COMMENTARY

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Is Burnout a Form of Depression? It's Not That Simple.

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The Keys to Differentiating Burnout and Depression

The issue of physician burnout has gained considerable attention in recent years, as research continues to map its underlying causes and resulting impact. Yet even as we begin to understand more about this crisis in our profession, we still stumble when it comes to differentiating burnout from depression.

The fact that burnout and depression are often conflated is understandable, given the conceptual overlap that exists between them. Someone can have milder forms of the work-association reaction that is burnout without having the medical condition of clinical depression. Differentiating between the two requires the use of appropriate terminology for both work and clinical settings that is acceptable to stakeholders and effective in making needed assessments and interventions.

It has been proposed that burnout is a depressive disorder in the work setting,[1] but this phraseology confounds decades of research on major depression's effect on productivity, absenteeism, and presenteeism in the workplace, which made no attribution of cause.[2]

Burnout has been talked about more openly in healthcare work settings, where the term has demonstrated utility in guiding personal and organizational interventions shown to improve physician well-being.[3,4]

In a review of 92 studies of the burnout/depression overlap, Bianchi and colleagues[5] reported that "the distinction between burnout and depression is conceptually fragile." They returned to observations from a 1974 article by Freudenberger,[6] who coined the term "burnout," in which it was said that "the person looks, seems and acts depressed." However, we know that people can

have the symptom depression ("little d") as part of normal reactions to difficult experiences. The symptom depression by itself does not define the clinical syndrome of major depression ("big D").

In Bianchi and colleagues' review article, a conundrum is put forth: "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."[5]

The first episode of major depression is more commonly associated with a life stressor than are subsequent recurrences, which can occur without a clear external precipitant.[7]

One is diagnosed with a major depressive episode if he or she has five of the following nine symptoms, and at least one of the symptoms is either (1) depressed mood most of the day, nearly every day or (2) markedly diminished interest or pleasure; then (3) significant weight loss or gain, (4) insomnia or hypersomnia, (5) psychomotor agitation or retardation, (6) fatigue or loss of energy, (7) feelings of worthlessness or inappropriate guilt, (8) diminished ability to think or concentrate or indecisiveness, and (9) recurrent thoughts of death or suicidal ideation.[8]

Burnout Severity and Co-occurring Major Depression

Data from other studies confirm that late stages of burnout (severe burnout) have a much greater chance of co-occurring major depression than early stages of burnout (mild burnout).

Ahola and colleagues[1] showed that the higher the level of burnout on the Maslach Burnout Inventory, the higher the level of depressive symptoms on the Beck Depression Inventory-Short Form (BDI-SF).[1] This led them to conclude that there was a conceptual similarity to burnout and depressive symptoms in the work context. However, they also showed that low-level burnout had BDI-SF scores that would not qualify as major depression.

An excellent 2016 study from Wurm and colleagues[9] clarified with significant certainty how major depression, not just depressed mood, correlates with the severity of burnout (Table 1). The team used the Major Depression Inventory

(MDI), an instrument for diagnosing and estimating symptom severity of major depression according to the International Classification of Diseases, 10th edition, and the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders*.

Table 1. Odds Ratio for Major Depression, by Degree of Burnout Symptoms[9]

Burnout level	None	Mild	Moderate	Severe
Odds ratio for having major depression	2.99 (95% CI: 2.21-4.06)	10.14 (95% CI: 7.58-13.59)	46.84 (95% CI: 35.25-62.24)	92.78 (95% CI: 62.96-136.74)

CI = confidence interval

The sensitivity of the for major depression has been shown to vary between 0.86 and 0.92, and the specificity between 0.82 and 0.86.[10]

Fears About Disclosing Mental Health Issues

One becomes a physician after an average of 21 years of training and incurring $250,000 in debt, at which point they will be subject to continual assessment of their capabilities for years. In our current healthcare environment, medical decisions can be questioned even by authorities from remote locations. A sense of strength and competence needs to be conveyed by physicians on a daily basis and is also promoted by medical training culture. Physicians are keenly aware that careers can be halted by external perceptions of competence, regardless of their validity. There is little wonder why physicians are reticent to openly discussing whether they have major depression in a work setting.

In many US states, applications for medical license and renewal still ask questions as to whether the physician ever was treated for or diagnosed with a mental illness. In at least one state, even having seasonal affective disorder needs to be reported on licensure applications. If the state's board does not require such questions, the physician's ability to practice can be jeopardized from some hospital credentialing processes and malpractice carriers who still ask these questions about mental illness history.

The efforts to mandate reporting of physicians' personal health information (PHI) grew out of an attempt to protect the public, but decision-makers were not

sufficiently informed of the downside of doing so. The American Psychiatric Association has advised that general screening questions about past diagnosis and treatment of mental disorders are overly broad and discriminatory.[11] Such questions should be limited to whether there is current impairment to practice medicine, with stable psychiatric conditions allowed the protection of PHI confidentiality afforded to any other citizen.

Toxic Work Cultures

The current age is marked by technological advances that have outpaced the ability of humans to adapt[12] and decades of escalating rates of work stress.[13] As a result of these and other factors, the healthcare profession is an increasingly toxic environment for those working and training within it.

As a society, we need to rethink the wisdom of agencies and institutions asking questions that we know will inhibit physicians from seeking mental healthcare,[13] because treatment will protect the safe care of patients.

