Physician Wellness and Remediation

11

Sarah Williams

Abstract

Medicine is an exceptionally demanding as well as rewarding profession. Physicians must maintain the ability to work hard, at optimal levels of excellence, under high levels of demand and accelerating change in the healthcare environment. This requires stamina and adaptability. Work-related distress is common in trainees and physicians and is associated with significant suffering, incompetence, lapses in professionalism, and attrition from the profession. At the worst end of the spectrum for the individual, this distress may result in depersonalization, emotional exhaustion, and a sense of low personal accomplishment. These symptoms characterize a syndrome now called burnout. Physicians are also at high risk for other stress-related issues such as depression, anxiety, substance abuse, and suicidality. Certain individual (e.g., resilience, relational competence, active health maintenance) and workplace (e.g.: safety orientation, mutual support, and flexibility) characteristics protect against burnout. In this chapter, Dr. Williams draws from her extensive experience first as an Associate Internal Medicine Residency Program Director and then as a psychiatrist who developed and ran a physician wellness program for a large healthcare system. She describes the common causes and consequences of stress, distress, and burnout in medical trainees and practicing physicians. She discusses strategies for identification, prevention, and treatment of physician distress and suggests a four-pronged approach toward physician wellness, which includes both programmatic and individual strategies.

11.1 Introduction

"As a medical student my second night on call in labor and delivery, I pestered the attending doctors to let me deliver a baby, and six hours later I got my chance. With the guidance of a senior doctor, a plump, slippery, wriggling baby appeared in

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> my hands. My adrenaline ran so fast that my hands shook when I clamped and cut the cord. I passed the infant to the pediatrician and was hooked." [1]

Sir William Osler said that being a physician is a "noble calling" that "provides the greatest opportunity to exercise the mind and heart," and I agree. Even in these difficult times for our profession, it is still a great privilege to be someone's doctor. However, it appears that fewer and fewer of us are actually able to experience these rewards and that physicians across the United States, Canada, and Europe are suffering from significant work-related distress [2, 3]. A recent study of physicians' satisfaction found that 1 in 5 young physicians would not choose a career in medicine again [4].

This level of distress, which affects our students and trainees as well, has serious consequences for patient care [5]. Medical students have higher levels of distress than nonmedical student peers, which negatively impacts their mental and physical health, reduces their altruistic values, and is associated with unprofessional behavior. All this may compromise patient care and the size of the physician workforce, particularly of primary care physicians willing to care for underserved populations. A compelling argument has also been made that physician distress threatens successful healthcare reform in the United States [6]. Because of the prevalence and serious implications of distress, the Licensing Committee on Medical Education (LCME) requires medical schools to have student wellness programs (accreditation standard MS-26), and a growing number of hospitals, as well as most state medical societies, run physician wellness programs.

At the same time as our young students and trainees are dealing with all the stresses of medical training and practice, they are also generally dealing with the exciting but challenging developmental tasks of late adolescence and early adulthood. These tasks include separation and individuation, personal identity formation, and development of meaningful adult relationships, partnering, and starting families, though these are often delayed or distorted by immersion in medical training [7]. As teachers and physician leaders, we have a responsibility to support the healthy professional identify formation of our trainees and junior colleagues by helping them deal with the stresses and strains of medical practice.

In this chapter I will review the issues of stress, dissatisfaction, and suffering among our students, trainees, and practicing physicians—where it comes from, where it leads, how to recognize it early, and what we can do about it. I will review the most important manifestations of stress among medical students and residents, followed by a discussion of selected issues, including the problem of burnout, with particular relevance for teachers and learners. Finally, I will suggest ways to address these issues. These ideas have been informed by over 30 years of practice, as a medical educator, internist, and psychiatrist; the relevant literature; and my experience founding and directing a physician's wellness program in a large multihospital consortium. In this last role, I personally evaluated over 50 attendings, residents, and medical students from various fields, who were experiencing difficulties in their work, studies, and/or personal lives.

Common Causes of Stress in Medical Training and Practice

Intrapersonal Issues

- Perfectionism
- Excessive sense of guilt and responsibility
- Self sacrifice, delayed gratification
- Unmet need for approval and affirmation in work
- Lack of awareness of one's own needs and feelings
- Perceived lack of support from bosses and colleagues
- Perceived lack of connection with colleagues
- Fear of errors and bad outcomes

System Level Issues

- Work–life imbalance, long hours away from family and friends

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- Constant exposure to suffering, death, and disability
- Lack of control over practice environment
- High standards of individual responsibility
- Lack of structured mutual support
- Work demands exceeding capacity
- Work not recognized or rewarded
- Actual lack of support from bosses and colleagues
- Family and financial burdens

Case

I first became interested in physician stress and wellness 20 years ago when I was running a resident support group in the ICU. One day I arrived to find the residents visibly shaken. The night before they had cared for a 36-year-old mother of 3 who had come into the ICU in preparation for a procedure, was given pre-procedure medication, and died suddenly of an arrhythmia—a rare side effect of the medication. As we discussed the case, many of the residents had tears running down their faces. Finally, one of the residents asked, with anguish in her voice: "Where does all this stuff go? Is there, like, a compactor in our brain that just squeezes it all into a corner so we can go on?"

Obviously we can't compact all these difficult experiences into a corner of our minds forever; they do affect us emotionally, physically, and in our behaviors. Ideally, novice practitioners would have a regularly scheduled time to confidentially discuss emotionally difficult situations with peers, facilitated by a trusted expert as they did in this case. In this way physician trainees can "air" the range of feelings they are experiencing and consider a repertoire of healthful ways to deal with these emotions. These strategics might include learning strategies to function effectively at work and maintain professionalism, while also respecting and allowing for their natural reactions. Unfortunately, even with such support, stress may manifest in negative ways; thus additional educational and supportive approaches are needed.

11.2 Stress, Distress, and Burnout

Although definitions vary widely, it is useful to distinguish among stress, distress and burnout. While *stress* is a normal, and in many cases a necessary, growth-promoting aspect of medical training and practice, *distress* is an unhappy, dysfunctional condition that can have a wide variety of physical, psychological, and behavioral consequences, some very serious.

Note that the signs and symptoms of distress are very similar to the "early warning signs of burnout," though in attenuated form. This is not surprising, as severe distress can often lead to burnout, as well as many of the other serious problems noted below, including depression, substance misuse, and suicidal thoughts.

Defining Terms

Stress: The body's reaction to a change that requires a physical, mental, or emotional adjustment or response. It is an adaptive response, which may not be experienced as abnormal or upsetting.

Distress: A pain or suffering affecting the body or mind.

