

Burnout: The “Other” Pandemic

Steve Alan Hyman, M.D., M.M.

Burnout...a word that has existed in the lexicon of common psychologic disorders only since 1975. It was described first by Herbert J. Freudenberger,¹ who noted problems with emotional depletion and disengagement in child psychotherapists working in free clinics in New York City. Subsequently, the Maslach Burnout Inventory was created around 1981 by Christina Maslach, a social psychologist, working in the field of workplace emotions.² The Maslach Burnout Inventory, a 22-question proprietary instrument, has since become the accepted standard for identifying burnout in a variety of populations³ and has arguably become the most utilized and most validated of all instruments. The Maslach Burnout Inventory has three dimensions that allow us to quantify the risk factors for burnout. A burned-out individual is likely to have one or more “risk factors”: increased emotional exhaustion, increased depersonalization (also called cynicism), or decreased sense of personal accomplishment. The Human Services Survey is a version of the Maslach Burnout Inventory developed specifically for healthcare providers.

This month’s issue of ANESTHESIOLOGY features an article characterizing the prevalence of burnout among anesthesiologists and risk factors for it.⁴ Using the Maslach Burnout Inventory Human Services Survey revealed that nearly 60% of anesthesiologists were at risk for burnout as measured by abnormal emotional exhaustion and depersonalization scores. Almost 14% had so-called “burnout syndrome” in which all three aspects of the Maslach Burnout Inventory were abnormal. Poor work life support



“It would behoove institutions to spend less time holding wellness and resilience seminars and spend more time correcting the institutional causes of burnout.”

was the most significant independent risk factor for burnout. Work hours (more than 40 h/week), staff shortages, low home support, and several other factors were also independent predictors. Compounding these problems, 37% of these anesthesiologists claimed to have no confidant with whom to discuss work-related issues. Undertaken with the cooperation and guidance of the American Society of Anesthesiologists and the Committee on Physician Wellness, this study is novel because it is the first large-scale evaluation of burnout in anesthesiologists as a whole, and confirms the results of a 2017 study by Hyman *et al.*⁵

Burnout may occur when one’s individual and situational factors become unbalanced.² Maslach believes that individual factors may be related to demographics (*e.g.*, age, marital status, education level), psychologic characteristics (*e.g.*, low “hardiness” or poor self-esteem), or one’s expectations (good or bad) toward one’s job. Situational factors include occupational characteristics, job characteristics, and organizational characteristics.

Few would argue that a physician’s occupation is in and of itself stressful, but working at a job where more is being demanded with less given in return (*e.g.*, financial reward or sincere appreciation) by the employer can result in a negative spiral of job disengagement, clinical errors, and a host of other mental and physical disorders.² Different clinical specialties have different rates of burnout.⁶ Younger physicians⁶ and, notably, trainees are more prone to burnout and the negative effects on their health and the quality of their work.^{7,8} Burned out physicians are more likely to leave their jobs, if not leave medicine altogether.⁹ The National Academy of Sciences

Image: Getty Images.

This editorial accompanies the article on p. 683.

Accepted for publication January 11, 2021. Published online first on March 5, 2021. From the Department of Anesthesiology, Vanderbilt University School of Medicine and Vanderbilt University Medical Center, Nashville, Tennessee.

Copyright © 2021, the American Society of Anesthesiologists, Inc. All Rights Reserved. Anesthesiology 2021; 134:673–5. DOI: 10.1097/ALN.00000000000003711

report from 2019¹⁰ states that costs associated with physician turnover and decreased productivity in the United States exceeds \$4 billion. Sadly, the costs associated with dealing with burned out physicians themselves, while incalculable, are likely staggering.

