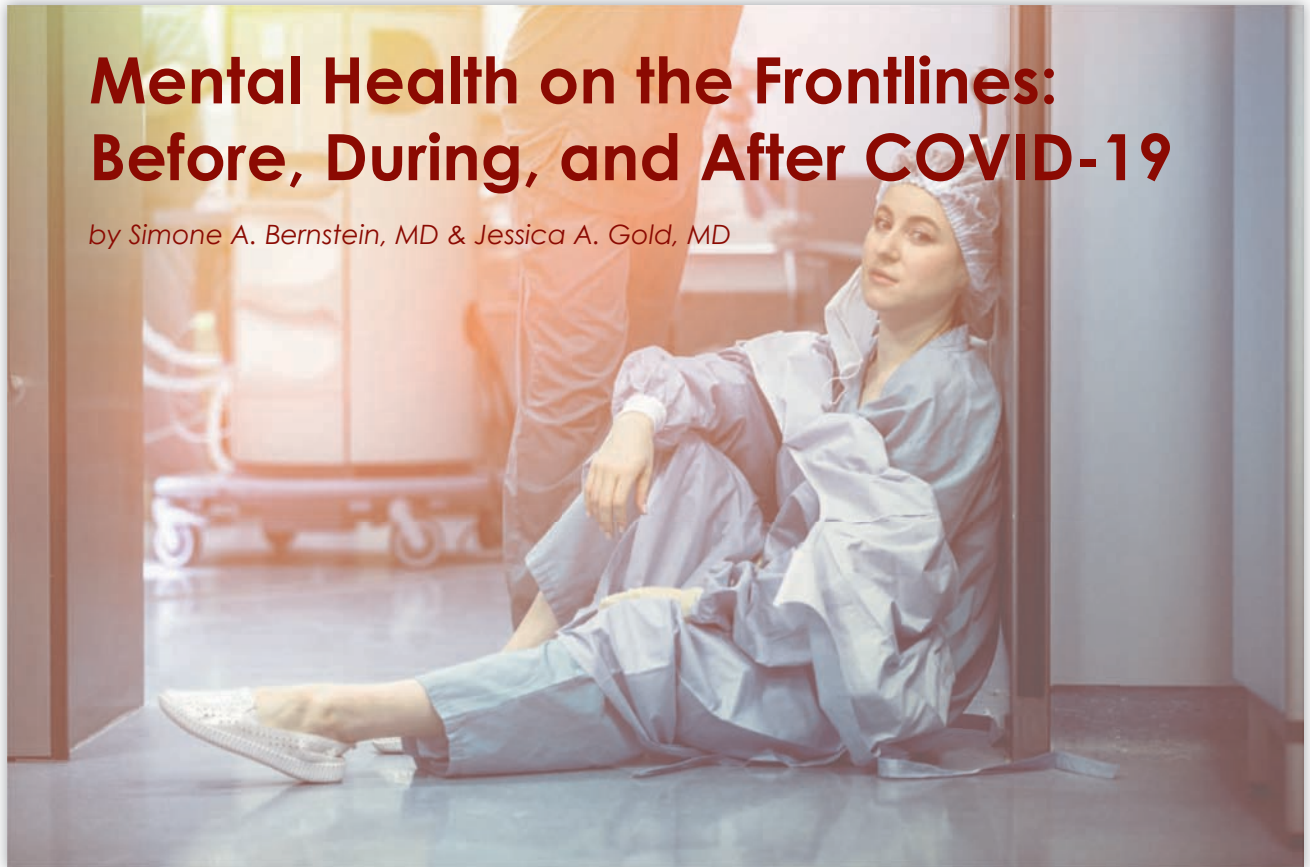


Mental Health on the Frontlines: Before, During, and After COVID-19

by Simone A. Bernstein, MD & Jessica A. Gold, MD



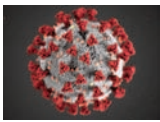
COVID-19 has impacted the psychological wellbeing of healthcare providers, worsening an already heightened baseline, and is likely to continue long into the future.

The essential nature of healthcare workers during the SARS-CoV-2 (COVID-19) pandemic has placed them at significantly heightened risk. Most simply, they are more vulnerable to a COVID-19 infection than the general population and many, with estimates greater than 900 in the United States (U.S.) according to *The Guardian*, have died as a result.¹ However, this increased risk of infection does not just affect their physical health, but affects them mentally as well. This strain is only worsened by other stressors unique to the pandemic work environment like the shortage of personal protective equipment, limited treatment options for patients, or working extended hours. It is not surprising, then, that there are studies outlining how employers can implement steps to reduce this significant burden on clinicians.²

Yet, mental health concerns, including burnout, substance use, depression, and suicide among physicians are not new and were issues long before COVID-19.³⁻⁷ These stressors are only compounding an already increased baseline. And, as we look towards the future, with rising cases across the country, and consider the ramifications of previous pandemics on mental health lasted up to three years, we also know that the outcomes are far from over when the pandemic itself is controlled.⁸ Therefore, we must consider the



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continuum for mental health in healthcare workers: before, during, and after the pandemic, as a way to better target interventions that can have long-lasting impacts on physicians in need.

