

# Development and Evaluation of Targeted Psychological Skills Training for Oncology Nurses in Managing Stressful Patient and Family Encounters

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Studies of the cumulative effects of stress in oncology nursing have pointed to outcomes such as burnout and compassion fatigue. Burnout reflects exhaustion in the context of work demands (Freudenberger, 1974), whereas compassion fatigue has been used to identify the personal costs over time of caring for others who are suffering (Figley, 2002; Joinson, 1992). Oncology nurses report high rates of both phenomena (Edmonds, Lockwood, Bezjak, & Nyhof-Young, 2012; Hooper, Craig, Janvrin, Wetsel, & Reimels, 2010; Ksiazek, Stefaniak, Stadnyk, & Ksiazek, 2011; Potter et al., 2010; Trufelli et al., 2008). In medical settings, work-related stress has been associated with poorer well-being (Taylor, Graham, Potts, Richards, & Ramirez, 2005), lower confidence (Travado, Grassi, Gil, Ventura, & Martins, 2005), and higher risk for medical errors (West et al., 2006). Oncology nurses with higher stress also may be more likely to consider leaving for positions outside of cancer care (Demirci et al., 2010), which is an important concern given the limited numbers of nurses with oncology training.

The evidence is inconsistent regarding whether interventions may prevent or reduce the effects of cumulative stress among oncology nurses. Intensive and nontargeted psychological training may decrease stress (Delvaux et al., 2004); however, the time and resources required to deliver or attend those programs limit feasibility in many practice settings. A number of pilot trials have tested brief, structured programs to reduce burnout among oncology nurses, with evidence to support additional investigation of education, coping skills, and mindfulness approaches (Cohen-Katz et al., 2005; Edmonds et al., 2012; Italia, Favara-Scacco, Di Cataldo, & Russo, 2008; Lupo et al., 2012; Mackenzie, Poulin, & Seidman-Carlson, 2006; Rask, Jensen, Andersen, & Zachariae, 2009; Turner et al., 2009). Mindfulness refers to intentional and nonjudgmental awareness of the present moment, engaging in the moment rather

**Purpose/Objectives:** To reduce workplace stress by developing a brief psychological skills training for nurses and to evaluate program feasibility, acceptability, and preliminary efficacy in decreasing burnout and stress.

**Design:** Intervention development and evaluation.

**Setting:** Outpatient chemotherapy unit at a comprehensive cancer center.

**Sample:** 26 infusion nurses and oncology social workers.

**Methods:** Focus groups were conducted with nurses. Results informed the development and evaluation of training for nurses. Participants completed the Maslach Burnout Inventory and Perceived Stress Scale post-training.

**Main Research Variables:** Burnout and stress.

**Findings:** Focus groups indicated strong commitment among nurses to psychosocial care and supported the idea that relationships with patients and families were sources of reward and stress. Stressors included factors that interfered with psychosocial care such as difficult family dynamics, patient behaviors and end-of-life care issues. Psychological skills training was developed to address these stressors. Evaluations suggested that the program was feasible and acceptable to nurses. At two months, participants showed reductions in emotional exhaustion ( $p = 0.02$ ) and stress ( $p = 0.04$ ).

**Conclusions:** Psychological skills training for managing difficult encounters showed feasibility, acceptability, and potential benefit in reducing emotional exhaustion and stress.

**Implications for Nursing:** Brief training that targets sources of clinical stress may be useful for nurses in outpatient chemotherapy units.

**Knowledge Translation:** Specific stressors in relationships with patients and families present challenges to nurses' therapeutic use of self. Targeted psychological skills training may help nurses problem-solve difficult encounters while taking care of themselves. System-level strategies are needed to support and promote training participation.

than acting on habit or wishing the moment were different. Oncology staff members also have shown small improvements following monthly group meetings

for support and problem-solving organizational processes (Le Blanc, Hox, Schaufeli, Taris, & Peeters, 2007).

A few programs have explicitly sought input from the nursing community on program design or delivery (Cohen-Katz, Wiley, Capuano, Baker, & Shapiro, 2004; Le Blanc et al., 2007; Medland, Howard-Ruben, & Whitaker, 2004). However, training availability varies widely across cancer institutions (Aycock & Boyle, 2009). In addition, the empirical literature highlights that even when programs are available, the challenges of program recruitment and retention still need to be addressed.

The development of feasible and efficient programs to teach psychological skills may be a key priority for reducing burnout and stress and retaining nurses in cancer care (Medland et al., 2004). The current study was designed to develop and evaluate brief, targeted training to enhance oncology nurses' skills for managing emotionally difficult clinical encounters. This work was prompted by the literature as well as discussions with local oncology nurses regarding difficult encounters and their effects on nursing staff.

Study procedures followed scientific guidelines for stages of behavioral intervention development (Rounsaville, Carroll, & Onken, 2001). During phase 1, the authors conducted focus groups with oncology staff to elicit perspectives on psychosocial challenges that infusion nurses faced when providing direct patient care. The information was used to guide the development of a training program for infusion nurses to enhance skills for managing these challenges while caring for themselves. During phase 2, the authors evaluated program feasibility, acceptability, and potential efficacy in reducing symptoms of burnout and stress.

## Phase 1: Qualitative Study

### Methods

Focus groups were conducted to gain an in-depth understanding of difficult clinical encounters and training needs among infusion nurses. The current authors selected this method to elaborate on a complex and inadequately understood topic (Krueger & Casey, 2008), explore how a particular group thinks about the topic (Curtis & Redmond, 2007), and guide initial stages of intervention development (Rounsaville et al., 2001). The group setting was intended to support discussions of sensitive topics and build on participants' shared experiences.

