secondary traumatic stress has been reported in forensic nurses and nurses who work in emergency departments, oncology, pediatrics, and hospice (Beck, 2011).

The prevalence of compassion fatigue among RNs has been documented as ranging from 16%–39%, with burnout ranging from 8%–38% (Hooper, Craig, Janvrin, Wetsel, & Reimels, 2010; Potter et al., 2010; Robins, Meltzer, & Zelikovsky, 2009; Yoder, 2010). A clear need exists for hospitals to implement effective programs to prepare healthcare staff to better recognize, prevent, and manage compassion fatigue. This article describes a pilot project that evaluated the efficacy of a resiliency program in reducing compassion fatigue among oncology nurses.

Purpose/Objectives: To evaluate a resiliency program designed to educate oncology nurses about compassion fatigue.

Design: Descriptive pilot study.

Setting: A National Cancer Institute–designated comprehensive cancer center in the midwestern United States.

Sample: 13 oncology nurses employed in an outpatient infusion center.

Methods: Nurses attended a five-week program involving five 90-minute sessions on compassion fatigue resiliency. A pre- and post-test design, using repeated measures, was conducted over six months.

Main Research Variables: Scores on the Professional Quality of Life (ProQOL) IV, Maslach Burnout Inventory–Human Services Survey, Impact of Event Scale–Revised (IES-R), and the Nursing Job Satisfaction Scale.

Findings: Long-term benefits were realized from the program. Secondary traumatization scores on the ProQOL IV declined immediately after the program, remained down at three months, and then dropped again at six months, with a statistically significant mean difference compared with baseline. The average IES-R total scores improved significantly overall and for each of the three postintervention time points. Participants evaluated the program positively with respect to their ability to apply and benefit from resiliency techniques.

Conclusions: This is the first reported study to show benefits gained from a compassion fatigue intervention program. Participants received useful strategies for managing stress at work and home.

Implications for Nursing: Compassion fatigue is a prevalent condition among healthcare providers. Development of resiliency to compassion fatigue may improve decision making, clarity of communication, and patient and nurse satisfaction.

Knowledge Translation: Self-regulation offers an approach to reduce stress during a perceived threat. Working by intention reduces reactivity in the workplace and makes communication more intentional and, therefore, effective.

Background

The ongoing stress of burnout is associated with nurse job dissatisfaction. Causative factors for burnout

within a healthcare setting include insufficient resources (e.g., staff, supplies), poor design of work areas, poor interprofessional relationships, and management conflicts (Vahey et al., 2004). Burnout is the chronic condition of perceived demands outweighing perceived resources (Gentry, Baranowsky, & Dunning, 1997). Secondary traumatic stress arises from repeated exposure to traumatic events, as is the case with the ongoing care of patients with cancer. A caregiver's empathy level with traumatized individuals is hypothesized to play a significant role in the transmission of traumatic stress from patient to nurse (Figley, 1995). The more empathic a nurse, the greater the risk for developing compassion fatigue.

In a concept analysis, Coetzee and Klopper (2010) defined compassion fatigue as the final result of a progressive and cumulative process that is caused by prolonged, continuous, and intense contact with patients (i.e., the use of oneself therapeutically) and exposure to stress. Compassion fatigue is a condition that results in symptoms that are intrusive, cause arousal, and lead to avoidance (Gentry et al., 1997). The typical nurse experiencing compassion fatigue often is nervous, cynical, and pessimistic; has low self-esteem; is angry toward coworkers; and dreads work. The stress of compassion fatigue is not restricted to work. At home, an affected nurse may be unable to sleep, have bad dreams, lose interest in social events or sexual activity, and experience changes in appetite (e.g., weight loss, weight gain) and relations with others.

The literature suggests that long-term effects of compassion fatigue negatively impact the health, well-being, and performance of employees. Health effects include potential mental and physical health issues and increased use of alcohol or drugs (Stamm, 2002). Nurses who have compassion fatigue may experience changes in job performance, negative effects on personal relationships, increased mistakes, noticeable personality changes, decline in health, and a desire to leave the profession or their specialty (Perry, Toffner, Merrick, & Dalton, 2011; Schwam, 1998). Compassion fatigue has significant implications for hospitals' efforts to maintain a competent and caring nursing staff, which are associated with patient satisfaction with nursing care and are predictors of patients' overall satisfaction with hospital care (Vahey et al., 2004; Wolf, Colahan, & Costello, 1998).

