Physician Burnout: Are We Treating the Symptoms Instead of the Disease?



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Despite increasing recognition of physician burnout, its incidence has only increased in recent years, with nearly half of physicians suffering from symptoms of burnout in the most recent surveys. Unfortunately, most burnout research has focused on its profound prevalence rather than seeking to identify the root cause of the burnout epidemic. Health care organizations throughout the United States are implementing committees and support groups in an attempt to reduce burnout among their physicians, but these efforts are typically focused on increasing resilience

and wellness among participants rather than combating problematic changes in how medicine is practiced by physicians in the current era. This report provides a brief review of the current literature on the syndrome of burnout, a summary of several institutional approaches to combating burnout, and a call for a shift in the focus of these efforts toward one proposed root cause of burnout.

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"And that's the thing: You don't understand burnout unless you've been burned out. And it's something you can't even explain. It's just doing something you have absolutely no passion for."

—Elena Delle Donne, Olympic Gold-Medalist in Women's Basketball

In the Spring of 2017, The New England Journal of Medicine published a sobering editorial describing the suicide of a fourth-year medical student at Icahn School of Medicine [1]. In the aftermath of this tragedy, the proposed root cause was the national epidemic of physician burnout and depression, leading to suicide [2]. Indeed, 1 of every 16 surgeons in the United States reports experiencing suicidal ideation within the past 12 months [3]. Physician burnout is often identified as the tipping point at which stress begins to overwhelm doctors, eventually pushing them into depression and suicide.

Despite increasing recognition of the myriad problems associated with physician burnout, an expanding epidemic of burnout is afflicting physicians in the United States [4]. Why is burnout affecting an increasing number of physicians today? What can be done to stem the tide of burnout threatening to topple the pinnacle of the health care workforce in the United States? In this report we define physician burnout, describe exacerbating and mitigating factors associated with burnout, and evaluate potential solutions for physician burnout, both on the individual level and organizational scale.

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What is Physician Burnout?

Physician burnout is a syndrome defined by the triad of emotional exhaustion, depersonalization, and low sense of personal accomplishment related to one's work [5]. Emotional exhaustion is the feeling of being overextended by responsibilities related to work, resulting in a depletion of emotional energy, in contradistinction to physical or mental fatigue. Depersonalization, also termed cynicism, causes impersonal responses toward the recipient of one's services. A low sense of personal accomplishment is often accompanied by an inability to complete tasks integral to one's job.

The Maslach Burnout Inventory is the most common research tool used to measure burnout among professionals, including physicians [5]. The Inventory consists of a series of statements, such as "I have become more callous toward people since I took this job" or "I have accomplished many worthwhile things in this job," to which the examinee must rate his or her level of agreement. The examinee receives scores related to all three components of burnout upon completion of the Inventory, which can be purchased online [6]. In addition to these common characteristics of burnout, this syndrome is often placed on a spectrum that includes stress, depression, and suicide (Fig 1) [7].

Although stress is experienced by virtually all physicians at one time or another (and can be a normal, healthy response to many situations), burnout represents a pathologic response to the stressors in one's work environment and likely places the burned-out physicians at increased risk for depression and suicide [1, 2, 8]. Studies have repeatedly demonstrated that burnout negatively affects professional behavior [9], career planning [10, 11], and quality of care [12].

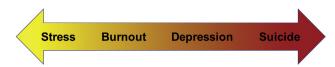


Fig 1. Continuum of stress. (Adapted from Dissanaike [7], with permission from Elsevier.)

The Epidemiology of Physician Burnout

Physician burnout has gained increasing notoriety since the publication of multiple landmark studies by Shanafelt and colleagues from the Mayo Clinic during the last decade. These studies initially demonstrated that burnout was significantly more prevalent among physicians than among working adults in the general population of the United States (38% vs 28%) [13] and suggested an expanding epidemic of physician burnout [4]. Burnout affects physicians through all phases of education, training, and career practice. The incidence of burnout among medical students and residents has been estimated to be between 40% and 76% [2, 14], and even premedical students have higher rates of burnout than their peers studying other subjects during their undergraduate education [8].