### Sample

Participants included nurses at the Massachusetts General Hospital (MGH) Cancer Center who provide direct patient care in an outpatient infusion unit. MGH Cancer Center social workers also were enrolled to col-

lect additional information about difficult encounters on the unit. Oncology social workers, available to infusion nurses as the first line of specialized psychosocial support for patients and families on the unit, were included to gain perspective on consults called by infusion nurses, sources of nurse distress on the unit, and potential training opportunities. All participants worked in oncology for at least six months to ensure adequate experiences for informing perspectives on clinical encounters.

### Procedure

Study procedures were approved by the MGH and Partners Healthcare Human Research Committee prior to conduct. Participants were recruited during spring 2011 via flyers and presentations from study staff during clinic meetings. Clinic managers did not participate in recruitment. Nurses contacted study staff directly to inquire about participation. Nurses who were interested and eligible provided informed consent and were invited to attend a one-hour focus group. A brief questionnaire was administered by a study staff member prior to focus group participation. Focus group data were collected until thematic saturation was achieved or no new themes emerged. Groups were moderated by a licensed MGH Cancer Center psychologist with experience in qualitative data collection, and groups were conducted separately by job type (two nurse groups, one social work group). A note taker was present at all groups. Food and refreshments were provided. Groups were audio-recorded and transcribed by study staff.

**Questionnaire:** Participants reported age, gender, race/ethnicity, and work hours per week. Nurses also completed measures to evaluate burnout using the Maslach Burnout Inventory (MBI)–Human Services Survey (Maslach, Leiter, & Schaufeli, 2009) and perceived stress using the Perceived Stress Scale (PSS) (Cohen, Kamarck, & Mermelstein, 1983).

The MBI is a widely used measure of burnout in human service professions, including oncology (Trufelli et al., 2008). The measure comprises three subscales based on Maslach's model of burnout: emotional exhaustion (depletion of resources), depersonalization (detachment from aspects of work), and personal reward (perception of competence and productivity) (Maslach & Jackson, 1981). Initial MBI evaluation revealed good internal consistency (Cronbach alpha > 0.7) and correlation with job dissatisfaction in human services (Maslach & Jackson, 1981). Subsequent work has supported MBI internal consistency (Cronbach alpha > 0.7) and factor structure among nurses (Poghosyan, Aiken, & Douglas, 2009). The current study used mean scores on MBI subscales.

The 14-item PSS is a measure of the extent to which life has been stressful, overwhelming, and unmanageable during the prior week. The PSS is a commonly used measure of perceived stress. Initial evaluation showed

**Table 1. Phase 1 Sample Characteristics (N = 17)**

Characteristic	Infusion Nurses (n = 9)		Social Workers (n = 8)	
	$\bar{X}$	SD	$\bar{X}$	SD
Age (years)	42.9	9.2	41.8	12.1
Work hours per week	32.7	8.6	36	7.4
Characteristic	n		n	
<b>Gender</b>				
Female	9		6	
Male	–		2	
<b>Race or ethnicity</b>				
Caucasian	8		8	
African American	1		–	

good test-retest correlation (0.85), internal consistency (Cronbach alpha > 0.8), and convergence with a measure of stressful life events in adults (Cohen et al., 1983). The PSS also converged with a measure of nursing stress in hospital nurses (Purcell, Kutash, & Cobb, 2011). The current study used total PSS scores.

**Focus groups:** Each group followed a semistructured interview guide comprised of open-ended questions and required probes. The guide was developed through iterative discussions by an interdisciplinary team of clinicians. Topics were informed by conceptual and empirical work on burnout and compassion fatigue, including domains of personal reward, exposure to suffering, exhaustion, and coping resources (Maslach et al., 2001; Medland et al., 2004; Sabo, 2006).

Questions for nurses focused on four topics: (a) rewarding patient and family encounters, (b) difficult encounters, (c) ramifications and coping strategies for difficult encounters, and (d) training needs and preferences. For social workers, complementary questions were generated to elicit perspectives or opinions about challenges that infusion nurses may face. The guide was cognitively tested with clinicians in nursing and social work to assess clarity, relevance, and potential bias (Willis, 2005). Revisions were made accordingly prior to use.

Focus groups were conducted based on prior recommendations for obtaining accurate data and facilitating a comfortable environment for self-disclosure (Côté-Arsenault & Morrison-Beedy, 2005; Krueger & Casey, 2008; Shaha, Wenzel, & Hill, 2011). The moderator first oriented participants to the discussion purpose. Participants were advised that researchers were not seeking consensus on topics. Parameters were established for safety and confidentiality. Throughout the session, the moderator continued to model active listening and respect for others.

During each session, the moderator followed the guide and used verbal techniques to clarify or elaborate

responses (Rubin & Rubin, 2005). For nurses, the session began with an exploration of rewarding aspects of patient and family care to elicit nurses' values and motivations for their work. The moderator then asked about situations that made it difficult to provide care as nurses ideally preferred. Nurses were invited to share experiences with challenging encounters. The group explored ramifications of encounters and ways of coping. The session ended with elicitation of training ideas. For social workers, the moderator guided a similar discussion; social workers were asked about referrals they received from the infusion unit and their perspectives or opinions on encounters that nurses faced on the unit.

## Analytic Plan

Focus group data were analyzed using a framework approach, a method for interpreting themes to reduce risk of data misinterpretation (Ritchie & Lewis, 2003). The authors first identified themes and developed a coding structure. Data from nurses were independently coded by two study team members using NVivo 9. Kappa coefficients were generated to evaluate coding precision. That statistic provides a measure of agreement between coders with a range from 0 (equivalent to chance) to 1 (perfect agreement). Coding differences were reviewed with study staff to resolve discrepancies. The final kappa (0.84) indicated a high level of agreement. Several overarching ideas were identified that unified specific themes.