Maiden, Georges, and Connelly (2011) reported that compassion fatigue correlated with nurses disagreeing with their institution's definition of medication error and fear as reasons for not reporting medication errors. The extent to which compassion fatigue affects clinical decision making and nurse judgment is yet to be thoroughly researched.

The development and implementation of systematic prevention and treatment efforts, including ongoing

education, support, and intervention programs for staff and nurses, would likely be a valuable investment of healthcare organization resources (Stamm, 2002). Such efforts can go beyond the impact on the well-being of individual nurses and also can impact larger organizational issues, such as staff turnover and patient satisfaction.

Reports of interventions directed toward nurses who experience compassion fatigue are limited in the literature; however, numerous studies have examined interventions to reduce burnout. Recently, basic stress management interventions such as the use of coping skills and support groups (Gunusen & Ustun, 2010) and psychoeducation programs (Kravits, McAllister-Black, Grant, & Kirk, 2010) have been shown to reduce self-reported stress and burnout. As the concept of compassion fatigue becomes better understood, studies using group interventions for nurses have been published (Cohen-Katz, Wiley, Capuano, Baker, & Shapiro, 2004; Mackenzie, Poulin, & Seidman-Carlson, 2006). Those studies primarily used the well-validated model of Mindfulness-Based Stress Reduction, developed in 1990 by Jon Kabat-Zinn, PhD, and employed in many stress management clinics across the United States today (Frisvold, Lindquist, & Peden, 2012; Goodman & Schorling, 2012). Another empirically validated intervention for compassion fatigue is the Accelerated Recovery Program (Gentry & Baranowsky, 1998; Gentry et al., 1997, 2002), which is a five-session copyrighted protocol that addresses the symptoms of secondary traumatic stress and burnout in caregivers. The Accelerated Recovery Program previously focused on professions such as mental health and trauma workers (Gentry et al., 1997). Recognition of the potential use and effectiveness of Accelerated Recovery Program interventions for compassion fatigue among nurses is growing.

In 2009, the authors conducted a quality improvement study to examine the extent to which healthcare staff at a large National Cancer Institute (NCI)-designated comprehensive cancer center were experiencing compassion fatigue (Potter et al., 2010). The Professional Quality of Life (ProQOL) IV, developed by Stamm (2005), was completed by 153 oncology healthcare providers, including RNs, medical assistants, and radiology technicians. The ProQOL measures compassion satisfaction, burnout, and secondary traumatic stress. Study results were compared to those of Stamm (2005), which were collected from a sample of 436 people. Potter et al. (2010) found that the oncology staff had higher than average scores of compassion satisfaction, a measure that reflects the pleasure derived from doing work well. However, the staff also had average scores for burnout and higher-than-average scores for compassion fatigue (later classified by Stamm as secondary traumatic stress) (Potter et al., 2010).

As a result of those findings, a consultant was invited to train staff facilitators to develop and deliver a compassion fatigue resiliency program designed for oncology staff nurses and based on the concepts of the Accelerated Recovery Program (Gentry & Baranowsky, 1998). This article describes the outcomes of the compassion fatigue resiliency program.

Methods

This pilot study was conducted at Siteman Cancer Center at Barnes-Jewish Hospital in St. Louis, MO. The protocol review and monitoring committee of the cancer center and the human research protection office of Washington University approved the study. Potential participants were oncology staff nurses who received information about the study through patient care unit in-services and informational brochures distributed to their work mailboxes. Those eligible for the study were staff RNs, aged 20 years or older, who provided direct patient care and were employed at one of the cancer center's outpatient chemotherapy infusion centers. Participants also had to be willing and able to fully participate in the five-week compassion fatigue resiliency program. Interested participants initially were interviewed to ensure their understanding of the program and its anticipated benefits and risks, and to evaluate whether they had a problem or concern that made them ill-suited to participate in a group intervention. Exclusion criteria were being actively suicidal or currently abusing substances, as determined by self-report during the interview. During the pre-enrollment interview, researchers obtained participants' written informed consent.