Burnout: A psychological phenomenon (not a psychiatric diagnosis) characterized by depersonalization, emotional exhaustion, and a sense of low personal accomplishment associated with cynicism and decreased work performance. *Engagement, the opposite state, is characterized by energy, involvement, and efficacy.*

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Burnout

Recently, a young attending came to me for help. He was tired and discouraged and no longer believed in his work or the value of his own efforts. "Since the age of 14," he said, "I have wanted to be a doctor—I have never wanted to do anything else. Taking care of patients has been my life; now I don't even want to go to work!" This young doctor was working in a clinic where he saw a patient every 15 min while trying to teach the students and complete the requisite paperwork. He told me, with shame and sadness, that his patients' needs "felt like burdens, their smallest requests annoyed him, and each day's tasks seem to stretch out in front of him like an endless desert he could never cross." He realized that for the first time in his life he was experiencing burnout.

"Burnout" can be conceptualized as a "final common pathway" of the many stresses and distresses of medical practice. Christina Maslach, who first developed the concept of burnout [7], describes it as having the following three major components:

- Emotional exhaustion (lost energy)
- Cynicism (lost caring and meaning)
- Lost sense of personal efficacy

In my experience, this is a state of great suffering, often described as "the soul-destroying agony of the healers." While more comprehensive lists exist [8] for the medical educator or administrator on the front line, it is most important to be aware of the most common warning signs so that you can identify this syndrome early and intervene as soon as possible.

Early Warning Signs of Burnout

- Chronic fatigue: exhaustion, tiredness, and feeling physically rundown
- Physical symptoms (e.g., headaches, myalgias, gastrointestinal disturbances, palpitations, and breathlessness)
- Anxiety, insomnia, and excessive daytime sleepiness
- Depressed mood and suicidal thoughts
- Anger at those making demands including patients
- Self-criticism and self-doubt
- Cynicism, negativity, and irritability
- Sense of being besieged and overwhelmed
- Exploding easily at seemingly inconsequential things
- Suspiciousness
- Feelings of helplessness and feeling stuck or trapped
- Loss of passion for work
- Loss of empathy, enthusiasm, and belief in medicine and oneself

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Burnout and depression can look alike, but actually they are very distinct syndromes. The fundamental distinction is that the low mood, anhedonia, and other symptoms of depression usually manifest throughout all areas of life, whereas the suffering and symptoms of burnout are generally confined to the reactions, feelings, and behaviors relating to work and the workplace and often do not affect other areas of life.

While burnout can exist in isolation, it is usually part of a larger picture of stress-related suffering and existential angst about current difficult events and situations, as well as long-term psychological issues. It can also be associated with many of the manifestations of stress and distress described below; particularly depression and substance misuse.

11.3 Depression and Suicide

Depression can be expected to occur in 12 % of male physicians and 19 % of female doctors at some point in their lives, and suicide is 2–4 times more common among physicians than in the general population [9]. Among medical students, 25 % identified themselves as feeling down,

depressed, or hopeless during the prior month, with some proportion having thoughts about suicide [10].

11.4 Alcohol and Substance Abuse

Case

Dr. R, a promising young male anesthesiologist suspected of having a drinking problem, staggers into the OR for an 8 am case, slurring his speech and making inappropriate remarks to female staff. His Chairman was notified, and Dr. R was immediately transported to an inpatient rehabilitation facility. After treatment, he was allowed to return to his position on probation under a detailed monitoring plan developed with his Chairman, in concert with the state's Committee on Physician Health.

At some point in their lifetime, 8–12 % of physicians will have problematic substance use [11]. Substance use and alcoholism, in particular, are still the major reasons for referral to physician wellness programs and disciplinary authorities. Fortunately, physicians are generally more responsive to treatment than the general population, with over 75 % working and achieving 5-year remission from substance misuse after treatment in their state's physician wellness programs [12].

11.5 Psychiatric Problems

Case

It was the first week of July, and his first night on call, when a new intern experienced his first psychotic break, leaving a trail of incoherent, bizarre admission notes to tell the tale.

The years of medical school and residency coincide with the age of onset of a number of serious mental illnesses, which can be worsened or precipitated by the stresses of medical training and practice. Unfortunately, mirroring how our society treats these illnesses, the student or resident who admits to having these disorders is still likely to experience significant stigmatization and discrimination, including dismissal from their training program [12]. Thus, while it is crucially important to insure patient safety as well as adequate diagnosis and care for these doctors, it is also important to insure against discrimination based on fear and ignorance. While true schizophrenia is usually incompatible with safe medical practice, this can be a very hard call, particularly given the range of severities and types of schizophreniform diagnoses.

However, there are many other psychiatric issues that—if properly treated and monitored—do not necessarily preclude completing medical training and being a good practitioner. These include unipolar depression and bipolar disorder, anxiety disorders, eating disorders, attention deficit disorder, and obsessive–compulsive disorders (which, if not too severe, can be adaptive in medicine). Of course if there is any significant symptomatology (e.g., if the physician has psychotic symptoms or is unable to think clearly or function adequately due to severe depression), or any chance that patient care could be compromised, the physician should be removed from patient care responsibilities immediately. Consultation from a psychiatrist experienced in both serious mental illness as well as the requirements and issues related to medical training should be sought. However, in dealing with psychiatric illness (as with any other illness), it is very important to distinguish between "illness" and "impairment" and to carefully assess the doctor's "fitness for duty," in addition to simply looking at his or her diagnoses [13, 14]. A very useful resource for this is the 2005 APA's Resource Document on Guidelines for Psychiatric Fitness for Duty Evaluations for Physicians [15].

If the manifestations are mild, trainees with challenging personality traits or frank disorders may function in medical training and practice,

though they may need some extra remediation (see Chap. 17). Severely personality disordered physicians usually become disruptive or display a great deal of problematic behavior (see below). Note that descriptions and criteria for all of these disorders can be found in the DSM-V, the revised DSM, which has just been released [16].

11.6 Work–Life Imbalance

Case

I was starting a night on call when I got the call that my 3-year-old son had been coughing for the past 2 h. Thinking it might be asthma, I quickly made arrangements for the babysitter to take him to the pediatrician's office, a few blocks from our home.

I, however, was an hour from home, covering 5 inpatient wards, two ERs, and the consult services of two hospitals. By the time I was able to contact the backup resident, it was past midnight, and I agonized about what to do. I thought about my son being sick (it was asthma) and needing me, though my husband was home and caring for him. I felt bad about making the coverage resident come in, and finally, I thought about a recent decree from the residency director that if you missed a call, you had to do 2 extra ones to make up for it and how that would take me away from my family even more!

And then I made a decision I still regret: I chose not to call in the coverage resident, stayed in the hospital, and finished out my call. When I got home the next morning and saw how sick my son was, I realized we could have lost him.

No resident should ever have to choose between caring for his patients and attending to a sick child. No student should ever be so exhausted, anxious, and cut off from family, friends, and nurturing activities that they become depressed or suicidal or decide to quit medicine altogether. And no young attending should be so distressed or overloaded that they start making errors. And finally, no pregnancy should be put at risk because of inflexible residency scheduling.