## Results

### Perspectives From Nurses

Sample characteristics are reported in Table 1. Broadly, MBI subscale scores reflected less burnout relative to reports from a large sample of U.S. general hospital nurses (Poghosyan et al., 2009) and a meta-analysis of smaller studies of cancer clinicians (Trufelli et al., 2008).

**Rewards:** Reward was associated with experiences in which nurses developed meaningful relationships with patients and families, made a difference in their lives, or witnessed their journeys of personal growth. Nurses shared that building relationships with patients and families was one of the most meaningful aspects of their work, representing a source of personal reward and stress.

**Stress:** Stress was discussed as a consequence of difficult encounters, which could be categorized in four major themes: (a) patient factors that interfered with provision of psychosocial care (e.g., inappropriate behaviors, psychiatric symptoms and/or lack of emotional disclosure to staff); (b) family dynamics and needs (e.g., family member behaving aggressively toward patient or demanding staff attention); (c) care provision at the end-of-life (e.g., navigating intra-family barriers to

prognostic understanding); and (d) maintaining emotional boundaries during difficult encounters. Themes are described in Figure 1.

Most nurses felt that difficult encounters did not increase risk for workplace errors. However, those sce-

#### **Inappropriate behaviors**

"You have some angry, angry patients. And no matter what you do, you try to do everything for them, and if anything, they get angrier."

"We all run into sexually inappropriate patients. I think because of some of my life experiences, I just get mad."

"After that patient screamed at me, I felt like, 'Nothing's going right for me today.' I know it wasn't me, but it still got thrown at me."

#### **Psychiatric symptoms**

"Sometimes it's hard to weed out whether a patient is aggressive or in such distress that you need to look past it for now. That's really hard."

"I didn't know if I could get this patient through the treatment, feeling like I didn't have any technique to decrease the anxiety. It's not like we didn't try. Some days nothing would work."

#### **Lack of disclosure**

"There was nothing I could say that was meaningful. This patient wasn't particularly mean to me, but nothing meant anything."

### **Theme 2: Family Dynamics and Needs**

"When you see vulnerable patients being mistreated by a spouse, it's hard to watch. Those are situations where I just feel like, 'Okay God, give me strength to bite my tongue.'"

"The patient's family member was so demanding that it began affecting my time with other patients."

"A lot of family members need someone to be close to them and not be so sterile. After a patient dies, sometimes a family member may rely on you a little too much."

"You feel like you need to have an end-of-life conversation and it's so very touchy. I have a patient right now who is not going to talk about end-of-life. And there are some people like that."

"You may be giving chemotherapy to a patient and feel internally that this is just wrong. Whereas if we just let him go home and be on hospice, he'll have a more peaceful death."

"Once you have a pattern of interacting with a patient, and you say to yourself, 'I've kind of made this pattern acceptable because I haven't said anything,' how do you go back and say, 'You know, this isn't right.'"

### **Figure 1. Themes of Patient and Family Care Challenges Expressed by Outpatient Infusion Nurses**

narios constrained nurses' efforts to provide the support they felt was integral to quality care. Some described a feeling of burden or fatigue from repeated exposure to suffering. Common coping strategies included venting, seeking input from others, compartmentalizing feelings, and distancing oneself from patients and families.

### **Perspectives From Social Workers**

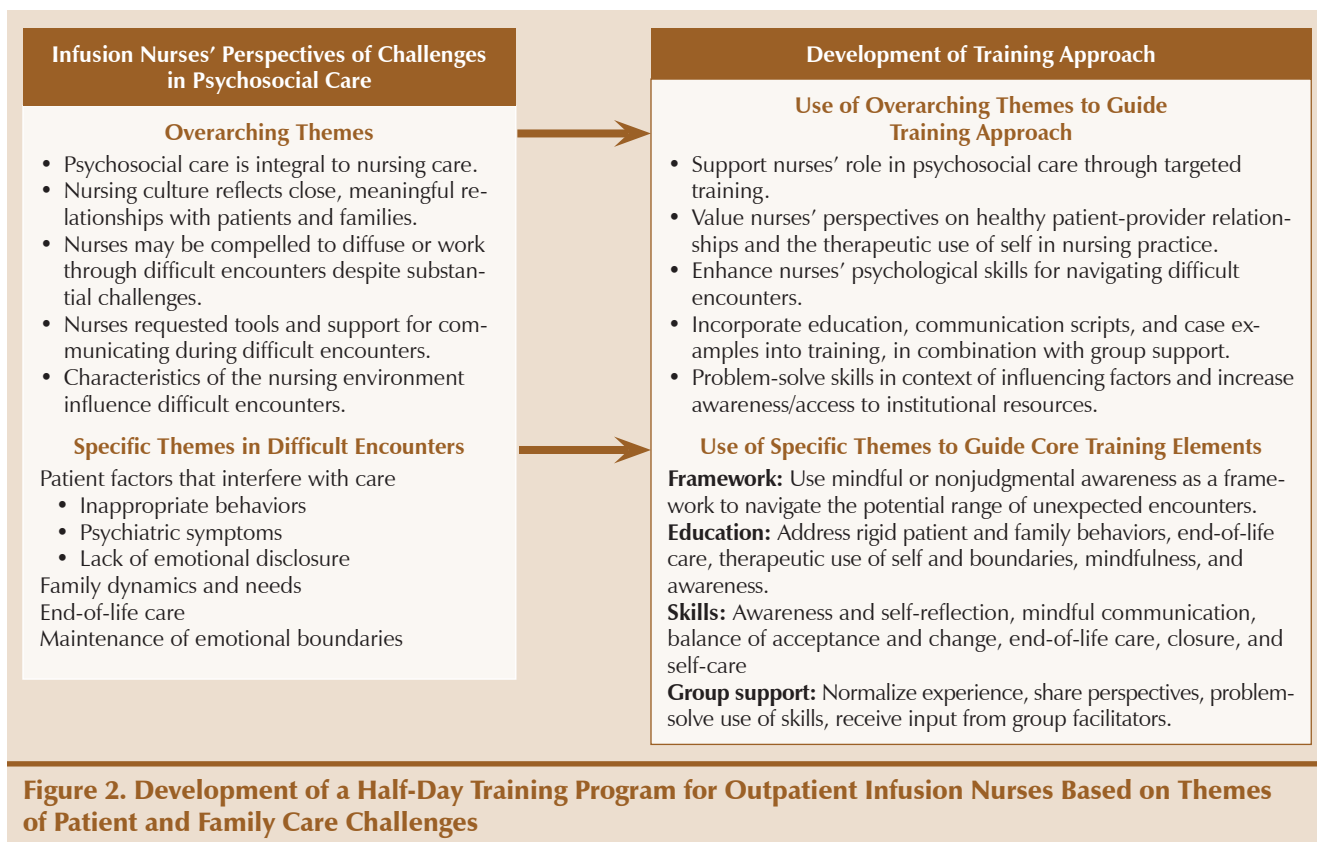
Social workers corroborated challenges described by nurses and reinforced that nurses made substantial efforts to establish rapport with patients and families, even when major barriers were present. Social workers also reflected on the intimate nature of relationships between nurses and patients and families. Diverse factors were suggested to shape close relationships on the infusion unit, including routine physical contact with patients, interactions during moments of suffering, characteristics of individuals drawn to work in oncology, and patient and family needs and expectations. These factors contributed to difficulties in boundary setting during difficult encounters. Limited control over patient scheduling and lack of involvement in end-of-life treatment planning were suggested to influence the stress of difficult encounters.

