# BALLARD BRIEF

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# Mental Health Challenges Among Physicians in the United States

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# **Summary**

Physicians in the United States experience elevated mental health challenges compared to the general population of the US and other professional groups. Owing to the significant demands placed on their time, emotional resilience, and effectiveness, many physicians in the United States encounter mental health challenges that surpass the national average by approximately 1.5 times. Because of these challenges, physicians hesitate to seek help due to licensure complications, stigmatization, and a culture of perfectionism and independence. As a result, physicians are more likely to develop habits of substance abuse, especially alcohol. Rates of alcohol abuse are about 3 times higher among physicians in the US than among the general US population. Current best practices indicate that intervention is most effective during their medical school education, which can help reduce the onset of mental health challenges later in their career.

## **Key Terms**

M.D.—Stands for Doctor of Medicine. MDs are allopathic doctors. In other words, they treat and diagnose conditions using conventional medical tools like X-rays, prescription drugs, and surgery.<sup>1</sup>

**Burnout**—An occupational-related syndrome characterized by physical and emotional exhaustion, cynicism, depersonalization, and a low sense of professional accomplishment.<sup>2</sup>

**Healthcare Administration**—The general administration of hospitals and other provider facilities. Their central goals are to prioritize patient safety as well as to ensure the financial and operational sustainability of the sites they manage.<sup>3</sup>

American Medical Association (AMA)—The American Medical Association is a professional association and lobbying group of physicians and medical students.<sup>4</sup>

Mental Health Challenge—Mental health challenges differ from situational sadness or compassion

fatigue. They are more severe and longer-lasting and can significantly impact daily life. Some common mental health challenges are anxiety, depression, eating disorders, substance use, and experiencing trauma.<sup>5</sup>

**Compassion Fatigue**—Compassion fatigue is a term that describes the physical, emotional, and psychological impact of helping others—often through experiences of stress or trauma.<sup>6</sup>

**Medical Error**—An accidental injury caused by a medical professional.<sup>7</sup>

# Context

# *Q: What do mental health challenges among physicians look like?*

A: Although physicians experience various mental health challenges, anxiety, depression, and burnout are the most common and will be the focus of this brief. One study published during the COVID-19 pandemic analyzed 1,257 healthcare providers that had experienced mental health challenges. Among those who completed the survey, the most commonly reported conditions were anxiety (44.6%), depression (50.4%), and burnout with high levels of distress (71.5%).<sup>8</sup> Anxiety, depression, and burnout were often found to lead to reduced productivity, isolation and loneliness, increased absenteeism, and increased conflicts.<sup>9,10,11,12</sup> Triggers for these symptoms are very multifaceted, but some common ones include work stress, improper work-life balance, and traumatic experiences.<sup>13,14,15</sup> These feelings of anxiety and distress interfere with daily responsibilities, such as meeting quotas and deadlines, and can also interfere with building a solid physician-patient relationship.<sup>16</sup> Physicians' sense of control and autonomy have been looked over by increased administrative burden, electronic records, and health system constraints all of which are defined risk factors for mental health challenges.<sup>17,18,19</sup>

# Q: How do rates of depression and burnout among physicians compare to the US population and other medical professionals?

A: This number fluctuates depending on the study and time period; however, the general trend is that physicians have a higher rate of depression and burnout than the general population. In 2020, researchers found 18.4% of American adults reported being diagnosed with depression.<sup>20</sup> However, according to the Journal of the American Medical Association in 2015, the overall prevalence of depression among physicians in the US was 28.8%.<sup>21</sup> In contrast, nurses have reported rates of depression of about 22%.<sup>22</sup> Similarly, a study published in the Journal of the American Medical Association in 2019 found that physicians had a higher prevalence of depression and had higher rates of suicidal ideation compared to the general US population.<sup>23</sup> Studies have consistently shown that rates of

depression, anxiety, and burnout are higher among physicians than in the general population, with burnout being particularly common.<sup>24</sup> One study done in 2018 showed that among a general population of physicians in the United States, about 42% reported feeling burnout.<sup>25</sup> In contrast, a study done in 2020 proved burnout symptoms to affect 28.1% of all workers in the US.<sup>26</sup> This indicates that the burnout rate is about 1.5 times higher among physicians. Additionally, rates of burnout and depression were found to be highly correlated with a difference of only 0.7%.<sup>27,28</sup> This high correlation indicates that as rates of burnout increase, so will depression.

