

“Physician Wellness” as Published in *Academic Psychiatry*

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The April 2017 issue of *Academic Psychiatry* features several articles relevant to burnout, well-being, and wellness among medical students, residents, and physicians. These articles are part of a growing professional and lay press literature on these topics and correlate with a rising tide of burnout in national samples, or at least increasing awareness of burnout as a problem [1]. The reasons for this rise in burnout are probably multiple and may include changes in medical economics, mandated implementation of electronic medical record systems with associated documentation burden [2], and other developments that historically coincide. Reasons notwithstanding, this area has been given added gravitas from the recognition that promoting medical students' and physicians' health and wellness serves to protect against unsafe clinical and psychosocial outcomes and fosters improved patient care practices [3].

This is not the first editorial in the journal to highlight the topic of psychological distress in clinicians. Past editorials have focused on acute and blatant threats to mental health, such as the negative impact of patient suicides, the experience of intimidation and/or assaults from patients, and the problem of mistreatment by more senior physicians. The challenges

faced by physicians and by psychiatrists in particular include the chronic toll of medical education and medical practice on mental health. This toll is exacted by clinical work with serious illness, suffering, and death; long work hours; expanding caseloads; sometimes dysfunctional medical teams; increasing bureaucratic hurdles in the provision of care; large personal debt with shrinking professional reimbursements; and the balance of personal and professional life in general. These issues have been addressed in publications in *Academic Psychiatry*. Some articles report rates of burnout, depression, and suicidal behaviors among medical students, residents, and/or physicians. A few studies examine interventions to prevent or mitigate these problems by enhancing mental health, resilience, and work-life balance.

Figure 1 shows the number of articles in *Academic Psychiatry* related to burnout and wellness or well-being returned in a simple search by entering the terms *burnout*, *wellness*, and *well-being* into the search field for *Academic Psychiatry* at SpringerLink since 2000. We did not find articles prior to this period, except for one in 1990. Several articles were eliminated that they were only indirectly related to the search terms. For example, articles on teaching empathy, setting up a mentoring system, or encouraging professionalism might have impact on student wellness, but they do not directly speak to it. Ninety articles were identified, and although this search was not exhaustive or systematic, some descriptive trends are of interest.

The number of articles in each year of the search has increased over time with apparent acceleration in the last few years. More articles addressed medical student wellness than resident physician wellness, whereas fewer addressed wellness of attending physicians, particularly academic physicians. A few focused on issues concerning non-psychiatric physicians and specific populations such as international medical graduate physicians. Of note, one article involved

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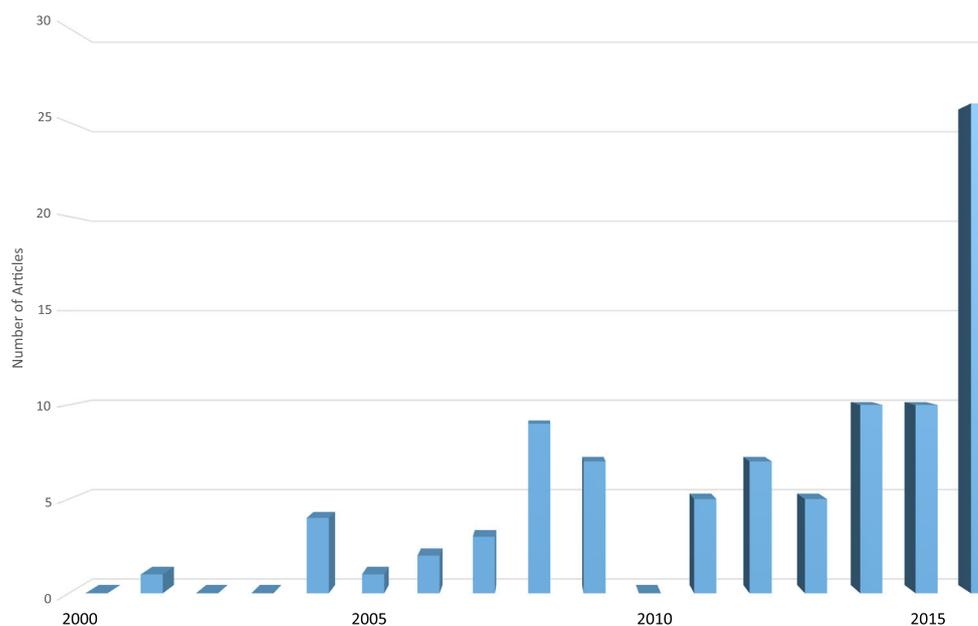
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Fig. 1 *Academic Psychiatry* “burnout,” “wellness,” and “well-being” articles by year



premedical undergraduates and another studied graduate students. A number of publications concerned medical students or physicians from countries outside the USA including Argentina, Canada, Israel, Lebanon, Mexico, Pakistan, Switzerland, and the Republic of Trinidad and Tobago.

