

Oncology Staff Stress and Related Interventions

Mary L. S. Vachon

Working in oncology has been both stressful and rewarding from its inception to the present. This chapter focuses primarily on recent research from 2000 on, in occupational stress and its relevance for understanding stressors, coping mechanisms, and programs of intervention relevant to oncology.

OCCUPATIONAL STRESS

The concepts of stress, burnout, compassion fatigue, and moral distress are relevant in a discussion of stress in oncology. Of these, the issues of stress and burnout are most studied.

Burnout. Table 82-1 shows the symptoms of burnout which include physical, emotional, occupational, and social symptoms. Burnout is a form of mental distress manifested in "normal" people who did not suffer from prior psychopathology and who experience decreased work performance resulting from negative attitudes and behaviors.³

Components of burnout. Burnout is a psychological syndrome in response to chronic interpersonal stressors on the job. The three key dimensions are as follows⁴:

Overwhelming **emotional exhaustion (EE)**—the basic *individual stress dimension* of burnout refers to feelings of being overextended and depleted of one's emotional and physical resources. Exhaustion is the most widely and most thoroughly analyzed and studied aspect of burnout. Exhaustion prompts action to distance oneself emotionally and cognitively from work, as a way to cope with work overload.³

Feelings of **cynicism** and detachment from the job (**depersonalization (DP)**)—the *interpersonal context* dimension of burnout, refers to a negative, callous, or excessively detached response to various aspects of the job. It is an attempt to put distance between oneself and various aspects of the job. Research shows a consistent and strong relationship between exhaustion and cynicism both of which emerge in the presence of work overload and social conflict.³ Sense of **ineffectiveness** and **lack of personal accomplishment (PA)**—the *self-evaluation dimension* of burnout refers to feelings of incompetence and a lack of achievement and productivity at work. PA arises more clearly from a lack of resources and tools, or insufficient time). It may be directly related to EE and DP, or be more independent.⁵

Demographic characteristics related to burnout include being single and younger; males score slightly higher on cynicism than females. Personality characteristics associated with burnout include neuroticism, lower levels of hardiness and self-esteem.^{3,5} Supportive spouses or partners are helpful in preventing burnout^{6,7}; work-home interference is associated with burnout.⁸ Research is much stronger for the association between burnout and a wide range of job characteristics including the following: chronically difficult job demands, an imbalance between high demands and low resources, and the presence of conflict (whether between people, between role demands, or between important values.⁵

The impact of burnout. Highly motivated health professionals with intense investment in their profession are at a greater risk for the development of burnout.⁹ Burnout is associated with suboptimal patient care practices and medical errors on the part of physicians.¹⁰ DP in physicians was associated with lower patient satisfaction and longer postdischarge

recovery.¹¹ Burnout was associated with a lower satisfaction with career choice; it was a stronger predictor of low career satisfaction than screening positive for depression in all models. It was also associated with poorer health.¹²

BURNOUT IN ONCOLOGY

Stress and burnout in oncology. This review focuses on five studies from before 2000¹³⁻¹⁷ and 18 from 2000 onward.^{8,12,18-33} One-third of the studies were from the United States. Studies were primarily of oncologists and oncology nurses, but some also included psychosocial staff, and support staff.

Burnout scores. In Maslach and Jackson's³⁴ normative sample of U.S. physicians and registered nurses, 33% had high EE, 33% high DP and 33% low PA. Most of the reviewed studies did not report an overall score on the Maslach Burnout Inventory (MBI) but 28% of surgical oncologists (31% of those under 50 vs. 22% over 50) and women (37% vs. 26%) had overall high-burnout scores.¹² Using a similar population and instrument, burnout in a large sample of oncologists decreased overtime from 56%¹⁵ to 34%.³³ In another large sample of American oncologists,¹⁸ 61.7% reported feeling burned out.

