Recognizing Compassion Fatigue, Vicarious Trauma, and Burnout

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Occupational Psychological Distress: An Overview

Acute and chronic psychological distress constitute serious occupational hazards in the healthcare profession, with concerning effects on performance, quality of care, and productivity [1–3]. Physicians are vulnerable to a spectrum of these stress disorders over the course of their professional lives, with the medical training period reported as a time of significant psychological distress

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[1, 2, 4]. These stress disorders are not mutually exclusive and may occur concurrently with significant overlap in phenomenology as evident in Fig. 10.1. In this chapter, we focus on three forms of occupational psychological distress: compassion fatigue, vicarious trauma, and burnout. Compassion fatigue and vicarious trauma are often thought of as different types of secondary traumatic stress disorder that occur in people working in occupations with exposure to traumatic situations or events [5]. Burnout applies more broadly as any individual can experience burnout in the context of work-related stress [6].

Physicians generally provide care to patients who are in vulnerable states, and frequently experience the psychological impact of such encounters, as do their interdisciplinary colleagues who share this work and are also influenced by patients' distress. The communal experience of care delivery is highly attuned to the
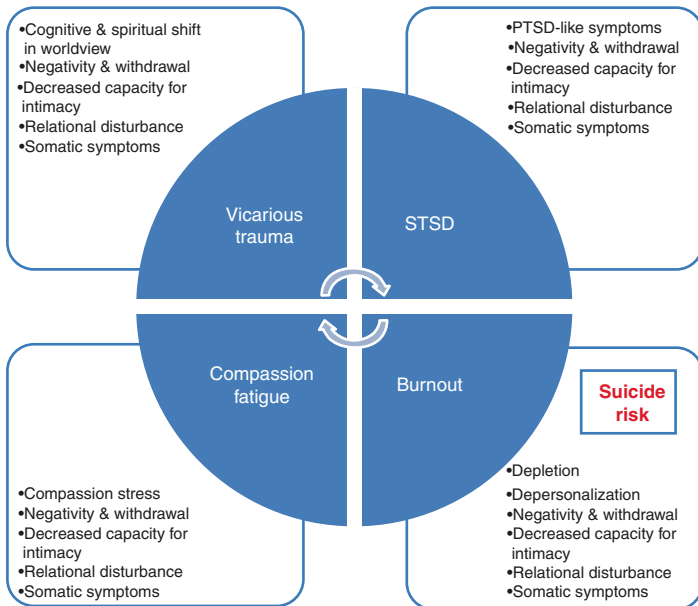

Fig. 10.1 Features of occupational stress-related disorders. *Note:* STSD = Secondary traumatic stress disorder

social context [1]. Thus, as physicians and their interdisciplinary team members simultaneously attend to the same unfolding events, there is an ongoing process of social appraisal, whereby other team member's emotions serve as a source of information regarding the shared event. This dynamic setting can contribute to psychological distress as physicians are recurrently exposed to patient and inter-collegial distress, such that their emotional state is influenced through emotion contagion and social appraisal processes [7]. As such, the role of self-care, inter-collegial support, wellness efforts, and psychological stewardship programs are essential for the prevention of stress disorders.

> **Key Points**
> - Psychological distress is a notable and prevalent occupational hazard in medicine and can manifest as one or more stress-related disorders including compassion fatigue, vicarious trauma, and burnout [1, 2, 8].
> - Stress disorders are not mutually exclusive and may occur concurrently, with significant overlap in phenomenology [1, 2, 8].

Compassion Fatigue

What Is Compassion Fatigue?

Compassion fatigue has been described as one type of secondary traumatic stress reaction that occurs in caregivers of those who are experiencing emotional distress [5]. It is an example of occupational stress that can be a significant source of psychological distress in healthcare practitioners and eventually lead to burnout [9]. It is often referred to as "*the cost of caring*" [5] and develops as a consequence of exposure to patient experiences and suffering, combined with empathy for the patient [10].

Compassion fatigue differs from burnout in that it is specifically associated with exposure to work that requires empathy, potentially leading to suffering, and fatigue in the course of caring for others [5, 10]. It is not limited to a particular specialty within medicine, as in all specialties physicians have the potential to work with patients who are dying, have experienced trauma, or are suffering from chronic illness [9]. The syndrome is also not unique to physicians and can be experienced by a variety of healthcare workers and by anyone in a caregiver role to someone experiencing suffering .

Recognizing Compassion Fatigue

It is important to understand signs of compassion fatigue in order to recognize it and intervene where appropriate [10]. It is often sudden in its onset, in contrast to the more insidious nature of burnout that develops over time [10]. Symptoms include feelings of helplessness, confusion, isolation, exhaustion, irritability, and anxiety [9–12]. One can feel overwhelmed by work and incapable of obtaining successful outcomes in patients [10]. Often there is a reduced capacity for or interest in being empathic toward patients which can have a significant effect on the therapeutic alliance and treatment outcomes [10, 13]. In some cases, symptoms such as intrusive imagery, hypervigilance, and re-experiencing of trauma can occur. At other times a sense of numbness develops, and there may be a propensity to avoid potential triggers in the workplace in order to reduce distress [9].

A lack of intervention for persistent states of compassion fatigue is one important factor leading to physician burnout [9]. Compassion fatigue can lead to feeling ineffective, depressed, apathetic, and detached [14].

Compassion fatigue has a negative impact on the individual experiencing it; however, it is also linked to reduced efficacy at work and perceived reductions of efficacy in personal relationships [9, 10]. It can lead to misjudgment, clinical errors, and poor

treatment planning [9, 12]. The sequelae of prolonged compassion fatigue in healthcare practitioners include low workplace morale, increased absenteeism, increased turnover, and apathy at work, all of which have been linked to increased patient dissatisfaction [14].