In adding to this diverse and valuable collection of papers, the current issue of *Academic Psychiatry* contains six articles that expand the evidence base regarding physician wellness. With a response rate of 61%, the e-mail survey of Holmes et al. found a burnout rate of 69% (according to the Maslach burnout inventory) in over 300 residents across multiple specialties [4]. Of interest, the training directors in the study underestimated burnout rates among their residents. On the basis of the survey answers by the residents, the authors articulated potential interventions (e.g., more time for work-life balance) that remain to be tested empirically. Similarly, Wolf and Rosenstock [5] surveyed medical students online, assessing sleep and exercise and administering Maslach burnout inventory assessments. Burnout correlated with Epworth sleepiness scale’s “pathological sleepiness,” less than 7 h of sleep per night, and a positive depression screen. Survey response rates of 23 to 29% limited the conclusions. Some of the numbers presented by the authors (e.g., burnout rate of 69%) point to the need for strategies that emphasize organizational change rather than individual physician resilience-based strategies. These alarming numbers also raise questions about the specificity of the concept of or scale cutoff level selected for “burnout,” and suggest the need for further critical analysis and definition of burnout.

Three other articles in this issue used a variety of survey instruments. Yoon et al. surveyed by mail a national sample of

approximately 1500 primary care physicians and 512 psychiatrists, with a response rate of 63–64% [6]. The primary finding was that a “sense of calling” tended to correlate with “well-being.” The authors noted the limitation of using a single-item measure of “calling” and “burnout,” which left the definition of these terms up to the respondent. This limitation may explain why the rates of burnout for primary care physicians and psychiatrists were lower (23 and 15%, respectively) than those obtained with the Maslach burnout inventory in other studies, and points to the need for standardization in the field. Hwang et al. [7] used the World Health Organization Quality of Life (QoL), abbreviated, to study about 150 Korean medical students, and suggest that social support is a key to well-being. Further studies would be needed to prove causation. The use of the QoL limits comparison to studies with other scales but allows for comparison with extensive worldwide benchmarking data available for these QoL scales. Bacchi and Licinio [8] engaged students registered for a Bachelor of Medicine and Bachelor of Surgery at the University of Adelaide by online survey. The authors reported that levels of resilience on the Connor-Davidson resilience scale correlated with less psychological distress on the Kessler measure of psychological distress. A survey response rate of only 37.4% limited the generalizability of this study.

Smith-Coggins et al. provided a description of the development of a program to prevent medical student mistreatment that will likely be a useful guide to other schools of medicine. Although the study design did not include a control group, it did include an intervention (implementation of the prevention program) and pre- and post-program implementation data from different years. The data were obtained independently

through the annual American Association of Medical Colleges graduation questionnaire, which has questions relating to medical student mistreatment [9].

Each of the six articles described presented study data utilizing a variety of methodologies, rating scales, and subject populations. Most were descriptive and correlational surveys of burnout, resilience, and quality of life; only one actually described and evaluated the effects of an intervention. This type of research is hard to do given barriers that include lack of funding, low survey response rates, reliance on self-report of subjects, resistance to randomized designs in education, and differing definitions of burnout and wellness.

These articles, and indeed all of those on the general topic area of wellness published in *Academic Psychiatry* over the years, indicate that awareness and research continue to be stimulated in this area and raise hope that interventions to promote physicians' wellness will soon be well accepted, established, and disseminated. Many medical schools have already implemented required curricula to promote well-being [10]. We may have prospects in this regard, but solutions may not be easily obtained, even when large-scale policy mandates are implemented. The acceptance, adoption, and impact of duty-hour restrictions, for example, promulgated by the Accreditation Council for Graduate Medical Education (ACGME), have not been straightforward. The ACGME had to respond in a timely manner to a growing national and political climate that demanded addressing errors in medicine, including errors that might be secondary to sleep deprivation of trainees, and they had to do so with limited research on duty-hour restrictions. Without a substantive evidence base in medical training to draw upon, the ACGME's duty-hour restrictions followed the lead of airline restrictions on pilots' hours. Unfortunately, interventions with apparent face validity instituted with good intentions do not always yield predictable results.