Emotional exhaustion. Emotional exhaustion is the scale that is most responsive to the organizational environment and social interactions that characterize human service work.²⁰ The lowest rate of EE reported in the studies reviewed was 15% in Japanese palliative care physicians.¹⁹ Approximately one-quarter of oncologists in Japan¹⁹; the United Kingdom¹⁶; Italy, Spain and Portugal,³² and surgical oncologists in the United States reported high EE.¹² One-third of Italian haematology doctors and nurses²⁰ and Canadian gynecologic oncology oncologists⁸ reported high EE, as did 40% of oncology and transplant staff in Greece.²⁹ The highest rate of EE (53.3%) was found in physicians working in Cancer Care Ontario which compared with 37.1% of allied staff.²³

Kash et al.²⁷ used mean scores. The total sample mean for burnout was 29.22. The normative score for U.S. physicians and nurses was >17.³⁴ House staff had significantly higher EE (34.03) than nurses (29.2) and medical oncologists (25.1).

EE and anger. Oncologists and ophthalmologists were assessed using the MBI and the State-Trait Anger Expression Inventory.³⁵ Oncology staff showed higher mean scores on the MBI, EE, and DP scales. Increasing burnout was associated with higher anger expressed toward the environment and loss of anger control. Higher scores on State Anger were associated with a pathological state of EE. Anger, as a response to frustration, appears to be a constant clinical feature of burnout and it should not be underestimated in theoretical and preventive contexts. Previously, Vachon¹⁴ reported that in a study of 581 international caregivers to the critically ill, dying, and bereaved, the 110 caregivers in oncology were more likely to report problems with anger, irritability, and frustration than were the caregivers in other specialties. The burned out oncologists in Allegra et al.'s¹⁸ sample reported feeling frustrated (78%), emotionally exhausted (69%) and had a lack of satisfaction with work (50%).

DP (diminished empathy). Depersonalization "may be interpreted as an attitude of 'patient refusal' in the oncology staff actuated

Table 82-1. Signs and symptoms of burnout

<i>Physical</i>	
Fatigue	
Physical and emotional exhaustion	
Headaches	
Gastrointestinal disturbances	
Weight loss	
Sleeplessness	
Hypertension	
Myocardial infarction	
<i>Psychological</i>	
Anxiety	
Depression	
Boredom	
Frustration	
Low morale	
Irritability	
May contribute to alcoholism and drug addiction	
<i>Occupational</i>	
Depersonalization in relationships with colleagues, patients, or both	
Emotional exhaustion, cynicism, perceived ineffectiveness	
Job turnover	
Impaired job performance	
Deterioration in the physician-patient relationship and a decrease in the quantity and quality of care	
<i>Social</i>	
Marital difficulties	

SOURCE: The table is adapted from information in references 1 and 2.

as a defense mechanism toward the bewildering and frightening experiences that come with the daily assistance of oncology patients.^{23,1} p. 648 In Greece, DP was higher in those in pediatric oncology without children and with fewer years of practice.²⁹

The lowest report of DP was 4% of the allied health staff in the Ontario study.²³ Nurses in the Kash et al.²⁷ study had lower rates than house staff or oncologists. Physicians in oncology more commonly reported rates of DP from 10% to 15%.^{8,12,16,19} Approximately one-quarter of physicians in oncology in Ontario²³; Italy, Spain and Portugal,³² and Italian oncologists and nurses reported DP.²⁰ The house staff in Kash et al.'s²⁷ study scored significantly higher than oncologists. High emotional empathy has been found to be associated with mental well-being in internal medicine residents.³⁵

Low PA. American surgical oncologists were least likely to report low feelings of PA (9.6%).¹² One-third of Canadian gynecologic oncologists⁸; about half of Ontario oncologists and allied health professionals²³; about half of Japanese palliative care physicians and 65% of oncologists reported low PA.¹⁹ In the Kash et al. study²⁷ the group was almost identical to the mean of 36.53 reported by Maslach and Jackson,³⁴ but nurses' had a significantly lower sense of accomplishment (34.94) than oncologists (38.03).

Psychiatric disturbance. Psychiatric disturbance in oncology staff ranged from a low of 12% of palliative care physicians¹⁹ to between a quarter and one-third of the sample in the other studies.^{8,20,23} Kash et al.²⁷ found women had more psychological distress/demoralization (30% vs. 24.5%) and house staff had more than oncologists (30% vs. 21.6%).