The resiliency program (Gentry & Baranowsky, 1998) was designed to educate participants about compassion fatigue, including contributing factors and the deleterious effects of chronic stress. A thorough discussion about the effects of chronic sympathetic stimulation on cognitive and behavioral function laid the ground work for understanding the importance of stress management in a healthcare role. The program interventions were designed to promote resiliency through self-regulation, intentionality, self-validation, connection, and self-care. Participants were involved in numerous small group activities that allowed them to apply each resiliency approach. Through self-regulation, participants learned how to achieve relaxation and reduce negative arousal during times of perceived threat. Learning to relax while engaged in caregiving activities helps individuals to relieve sympathetic nervous system dominance. Living intentionally emphasizes the importance of developing and following one's professional covenant of doing his or her best each day and living by one's professional val-

ues. Each participant wrote his or her own covenant for how they chose to live and work. Self-validation emphasizes the importance of aiming to live and work with integrity rather than pursuing the acceptance and acknowledgment of others. Connection emphasizes the importance of cultivating social support in the workplace to have someone who can appreciate and share stories of stressful caregiving. Finally, self-care interventions are used to underscore the importance of refueling and restoring one's energy and passion for professional caregiving. Each participant completed their own self-care plan.

Program facilitators included a social worker, pastoral care professional, and a physician's assistant in psychiatry, who received 16 hours of training on advanced compassion fatigue prevention and resiliency (Gentry et al., 2002). Two separate intervention programs for nursing staff were conducted. Each program included four 90-minute sessions held during the early evening hours after the nursing staff's regularly assigned shifts. Between the third and fourth weeks, a four-hour retreat was conducted offsite to allow participants to debrief and practice self-care, including a healing arts program. Participants received remuneration in the form of their hourly salary rate for the time they participated in the sessions. Before and immediately, three months, and six months after the program, participants completed a set of instruments measuring compassion fatigue, job satisfaction, and burnout. In addition, participants completed weekly and end-of-program evaluations of program content, organization, and facilitator effectiveness.

Instruments

The **Maslach Burnout Inventory (MBI)–Human Services Survey** (Maslach & Jackson, 1981) is a widely used 22-item survey that measures job-related feelings. The scale includes three categories of burnout: emotional exhaustion, depersonalization, and lack of personal accomplishment (Maslach & Jackson, 1981). Each item requires a forced-choice response on a Likert-type scale from 0 (never) to 6 (every day). The instrument takes 10–15 minutes to complete and is widely used with human service professionals; the survey has been found effective and suitable for measuring burnout among nurses (Kanste, Miettunen, & Kyngäs, 2006). High scores for emotional exhaustion (27 or higher) and depersonalization (14 or higher) and low scores for personal accomplishment (37 or higher) reflect greater risk for burnout. Good reliability and validity of the MBI have been established and reported in several analyses (Poghosyan, Aiken, & Sloane, 2009).

The **ProQOL IV** (Stamm, 2005) is a revision of the Compassion Fatigue Self-Test (Figley, 1995). The

ProQOL addresses the separation of burnout and secondary trauma and shortens the Compassion Fatigue Self-Test from 66 to 30 items. The ProQOL IV measures three discrete concepts: compassion satisfaction, secondary traumatic stress, and burnout (Stamm, 2005). The construct validity and reliability coefficients range from 0.71–0.9 (Aycock & Boyle, 2009; Boscarino, Figley, & Adams, 2004). The 30-item instrument takes about 10 minutes to complete. The average scores on the subscales are 37 for compassion satisfaction, 22 for burnout, and 13 for secondary traumatic stress (Stamm, 2005). In addition, Stamm (2005) reported at-risk scores for each subscale (compassion satisfaction, lower than 33; burnout, higher than 22; secondary traumatic stress, higher than 17).

The **Impact of Event Scale–Revised (IES-R)** (Beck et al., 2008; Weiss & Marmar, 1997) is a 22-item measure of a respondent’s subjective distress caused by traumatic events experienced during the prior week, rated from 0 (not at all) to 4 (extremely). The tool has been widely used in research of post-traumatic stress disorder, as it assesses the frequency of intrusive thoughts and feelings and behavioral avoidance in those who have experienced a recent traumatic event (Horowitz, Wilner, & Alvarez, 1979). The IES-R has been shown to have high internal consistency ($\alpha = 0.96$) (Creamer, Bell, & Failla, 2003) and test-retest reliability (0.89–0.94) across a six-month interval (Weiss & Marmar, 1997). The IES-R takes 10 minutes to complete and has three subscales: intrusion, avoidance, and hyperarousal. The total score ranges from 0–88, with higher subscale scores reflecting greater risk. Participants were asked to complete this measure while considering a particularly distressing experience with a patient.

