Compassion, Compassion Fatigue, and Burnout: Key Insights for Oncology Professionals

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OVERVIEW

When cancer care clinicians become stressed, sad, isolated—and unaware of this—they are placing themselves at risk for burnout and their patients at risk for suboptimal care. Despite their best intentions, clinicians can sink from a healthy work state of compassion, empathy, and well-being into compassion fatigue and burnout. Lessons from first responders demonstrate the importance for clinicians to recognize the warning signs of compassion and fatigue and burnout, as this recognition can enable them to take action towards prevention and/or recovery. The recognition of these issues as a threat to clinician performance has outstripped the development of evidence-based interventions, but interventions tested to date are effective, feasible, and scalable. These interventions could be incorporated systematically into cancer care.

Busy professionals in cancer care often assume that compassion will take care of itself. However, when cancer care clinicians become stressed, sad, isolated—and unaware of this—they are placing themselves at risk for burnout and their patients at risk for suboptimal care.

CASE PRESENTATION

Dr. R is 3 years past his medical oncology fellowship, and feels that he is working at his best in his medical oncology practice in a large urban health system. His team includes a terrific nurse who is both smart and kind, and his colleagues have helped him learn the system. He takes some time most days to make phone calls that are not absolutely necessary—one to a spouse after a patient dies, another to a jittery patient after their first dose of chemotherapy. He is busy, to be sure, and not getting out on his weekend hikes much, but his work is satisfying.

COMPASSION FATIGUE: THE ‘COST OF CARING’

Dr. R comes into work Monday feeling exhausted. The previous week had been impossibly busy, and he spent the weekend cleaning up paperwork and dictations. He was still thinking about a patient—a friend of his wife’s—who was on a phase I study, ended up in the hospital, and who completely broke down in tears while they were talking about her children—and it shook him for some reason. Dr. R figures that he will put these feelings aside and just plow into his work.

Empirical studies describe how clinicians can sink from a healthy work-state of compassion, empathy, and well-being into compassion fatigue, a concept first coined by a nurse in 1992. Figley defined compassion fatigue as “a state of tension...
Compassion has two components: the feelings of caring for someone who is suffering, and the motivation to relieve that suffering.

Compassion fatigue appears as symptoms that parallel post-traumatic stress disorders: hyperarousal; avoidance of stressful situations; and re-experiencing difficult events.

Burnout has three components: emotional exhaustion, cynicism, and feelings of ineffectiveness at work.

Compassion fatigue and burnout are not inevitable, and can be prevented and treated.

Interventions for clinicians are in an early phase of development and evidence quality, but are promising.
An important point is that compassion fatigue and even burnout are reversible conditions, and there are many steps that clinicians can take if they recognize and take action. Despite a relative lack of outcome research on interventions for compassion fatigue and burnout in cancer care clinicians, some important elements have emerged in cross-sectional studies, including relationships at work and at home, physical health, constructive coping that does not rely on avoidance, and time away from work. An element that has recently come to light is that a professional’s capacity to regulate his or her own emotional responses form an important aspect of their capacity to sustain compassion. For example, physicians who have difficulty regulating their negative arousal in response to stress, and who have less ability to describe and identify their own emotions, seem to be more prone to emotional exhaustion, detachment, and a low sense of accomplishment. Building on this, a pre/post-intervention study using mindfulness as a core skill for primary care physicians showed impressive decreases in burnout and increases in self-reported empathy. Outside the medical context, compassion training has shown changes in prosocial behavior and associated changes in neural plasticity, suggesting that compassion training may enhance resilience. A variety of training programs have now been described, including by Halifax, aimed at medical professionals.

Oncology Professionals as First Responders

Perhaps the most extensive experience with compassion fatigue exists for first responders, police, firefighters, and emergency medical professionals. These first responders and those who work in oncology have much in common. These professionals all possess a desire to serve and make a difference in the lives of others. Their common beliefs include having a team approach, the ability to suppress emotions and remain functional to perform complex tasks, the ability to make difficult decisions with fateful consequences, problem solving skills, the expectation to affect positive outcomes, being action oriented, and the ability to maintain effectiveness under high stress. Both cultures strive for the acceptance, respect, and approval of their peers. Both cultures tend to de-emphasize self-care.

The amount of occupational stress is great in both professions. First responders respond to critical incidents such as house fires, sudden deaths, sexual/physical abuse, domestic violence, community and/or school violence, medical trauma, motor vehicle accidents, acts of terrorism, war experiences, natural and human-made disasters, suicides, or other traumatic losses. Those who work in the field of oncology have difficult life-and-death conversations with patients and their family members, listen to patients’ worries and concerns, and interact with patients during their time of suffering.