#### Burnout per 100 People



# *Q: How have physicians' mental health challenges and burnout rates changed over the years?*

A: Research suggests that rates of depression among physicians in the United States have been increasing over the last several years. However, it is important to know that these results fluctuate based on how they conducted their research. But despite this, research is relatively conclusive on the increasing rates of depression and mental health challenges amongst physicians. For example, one study found that the prevalence of depression among resident physicians was as low as 21% in 2011, but another study found it to be as high as 43% in 2014.<sup>29</sup> In addition, a survey of US physicians conducted in 2015 found that rates of burnout and depression had increased slightly to about 0.5%.<sup>30</sup> The recent COVID-19 pandemic also had a significant impact on the mental health of physicians, with an increase in depression, anxiety, and burnout.<sup>31</sup> A survey conducted in 2020 found that

nearly 58% of physicians reported symptoms of burnout, which was a significant increase from 2018 when they measured burnout to be 42%.<sup>32</sup> Efforts to promote physician well-being and reduce the incidence of burnout and mental health challenges have become an increasingly important focus of medical organizations and policymakers.

# Q: How do mental health challenges and burnout among physicians in the United States compare globally?

A: A: Studies suggest that rates of mental health challenges among physicians are high in many countries around the world and that the factors contributing to these challenges are often similar.<sup>33</sup> The rates of burnout and psychological distress are high among physicians in Australia. One study found that 43% of physicians reported high levels of emotional exhaustion, and 37% reported high levels of depersonalization, or feeling

detached from oneself.<sup>34</sup> One survey of over 2,000 physicians in Canada found that 30% reported high levels of burnout and 21% reported symptoms of depression.<sup>35</sup> In the United Kingdom, rates of depression among physicians were historically high, with one survey finding that 45% reported symptoms of burnout and 31% reported symptoms of depression.<sup>36</sup> The rates of burnout and mental health challenges among physicians have been studied and recorded in many other countries, including Brazil, China, India, Saudi Arabia, and South Africa.<sup>37</sup> While the rates of mental health challenges among physicians may vary from country to country, the overall trend appears to be that these challenges are a significant and growing problem in many parts of the world.

Physicians in the United States will be the focus of this paper due to high rates of medical error, and one of the highest reported trends of mental health in the world reported at 51.2%.<sup>38</sup> Not only have American physicians suffered greatly, but so has the United States healthcare system. The declining mental health of US physicians can lead to decreased quality of patient care, increased medical errors, and high healthcare costs.<sup>39</sup> In a study published in 2016, the pooled estimate of depression caseness, meaning the number of physicians scoring highly enough on a measure of depression to be considered as having clinically significant depressive symptoms, was 28.8% (compared to the national average of 8.4%).<sup>40,41,42</sup>

# *Q: What is the difference between burnout and mental health challenges?*

A: While burnout is often used synonymously with mental health challenges among physicians, the two terms are interconnected but must be understood in the context of mental health challenges among physicians. Although there is symptomatic and epidemiological overlap, burnout is defined as arising predominantly from workplace problems, whereas depression is agnostic to the cause; it is possible to be burned out and not depressed, and vice versa, or both.<sup>43</sup>

Burnout is primarily described as an organizational problem and not an individual one.44 Burnout and depression are related but have distinct symptoms and, as a result, require different prevention and management approaches; for example, antidepressant medications are a proven treatment for depression, but these medications might not be an appropriate intervention for burnout. Care must be taken to ascertain whether physicians reporting burnout might have an underlying depressive disorder amenable to evidence-based treatment if appropriately identified and whether physicians' reports of depression suggest occupational factors that contribute to distress.<sup>45</sup>

While the subject of burnout is often used synonymously with mental health challenges, the two terms will remain distinct as we discuss this issue. This is because burnout is defined as an occupational-related syndrome characterized by physical and emotional exhaustion, cynicism, depersonalization, and a low sense of professional accomplishment.<sup>46</sup> Mental health challenges, on the other hand, refer to a range of conditions that affect an individual's emotional and psychological well-being.<sup>47</sup> Overall, while mental health challenges and burnout are related, they are distinct challenges that require different types of interventions and support.<sup>48</sup>