Doctors' work demands, as well as our strong personality characteristics (compulsiveness, perfectionism, self-sacrifice, and the tendency to delay gratification), can cause significant difficulties for their relationships, their partners, and their children. Surprisingly, there is very little data on physician marriage and family life, but the data that do exist are optimistic in that physician marriages are no better or worse than anyone else's and that the satisfaction of physician's partners is mostly related to the amount of "awake" time they are able to spend together [17, 18]. However physicians, particularly younger and women physicians, are fairly unhappy with their work–life balance and the amount of time they have for family life and other relationships [3, 19]. Strategies for helping our trainees with some of these difficult issues are discussed in Sect. 11.5 [20]

11.7 Personal and Programmatic Attitudes

In the West, as a consequence of our highly individualistic culture, we have tended to conceptualize competence as an individual characteristic. And yet it is becoming increasingly clear that healthcare is a highly relational, team activity requiring collaboration, excellent communication, and team skills [21, 22]. This change in focus and the need to adapt to new expectations is a major source of stress, especially among older physicians.

We come to medical training with a host of personal, generational, cultural, and familial expectations, particularly the values of striving, hard work, self-sacrifice, and the wish to help and care for others. Praiseworthy as these values are, under the pressure of medical training culture, these values may morph into extreme self-sacrifice and work hours, deferred gratification,

always putting patients' needs ahead of our own and those of our loved ones, and of being strong and tough no matter the situation. Not being "perfect" or "the best" comes to be viewed as abject failure, and admitting one doesn't know something is a shame to be avoided at all costs (including, at times, the patient's welfare).

We have also seen rapid and profound generational shifts in expectations and values, which are causing significant tensions in training environments as increasingly diverse generations of physicians bring different perspectives and expectations to the table. Areas of particular tension include the issues of work–life balance, expectation of self-sacrifice, and the value of institutional loyalty and respect for authority. It is common to hear program leaders bristle when trainees act "entitled" to flexibility and to considerations not available to them in their training years (back in the famous "Days of the Giants"). And yet they are not wrong in expecting different things: the modern generations have lived very different lives as a consequence of profound social changes [23].

11.8 Disruptive, Aggressive, and Arrogant Trainees

Disruptive physicians, although rare, can wreak havoc on a healthcare team, increase the distress of others, reduce the quality of patient care and safety, and expose systems to increased costs and legal liability. In 2009, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) set new leadership standards addressing disruptive and inappropriate behaviors. These require accredited organizations to define a code of conduct and create and implement a program to manage disruptive and inappropriate behaviors among staff [24].

A number of things make these people particularly difficult to deal with, including their lack of insight into their own behavior, a desire by others to avoid conflict, and an exceptionally high regard for medical knowledge in our profession. This is illustrated by the popularity of television show characters such as Gregory House (Fox network series "House"), the cantankerous, arrogant, drug addict whose ridiculous "bullying" behavior is tolerated despite its dangers, because he is undeniably a brilliant diagnostician. Dealing with disruptive physicians, which is discussed below, is part of our responsibility to the public [25]

11.9 Prevention and Remediation: Promoting Well-Being and Improving Resilience

Becoming a doctor is a demanding and profound developmental process, involving not only the acquisition of vast knowledge and skill but also the development of mature judgment, responsibility, and the ability to make difficult decisions, to be a witness to suffering, and even to hold others' lives in your hands. How can we, as teachers and mentors, provide our students with the support and guidance they need to move through this process in a healthy, meaningful, and successful way? How can we help them maintain or develop resilience and well-being as well as healthy, rewarding relationships both within and outside of medicine? How can we help them find the profound rewards of medical practice and be the best doctors they can possibly be? And, finally, how can we develop and prepare ourselves to be the teachers and mentors our students need? Read on for some detailed responses to these questions!

11.9.1 What Is Resilience?

Case

Agnes is the third child of the Chair of Pediatrics to enter our medical school. Her two older siblings were very successful students and are both in prestigious

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residency programs. She performed well in the pre-clerkship curriculum and was reported to be a "fine" clerkship student. Her clerkship comments were strewn with comparisons to her sisters, highlighting her relatively reserved style. For example "Agnes is more "bookish and shy than Margret and Elizabeth…but once she speaks up it is obvious she knows her stuff."

Agnes failed the end of clerkship OSCE. When I sat down with her to begin the remediation, I asked, "What do you make of all this?" She diverted her eyes, wiped away a tear, and smiled: "I have never ever failed anything before—I was devastated." I moved my tissue box closer to her and continued: "So what did you first do when you found out?" "I called my mom and told her; she laughed and said, 'Welcome to medicine, sweetheart! Call your sisters and ask them for advice on how to work on these skills—and get to it.' Then my parents took me out for dinner. I heard their 'first failure' stories. Humbling stuff!" Agnes engaged in preparing for the makeup exam with enthusiasm and a self-deprecating sense of humor. She passed and afterwards thanked the team for their help.

For highly perfectionistic individuals, a failure such as Agnes's would be a big blow to identity and self-confidence and very upsetting to everyone involved. It takes significant effort to mobilize the resources to overcome the emotional blow and get down to work. This is easier for some than others. Resilience is the capacity to live in a positive way despite stress and adversity that could have caused negative consequences. Resilient people, despite significant stressors or even trauma, are better able to manage stress, function well, and stay healthy physically and emotionally [20].

Characteristics of Resilient Individuals

- Adapt to change
- Confident
- Persistent and committed
- Have a relaxed sense of humor
- Manage negative emotions rather than deny them
- Tendency to be composed and reflective rather than anxious
- Find a learning point in every situation
- Tendency to reframe negative situations as challenges
- Have a sense of purpose, professional code, or underlying moral belief
- Have a sense they belong to a coherent, supportive community

Although some people are inherently (or by virtue of experience) more able to deal with adversity, this resilience can also be fostered and taught. Effective resilience-enhancing interventions have been studied in the military and among child trauma victims. These include planned, graduated, and supervised exposure to challenging experiences to help individuals develop mature coping mechanisms. While research in medical education is limited, the structures needed for such interventions are already in place, to some extent, in typical clinical training. However, enhancing resilience among medical trainees also requires institutions and educators to adopt the stance that character "traits" are malleable, that well-being is important to monitor and encourage, and that enhancing social connections at work is valuable to developing as a physician. In addition, we can help our trainees become more resistant by giving them adequate support, helping them develop healthy cognitive patterns, behaviors, and stress management techniques; teaching self-awareness and the use of self-assessments; and promoting open discussions of authentically complex cases.

In this next section, I will describe a four-pronged approach to help us to do all these things!