Of the top 10 work stressors in a study of New York State physicians, 80% were systemic/organizational imposed and not under their control.[14] In a longitudinal study in the United Kingdom, the prevalence of physician burnout increased after implementation of new healthcare policies, with the prevalence of emotional exhaustion increasing from 32% in 1994 to 41% in 2002.[15]

Another study found that matriculated medical students (enrolled, before training begins) have burnout and depression scores lower than the general population in age-matched controls. By the end of 2 years of medical school, however, these ratios are reversed.[16] Six months into internship, the incidence of depression is six times higher than it was at the beginning,[17] and suicidal ideation is four times higher.[18]

Making 'Stress' More Specific

In going into medicine, it is anticipated that there will be some form of "stress." However, this overly inclusive term may blind current decision-makers, administrators, and clinicians themselves to the severe impact of high acute or chronic high levels of stress. In previous generations, a clinician may stay late at work out of concern for what is happening to their patient, an autonomous

decision stemming from intrinsic motivation, concern, and compassion. It is a very different stress to have to stay late because the electronic medical record is inefficient, associated documentation is excessive, or the clinician is forced to complete mandatory computer-based training on their own time.

A useful nosology differentiates "stress" into terms that convey a spectrum of severity. *Hypostress* is characterized by boredom and restlessness, whereby stress occurs from having nothing to do. *Eustress* helps us meet challenges. It is motivating, energizes us to perform better, helps us to learn new skills and master our jobs, and is generally thought to apply to the short term. *Distress* is negative and unpleasant stress that depletes energy and decreases performance. It can lead to illness and be either short or long term. In *hyperstress*, the person is pushed beyond what they can handle, and are overloaded and/or overworked. In this state, small things can tip someone over to having strong emotional responses.

Behind the Burnout

"Ergonomics" is the science of interactions between humans and other elements of a work system, with the purpose of optimizing overall system performance and human well-being. Patient safety is one component of system performance.[19] The goal is designing the system to fit the worker instead of fitting the worker to the system.

Ergonomics is increasingly important as industries require higher production rates and technology advances to stay competitive. An example of this problem was the dramatic increase of musculoskeletal disorders (eg, carpal tunnel syndrome, back injuries) on companies' injury and illness logs in the 1970s.[20]

Burnout has been described as a persistent negative work-related state of mind defined by emotional exhaustion, depersonalization, and low sense of personal accomplishment.[21,22] It is the sequela of chronic stress typical of day-to-day work that has direct impact on the efficiency and quality of work.[23]

Occupational stress has been defined by the National Institute for Occupational Safety and Health as "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources or needs of the worker. Job stress can lead to poor health and even injury."[24]

Common causes of burnout include organizational factors, work overload, role ambiguity, lack of control, financial factors, conflict between work and family roles and responsibilities, and poor opportunity for career growth.

Karasek[25] defines job strain, "not from a single aspect of the work environment, but from the joint effects of the demands of a work situation and the range of decision-making freedom (discretion) available to the worker facing those demands." Many medical diseases have been related to job strain: cardiovascular disease, respiratory disease, depression, sleep disorders, cancer, hypertension, diabetes, elevated hemoglobin A1c, stroke, and obesity.[26-30] The more serious the job strain and duration, the more likely to lead to psychological fatigue.

In the Medscape National Physician Burnout and Depression Report 2018, over 15,000 physicians from 29 specialties responded to survey questions. Their responses showed prevalence rates of 42% for self-defined burnout, 12% for colloquially depressed, and 3% for clinically depressed. However, we don't know whether respondents minimized how affected they were, given that medicine promotes the culture of endurance, silence, and self-effacement.[31] Neurologically, MRI studies of burned out individuals show significant anatomical changes[32] in brain structures that have also been found in patients with early life trauma[33,34] and posttraumatic stress disorder.[35,36]

These findings support a common suspicion that burnout may come from additive microtrauma experienced by the clinicians during the course of their work. In treating physicians for over three decades, it is not uncommon to see late-onset alexithymia in those with burnout similar to those who have had trauma histories. Alexithymia is the difficulty of putting feelings into words and is thought to be due to a chronic feeling of overwhelm or threat, which unfortunately resets what they daily experience as normal. This impairs their self-perception of how stressed they really are, diminishing the self-protective feedback mechanisms that would otherwise help them take better self-protective measures.

Conclusions

There is considerable overlap of symptoms between burnout and depression, but not always major depression, which is a clinical condition. The term "burnout" implies the context of a work setting, and use of the term intimates job strain and high occupational stress, which helps focus solutions that need to be

organizational and individual. Conversely, the term "major depression" intimates individual solutions.

Physicians can talk about job burnout in work settings without having to reveal PHI if they happen to have co-occuring major depression, which, as with all other medical conditions, is no one's privilege to know. If the physician is not well enough to work, then the diagnosis is revealed only to those who need to know.

In the United States, too many negative career consequences could occur from authorities who don't yet grasp the needed procedural difference between dealing with a physician who has a mental illness that is stable and one that is currently impaired. Threats to the career elevate the risk for suicide in physicians.[37] Career threat can come with a sense of shame in the medical culture. Although suicide risk may be higher in those with major depression, impulsive suicide without a mental illness can occur as well. The effect of culture on risk for suicide independent of mental illness should not be underestimated. In the United States, about 90% of completed suicides have a mental illness,[38] whereas in China only 76% of suicides have a mental illness.[39]

Scientifically, there is intrinsic value in trying to understand the relationship between severe burnout and depressive disorder. However, in the current healthcare work environment, substitution of the term "depressive disorder" is not only inaccurate but counterproductive to solutions. In the work setting, the term "burnout" has more palatability to clinicians and has utility in catalyzing action to make the work life of physicians better than it is currently, which ultimately benefits patients and sustainability of a high-quality healthcare system as well.

Institutions can offer a range of early interventions to improve or sustain well-being. Examples include online informational resources, peer-to-peer support, coaching, mindfulness-based stress reduction, and gratefulness journaling. "Disease management" options would include mental health treatment, such as psychotherapy and medications, or addressing other medical needs.

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