# COVID-19-Related Stress on Physicians

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oronavirus disease 2019 (COVID-19) was first reported in December 2019. As of February 2, 2021, more than 104,333,878 individuals worldwide were documented with the infection, including 2,265,559 deaths. In the United States, there have been >26,545,905 cases and 450,273 deaths. The psychological and socioeconomic toll has been substantial for patients, family members, and frontline healthcare workers.

Patients have endured uncertainty regarding prognosis, hospitalmandated separation from family members, loss of accustomed coping mechanisms, and resurgence of substance abuse or psychiatric disorders. The stress of frontline physicians has been considerable, fueled by shortages of personal protective equipment, concerns about personal infection and transmission to family members, longer work hours, and shortages of intensive care-trained staff.<sup>3</sup> Reported manifestations of physician stress have included sleep deprivation, higher rates of depression, somatization, anxiety, obsessive compulsive behavior, and posttraumatic stress.<sup>4,5</sup> There also has been a greater propensity for physician burnout. Burnout comprised three dimensions: emotional exhaustion; cynicism or depersonalization, wherein health professionals distance themselves from patients under their care; and a sense of diminished personal achievement, with dissatisfaction and feelings of diminished competency.<sup>6</sup>

Experts recommend that physicians engage in open discussion of fear and anger related to the COVID-19 pandemic.<sup>3</sup> They also suggest heightened awareness of their personal vulnerability to the mental health sequelae associated with providing care for patients with COVID-19 infections.

## Methods

In October and November 2020, a survey among Louisville, Kentucky doctors was conducted to assess their perceived stressors related to providing COVID-19 care. It also sought to determine what interventions they have found helpful in mitigating distress. The survey included physicians from a variety of specialties, including surgery, emergency medicine, palliative care, hematology/oncology, obstetrics and gynecology, psychiatry, addiction medicine, internal medicine, and intensivists. Twelve physicians responded

ferent medical specialties as possible and to determine any variance between stressors and field of practice. None of the doctors approached declined to be surveyed. All of them had experience providing care for patients with COVID-19; the intensity and frequency of contact was dependent upon the medical specialty. In terms of demographics, the respondents ranged in age from the 20s to the 70s. Seventy percent of them were male. These doctors provided care at two inner-city hospitals, each of which served a significantly large African American population. Some of the physicians had outpatient care responsibilities and approximately 50% functioned as inpatient hospitalists.

Survey queries included the following:

to the survey. It was conducted in person by a consultation/liaison psychiatrist. Respondents were chosen to represent as many dif-

- Can you identify from your personal experience stressful aspects of providing COVID-19 care?
- Would you compare the amount of distress when first encountering these patients with how you feel currently?
- What have you now found to be helpful at providing a greater degree of comfort?

In addition to these formal survey questions, participants were encouraged to openly express further comments relating to COVID-19 care in a conversational manner. The target audience for this survey was healthcare professionals who treat patients with coronavirus; thus, the survey was exploratory and potentially therapeutic.

## Results

Several themes emerged from the survey. These interviews explored stressors and means to relieve stress.

## **Family Concerns**

Fear of infecting their own family members was the most common stressor reported by doctors in all specialties. This fear outweighed concerns about personally becoming ill from the virus and was more frequently mentioned by medical intensivists who often intubated COVID-19 and COVID-19 presumptive patients. Those who performed intubations indicated feeling a need to "keep my distance" from spouses and other family, especially for a few days after a difficult or invasive procedure. They reported leaving their shoes on the porch, wearing only freshly washed white coats, and changing scrubs frequently. They tried to leave work and put the day's concerns behind them, but concern about possibly bringing home the virus persisted.

### **Personal Fears**

Although the fear of personal infection and subsequent illness was significant in the early days of the pandemic, physicians in this survey did not identify it as a major current stress. Comments commonly included, "This is why I became a doctor," and "I still have a job to do." Some of them seem to have accepted the fact that eventually they would become seropositive. Obstetrics/gynecologists

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noted only a small degree of fear for personal infection since all pregnant patients are prescreened medically before being admitted to labor and delivery suites. They did not know what effects the coronavirus infection may have on the progeny of childbearing women.<sup>7</sup>

Psychiatry was the specialty in which fear of becoming infected remained high, especially among those who provide emergency psychiatric evaluations and/or care. Their patients often were severely depressed or suicidal, psychotic, sometimes combative, and suboptimal at masking and maintaining social distancing guidelines. In addition, many of them refused COVID-19 screening, thereby heightening physician anxiety.