After training, burnout affects physicians in different ways throughout their careers. For example, early-career physicians (in practice ≤ 10 years) have the lowest satisfaction with their choice to become a physician and the highest rates of depersonalization, whereas middle-career physicians (in practice 11 to 20 years) have the lowest rates of satisfaction with their specialty choice and increased rates of overall burnout [15]. Interestingly, seemingly positive character traits, including dedication, conscientiousness, responsibility, and motivation, appear to put physicians at increased risk for burnout, possibly because individuals possessing these characteristics may not experience work satisfaction that meets their idealistic and perfectionist qualities [16, 17].

Burnout is more prevalent in certain specialties, including emergency medicine (60% to 70%) and primary care (50% to 60%), and is less prevalent in others such as dermatology (30% to 40%) and pediatrics (30% to 40%) [13]. General surgeons and general surgery subspecialists, including thoracic surgeons, experience burnout at a rate roughly equivalent to the mean of all physicians (40% to 50%) [4, 13]. Although more than 70% of thoracic surgeon members of The Society of Thoracic Surgeons report being satisfied with their career [18], surgeons are commonly affected by burnout (40%), exhibit symptoms of depression (30%), and suffer from suicidal ideation (6%), though only a minority ever seek psychiatric or psychological help [3, 19, 20].

Among surgeons, burnout is the single most important predictor of satisfaction with career and specialty choice, with younger age, having children, subspecialty selection (although not cardiothoracic surgery), number of nights on call, hours worked per week, and compensation based entirely on billing all associated with increased risk for burnout [4, 21]. Very few studies have reported burnout

specifically in thoracic surgeons [22], but the most recent Workforce Report from The Society of Thoracic Surgeons identified several characteristics common to cardiothoracic practice that place thoracic surgeons at increased risk for burnout, including very long duration of residency training, high number of hours worked per week, frequent nights on call, and increasing caseload volumes [14].

Although burnout negatively affects the physician directly, this syndrome is particularly problematic for their patients because increasing degrees of burnout are strongly and independently correlated with an increased risk for major medical errors. More than 15% of surgeons experiencing high levels of emotional exhaustion and depersonalization reported at least one major medical error within the past 3 months at the time of a recent survey, tripling the error rate of surgeons with a minimal degree of burnout [15].

Given the myriad negative consequences related to burnout, the prevention and treatment of burnout are important to patients, individual physicians, care teams, and health care systems alike. Unfortunately, most of the research related to burnout has focused on its prevalence rather than on optimal strategies for its treatment or prevention [7]. The current emphasis on burnout prevention focuses on efforts designed to increase physician "resilience," defined as an ability to overcome exposure to stress that may otherwise lead to burnout.

Resilience: The Silver Bullet Antidote to Burnout?

Resilience has been studied under a variety of academic lenses, including developmental psychology [23], sociology [24], and medical trauma [25]. A resilient individual has the ability to combat stress through enhanced recovery in response to stressful stimuli. Rather than simply enduring stress, a resilient individual uses "strategic stopping" that allows for recharging rather than continuing to endure additional stress. The value (ie, duration or intensity, or both) of the recovery period rises in proportion to the amount of stress facing a resilient individual. Increases in resilience can be motivated by a number of factors operating at the individual, family, organizational, and community levels (Table 1) [26]. Certain personality characteristics, including a firm base in reality, a strong value system, and an ability and willingness to improvise to solve unique challenges, have also been correlated with resilience in physicians [27].

On an individual level, regular aerobic or anaerobic exercise, or both, annual visits to primary care providers, and a variety of other personal wellness strategies, including focusing on what is personally important in life, taking vacations, and nurturing one's religious/spiritual life, have all been specifically identified as protective against burnout in surgeons [28]. Recognizing the dangers of physician burnout, many health care organizations have recently instituted programs designed to promote resilience and wellness among their staff. Indeed, each of the institutions with which the authors are affiliated has formally established these programs. To

Table 1. Factors That Promote Resilience^a

Individual Factors

- Positive coping
- Positive affect
- Positive thinking
- Realism
- Behavioral control
- Physical fitness
- Altruism

Family Factors

- Emotional ties
- Communication
- Support
- Closeness
- Nurturing
- Adaptability

Organizational Factors

- Positive command climate
- Teamwork
- Cohesion

Community Factors

- Belongingness
- Cohesion
- Connectedness
- Collective efficacy

illustrate the therapeutic thrust of these efforts, we provide a brief summary of each program.

