



## COVID-19's Multipronged Attack on Mental Health

Months of uncertainty and threats to health, social, and financial security have contributed to intense anxiety, depression, posttraumatic stress disorder, and even suicide. Here, in part 2 of a 2-part series, we investigate the pandemic's growing mental health toll on the general public and efforts to address it

**A**fter months of social distancing, job losses, and shuttered businesses and schools amid the coronavirus disease 2019 (COVID-19) pandemic, mental health experts are warning of another massive crisis. Psychologists and psychiatrists are seeing multiple waves of anxiety, depression, and posttraumatic stress disorder (PTSD) in patients across the country. Self-reported drug and alcohol use has climbed, calls to suicide prevention and domestic violence hotlines have soared, and the public has struggled to acclimate to a "new normal" marked by extreme uncertainty and isolation.

The US National Pandemic Emotional Impact Report<sup>1</sup>, a multi-institutional survey of 1500 adults published on June 29, 2020, concluded that "At least a quarter of all US adults is presently in a condition of high emotional distress directly attributable to the pandemic." Individuals aged younger than 50 years and patients of racial and ethnic minorities have been especially hard hit, the report finds.

George Slavich, PhD, director of the Laboratory for Stress Assessment and Research at the University of California at Los Angeles, says the pandemic and public health measures implemented in

response to it have created a multifaceted threat to mental health, the impact of which can be compounded by individual stressors. "The pandemic for a lot of people is a major health scare. It's certainly the worst for people who have been exposed or who know somebody who has been exposed," he says. "But you have this threat in the air of you potentially contracting it at any given time."

COVID-19 has contributed to 3 other major stressors, he says. First, the pandemic has significantly disrupted individuals' daily routines and social connections, regardless of whether they have been exposed to the virus. For many people, their work environment and finances have been upended as well through major job modifications or outright layoffs. Research has suggested that a major life event in the health, social, work, or financial domains could prompt a depressive episode in approximately one-half of the people experiencing them, Dr. Slavich says. For some people, COVID-19 has disrupted all 4 domains at once.

Even worse, the pandemic has cut off normal channels of support. "One of the perverse things about this virus is that the very people you care about the most are the ones who can do you the most harm," says David Spiegel, MD, associate chair of psychiatry at Stanford University and director of the Stanford Center on Stress and Health in Stanford, California. "They can pass this thing on to you, and so your usual caregivers become a potential danger."

A feeling of solidarity and community, he says, can partially make up for the lack of social connectivity, but that has frayed too as the pandemic has worn on. Dr. Spiegel charges that federal missteps in public health messaging and management have furthered the stress through increased unemployment and uncertainty.

### A Worsening Syndrome

The 2019 book *The Psychology of Pandemics* suggests that psychological factors are key to understanding and managing the societal problems associated with pandemics, such as the spreading of excessive fear, stigmatization, ➔

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and xenophobia. Author Steven Taylor, PhD, a professor and clinical psychologist in the department of psychiatry at the University of British Columbia in Vancouver, British Columbia, Canada, says that compared with other recent outbreaks, the COVID-19 pandemic is contributing to societal problems through a far broader constellation of mental health issues.

Through several rounds of survey data collected from Canada and the United States, Dr. Taylor and his colleagues have identified a complex interplay of mental health stressors incorporating features of anxiety-related disorders such as obsessive-compulsive disorder, PTSD, and generalized anxiety disorder. Dr. Taylor calls it COVID stress syndrome.<sup>2</sup>

People with the syndrome tend to be frightened of getting infected, of touching surfaces that might be infected, of foreigners who they believe might be spreading contagion, and of the pandemic's socioeconomic fallout. "They're constantly thinking about COVID-19; they're having nightmares about it. And they're engaging in compulsive checking and reassurance seeking about their health," Dr. Taylor says. In addition, people with more severe forms of the syndrome are more likely to have pre-existing mental health problems. "So it's as if this pandemic has served as a massive stressor for highly vulnerable people to become exceedingly anxious," he says.

In Dr. Taylor's survey data, approximately 20% of respondents say their drug or alcohol use has increased, sometimes to hazardous levels. Others have coped through overeating or online shopping, all of which are examples of emotion-focused coping strategies.

Among the lasting harms, some experts have cited an increased potential for physical and sexual abuse due to exacerbated power imbalances, stress, drug and alcohol abuse, and extended isolation or quarantine at home with an abuser. The Rape, Abuse and Incest National Network has reported a spike in calls to its national hotline, particularly by children. "Many of my patients who were physically or sexually abused as children found school as the only respite they had," Dr. Spiegel says. "It was the one place where they knew they weren't going to get attacked or mistreated."

The disturbing reports of increased sexual and domestic abuse, Dr. Taylor says, have followed a pattern observed after other emergencies, such as the displacement of residents by wildfires and other natural disasters. "They're relocated, they're put into hotel rooms, they're stressed about finances, they're drinking more, and so that erupts," he says.

### An Inflammatory Response

To help understand how best to intervene, Dr. Slavich and his colleagues have begun to dissect the biological and neurological contributors to disrupted mental health. Social safety theory, he says, suggests that without the protection or resources of social contacts, an isolated person's brain may heighten its surveillance of potential threats in the social and physical environment.<sup>3</sup> That constant scanning may help to protect the individual from harm in the short term. "But then those responses can become health-damaging over the long run," Dr. Slavich says. A big reason why, researchers are finding, is the potential for chronic inflammation.

Inflammation-promoting cytokines are critical immune system components that can accelerate wound healing and recovery after an acute injury. However, in response to social threats that the brain perceives as increasing the risk of physical danger, Dr. Slavich and other experts believe that the body initiates an anticipatory release of pro-inflammatory cytokines. When the perceived threat becomes chronic, the body engages in a prolonged surveillance and inflammatory response that can do more harm than good, especially in more vulnerable individuals. Chronic inflammation, which has been linked to anxiety, depression, PTSD, and even suicide, can heighten the risk of physical ailments such as cardiovascular disease and cancer as well.

Despite the growing toll, experts say the damage is not insurmountable. "One of the great things about inflammation is that it seems to be sensitive to several different types of interventions," Dr. Slavich says. In a recent meta-analysis in *JAMA Psychiatry*, he and his colleagues reviewed the positive, anti-inflammatory effects of multiple interventions.<sup>4</sup> Among them, he cites cognitive behavioral therapy,

mindfulness-based stress reduction, yoga, meditation, eating a well-balanced diet, and maintaining a physical routine.

At Stanford, Dr. Spiegel says psychiatrists have pivoted to telemedicine fairly well and approximately one-third of patients actually prefer the virtual sessions to the hassles of in-person visits. "There is more psychiatric support available than people may think, and we should take full advantage of that," he says. To help patients better understand what they may be experiencing, Dr. Taylor's group has set up a website called coronaphobia.org, which includes a 36-item COVID-19 stress scale. The information gathered from participants, in turn, may help him and his colleagues to develop an online treatment platform.

On a broader level, several experts say governmental and health agency responses to mental health emergencies have been largely reactive rather than proactive. COVID-19 has laid bare the shortcomings of that model, although the wakeup call may prompt a rethinking of what Dr. Taylor and others say is a fully inadequate mental health infrastructure. "Maybe this is a golden opportunity for us to get that infrastructure in place," he says, "because there will be another pandemic, that's inevitable." Other disasters likewise may require significant mental health resources. "The digital infrastructure we can set up for delivering mental health services can be applied years or decades later in coping with the other challenges ahead," he says. ■

### References

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