Some first responders and oncology professionals may be more vulnerable to developing compassion fatigue. The risk factors include: frequent exposure to other’s pain and suffering, those who possess a great deal of compassion/empathy, those with unresolved issues activated by the patient/survivor, and those with type-A personalities and codependent traits.

On the other hand, both work cultures have inherent growth opportunities. We can learn much from those who have survived traumatic events and those who live with a cancer diagnosis. For those who approach their work humbly, attentively, and with respect, the reward may be vicarious post-traumatic growth.

What First Responders Can Teach Oncology Clinicians

First responders have embraced the concept of Force Health Protection, defined as “services performed, provided, or arranged to promote, improve, conserve, or restore the mental or physical well-being of personnel.” First responder systems recognize the risk of compassion fatigue, and seek to enhance the effectiveness of teams by protecting the psychological, cognitive, social, and spiritual health of team members. Behavioral health force protection includes a set of strategies, guided by best practices, which are implemented before, during and after a deployment.

For some time now, first responders have begun to prepare themselves for challenging shifts or extended responses by understanding what their potentially harmful triggers are and practicing stress reduction techniques. During their shifts, functioning is monitored by peers, supervisors, and a designated safety officer. Regular breaks are encouraged and high/low-stress tasks are rotated.

After the response is over, end-of-shift debriefings are conducted before the responders go home and after-action reviews are conducted to capture lessons learned. Self-care is strongly encouraged before, during, and after the response. This is also an ideal time to make meaning of the event. It is expected that there will be a reintegration and transition period. In some cases, support is also provided to family. These policies and procedures can be easily be adapted in cancer care.

A Pilot Intervention for Compassion Fatigue

During fall 2009, a group of oncology nurse managers at Barnes-Jewish Hospital identified behaviors characteristic of compassion fatigue in their nursing and support staff who worked at the outpatient chemotherapy infusion centers. There had been incidents of frustration and conflict among staff, a sense of failure in their roles as caregivers, and considerable fatigue. An initial quality improvement study was conducted to evaluate the extent of compassion fatigue among the outpatient and inpatient oncology staff. A well-validated tool for screening the presence of compassion fatigue, the Professional Quality of Life (ProQol IV) instrument, was used to measure three discrete concepts: compassion satisfaction, secondary traumatic stress, and burnout. The construct validity and reliability coefficients for the three subscales range from 0.71 to 0.91. The study found that the 153 members of the oncology staff who
completed the survey had higher than average scores for compassion satisfaction, and average scores for burnout, but the average scores for secondary traumatic stress were higher than established norms. These findings were available during a time when the hospital was developing new initiatives for improving patient satisfaction, and the correlation between burnout and low patient satisfaction led to a pilot program to address compassion fatigue.

Pilot Program Design
The compassion fatigue resiliency program first educates participants about compassion fatigue. The curriculum emphasizes the deleterious effects of chronic stress, describing how chronic sympathetic stimulation affects cognitive and behavioral functions, and influences on problem solving and decision making, communication skills, and emotional regulation.

The curriculum includes five key strategies (Sidebar 3): self-regulation, intentionality, self-validation, connection, and self-care. The program combines didactic sessions with small group activities and discussions. Participants learn how to achieve relaxation and reduce negative (sympathetic) arousal during times of perceived threat (e.g., difficult patients, difficult colleagues, prioritizing, and dealing with emergencies). The skill of 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 by doing one’s best each day, acknowledging efforts, and living by one’s professional values. 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 utilized to underscore the importance of refueling and restoring one’s energy and passion for professional caregiving.

**Results**
The 15 participants in the compassion fatigue resiliency pilot program attended four 90-minute sessions, held during the early evening hours after the nursing staffs’ regularly assigned shifts, and a 4-hour retreat. A mixed-model repeated-measures analysis was used to compare the outcome measures as a function of time across four time points (before the program and immediately, 3 months, and 6 months after the program) adjusting for covariates (age, years in nursing, and years in oncology). The analysis (Table 1) revealed that secondary traumatic stress scores on the ProQol IV declined from preprogram baseline at 0 months, remained down at 3 months, and then decreased at 6 months, with a statistically significant mean difference from baseline (X diff /H11005 3.54, p /H11005 0.044, confidence interval [CI], 0.09 – 6.99). The staff also completed The Revised Impact of Event Scale (IES-R), a 22-item measure which rates a respondent’s subjective distress caused by traumatic events experienced during the past week. Widely used in research on post-traumatic stress disorder, the IES-R assesses the frequency of intrusive thoughts and feelings, and behavioral avoidance in those who have experienced a recent traumatic event. Among the pilot study participants the average IES-R total scores improved significantly overall and from baseline at 0 months (X diff = 1.24, p = 0.04, CI, 0.04 – 2.45), 3 months (X diff = 2.40, p = 0.000, CI, 1.20 – 3.61), and 6 months (X diff = 1.77, p = 0.005, CI, 0.57 – 2.97; Table 1). With the improvements achieved in both

