

Resident Mental Health

Time for Action

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I completed my internship in internal medicine in preparation for residency in psychiatry at Columbia Presbyterian Hospital in New York, New York, in 1999. Most of the experiences I remember from this intense year are warm, poignant, and amusing. However, I also remember “long-call” every fourth night over four consecutive months, a disrupted sleep schedule, crying on the shoulder of a colleague in a chilly call room because a medical error may have hastened a patient’s death, and frequent irritability and limited resilience for any additional non-work-related stress. An example of my poor frustration tolerance was standing in the checkout line at the local grocery store, and abandoning my cart in a silent fury, thinking to myself, “How dare they make me wait after I just worked a 70-h week.”

Readers of the article by Sun *et al.*¹ may reflect on similar current or past experiences during their graduate medical training. In this repeated cross-sectional survey of anesthesiology residents and first-year graduates, they observed that approximately half experienced burnout, one third were in emotional distress, and 12% screened positive for depression. Demographics, sex, workload, perceived institutional support, work-life balance, strength of social support, and student loan debt all had an impact on the well-being of the surveyed anesthesiologists.

This 50% rate of burnout is consistent with national trends among medical students, attendings, and resident physicians. It is the very nature of medical education and training that contributes to these high rates of emotional distress, since students entering medical school score better on indicators of mental health than similarly aged college graduates.² The prevalence of depression in this anesthesiology cohort is troubling, and is almost twice that of community-dwelling



“Social media may be contributing to...elevated rates of [anesthesiology resident] distress.”

adults³ (and the rate is higher than medical students⁴), reinforcing the danger to mental health inherent with being a physician in training. The prevalence of suicidal ideation is also striking among anesthesiology residents and recent graduates who endorse burnout, distress, and depression in this study, with a positive screen for depression increasing the risk of suicidal thinking from 1 to 25%. This rate of suicidal ideation is similar to community-dwelling adults with diagnosed major depressive disorder,⁵ indicating that these distressing emotions, in the setting of work-related sleep cycle dysregulation and anxiety (*i.e.*, about student loan debt), contribute to a vulnerable population enriched for suicidal ideation and behavior. Given that depression is among the most potent risk factors for suicide, especially when complicated by poor sleep, limited psychosocial supports, and anxiety, focused efforts to identify anesthesiology residents living with these markers of poor mental health should be considered by Graduate Medical Education programs and hospital systems.

Approximately 40% of anesthesiologists under the age of 36 yr are female.⁶ When adjusted for other factors, Sun *et al.*¹ found that being female was associated with higher risk of being in distress (1.58 times that of male respondents) but not with a higher risk of burnout or depression. This is worth further discussion. A threshold of four or more affirmative answers to the seven questions of the Physician Well-Being Index was used to indicate a “physician in distress.” These seven items inquire about (1) feeling burned out at work; (2) feeling work was emotionally hardening them; (3) feeling down, depressed, or hopeless; (4) falling asleep while driving; (5) feeling overwhelmed with responsibilities; (6) having trouble with emotional problems (anxiety,

Image: J. P. Rathmell.

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depression, irritability); and (7) experiencing physical health problems that interfered with daily work at home and/or away from home. While the Physician Well-Being Index was described as a measure of “distress,” it is actually a multidimensional scale assessing symptoms of burnout, depersonalization (also known as “compassion fatigue”), high levels of stress, fatigue/sleepiness, and emotional problems such as depression, anxiety, and irritability. All of these items on the Physician Well-Being Index are symptoms of or risks for depression and burnout, and they may increase the risk (in either an additive or synergistic fashion) for physician suicidal ideation and behavior, physician alcohol and drug abuse and addiction, elevated medical error rates and malpractice risk, lower patient satisfaction and care quality, and attrition from the medical field. This sex effect must be addressed, and further assessing the unique challenges of female anesthesiology trainees and the types of support and interventions (and preventive measures) that may minimize this distress and associated bad outcomes should be a priority of Graduate Medical Education programs. This is especially relevant given the elevated rate of suicide in women physicians compared to male physicians and female nonphysicians.⁷ Themes from a qualitative study of physicians who had taken maternity leave described less support for women postpartum than during pregnancy, with return to work challenged due to fatigue, difficulties with breastfeeding, and caring for sick children.⁸ These issues must be considered when developing sex-specific prevention, wellness, and treatment programs.