Demographic variables and burnout in oncology. Younger caregivers report more stressors, exhibit more manifestations of stress and fewer coping strategies¹⁴ and are more prone to burnout and stress reactions.^{12,16,27,36} Emotional sensitivity and the ability to connect with

patients rose after the age of 35.³⁷ Those with more years of experience were less likely to report stress-related symptoms and burnout.^{16,38} Surgeons with fewer years of experience had a lower sense of PA.¹²

Those with more responsibility for dependents, either children or elderly parents, reported more stress.²⁷ Being single was an independent risk factor for burnout.³⁶ Females may be more at risk of mental health problems and burnout.^{12,17,27} However, in a large, recent study of U.K. National Health Service physicians, male and midaged consultants were particularly at risk.³⁸

Personality factors relevant to burnout in oncology. The profession of medicine with its delay of satisfactions may lead people to experience burnout.^{2,39} The compulsive triad in physicians of doubt, guilt feelings, and an exaggerated sense of responsibility can have an enormous impact on professional, personal, and family lives.^{2,9} A diminishing awareness of one's physical and emotional needs leads to a self-destructive pattern of overwork. A psychology of postponement takes root in which physicians habitually delay in attending to their significant relationships and other sources of renewal until all the work is done or the next professional hurdle is achieved.^{2,40}

The personality characteristic of hardiness—a sense of commitment, control, and challenge,^{41,42} helped to alleviate burnout in oncology staff and was associated with a greater sense of PA.²⁷

Religiosity, spirituality, and meaning making. Being religious has been associated with a decreased risk of burnout.²⁷ Current work tends to speak of spirituality in contrast to religiosity. Kearney and Mount⁴³ define spirituality as "of, or pertaining to, affecting or concerning the spirit or higher moral questions" and speak of the need for the caregiver to experience his or her own inner depths as he or she is with a patient experiencing spiritual pain.

A MODEL FOR UNDERSTANDING OCCUPATIONAL STRESS

Recent research on burnout has focused on the degree of match or mismatch between the person and six domains of the job environment. The greater the gap or mismatch between the person and the environment, the greater the likelihood of burnout. The greater the match or fit the greater the likelihood of engagement with work. Six areas of work life encompass the major organizational antecedents of burnout. These include workload, control, reward, community, fairness, and values.⁴

Burnout arises from chronic mismatches between people and their work settings in some or all of these areas. The area of values may play a central mediating role for the other areas⁴ although, for individuals at risk of burnout, fairness in the work environment may be the tipping point determining whether people develop job engagement or burnout.⁴

Emotion-work variables (e.g., requirement to display or suppress emotions on the job, requirements to be emotionally empathic) account for additional variance in burnout scores over and above job stressors.⁴

Workload. Excessive workload exhausts the individual to the extent that recovery becomes impossible. Workload has long been a major issue in oncology.^{8,13,14,17,18,20,23-27}

Whippen and Canelos¹⁵ and Whippen et al.³³ report insufficient personal time and or vacation time as two of the three most commonly reported stressors leading to burnout. In their replication study in 2004, over one-third said that their burnout affected patient care. A lack of confidence in having sufficient time to communicate with patients was associated with burnout in Japanese oncologists,¹⁹ while French oncology nurses felt time pressure which did not allow them to deal with the psychological components of care and to face suffering and death.²⁵

Burnout was also associated with being overloaded and its effect on home life.^{16,26} Performing more than 11 surgical cases a week, was associated with burnout and surgical oncologists who worked longer hours (24% worked more than 70 hours a week) were more likely to have EE.¹² In gynecologic oncologists, low PA was associated with having fewer partners, a high number of follow-ups and culposcopy patients and spending a high percentage of time with gynecologic oncology patients.⁸

Control. Control is related to inefficacy or reduced PA. Mismatches often indicate that individuals have insufficient control over the resources necessary to do their work or insufficient authority to pursue the work in what they believe is the most effective manner. Stress results from a lack of knowledge in interpersonal skills and a lack of communication skills and/or management skills.^{13,16,17,24} There are issues when patients become more demanding consumers.^{13,14,23}

In gynecologic oncologists, high EE, and a negative association with job satisfaction was associated with a loss of ability to bring about positive change in the organization. High EE and high stress was associated with "insufficient input into my unit" and inadequate facilities.⁸