# Contributing

# **Factors**

#### High Demand for Physicians

Increasing demand for physician work contributes to mental health challenges among physicians because it adds responsibility and burden to each physician. The medical field lacks physicians, with a ratio as low as 2.6 physicians to every 1000 people.<sup>49</sup> To put this into perspective, there are about 16 nurses per every 1000 people in the US.<sup>50</sup> This often results in issues that are not directly under physicians' control, such as quotas, monetary incentives, and stigmas surrounding mental health episodes.<sup>51</sup> The increasing demand for physicians in the United States has put

significant pressure on the current workforce. As of 2019, there was an estimated shortage of about 20,000 physicians.<sup>52,53</sup> This number is expected to rise as the number of insured people increases due to the Affordable Care Act.<sup>54</sup> There has been a historic 13% increase in demand for physicians since 2013.<sup>55</sup> However, this demand is not being met by new physicians entering the workforce, with a projected shortage of up to 124,000 doctors by 2034.<sup>56</sup> Within the next decade, 2 out of every 5 physicians will be over the age of 65, exacerbating the issue of physician shortage and further increasing the workload of current physicians.<sup>57</sup> With a shortage of doctors and an aging demographic, physicians are working longer hours, often averaging 50–70 hours a week.<sup>58</sup> In comparison, the average full-time working American works 34.4 hours per week.<sup>59</sup> All of these factors of over-strenuous work conditions contribute to the mental health challenges that physicians face.<sup>60</sup>

#### Shortage of Physicians



Physician Shortage
 Projected Physician Shortage

The demanding workload and stressful environment of the medical profession can also negatively impact the mental health of physicians. A case study found that 40% of surveyed physicians reported struggling with depression currently.<sup>61</sup> However, less than half of those who reported struggling with depression said they would seek help, citing reasons such as not having enough time, fear of being looked down upon by colleagues, or losing patients' trust.<sup>62</sup> This stigma is prevalent, with 57% of physicians nationwide reporting

that they would never seek help for mental health concerns due to fears of impartial treatment by their colleagues.<sup>63</sup> There are concerns about how mental health challenges may affect career opportunities, as most physicians worry that disclosing a history of mental health challenges could negatively impact their chances of promotions and accolades.<sup>64</sup> Even physicians struggling with substance abuse may hesitate to disclose their mental health challenges and coping mechanisms; according to one study, 52% of the physicians reported that they would never tell anyone.<sup>65</sup> This stigma and reluctance to disclose their struggle can lead to unhealthy coping mechanisms and further exacerbate mental health challenges among physicians.<sup>66</sup> This stigma has dramatically contributed to the prevalence of untreated mental illness among physicians. Research suggests that unreported and undiagnosed mental illness is likely a significant reason why the United States has seen an increase in mental health challenges without the rates going down.<sup>67</sup>

Physicians are typically required to meet with a certain number of patients each day and limit each visit to 10–15 minutes.<sup>68</sup> A study done in 2012 at San Francisco's Center for Excellence in Primary Care, performed by the University of California, revealed how many patients some physicians see. While working full-time and for most of the year, physicians could comfortably fit around 980 patients. However, multiple studies indicate that physicians can see upwards of 2,500 patients in a year.<sup>69</sup>



However, this reduced patient interaction time has been linked to lower job satisfaction and a greater

likelihood of burnout among physicians.<sup>70</sup> Those who fail to meet their daily patient quota may experience financial penalties, while those who exceed it may receive bonuses and other incentives. As a result, financial pressures often play a significant role in determining the length of patient visits.<sup>71</sup> Research suggests that the length of patient visits is related to job satisfaction among physicians.<sup>72</sup> Some studies indicate that when physicians can spend more time with their patients, they may feel more satisfied with their work and experience less stress and burnout.73

### Improper Institutional Support

The stigmatization and nuance of governing medical institutions have increased physician reluctance, poor identification and coping strategies, and a larger sense of physician uncertainty around mental health challenges. Approximately 50% of medical school students experience burnout, and 10% experience suicidal ideation.<sup>74</sup> Medical students who struggle with mental health challenges while working towards their medical degree may be at increased risk for developing depression, anxiety, or burnout as practicing physicians.<sup>75</sup>

Half of physicians reported that their residency training program did not equip them with the necessary tools to manage mental health challenges.<sup>76</sup> Residency programs often lack a structured approach to addressing social aspects of medicine, such as burnout and compassion fatigue.<sup>77</sup> To combat this, wellness programs, which are interventions to help both mental and physical health among employees, exist at many places of employment.<sup>78</sup> However, while 86% of hospitals claim to have wellness programs for their staff, only 19% of eligible employees participate.<sup>79</sup> This indicates a need for more excellent advocacy and implementation of wellness programs tailored to physicians. Furthermore, less than a third of hospitals that offer wellness programs reported that they had a positive impact on employee well-being.80