Factors Associated with Compassion Fatigue

Personal Factors

Care providers with higher capacity for feeling and expressing empathy are at higher risk of experiencing compassion fatigue and burnout. Those who view themselves as "rescuers" are at an even higher risk of experiencing the distress of compassion fatigue or burnout [10]. In contrast, those with an ability to emotionally detach from difficult and demanding patients have more protection from these occupational hazards and also demonstrate improved concentration, time-rationing, and maintenance of impartiality [10]. Effective care of self and others therefore relies on a delicate balance between empathy and healthy emotional detachment from the work.

Professional Factors

The work of a healthcare professional is inherently high risk for leading to compassion fatigue [12, 14–17]. As part of daily work, physicians are required to bring their whole selves to work toward the healing of others. Add this to the ever-increasing demands in our current healthcare system and it can feel like the need to give of oneself is never ending. To not give all of oneself to the profession of medicine can lead to feelings of guilt and shame. Sometimes the expectations of patients, families, and supervisors can feel infinite. This situation fosters a high degree of compassion fatigue [17, 18].

Other professional factors such as the patient population, type of work, and length of work hours can contribute to the development of compassion fatigue. Treating a higher proportion of com-

plex patients, or those with higher degrees of trauma and suffering are associated with higher levels of compassion fatigue [9]. While compassion fatigue can occur in any specialty in medicine, specialties with a higher proportion of patients who have experienced trauma, chronic illness, or death tend to have higher levels of compassion fatigue [10]. Longer work hours have also been associated with higher levels of compassion fatigue [9] .

Organizational and System Factors

It is important to understand the organizational factors that can contribute to the development of compassion fatigue. Physician trainees have little autonomy over their schedules, and are often required to work long hours, sometimes in tasks that are not particularly beneficial for learning [19]. There is a fine balance to achieve in order to ensure learning objectives and competency is met by the trainee, while also considering that independence in delivering patient care and clinical decision-making is key in training competent physicians [19]. Academic centers may rely on resident staff to complete a range of clinical duties that are not necessarily beneficial for learning, and take significant time (e.g., a resident being required to transport their patient for urgent medical imaging) [19]. Physicians and physician trainees are also exposed to the repeated challenge of treating increasingly complex patients in a system operating with reduced resources leading to higher numbers of new patients, more complex medical problems, and shorter length of stay placing unrealistic expectations on the healthcare team [15, 19–21]. With these increasing demands on trainees, there is often little opportunity to engage in self-care or to have frank discussions about their own emotional reactions to patients, both of which can help to prevent or reduce the experience of compassion fatigue [9, 10, 22, 23].

The abovementioned systemic issues also contribute to working in a strained healthcare system where supervisors and other healthcare professionals are also experiencing compassion fatigue. This becomes another contributing factor leading to compassion fatigue [15].

While challenging working conditions are a fact of a career in medicine, it is important to focus on modifiable factors that may mitigate the deleterious effects of these conditions. The individual may need to engage in some reflection in order to understand what things they need to keep themselves well while systemic change is occurring at the level of the institution and may involve changes to policies and curricula [22]. Advocating for systemic change may be one way that long-term shifts are made in the way health-care is delivered. An in-depth discussion of this is beyond the scope of this chapter and is covered in Chap. 19.

Early Interventions

Strategies for promoting physician resilience and well-being are covered in detail later in this book; however, this section will highlight one intervention that can be helpful specifically in addressing compassion fatigue. Balint groups were first developed after World War II by Dr. Michael Balint and consist of groups of doctors who meet regularly to discuss patient care situations that have been particularly difficult to manage. These groups are typically led by a psychoanalyst/psychiatrist and are intended to support physicians' identification of their own emotional reactions, which in turn can allow work toward appropriate emotional boundaries with the patient. There is benefit in such sharing among peers, as these types of groups allow physicians to debrief, normalize emotional reactions, reduce stress, reinforce personal value, and formulate appropriate patient-physician boundaries [10].

Did You Know?

Balint groups are groups of physicians, typically led by a psychiatrist or psychoanalyst that meet to discuss personal reactions to their patients. This setting is one example of an intervention to help physicians manage and prevent compassion fatigue and burnout [10].

Key Points
- Compassion fatigue is a phenomenon experienced by healthcare workers leading to loss of empathy and can occur in anyone who engages meaningfully with the suffering of others [5, 15].
- When recognized early, interventions such as Balint groups, which address personal reactions to patients, can support resolution of compassion fatigue and prevent physician burnout [10].

Vicarious Trauma

What Is Vicarious Trauma?

Healthcare providers witness some of the most acutely distressing events in patients' lives. In the process, healthcare providers may experience vicarious trauma. Vicarious trauma is the internal shift in emotions, spirituality, and worldview that occurs over the course of indirect exposure to trauma, particularly for clinicians working predominantly with trauma survivors [11, 24]. Clinicians working in such settings are at increased risk of vicarious trauma as they attempt to reconcile witnessing horrific events. Over time, the cumulative physical, spiritual, and emotional residue of this work can be a source of intense psychological distress. Specifically, vicarious trauma may manifest in secondary traumatic stress disorder (STSD) as defined in the DSM-5 diagnostic criteria for acute stress disorder and post-traumatic stress disorder (PTSD) [25].