The **Nursing Job Satisfaction Scale** (Hinshaw & Atwood, 1983) is an instrument that assesses elements essential to a nurse’s enjoyment or liking of one’s job. The scale has 28 items and uses a five-point Likert-type scale from 1 (strongly agree) to 5 (strongly disagree), with higher scores reflecting higher satisfaction. The Nursing Job Satisfaction Scale takes 10 minutes to complete and includes the following subscales: quality of care, enjoyment, time to do one’s job, and task requirement. The goodness of fit index for the factor analyses ranges from 0.65–0.8, and Cronbach alpha ranges from 0.7–0.91 (Davidson, Folcarelli, Crawford, Duprat, & Clifford, 1997).

The weekly and final program evaluation forms consisted of five-point Likert-type scales ranging from 1 (poor) to 5 (excellent), with items for rating program content, effectiveness and usefulness, anticipated impact on daily work and life experiences, and facilitator evaluation. Each program evaluation also allowed for narrative feedback from participants for suggestions to improve the program.

Data Analysis

A mixed model repeated-measures analysis was used to compare the outcome measures as a function of time across four time points (before and immediately, three months, and six months after the program) adjusting for covariates (age, years in nursing, and years in oncology). An estimate statement within the mixed model was used to compare before program measures to immediately, three months, and six months after, as well as the average of the three time points after the program, respectively. The estimate statement also produces 95% confidence intervals (CIs) for the mean differences of the comparisons (before the program against immediately, three months, six months, and the average of the three time points after the program). All statistical tests were two-sided at a significance level of 0.05. The statistical analysis was conducted with SAS®, version 9.2.

Results

Fourteen nurses attended the two five-week programs. Table 1 summarizes sample characteristics. The majority were White, female, and married; had a bachelor’s degree in nursing; and were experienced nurses. One was unable to attend the retreat and the final session; therefore, the final analysis included only 13 participants.

Participants’ mean scores on the MBI, ProQOL IV, and IES-R across all time periods are displayed in Table 2. At baseline, prior to program implementation,

Table 1. Sample Characteristics (N = 14)

Characteristic	\bar{X}	Range
Age (years)	43.9	28–61
Years in nursing	15.4	5–29
Years in oncology nursing	12.4	4–29
Home support ^a	4	3–5
Work support ^a	3.6	1–5

Characteristic	n
Race	
White	13
Black	1
Gender	
Male	2
Female	12
Education	
Diploma	3
Associate’s degree	4
Bachelor’s degree	7
Marital status	
Single	3
Married	7
Divorced	4

^a Scores ranged from 0 (no support) to 5 (best possible support).

Table 2. Mean Scores on Study Instruments Before and After the Compassion Fatigue Resiliency Program

Instrument	Range	Before	Immediately After		Three Months After		Six Months After	
		\bar{X}	\bar{X}	\bar{X} Diff	\bar{X}	\bar{X} Diff	\bar{X}	\bar{X} Diff
MBI—Human Services Survey^a								
Emotional exhaustion	0–78	23.3	20.38	2.92	25.69	–2.38	19.84	3.46
Depersonalization	0–102	5.23	6.69	–1.46	6.53	–1.31	5.53	–0.31
Personal accomplishment	0–84	36.46	37.38	–0.92	37.61	–1.15	38.61	–2.15
Professional Quality of Life IV^b								
Compassion satisfaction	0–50	39.53	39.92	–0.38	38.53	1	40.76	–1.23
Burnout		23.46	22.61	0.85	23.69	–0.23	22.3	1.15
Secondary trauma		19.76	17.61	2.15	17.92	1.85	16.23	3.54*
Impact of Events Scale—Revised^c								
Avoidance	0–88	1.27	1.06	0.21	0.71	0.57**	0.9	0.37
Intrusions		1.79	1.34	0.45	0.75	1.03***	1.03	0.76**
Hyperarousal		1.38	0.8	0.58**	0.58	0.8***	0.74	0.64**
Total score		4.45	3.21	1.24*	2.05	2.4***	2.68	1.77**

* $p < 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

^aHigh scores for emotional exhaustion (27 or higher) and depersonalization (14 or higher) and low scores for personal accomplishment (37 or higher) reflect greater risk for burnout.