The number of anesthesiologists at risk for burnout in this pre-coronavirus 2019 (COVID-19) study⁴ is lower compared to some other specialties, but the burnout risk remains far too high.⁶ Although reliable studies looking at the effect of COVID-19 on burnout are scarce at this point,¹¹ one could predict that burnout in these anesthesiologists would probably be higher were this study repeated during today's pandemic. This would likely be because during extremely busy times, anesthesiologists are often called upon to adapt to the ever-changing demands of work life and work even harder than usual. Many of my anesthesia colleagues, in addition to the usual stress of providing anesthesia-related care, have been asked to cross-cover on COVID-19-related medicine services that are outside the operating room and almost certainly outside of their comfort zones. One of them recently referred to anesthesiologists as the "Swiss Army Knives" of medicine because of their involvement in so many diverse areas of the hospital during the pandemic. The ability of anesthesiologists to perform these extra duties and to contribute positively to the hospital's financial well-being often comes at a steep price—their own well-being.¹²

Maslach said in 2001 that burnout "had its roots in care giving"; because "the core of the job" was the interaction between provider and recipient, burnout was associated with "an individual's relational transactions in the workplace."² After burnout was identified by a physician, the medical community failed to step up and lead in finding a solution to this serious problem. The airline industry was among the first to examine burnout prevalence and its impact on personnel and quality of work product.^{13–16} Nearly two decades passed before articles with physicians as primary subjects finally trickled into the literature. A simple PubMed search clearly demonstrates this phenomenon. Searching the keywords "physician burnout" returned only 68 articles on the subject through 1990 and 337 through the year 2000. As of January 3, 2021, that number has jumped to more than 4,000.

Here is a difficult question: How many more articles do we need that identify burnout? We have 4,000...do we need 5,000? 6,000? More? We already know that this syndrome is pervasive to pandemic proportions. It interferes with providers' lives. It interferes with the quality of patient care. It interferes with effective workplace activity. Now is the time for a call to action and the time to initiate a new direction for burnout research. We must be on the lookout for meaningful and scientific approaches for improving burnout in the long run.

With the prevalence of burnout, one might envision (incorrectly) a massive bibliography of high-quality studies

on therapy. There are as many, if not more, articles concerning therapy than there are on the incidence of burnout. Two meta-analyses evaluated the literature since the advent of databases. The Cochrane Database article by Ruotsalainen *et al.*¹⁷ focuses on "healthcare workers" (9,646 articles) and the West *et al.* article¹⁸ focuses (almost) entirely on fully trained physicians (2,617 articles). Both analyses evaluated papers from approximately 1966 through 2013 to 2016. From the thousands of articles, only 50 to 60 met retention criteria for analysis. Those remaining were of low quality and few were long term. No specific interventions were observed, but most were aimed at individuals, not institutions. The proposed interventions, mostly dealing with stress management and behavioral training, caused a modest reduction in emotional exhaustion scores. Both meta-analyses concluded that doing something is better than doing nothing.

Future burnout research should focus not only on the incidence of burnout, but also on specific modalities that can mitigate or prevent burnout altogether. Studies should be longitudinal to evaluate the permanence of therapy. Because burnout is such an intimate situation, any intervention might need some personalization depending on the individual sufferer. Actionable items should not focus solely on the individual since, as previously mentioned, burnout results from an imbalance of personal and workplace characteristics. Additionally, simpler, nonproprietary, and short burnout testing would simplify the evaluation of burnout more frequently and on a larger scale.¹⁹

Institutions often turn a "blind eye" to dysfunctional workplace characteristics that may promote burnout and have negative employee consequences.¹² Modifying individuals is much simpler than modifying the workplace. It would behoove institutions to spend less time holding wellness and resilience seminars and spend more time correcting the institutional causes of burnout. To address individual issues without addressing workplace issues does not provide a comprehensive solution to the problem. This promises to be a laborious task, but a necessary one.

As one who is in the twilight of his anesthesiology career and successful in overcoming the specter of burnout in his personal life, I found success in modulating stressful situations by having non-work-related diversions that have helped keep work life and personal life in good balance. For me, this was earning a master's degree in piano performance. My "concert career" offsets many of the stresses of my "medical career." Sadly, this sort of salutary activity, whatever that activity may be, is not present for many subjects in articles published on the subject of burnout. The article by Afonso *et al.*⁴ helps emphasize the burnout problem for anesthesiologists and points to the need for future studies on burnout and therapy. I congratulate the authors on a clear and effective presentation of the problem. Now, I look forward to clear and effective solutions.

