#### **EDITORIAL**



# An Update on Trainee Wellness: Some Progress and a Long Way to Go

Adam M. Brenner <sup>1</sup> • John Coverdale <sup>2</sup> • Anthony P. S. Guerrero <sup>3</sup> • Richard Balon <sup>4</sup> • Eugene V. Beresin <sup>5</sup> • Alan K. Louie <sup>6</sup> • Laura Weiss Roberts <sup>6</sup>

Received: 29 May 2019 / Revised: 29 May 2019 / Accepted: 3 June 2019 / Published online: 24 June 2019 © Academic Psychiatry 2019

The most recent update of the common program requirements of the Accreditation Council for Graduate Medical Education (ACGME) in 2017 placed a strong emphasis on resident wellbeing. According to the ACGME, "Psychological, emotional, and physical well-being are critical in the development of the competent, caring, and resilient physician and require proactive attention to life inside and outside of medicine... Residents and faculty members are at risk for burnout and depression. Programs, in partnership with their Sponsoring Institutions, have the same responsibility to address wellbeing as other aspects of resident competence" ([1], p. 54). The Liaison Committee on Medical Education (LCME) has similar requirements regarding medical students, calling for "an effective system of personal counseling for its medical students that includes programs to promote their well-being and to facilitate their adjustment to the physical and emotional demands of medical education" ([2], p. 19).

It is a substantial advance for the field of psychiatry that the major accrediting bodies have acknowledged the profound stakes of trainee wellness. These mandates are vital to changing expectations in health care and across society and creating momentum for change in the training and preparation of health professionals. The mandates represent a necessary, yet not sufficient, part of the solution. They provide goals but not specific measures, processes, or interventions. So, what evidence base and guidelines can the medical student educator

Adam M. Brenner adam.brenner@utsouthwestern.edu

- University of Texas Southwestern Medical Center, Dallas, TX, USA
- Baylor College of Medicine, Houston, TX, USA
- <sup>3</sup> University of Hawai'i John A. Burns School of Medicine, Honolulu, HI, USA
- Wayne State University, Detroit, MI, USA
- 5 Harvard Medical School, Boston, MA, USA
- Stanford University, Stanford, CA, USA

and program director in psychiatry draw upon in concretely addressing burnout and wellness? In this issue, we present a collection of papers that adds to both the evidence base and the practical guidance needed to address well-being.

### **Understanding the Problem and Its Origins**

One place to begin in addressing psychological, emotional, and physical well-being in the training and preparation of health professionals [3] is with attempts to define and measure the problem. Thrush et al. [4] assessed the prevalence, course, and associated characteristics of burnout in a sample of residents. The residents were drawn from different specialties and years of training. One of the distinctive aspects of this paper is the use of the Copenhagen Burnout Inventory (CBI), a relatively new instrument that is available for free, in contrast with the often-cited Maslach Burnout Inventory (MBI). The CBI is also distinct in that it measures only the fatigue/exhaustion aspect of the MBI's triad of emotional exhaustion, depersonalization, and reduced sense of efficacy. In addition, the elements of the CBI have less overlap with measures of depression, which is a significant challenge with the MBI. As in studies of residents using other instruments, Thrush et al. found that close to half experienced moderate to high levels of personal and work-related burnout. Patient-related burnout was lower but increased over the course of the first two years.

Knowing that the state of trainee wellness is often poor, we still have a great deal to learn about the underlying causes. Two papers in this collection take very different approaches to exploring the etiology of burnout and depression during psychiatry training. Sciolla et al. [5] attempt to place these issues in the context of developmental trauma and adverse childhood experiences (ACEs) of medical students. Although robust evidence shows that ACEs are a strong risk factor for later depression, suicidality, and substance abuse [6], there is a paucity of data on medical student populations. This novel and important study surveyed one class of third-year medical

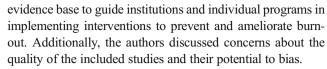


students (response rate 88%) using the ACE Questionnaire. The investigators expected to find lower rates than in the general population because lower socioeconomic status is generally correlated with an increased risk of ACEs [7] and medical students generally come from backgrounds of higher than average socioeconomic standing. Contrary to expectations, rates in the medical students were similar to those reported in studies of the general population, with just over half reporting at least one ACE, and 12% (all women) reporting four or more. Three specific traumatic experiences were significantly more common among female medical students than male medical students: emotional abuse, physical abuse, and witnessing a mother/stepmother's physical abuse.