^bAt-risk scores for each subscale are as follows: compassion satisfaction, lower than 33; burnout, higher than 22; secondary traumatic stress, higher than 17.

^cHigher subscale scores reflect greater risk.

MBI—Maslach Burnout Inventory; \bar{X} Diff—mean difference

participants' scores on the MBI were below high risk. However, scores on the ProQOL IV for burnout and secondary traumatic stress were at the high-risk level. Repeated-measures analysis indicated that none of the covariates (age, years in nursing, and years in oncology) were significantly associated with the outcome measures. Comparisons of baseline measures with postprogram measures showed no statistically significant changes in the MBI subscales, even though scores for emotional exhaustion improved immediately and six months after the program and personal accomplishment improved at each time point. Compassion satisfaction scores on the ProQOL IV were variable, with no statistically significant changes. Burnout scores dropped slightly immediately after the program, remained near the preprogram score at three months, but then dropped below the preprogram level at six months. No statistically significant differences occurred. Secondary traumatization scores declined immediately after the program, remained down at three months, and then dropped at six months, with a statistically significant mean difference compared with baseline (\bar{X} difference = 3.54, $p = 0.044$, 95% CI [0.09, 6.99]).

The mean IES-R total scores improved significantly overall and immediately (\bar{X} difference = 1.24, $p = 0.04$, 95% CI [0.04, 2.45]), three months (\bar{X} difference = 2.4, $p < 0.001$, 95% CI [1.2, 3.61]), and six months (\bar{X} difference = 1.77, $p = 0.005$, 95% CI [0.57, 2.97]) after the program. The mean scores for each of the IES-R subscales declined (showing improvement) across the

three postprogram time points when compared with baseline. Avoidance scores were significantly lower at three months (\bar{X} difference = 0.57, $p = 0.007$, 95% CI [0.16, 0.98]). Hyperarousal scores showed immediate and sustained positive improvement, declining significantly immediately (\bar{X} difference = 0.58, $p = 0.01$, 95% CI [0.13, 1.03]), three months (\bar{X} difference = 0.8, $p < 0.001$, 95% CI [0.35, 1.25]), and six months (\bar{X} difference = 0.64, $p = 0.006$, 95% CI [0.19, 1.09]) after the program. Intrusion scores also showed significant improvement with sustained declines at three months (\bar{X} difference = 1.03, $p < 0.001$, 95% CI [0.53, 1.54]) and six months (\bar{X} difference = 0.76, $p = 0.004$, 95% CI [0.26, 1.26]).

The four subscales for nurse job satisfaction showed considerable variation over time, but none of the changes were statistically significant. Nurse perceptions of quality of care improved initially, but then remained relatively stable. Enjoyment increased slightly immediately and three months after the program, and declined to a level near baseline at six months. The subscales for time to do one's job and task requirement remained relatively stable across time periods.

Participants evaluated the program positively, particularly with respect to their ability to apply and benefit from resiliency techniques in the future. Mean evaluations of the program ranged from 4–4.7 (range 1–5). The staff nurse perceptions of the overall impact of the program on compassion fatigue symptoms also were high, and the narrative feedback was very positive. Staff valued learning that they were not alone in experiencing compassion fatigue. One nurse

commented, "It was most helpful to get together with a group and have discussions, to know other people have the same kind of day I do and experience the same things." Staff also identified strategies they could apply at work and home. One nurse said, "I learned how to relax a little bit about things. I learned to not take myself so seriously. I learned some relaxing techniques that kind of helped at home, too." Nurses also were able to be self-reflective and recognize how compassion fatigue affects their practice. For example, one nurse stated, "I have a tendency to take all the work on myself. I know now that it's okay to allow patients to wait, so I take my time and don't make stupid mistakes."