### **Training Needs Among Infusion Nurses**

Nurses felt compelled to guide or diffuse encounters, and they expressed a need for structured scripts. Individual variation occurred in regard to which experiences were perceived as most challenging. Findings suggested potential benefit of a framework to navigate the range of unexpected encounters, as well as sample scripts for common situations. Results also emphasized the importance of support to normalize experiences and share solutions for encounters that may uniquely affect each nurse. Some had benefited from consultation with seasoned clinicians, underscoring the need for training facilitators with relevant experience.

Regardless of skill level, most nurses described unnerving experiences in which they could not form productive relationships with patients or families. Findings suggested a need for education and discussion on balancing efforts to accept or change difficult situations. Relevant topics included: (a) increasing understanding of rigid patient behaviors, (b) increasing access to institutional support resources, and (c) reinforcing concepts of end-of-life psychosocial care, particularly with patients who refuse or avoid end-of-life discussions.

Finally, focus groups emphasized the importance of the nursing environment and culture in shaping the training approach. Nurses felt that their patient-provider boundaries needed to be more flexible than those advocated in other helping professions. Training needed to reflect nurses' perspectives on healthy



patient-provider relationships. Also, under many circumstances, nurses prioritized psychosocial care for patients at the expense of self-care. This suggested a need to explicitly problem-solve regular use of self-care strategies. Similarly, nurses described barriers to attending seminars or in-services, including shift schedules, complex patient needs, and other factors. Findings suggested that a weekend program might be more feasible than a series of brief weekday sessions.

## Phase 2: Training Program Development and Evaluation

### Methods

Researchers developed a brief group training to expand nurses' skills for managing difficult encounters. Salient training topics were generated based on prior intervention trials, phase 1 results, and key aspects of the nursing environment. A training manual was created that specified what techniques to use. Mapping of phase 1 findings to the training approach and core elements is shown in Figure 2.

### Training Approach

Several phase 1 participants focused on the need for communication tools. Notably, although perceived deficits in communication skills may be a risk factor for burnout, little empirical support exists for communication

skills training to reduce burnout symptoms (Rask et al., 2009; Turner et al., 2009). Conversely, mindfulness has shown preliminary promise for reducing burnout (Cohen-Katz et al., 2005; Mackenzie et al., 2006); however, a gap exists in the empirical work to integrate this approach into direct patient care. Phase 1 results suggested that nurses might benefit from a combined approach, with mindfulness as a framework for navigating complex and ethically fraught clinical interactions.

The current study's approach was grounded in the perspective that relationships with patients and families are an integral part of nursing care. This perspective is reflected in Watson's Theory of Human Care, in which intentional, authentic care transactions with patients are proposed to strengthen multiple dimensions of patient well-being (Watson, 2011). Core training elements also were rooted in the therapeutic use of self (Ersser, 1998; Travelbee, 1971), the concept that nurses engage their total selves in care transactions.

The training agenda consisted of seven modules that integrated skills for navigating the range of difficult encounters that may occur in practice (see Figure 3). Education and skill building were designed to help nurses balance efforts toward acceptance and change during situations. Sample scripts were provided to illustrate concepts in common scenarios. Strategies were drawn from psychotherapy and mind-body principles.

### 1. Approaching interactions from an ethic of nursing care

- Interpret American Nursing Association ethical principles as they may apply to difficult encounters with patients and families.
- Explore balance of duty to self and others.

### 2. Therapeutic use of self

- Define concept of 'therapeutic use of self' in nursing practice.
- Reflect on use of self, role of boundaries between self and others, and instances of transference and counter-transference.
- Explore ways to promote awareness and reflection in nursing practice.