The DSM-5 recognizes vicarious etiologies of trauma, and three out of four Criterion A items for acute stress and post-traumatic stress disorder pertain to vicarious experiences of trauma [25]. In terms of healthcare staff, vicarious trauma and secondary traumatic stress may stem from "witnessing in person, the event(s) as it occurred to others, and/or experiencing

repeated or extreme exposure to aversive details of the traumatic event(s)" [25].

The witnessing of trauma is not solely a visual event, but extends to the effects of aural and olfactory exposure and encoding of traumatic events. Healthcare staff in acute care settings may be more vulnerable to visual and olfactory exposures to trauma, particularly those working in the emergency department, trauma surgery, and intensive care units. In contrast, in settings such as primary care and mental health, the telling and retelling of events constitutes a core feature of the care process. This results in cumulative and recurrent aural exposure of staff to traumatic stories as they attempt to understand the narrative and in turn formulate appropriate treatment plans. This occupational hazard varies by setting, with healthcare staff in correctional facilities, forensic mental health settings, and military clinics being at higher risk of developing vicarious trauma and associated psychological distress [8, 17, 26].

Although generally acknowledged and increasingly recognized in the scientific literature, vicarious trauma has not been met correspondingly with more robust occupational health programs [8, 11, 24]. Such trauma stewardship is essential in healthcare, to protect and promote the well-being of frontline care providers, and should be a system priority.

Vicarious Trauma, Secondary Trauma, and Secondary Traumatic Stress Disorder

In the mental health setting, vicarious traumatization is a process through which a therapist's inner experience and conception of the world is negatively transformed through empathic engagement with traumatized patients [11], a process of social appraisal and emotional contagion [7]. As such, vicarious trauma captures an indirect trauma exposure with a resultant shift in cognitive schemas, although it does not always result in a clear clinical disorder.

Over time with recurrent vicarious exposures, the risk of clinical manifestation of secondary traumatic stress disorder increases. For the purpose of this chapter, vicarious trauma and secondary

trauma will be used to capture the phenomena of indirect and usually recurrent exposures to traumatic events and the reaction to these exposures. In contrast, secondary traumatic stress disorder denotes the potential outcome of a clinical disorder with hallmark features of post-traumatic stress disorder.

Factors Associated with Vicarious Trauma: Personal, Organizational, and Societal Factors

Healthcare workers can reasonably expect to experience the impact of witnessing catastrophic events, recurrent aversive encounters, and hearing descriptions of such events by their patients. However, the risk of a resultant traumatic response is dependent on a number of factors, broadly captured by personal factors, work environment, and broader cultural context, as illustrated in Fig. 10.2. These factors interact in a complex manner and vary from one clinical environment to the next.

In terms of the personal factors illustrated in Fig. 10.2, these exist within the broader sphere of the work environment and the sociocultural context. Personal factors including personal history,
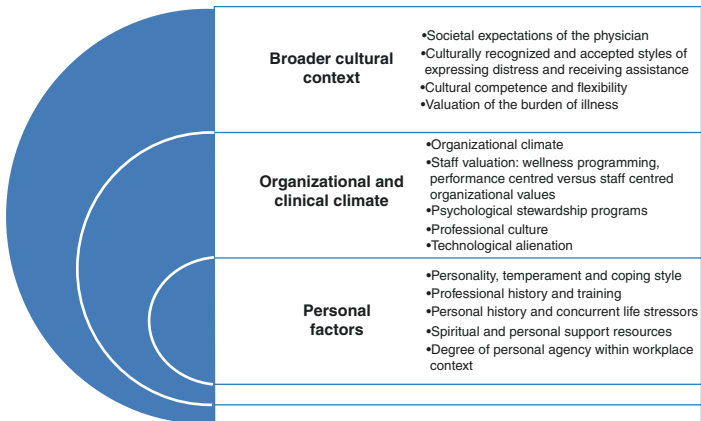

Broader cultural context
•Societal expectations of the physician
•Culturally recognized and accepted styles of expressing distress and receiving assistance
•Cultural competence and flexibility
•Valuation of the burden of illness

Organizational and clinical climate
•Organizational climate
•Staff valuation: wellness programming, performance centred versus staff centred organizational values
•Psychological stewardship programs
•Professional culture
•Technological alienation

Personal factors
•Personality, temperament and coping style
•Professional history and training
•Personal history and concurrent life stressors
•Spiritual and personal support resources
•Degree of personal agency within workplace context

Fig. 10.2 Interactive risk factors associated with vicarious trauma and occupational psychological distress

professional history, and professional training strongly influence the ability to recognize risk and employ help-seeking behavior to address compassion fatigue, burnout, and vicarious traumatization. Defensive styles of seeking help rather than avoiding or retreating from situations are protective. A more passive style of coping such as retreating, avoidance, and isolation increases the risk of vicarious traumatization [24]. Similarly, the degree of perceived self-agency within the immediate work environment is important. In organizations with very hierarchical top-down approaches, the opportunity for staff to proactively elicit and utilize occupational wellness supports is more constrained.

The broader societal and cultural context shapes the manner in which distress is expressed and managed in the clinical setting. Organizational climates that provide ongoing training and support to staff for occupational psychological distress are likely to have a healthier workforce than settings in which there is no added training and no psychological stewardship [8, 24]. As such, when trainees are considering potential employers, it is helpful to know which healthcare organizations value staff as part of their mission, vision, and values. In addition, one should consider the translation of these intentions into practice (Table 10.1).

The organizational climate is shaped by societal expectations of the physician and societal valuation of healthcare. As a reflective exercise, consider the questions posed below.