Discussion

The prevalence of compassion fatigue reported among nurses and other healthcare professionals presents the need for organizations to assess the vulnerability of their staff and develop relevant and appropriate interventional programs. This is the first reported study to show benefits gained from a compassion fatigue intervention program designed for oncology nurses. The significant reductions in secondary traumatic stress at six months and the overall total scores for the IES-R were very promising, particularly because the sample size was small. The significant reduction in the IES-R total score and subscales suggests that staff were less traumatized overall, felt better equipped to manage intrusive thoughts and feelings, and reported less behavioral avoidance when facing recent traumatic events.

The current study was an initial effort to develop a program suited to the needs of oncology nurses. The resiliency program was specifically designed to empower nurses to better recognize threatening, traumatic events and then to self-regulate the related stress. In addition, the components of intentionality, self-validation, connection, and self-care are designed to sustain the ability to manage stress and reduce intrusive stressful experiences.

The participants in the compassion fatigue resiliency program reported personal and professional benefits. Those findings were similar to the results of Cohen-Katz et al. (2005), where nurses experienced greater relaxation and self-care skills and improvement in work and family relationships. Learning about the use of relaxation exercises to achieve self-regulation during a perceived threat and how that aids in managing chronic stress was reported to be the most helpful aspect of the intervention. Participants also found learning that they were not alone to be particularly helpful, as compassion fatigue commonly is experienced by healthcare providers. That awareness gave participants a voice in being able to

discuss with colleagues the difficulties and stressors they face in their practice and to be more attentive to shared issues. The results of the program also were promising with respect to giving nurses useful strategies for managing stress at work and home.

Sustaining change over time is critical to the long-term success of the resiliency program. From an organizational perspective, the trend in scores provided an impetus to broaden the program to include all hospital staff. The feedback from staff who participated in the feasibility study contributed to the development of an institution-wide program. The program was expanded during the fall of 2011 with training of 25 additional facilitators to offer it to all healthcare providers across the medical center. A formal longitudinal evaluation of the program is being conducted. A special course was offered for managers and directors of the hospital in the first quarter of 2012 to equip those staff members with the skills needed to support a work environment that fosters professional growth and resiliency. Finally, a special program is being designed for the emergency department, a specifically high-risk area for compassion fatigue.

Limitations

The current study had a small sample size, which limited the ability to statistically document the full impact of the program and generalize findings. Through self-selection, staff members who chose to participate were possibly more amenable to learning coping strategies. In addition, the nurses who were most adversely affected by compassion fatigue may have chosen not to participate because of the voluntary nature of the program. Time demands for participation in the five-week program may have been a barrier for those staff feeling most overwhelmed. Subsequent programs have been restructured to cover content over a period of one day only.

Conclusions

The compassion fatigue intervention program has shown great promise with respect to informing nurses about the nature and impact of compassion fatigue in their work and personal lives. The results of this program still are only partially measurable. The researchers intend to examine over time whether the compassion fatigue resiliency program can improve staff job satisfaction, decrease turnover, and improve patient satisfaction within the hospital.

Implications for Nursing

Compassion fatigue is being recognized as a prevalent condition resulting from the traumatic nature of professional caregiving and the stressful environments

in which nurses work. Nurses must develop resiliency skills that will enable them to manage day-to-day stressors in an effective manner. This program has the potential for equipping professional nurses and other healthcare providers to work and live more intentionally and practice in a more rewarding manner.

The authors gratefully acknowledge J. Eric Gentry, PhD, LMHC, for his support and contributions to the review of this article.

Patricia Potter, RN, PhD, FAAN, is the director of research in Patient Care Services, Teresa Deshields, PhD, is the manager of the Siteman Counseling Service, and Julia Allen Berger, DMin,

BCC, is the chaplain of the Palliative Care Team, Oncology Services, and Spiritual Care Services, all at Barnes-Jewish Hospital; Marty Clarke, PA-C, PhD, is a physician's assistant in the Department of Psychiatry in the School of Medicine at Washington University; Sarah Olsen, RN, BS, is a research coordinator at Barnes-Jewish Hospital; and Ling Chen, MSPH, PhD, is a statistician in the Department of Biostatistics in the School of Medicine at Washington University, all in St. Louis, MO. Funding from the Barnes-Jewish Hospital Foundation supported the training of facilitators and conducting of the compassion fatigue resiliency program. Potter can be reached at pap1212@bjc.org, with copy to editor at ONFEditor@ons.org. (Submitted February 2012. Accepted for publication June 6, 2012.)