Before COVID-19

Wellness has been a “buzzword” and topic of conversation in graduate medical education for many years. Prior to COVID-19, research has shown that depression was prominent in medical students (27.2%), residents (28.8%), and licensed physicians (13% in men and 20% in women).⁹⁻¹¹ Substance use was also prevalent and at some point in their career, 10-15% of medical professionals misused substances, with alcohol the most commonly misused. Prescription drug use was also much higher than the general population.¹² For example, 13-23% of female physicians used prescription opioids as compared to 1%-3% of the general population.¹² That number was 14-23% (vs 1-4%) in men.¹²

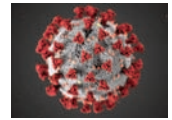
Given these numbers, one could make the argument that more strict and encompassing policies in medical schools and residency programs could help prevent some of the substance use issues in the medical field, similar to random drug and alcohol screens for pilots or ship captains whose impairment also impacts public safety.¹³⁻¹⁴ While this may be controversial for physicians and many programs simply test at the beginning of employment, random testing could detect and deter drug use and misuse over time. Massachusetts General Hospital randomly tested anesthesiology residents over 13 years, and there was no detected substance abuse among 628 residents, while there were four incidents the 10 years before initiation of their random urine drug screening.¹⁵ While this decreased use is based on a single-center comprehensive program, it suggests a larger study would be useful to determine if random drug screening reduces substance use disorders in medicine. However, these policies are unpopular even with the public and in 2014, California voters rejected a proposal that would have required physicians to submit to random drug testing.¹⁶

Burnout is also high in the medical profession. Though the definitions vary between studies, it is often defined as “emotional exhaustion,” feeling “used up” at the end of the workday, and a sense of reduced personal accomplishment.¹⁷ Physician burnout has many implications, including financial, and costs exceed \$213.1 million.¹⁸ Burnout is particularly relevant as it can lead to people leaving the profession, which, as the data from the Severe Acute Respiratory Syndrome (SARS) pandemic in Toronto suggests is only worsened during a pandemic.¹⁹

Given these high numbers, some policy changes were previously put into effect in medical education and training, like duty hours restrictions in 2003.²⁰ In 2017, additional changes were made by the Accreditation Council for Graduate Medical Education (ACGME) including the creation of policies and programs that support faculty members and residents to attend appointments for personal care, even during work hours. Additionally, the policies mention availability and access to confidential, affordable mental health counseling and treatment.²¹

One unique way to increase utilization of mental health services is an opt-out approach to a universal well-being assessment. In an opt-out study at a medicine residency program in the U.S., residents were scheduled for appointments when they were relieved from clinical responsibilities and it resulted in 93% of trainees attending their appointments.²² Residents who participated also described satisfaction with these appointments and said they were likely to return for visits if they had mental health concerns.²² While this is one study, it does suggest that opt-out programs could be one way to decrease barriers to care.

However, even if pathways are created to allow for care seeking, help seeking remains low in medicine due to a culture of stigma and fear. In fact, one study found that not a single female physician who died by suicide disclosed suicidal intent to a doctor prior to her death.²³ While there are many reasons why physicians do not disclose information about their mental health, one study found that 60% were concerned it could affect their medical licenses.²⁴ This causes some to get



Post-COVID Care

While the response to the impact of COVID-19 on mental health and wellbeing has significantly varied between institutions, all programs can find ways to improve discussions to create long-term solutions.

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care outside of the system—receiving prescriptions from friends who are not formally treating them—and can lead others to delay treatment until a crisis occurs, if treatment is sought at all.²⁴ As we know that approximately 300-400 physicians die by suicide in the United States, this is not just an urgent issue, it is a critical one.²⁵

During COVID-19

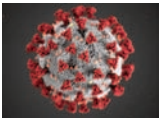
On top of an already strained emotional baseline, healthcare workers faced the sudden onslaught of a pandemic. Their day-to-day schedules changed, work environments looked different, patients were sicker, and their own risk much higher. All levels of medical training were affected in different ways. Medical school students on clerkships were removed from classrooms and rotations in the hospital, and those on research had their projects put on hold. Resident physicians were assigned to different rotations than ones originally scheduled, often to protect them from exposure. Yet, in some programs, trainees were sent to work in COVID-19 units, in specialties that were not their own, or graduated early to perform needed tasks. Faculty completed many outpatient appointments on virtual modalities, so patients were able to get care, but other procedures and “non-essential” work was put on hold. Not only did the life of a physician change inside the hospital, but home life shifted as well, and it became difficult to maintain a balanced life. Some also worried about infecting their families and chose to isolate in separate housing to keep them safe.