### 3. Continuum of interventions for patients

- Practice strategies for assisting patients and families in coping with stress.
- Review resources and procedures for making referrals to supportive care and for maintaining safety in high risk situations.

### 4. Mindfulness concepts and practice

- Introduce mindfulness as a central concept in managing emotions.
- Teach basic skills and exercises for practicing mindfulness.
- Discuss how mindfulness may be used to help nurses coach themselves through difficult patient and family encounters.

### 5. Difficult encounters and treatment interference

- Discuss features and challenges of difficult patient and family encounters.
- Explore balance of acceptance and change in difficult situations.
- Review principles and strategies for mindful communication during difficult encounters.
- Review case examples and scripts for managing difficult encounters.

### 6. Caring for patients at the end-of-life

- Explore concepts and psychological challenges of providing end-of-life care.
- Provide techniques and strategies for mindful communication with patients and families at end-of-life.
- Explore role of closure and options for seeking closure.

### 7. Self-care for compassion fatigue

- Discuss definitions, influencing factors, symptoms, and effects of compassion fatigue.
- Discuss use of reflection and self-care for reducing fatigue.
- Explore factors that inspire nurses to continue their line of work.

## Figure 3. Content of a Half-Day Training Program for Outpatient Infusion Nurses

Discussions also were aligned with the American Nurses Association's ethical principles, including duty to self and others (American Nurses Association, 2001). Group support was emphasized for normalizing experiences and problem-solving newly learned skills.

The training was delivered as a half-day program on a weekend morning. Facilitators were licensed MGH Cancer Center clinicians in nursing, social work, psychology, and psychiatry. Some facilitators had experience consulting with the infusion unit staff, but none had a supervisory role on the unit. Participants received

a book on mindfulness principles and practices as applied to relationships (Hanh, 2011), and were encouraged to practice new skills outside of the group. Participants included MGH Cancer Center infusion nurses with at least six months of oncology experience. Phase 1 participants were eligible for enrollment.

## Procedure

The MGH and Partners Healthcare Human Research Committee approved phase 2 procedures. Participants were recruited during Fall 2011 via presentations by study staff during clinic meetings and by departmental e-mail invitation. Clinic managers did not participate in recruitment. Nurses contacted study staff directly, and those who were eligible provided informed consent and were invited to attend the training. A study staff member met with each participant at pretraining and two months post-training to administer a questionnaire. Participants also provided anonymous program feedback immediately after and two months post-training. Participants received up to four continuing education credits for attendance. Food and refreshments were provided during the program.

At pretraining, participants reported demographic information (age, gender, race or ethnicity, work hours per week) (see Table 2) and completed the MBI (Maslach et al., 2009) and PSS (Cohen et al., 1983) (see Table 3). At two months post-training, the MBI and PSS were readministered.

## Analytic Plan

Feasibility was assessed as the proportion of infusion nurses who enrolled in phase 2, and the proportion of participants who attended the training and completed the assessments. Acceptability was evaluated via anonymous feedback about participant satisfaction. Preliminary efficacy was assessed as changes in MBI and PSS scores from pretraining to two months post-training. Changes were evaluated with non-parametric Wilcoxon signed rank tests in SPSS®, version 17.0, using conservative ( $p < 0.05$ ) and liberal ( $p < 0.1$ ) critical values.

## Results

### Feasibility

Of the about 60 infusion nurses, nine (15%) provided informed consent. The authors did not collect data from non-enrollees. Informal feedback indicated that reasons for non-participation included scheduling conflicts and study time commitment without exchange for shift hours or related compensation. No study attrition occurred among enrollees.

MBI scores reflected less burnout relative to those reported in previous studies of hospital nurses (Poghosyan

**Table 2. Phase 2 Sample Characteristics (N = 9)**

Characteristic	$\bar{X}$	SD
Age (years)	52.8	7.8
Work hours per week	38.1	11.2

Characteristic	n
<b>Gender</b>	
Female	9
<b>Race or ethnicity</b>	
Caucasian	9

et al., 2009) and cancer clinicians (Trufelli et al., 2008). Participants also were relatively experienced nurses. Although comparisons should be interpreted with caution, results suggested that barriers to participation may have been more common among newer nurses and those with greater burnout.

### Acceptability

Participants felt comfortable with the setting and staff, and eight of nine felt comfortable actively participating in the group. Having MGH Cancer Center clinicians as facilitators helped nurses feel validated with regard to their role in patient care, the complexities of their work, and the impact of difficult encounters. Program scheduling was considered convenient in comparison to multiple brief sessions. Most participants (n = 8) felt the program length was appropriate, although some (n = 3) wanted more time for discussions.

All participants described training content as relevant to their practice (versus not relevant or not sure). One of the most meaningful aspects was that the program afforded a time and place for nurses to reflect on their roles in patient and family care. Other specific benefits included mindfulness concepts, self-care strategies, scripts, and validation of approaches that nurses were already using. Critiques included desire for more time to discuss applying skills to current cases. Some indicated that skill-building might be more useful to newer nurses. At two months post-training, most participants (n = 8) continued to describe strategies as helpful (versus not helpful or not sure). Five reported that they were using the strategies at least a few times per week. Participants described efforts to “stay in the moment” and to practice self-care.

### Preliminary Outcomes

Preliminary analysis of proposed training outcomes is reported in Table 4. At two months post-training, participants showed reductions in emotional exhaustion and perceived stress, with no change in depersonalization or personal accomplishment. Based on MBI cut-off scores (Maslach et al., 2009), all participants reported

high personal accomplishment at both time points. The proportion with moderate elevation on emotional exhaustion or depersonalization decreased from 67% (n = 6) to 33% (n = 3).

