

# Depression and suicide: Occupational hazards of practicing medicine

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## Abstract

There is growing recognition of the prevalence of depression and suicide in medicine but there is still a lack of understanding of its causes and solutions. For many years, the medical community has focused on the intrinsic characteristics of physicians and ignored the structural causes of psychological and moral distress. Students begin training healthier than their peers, but the environment of medical training and practice leads many to experience depression, substance abuse, and suicidal thoughts. Depression and suicide are strongly correlated with characteristics of toxic work environments, including high demands but little control over one's environment, bullying, and long work hours, characteristics almost synonymous with the darker aspects of the "hidden curriculum" of medical training. Dysfunctional work environments, unrealistic productivity requirements, and the moral injury of systemic inequality in healthcare drive persistently elevated rates of depression and suicide throughout our careers. Recognizing depression and suicide as occupational hazards would shift the conversation from individual efforts to systemic strategies. If depression and suicide are occupational hazards, then our schools, training programs, and employers have a responsibility to recognize, anticipate, and mitigate them.

## Keywords

Suicide, depression, occupational medicine, residency, medical education

I guess I should tell you about my loss. I haven't told anyone else this in years.

The man addressing me was in his 50s and had been practicing medicine for decades. He looked at me and grasped my hand for a few seconds. I could see his face betray his pain just for a moment, like a stoic veteran on the exam table. "My co-resident killed himself," he finally said. "We all knew, but no one talked about it. And I guess I am still really angry about that."

We were both at a conference for the Accreditation Council on Graduate Medical Education (ACGME) on physician well-being. There had been a lot of talk about burnout, very little mention of suicide. Shortly after his confession, we were asked to take our seats. The physician disappeared into the crowd.

When I first wrote about experiencing depression and suicidal thoughts in residency, I never expected years later I would continue to have these kinds of encounters with strangers.<sup>1</sup> Some have sent me letters about colleagues and loved ones who killed themselves,

looking for private ways to grieve when their institutions did not allow public ones. Over a hundred have reached out to me in crisis, unsure how to access support. I'm especially grateful for these messages, even as I remain furious that they may be emailing me from a hospital call room, surrounded by caregivers and unable to find care.

Beginning in medical school, we cover up our vulnerabilities, donning our white coats as if they possessed some talismanic charm to overcome our weaknesses. But scrubs and white coats do not make us superheroes; when seeking mental health treatment, we are often afraid to be honest with our colleagues. Those reaching out to me tell me how alone they feel;

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no statistic will convince them that many of their colleagues are probably also suffering and afraid.

Many of us are fighting this culture, but our piecemeal efforts are not enough. What we need is a paradigm shift. We need to speak about demoralization, emotional exhaustion, depression, and suicide as occupational hazards of practicing medicine.

To understand the risk of mental illness and suicide as occupational hazards would shift our conversation from individual strategies to systemic ones. Although we often talk about mental health disorders as diseases purely of biochemistry, depressive symptoms and suicide are strongly correlated with characteristics of toxic work environments.<sup>2,3</sup> These include high demands but little control over one's environment, bullying, and long work hours, characteristics almost synonymous with the darker aspects of the unofficial rules and cultural norms of medical training, commonly referred to as the "hidden curriculum."<sup>4</sup>

If depression and suicide are occupational hazards, then they are inherent risks of our clinical and training environment; our schools, training programs, and employers should recognize, anticipate, and mitigate them. This framework would allow us to employ evidence-based strategies to proactively connect students, trainees, and providers with life-saving mental health treatment, improve the quality of the environments where we work and train, and fight unacceptable and dangerous work conditions that harm providers and patients. It would also mean embracing the heart of occupational medicine: treating each case as a sentinel event and a chance for "meaningful clinical intervention" and prevention.<sup>5</sup>

This framework is at odds with much of the discussion around physician mental health, which has long emphasized inherent traits in medical students and physicians to explain the mental health crisis we are facing.<sup>6</sup> Such explanations ignore the fact that medical students are likely healthier than their peers at the beginning of medical school, but that this quickly changes: at any point in time, one in four medical students screens positive for depression or depressive symptoms, according to one comprehensive meta-analysis of students around the world.<sup>7,8</sup> One in 10 students reports contemplating suicide. But only one in six of those with depression has sought help, having internalized implicit messages about stigma and the possible impact on their careers, even as they are being taught explicitly that psychiatric diseases are common, treatable conditions.