Taking a different approach, Hu et al. [8] focused on medical students' current mental state rather than their childhood histories. Their paper is part of an ongoing project studying maladaptive perfectionism and impostor syndrome and their relationship to anxiety and depression among medical students. Hu et al. postulate that these cognitions lead to negative effects and depression, which in turn increase the likelihood of negative and distorted cognition. The authors describe an expectable challenge to the self-perception of medical students: before medical school, the students were all extraordinarily high achievers, yet half will soon be in the bottom half of their medical school class. In a cross-sectional study of the firstyear students at their school, they found substantial levels of maladaptive perfectionism (25.4%) and impostor syndrome (31.9%). These students were significantly more likely to report experiences of shame and inadequacy than their peers and were significantly more likely to report depression and anxiety symptoms. Most of the cohort reported that they compared themselves to their peers to a moderate or great degree, and close to half reported that their self-worth was tied to their performance relative to their classmates. It is important to recognize, however, that both the Sciolla et al. [5] and Hu et al. [8] studies are limited by methodological challenges, including relatively small samples and a potential lack of generalizability of results.

## **Constructive Approaches**

Turning now to the question of what can be done, Walsh et al. [9] provide a valuable contribution with a systematic review of the evidence for burnout prevention and intervention in trainees. Although they initially set out to review only prevention of burnout in medical students and residents, they found no studies that targeted prevention specifically, so they broadened their search to include burnout interventions in general. Of the 14 studies that met inclusion criteria, fewer than half (five) showed robust improvements as measured by the MBI, and of those, three studied the impact of reducing duty hours. The paucity of these results is striking. There is still little in the



Given the limited evidence base, how should teachers, supervisors, and program directors move forward? Several of the papers collected in this issue of the journal aim to address this gap. Aggarwal and colleagues [10] provide a framework for a comprehensive approach to fostering wellness in a psychiatry residency program. They suggest that program leadership organize their thinking around how the residency program (1) creates a healthy workplace environment, (2) builds community, (3) demonstrates effective leadership, (4) creates a culture of well-being, and (5) ensures access to mental health care. The authors offer a thoughtfully curated selection of suggestions, drawn from their experience and the available literature. They provide some much-needed signposts by which to navigate while waiting for research that is more definitive. From the medical student perspective, Hu and colleagues [8] suggested that educators emphasize a series of messages early in medical school, including that the first year is not a level playing field given different kinds of college preparation, that the correlation between preclinical performance and excellence as a physician is modest at best, and that multiple-choice exams are not strong measures of either intelligence or clinical ability. They suggested screening students for maladaptive perfectionism and impostor phenomena and cite preliminary work indicating that cognitive behavioral therapies might decrease depression.

Gold et al. [11] report on a pilot study of resident-led voluntary reflection groups for medical students. The authors note that social belonging is a "positive predictor of psychological wellbeing" and hypothesized that peer reflection groups, led by "near-peers" (i.e., residents), would result in students feeling more connected to each other. Over 90% of participants agreed that the groups helped them feel more connected with others and less lonely. Additional benefits included increased emotional self-awareness, diminished impostor syndrome, and tolerance of diverse perspectives. Although the study was limited by a small sample size and lack of a control group, it describes a promising model that deserves future study. An unexplored question is the possibility of improved wellness in the resident leaders as well.

Finally, Goldenberg and colleagues [12] describe an approach to conceptualizing and mitigating one of the most challenging causes of burnout: the experience of mistreatment by patients. Mistreatment from patients can include overtly bigoted comments, sexual harassment, and microaggressions. Such behavior can lead to increased anxiety, avoidance, and feelings of disempowerment on the part of the trainee. Repeated experiences may erode the trainee's overall wellness and increase the risk of burnout or depression [13]. Appreciating that there is little guidance available in the



literature, the authors created a stepwise framework to teach faculty to manage patient mistreatment of trainees: expect, recognize, address, support, and establish a positive culture. While it is easy to recognize the most blatant examples of mistreatment, the authors note that more subtle incidents are easy to miss, especially when the trainee is a member of a demographic different from the faculty. Among the most valuable contributions of this pilot project are the authors' examples of different mistreatment scenarios, accompanied by concrete samples of possible interventions. Clearly, it is possible to be respectful and empathic toward patients while also intervening to protect trainees from abusive language or unintended insults. As a result, participants in the pilot reported a sense of increased efficacy and empowerment.