Consistently, caregivers report having difficulty performing in their jobs because of a lack of organizational resources.^{8,13,16,17,20,23} In addition, they report feeling disenfranchised²⁷ and having an imbalance between their job and their authority.²⁶

Reward. Lack of reward may be financial when one doesn't receive a salary or benefits commensurate with achievements, or lack of social rewards when one's hard work is ignored and not appreciated by others. The lack of intrinsic rewards (e.g., doing something of importance and doing it well) can also be a critical part of this mismatch. Issues with the financial reward for work was noted by physicians.¹⁷⁻²⁰ Almost half of Italian oncology nurses, compared with one-third of oncologists reported low salaries.²⁰ Low PA and high stress was reported when pay was inequitable.⁸ There are frequent complaints of a lack of resources to do one's work.^{8,17}

Reports of communication problems with administration often reflect a lack of social rewards.^{14,26} In the Ramirez et al. study¹⁶ deriving little satisfaction from work was associated with burnout for oncologists. There were concerns about the future funding of units and feeling that skills were being underutilized.²² Oncology support staff reported feeling a lack of value and recognition. Their lowest satisfaction score was with job recognition.²¹

Community. This mismatch arises when people lose a sense of personal connection with others in the workplace. Social support from people with whom one shares praise, comfort, happiness, and humor affirms membership in a group with a shared sense of values. Problems with colleagues were reported in many studies.^{13,14,16,17,20,21,26} In the Kash study²⁷ oncologists reported less support from their colleagues than did nurses or fellows. A lack of support from administration was found in Italian nurses²⁰ as well as support staff at Massachusetts General Hospital (MGH).²¹ In Greek staff, a lack of role clarity was associated with burnout.²⁹ French nurses reported that the absence of a doctor at the time of a patient's death was associated with distress lasting for a week after the patient's death.²⁵ Gynecologic-oncologists had high DP and high-job stress if they had difficult relations with colleagues.⁸ High EE and high-job stress were associated with taking on managerial responsibilities and relationships with colleagues.⁸

Fairness. This mismatch arises when there is perceived unfairness in the workplace. Fairness communicates respect and confirms people's self-worth. Mutual respect between people is central to a shared sense of community. There are concerns about funding¹⁷; nurses not feeling supported in meeting patients' emotional needs²⁷; and having inadequate resources to do the job properly.^{23,24} In Turkey, oncology nurses and oncologists experienced an imbalance between their jobs and responsibilities, unfairness in job promotion, inadequacy of equipment, and high cost of drugs.²⁶

Values. People might feel constrained by their job to do something unethical and not in accord with their own values. Alternatively, there may be a mismatch between their personal career goals and the values of the organization. People can also be caught in conflicting values of the organization, as when there is a discrepancy between a lofty mission statement and actual practice, or when the values are in conflict (e.g., high-quality service and cost containment do not always coexist). Staffing problems can lead to not being able to do the job properly, a decrease in quality patient care and decreased staff morale.^{23,24}

Gynecologic-oncologists had high EE and high-job stress if their expertise was not being put to good use.⁸ Burned out oncology surgeons¹⁷ were less satisfied with their career choice. Surgeons in private practice were less likely to say they would become a physician again, and less likely to say they would become a surgical oncologist again. Devoting less than 25% of one's time to research was associated with burnout in that study.

Emotion/work variables. Emotion/work variables require the individual to display or suppress emotions on the job and involve the requirement to be emotionally empathic. Staff report difficulty in various aspects of communicating with sick, suffering, and dying patients and their family members,^{14,15,18,20,23,24,26,32} particularly if they are young.^{14,20}

A recent study of academic oncologists⁴⁴ found that those who viewed their roles as encompassing both biomedical and psychosocial aspects of care reported a clear method of communicating with patients and families about end-of life issues, an ability to positively influence patient and family coping with and acceptance of the dying process. They described communication as a process, made recommendations to the patient using an individualized approach, and viewed the provision of effective EOL care as very satisfying. In contrast, oncologists who described primarily a biomedical role reported a more distant relationship with the patient, a sense of failure at not being able to alter the course of the disease, and an absence of collegial support. In their descriptions of communication encounters with patients and families, these physicians did not seem to feel they could impact patients' coping with and acceptance of death and made few recommendations about EOL treatment options. Physicians who viewed EOL care as an important role reported increased job satisfaction.