Ψ **Skill-Building Exercise: Pause and Reflect**
In order to reflect on organizational climate at your workplace, consider the following questions:

- What do you expect of yourself as a physician?
- What does your employer expect of you?
- What are the societal expectations of physicians locally?
- As a medical trainee, consider the core values of your training program regarding the health and wellness of its trainees. Are these expectations realistic and sustainable?

Table 10.1 Translating the mission statement into practice: questions to answer

Does the organization have a psychological stewardship program?

Does the organization promote staff wellness and development with any of the following:
  Staff wellness program
  Professional education and development
  Interprofessional support

Is promoting staff self-efficacy explicitly valued as a shared organizational goal?
Is staff recognition important to the organization: are staff contributions recognized?

At times, these expectations are unsustainable and at odds with maintaining the well-being and productivity of the physician work force. More concerning is the professional culture of medicine which has historically been one of selflessness combined with discomfort for self-care [3, 27, 28]. The tension between the values of sacrifice inherent historically in medicine and the growing recognition of the risks of burnout gives rise to a set of challenges in which seemingly disparate values are hard to reconcile.

Preseenteeism refers to work attendance while unwell and is closely linked with stress-related disorders in medicine [28, 29]. Stress-related disorders encompass a broad spectrum of disorders, including the three discussed in this chapter. Physicians have high rates of sick presenteeism [28, 30] and alarmingly high rates of stress-related disorders [7], with rates varying by clinical setting, specialty, and stage of career. For example, estimates of burnout prevalence in North American physicians range from 30% to 67%, while among residents the range is 38–76% depending on specialty [2, 31–33]. In terms of traumatic stress disorders, the point prevalence of PTSD among emergency physicians is reported at 15.8% for PTSD [34]. Consequently, self-assessment and ongoing self-scanning from the onset of medical training and through the

practice years is a necessity for appropriate self-care and professional growth. Chapter 18 provides resources for self-assessment and ongoing self-scanning, as well as resources for self-care.

Compassion fatigue and burnout are perhaps the most evident forms of sick presenteeism, as physicians very often continue to work long hours despite recognizing that they are depleted and are operating in rote fashion. This is highly concerning as it can have profound personal and professional implications. To the individual physician, this can result in a decline in the general state of health, with increased rates of anxiety and depression [3, 22, 28, 35, 36]. The professional implications include less effective bedside manner, decreased productivity, and decreased quality of patient care [22, 35, 36].

Did You Know?

Stress-related disorders are not solely psychological in their manifestation. Stress disorders are recognized risk factors for adverse physical health outcomes including weight gain, sleep disorders, hypertension, and cardiovascular morbidity [37].

In terms of the societal valuation of healthcare, there are distinct differences in the funding of different fields of healthcare. For example, although the psychiatric burden of illness is significant in the general population, this does not translate to proportionate resource distribution which in turn impacts funding for psychological stewardship programs within healthcare organizations. In such settings, it can be difficult for trainees and staff alike to access wellness resources, supports, and appropriate professional development. If wellness programs exist, is the organizational attitude one of promoting or penalizing staff uptake?

Recognition of vicarious trauma, resultant secondary traumatic stress, and their distinction from other adverse psychological states can be challenging. The negative alterations in cognition and mood state of vicarious trauma may be erroneously attributed to burnout, somatic symptoms may be attributed to an anxiety disorder or other medical condition, while perceived detachment may be seen as an element of compassion fatigue; however, vicarious trauma and secondary traumatic stress disorder should be considered if there are concurrent features of avoidance and altered arousal. While psychological distress accompanies all these conditions, it would be important to be alert for the accompanying features that may help distinguish the three conditions such as outlined in Fig. 10.1. Recognizing each condition and providing appropriate intervention is essential as each is correlated with adverse impacts on physician health, quality of care, productivity, and work satisfaction [7].

Vicarious trauma occurs as a result of cumulative and recurrent exposure to traumatic material [24]. The sustained underlying stress of healthcare work combined with exposures to aversive or catastrophic events and patient's narratives creates a system in which the interaction of the clinical environment, cultural context, and personal variables may coalesce to tip the balance toward burnout, compassion fatigue, and vicarious trauma as illustrated in Fig. 10.3. Vicarious trauma can result in secondary traumatic stress disorder when it produces PTSD symptoms including avoidance, anhedonic cognitive and emotional states, hyperarousal, and intrusive reliving of the event. This outcome is not well measured but is certainly more prevalent in settings such as military medicine, disaster medicine, and mental health clinics [8, 17, 26].
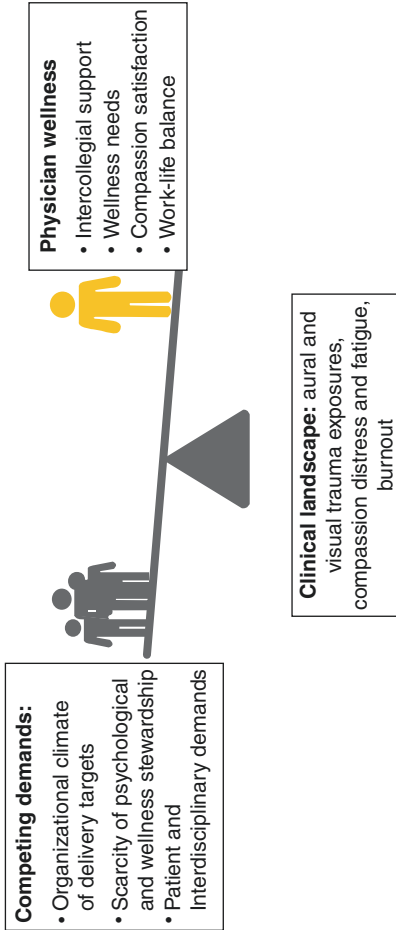
Competing demands:
- Organizational climate of delivery targets
- Scarcity of psychological and wellness stewardship
- Patient and Interdisciplinary demands