# **Looking Ahead**

The studies in this collection are promising, but clearly a great deal of work is yet to be done. Research on the prevention of burnout is perhaps the most critical need, but careful thought is needed in defining the goal. Should academic medical centers be aiming for zero burnout among residents and medical students? It may be that not every case of burnout is preventable. In a recent editorial, Coverdale et al. [14] discussed some common adversities that psychiatry residents may experience. A resident whose patient commits suicide will experience a huge stress even if program, faculty, and peer support is very available. The meaning of the event can differ greatly on the basis of the particulars of the case, and the impact on the resident will hinge on the resident's personal makeup. A resident whose history includes a suicide attempt by a family member may experience additional and very individual stresses. The individual backgrounds of trainees and the specific adversities they encounter during training will differ widely, sometimes dramatically. When such severe adversities occur in training, educators can perhaps take solace in the opportunity to model the great value of a supportive professional community.

Although it is important, as with any other approach necessary to ensure safe patient care, to "hard-wire" interventions that optimize physician well-being and that limit the adverse effects of burnout, more research is needed on the routine stresses in the learning environment. Graduate medical education has made progress in decreasing duty hours and exhaustion from the toxic levels that residents experienced in the past. Nevertheless, when deciding on an appropriate workload, program directors have little to guide them. It seems intuitive that there is a "therapeutic window" of stress in training. Having no stress at all would deprive students and residents of much of the spur to growth and development. Anecdotally, many of us can remember times of working quite

hard in training as valuable and formative, as long as it remained within a tolerable range. Such stress can help trainees stretch and extend their skills and capacities.

It is also important to remember that burnout is rarely a function of workload alone. It is one thing for physicians to put in a long, hard week of patient care when they feel part of a team pulling in the same direction and are satisfied that their efforts are truly in the service of good care. It is another thing entirely to do the same amount of work in a fractured team or when a patient is being mistreated or in a care system whose integrity is in doubt. A recent report from the Association of American Medical Colleges highlighted the role of misalignment of one's personal values with the values and practices of one's institution as a key contributor to burnout and diminished well-being among health professionals [15]. The strain of such "moral fatigue" is considerable and represents a critical target for burnout prevention.

Psychiatry educators cannot address this kind of moral fatigue in isolation. It is embedded in larger health care systems issues that are bigger than medical student and resident education [16]. Medical students and residents can feel a sense of well-being, even working long hours, if they have sufficient contact with patients to make real connections, mentoring relationships that are safe and supportive, and adequate time for doing required record keeping and they feel part of a larger mission that enhances self-esteem. Wellness interventions aimed at individuals can be appealing to health care systems but may have less impact than changes in the working environment that increase the percentage of time physicians spend with patients compared with, for example, computer screens. A recent meta-analysis reported that organization-directed interventions may be more effective than physician-directed interventions, especially structural changes that cultivate a sense of teamwork and job control [17]. Such approaches will be increasingly important as the US population ages and the workforce continues to be inadequate to meet the growing demand for health services [18]. Solutions on an organizational level will be required if medical schools and residencies want to change the work climate and hidden curriculum to address moral fatigue [19].

As academic psychiatrists move forward in producing the studies that are so needed, Ramirez and Carvour [20] offer a wise, cautionary note. They argue for attention to be paid to the ethics of wellness studies. They note that there seems to be a trend to bundle such work under quality improvement (QI) projects exempt from institutional review board review. The authors believe that this decision is often a mistake. QI exemptions are meant to cover studies that aim at health care operations and manipulation of health care systems. Physicians—whether residents or faculty—are "not only integral components in the health care system; they are human stakeholders whose lives and livelihoods are impacted by that system and whose own agency and interests within the system



warrant reasonable protection." It is indeed ironic if protection for autonomy is sacrificed in wellness studies, since loss of workplace autonomy is itself an established driver of burnout and diminished wellness.

Winston Churchill famously said in 1942, "Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning." The hope in his words was that momentum toward victory was underway. Clearly, our field is still in the early stages of addressing burnout and wellness, and far from reaching the conclusion. However, with continued advances in our research and sharing our best practices, as the authors of the papers in this collection demonstrate, we may see the slow accretion of evidence that brings lasting change. Academic psychiatrists are well positioned to lead such change.