In a Southern European study, low psychosocial orientation and burnout symptoms were associated with lower confidence in communication skills and higher expectations of a negative outcome following physician-patient communication.³² Confidence in communication was not related to age or years in practice. Physicians who scored high on DP considered it very unlikely that a positive outcome would be achieved as a result of communicating with their patients. Japanese oncologists and palliative care physicians who were less confident in dealing with psychologic care and demonstrated higher levels of EE were more likely to choose continuous-deep sedation for patients with refractory physical and psychologic distress.³⁰ Insufficient confidence in the psychological care of patients was associated with physician burnout rather than involvement in EOL care.¹⁹

In the original burnout study by Whippen and Canellos¹⁵ administering palliative or terminal care was a contributing factor to burnout in 53% of respondents. In the later study³³ this dropped to 31%. Frustration with limited therapeutic success dropped to 22% versus 45%.

Kash et al.²⁷ found that nurses and house staff most often see patients, rather than the patient when they are most ill with symptoms, or in the terminal stage of disease. The stressors contributing most to burnout and demoralization were dealing with a high number of deaths, or struggling over a Do Not Resuscitate (DNR) decision with another colleague or family member. Ethical issues also contributed to burnout in Italy where oncologists reported more difficulty with ethical and moral problems than did nurses but seemed to have better judgment on the communication training received.²⁰ Cohen and Erickson⁴⁵ suggest that students and novice nurses in oncology may experience more uncertainty and distress related to ethical issues, evolving from conflicting values or beliefs about what is the right or best course of action.

Oncology nurses²⁵ reported feeling impotent if patients didn't improve and over one-third reported disgust with preparing dead bodies for the mortuary, especially with stuffing orifices.

Rural nurses working in Australia with oncology patients found that a key issue in providing psychosocial care was their own "emotional toil." They are multiskilled generalists providing care to patients with cancer without necessarily having specialist knowledge or skill. This results in fatigue and EE that impact on their own well-being.²⁸

JOB ENGAGEMENT AND COMPASSION SATISFACTION

Job engagement⁵ and compassion satisfaction (CS)⁴⁶ are two frameworks to understand what keeps workers functioning and enjoying their work in challenging situations.

JOB ENGAGEMENT

Job engagement is conceptualized as being the opposite of burnout. Engagement is defined as a persistent, positive-affective-motivational state of fulfillment in employees that is characterized by vigor, dedication, and absorption.⁵ Engagement is associated with a sustainable workload, feelings of choice and control, appropriate recognition and reward, a supportive work community, fairness and justice, and meaningful and valued work.

Maslach and Leiter³ describe the continuum between the negative experience of burnout and the positive experience of engagement. There are three interrelated dimensions to this continuum: exhaustion-energy, cynicism-involvement, and inefficacy-efficacy. Exhaustion and cynicism are the two primary measures of burnout. They "go together," both appearing strongly in people experiencing burnout and they both fade away in people experiencing engagement with their work. A potential early warning sign of burnout is the appearance of one, but not the other of these signs. They suggest there is a push to move from an inconsistent pattern to a consistent one. A predictor of whether an inconsistent pattern will evolve toward burnout or engagement will be the presence of a negative incongruence between the person and the job. For someone who is experiencing one of the burnout dimensions, this level of incongruity can be the tipping point into burnout. In a university setting the workplace incongruity (tipping point) that determined whether people changed was their perception of fairness in the workplace.

Compassion satisfaction. Compassion satisfaction⁴⁶ is satisfaction derived from the work of helping others. It may be the portrayal of efficacy. Caregivers with CS derive pleasure from helping others, like their colleagues, feel good about their ability to help and make a contribution. There may be a balance between compassion fatigue and CS. Caregivers may experience compassion fatigue, yet they like their work because they feel positive benefits from it. They believe what they are doing is helping others and may even be redemptive. When a person's belief system is well maintained with positive material, a person's resiliency may be enhanced.⁴⁷ What seems to count most for resilience is the opportunity to encounter pain within a context of meaning and to find that one's compassion (one's suffering with) has power. These sustain an underlying belief that the world is good and in order.⁴⁸

COPING

Job satisfaction and meaning making. When caregivers to the critically ill, dying, and bereaved were asked what enabled them to continue working in the field, the top coping mechanism identified was as follows: a sense of competence, control, or pleasure in one's work.¹⁴ One-third of Italian oncologists and nurses²⁰ were very satisfied with their jobs and 60% were quite satisfied. More than 80% would repeat their choice to work with oncology patients.