Digital Object Identifier: 10.1188/13.ONF.180-187

References

- Aycock, N., & Boyle, D. (2009). Interventions to manage compassion fatigue in oncology nursing. *Clinical Journal of Oncology Nursing*, 13, 183–191. doi:10.1188/09.CJON.183-191
- Beck, C.T. (2011). Secondary traumatic stress in nurses: A systematic review. *Archives of Psychiatric Nursing*, 25, 1–10. doi:10.1016/j.apnu.2010.05.005
- Beck, J.G., Grant, D.M., Read, J.P., Clapp, J.D., Coffey, S.F., Miller, L.M., & Palyo, S.A. (2008). The Impact of Event Scale-Revised: Psychometric properties in a sample of motor vehicle accident survivors. *Journal of Anxiety Disorders*, 22, 187–198. doi:10.1016/j.janxdis.2007.02.007
- Boscarino, J.A., Figley, C.R., & Adams, R.E. (2004). Compassion fatigue following the September 11 terrorist attacks: A study of secondary trauma among New York City social workers. *International Journal of Emergency Mental Health*, 6(2), 57–66.
- Coetzee, S.K., & Klopper, H.C. (2010). Compassion fatigue within nursing practice: A concept analysis. *Nursing and Health Sciences*, 12, 235–243. doi:10.1111/j.1442-2018.2010.00526.x
- Cohen-Katz, J., Wiley, S.D., Capuano, T., Baker, D.M., Deitrick, L., & Shapiro, S. (2005). The effects of mindfulness-based stress reduction on nurse stress and burnout: A qualitative and quantitative study, part III. *Holistic Nursing Practice*, 19(2), 78–86.
- 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*, 18, 302–308.
- Creamer, M., Bell, R., & Failla, S. (2003). Psychometric properties of the Impact of Event Scale-Revised. *Behavioral Research*, 41, 1489–1496. doi:10.1016/j.2003.07.010
- Davidson, H., Folcarelli, P.H., Crawford, S., Duprat, L.J., & Clifford, J.C. (1997). The effects of health care reforms on job satisfaction and voluntary turnover among hospital based nurses. *Medical Care*, 35, 634–645.
- Figley, C.R. (Ed.). (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. New York, NY: Brunner/Mazel.
- Figley, C.R. (1999). Compassion fatigue: Toward a new understanding of the costs of caring. In B.H. Stamm (Ed.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators* (2nd ed., pp. 3–28). Lutherville, MD: Sidran.
- Frisvold, M.H., Lindquist, R.M., & Peden, C. (2012). Living life in the balance at midlife: Lessons learned from mindfulness. *Western Journal of Nursing Research*, 34, 265–278.
- Garman, A.N., Corrigan, P.W., & 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/j.1076-8998.7.3.235
- Gentry, E., & Baranowsky, A. (1998). *Treatment manual for the accelerated recovery program: Set II*. Toronto, Ontario, Canada: Psych Ink.
- Gentry, E., Baranowsky, A., & Dunning, K. (1997, November). *Accelerated Recovery Program for compassion fatigue*. Paper presented at the Thirteenth Annual International Society for Traumatic Stress Studies Conference, Montreal, Quebec, Canada.
- Gentry, E., Baranowsky, A., & Dunning, K. (2002). The Accelerated Recovery Program for compassion fatigue. In C.R. Figley (Ed.), *Treating compassion fatigue* (pp. 123–138). New York, NY: Brunner/Mazel.
- Goodman, M.J., & Schorling, J.B. (2012). A mindfulness course decreases burnout and improves well-being among healthcare providers. *International Journal of Psychiatry in Medicine*, 43, 119–128.
- Gunusen, N.P., & Ustun, B. (2010). An RCT of coping and support groups to reduce burnout among nurses. *International Nursing Review*, 57, 485–492. doi:10.1111/j.1466-7657.2010.00808.x
- Hinshaw, A.S., & Atwood, J.R. (1983). Nursing staff turnover, stress, and satisfaction: Models, measures, and management. *Annual Review of Nursing Research*, 1, 133–153.
- Hooper, C., Craig, J., Janvrin, D.R., Wetsel, M.A., & Reimels, E. (2010). Compassion satisfaction, burnout, and compassion fatigue among emergency nurses compared with nurses in other selected inpatient specialties. *Journal of Emergency Nursing*, 36, 420–427. doi:10.1016/j.jen.2009.11.027
- Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine*, 41, 209–218.
- Jones, C.B. (2004). The costs of nurse turnover: Part 1: An economic perspective. *Journal of Nursing Administration*, 34, 562–570.
- Kanste, O., Miettunen, J., & Kyngäs, H. (2006). Factor structure of the Maslach Burnout Inventory among Finnish nursing staff. *Nursing and Health Science*, 8, 201–207. doi:10.1111/j.1442-2018.2006.00283.x
- Kravits, K., McAllister-Black, R., Grant, M., & Kirk, C. (2010). Self-care strategies for nurses: A psycho-educational intervention for stress reduction and the prevention of burnout. *Applied Nursing Research*, 23, 130–138. doi:10.1016/j.apnr.2008.08.002
- 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. doi:10.1016/j.apnr.2005.08.002
- Maiden, J., Georges, J.M., & Connelly, C.D. (2011). Moral distress, compassion fatigue, and perceptions about medication errors in certified critical care nurses. *Dimensions of Critical Care Nursing*, 30, 339–345. doi:10.1097/DCC.0b013e31822fab2a
- Maslach, C. (1982). *Burnout—The cost of caring*. Englewood Cliffs, NJ: Prentice-Hall.
- Maslach, C., & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2, 99–113.
- Perry, B., Toffner, G., Merrick, T., & Dalton, J. (2011). An exploration of the experience of compassion fatigue in clinical oncology nurses. *Canadian Oncology Nursing Journal*, 21, 91–105.
- Poghosyan, L., Aiken, L.H., & Sloane, D.M. (2009). Factor structure of the Maslach Burnout Inventory: An analysis of data from large scale cross-sectional surveys of nurses from eight countries. *International Journal of Nursing Studies*, 46, 894–902.