Physician wellness
- Intercollegial support
- Wellness needs
- Compassion satisfaction
- Work-life balance

Clinical landscape: aural and visual trauma exposures, compassion distress and fatigue, burnout

Fig. 10.3 The tipping point: achieving balance in the dynamic landscape of medicine

Early Intervention at the Education and Training Level

There is a widely held view that the above noted acute and chronic occupational features of medicine constitute an inevitable and routine aspect of healthcare work, and are as such, unavoidable occupational hazards of the profession [38, 39]. Of concern, acculturation to the idea that self-care is secondary in this environment of sustained occupational stress occurs as early as the learning and trainee years and is pervasive in academic medicine [39]. Trainees who are exposed to psychologically distressing events have access to support and debriefing through their training program; however, they may not receive support in their clinical rotation. While the trainee should access their program resources, it requires a balance between rotation obligations and protected time which varies across training programs. This raises the question of the potential utility of completing a psychological distress inventory in advance of a resident's routine meeting with their program director. The Professional Quality of Life (ProQOL) Tool and the Maslach Burnout Inventory are discussed in this chapter; however, there are a number of other psychometrically sound tools for evaluation of items such as work stress, work satisfaction, resilience and burnout, some of which are explored further in Chap. 19.

Humanistic medicine strives to deliver holistic patient-centered care. Physician performance, patient safety, and the quality of patient care are intertwined with organizational health [40–42]; thus, humanistic healthcare requires salubrious health systems. For physicians, the system begins as early as the medical education years through professional commitment to the health promotion and wellness components of their education and training curriculum. The progression of clinical knowledge and skills occurs concurrently with developing added proficiency with wellness. Self-compassion and wellness are associated with enhanced resident empathy, which enhances medical care and competency [23, 43, 44]. Just as an empty bowl can offer no sustenance, so too must medical trainees and physicians recognize the importance of refilling their own bowl in order to offer nourishment to patients.

Trauma stewardship is more likely to have good uptake when it is introduced as a core organizational value in healthcare facilities concurrent with disseminating the same values in medical education and training programs. This would enable learners to be early adopters who can translate the principles into practice during their formative stages of training. In certain healthcare settings such as mental health, military, and forensic services, the recurrent and pervasive nature of staff exposure to distressing life narratives and the high rates of violence in this clinical setting behoove investment in psychological health and trauma stewardship as a priority in promoting staff well-being and productivity. Promoting the healers' health and healing the healer should indeed form a core feature of the healthcare work environment, as this in turn improves physician performance and the quality of patient care [40–42, 45, 46].

How Do We Approach Vicarious Trauma and Psychological Distress?

The management of psychological distress is an inherent aspect of holistic healthcare. Much resource and effort is appropriately focused toward delivering comfort and treatment to patients, but with significantly less invested in managing the negative health effects of bearing witness on healthcare professionals. Herein lies the paradox of an occupation devoted to healing and restoration, palliation and support, but limited in applying these precepts to those at the forefront of healthcare delivery.

Healthcare professionals routinely provide emotional support and promote holistic healing in the course of patient care. However, the very process of delivering such care can expose providers to secondary trauma and over time and compromise their ability to provide compassionate care, particularly when the occupational environment offers limited support, inadequate promotion of self-compassion and self-care, and lack of wellness stewardship. Furthermore, the cumulative effect of vicarious

trauma is that of decreasing effectiveness and productivity; thus, it is essential that programs and workplaces implement opportunities for healthcare teams to debrief and foster other workplace wellness techniques. This will necessitate ongoing shifts in professional culture and organizational climate.

What does wellness stewardship look like? Any approach to psychological health stewardship must be systems focused as no single factor is sufficient on its own. As illustrated in Fig. 10.3, the healthcare environment is multilayered, with physicians and their allied health colleagues nestled within the clinical and organizational setting, which is in turn encapsulated within the broader sociocultural context. Any approach that aims to alleviate the psychological burden of healthcare work can only be effective when it examines the influence and interaction of these systemic factors. Even the most resilient physician struggles to sustain wellness in an organizational climate of intolerance, an absence of inter-collegial support, a lack of recognition of their workplace contributions, and with technological alienation. The issue of technological alienation is rapidly becoming more evident as processes become automated or result in increased solitary work with digital technology. The role of inter-collegial support in healthcare has historically been a source of professional strength; thus, the role of technology in provider alienation needs to be carefully understood so as to minimize negative impact on physician wellness and patient care.

Emotional regulation is crucial to maintaining well-being, fostering resilience, and preventing compassion fatigue, burnout, and the transition of vicarious traumatization to a secondary traumatic stress disorder [7]. Healthcare organizations must give serious consideration to this issue, as these facets of occupational psychological distress are tightly linked with physician and healthcare worker performance, productivity, effectiveness, and long-term retention.

Take a moment to reflect on yourself and your residency training to date. If you could measure your professional quality of life, how would you score on measures of vicarious trauma, compassion fatigue, and burnout?

Did You Know?

The Professional Quality of Life (ProQOL) Measure is the most commonly used measure of the negative and positive effects of helping others who experience suffering and trauma. The ProQOL has subscales for compassion satisfaction, burnout, and compassion fatigue, and has been in use since 1995 [47].