## Discussion

The Oncology Nursing Society (ONS) Life Cycle of the Oncology Nurse Task Force highlighted that oncology nursing meant being present and responsive during times of suffering (Cohen & Sarter, 1992). In the current study, infusion nurses reported that building relationships with patients and families was a critical aspect of quality care. Relationships were one of the most important sources of reward, a theme that has been reflected in prior research (Rohan & Bausch, 2009; Wenzel, Shaha, Klimmek, & Krumm, 2011).

Factors that interfered with forming or maintaining relationships were key stressors. Four themes emerged in descriptions of difficult encounters: (a) patient factors that interfered with psychosocial care (e.g., inappropriate behaviors or psychiatric symptoms); (b) family dynamics and needs (e.g., family member elevating patient distress); (c) end-of-life care (e.g., navigating barriers to prognostic understanding); and (d) maintaining emotional boundaries during difficult encounters. Themes were consistent with prior findings among nurses (Cohen, Ferrell, Vrabel, Visovsky, & Schaefer, 2010; Perry, Toffner, Merrick, & Dalton, 2011; Piers et al., 2012; Sehlen et al., 2009; Turner et al., 2007; Wenzel et al., 2011).

Themes of reward and stress reflected a key premise of nurses’ therapeutic use of self to foster relationships with patients and families. The therapeutic use of self involves a nurse’s total being, including knowledge, personality, and emotional expressions (Ersser, 1998; Travelbee, 1971). Nurses commonly described their efforts to connect with, comfort, educate, protect, advocate for, and empower patients as critical to their work.

**Table 3. Phase 1 Instrument Results**

Maslach Burnout Inventory <sup>a</sup>	$\bar{X}$	SD
Personal accomplishment	1.78	0.7
Emotional exhaustion	1.72	1.08
Depersonalization	0.83	0.61

Perceived Stress Scale <sup>b</sup>	$\bar{X}$	SD
Stress	18.2	6.3

<sup>a</sup> Score range = 0–6; personal accomplishment: lower scores indicate greater personal accomplishment; emotional exhaustion: higher scores indicate greater exhaustion; and depersonalization: higher scores indicate greater depersonalization.

<sup>b</sup> Score range = 0–56; higher scores indicate greater stress.

Note. Based on information from Cohen et al., 1983.

**Table 4. Phase 2 Instrument Results**

Maslach Burnout Inventory <sup>a</sup>	Pretraining		2 Months Post-Training		z	p
	$\bar{X}$	SD	$\bar{X}$	SD		
Personal accomplishment	2	0.83	1.88	0.41	-0.12	0.91
Emotional exhaustion	1.62	0.66	1.21	0.6	-2.38	0.02
Depersonalization	0.76	0.68	0.67	0.5	-0.74	0.46

Perceived Stress Scale <sup>b</sup>	Pretraining		2 Months Post-Training		z	P
	$\bar{X}$	SD	$\bar{X}$	SD		
Stress	20.5	3.79	17.66	4.12	-2.02	0.04

<sup>a</sup> Score range = 0–6; personal accomplishment: lower scores indicate greater personal accomplishment; emotional exhaustion: higher scores indicate greater exhaustion; and depersonalization: higher scores indicate greater depersonalization.

<sup>b</sup> Score range = 0–56; higher scores indicate greater stress.

Note. Based on information from Cohen et al., 1983.

One of the most difficult aspects of stressful encounters was that they interfered with these processes.

Psychological skills are needed to address these stressful situations. The concept of mindfulness or nonjudgmental awareness is one way to approach skill building for oncology nurses to manage emotions during difficult encounters. This approach supports prior work emphasizing the need to enhance personal resources for coping with nursing issues such as bereavement and loss (Wenzel et al., 2011). Mindfulness-based stress reduction has shown preliminary benefit for nurses (Cohen-Katz et al., 2005; Mackenzie et al., 2006; Pipe et al., 2009). At post-training and two-month follow-up, program participants indicated that the concept of mindfulness was relevant to their work and could be integrated into nursing practice.

The authors' program focused on skills for difficult encounters, and may have decreased nurses' levels of perceived stress and emotional exhaustion. This is consistent with conceptual work suggesting that reflection during or after stressful encounters can reduce risk for emotional conflict (Lawrence, 2011). Results also align with findings from an intervention trial for hospital nurses to relieve patient and family suffering and manage emotions during difficult encounters (Arranz, Ulla, Ramos, Del Rincón, & López-Fando, 2005). The current study's participants also felt validated by attention to the complexities and challenges of their work, even when they felt that they had already mastered the skills that were discussed.

The brief training format had some disadvantages. Participants expressed a desire for more time to explore the use of new skills in their current practice. Deliver-

ing the program over multiple sessions might support time for skills practice and discussion. However, enrollment was relatively low, and nurses noted barriers to attendance at multi-session programs. Results suggested that creative institutional solutions and support are needed to facilitate attendance (Cohen-Katz et al., 2004), particularly among newer nurses.

## Limitations

The training had several strengths in that it was informed by a study of needs and preferences, tailored to reflect nurses' patient care values, and focused on skills and education to promote a reflective nursing practice. Several limitations also existed. A brief evaluation period may not be sufficient to capture changes in burnout. Future trials should include longer follow-up and measured training targets that might improve burnout over time. The program did not modify institutional factors that influence nursing stress (Medland et al., 2004). Participants included a

small number of nurses with relatively low burnout, which could impact participant feedback and limit generalizability. The small sample and lack of a control arm also limit inferences to be drawn from results. Findings support the need for a larger trial that addresses these limitations.

## Conclusion

Overall, brief targeted psychological skills training represents a feasible and acceptable intervention for infusion nurses and has the potential to reduce emotional exhaustion and stress in this population. Establishing long-term effects on work performance and retention will be necessary to support wider dissemination.