The Four-Pronged Approach to Wellness and Resilience in Medical Training

- Create supportive, health-promoting structures (schedules, coverage arrangements, and social interactions) and challenge dysfunctional attitudes (personal and institutional)
- The "Open eyes, Open doors" policy: Be available, be observant, and reach out: monitoring, modeling, and mentoring
- Teaching: Group approaches and formal curricula
- Intervention: What to do when you identify a problem

11.9.2 Creating Supportive Structures

11.9.2.1 Work Hours

There has been a dramatic effort to reduce working hours [26] in the United States over the past 2 decades due to increasing concern for physician well-being and after a number of high-profile malpractice cases blamed on poor resident supervision [27]. The American College of Graduate Medical Education (ACGME) enacted work-hour reforms in 2003 and, to further pursue a culture of patient safety, revised them in 2010 [28].

Reducing work hours has been associated with improved attention, reduced physical and emotional fatigue and distress among residents and has been associated with reduced mortality in patients in ICUs [29]. While residents report that work-hour reductions do improve their well-being, they are also worried, as are their supervisors, about the impact on education and patient care continuity [30, 31].

As the medical education historian Kenneth Ludmerer points out, work-hour reform alone may not be enough to reduce the serious stress of medical training. Attention also needs to be paid to working conditions and the scheduling of those work hours, the quality of the training experience, and the tension between service and education [32]. Practical approaches to meet these goals, as well as to enhance work–life balance, include: lessening the time spent on noneducational and non-patient care time, use of physician extenders and additional support staff (all of which would also increase time for meaningful interactions with patients), flextime and job sharing, as well as offering fulltime, on-site childcare [33].

11.9.2.2 Workplace Conditions

When physicians have some degree of control over the workplace, including the workplace environment, workflow, and interactions with other members of the team, wellness and satisfaction is enhanced. A recent study of burnout in primary care physicians was strongly correlated with poor patient care workflow and low control [34].

11.9.2.3 Trainee Assessment Strategies

Dyrbye and Shanafelt have found that in the preclinical medical school curriculum, a "pass/fail" grading system decreases competition and increases collegiality, and a criterion-based (as opposed to a norm-based) system which compares students' performance against each other has similar benefits in the clinical years [35].

11.9.2.4 Social Support

Support from colleagues and coworkers sustains us through the long and difficult hours away from our home lives, friends, and families. Chatting in the nurse's station, or mentioning a recent difficult event to a colleague and getting an understanding nod or comment can make us feel less alone and more connected to our work. Schools and training programs facilitate "team building" through activities like orientations and retreats in which fun and games are mixed in with work. For example, the annual retreats at the University of Portland Medical Center always include the famous "tug of war" between residents and faculty. The physician wellness program at the University of South Florida runs group trips where participants can gain continuing medical

education credits while getting to know each other in a nonwork environment. The traditional end of week "liver rounds" also served this purpose (though we are less sanguine about alcohol use these days!).

11.10 "Open Eyes, Open Doors": Monitoring

Case

I had just finished leading a small group conversation, and as we were walking away, I asked one of the students what he thought of the discussion. To my shock, he replied that he had not been able to pay much attention, as he was preoccupied with deciding whether or not to kill himself! He explained that he had access to a large gun collection and was thinking seriously of using one. I immediately walked the student to our psychiatric hospital. He was admitted and after a month as an inpatient was able to return to school, where he did quite well.

Those of us who are actively involved with trainees know that this "on the ground" observation and intervention can be an invaluable approach to identifying a trainee in distress. Paradoxically, many physicians, trainees, and medical educators may not access their clinical knowledge and judgment when dealing with students, residents, or peers. Hochberg et al. found that residents have an alarming lack of the recognition of the signs of stress, depression, and suicide among their peers. The good news is that a simple educational intervention can significantly improve awareness [36]. Expressing concern by checking in with learners in various educational venues including attending rounds, conferences, and the like, conveys that we care about how our learners (and colleagues) are adjusting and coping and acknowledge that emotionally difficult situations arise everyday in clinical practice. Even if the conversation is brief and superficial (which it often will be in a group setting busy with patient care responsibilities), the students and residents will know that the lines of communication are open and discussion is welcomed.

Most trainees are well versed in the "unspoken rules" of medical training and may be very reluctant to acknowledge problems or weaknesses. Signs of trouble are not always obvious: the student who is never prepared, never speaks up, or who looks like they have slept in their clothes may be suffering from significant distress, academic or personal. This may also be true of the "perfect" student, always early to rounds, having checked the labs and done all the assigned reading, but who seems tense, anxious and "buttoned up." Many medical educators make it routine to check in with all students on how they are managing the workload and other issues, emotionally and physically, asking a normalizing question such as "Clerkships can be surprisingly stressful, how's it going for you?"

Given the reluctance to express problems, a number of residency training programs and some medical schools have begun regular well-being screening of trainees as part of an integrated wellness program [37]. In addition to annual or biannual interviews, the most popular tool for this purpose is the Medical Student Well-Being Index (MSWBI). The MSWBI is a 7-item validated screening tool that identifies students who are suffering, but who may not seek help despite the likelihood of serious consequences. MSWBI's sensitivity and specificity were both over 90 % for identifying students with low "mental quality of life," recent suicidal ideation, or serious thoughts of dropping out of medical school. Endorsement of any item on this survey was associated with at least one of these outcomes. Recently, a 2-item version of the MSWBI—"I feel burned out from my work" and "I feel callous toward people since taking this job"—was found to be a similarly useful screening tool in students, residents, practicing internists, and surgeons [38].

Medical Student Well-Being Index

1. Do you feel burned out from medical school?
2. Do you worry that medical school is hardening you emotionally?
3. During the past month have you often been bothered by feeling down, depressed, or hopeless?
4. In the past month have you fallen asleep while stopped in traffic or driving?
5. During the past month, have you felt that all the things you had to do were piling up so high that you could never overcome them (overwhelmed)?
6. During the past month, have you been bothered by emotional problems (such as feeling anxious, depressed, or irritable)?
7. During the past month, has your physical health interfered with your ability to do your daily work at home and/or away from home?

11.11 Modeling

Case

Cynthia, a senior psychiatrist in the teaching clinic, had a longtime patient commit suicide after years of suicidal ideation. Cynthia had a strong bond with this patient and had frequently reiterated their non-suicide contract. In her suicide note, the patient thanked Cynthia for keeping her alive for 10 years, apologized for breaking their contract, and asked God to forgive her.

Despite her shock and pain, Cynthia immediately called a close colleague and mentor to discuss what had happened. She took time to reflect on her own feelings. The next day in the teaching clinic, she called a meeting to discuss this loss with the staff who knew the patient. Later that day a resident rotating through the clinic thanked her with tears in his eyes for her honesty. He recounted the story of a bad outcome that had occurred during his first year of residency, which had never been discussed by anyone involved.

Mistakes, bad outcomes, and the ever-present fear of a malpractice suit have been called medicine's "heart of darkness." The guilt, shame, and sense of loss are often so extreme that many of us are reluctant to share our feelings with colleagues. Cynthia, fortunately, knew better. By attending to her own need for support and to express and share reactions with colleagues, she modeled this behavior for others.