Occupational psychological distress in healthcare continues to gain attention, as it can have deleterious effects personally, professionally, and at a broader societal level by way of an unsustainable workforce. Fortunately, there is increasing discussion in healthcare about how to build and fortify physician resilience, how to determine risk indicators of sick systems, and how to recognize the spectrum of occupational psychological distress. This has concurrently generated many exciting initiatives and toolkits to combat the issue, with a number of these valuable resources described in the final chapter. When incorporated as early as the undergraduate medical education years, wellness practice can be firmly established by the time trainees become physicians in practice.

Burnout

What Is Burnout?

Many of the terms used to describe concepts relating to wellness and distress tend to be used interchangeably, and although interrelated, are not synonymous. Stress and burnout describe different, equally important phenomenon. Where stress describes our reactions to a given situation, either acutely or chronically, burnout is a work-related syndrome. "Burnout" was first coined in the literature in a psychology journal by Herbert Freudenberger in 1974 in his paper entitled *Staff Burnout* [6]. Freudenberger began writing about the phenomenon that he was experiencing as a psychologist.

Since this term was coined almost 50 years ago, the term "burnout" has been used multiple times within the literature with its core tenets remaining the same. Burnout is a work-related syndrome consisting of the following triad:

1. Emotional exhaustion, feeling that there is nothing left to give, and that one's emotional resources are depleted [48].
2. A sense of depersonalization, which describes a negative, cynical, or detached response to one's job or others [48].
3. A reduced sense of personal accomplishment; feeling less fulfillment or effectiveness in one's work [49].

Burnout is not a diagnosis recognized in the DSM-5, outside of a V-code that refers to "other problems related to employment"; however, the International Classification of Diseases, 11th revision (ICD-11), now recognizes burnout. It conceptualizes burnout as *chronic workplace stress that has not been successfully managed* [50]. ICD-11's three dimensions mirror those detailed earlier, and it is emphasized that burnout should only be diagnosed in an occupational context.

How Is Burnout Measured?

Burnout is often measured using the Maslach Burnout Inventory (MBI) developed by Christina Maslach and Susan E. Jackson in 1981 [51]. It measures the three components of burnout (emotional exhaustion, depersonalization, and reduced sense of personal accomplishment) through 22 items that are divided into three subscales [48]. The items within the inventory are composed in a way that allows respondents to answer based on their attitudes. Respondents answer on a 7-point scale, with possible responses ranging from "never" to "every day." This scale has demonstrated both reliability and validity. It demonstrated convergent validity multiple ways: through behavioral ratings by someone well known to the subject, through specific job characteristics that were known to cause burnout, and through various measures that were hypothesized to be correlated with burnout [48].

Prevalence of Burnout in Physicians

In recent years, burnout has been seen as an occupational hazard for those in medicine. The rates of burnout in physicians in training and staff physicians continue to grow. A survey by the Canadian Medical Association noted increasing levels of distress among Canadian physicians (both staff physicians and residents) [32]. They found that 30% of Canadian physicians reported high levels of burnout. This survey looked at the components of burnout as well as burnout as an overall condition. They found that physicians note especially high levels of emotional exhaustion (one component of burnout). They also found that significantly more residents (38%) reported burnout compared to staff physicians (29%) [32]. This data mirrors the results of Resident Doctors of Canada's (RDoC) 2018 survey [52]. This survey found 51.9% of respondents self-screened as positive for burnout (these figures varied by specialty). These figures are also higher than what we are seeing in the general population confirmed by a study examining rates of burnout, depression, and anxiety amount medical students, residents, and early career physicians in comparison to an age-matched, college graduated population in the United States [2]. Rates of burnout in physician trainees were found to be 49.6–50% compared to rates of burnout in an aged match population at 31.4–35.7% [2].

A study by Shanafelt and colleagues looked at rates of burnout among physicians in the United States compared to the general population [53]. They did this in both 2011 and 2014 and found that burnout was more common among physicians than among the general American working population, a finding that persisted after adjusting for age, sex, hours worked, and level of education. Not only were the results higher in physicians compared to the general population, they were also higher in 2014 compared to 2011. This was consistent across all specialties.

Factors That Contribute to Burnout in Physicians

Multiple factors in the literature have been noted to contribute to physician burnout, and these can vary based on level of training. These factors can be considered at the level of the individual

(e.g., personality, personal coping style), the level of the medical profession (stigma), and the level of healthcare organizations (high workloads, changing work environments) [54]. Swenson and colleagues reviewed the literature on physician burnout and found that factors such as high workload, inefficient working environment, difficulty with work-life balance, loss of meaning in work and lack of flexibility, autonomy, and control all contribute to burnout. They also found that medical specialty, practice setting, and personality type can contribute to burnout, as do sleep deprivation and medical errors [55].

This highlights the difficult cycle perpetuated by burnout: medical errors are a risk factor for burnout and experiencing burnout is a risk factor for making medical errors. Studies have shown that experiencing burnout increases the risk that one has made a medical error in the past 3 months [36] and that one will make a medical error in the next 3 months [56]. This continues to be replicated in the literature; Tawfik and colleagues found that physician burnout is independently associated with major medical errors [57].

Personality traits can also affect the experience of burnout. Factors such as perfectionism, an exaggerated sense of responsibility, and a need for achievement all put physicians at risk for burnout [58]. Residents and physicians in general, however, have also needed to draw on these once adaptive personality traits to remain successful in medicine – these were likely the personality traits that facilitated admission to medical school and residency positions. Resident physicians are in a unique position where they are beginning to practice like independent physicians, however, still have academic requirements and schedules to which they must adhere. This may augment a sense of lack of flexibility, autonomy and control, especially when coupled with the need for achievement that many residents experience.