## Implications for Nursing Practice

The psychosocial care of patients and families is a critical component of oncology nursing and one of the most meaningful aspects of this work. However, significant barriers can interfere with nurses' abilities to establish and maintain productive, supportive relationships with patients and families. Nurses need more access to multi-level support and training to help them manage psychosocial care provision in the context of stressful, difficult, or ethically complex encounters. These encounters will uniquely affect each nurse and cannot always be anticipated. Therefore, nurses may benefit from explicit training that would normalize difficult encounters and provide a framework of psychological skills that nurses could use to approach



a potential range of scenarios. Seasoned clinicians with relevant experiences may be salient training leaders. In the current study, multidisciplinary training leaders were able to offer various perspectives on difficult encounters, while validating the complexity of oncology nurses' work. Mindfulness is a potentially valuable framework for helping nurses to engage in a reflective nursing practice, with a balance between efforts to improve or accept aspects of difficult encounters. Structured scripts also may be useful tools that can be shared among nurses and serve as starting points for discussion and problem-solving.

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## References

- American Nurses Association. (2001). Code of ethics for nurses with interpretive statements. Retrieved from <http://www.nursingworld.org/MainMenuCategories/EthicsStandards/CodeofEthicsforNurses>
- Arranz, P., Ulla, S.M., Ramos, J.L., Del Rincón, C., & López-Fando, T. (2005). Evaluation of a counseling training program for nursing staff. *Patient Education and Counseling*, 56, 233–239.
- 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
- Cohen, M.Z., Ferrell, B.R., Vrabell, M., Visovsky, C., & Schaefer, B. (2010). What does it mean to be an oncology nurse? Reexamining the life cycle concepts. *Oncology Nursing Forum*, 37, 561–570. doi:10.1188/10.ONF.561-570
- Cohen, M.Z., & Sarter, B. (1992). Love and work: Oncology nurses' view of the meaning of their work. *Oncology Nursing Forum*, 19, 1481–1486.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386–396.
- Cohen-Katz, J., Wiley, S.D., Capuano, T., Baker, D.M., Kimmel, S., & Shapiro, S. (2005). The effects of mindfulness-based stress reduction on nurse stress and burnout, part II: A quantitative and qualitative study. *Holistic Nursing Practice*, 19, 26–35.
- 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.
- Côté-Arsenault, D., & Morrison-Beedy, D. (2005). Maintaining your focus in focus groups: Avoiding common mistakes. *Research in Nursing and Health*, 28, 172–179.
- Curtis, E., & Redmond, R. (2007). Focus groups in nursing research. *Nurse Researcher*, 14, 25–37.
- Delvaux, N., Razavi, D., Marchal, S., Bredart, A., Farvacques, C., & Slachmuylder, J.L. (2004). Effects of a 105 hours psychological training program on attitudes, communication skills and occupational stress in oncology: A randomized study. *British Journal of Cancer*, 90, 106–114.
- Demirci, S., Yildirim, Y.K., Ozsaran, Z., Uslu, R., Yalman, D., & Aras, A.B. (2010). Evaluation of burnout syndrome in oncology employees. *Medical Oncology*, 27, 968–974. doi:10.1007/s12032-009-9318-5
- Edmonds, C., Lockwood, G.M., Bezjak, A., & Nyhof-Young, J. (2012). Alleviating emotional exhaustion in oncology nurses: An evaluation of Wellspring's "Care for the Professional Caregiver Program". *Journal of Cancer Education*, 27, 27–36. doi:10.1007/s13187-011-0278-z
- Ersner, S.J. (1998). The presentation of the nurse: A neglected dimension of therapeutic nurse-patient interaction? In R. McMahon & A. Pearson (Eds.), *Nursing as therapy* (pp. 37–63). Cheltenham, UK: Nelson Thornes Ltd.
- Figley, C.R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self care. *Journal of Clinical Psychology*, 58, 1433–1441. doi:10.1002/jclp.10090
- Freudenberger, H.J. (1974). Staff burnout. *Journal of Social Issues*, 30, 159–165.
- Hanh, T.N. (2011). *True love: A practice for awakening the heart* (S.C. Kohn, Trans.). Boston, MA: Shambhala.
- 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
- Italia, S., Favara-Scacco, C., Di Cataldo, A., & Russo, G. (2008). Evaluation and art therapy treatment of the burnout syndrome in oncology units. *Psycho-Oncology*, 17, 676–680. doi:10.1002/pon.1293
- Joinson, C. (1992). Coping with compassion fatigue. *Nursing*, 22, 116–120.
- Krueger, R.A., & Casey, M.A. (2008). *Focus groups: A practical guide for applied research* (4th ed.). Thousand Oaks, CA: Sage.
- Ksiazek, I., Stefaniak, T.J., Stadnyk, M., & Ksiazek, J. (2011). Burnout syndrome in surgical oncology and general surgery nurses: A cross-sectional study. *European Journal of Oncology Nursing*, 15, 347–350. doi:10.1016/j.ejon.2010.09.002
- Lawrence, L.A. (2011). Work engagement, moral distress, education level, and critical reflective practice in intensive care nurses. *Nursing Forum*, 46, 256–268. doi:10.1111/j.1744-6198.2011.00237.x
- Le Blanc, P.M., Hox, J.J., Schaufeli, W.B., Taris, T.W., & Peeters, M.C. (2007). Take care! The evaluation of a team-based burnout intervention program for oncology care providers. *Journal of Applied Psychology*, 92, 213–227.
- Lupo, F.N., Arnaboldi, P., Santoro, L., D'Anna, E., Beltrami, C., Mazzoleni, E.M., . . . Didier, F. (2012). The effects of a multimodal training program on burnout syndrome in gynecologic oncology nurses and on the multidisciplinary psychosocial care of gynecologic cancer patients: An Italian experience. *Palliative and Supportive Care*. Advance online publication. doi:10.1017/S1478951512000247
- 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., & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2, 99–113.
- Maslach, C., Leiter, M.P., & Schaufeli, W.B. (2009). Measuring burnout. In C.L. Cooper & S. Cartwright (Eds.), *The Oxford handbook of organizational well-being* (pp. 86–108). Oxford, UK: Oxford University Press.
- Maslach, C., Schaufeli, W.B., & Leiter, M.P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.
- 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.
- 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.
- Piers, R.D., Van den Eynde, M., Steeman, E., Vlerick, P., Benoit, D.D.,