11.12 Teaching: Group Programs and Curricula

Case

Dr. S was a second year medicine resident who found himself sad, somewhat depressed and distracted following the death of a patient whom he had cared for in her last weeks and to whom he had become quite attached. While he often felt resistant to attending the resident support groups, this time he found himself looking forward to it, as he had not felt able to talk to anyone about his experience. In the group, Dr. S was able to express his sadness at the death of his patient and his feelings of helplessness at not being able to save her. He was very surprised to learn that a number of other participants—including the group leader—had experienced similar situations and emotions and were understanding and supportive. After the group his mood and

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concentration improved; he no longer feared making a mistake because of his distraction. He also found himself feeling less alone and closer to his fellow residents. The following year, when he had another emotionally and ethically difficult patient situation, he felt comfortable talking about it with a colleague and also sought out his former group leader for support and advice.

Since it is not always possible, or even desirable, to address difficult events right when they happen ("hold the resuscitation—I need to process my feelings!"), students and residents need regularly scheduled, protected times when they can get together to discuss difficult events and situations, ideally with the guidance of a trusted facilitator. These meetings work best with naturally occurring groups (such as students rotating on medicine or surgery, or residents working together in the ICU) and when led by a skilled and trusted facilitator or group leader who the students or residents respect and perceive as understanding of their issues. Group meetings can involve a large variety of topics (see box "Common Group Topics").

Common Group Topics

- Difficult patients
- Death and dying
- Mistakes and bad outcomes
- Doctor–patient relationships and boundaries
- How much caring is enough? Too much?
- Ethical questions
- Supervision and oversight: Are we getting enough? Too much?
- Being thrown into difficult situations (e.g., delivering bad news) without preparation or support
- Educational requirements vs. time for clinical work
- Teaching: Not enough? Too much?
- Schedules, workloads, and coverage
- Mentoring
- Institutional support (or lack thereof)
- Relationships with colleagues and co-workers
- Inadequate resources, difficulties with labs, consults, and other department

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To be effective, group programs need to be actively supported by the institution, reliably scheduled, confidential, and led by experienced and skilled facilitators (pizza helps as well). While they are definitely not group psychotherapy sessions, such groups can allow and encourage self-exploration and awareness, sharing with others to experience different viewpoints, but also to know one is not alone; to feel supported; to understand one's own reactions, vulnerabilities, and strengths; and to have more empathy and understanding toward others. It is useful to have ground rules that are stated at each meeting and respected. These rules can be negotiated at the initial group meeting but usually include:

- What is discussed in this group is confidential.
- Feel free to say as little or as much as you like.
- Speak for yourself only.

Over time, the trainees develop the habit of "saving" issues and problems for the group. As well, they will often come to identify the group leader as someone they can approach to discuss things more "in the moment" when there is a problem that just can't wait.

There are a variety of groups that are useful in the setting of medical training and practice; broadly, these can be divided into open-ended, nonstructured groups vs. those using more structured formats.

11.12.1 Open-Ended, Nonstructured Groups

In "open" groups, participants are invited to talk about anything involving their work or school experiences and related issues, including significant

things that have gone on in the past week, issues or problems on their minds, reactions to difficult events, and the like (see box "Common Group Topics"). An example of a successful group program of this type is the long-running, weekly "Humanism in Medicine" program for all internal medicine clinical clerks (fondly referred to as "touchy-feely groups") at the New York University School of Medicine [39].

11.12.2 Structured Groups

In a *Balint group*, named for their originator, Dr. Michael Balint [40], physicians meet regularly to discuss clinical cases in order to better understand the patient, one's own feelings and reactions, and the doctor–patient relationship. As compared with a regular case conference, Balint groups focus not on the medical questions, but rather on the provider's emotional reactions and the difficult personal, ethical, or psychosocial issues that are presented by the case. So, for example, in discussing a case involving a dying patient, discussion may range from the ethics and value of using strong pain medications at the end of life, to spirituality, or to difficult personal issues brought up by losing a patient to whom one has become attached. Balint groups are usually co-led by a physician and a psychologist who are trained in the specific method [41].

Narrative Medicine seminars originated by Dr. Rita Charon as part of the "Narrative Medicine Program" at the Columbia University Medical School are also structured around cases that present difficult emotional, ethical, or other issues for the practitioner. However, in these seminars, participants describe the patient or the case and their related issues in writing, which they then share with the group for discussion. Participants also may read and discuss relevant novels and stories, which greatly expand the breadth and depth of their medical education and training [42] (see also Chap. 14).

Less structured, open groups have the advantage of being flexible and able to respond to a wide range of issues; the disadvantage is that these meetings can become vague, meandering, and somewhat superficial "venting" sessions without expert facilitation. Conversely, the structured, case-oriented groups with their clear-cut boundaries and expectations, as well as the focus on a "case," can create a "distance" that makes people feel safer in bringing up personal material and encourages openness and self-disclosure. Many additional strategies to incorporate "personal awareness" activities into medical training have been reported in the literature [43]. However, the essential elements seem to be that teachers are committed to engaging in these activities and have the skills needed to facilitate a safe and growth-promoting discussion on these topics.

11.13 Teaching: Wellness and Resilience Curriculum

During my time with the physician wellness program, I taught a course called "Taking Care of Patients, Taking Care of Ourselves." Similar offerings are available in many medical schools, and many residencies now have courses on "the art of patient care," "doctor–patient communication," and "The Healer's Art" [44]. Such courses can be excellent venues for teaching wellness and resilience, as described below.

Wellness and Resilience Curriculum

1. Stress and distress in medical training and practice.
2. What is resilience and how do we learn and practice it?
3. Cognitive strategies: identifying distorted, dysfunctional, and/or rigid thought patterns and replacing them with more realistic, adaptive thinking. Learning to accept realistic limitations (of self and surroundings), while always working to improve them.
4. Stress management techniques: meditation, yoga, breathing, and relaxation exercises
5. How to find and hold onto meaning in your work.

Effective implementation of this curriculum is best done using a range of teaching approaches including brief lectures, small group discussions, film or literature, and experiential approaches such as role play and writing exercises. While some of these topics can and should be taught by medical school faculty with appropriate training, other aspects (e.g., "applied cognitive concepts" or "stress management") require an expert in the field, who then may be able to teach these skills to the medical faculty.

11.14 Basic Wellness Strategies

"Big 5" Wellness Strategies of Practicing Physicians:

- Spending time with family and friends
- Focusing on values and priorities and finding meaning in our work
- Religious or spiritual activity
- Adopting a healthy outlook, i.e., developing healthy cognitive and coping strategies such as a positive outlook and problem-solving
- Self-care including adequate nutrition, sleep, exercise, having a personal physician, and getting regular medical care (which most doctors don't)

The above box lists the five most common strategies used by experienced doctors to combat stress [45, 46]; similarly medical students who find meaning in their schoolwork, take time to engage in recreation and maintain a positive outlook are less likely to suffer burnout, whereas those who develop a "survival strategy" of deferring gratification and "just trying to get through it" are at greater risk [47].