The prevalence of depression drops toward the end of medical school, but dramatically increases during intern year. In a year-long study of interns who were emailed an anonymous depression survey (the Patient Health Questionnaire), 41.8% of participants screened

positive for moderate to severe depression at at least one point in the year.<sup>9</sup> Between 2000 and 2014, the ACGME reported at least 66 residents killed themselves, almost certainly an underestimation given that overdoses and deaths with "unclear intent" were systematically excluded.<sup>10</sup>

We lack rigorous studies of the mental health of physicians out of training, but we have known for decades that the risk of physician suicide is markedly higher than the general population. Three hundred to 400 physicians are estimated to kill themselves every year, but as many may choose methods like overdoses and accidents with unclear intent, the true number will never be known.<sup>11</sup> There is also some indication that the prevalence of depressive symptoms among practicing physicians may be rising.<sup>12</sup>

Our work is by its very nature traumatic. Witnessing death is an integral part of our training, and for some physicians, of our practice. We contend with the possibility of life-threatening errors. We toil in systems that push us to be more productive even when they provide us less and less structural support. Long after our paid hours are over, we fill out forms, review results, and close charts.<sup>13,14</sup> We spend the precious time we need to recover on demoralizing clerical duties that give the impression that our time and well-being are not valuable to our employers. Our joy in medicine is increasingly drained by these clerical tasks and the dysfunction of American healthcare, where drugs as old as insulin have become prohibitively expensive for many of our patients.

To effect change, we need to show that physicians' distress and suicide rates impact patient care. To that end, many researchers and advocates have emphasized the connection between burnout and medical errors, a relationship found primarily in self-reported studies of error and but not in those that measure error objectively.<sup>15</sup> Emphasizing this relationship is a mistake: it may increase discrimination against doctors who need help, discourage doctors from disclosing their distress and seeking care, and when measured rigorously and objectively, does not seem to exist.

Physician distress, however, does have important implications for patient care and cost: it is associated with a doctor's likelihood of cutting her hours or leaving practice, and may be a leading indicator of a dysfunctional clinical environment.<sup>16</sup> For every doctor who leaves practice, hospitals must spend half a million to a million dollars a year to replace them.<sup>17</sup> Suicide, too, impacts our patients: if 400 physicians a year take their lives, it has been estimated that one million patients would lose their doctor.<sup>18</sup>

When it comes to mental illness and suicide, we are all at risk, but we have too often lacked compassion in the way we approach our colleagues. We have lacked

the courage to fight the stigma that is killing us. We have not asked whether our unwillingness to reform medical training has eroded the empathy of generations of doctors.<sup>19,20</sup> We have not done enough to fight medical boards that ask doctors about mental health diagnoses in the same way they ask if we have domestic violence charges.<sup>21</sup>

A focus on the occupational risks we face would shift us away from “wellness” and “resilience” and place the onus on schools, training programs, and hospitals to do better for providers and patients. Instead of asking whether burnout leads to an increase in errors or not, we should be asking why we place so much pressure on physicians to catch these errors, missing opportunities to improve clinical care, unburden physicians, and keep patients safe.<sup>22,23</sup> It would strengthen arguments against senselessly invasive questions on licensing applications. Most importantly, it would lessen the stigma for those of us who experience mental health disorders in practice, and the fatalism that leads one physician a day to believe suicide is her only option.

When institutions are willing to confront the size of this epidemic of depression and suicide head-on, important cultural shifts are achievable. At Oregon Health and Science University, a large portion of residents and faculty access rigorously confidential mental health support through their wellness and suicide prevention program.<sup>24</sup> Stanford General Surgery has created a successful wellness program for residents that emphasizes relationships, structural support, and psychological safety.<sup>25</sup> It is notable that both of these programs are not afraid to speak openly about suicide. Stanford’s program, in particular, is dedicated to Dr. Greg Feldman, a former chief resident who committed suicide in fellowship.

We treat mental health disorders as the exception, but for many, they are a predictable consequence of training and practice. We need to start acting on that knowledge. Medical schools need to create confidential support for students, and forums for leaders to share their own struggles honestly. Residencies need to proactively encourage trainees to utilize care and debrief about traumatic cases, and the patients they could not save. Physicians in practice should be encouraged to seek care as a mark of professionalism, not a mark against it, and to connect with their colleagues in meaningful ways. We need to improve the humanity of medical training and healthcare, so that we can continue to fight for a more just system for our patients.

It is time for us to acknowledge the risks inherent to medicine, and the dysfunction that is making us and our patients sick. It is time to stop grieving the colleagues we have lost to suicide in hushed, secretive tones. Let us embrace our vulnerabilities as a

profession, as professionals, as humans. We have lost so many. We have too much to lose.

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