

Burnout in Medical School: A Medical Student's Perspective

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Key Words: Medical school; burnout; medical education.

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INTRODUCTION

In the last decade, there has been a heightened awareness of burnout in medicine, particularly in medical education. It has garnered further attention during the COVID-19 pandemic, with healthcare workers facing a tremendous amount of pressure to care for patients with an unknown illness, while working long hours in personal protective equipment and putting themselves and their families at risk. Similarly, the pandemic precipitated burnout in medical students as many started and completed their clinical rotations during the height of the pandemic, all while preparing and applying for residency. While the pandemic may have accentuated the issues faced by healthcare workers and medical students and brought public attention to them, the concept of burnout remains unclear and difficult to define despite being referenced on a regular basis.

The National Academy of Medicine defines burnout as a syndrome characterized by a high degree of emotional exhaustion, depersonalization, and a low sense of personal accomplishment (1). While this definition provides some clarity, it is still difficult to comprehend on a personal level. Like the loss of a loved one, burnout really is an experience; only after having struggled through it, can one grasp its magnitude and the toll it takes on one's physical, emotional, and mental health.

THE PREVALENCE OF BURNOUT AND SUICIDAL IDEATION IN MEDICAL SCHOOL

Burnout is quite prevalent among residents, even among radiology residents, perhaps for different challenges than those faced by medical students (2,3). Students enter medical school with mental health statuses very similar to those of their same-age peers, but during medical school, their mental health severely deteriorates (4,5,6). Perhaps, the seeds of mental

health issues in healthcare providers begin in medical school, as at least half of medical students are affected by burnout during their medical education, according to multi-institutional studies (7). Students often develop comorbid mental health conditions as a consequence of their burnout. A cross-sectional study showed that more than one in 10 medical students have experienced thoughts of suicide during their training. In fact, the same study reported a strong association between burnout severity and suicidal ideation, even after accounting for depression as a cofounder. Students experiencing burnout were approximately 3.5 times more likely to experience thoughts of self-harm (8). A meta-analysis of over 4,000 articles showed that exposure to burnout increased a student's risk of suicidal ideation by a factor of six (9). While it is difficult to find longitudinal data on the rates of burnout mainly due to the stigma associated with mental health conditions, one could fairly assume that burnout rates have been on the rise given the relatively recent awareness of this issue.

CAUSES OF MEDICAL STUDENT BURNOUT

Medical students are confronted with multiple academic and personal stressors including excessive workload, work-life balance, relationships, and financial burdens. A 2018 survey study shed light on concerns, which had not been highlighted by prior research and are unique to medical school, such as lack of assistance with career planning, and assessment-related performance pressure (10).

Excessive Workload & Work-Life Balance

Medical educators often use the analogy of drinking from a firehose to explain the daunting task newly matriculated medical students have chosen to undertake. Frankly, this is not particularly encouraging, especially as the firehose has become larger over the last few decades. Advances in medicine and technology mean that medical students are expected to learn significantly more information than their predecessors in the same amount of time. In addition, they are also expected to be involved in numerous extra-curricular activities, including research and leadership positions to strengthen their residency applications. In fact, lacking any of these

Acad Radiol 2022; ■:1-3

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<https://doi.org/10.1016/j.acra.2022.11.023>

activities is considered a shortcoming. There is a paucity of time to do all of the expected learning and look after one's health and personal relationships. Medical students often sacrifice their own health and relationships with family and friends in the pursuit of their dream to become a physician.

Financial Stressors

Medical students in the United States also sacrifice their financial freedom. According to the Association of American Medical Colleges (AAMC), the median educational debt for medical school graduates was \$200,000 in 2019 (11). This is compounded by the length of residency, anywhere from 3 to 7 years, where student loan payments, based on resident salary, may not cover the accrued interest. In addition, medical students and trainees often lack a high level of financial and business literacy (12). Financial stressors often drive students to pursue more competitive specialties, which offer higher compensation, better lifestyle, or both. This creates a rather vicious cycle as pursuing these specialties often adds to a student's workload, further increasing the likelihood of burnout.

Assessment-Related Performance Pressure

Medical students tend to be overachievers and consequently hold themselves to a high standard to succeed academically. As previously discussed, the work-related and financial stressors drive students to pursue competitive specialties, which often require AOA status, exceptional board scores, leadership experiences, and strong letters of recommendation. This performance pressure is further exacerbated during clinical years, where students are not only expected to succeed on their shelf exams but are also being constantly evaluated by their preceptors and residents. Being under constant scrutiny creates an enormous amount of stress, particularly during the student's rotation on their specialty of choice, where they would like to secure strong letters of recommendations. After a long day on the wards where students feel scrutinized, they are expected to go home and spend their evening studying and reading for their shelf exams.