- & Van Den Noortgate, N.J. (2012). End-of-life care of the geriatric patient and nurses' moral distress. *Journal of the American Medical Directors Association, 13*, e7–e13.
- Pipe, T.B., Bortz, J.J., Dueck, A., Pendergast, D., Buchda, V., & Summers, J. (2009). Nurse leader mindfulness meditation program for stress management: a randomized controlled trial. *Journal of Nursing Administration, 39*, 130–137.
- Poghosyan, L., Aiken, L., & Douglas, S. (2009). Factor structure of the Maslach burnout inventory: An analysis of data from large scale cross-sectional surveys of nurses from eight counties. *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
- Purcell, S.R., Kutash, M., & Cobb, S. (2011). The relationship between nurses' stress and nurse staffing factors in a hospital setting. *Journal of Nursing Management, 19*, 714–720.
- Rask, M.T., Jensen, M.L., Andersen, J., & Zachariae, R. (2009). Effects of an intervention aimed at improving nurse-patient communication in an oncology outpatient clinic. *Cancer Nursing, 32*, E1–E11.
- Ritchie, J., & Lewis, J. (Eds.). (2003). *Qualitative research practice: A guide for social science students and researchers*. London, UK: Sage.
- Rohan, E., & Bausch, J. (2009). Climbing Everest: Oncology work as an expedition in caring. *Journal of Psychosocial Oncology, 27*, 84–118.
- Rounsaville, B.J., Carroll, K.M., & Onken, L.S. (2001). A stage model of behavioral therapies research: Getting started and moving on from stage I. *Clinical Psychology: Science and Practice, 8*, 133–142.
- Rubin, H.J., & Rubin, I. (2005). *Qualitative interviewing: The art of hearing data* (2nd ed.). Thousand Oaks, CA: Sage.
- Sabo, B.M. (2006). Compassion fatigue and nursing work: Can we accurately capture the consequences of caring work? *International Journal of Nursing Practice, 12*, 136–142.
- Sehlen, S., Vordermark, D., Schafer, C., Herschbach, P., Bayerl, A., Pigorsch, S., . . . Geinitz, H. (2009). Job stress and job satisfaction of physicians, radiographers, nurses and physicists working in radiotherapy: A multicenter analysis by the DEGRO Quality of Life Work Group. *Radiation Oncology, 4*, 6.
- Shaha, M., Wenzel, J., & Hill, E.E. (2011). Planning and conducting focus group research with nurses. *Nurse Researcher, 18*, 77–87.
- Taylor, C., Graham, J., Potts, H.W., Richards, M.A., & Ramirez A.J. (2005). Changes in mental health of UK hospital consultants since the mid-1990s. *Lancet, 366*, 742–744.
- Travado, L., Grassi, L., Gil, F., Ventura, C., & Martins, C. (2005). Physician-patient communication among Southern European cancer physicians: The influence of psychosocial orientation and burnout. *Psycho-Oncology, 14*, 661–670.
- Travelbee, J. (1971). *Interpersonal aspects of nursing* (2nd ed.). Philadelphia, PA: F.A. Davis.
- Trufelli, D.C., Bensi, C.G., Garcia, J.B., Narahara, J.L., Abrão, M.N., Diniz, R.W., . . . Del Giglio, A. (2008). Burnout in cancer professionals: A systematic review and meta-analysis. *European Journal of Cancer Care, 17*, 524–531.
- Turner, J., Clavarino, A., Butow, P., Yates, P., Hargraves, M., Connors, V., & Hausmann, S. (2009). Enhancing the capacity of oncology nurses to provide supportive care for parents with advanced cancer: evaluation of an educational intervention. *European Journal of Cancer, 45*, 1798–1806.
- Turner, J., Clavarino, A., Yates, P., Hargraves, M., Connors, V., & Hausmann, S. (2007). Oncology nurses' perceptions of their supportive care for parents with advanced cancer: Challenges and educational needs. *Psycho-Oncology, 16*, 149–157. doi:10.1002/pon.1106
- Watson, J. (2011). *Human caring science—A theory of nursing* (2nd ed.). Sudbury, MA: Jones and Bartlett.
- Wenzel, J., Shaha, M., Klimmek, R., & Krumm, S. (2011). Working through grief and loss: Oncology nurses' perspectives on professional bereavement [Online exclusive]. *Oncology Nursing Forum, 38*, E272–E282. doi:10.1188/11.ONFE272-E282
- West, C.P., Huschka, M.M., Novotny, P.J., Sloan, J.A., Kolars, J.C., Habermann, T.M., & Shanafelt, T.D. (2006). Association of perceived medical errors with resident distress and empathy: A prospective longitudinal study. *JAMA, 296*, 1072–1078. doi:10.1001/jama.296.9.1071
- Willis, G.B. (2005). *Cognitive interviewing: A tool for improving questionnaire design*. Thousand Oaks, CA: Sage.