Competing Interests

The author is not supported by, nor maintains any financial interest in, any commercial activity that may be associated with the topic of this article.

Correspondence

Address correspondence to Dr. Hyman: steve.hyman@vumc.org

References

- Freudenberger HJ: The staff burn-out syndrome in alternative institutions. *Psychotherapy: Theory, Research, and Practice* 1975; 12:73–82
- Maslach C, Schaufeli WB, Leiter MP: Job burnout. *Annu Rev Psychol* 2001; 52:397–422
- Maslach C: MBI Manual, 3rd edition. Edited by Jackson S, Mountain View, California, CPP, Inc., 1996
- Afonso AM, Cadwell JB, Staffa SJ, Zurakowski D, Vinson AE: Burnout rate and risk factors among anesthesiologists in the United States. *ANESTHESIOLOGY* 2021; 134:683–96
- Hyman SA, Shotwell MS, Michaels DR, Han X, Card EB, Morse JL, Weinger MB: A survey evaluating burnout, health status, depression, reported alcohol and substance use, and social support of anesthesiologists. *Anesth Analg* 2017; 125:2009–18
- Hyman SA, Michaels DR, Berry JM, Schildcrout JS, Mercaldo ND, Weinger MB: Risk of burnout in perioperative clinicians: A survey study and literature review. *ANESTHESIOLOGY* 2011; 114:194–204
- Dyrbye LN, Thomas MR, Huschka MM, Lawson KL, Novotny PJ, Sloan JA, Shanafelt TD: A multicenter study of burnout, depression, and quality of life in minority and nonminority US medical students. *Mayo Clin Proc* 2006; 81:1435–42
- Sun H, Warner DO, Macario A, Zhou Y, Culley DJ, Keegan MT: Repeated cross-sectional surveys of burnout, distress, and depression among anesthesiology residents and first-year graduates. *ANESTHESIOLOGY* 2019; 131:668–77
- Sinsky CA, Dyrbye LN, West CP, Satele D, Tutty M, Shanafelt TD: Professional satisfaction and the career plans of US physicians. *Mayo Clin Proc* 2017; 92:1625–35
- Committee on Systems Approaches to Improve Patient Care by Supporting Clinician Well-Being; National Academies of Science, Engineering, and Medicine: Taking action against clinician burnout: A systems approach to professional well-being. Washington, D.C., The National Academies Press, 2019, pp 63–80
- Amanullah S, Ramesh Shankar R: The impact of COVID-19 on physician burnout globally: A review. *Healthcare (Basel)* 2020; 8:421
- Shanafelt T, Goh J, Sinsky C: The business case for investing in physician well-being. *JAMA Intern Med* 2017; 177:1826–32
- Little LF, Gaffney IC, Rosen KH, Bender MM: Corporate instability is related to airline pilots' stress symptoms. *Aviat Space Environ Med* 1990; 61:977–82
- Girodo M: The psychological health and stress of pilots in a labor dispute. *Aviat Space Environ Med* 1988; 59:505–10
- Dell'Erba G, Venturi P, Rizzo F, Porcù S, Pancheri P: Burnout and health status in Italian air traffic controllers. *Aviat Space Environ Med* 1994; 65:315–22
- Singh RG: Relationship between occupational stress and social support in flight nurses. *Aviat Space Environ Med* 1990; 61:349–52
- Ruotsalainen JH, Verbeek JH, Marine A, Serra C: Preventing occupational stress in healthcare workers. *Cochrane Database Syst Rev* 2014; CD002892
- West CP, Dyrbye LN, Erwin PJ, Shanafelt TD: Interventions to prevent and reduce physician burnout: A systematic review and meta-analysis. *Lancet* 2016; 388:2272–81
- Card EB, Hyman SA, Wells N, Shi Y, Shotwell MS, Weinger MB: Burnout and resiliency in perianesthesia nurses: Findings and recommendations from a national study of members of the American Society of PeriAnesthesia Nurses. *J Perianesth Nurs* 2019; 34:1130–45