








# A medical student perspective on solutions for burnout

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**B**urnout among physicians has reached unprecedented levels, negatively affecting patient care and worker safety.<sup>1</sup> More than half of US physicians are experiencing professional burnout—a rate twice that of the general population.<sup>2</sup> Despite efforts to better understand the causes and effects of burnout, little is known about how to combat it.<sup>3</sup> Research has shown that there are different causes, such as increasing patient burden and the implementation of electronic medical record (EMR) systems. These causes tend to vary by level of medical training; however, few solutions have been proposed.<sup>4</sup> Previous attempts aimed at improving communication, workflow, and health care delivery have not identified effective interventions to significantly reduce burnout rates or improve overall job satisfaction.

Burnout is “a state of exhaustion in which one is cynical about the value of one’s occupation and doubtful of one’s ability to perform.”<sup>5</sup> It has three features: emotional exhaustion, depersonalization, and reduced sense of achievement. Understanding causes and factors that propagate burnout is important because it is a significant source of depression and fatigue, contributing to medical errors, decreased productivity, and early retirement.<sup>6,7</sup> The Maslach Burnout Inventory (MBI) with 22 questions explores the three features and is used to characterize and detect burnout in the “helping professions.”<sup>5</sup> Of 7288 US physicians surveyed with the MBI, 45.8% had at least one symptom of burnout,<sup>8</sup> and the percentage increased to 54.5% when the MBI was repeated 3 years later.<sup>2</sup> Compared with the general population, physicians expressed more dissatisfaction with work-life balance and were at a higher risk for all three components of burnout.<sup>8</sup> Health care is evolving, and physicians’ unique experiences hasten burnout.<sup>8</sup>

The etiology of burnout is multifactorial; however, time constraints, use of EMRs, professional culture, and

numerous other factors are contributors.<sup>9,10</sup> Our interest was to examine the literature and discuss with our colleagues the causes and solutions to burnout in medical students. As physicians-in-training, we have a vested interest in better understanding burnout starting in medical school to assist in developing programs to lessen it throughout our careers.

## CAUSES

There is agreement that burnout is a problem in medicine that is only getting worse. Unfortunately, burnout is observed in medical students and other trainees (residents and fellows), as has been reported in this country and others.<sup>6,11</sup> Burnout was thought to be worse in medicine than in other fields because of the intensity of the training; one has to ensure that each patient is dealt with fully to prevent errors that may injure patients or cost them their lives. This low threshold for mistakes promotes stress and anxiety in medical students.<sup>12</sup> Individual physician qualities (such as compulsiveness, high conscientiousness, and idealism), high patient load, and financial pressures were the three factors thought to contribute the most to burnout.

## SOLUTIONS

In our experience and conversations, we came up with the following solutions to burnout: fiscal responsibility training, loan forgiveness, fostering resilience and camaraderie, providing opportunities for structured counseling, lessening stress associated with the use of EMRs, and improving communication between physicians and patients.

### Offer fiscal responsibility training

A census of 3083 recent medical graduates indicated that 58% carried a debt >\$150,000, and 26% carried a debt

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>\$250,000.<sup>13</sup> Residents who had >\$200,000 educational debt had increased feelings of depersonalization, emotional exhaustion, and poorer quality of life scores.<sup>14</sup> A common theme was a lack of preparation for debt and wealth management, retirement planning, and achieving success in medicine. No data were found on institutional financial planning initiatives for medical students, residents, or physicians. This lack of guidance can lead to poor financial decisions and thus burnout. Schools should become more proactive in preparing students for financial management by including workshops in the medical school curriculum, offering students a more sensible approach to debt management, and providing a more accurate picture of expenses before they submit loan requests. During training, when residency selections have passed would be an ideal time to meet with financial counselors to discuss the next steps of financial planning. Implementing these recommendations could promote a more realistic view of life as a physician to demonstrate how current and future physicians can live within their means.

### **Offer loan/debt forgiveness**

Many physicians remain burdened by debt years into their professional careers. Higher levels of debt have been associated with increased burnout rates and decreased career satisfaction, depressive symptoms, and lack of quality of life and work-life balance.<sup>14</sup> Moonlighting among residents who carry debt increases their quality of life and satisfaction with work-life balance, because it can help alleviate debt burden.<sup>14</sup> If loan forgiveness/reduction programs were created for those who work in underserved areas, one of the largest factors of burnout in young physicians would be mitigated, and the program would provide medical care to areas that lack access. This may result in increased upfront expenses, but if programs were successful, a need would be filled in rural areas. By increasing the level of care in these regions, as well as implementing loan forgiveness/reduction programs, total expenses may drop over time.