Wellness Programs vs Participation

According to a survey, almost 40% of physicians feel hesitant to seek help for their mental health issues, as they worry about facing difficulties in obtaining or renewing their medical licensure.<sup>81</sup> The State Medical Board (SMB), which handles the licensure process, can suspend a physician's license due to their psychiatric condition, regardless of the context, current or previous treatment received, or the severity of the condition.<sup>82</sup> According to one source, 13 of the 35 SMBs stated that a mental illness diagnosis alone would be enough to impose sanctions on physicians.<sup>83</sup> According to a study done, 37% of states can or have already sanctioned physicians based only on the disclosure of a psychiatric condition in their

licensing application, regardless of whether or not they are impaired.<sup>84</sup> Even if tests reveal no impairment, physicians may still feel discouraged from reporting any mental health issues due to the risk of an unfavorable prognosis. Therefore, more effort is required to address this issue and encourage physicians to seek help without fearing negative consequences on their licensure status.<sup>85</sup>

## Consequences

#### Lower Quality of Patient Care

Mental health challenges among physicians can lead to decreased attentiveness, lessened moral obligation, a desensitized sense of empathy, and a lulled sense of work satisfaction, all of which can result in a lower quality of patient care.<sup>86</sup> A recent study revealed that those experiencing burnout were significantly more likely to self-report medical errors. However, it is important to note that this still leaves a high likelihood of unreported errors.<sup>87</sup> The study also found that depersonalization, a common

characteristic of depression and burnout, was strongly associated with an 11% increase in self-reported medical errors per recorded point. In contrast, physical exhaustion among surgeons resulted in only a 4% increase in reported errors for every one-point increase.<sup>88</sup> These errors cause preventable adverse events that result in fatalities among hospitalized patients. Given the impact of mental health challenges on physicians, which have been linked to medical error rates ranging from 20–50%, addressing medical errors should be a top priority for healthcare organizations to ensure overall patient safety.<sup>89</sup>

Medical errors are responsible for around 100,000–200,000 deaths in the United States each year.<sup>90</sup> Studies show that physician burnout is as responsible for medical errors as unsafe work conditions. Stanford University showed that rates of error due to burnout may even be higher than unsafe conditions. Research done by Stanford Medicine explored physician burnout and how it influences patient care, safety, patient satisfaction, and turnover rates. They reported that "physicians with burnout had more than twice the odds of self-reported medical error, after adjusting for specialty, work hours, fatigue and work unit safety rating."91 It is worth noting that these estimates may not fully capture the extent of medical errors and their impact on patients. Even if medical errors do not result in fatalities or injuries, they can still have profound consequences for patients, such as prolonged hospital stays or additional medical interventions. Ultimately, all stakeholders must work together to reduce the incidence of medical errors

and effective care they need.

and ensure patients receive the safe

## Substance Abuse among Physicians

Mental health challenges among physicians can lead to substance abuse habits due to an elevated need for coping alternatives and self-medication. According to a systematic review and meta-analysis published in the Journal of the American Medical Association in 2016,

the pooled prevalence of alcohol abuse or dependence among physicians was estimated to be 15.4%, and more than a quarter of that was directly related to the manifestation of mental health challenges.<sup>92,93</sup> A study published in the Journal of Addiction Medicine in 2013 found that 13% of physicians with a history of substance abuse had abused prescription drugs that were easily accessible to them.<sup>94</sup> Physicians experiencing occupational distress are more likely to regularly drink alcohol, binge drink, or use drugs as a method of coping.<sup>95</sup> It is thought that 10–14% of physicians suffer from addiction to drugs or alcohol during their careers.<sup>96</sup> In contrast, the rate of alcoholism in the general public is reported to be approximately 5.8%. These high rates of addiction among physicians may be due to physicians trying to escape from the difficult decisions they have to make all day, or could be an attempt to stay awake during long or complex shifts.97



The demanding nature of the profession further increases the likelihood of developing these unhealthy habits, as evidenced by a study in the Journal of Addictive Medicine that found physicians struggling with depression and burnout strongly correlated with the development of alcohol disorders. The prevalence of substance abuse may also vary by specialty, with anesthesiologists being at higher risk compared to other physician specialties, according to a study published in 2016.<sup>98</sup> Substance abuse among physicians can cause even more severe consequences for patient safety,

including increased risk of medical errors and impaired decision-making.<sup>99</sup>