Baylor Scott & White Health

Baylor Scott & White Health (BSWH) is the largest notfor-profit health care system in Texas, comprising 48 hospitals and more than 1,000 patient care sites. More than 5,500 active physicians treat patients within the BSWH system, which covers most of North and Central Texas. The BSWH Provider Support and Resource Committee is tasked with addressing burnout among BSWH physicians. This committee coordinates peer-to-peer support for physicians experiencing burnout through the SWADDLE (Staff Well-being Assistance During Difficult Life Events) program. When a physician selfidentifies his or her own symptoms of burnout or when a colleague is concerned about another physician, a confidential referral to the committee can be placed to initiate this process. Ultimately, the burned-out physician is paired with a trained peer who aims to provide support in a personalized manner, depending upon the needs particular to each individual (Fig 2). The SWADDLE program is also designed to support health care providers through unanticipated adverse events, including medical errors, traumatic patient outcomes, lawsuits, agency complaints, or mass casualties, many of which can also serve as a nidus for burnout.

Although the SWADDLE program is tasked with intervention on physicians already suffering from burnout, the BSWH Provider Support and Resource Committee also aims to prevent burnout among physicians. Bimonthly Resilience Rounds allow invited experts to give lectures and share advice related to burnout and resilience. Past topics have included email etiquette, aggressive patient behavior, and psychological crises. In addition to Resilience Rounds, a weekly email is circulated to physician staff with brief write-ups regarding burnout and resilience and links to more in-depth resources and recently published topical peer-reviewed literature. Another concerted effort to reduce physician burnout offered by BSWH is the Thrive wellness program, which is designed as a one-stop online wellness shop with a focus on stress management, fitness, weight management, tobacco cessation, and nutrition.

Carolinas Healthcare System

The Carolinas Healthcare System (CHS) is a not-forprofit health care system comprising more than 900 health care locations, including academic medical centers, hospitals, ambulatory surgical centers, and nursing homes in North and South Carolina. The institutional approach to burnout within CHS is packaged in the LiveWELL (Work, Eat, Learn, and Live) program. This program has representatives available at all of the major CHS facilities and a resource-laden web site with informational videos, intramural calendars, and fitness programs. The LiveWELL program also promotes stress management through LetsTalk events that teach participants resilience techniques and strategies for reshaping thoughts and mood. A confidential Employee Assistance Program is also available for short-term, solution-based counseling over the course of up to 6 sessions, at no cost to the physician. The Employee Assistance Program also hosts a monthly webinar series that covers topics related to burnout and resilience, including time management and goal setting, single parenting, and dealing with



Fig 2. Peer support flow diagram as coordinated by the Baylor Scott & White Health Provider Support and Resource Committee.

^a Data were derived from Meredith and colleagues [26].

difficult people. Finally, the chaplain service at CHS hosts monthly "Compassion and Medicine" rounds with the goal of promoting the many benefits of physician compassion for both themselves and their patients.

Stanford

Stanford Health Care is an academic health system centered at Stanford Hospital in California. Stanford has labeled its wellness program as WellMD. The goal of WellMD, which was launched in 2011, is to help doctors to take care of themselves by promoting a culture of wellness, efficiency of practice, and personal resilience. Led by a committee of physician experts, WellMD promotes resilience improvements and burnout reductions through a variety of initiatives and programs, including online resources, stress reduction and mindfulness classes, and a crisis hotline. Importantly, the committee is committed to studying the efficacy of these programs as they are implemented across the Stanford system [29].

One particularly unique pilot program initiated in the emergency medicine department is termed "time banking" [30]. This program allows emergency department physicians to bank time spent on several academic activities that may not otherwise directly result in compensation, such as mentoring, committee service, or last-minute substitution to cover a colleague's shift. This banked time is converted to credits that physicians can use to ease the burden of their work; for example, credits can be used for free assistance with grant writing or even home cleaning services.

Are We Treating the Symptoms and Not the Disease?

Although an emphasis on individual-level resilience is important [19], we argue that current efforts toward combating burnout have become too myopic. After all, burnout is defined as an inappropriate response to stress, so the prevention and treatment of burnout should be conceptualized in two ways: (1) a reduction in stressful stimuli; and (2) an increase in the capacity to handle stress (ie, resilience) [31]. An optimal strategy to prevent and treat burnout should therefore use tactics aimed at both sides of this coin, but organizational efforts appear to be focused only on the latter. If, for example, physicians were sailing on a leaking boat, health care institutions commonly appear to be suggesting that the physicians bail more quickly rather than helping them plug holes. Unfortunately, this strategy does not appear to be working, because the rates of physician burnout have continued to increase even as the problem of burnout has received greater attention in the peer-reviewed literature and the lay press [4].