- Potter, P., Deshields, T., Divanbeigi, J., Berger, J., Cipriano, D., Norris, L., & Olsen, S. (2010). Compassion fatigue and burnout: Prevalence among oncology nurses [Online exclusive]. *Clinical Journal of Oncology Nursing*, 14, E56–E62. doi:10.1188/10.CJON.E56-E62
- Robins, P.M., Meltzer, L., & Zelikovsky, N. (2009). The experience of secondary traumatic stress upon care providers working within a children's hospital. *Journal of Pediatric Nursing*, 24, 270–279.
- Schwam, K. (1998). The phenomenon of compassion fatigue in perioperative nursing. *Association of Perioperative Registered Nurses Journal*, 68, 642–645, 647–648. doi:10.1016/S0001-2092(06)62569-6
- Stamm, B.H. (1995). *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators*. Lutherville, MD: Sidran.
- Stamm, B.H. (2002). Measuring compassion satisfaction as well as fatigue: Developmental history of the compassion satisfaction and fatigue test. In C.R. Figley (Ed.), *Treating compassion fatigue* (pp. 107–119). New York, NY: Brunner-Routledge.
- Stamm, B.H. (2005). *The ProQOL manual*. Retrieved from <http://www.compassionfatigue.org/pages/ProQOLManualOct05.pdf>
- Sundin, L., Hochwalder, J., & Lisspers, J. (2011). A longitudinal examination of generic and occupational specific job demands and work-related social support associated with burnout among nurses in Sweden. *Work*, 38, 389–400. doi:10.3233/WOR-2011-1142
- Vahey, D.C., Aiken, L.H., Sloane, D.M., Clarke, S.P., & Vargas, D. (2004). Nurse burnout and patient satisfaction. *Medical Care*, 42(2, Suppl.), II57–II66. doi:10.1097/01.mlr.0000109126.50398.5a
- Weiss, D.S., & Marmar, C.R. (1997). The Impact of Event Scale–Revised. In J.P. Wilson & T.M. Keane (Eds.), *Assessing psychological trauma and PTSD*. New York, NY: Guilford.
- Wolf, Z.R., Colahan, M., & Costello, A. (1998). Relationship between nurse caring and patient satisfaction. *Medsurg Nursing*, 7, 99–105.
- Yoder, E.A. (2010). Compassion fatigue in nurses. *Applied Nursing Research*, 23, 191–197. doi:10.1016/j.apnr.2008.09.003