Sources of satisfaction for oncology staff include the following:

- dealing well with patients and relatives^{16,24}
- patient care or patient contact^{20,24}
- having professional status and esteem, deriving intellectual satisfaction, and having adequate resources to perform one's role¹⁶
- being perceived to do one's job well²⁴
- having good relationships with colleagues^{8,14,20,24}
- personal ideals²⁴

Oncology was perceived to be a special environment, often because of longstanding relationships with patients.²⁴ Attachment to work and patients hardly declines, even in burnout. Stress may be "double-edged" in the sense that a task done badly was a source of stress, but the same job done well was a source of satisfaction.^{16,20}

Hamilton,⁴⁹ a neurosurgeon, writes of coming to recognize how we are all connected "... as a physician, you have unparalleled entry into the lives of others. Every patient is an existential conduit to seeing your own struggle" p.63. Taylor,⁵⁰ a neuro-anatomist had a left brain stroke at age 37. In *My stroke of insight* she says the experience made her aware that "... I am part of a greater structure-an eternal flow of energy and molecules

from which I cannot be separated" p.160. "My left hemisphere had been trained to perceive myself as a solid, separate from others. Now, released from that restrictive circuitry my right hemisphere relished in its attachment to the eternal flow. I was no longer isolated and alone" p.69. She speaks of being sensitive to the energies of her caregivers.

I experienced people as concentrated packages of energy. Doctors and nurses were massive conglomerations of powerful beams of energy that came and went... With this shift onto my right hemisphere, I became empathic to what others felt. Although I could not understand the words they spoke, I could read volumes from their facial expressions and body language. I paid very close attention to how energy dynamics and body me. I realized that some people brought me energy, while others took it away p.74-75.

Hamilton⁴⁹ says "Medicine was not meant to be a mechanical transaction. It's a spiritual quest, putting your own soul on the line, along with the patient's" p.123.

Katz⁵¹ redefines counter-transference and speaks of the alchemical reaction which occurs when two individuals engage together at the most vulnerable time in human existence-the EOL. Alchemy is "that space" that takes its own place in the poignant relationship between helper and patient. Through the experience both can be transformed.

PERSONAL WELLNESS

A number of recent documents⁵²⁻⁵⁴ have addressed the concept of wellness for cancer survivors, but caregivers also need to address their personal wellness. We cannot continue to give if we are empty vessels. Meier, Back, and Morrison⁵⁵ propose a model for increasing physician self-awareness, which includes identifying and working with emotions that may affect patient care. Kearney, Weininger, Vachon, Mount, and Harrison⁵⁶ have written of the need for physicians to be "connected" to continue to practice end-of-life care.

Elit et al.⁸ found that three areas must be addressed to decrease stress and burnout in physicians-physician well-being, job description, and environment. Physician well-being seems to be inversely correlated to number of hours on call, number of hours in direct patient contact, and lack of vacation time. The Joint Committee on Accreditation has mandated that all hospitals have a program to address physician well-being, separate from disciplinary processes.⁵⁷

Spickard et al.,² note the best prevention for physician burnout is to promote personal and professional well-being on all levels: physical, emotional, psychological, and spiritual. This must occur throughout the professional life-cycle of physicians, from medical school through retirement. It is a challenge not only for individual physicians in their own lives but also for the profession of medicine and the organizations in which physicians work. Of course this concept applies equally well to all other professional caregivers. Shanafelt and his colleagues have done a series of articles on wellness in residents,¹⁰ oncologists^{13,39} and surgical oncologists.^{12,58} The well-being and personal wellness strategies of medical oncologists in the North Central Cancer Treatment Group were assessed.³⁵ Half reported high overall well-being. Being age 50 or younger, male, and working 60 hours or less per week were associated with increased overall well-being.