The question of *why* burnout is such a problem is a source of concern for deans of medical schools, hospital directors, departmental chairs, division chiefs, and residency training directors. The National Academy of Medicine (Washington, DC) has recently launched a national effort inclusive of multidisciplinary stakeholders,⁹ and the American Medical Association (Chicago, Illinois) has been working on studies and programs to understand and reduce physician burnout since 2012.¹⁰ The observations Sun *et al.*¹ described are among the likely major contributors to burnout, and at face value, have high validity. It may also be argued that a 60-h work week represents an unacceptable work/life time ratio. Other unmeasured variables that may contribute to burnout include spousal expectations for shared household responsibilities and child care, desire for more leisure activities, and dissatisfaction with effort spent with the electronic medical record. Among the contributors was burden of student loan debt. According to information from the Association of American Medical Colleges (Washington, DC), in 2017, the median educational debt for graduates from both public and private medical school was \$192,000.¹¹ While medical schools across the country are experimenting with or adopting free tuition for all students, merit-based scholarships, full tuition scholarships, and loan-free tuition packages, it is highly unlikely these programs can be universally adopted. Other initiatives, such as improved loan repayment

and forgiveness programs, should be considered and developed to mitigate this source of physician distress.

While hypothetical and again unmeasured in the article by Sun *et al.*,¹ social media may be contributing to these elevated rates of distress. Facebook, Instagram, and Snapchat permit medical trainees to stay updated about family and friends. Perhaps accessing these online social platforms, however, contributes to “fear of missing out.” In 2013, the abbreviation FOMO was added to the *Oxford Dictionary* and defined as “anxiety that an exciting or interesting event may currently be happening elsewhere, often aroused by posts seen on a social media website.”¹² Social media use contributes to a sense of relative deprivation, a “dissatisfaction people feel when they compare their positions to others and grasp that they have less, particularly when they see their peers engaging in enviable experiences.”¹³ This FOMO may contribute to a vicious cycle of further social media use, dissatisfaction with one’s work circumstances, anxiety, and concerns that others are living a better life.

We know the facts: despite entering medical school with relatively good mental health,² medical students become depressed, burned out, and suicidal at alarming rates, and this worsens during residency. It is the nature of medical education and graduate medical training that contributes to worsening mental health. We also know that demanding schedules, cost, and stigma interfere with trainees’ access to treatment. The time has come to move beyond simply measuring depression, burnout, distress, and suicidal ideation among medical trainees, and to implementing resident-focused, Graduate Medical Education-sponsored solutions. At the University of Pittsburgh Medical Center (Pittsburgh, Pennsylvania), our office of Graduate Medical Education supports a program called the Resident and Fellow Assistance Program. This no-cost, completely confidential program (administered by clinical specialists from our affiliated Employee Assistance Program) for residents, fellows, and their household members offers coaching and counseling to help with stress management, family and relationship concerns, depression, anxiety, and substance misuse. Psychiatric consultation and medication management are available and provided by psychiatric faculty at no cost to the resident, and without generating an insurance record or documentation in the hospital-based electronic medical record. The Resident and Fellow Assistance Program also offers lectures about wellness, resilience, and self-care to trainees, specialized coaching for test-taking and preparation for Board Certification exams, and a “First-Job Assist Program” to assist with resumé creation, interview preparation, and medical career planning during the last two years of residency or fellowship. To address residents’ concerns about debt management and legal challenges, our Resident and Fellow Assistance Program also offers free 30-min legal and financial consultations. We are currently implementing the Interactive Screening Program, developed and supported by the American Foundation for

Suicide Prevention (New York, New York; <http://www.afsp.org>). The Interactive Screening Tool is delivered online, and permits trainees to take a brief stress and depression questionnaire, receive personalized responses from a program counselor, obtain feedback and encouragement, and make an in-person appointment with the counselor or request a community referral. I describe the Resident and Fellow Assistance Program and our approaches to enhance resilience and to minimize depression, burnout, and distress, so other programs may consider our program as a model.

Leaders at our medical center have determined that supporting the Resident and Fellow Assistance Program is a good investment, but such support may not be feasible at all programs, and other options must be considered. Working closely with the physician services divisions of large hospital systems may help Graduate Medical Education programs and hospitals leverage resources and provide shared opportunities to improve the care of trainees, faculty, and staff physicians. Such efforts are aligned with an important observation in the article by Sun *et al.*¹: when physicians perceive that their workplace provides sufficient resources to address burnout and depression (*i.e.*, they feel that their place of employment understands the challenges and emotional toll associated with being a trainee), and if they are comfortable using them (*i.e.*, because concerns about confidentiality and access are minimized, and self-care and managing one's level of stress and distress are promoted by institutional and departmental leadership as a strength), the mental health and quality of life of medical trainees is improved.

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