#### **Compliance with Ethical Standards**

**Conflict of Interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

#### References

- Accreditation Council for Graduate Medical Education. ACGME program requirements for graduate medical education in psychiatry. Editorial revision: effective July 1, 2019. Available at https://acgme.org/Portals/0/PFAssets/ProgramRequirements/400\_Psychiatry\_2019\_TCC.pdf?ver=2019-03-27-090422-550. Accessed 28 May 2019.
- Liaison Committee on Medical Education. Functions and structure
  of a medical school: standards for accreditation of medical education programs leading to the MD degree. Washington, DC:
  Association of American Medical Colleges and American
  Medical Association; 2019. Available at http://lcme.org/
  publications/. Accessed 28 May 2019.
- Beresin EV, Milligan TA, Balon R, Coverdale JH, Louie AK, Roberts LW. Physician wellbeing: a critical deficiency in resilience education and training. Acad Psychiatry. 2016;40:9–12.
- Thrush CR, Guise JB, Gathright MM, Messias E, Flynn V, Belknap T, et al. A one-year institutional review of resident physician burnout. Acad Psychiatry. 2019. https://doi.org/10. 1007/s40596-019-01043-9.
- Sciolla AF, Wilkes MS, Griffin EJ. Adverse childhood experiences in medical students: implications for wellness. Acad Psychiatry. 2019. https://doi.org/10.1007/s40596-019-01047-5.
- Bielas H, Barra S, Skrivanek C, Aebi M, Steinhausen HC, Bessler C, et al. The associations of cumulative adverse childhood experiences and irritability with mental disorders in detained male

- adolescent offenders. Child Adolesc Psychiatry Ment Health. 2016;10(34):34. https://doi.org/10.1186/s13034-016-0122-7.
- Steele H, Bate J, Steele M, Dube SR, Danskin K, Knafo H, et al. Adverse childhood experiences, poverty, and parenting stress. Can J Behav Sci. 2016;48:32–8.
- Hu KS, Chibnall JT, Slavin SJ. Maladaptive perfectionism, impostorism, and cognitive distortions: threats to the mental health of pre-clinical medical students. Acad Psychiatry. 2019. https://doi. org/10.1007/s40596-019-01031-z.
- Walsh AL, Lehmann S, Zabinski J, Truskey M, Purvis T, Gould NF, et al. Interventions to prevent and reduce burnout among undergraduate and graduate medical education trainees: a systematic review. Acad Psychiatry. 2019. https://doi.org/10.1007/s40596-019-01023-z.
- Aggarwal R, Kim K, O'Donohoe J, Kleinschmit K. Implementing organizational strategies for resident well-being: practical tips. Acad Psychiatry. 2019. https://doi.org/10.1007/s40596-019-01045-7.
- Gold JA, Bentzley JP, Franciscus AM, Forte C, de Golia SG. An intervention in social connection: medical student reflection groups. Acad Psychiatry. 2019. https://doi.org/10.1007/s40596-019-01058-2.
- Goldenberg MN, Cyrus KD, Wilkins KM. ERASE: a new framework for faculty to manage patient mistreatment of trainees. Acad Psychiatry. 2018. https://doi.org/10.1007/s40596-018-1011-6.
- Whitgob EE, Blankenburg RL, Bogetz AL. The discriminatory patient and family: strategies to address discrimination towards trainees. Acad Med. 2016;91:S64–9.
- Coverdale JH, Balon R, Beresin EV, Brenner AM, Louie AK, Guerrero APS, et al. What are some stressful adversities in psychiatry residency training, and how should they be managed professionally? Acad Psychiatry. 2019;43:145–50.
- Dandar VM, Grigsby RK, Bunton SA. Burnout among U.S. medical school faculty. AAMC Analysis in Brief. 2019;19(1):1–3
   Available at https://www.aamc.org/download/495534/data/february2019burnoutamongusmedicalschoolfaculty.pdf. Accessed 29 May 2019.
- Balon R, Morreale M. The madness of mandated wellness. Ann Clin Psychiatry. 2019;31:81–2.
- Panagioti M, Panagopoulou E, Bower P, Lewith G, Kontopantelis E, Chew-Graham C, et al. Controlled interventions to reduce burnout in physicians: a systematic review and meta-analysis. JAMA Intern Med. 2017;177:195–205.
- Brenner AM, Balon R, Coverdale JH, Beresin EV, Guerrero APS, Louie AK, et al. Psychiatry recruitment and psychiatry workforce: two intertwined challenges. Acad Psychiatry. 2017;41:202–6.
- Roberts LW, Trockel M. The art and science of physician wellbeing: a handbook for physicians and trainees. New York: Springer; 2019.
- Ramirez NC, Carvour ML. Physician wellness: the ethics of studying ourselves. Acad Psychiatry. 2019. https://doi.org/10.1007/ s40596-019-01034-w.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

