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The Dead End of Current Research on Burnout Prevalence



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In their systematic review of surgeon burnout, Dimou and colleagues¹ concluded that >50% of the members of the profession experience burnout. The authors additionally suggested that the prevalence of burnout in surgeons was likely underreported because of limited response rates in the studies of interest. We think that such conclusions are unwarranted.

First, there are no consensual or binding diagnostic criteria for burnout.^{2,3} The cutoff scores provided in the manual of the Maslach Burnout Inventory have been arbitrarily defined on a tercile-split basis and have no clinical grounding or theoretical underpinning.⁴ Had a quartile split been chosen, then different cut points would have emerged. Relying on such criteria to estimate the prevalence of burnout is therefore unjustified. Pending diagnostic criteria for burnout, it has been recommended that conservative cutoff scores be used when the investigator wants to adopt a clinically relevant approach to burnout.^{2,4} Although still suboptimal, this strategy at least has the advantage of being sustained by a clear rationale. Indeed, conservative cutoff scores correspond to high symptom frequencies and show close adherence to the available descriptions of clinical burnout. Clinical burnout is not a transient state that could appear and disappear from one day to another; it is supposed to reflect the final stage of an adaptive breakdown at which feelings of helplessness and exhaustion are constant.² Dimou and colleagues themselves note that “burnout represents the extreme end of a spectrum.” The Maslach Burnout Inventory cutoff scores used in the studies reviewed by the authors do not satisfy these recommendations (see Table 1 in the article by Dimou and colleagues): an emotional exhaustion score ≥ 27 of 54 corresponds to symptoms experienced, on average, a few times a month, and a depersonalization score ≥ 10 of 30 corresponds to symptoms experienced, on average, once a month. Given the leniency of these cutoff scores, the authors' claim that burnout's prevalence is likely underestimated is open to question. Overestimation is, in our view, more plausible.

Second, recent research suggests that burnout is actually a depressive syndrome.³ Burnout and depression overlap has been evidenced in terms of cause, symptoms, course, cognitive biases, dispositional vulnerabilities, and allostatic load.^{2,3} In this context, focusing on (job-related)

depression—a clinically well-characterized entity—might be better advised in research on occupational health.^{3,5,6}

Finally, we note that researchers' recommendations about stress-reducing organizational changes often remain incantatory because they insufficiently consider the economic issues and macrosocial power relationships that can hamper the recommendations' implementation. If such recommendations are to be followed, another key condition is the availability of high-validity supportive research. The claim that >50% of surgeons are burned out can be easily challenged, given its reliance on arbitrary reference points.

Current practices in burnout research have led to an accumulation of results, the clinical meaning of which is obscure.⁵ This state of affairs compromises effective decision making in terms of interventions and public health policies. In our view, continuing down this road will drive burnout researchers to a dead end. Burnout's status should be clarified before more research on its prevalence is planned.

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On Surgeon Burnout In reply to Bianchi and colleagues



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In their letter to the editor, Bianchi and colleagues correctly point out that current measures of burnout are

limited by arbitrary cutoffs with little clinical relevance or theoretical underpinning.¹ They go on to suggest that conservative cutoff scores be used to increase the specificity of the Maslach Burnout Inventory—or to not “over-diagnose” burnout—if investigators want to develop a clinically relevant approach to burnout.

Burnout is the final stage of an adaptive breakdown, at which feelings of helplessness and exhaustion are constant. If the goal is diagnosing burnout in the end stage, then Bianchi and colleagues are correct, we are likely overestimating the prevalence of end-stage burnout, but not the symptoms of burnout. However, we would argue that if people are experiencing distress in any area of their life, it impacts their performance in other areas and holds them back from achieving their greatest potential. If surgeons are experiencing emotional exhaustion on average a few times a month, or depersonalization on average once a month, this is the time to intervene. Unchecked, this distress leads to clinical burnout, which often leads to adverse consequences for the surgeon, his or her colleagues, family, and the patients he or she treats.

We believe the goal of screening for symptoms of burnout or lack of physician well being is not to diagnose the end stage, but raise physician awareness about the early signs. Data suggest that physicians lack awareness in this regard; 70% of physicians in the lowest third of well being relative to physician norms believed their well being to be higher than average.² With awareness of the signs and symptoms, physicians will be better able to identify the factors that challenge their well being in this quickly changing and stressful health care environment and make conscious choices about how they respond to those challenges.

Although imperfect, we believe that current data suggest an alarming trend. Regardless of the specificity of the measure of burnout in the studies reviewed, it is concerning that the prevalence of these symptoms is worsening over time, as well as worsening relative to a probability-based sample of working US adults.³ We believe that underestimation of symptoms of burnout or distress is possible. The studies in the review targeted working physicians and surgeons, thereby assessing only physicians who were healthy enough to keep working; the studies likely missed those that left medicine due to burnout—what has ultimately been reported as healthy worker bias.⁴ In addition, medical culture, and surgical culture especially, encourages success by “running faster and faster on the hamster wheel” and does not provide an environment where physicians are encouraged to take care of themselves. In many instances, responding to such surveys or admitting the