### **Foster resilience and camaraderie**

Resilience is the antithesis of burnout. Cultivating resilience in medical students could effectively decrease or prevent burnout. This starts with medical students and their colleagues sharing their experiences as an effective way to reduce “emotional pressure” from work.<sup>15</sup> Support groups designed to promote resilience and foster communication about burnout are an option for prevention. Students can meet regularly to present cases for discussion of different aspects of patient care. These shared experiences help to lessen burnout stress.<sup>15</sup> Depersonalization, a factor of burnout, was reduced by 15.5% when physicians met for 3 months of biweekly discussion groups.<sup>16</sup> Baylor Scott & White Health employed this in a program titled “Resilient Doc.” The “Resilient Doc” is a web page that houses resources with physician testimonials, health and well-being information, and optional

burnout questionnaires like the MBI. A similar web page could be a resource for medical students.

Another approach would be to hire an individual dedicated to burnout prevention for medical students. Ideally, this could be a senior physician who is transitioning into retirement and could become a mentor for medical students. This approach could be a “win-win” for physicians of retirement age and for medical students, because one study showed that 64% of senior physicians planning to retire wanted to remain active in teaching (75%) and mentoring (55%) after retirement.<sup>17</sup> One survey revealed both a need and desire for mentorship among practicing doctors. About 51% of physicians in one study reported no regular mentor, and 47% of physicians said that they wanted to be mentored.<sup>17</sup> The same should hold for physicians-in-training and medical students. The senior physicians could meet with students individually or in a group to discuss their unique needs and ascertain potential warning signs for future burnout. This solution might allow these doctors to redirect their talent and desire for servitude toward a new type of “patient,” the medical student.

### **Provide structured counseling**

A clinical psychologist we spoke to was passionate about using preventive measures against medical student burnout. Employing lifestyle coaches, holding burnout workshops, using burnout testing instruments, and providing prevention counseling are all measures that can help prevent burnout. One important factor is addressing barriers for those affected by depression created by burnout. One study showed that over 85% of physicians did not seek help in these situations due to lack of time and convenient access.<sup>18</sup> Implementing a mandatory counseling program for medical students and residents would avoid both of these roadblocks as well as stigma and cost, two other important barriers.

### **Prevent stress associated with use of EMRs**

Stress associated with the use of EMRs is a driver of physician burnout. Almost 27% of physicians reported that inefficient EMR design/interoperability was one factor that made medical practice unsatisfying.<sup>19</sup> Another study found that primary care physicians who use more highly complex EMRs with greater capabilities have higher levels of stress than those who use less complex EMRs.<sup>20</sup> The pressure of time also contributes to stress when increased amounts of information are required to fill in complex EMR templates without any increase in time allotted for patient visits.

To reduce EMR implementation issues and medical student pressure during transition, a three-part solution is needed. Health care systems should implement more hands-on and interactive EMR training for medical students before they start a new system. Second, new users should have access to responsive information technology support groups and regular optimization meetings. Lastly, a system of proficiency testing during EMR training sessions to accommodate

different rates of learning is needed, so that those who learn more quickly can test out of unnecessary training sessions. More efficient training and increased access before transitioning to a new EMR system would reduce stress and eliminate one of the factors contributing to medical student burnout.

### Improve communication between physicians and patients

Currently, patient decisions are more collaborative, involving physician and patient. Once physicians discuss treatment options with patients, they can decide on a therapy and work toward a mutually agreed-upon goal. One aspect affecting compliance is patients' views of their physicians, because patients consider a physician's bedside manner an indicator of his or her medical competence.<sup>21</sup> Neglecting patient relationships can affect patients' abilities to achieve therapeutic goals, because if physicians are ambiguous in communicating expectations, patients will not understand their treatment, resulting in therapeutic failure.<sup>22</sup> A more patient-centric practice increases patient and physician satisfaction, decreases complaints and malpractice suits,<sup>21,23,24</sup> reduces perceived stress, and decreases levels of physician burnout.<sup>25,26</sup> Efforts need to be encouraged at all levels of physician-patient interactions. This instruction in physician-patient communication needs to start in medical school, so the students are not only given the tools for effective communication but are aware of the benefits of strong lines of communication. This training early in a physician's career can potentially lead to a drastic reduction of burnout at all stages of training.

### CONCLUSIONS

Burnout is a growing epidemic among health care providers. Burnout is not only prevalent but problematic at all levels of medical training and practice. Previous publications, discussions with members of the medical field, and the authors' own personal experiences were used to generate potential solutions to this problem as well as emphasize proposed solutions not currently or widely employed. The options presented here to prevent and/or treat burnout potentially are efficacious as well as fiscally and logistically manageable to implement. These solutions are not an exhaustive list but rather could be adopted individually or in steps to best fit an individual training institution.

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