#### Suicidality

Mental health challenges among physicians can lead to many negative consequences, including a higher probability of self-harm and suicide. The rate of suicide among physicians is one of the highest of professions in the United States.<sup>100</sup> Female physicians commit suicide at rates 130% higher than the general population, and male physicians at rates 40% higher than the general population.<sup>101</sup> According to a systematic review and meta-analysis of 67 studies published between 1949 and 2019, the overall pooled prevalence of suicide among physicians was 28.8 per 100,000 individuals, which is more than double the rate of the general population, which has been recorded to be 12.3 out of every 100,000 people.<sup>102</sup> Additionally, a study published in the Journal of Clinical Psychiatry found that physicians with dual diagnoses of depression and substance use disorder were more likely to report suicidal ideation and

attempt suicide compared to those with either disorder alone.<sup>103</sup>

Physicians who died by suicide were less likely to be receiving mental health treatment than non-physicians who died by suicide.<sup>104</sup> A study published in JAMA Psychiatry in 2015 found that among physicians who died by suicide, only 29% had received mental health care in the year before their death.<sup>105</sup> The study suggested that improving access to mental health care and reducing stigma around seeking treatment may be necessary steps in addressing physician suicide. Overall, the data suggests that suicide is a significant concern among male and female physicians, and more research is needed to understand the factors contributing to suicide among female physicians fully. However, several studies have been conducted focusing on this population. One such study analyzed data from the US Centers for Disease Control and Prevention National Violent Death Reporting System during the years 2003–2016 and found that the suicide rate among female physicians was significantly

higher than that of the general population in certain age groups, particularly those aged 45–54 years.<sup>106</sup>

# **Practices**

## Web-Based Cognitive Behavioral Therapy

Alongside their irregular and exhaustive hours, medical professionals are put in positions where they need to make immediate, high-pressured decisions concerning their patient's health. If physicians feel responsible for specific outcomes, this can affect their emotional and mental state.<sup>107</sup> Cognitive Behavioral Therapy (CBT) is a therapy that can change how individuals think about specific situations or ideas. It can help to change behaviors or habits and work to treat some psychological problems such as anxiety or depression.<sup>108</sup> It works through a therapist changing the way you think about an event and the way you act after the event and gives you new techniques and strategies to respond to potentially traumatic events.<sup>109</sup> It is approximated that one

physician in the United States commits suicide every single day. Internet-based Cognitive Behavioral Therapy (wCBT) has shown some success among physicians struggling with suicidal ideation.



#### Impact

Administration and researchers from Yale Medical School and the University of Southern California set up a program that monitored suicide ideation while instituting wCBT, with the first trial running from 2009–2012. The program first involved 352 residents entering specialties of several types. The goal was to measure suicidal ideation before and after the program to see if there were any changes due to the wCBT. The wCBT program, MoodGYM, was developed by the National

Institute for Mental Health Research staff at the Australian National University. The program consisted of 4 weekly web-based sessions lasting approximately 30 minutes each.<sup>110</sup> The interactive program aimed to facilitate an understanding of the interplay between thoughts, emotions, and behaviors and taught cognitive restructuring techniques that promote the ability to identify and challenge inaccurate, unrealistic, or overly negative thoughts. The program also included problem-solving strategies. The entirety of the program was mobile, which allowed residents and physicians to continue with the program, even if they rotated into different positions or locations.<sup>111</sup> Researchers found that interns assigned to the test group were 60% less likely to endorse suicidal ideation during the internship year than those assigned to the control group. They also found that for every 11 interns taking part in the intervention, they expected to prevent one intern from developing suicidal ideation. Notably,

the effect of the intervention was sustained over an entire year.<sup>112</sup>

#### Gaps

Because physicians face a unique set of challenges at an institutional level, the programs that aim to assist at an individual level may overlook the real underlying challenges that contribute to the mental health challenges of physicians. This includes quotas, incentives, high-stress work environments, and licensure complications. Recent legislation was passed to assist in many of these concerns in a bill called the Dr. Lorna Breen Health Care Provider Protection Act: there is no assessment of its efficacy. Cognitive Behavior Therapy may also force individuals to realize traumatizing situations. If individuals do not follow the instructions of their therapist, it may be a less effective treatment.113

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