11.15 Cognitive Restructuring

Cognitive behavioral therapy (CBT), which is being taught in some residency programs [44], offers a great "toolbox" of strategies to help us, our students, and our patients understand destructive thought patterns and behaviors and how to change them. A knowledgeable professional can teach these concepts with lots of illustrations and case examples to help learners make connections between the concepts and their own cognitive processes. For example, in the case of Agnes (above), the interventions of her professor and family helped her "reframe" failing the exam from a devastating failure ("catastrophizing") to a more realistic, adaptive appraisal of a common problem that could and should be addressed [48].

11.16 Stress Management Techniques

While we do not advocate that our residents chant "OM" in morning report, a basic acquaintance with the time-honored techniques of meditation, yoga, and relaxation breathing techniques (and their modern iterations) can lay the foundation for a lifetime of enhanced resilience and well-being [49]. This is particularly true for the practices of "Mindfulness," Mindfulness Meditation [50] and the very effective "Mindfulness-Based Stress Reduction Program," as developed by Jon Kabat-Zinn. There is now a robust literature describing the value of these techniques (particularly MBSR) for a variety of mental and physical problems [51, 52]. I find that residents and students are most comfortable learning these practices when they are taught experientially as techniques for helping their own patients deal with stress. When taught in this context, most trainees are very happy to take an hour out of their busy days to learn and practice a restful, relaxation technique! There are a number of useful resources to support this work [53–55].

11.17 Remedial Interventions: What to Do When You Identify a Problem

Escalating Interventions

- Explore problems and provide counseling
- Refer for outside therapy

(continued)

- Take to level of Dean of Students, Residency Directors, and Department Chairs
- On-site physician/student wellness programs
- Statewide (medical society) physician health committee
- Regulatory bodies, such as the Office of Professional Medical Conduct and state licensing boards.

Many of us avoid eliciting problems because we fear opening a "can of worms." However, most teaching institutions do have mechanisms, both formal and informal, for addressing distress and dysfunction in trainees.

Once you have identified a problem, the first step is to sit down with the trainee and explore the situation and, if it is relatively minor, to provide some basic counseling. Those who do not feel comfortable or skillful in this role can refer the student or resident to a colleague with the skill, or—if appropriate—for counseling/therapy outside the institution.

For more severe problems (e.g., major depression, serious academic or performance issues, disruptive behavior, or severe distress), it is necessary to take the problem to a higher level, which in most cases will be the school or medical center's student or physician wellness program. These programs are designed to help, support and remediate; they are places where students, and physicians can discuss their problems with a knowledgeable and empathic professional (usually a psychiatrist), and get appropriate assistance in a safe and confidential environment.

Frequently, the decision must be made whether and when to involve the relevant authority figure(s), usually the dean of students, residency training director, or appropriate department chair. There are certainly risks to involving "the authorities," including breaking confidentiality and trust, or putting the troubled person at risk of unnecessary scrutiny, restrictions, or sanctions. However, once the problem is severe enough to require therapeutic or physician health intervention, it is important—for legal, ethical, and safety reasons—that the responsible authority be informed and involved.

11.18 Committee on Physician Health

Most states, if not all, now have physician health committees, usually under the auspices of the state medical society. These are physician-centered programs whose mission is to help distressed and dysfunctional doctors and medical students, while protecting them professionally as much as possible, within the bounds of patient safety.

Anyone can make a confidential referral to his or her state's Committee on Physician Health (CPH), who will then reach out to the doctor in question, inform him or her of the referral, and offer a confidential evaluation. If the CPH decides that intervention is needed, and the physician is amenable, the program will work with the doctor and his/her institution to devise an appropriate program of intervention. Such a program may include determinations about workplace monitoring, if necessary, recommendations for treatment and monitoring of treatment progress, and—if the physician has not been allowed to work—determining when they are sufficiently improved to assume patient care responsibilities again. In my experience, these programs can be tremendously helpful, competent, and trustworthy.

Finally, physicians who have engaged in seriously negligent, criminal, or other unsavory practices may find themselves referred to their state's licensing board. These agencies are mainly disciplinary and regulative, rather than remedial, in that their mission is primarily to protect the public from unscrupulous, incompetent, or irresponsible physicians.

11.19 Dealing with Disruptive and Arrogant Physicians

It is important to remember that students and residents who are disruptive and arrogant may be suffering from many of the types of distress described

above, as well as from a number of serious psychological issues. In a longitudinal study, George Valliant found that physicians at high risk for unstable marriages and substance use came from the most unstable childhoods, marked by a lack of warmth, close relationships, and support [56].

Fortunately, the experience of those working in this arena is that some disruptive behavior and its consequences can be reduced with supportive leadership and comprehensive remediation. These include interventions aimed at improving stress management, enhancing resiliency, and improving communication skills in order to ameliorate negative behaviors [57] (see also Chap. 17). Expertise in remediating disruptive healthcare professionals is limited, but growing, as a result of the new Joint Commission regulations. A number of programs around the United States and elsewhere have extensive experience with effective remediation of physicians in practice, including the Foundation for Medical Excellence (http://www.tfme.org) [58] and the Physician Assessment and Clinical Education Program at the University of California in San Diego (http://www.paceprogram.ucsd.edu) [59].

11.20 Conclusion

Case

Dr. S, a 35-year-old vascular surgeon who was referred to me for problems with "anger management." By the time he got to me, Dr. S had already been mandated to the state Office of Professional Medical Conduct, for alleged behavior such as yelling at nurses in the OR, pushing an equipment representative, and shoving a cart up against a nurse. Dr. S was pleasant, somewhat arrogant, and described himself as a "very busy surgeon" who was angry at being referred, didn't understand what he had done wrong, and felt he was being unfairly persecuted.

(continued)

Over time, it became clear that Dr. S was way too busy, primarily because he believed he had to be all things to all people, could never say no to a last minute consult, or to a patient that no one else wanted to care for. He felt he had to attend to all the patients who came his way, however difficult their cases.

At the time of his "outbursts," he was under severe stress, having just lost a work partner, and having a newborn baby at home. In working with me, Dr. S learned that he could say no to unreasonable or impossible requests and was surprised to find that his colleagues continued to consult and refer to him. He also realized that his arrogance and angry demands were unreasonable, counterproductive, and interfered with having good, pleasant working relationships with co-workers. He began to have empathy and understanding of the needs and feelings of others and learned to interact in a respectful, team-oriented way with the nurses and OR techs on whom the success of his surgeries depended.