Ratings of the importance of a number of personal wellness promotion strategies differed for oncologists with high-well-being compared with those without high well-being. Developing an approach/philosophy to dealing with death and end-of-life care, using recreation/hobbies/exercise, taking a positive outlook and incorporating a philosophy of balance between personal and professional life were all rated as substantially more important wellness strategies by oncologists with high well-being... Oncologists with high overall well-being also reported greater career satisfaction p.23.

These coping strategies are similar to the top five coping strategies identified two decades ago¹⁴: a sense of competence, control or pleasure in one's work; team philosophy, building and support; control over aspects of practice; lifestyle management; and a personal philosophy of illness, death and one's role in life.

Oncologists can shape their career and increase their likelihood of achieving personal and professional satisfaction through: identifying professional goals, optimizing career fit, identifying and managing stressors specific to practice type, and achieving optimum work-life balance.⁵⁸ Shanafelt suggests that surgical oncologists⁵⁸ can find meaning, and personal satisfaction in their career through asking oneself and reflecting on a series of questions related to: one's greatest priority in life and whether one has been living life in a way that demonstrates that; asking where one is most irreplaceable; looking at adequate balance between home and personal life; how much professional achievement one is willing to sacrifice to have more time with family; checking if one is asking more of a spouse than one should; asking what type of legacy one wishes to leave one's children; inquiring what person or activity one might have been neglecting; how one would relive the past year; asking one's self what one would like life to be like in 10 years and asking one's self what do I fear? Shanafelt⁵⁸ also suggests looking at relationships, taking time for personal reflection, spiritual practices, self-care and hobbies, and personal interests. Caring for one's self, cultivating personal relationships, and nurturing personal interests is what makes time away from work meaningful and provides individuals with opportunity for achievement and personal growth outside of work.

A study of 549 surgical oncologists¹² found that devoting less than 25% of time to research was associated with greater burnout and there was a lower physical quality of life associated with a low sense of PA. Factors associated with problematic alcohol use include screening positive for depression and devoting at least 25% of time to research. Kuerer

et al. concluded that there was a need to encourage faculty to be attentive to their physical health (e.g., maintaining fitness, establishing a primary care physician, staying current with recommended health maintenance measures).

STUDIES OF INTERVENTION

While new findings regarding the interpersonal dynamics between the worker and other people in the workplace have yielded new insights into the sources of stress, effective interventions to prevent burnout have yet to be developed.⁵ The model proposed by Maslach and her colleagues suggests that effective interventions to deal with burnout should be framed in terms of the three dimensions of exhaustion, cynicism, and sense of inefficacy. Currently their interventions are focusing on building job engagement, rather than reducing burnout.³ Programs of intervention in oncology could focus on one or more of the issues addressed above in the section on *A model for understanding occupational stress*.

A Cochrane Review assessed the prevention of occupational stress in healthcare workers,⁵⁹ concluding there was limited evidence for the effectiveness of person- and work-directed interventions to reduce stress levels in healthcare settings. Only two trials, one in oncology⁶⁰ were rated as being of high quality, based on receiving 75% on the internal validity subscales.

One of the reviewed studies that could have relevance for oncology is an 8 week Mindfulness-Based Stress Reduction (MBSR) program for nurses in a hospital system.⁶¹ Work had already been done to improve