Subsequently, the effectiveness and side effects of restrictions have been debated [11, 12]. Do restrictions reduce medical errors and improve the well-being of trainees? Alternatively, do they increase treatment hand-offs and the inability of trainees to learn when to stay or leave patients and ultimately result in more errors? Perhaps most importantly, if duty-hour restrictions to reduce obvious problems associated with sleep-related impairment were not sufficiently beneficial, why is this so? Is a simplistic work-hour limitation analogous to a track team mandate that overtrained runners must complete their workouts in less time without changing the number of miles they are required to run?

Despite the good intentions, duty-hour restrictions—particularly when implemented by systems with incentives to exact the same workload in fewer hours—may, in some situations, diminish physician well-being. Additionally, forcing residents to leave patients midstream can be stressful, demoralizing, and detrimental to residents' self-efficacy. On the other hand, lack

of efficacy of ACGME work-hour mandates to mitigate toxic stress and inadequate sleep (by some training programs) does not mean that regulatory efforts to mitigate these problems should cease. The toll of medical training and practice on successive generations will not go away on its own and must be addressed. The story with duty-hour restrictions, however, may be a cautionary tale concerning future interventions aimed at reducing burnout and improving wellness. How do physicians know if interventions are effective and if the administrative time, effort, and cost of instituting proposed interventions are justified? How do physicians know if there will be unintended side effects of interventions? The answer is not necessarily obscure—well-conducted research and trials will be needed, and although these are easier said than done and take time, these are things that the medical profession knows how to do.

Moving forward, the field will need rigorous research on interventions to improve physician wellness to ensure effectiveness and uncover possible harms. The studies with data in *Academic Psychiatry* frequently used different definitions of terms (e.g., burnout, well-being, and wellness), various rating scales, diverse subject populations, and different outcome measures. Future comparisons and generalization of findings will require some standardization of research approaches. The definition of terms is a good place to start. As Korczak, Huber, and Kister pointed out, there is no consistent definition of burnout [13]. They emphasized that we need to widen our definition of burnout as vetted by scientific evidence, develop a valid method for diagnosing burnout including a “third party assessment tool,” and analyze financial and health effects of the derived definition of burnout. Much of what these authors are saying about burnout may also apply to terms like well-being and wellness of physicians, which also need well-considered definitions. Moreover, sound core curricula are needed from medical school through residency and in practice to continually promote well-being. Robust self-care practices should not be taken for granted—wellness habits do not just come naturally. A self-care toolkit that physicians-in-training-and-practice may increasingly develop and use during the course of lifelong learning is needed [10]. In addition, it may be impossible to adequately address the wellness of physicians-in-training without concurrently addressing the wellness of their mentors and attending physicians. Perhaps, the most compelling teaching method in medical training is direct modeling of the medical practice by faculty mentors. Healthy mentors are probably more likely to promote wellness in their trainees. Given the high risks of the medical profession, physicians owe it to themselves and to incoming students to provide evidence-based methods for preventing harm and promoting well-being.

The experience of being human—neither perfect nor invulnerable—provides important lessons for physicians and physicians-in-training as they seek to understand and develop

an empathic connection with their patients. Many deeply moving narrative accounts of physicians' experiences with personal illness substantiate this observation [14–17]. Moreover, many hypothesis-driven empirical studies have determined that having at least some experience as a patient strengthens the priority placed on communication and compassionate practices of resident physicians, for example [18–21]. The troubling connection between exhaustion and patterns of mistakes or misjudgments in physician, resident, and medical student practice highlights the importance of accepting one's imperfections and vulnerabilities and safeguarding against them so that patient care standards are upheld.

The articles highlighted in this editorial and the many others found in our search of the *Academic Psychiatry* archive provide a foundation for future research and scholarship of wellness in the health professions. Ultimately, scientifically rigorous studies of interventions will be needed with outcome metrics demonstrating improved physician wellness first and, secondarily, improved clinical and psychosocial outcomes for patients. We applaud the efforts of these authors and encourage others to join the effort to contribute to research on evidence-based interventions to improve the wellness of physicians.

Compliance with Ethical Standards

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

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