In a focus group conducted by RDoC, residents were asked to describe factors related to burnout, and reiterated many of those previously mentioned. In particular, they described feeling a strong sense of responsibility and related pressures that come along with this. One of the respondents stated that "in this field, if our work is not up to par…people die" [59]. Residents also described a sense of needing to sacrifice due to internal and

external/institutional expectations. They spoke about sacrificing their time, their own health (two-thirds of residents often or always go in to work when sick) [52], and at times who they are as a person. One of the respondents stated, "there's this idea of self-sacrifice and the more you're willing to give up yourself […] the better physician you are" [59].

Barriers to Seeking Care

Despite high levels of burnout, physicians often do not seek the care that is needed. The Canadian Medical Association's national survey found that the top reported barriers to seeking help among physicians include believing their situation is not severe enough, being ashamed to seek help, and not being aware of the range of services available. The RDoC National Survey found that almost 60% of respondents cited lack of control over one's schedule as the most significant barrier to seeking care for their mental health concerns [52]. This can manifest in a multitude of ways. In this same survey by RDoC, almost two-thirds of residents reported that their work schedules do not leave them with enough time for their personal lives. Most residents work more than 60 hours a week, and this can leave insufficient time to seek the optimal support and care that would be of benefit. Furthermore, many residents are uncertain that a counsellor's or doctor's appointment is a sufficient reason to leave work.

This barrier was followed by concern for the existing culture of medicine, particularly the stigma around mental health. In this context, stigma can be multifactorial and is interconnected with being unable to find time to seek care. It includes the stigma portrayed by peers, staff, and supervisors, added to which there may be an internalized stigma that learners bring with them from experiences prior to medicine. This makes it difficult for learners to feel comfortable disclosing the need to seek care for mental health concerns and is also influenced by the fear of repercussions to their training or future job prospects if they ask for this time off. Schwenk and colleagues surveyed medical students for symptoms of depression using the PHQ-9 [60]. They found that when

compared to students with low scores on this depression scale, students with high scores were more likely to endorse statements that they would be less respected or viewed as less adequate than their colleagues who were not depressed. For example, 17% of those with low depression scores felt that telling a counsellor how they were feeling would be risky, compared to 53% of those with higher depression scores. This view helps to further illustrate another reason that residents can be reluctant to seek professional help [60].

The third most cited barrier was a perceived lack of mental health resources that ensure resident confidentiality. Residents have shared concerns about a potential impact on their future career options in terms of job availability and licensing, if they were to come forward with mental health concerns during residency. Dyrbye and colleagues found that nearly 40% of physicians surveyed would be hesitant to seek care for their mental health concerns because of the fear of repercussions to their medical licensure [61]. The authors described these fears as reasonable – more than one-third of state licensure board executive directors stated that a mental health diagnosis noted on an application would be sufficient to sanction a physician [61].

The CMA's 2018 National Survey found that 82% of physicians reported high levels of resilience [32]. Medical students at the beginning of medical school are assessed to be more resilient, less depressed [62], and have healthier mental health profiles [53] overall than college graduates pursuing other fields. However, this profile is reversed 1–2 years into medical school [53].

Maladaptive patterns of managing stress may begin in medical school and continue into residency and independent practice. Montgomery speaks to the concept of the "hidden curriculum" and how this propagates increasing cases of burnout [38]. He speaks to the fact that the antecedents of burnout and iatrogenic medical errors find their roots in the early medical education years. There is a paradox that exists as the years in which a physician can undergo the most formative changes in practice patterns and habits are also the years when they are most vulnerable to the impact of burnout. Montgomery reflects that attempting to retrain physicians after they complete medical school or residency has

been futile as these behaviors and patterns that develop early become deeply embedded [38]. This underscores the importance of intervention early in medical training .

Why Does Burnout Matter?

The conversation about burnout and physician wellness matters because the system is suffering. Our patients, our physicians, and our colleagues suffer concurrently. Residents are experiencing mental health concerns at alarming rates. Data has shown that 13.7% and 10.8% of residents are bothered more than half of the days or nearly every day by having little interest or pleasure in doing things and by experiencing other symptoms of depression [52]. The terms "depression" and "burnout" are often used interchangeably but represent different concepts which are at times difficult to differentiate.

Bianchi and colleagues state *"the idea that burnout is, in its early stages, job-related and situation-specific whereas depression is context-free and pervasive says nothing about what distinguishes the late stages of burnout from depression, leaving a key problem unresolved"* [63]. Despite the challenging distinction, leaving depression and burnout unmanaged can have devastating repercussions. New research is increasingly showing that physicians have the highest suicide rates compared to all other professions, and the rates of physician suicide are twice that of the general population [64] and are estimated at 40 in 100,000 per year in the United States [65]. It is estimated that one physician dies each day due to suicide [65].

Individual Versus Organizational-Level Interventions

Individual resilience is not the silver bullet; it is only one very small piece of a much larger puzzle. Most efforts to prevent burnout have focused on improving physicians' personal resiliency rather than their workplaces and training environments.

Unfortunately, the result is that physicians who are more resilient take on greater workloads, and so the problem perpetuates itself [65]. A 2017 meta-analysis by Panagioti and colleagues found that although individual targeted interventions such as mindfulness and resiliency programs have been shown to be helpful and reduce scores on objective measures of burnout, organization-directed interventions are associated with higher treatment effects when compared to physician-directed interventions [66].