Table 82-2. Intervention: communication studies

Authors	Sample	Design	Results
Fallowfield et al. ^{63,64}	160 U.K. oncologists from 34 cancer centers	Allocated to written feedback plus course; course alone; written feedback alone on control Each clinician had 6-10 interviews with patients videotaped at baseline and three months postintervention	Improved communication skills in oncologists assigned to training Twelve month follow-up—no demonstrable attrition in communication behaviors in those who had shown improvement previously, including fewer leading questions, appropriate use of focused and open-ended questions and responses to patient cues Additional skills not apparent at 3 months included fewer interruptions and increased summarizing of information Expressions of empathy declined Twelve-fifteen months after intervention, clinicians had integrated key communication skills into practice and were applying others Significant training effect on attitudes, especially those related to self-concept, and occupational stress related to inadequate preparation
Razavi et al. ⁶⁵	72 oncology nurses	Randomly assigned to 24-hours psychological training program or wait-list period	Limited changes found regarding posttraining skills Trained staff were significantly more in control of the interview Consolidation of the skills through posttraining sessions is needed Communication skills improved more in the consolidation-workshop group than in the waiting-list group
Razavi et al. ⁶⁶	63 Belgian physicians	Basic training program, randomly assigned to consolidation workshops	Simulated interviews—significant increases in open and open-directive questions and utterances alerting patients to reality, and significant decrease in premature reassurance Actual patient interviews—significant increase in acknowledgements and empathic statements, educated guesses, and negotiations Patients interacting with physicians who benefited from consolidation workshops reported higher scores concerning their physicians' understanding of their disease Communication skills scores for the intervention group increased significantly Control scores decreased Confidence scores increased significantly for experimental group and decreased in control group
Wilkinson et al. ⁶⁷	U.K. nurses	Randomized to 3-day communication skills training program, or control group	Videotaped simulated patient interviews Intervention group displayed nonsignificantly more creating environment and fewer blocking behaviors after completion and 12 months later
Butow et al. ⁶⁸	35 oncologists from six teaching hospitals in six Australian cities	Participated in a 1.5-day intensive communication skills training program	The intervention doctors valued the training highly but there was not a significant change in stress or burnout Baseline stress and burnout scores were, somewhat less than those reported elsewhere

employee satisfaction and retention; a nursing advisory council was set up; there was work to enhance the model of self governance and increased opportunity for education and professional development. Mindfulness: being fully present to one's experience without judgment or resistance; emphasis on self-care, compassion and healing makes it relevant as an intervention for helping caregivers. The treatment group had decreased scores on the MBI which lasted 3 months. These included decreased EE and DP and a trend toward significance in PA.

INTERVENTION TO IMPROVE THE ONCOLOGY WORKPLACE

Communication training. Fellowes, Wilkinson, and Moore⁶² did a Cochrane Review of communication skills training for healthcare professionals in oncology. Three trials, involving 347 health professionals met the criteria.⁶³⁻⁶⁶ At the time of that review the work of Wilkinson, Perry, and Blanchard⁶⁷ was noted as being ongoing and has been reported. Table 82-2 briefly describes these studies, as well as the Delvaux, Razavi et al.⁶⁰ study and a recent Australian study.⁶⁸

Team intervention. LeBlanc et al.⁶⁹ did a quasi experimental study of a team-based burnout intervention on 29 oncology units in the Netherlands. Nine wards were randomly selected to participate in the Take Care! intervention. The program consists of six monthly 3-hour sessions including education about the mechanisms of stress and feedback about the participants' work situation; this feedback was used to help participants structure their subjective feelings by providing them with relevant topics for discussion and for their plans to reduce work stress on their ward. They were provided with their ward scores, but not team burnout scores. At the end of the first session, the job stressors that were to be dealt with during the training session were selected. The remaining sessions consisted of an education and an action portion. Subjects included unwanted collective behavior; communication and feedback, building a support network; balancing job-related investments and outcomes; personal experiences; and potential problems with change. During the action component, participants formed problem-solving teams. Outcomes of these sessions were, for example, the introduction of more efficient procedures in regards to reporting about patients and ordering supplies (quantitative demands), the appointment of staff members as "guardian angels" who should watch over team members' well-being (support), and restructuring of the weekly work meetings to enable more participation (voice) of staff members (participation in decision making). Results of multilevel analyses showed that staff in the experimental wards experienced significantly less EE at both Time 2 and Time 3 and less DP at Time 2, compared with the control wards. Moreover, changes in burnout levels were significantly related to changes in the perception of job characteristics over time.

CONCLUSIONS

In conclusion, the stressors and satisfactions in oncology have not changed since the early years of the field but there are new insights into the factors that might contribute to burnout, ways of identifying those at risk of burnout and programs to promote job engagement. As important as workplace interventions are, the responsibility of caregivers to engage in personal wellness programs is essential. Remember the warning when traveling in airplanes and first attach your own oxygen mask.

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