At one point he made a statement that, I think, really captures the paradox of physician privilege and stress, when he said that "on the one hand, I'm a top surgeon, the 'Big Kahuna'; I make money for the hospital and so I should rule the roost. On the other hand, I often feel abused, put upon, and taken advantage of; I'm taking care of everyone except myself!"

After 3 years, Dr. S was taken off the OPMC rolls and his name was taken off their website of problematic physicians. He was relieved to be out from under this burden, and was happy to have learned the important lessons of self-awareness, relationship, and self-care. In fact, he became one of the biggest supporters of the wellness program, sharing his newfound understanding wherever he went.

This case illustrates many of the principles and practices I have shared in this chapter. It is my hope that it will assist you in helping young physicians and other healthcare professionals to practice high-quality medicine while experiencing the rewards and joys of our noble profession.

References

1. Friedman A. Wanted: workaholics to become obstetricians. New York Times. 9 Aug 2005; Sect. F:5.
2. Spickard Jr A, Gabbe SG, Christensen JF. Mid-career burnout in generalist and specialist physicians. JAMA. 2002;288(12):1447–50. doi:10.1001/jama.288.12.1447.
3. Weinstein L, Wolfe HM. The downward spiral of physician satisfaction: an attempt to avert a crisis within the medical profession. Obstet Gynecol. 2007;109(5):1181–3. PubMed PMID: 17470602.
4. Buddenberg-Fischer B, Dietz C, Klaghofer R, Buddeberg C. Swiss residents' arguments for and against a career in medicine. BMC Health Serv Res. 2006;6:98–110. doi:10.1186/1472-6963-6-98. PubMed Central PMCID: PMC1564007.
5. Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. Ann Intern Med. 2002;136(5):358–67.
6. Dyrbye LN, Shanafelt TD. Physician burnout: a potential threat to successful health care reform. JAMA. 2011;305(19):2009–10. doi:10.1001/jama.2011.652.
7. Erikson EH. Childhood and society. New York: W.W. Norton; 1993.
8. Maslach C, Jackson SE, Leiter MP. Maslach burnout inventory. In: Zalaquett CP, Wood RJ, editors. Evaluating stress: a book of resources. 3rd ed. Lanham, MD: Scarecrow Press; 1997. p. 191–218.
9. Center C, Davis M, Detre T, Ford DE, Hansbrough W, Hendin H, Laszlo J, Litts DA, Mann J, Mansky PA, Michels R, Miles SH, Proujansky R, Reynolds III CF, Silverman MM. Confronting depression and suicide in physicians: a consensus statement. JAMA. 2003;289(23):3161–6. doi:10.1001/jama.289.23.3161.
10. Dyrbye LN, Thomas MR, Shanafelt TD. Systematic review of depression, anxiety, and other indicators of psychological distress among U.S. and Canadian medical students. Acad Med. 2006;81(4):354–73.
11. McCall SV. Chemically dependent health professionals. West J Med. 2001;174(1):50–4. PubMed Central PMCID: PMC1071235.
12. McLellan AT, Skipper GS, Campbell M, DuPont RL. Five year outcomes in a cohort study of physicians treated for substance use disorders in the United States. BMJ. 2008;337:A2038. doi:10.1136/bmj.a2038. PubMed PMCID: PMC2590904.
13. Wallace JE. Mental health and stigma in the medical profession. Health. 2011;16(1):3–18. doi:10.1177/1363459310371080.
14. Miller L. Doctors, their mental health and capacity for work. Occup Med. 2009;59(1):53–5. doi:10.1093/occmed/kqn111.
15. Anfang SA, Faulkner LR, Fromson JA, Glendel MH. The American Psychiatric Association's resource document on guidelines for fitness-for-duty evaluations of physicians. J Am Acad Psychiatry Law. 2005;33(1):85–8.
16. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5. Washington, DC: American Psychiatric Publishing; 2013. p. 947.
17. Shanafelt TD, Boone SL, Dyrbye LN, Oreskovich MR, Tan L, West CP, Satele DV, Sloan JA, Sotile WM. The medical marriage: a national survey of the spouses/partners of US physicians. Mayo Clin Proc. 2013;88(3):216–25. doi:10.1016/j.mayocp.2012.11.021.
18. Warde CM, Moonesinghe K, Allen W, Gelberg L. Marital and parental satisfaction of married physicians with children. J Gen Intern Med. 1999;14(3):157–65. PubMed PMID: 10203621.
19. Dyrbye LN, Shanafelt TD, Balch CM, Satele D, Sloan J, Freischlag J. Relationship between work-home conflicts and burnout among American surgeons: a comparison by sex. Arch Surg. 2011;146(2):211–7. doi:10.1001/archsurg.2010.310.
20. Howe A, Smajdor A, Stöckl A. Towards an understanding of resilience and its relevance to medical training. Med Educ. 2012;46(4):349–56. doi:10.1111/j.1365-2923.2011.04188.x.
21. Botelho RJ, Hinton-Walker P, Suchman AL. Partnerships in healthcare: transforming relational process. New York: University of Rochester Press; 1998. p. 343.
22. Suchman AL, Sluyter DJ, Williamson PR. Leading change in healthcare: transforming organizations using complexity, positive psychology, and relationship-centered care. London: Radcliffe; 2011. p. 340.
23. Bickel J, Brown AJ. Generation X: implications for faculty recruitment and development in academic health centers. Acad Med. 2005;80(3):205–10. PubMed PMID: 15734801.
24. Behaviors that undermine a culture of safety. Sentinel Event Alert. 2008;(40):1–3. PubMed PMID: 18686330.
25. Leape LL, Fromson JA. Problem doctors: is there a system-level solution? Ann Intern Med. 2006;144(2):107–15.
26. Lockley SW, Cronin JW, Evans EE, Cade BE, Lee CJ, Landrigan CP, Rothschild JM, Katz JT, Lilly CM, Stone PH, Aeschbach D, Czeisler CA, Harvard Work Hours, Health and Safety Group. Effect of reducing interns' weekly work hours on sleep and attentional failures. N Engl J Med. 2004;351(18):1829–37. PubMed PMID: 15509816.
27. Lerner BH. A life-changing case for doctors in training. New York Times [Internet]; 3 March 2009 [cited 2013