There are many organizations that are working toward individual intervention programs, such as the RDoC Resident and Leadership Resiliency Curriculum (https://residentdoctors.ca/areas-of-focus/resiliency/), the McMaster Resilience in the Era of Sustainable Physicians: An International Training Endeavor (RESPITE) program (https://respite.machealth.ca/), the AMA STEPS forward Professional Well-Being (https://edhub.ama-assn.org/steps-forward), among other national and international administered programs. These programs should be viewed as a harm reduction approach to wellness; they can fill an individual's toolbox while cultural and organizational changes are being planned and implemented. For example, organizations such as the CMA have identified that while there are many developments in progress for physician wellness, they are occurring in silos, as most do not know of the work being done elsewhere. Moreover, the CMA's 2018 survey identified that physicians are not aware of the range of wellness programs and services available [32]. Therefore, the CMA has launched a national analysis of the work being done, with the end goal of building a physician wellness virtual hub. Several researchers have looked at how organizational-level approaches can be implemented within healthcare settings and residency programs. The latter is of paramount importance given that the patterns of physician burnout begin early in the training period.

In sum, in this chapter, we have discussed three important forms of occupational psychological distress: compassion fatigue, vicarious trauma, and burnout. There is a growing body of evidence pointing to the prevalence of these phenomena in physi-

cians. It is important to be able to recognize these phenomena in order to make the necessary changes to combat them for the benefit of the physician, as a human, as well as for the benefits of the patients we treat.

Check Your Learning

Stacy is a fourth-year resident in orthopedic surgery. She is transitioning into fifth year soon and starting to worry about preparing for her upcoming licensing exam. She continues to find meaning in the bulk of her work and is happy with her choice of residency program and specialty. She is involved in an elective multidisciplinary clinic that helps patients who are the victims of domestic violence. Lately, Stacy has noticed she has become increasingly overwhelmed at work and finds it difficult to empathize with patients she sees in the elective clinic. She used to get a sense of purpose and fulfillment in her work there; however, she has begun to feel that her efforts at treating these patients are an exercise in futility as much of the time, her patients do not have the financial or social supports necessary to get out or leave their abusive relationships.

Stacy's partner has noticed a shift in her as well and has spoken to her about feeling that she is less emotionally available at home and has started to seem that she is not present even when they do spend time together. Eventually, Stacy's partner convinces her to arrange a meeting with a social worker affiliated with the postgraduate office.

Through the course of meeting with the social worker over several sessions, Stacy begins to understand that some of the symptoms she was experiencing were related to ongoing exposure to patients with a high degree of trauma. When added on top of day-to-day demands of residency training, clinical responsibilities, and considering the upcoming high-stakes board exam, her own resources were being depleted. Stacy worked with the social worker to develop some strategies that she could use to prevent herself from developing long-lasting compassion fatigue or burnout. She was able to find a mentor in a supervisor

who was willing to talk with her in order to process some of the difficult emotions she experienced in response to the elective clinic in order to develop healthy emotional boundaries with that work.

Question 1. Which of the following features are common to the stress-related syndromes discussed in the chapter?

    A. **Detachment**
    B. **Somatic symptoms**
    C. **Withdrawal and decreased capacity for intimacy**
    D. **Cognitive shift and disturbance in spirituality**
    E. **All of the above**

Answer: E ✓
All the above are qualities common across the spectrum of psychological distress discussed in this chapter, although the degree of each feature may vary from one disorder to the other.

Question 2. All of the following are risk factors for compassion fatigue *except*:

    A. **People who detach emotionally from their work**
    B. **Working long work hours**
    C. **Working with a highly traumatized patient population**
    D. **Working with many colleagues who are experiencing compassion fatigue**
    E. **Having little control over your work**

Answer: A ✓
People who have a greater capacity to feel and express empathy are at higher risk of experiencing compassion fatigue; however, a degree of this is necessary for optimal patient care. The key is establishing an appropriate balance between empathy and detachment.

Question 3. **Which of the following is not a known personality risk factor for burnout?**

- A. **Perfectionism**
- B. **Laissez-faire work ethic**
- C. **Need for achievement**
- D. **Exaggerated sense of responsibility**

Answer: B ✔
Although a person may have a decreased work output due to burnout, this characteristic is not one that has been shown in studies to predispose to burnout.

Key Takeaways

- High rates of stress disorders and sick presenteeism are present in the medical profession, and should be considered a priority issue as stress disorders influence empathy, performance, and productivity [7, 28, 29].
- "There is no health without mental health" [67] and wellness. Stress disorders are not "all in our heads" as they can combine with other risk factors to manifest in serious outcomes including cardiovascular disease, cerebrovascular accidents, and shortened life span [37].
- Humanistic patient care requires empathy, and empathy-related emotions and their regulation are dependent on physician well-being, thus our effectiveness as physicians is dependent on self-care and self-compassion [23, 44].
- Vicarious trauma can result in secondary traumatic stress disorder. Trainees and physicians in higher risk clinical settings (e.g., forensic and military settings, emergency services, mental health services) should seek and routinely utilize wellness programs to manage this occupational hazard [8, 17].

- Compassion fatigue is a phenomenon experienced by healthcare workers leading to loss of empathy and can occur in anyone who works closely with and engages meaningfully with the suffering of others [5].
- Symptoms of compassion fatigue include feelings of helplessness, confusion, isolation, exhaustion, irritability, anxiety, feeling overwhelmed, and feeling incapable of helping. Conversely, this can progress to a sense of numbness and lead to significant avoidance [5, 10, 16].
- When recognized early, interventions to address compassion fatigue can lead to recovery and prevent progression to burnout [10].
- Burnout is a work-related syndrome comprised of emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment [6, 51].
- Although programming and interventions targeting individuals and skill development are important, systemic and organizational-level interventions lead to overall greater impact in reducing burnout [66, 68].

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