**TABLE 1. Pilot Program Outcomes**

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Baseline (p value)</th>
<th>Post-Intervention at 0 months (p value)</th>
<th>Post-Intervention at 3 months (p value)</th>
<th>Post-Intervention at 6 months (p value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProQol IV</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Compassion Satisfaction</td>
<td>39.53</td>
<td>39.92 (ns)</td>
<td>38.53 (ns)</td>
<td>40.76 (ns)</td>
</tr>
<tr>
<td>Burnout</td>
<td>23.46</td>
<td>22.61 (ns)</td>
<td>23.69 (ns)</td>
<td>22.30 (ns)</td>
</tr>
<tr>
<td>Compassion Fatigue</td>
<td>19.76</td>
<td>17.61 (ns)</td>
<td>17.92 (ns)</td>
<td>16.23 (0.04)</td>
</tr>
<tr>
<td>Impact of Events Scale R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance</td>
<td>1.27</td>
<td>1.06 (ns)</td>
<td>0.75 (0.000)</td>
<td>0.90 (ns)</td>
</tr>
<tr>
<td>Intrusive</td>
<td>1.79</td>
<td>1.34 (ns)</td>
<td>0.58 (0.000)</td>
<td>0.74 (0.006)</td>
</tr>
<tr>
<td>Hyperarousal</td>
<td>1.38</td>
<td>0.80 (0.01)</td>
<td>0.58 (0.000)</td>
<td>0.74 (0.006)</td>
</tr>
<tr>
<td>Total score</td>
<td>4.45</td>
<td>3.21 (0.04)</td>
<td>2.05 (0.000)</td>
<td>2.68 (0.005)</td>
</tr>
</tbody>
</table>

Abbreviations: NS, nonsignificant.
staff’s perception of secondary traumatic stress and the IES-R scores, the decision was made that the resiliency program had benefits that should be made available to a broader group. The hospital thus chose to create a resiliency program for all hospital staff.

**Institutional Scale-up**

A 2-day facilitator training program was designed to create a core group of compassion fatigue resiliency facilitators who would present the hospital-wide program. The 25 facilitators included nurse clinicians and managers, pastoral care staff, human resource trainers, a psychologist, a physician assistant, patient experience staff, and staff from the cultural diversity program. Each 8-hour program is presented by a group of three facilitators. The program has been in place for 26 months.

All staff members who attend the compassion fatigue resiliency program are asked to complete the ProQol R-IV survey before the beginning of the program session. A total of 513 members of the staff have attended the program to date. The majority of attendees have been women (92.4%), with an average age 41.9 years, and an average of 9.9 years of hospital service. About 75% of attendees have been nurses; 10.6%, allied health professionals; 7.2%, clerical professionals; and, 0.6%, physicians.

Among all participants, 20.7% are at high risk for low compassion satisfaction, a measure that reflects the pleasure derived from doing caregiving work well; 48.3% are at high risk for burnout; and 39.4% are at high risk for secondary traumatic stress. Among all professional/occupational groups, nurses have the highest percentage of high-risk scores for burnout and secondary traumatic stress.

Of the 513 staff who have attended the program, 97 (18.9%) have returned surveys that could be linked to a 6-month follow-up. These data demonstrate an improvement in all three conceptual measures, with statistically significant improvement in burnout and secondary traumatic stress (p < 0.01; Fig. 1).

**CONCLUSION**

Cancer care clinicians are at risk for compassion fatigue and burnout, and self-awareness and self-recognition are critical to taking steps to avert or address these syndromes. Lessons from first responders could be incorporated systematically into cancer care. Interventions like the compassion fatigue resiliency program are effective, feasible, and scalable. More work is needed in this area.

**Disclosures of Potential Conflicts of Interest**

Relationships are considered self-held and compensated unless otherwise noted. Relationships marked “L” indicate leadership positions. Relationships marked “I” are those held by an immediate family member; those marked “B” are held by the author and an immediate family member. Relationships marked “U” are uncompensated.

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**References**