WHY WELLNESS WORKSHOPS ARE INADEQUATE?

The first step in rectifying a problem is acknowledging its presence. In the last decade, there has been a lot more attention to medical student burnout nationally, and medical schools have attempted to respond to this issue by implementing a variety of wellness programs. These programs focus on introducing a variety of student activities and/or lecturing students on wellness, which are frankly insufficient and often counterproductive.

For example, imagine being a medical student in pre-clinical years and spending your entire weekend tirelessly studying for an upcoming exam on Monday morning. When the

exam is over, attention is paid to the neglected chores from the past weekend (if not the whole week), including email, grocery shopping, cleaning, laundry, etc. The school adds an 8 AM mandatory lecture on Tuesday about wellness, where students are told the importance of taking the time to take care of themselves to prevent burnout. The irony was not lost on the speaker, who opens their talk by noting the irony, then saying this is the time given to educate students on wellness. This is precisely what is occurring in many medical schools across the country. Not only is the timing of this lecture frustrating, but such lectures put further pressure on medical students. Students are told that burnout is very common and are given the responsibility to prevent it by adding relaxing activities to their very busy and exhausting schedules. It is almost presented as a failure on the student's part, instead of the medical school's culture and environment, if they end up experiencing burnout.

AN INVITATION TO ADOPT A HOLISTIC APPROACH

The medical field has traditionally been resistant to change. For example, it took decades to abandon the paternalistic approach to patient care and adopt a more holistic patient-centered approach with shared decision making. Similarly, in the last decade, medical schools have adopted a more holistic approach to recruiting medical students. However, medical schools continue to put the responsibility for wellness on medical students without addressing the issues and stressors that precipitate burnout. While some studies have shown resilience training to be beneficial, one could argue that medical students are some of the most intelligent and resilient individuals based on their accomplishment of gaining admission into medical school.

The USMLE Step 1 scoring has been changed to a pass/fail format effective in January 2022. While this may be a step in the right direction to alleviate some stress during pre-clinical years, there has already been an emphasis from residency programs on USMLE Step 2 (13,14). This change could increase the stress in the months preceding residency application because if a student underperformed compared to the standard of their specialty of choice, they would have very limited time to explore other career options.

Current interventions aim to mask the manifestations of burnout instead of addressing the underlying stressors. The point being that the burnout pandemic in medical education requires system-wide changes. The majority of medical schools heavily advertise a "pass/fail" grading system to applicants. However, few actually have a strict "pass/fail" grading system. For example, schools that may not use letter grades, use a tiered "pass/fail" system, which would include honors, high pass, pass, and fail. In reality, this tiered grading system is very similar to letter grades. A multi-institutional study found higher levels of stress, emotional exhaustion, and

depersonalization in schools that used a grading system with three or more tiers compared to those with a strict “pass/fail” grading system (15). This change would reduce the stress caused by competition for grades and, potentially, allow students to focus on important material as opposed to testable minute details of perhaps low long-term value.

Positive interventions are also needed on the wards to incorporate students as part of the care team as opposed to feeling constantly under scrutiny by residents and faculty. During clinical years, students will often work with several residents and attendings during the same rotation. While the variety can be beneficial to see different approaches to patient care and educating trainees, it is often disruptive to the team dynamic and the learning environment. Therefore, medical students, find it difficult to build professional relationships with residents and attendings, which often extends to finding excellent mentors in their fields of interest. An alternative to assigning medical students to a particular service would be assigning them to a resident, attending, or both (if possible), allowing the students to develop a working relationship, which would minimize the student’s feelings of being constantly evaluated. In addition, the student will be able to develop a better sense of what it is like to be an attending or resident in the field they are rotating on.

On a national level, adding additional residency positions, given the current mismatch between the number of residency positions and medical school graduates every year, as well as improving work conditions is essential to minimizing the stress surrounding The Match. In 2021, the AAMC predicted an “estimated shortage of between 37,800 and 124,000 physicians by 2034, including shortfalls in primary and specialty care” (16). If a holistic approach is not adopted to address the stressors leading to student burnout, we could see an increased dropout rate in medical school and/or residency, leading to a further shortage of physicians, creating worse working conditions resulting in a vicious cycle.

CONCLUSION

Burnout is an emotional experience that is often precipitated when the achievement of becoming a physician is outweighed by its pitfalls and stressors. As the rates of burnout, as well as comorbid mental health conditions particularly suicidal ideation, continue to increase among medical students, adopting a holistic approach to medical student wellness to address the pitfalls and stressors of medical education should be of utmost importance.

FUNDING

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

ACKNOWLEDGMENT

The author would like to acknowledge Dr. N Reed Durnick, for his assistance in editing the manuscript.

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