Jul 1] Health: [about 3p.]. Available form: http://www.nytimes.com/2009/03/03/health/03zion.html?pagewanted=all&_r=0.
28. Nasca TJ, Day SH, Amis Jr ES, ACGME Duty Hour Task Force. The new recommendations on duty hours from the ACGME Task Force. N Engl J Med. 2010;363(2):e3.
29. Volpp KG, Rosen AK, Rosenbaum PR, Romano PS, Even-Shoshan O, Canamucio A, Bellini L, Behringer T, Silber JH. Mortality among patients in VA hospitals in the first 2 years following ACGME resident duty hour reform. JAMA. 2007;298(9):984–92. PubMed PMID: 17785643.
30. Goitein L, Shanafelt TD, Wipf JE, Slatore CG, Back AL. The effects of work-hour limitations on resident well-being, patient care, and education in an internal medicine residency program. Arch Intern Med. 2005;165(22):2601–6. PubMed PMID: 16344417.
31. Desai SV, Feldman L, Brown L, Dezube R, Yeh HC, Punjabi N, Afshar K, Grunwald MR, Harrington C, Naik R, Cofrancesco J Jr. Effect of the 2011 vs 2003 duty hour regulation-compliant models on sleep duration, trainee education, and continuity of patient care among internal medicine house staff: a randomized trial. JAMA Intern Med. 2013;173(8):649–55. doi:10.1001/jamainternmed.2013.2973.
32. Ludmerer KM. Resident burnout: working hours or working conditions? J Grad Med Educ. 2009;1(2):169–71. doi:10.4300/JGME-D-09-00077.1.
33. Bohnert P, O'Connel A. How to avoid burning out and keep your spark. Curr Psychiatr. 2006;5(1):31–42.
34. Linzer M, Manwell LB, Williams ES, Bobula JA, Brown RL, Varkey AB, Man B, McMurray JE, Maguire A, Horner-Ibler B, Schwartz MD; MEMO (Minimizing Error, Maximizing Outcome) Investigators. Working conditions in primary care: physician reactions and care quality. Ann Intern Med. 2009;151(1):28–36, W6–9. PubMed PMID: 19581644.
35. Dyrbye LN, Shanafelt TD. Commentary: medical student distress: a call to action. Acad Med. 2011;86(7):801–3. doi:10.1097/ACM.0b013e31821da481.
36. Hochberg MS, Berman RS, Kalet AL, Zabar SR, Gillespie C, Pachter HL. The stress of residency: recognizing the signs of depression and suicide in you and your fellow residents. Am J Surg. 2013;205(2):141–6. doi:10.1016/j.amjsurg.2012.08.003.
37. Eckleberry-Hunt J, Van Dyke A, Lick D, Tucciarone J. Changing the conversation from burnout to wellness: physician well-being in residency training programs. J Grad Med Educ. 2009;1(2):225–30. doi:10.4300/JGME-D-09-00026.1.
38. West CP, Dyrbye LN, Sloan JA, Shanafelt TD. Single item measures of emotional exhaustion and depersonalization are useful for assessing burnout in medical professionals. J Gen Intern Med. 2009;24(12):1318–21. doi:10.1007/s11606-009-1129-z.
39. Krackov SK, Levin RI, Catanesé V, Rey M, Aull F, Blagev D, Dreyer B, Grieco AJ, Hebert C, Kalet A, Lipkin Jr M, Lowenstein J, Ofri D, Stevens D. Medical humanities at New York University School of Medicine: an array of rich programs in diverse settings. Acad Med. 2003;78(10):977–82. PubMed PMID: 14534091.
40. Balint M. The doctor, hid patient and the illness. 2nd ed. Edinbourgh: Churchill Livingston; 2000. p. 416.
41. American Balint Society. [Internet]. Colbert, WA: American Balint Society; 2013 [cited 2013 Jul 8]. Available from: http://americanbalintsociety.org.
42. Charon R. Narrative medicine: honoring the stories of illness. Oxford, UK: Oxford University Press; 2006. p. 266.
43. Kern DE, Wright SM, Carrese JA, Lipkin Jr M, Simmons JM, Novack DH, Kalet A, Frankel R. Personal growth in medical faculty: a qualitative study. West J Med. 2001;175(2):92–8. PubMed PMID: 11483549.
44. Remen RN, O'Donnell JF, Rabow MW. The Healer's art: education in meaning and service. J Cancer Educ. 2008;23(1):65–7. doi:10.1080/08858190701821394.
45. Weiner EL, Swain GR, Wolf B, Gottlieb M. A qualitative study of physicians' own wellness-promotion practices. West J Med. 2001;174(1):19–23. PubMed PMID: 11154656.
46. Shanafelt TD, Oreskovich MR, Dyrbye LN, Satele DV, Hanks JB, Sloan JA, Balch CM. Avoiding burnout: the personal health habits and wellness practices of US surgeons. Ann Surg. 2012;255(4):625–33. doi:10.1097/SLA.0b013e31824b2fa0.
47. Kushner RF, Kessler S, McGaghie WC. Using behavior change plans to improve medical student self-care. Acad Med. 2011;86(7):901–6. doi:10.1097/ACM.0b013e31821da193.
48. Basco MR, Thase ME, Wrighy JH. Learning cognitive-behavioral therapy: an illustrated guide. Arlington, VA: American Psychiatric Publications; 2006. p. 300.
49. Shapiro SL, Schwartz GE, Bonner G. Effects of mindfulness-based stress reduction on medical and premedical students. J Behav Med. 1998;21(6):581–99. PMID: 9891256.
50. Hanh TN. The miracle of mindfulness: an introduction to the practice of meditation. Boston, MA: Beacon Press; 1975. p. 108.
51. Young SN. Biologic effects of mindfulness meditation: growing insights into neurobiologic aspects of the prevention of depression. J Psychiatry Neurosci. 2011;36(2):75–7. doi:10.1503/jpn.110010.
52. Carlson LE, Speca M, Faris P, Patel KD. One year pre-post intervention follow-up of psychological, immune, endocrine and blood pressure outcomes of mindfulness-based stress reduction (MBSR) in breast and prostate cancer outpatients. Brain Behav Immun. 2007;21(8):1038–49. PubMed PMID: 17521871.
53. Epstein RM. Mindful practice. JAMA. 1999;282(9):833–9. PubMed PMID: 10478689.
54. Brach T. Radical acceptance: embracing your life with the heart of a Buddha. New York: Bantam; 2003. p. 333.

55. Lefebvre DC. Perspective: resident physician wellness: a new hope. Acad Med. 2012;87(5):598–602. doi:10.1097/ACM.0b013e31824d47ff.
56. Vaillant GE, Sobowale NC, McArthur C. Some psychologic vulnerabilities of physicians. N Engl J Med. 1972;287(8):372–5. PubMed PMID: 5043521.
57. Swiggart WH, Dewey CM, Hickson GB, Finlayson AJR, Spickard Jr WA. A plan for identification, treatment and remediation of disruptive behaviors in physicians. Front Health Serv Manage. 2009;25(4):3–11. PubMed PMID: 19603686.
58. Foundation for Medical Excellence. [Internet]. Portland, OR: Foundation for Medical Excellence; [cited 2013 Jul 8]. Available from: http://www.tfme.org.
59. Physician Assessment and Clinical Education Program. UCSD Pace Program. [Internet] San Diego, CA: Regents of the University of California; 2008 [cited 2013 Jul 8]. Available from: http://www.paceprogram.ucsd.edu