These changes had real mental health outcomes. In a study conducted in 34 hospitals in China, healthcare workers who engaged in

direct diagnosis, treatment, and care of COVID-19 patients endorsed more severe degrees of depression, anxiety, insomnia, and distress.²⁶ Among healthcare workers in New York, positive screens for psychological stress were common, including 57% for acute stress, 48% for depressive symptoms, and 33% for symptoms of anxiety. Interestingly, 61% of participants also expressed an increased sense of meaning and purpose since the outbreak, which is worth more analysis.²⁷ At Washington University in St. Louis, a study was completed that compared trainees exposed to COVID-19 vs those that were non-exposed.²⁸ Compared to the non-exposed group, the exposed group had a higher prevalence of stress (29.4% vs 18.9%) and burnout (46.3% vs 22.7%).²⁸ Meaning and purpose can be further explored in Victor Frankl’s book, *Man’s Search for Meaning*, a memoir of surviving a concentration camp.²⁹ This book reflects that for a meaningful life, you must pursue meaningful work.²⁹ One study of academic physicians showcased that value-aligned work protected from burnout.³⁰ Therefore, including and thinking about these concepts might be protective factors in mental health of healthcare workers or at least important foundations for treatment.

Mental health risk will only continue to worsen as cases increase across the country and possibilities of additional waves and repeated resource strains occur. It is also emotionally exhausting for physicians to continue to express their lived experiences and attempt to contradict the narratives about testing and protective equipment daily through public advocacy.

To help combat the emotional needs of healthcare workers during the pandemic, the World



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Health Organization provided recommendations to give psychological support including information about community-based health care, clinical management guidelines, strengthening health systems, and mental health.³¹ While comprehensive, this can be challenging if an organized structure of support was not in existence before COVID-19, as was the case in many hospitals.

As such, some hospitals have quickly created wellness initiatives including a hotline, virtual support groups and mindfulness sessions, and made mental health appointments more readily available via telehealth. Nationally, pro bono therapy programs have sprung up like Project Parachute, and a hotline run by psychiatrists was founded to address the needs for the nation's providers, especially those in institutions that can't help or those who feel more comfortable seeking help outside their institution.³²⁻³³ While these initiatives are needed and important, they remain underutilized and culture change is still necessary. It is also key for healthcare systems to plan for the longer term to design sustainable models of care for providers.

After COVID-19

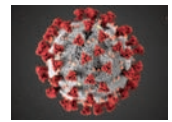
While the response to the impact of COVID-19 on mental health and wellbeing has significantly varied between institutions, all programs can find ways to improve discussions to create long-term solutions. This is critical...as we know from past pandemics that this will have mental health repercussions long into the future.³⁴ For example, following the SARS pandemic in Toronto, for up to two years, health care workers had significantly higher than normal levels of burnout.¹⁹ This pandemic and the effects are different and could have longer term impacts or more widely distributed ones.

To better take care of healthcare providers into the future, we need to first identify, screen, and follow at risk groups.³⁵ We know this includes providers who have directly taken care of COVID-19 patients, or who have been exposed to it themselves. This also includes quarantined providers, those with a history of mental illness, and trainees. While crisis intervention is good, we need to refer these groups to long-term care in an accessible and

affordable way. It also needs to be valued and not stigmatized at the highest level of leadership and through changes to licensing and credentialing. Yet, in 2017, two thirds of state medical applications still asked questions that stigmatized mental health.³⁶ As the way physicians are asked about mental health diagnoses and treatment affects their care seeking, and nearly 40% of physicians reported that they would be reluctant to seek treatment, these questions need to be changed urgently.³⁶ The Federation of State Medical Board recommends focusing the phrasing to address current impairment, or not asking the question at all.³⁷

Focusing on physician mental health and wellness will not only help physicians and keep people in medicine, but it will improve patient care.³⁸⁻³⁹ Burnout affects empathy and the number of patient errors. For example, the number of major medical errors have been correlated to burnout in surgeons and a decreased sense of altruism amongst medical students.³⁸⁻³⁹ One way an institution can focus on mental health is through increased training and discussions with healthcare providers to identify signs and symptoms in themselves and their patients. While healthcare providers monitor the psychosocial factors of their patient population and ask questions related to mental health, they will get comfortable with a mental health focused culture. This culture shift is needed as a culture that self-stigmatizes mental health will also not screen or refer patients to treatment or feel like a safe place for mental health conversations. Normalizing starts at the top.

COVID-19 has impacted the psychological wellbeing of healthcare providers, worsening an already heightened baseline, and is likely to continue long into the future. Using evidence from the impact of outbreaks like SARS and data from studies of healthcare providers worldwide working with COVID-19, healthcare institutions can continue to put into place solutions to address both the short and long term needs of frontline providers in their hospital systems. If COVID-19 has taught us anything, it has finally cemented that a wellness lecture or a tiny policy change is not enough to address the mental health needs in physicians. We need large and sustainable change, to culture, policy, and infrastructure, and we need it now.



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