To determine the root cause for the rise of physician burnout, it is important to consider what has remained the same and what has changed about a career in medicine. Most likely, the characteristics of individuals who choose to pursue a career in medicine have not changed significantly over time. Medicine continues to attract intelligent, hard-working, compassionate individuals who are drawn to the challenges and lifelong learning required to expertly care for patients. Furthermore, although today's medical students and residents continue to sacrifice their freedom and financial gain to pursue training in medicine, their training conditions and work hours are substantially improved compared with previous generations of trainees.

If the personality traits and characteristics of physicians have not changed and the conditions under which they have trained are arguably improved, why then is burnout on the rise? Perhaps burnout was simply not well recognized in previous eras, but this argument fails to explain the recent data demonstrating that burnout is increasing so rapidly that statistically significant rates of change can be detected from year-to-year as recently as 2011 to 2014 [4]. Therefore, other problem(s) associated with current practice conditions are likely the sources of additional stress that physicians are not equipped to handle. We believe that one important mismatch is obvious to most practicing physicians—the increasing demands of medical bureaucracy that is at odds with and distracts from their primary passions of medical practice (eg, patient care, research, and teaching). After all, very few personal statements in medical school and residency applications describe the applicant's passion for medical documentation, paperwork, coding, and billing practices. And yet, these tasks now account for more of the physician's time than direct patient care [32, 33].

The realization that a modern career in medicine now involves substantial clerical duties that interfere with time spent with patients likely hits most medical school graduates quickly. Interns in medicine now spend 40% of their time at work on the computer and only 12% of their time on direct patient care [34], whereas interns in surgery spend most of their work day rounding and performing "aimless or noneducational tasks" rather than in the operating room or otherwise directly caring for patients [35].

Although the clerical tsunami of internship eventually subsides, the burden of administrative work never completely disappears. Physicians in practice spend as much as one-sixth of their working hours performing administrative duties [36]. Worse yet, the risk factors associated with increased administrative work match precisely with current trends in medical practice in the United States, such as use of an electronic medical record, employment in large physician groups, and hospital-owned practice groups, and, not surprisingly, physicians who spend more time doing clerical work tend to be less satisfied with their careers, even after controlling for other factors known to affect career satisfaction [36].

Elena Delle Donne was the 2015 Most Valuable Player in the Women's National Basketball Association and a Gold-Medalist in Women's Basketball at the 2016 Olympics. Not long before she reached these pinnacles of her profession, however, she quit playing basketball altogether for 1 year, walking away from an athletic scholarship at the University of Connecticut, an absolute powerhouse in women's basketball [37]. At the time, she described the hours of practice, weight lifting, and

studying game films as a drain on her passion for simply playing basketball. Similarly, physicians who experience burnout are significantly less likely to identify medicine as their passion or calling [38].

Although most efforts at preventing physician burnout are focused on improving individual physician resilience, health care organizations are failing to change the system that is increasingly asking doctors to perform tasks, largely administrative in nature, for which they have no passion. Fortunately, physician groups are beginning to recognize this dilemma. The American College of Physicians recently published a position statement, "Putting Patients First by Reducing Administrative Tasks in Health Care" [39], and the representatives from American College of Radiologists wrote in their society journal that burnout be addressed by redesigning the radiology work process rather than radiologists [40]. The National Academy of Medicine also recently published a discussion paper calling for increased research regarding the effects of how changes in the organizational and practice environments of physician are related to increasing rates of burnout [41].

As recently stated by Epstein and Privitera [42] in an editorial in The Lancet, "Physicians, disillusioned by the productivity orientation of administrators and absence of affirmation for the values and relationships that sustain their sense of purpose, need enlightened leaders who recognize that medicine is a human endeavor and not an assembly line." At the 2017 Society of Thoracic Surgeons Annual Meeting, the patient safety symposium actually focused on resilience and burnout among physicians. We strongly urge The Society of Thoracic Surgeons and its membership to use this knowledge as a clarion call for advocacy on behalf of the physicians (and others on the care teams) who are increasingly faced with burnout in response to the changes in modern medical practice. It is time to stop treating symptoms and redirect our focus to fighting the disease of burnout.

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