Hospital discharges were a prominent situation in which apprehension about becoming infected remained high for some physicians. This involved chances for illness exposure while caring for someone who at discharge or transfer to a nursing facility unexpectedly evidenced being positive for COVID-19.

## **No Family Present**

Physicians in all specialties described great emotional discomfort at watching seriously ill patients suffer when being barred from having family visitation because of contagion concerns. Many hospitals restricted visitors. Patients also indicated that they were conflicted about wanting family present, believing that a visit would be dangerous. This worsened stress for everyone. The upset was intensified since other caregivers, such as chaplains, also were barred from direct patient contact. Older adults were the most affected, especially those exhibiting cognitive deficiencies and/or when prescribed treatments for managing behaviors with the potential for adverse effects.

Some physicians opined that holding a patient's hand and/or having a spouse at the bedside could obviate the need for some pharmacotherapies. Not having family members with their relatives was the main cause of distress for palliative care doctors. They were less able to conduct in-person family meetings to decide upon directions of care that maximize quality of life issues for terminally ill relatives.

## **Less Intimacy**

Some psychiatrists, especially those who treat patients in outpatient settings, bemoaned the loss of personal intimacy necessitated by the use of electronic devices. Isolation from direct human contact compromises rapport; this negatively affects communication and prognoses by diminishing compliance with physician recommendations. Some complained about diminished expression of empathy when communicating through electronic devices; this is sometimes even worse with individuals who were paranoid or suspicious about such devices. Older patients were more uncomfortable using electronic means of communication. Despite understanding the need to wear personal protective equipment, maintain physical distancing, and use telepsychiatry, some believed that these interventions changed the nature of the physician—patient relationship.

## **Nursing Morale**

"The nurses are depressed; I know they are," commented one internist, when asked to name his main concern in caring for patients with COVID-19. Issues about staff morale were a source of physician distress. Professional burnout among nurses was more obvious. This applied especially to those whose job required direct contact with sick people for many hours of long shifts

Doctors generally felt helpless at how to mitigate the level of stress that nurses were experiencing; this increased their own discomfort. Psychiatrists consulting on suicidal or encephalopathic patients would occasionally order one-to-one clinician watch observations, requiring a staff member to remain in the same room to monitor a COVID-19 patient for many hours. Issues regarding nursing morale are generally addressed by hospital administrators and/or nursing supervisors, but they remained a concern for physicians and induced considerable discomfort.

## **Exacerbation of Previously Diagnosed Disorders**

Addiction medicine physicians noticed that patients with substance abuse conditions often lost their usual support networks, contact with sponsors, and access to Alcoholics Anonymous or Narcotics Anonymous meetings. This increased the risk of drug relapse, overdoses, and resultant fatalities. Outpatient psychiatrists also noted an increase in anxiety among otherwise healthy individuals, the "worried well," who voiced apprehension about becoming ill and fear of becoming disabled. As such, many physicians providing COVID-19 care requested psychiatric consultation for patients with previously diagnosed mood, psychotic, neurocognitive, and/or anxiety conditions.

## Helplessness

Some degree of helplessness was common to clinicians treating patients with COVID-19. Oncologists were frustrated about the inaccuracy of laboratory testing and lag time in obtaining test results. They also were concerned about how to correctly document cause of death in someone diagnosed as having coronavirus, but who died of other pathology. Lack of access to drugs such as remdesivir and the inconsistent, often unreliable information about this illness was a cause of frustration. The fact that there was no known cure, no way to tell whether immunity would protect someone from a recurrence of the disease, and not knowing which organs would be most affected increased the feelings of helplessness and frustration. Added to this was the concern about shortages of protective gear, inadequate test kit reagents, and fear of contracting the disease and potentially transmitting illness to family. Together, these yielded distress for physicians providing care to these patients.

## **Protective Gear**

Upset about the scarcity of personal protective equipment early in the pandemic led to some physicians deciding to provide

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their own supplies. Such shortages meant that social workers, chaplains, and other caregivers often were unable to offer face-to-face contact, to the detriment of good health care. Some were angered by ever-changing recommendations on viral illness prevention guidelines. Questions included the following: Which is the best mask? Should more than one be worn? Do goggles help? Are goggles better than a face shield? Should patients also be masked during medical encounters? Once protective equipment and disease information became more available, these concerns diminished.

## **Disposition Issues**

Extended hospital stays because of issues regarding coronavirus-related dispositions were upsetting for physicians and social services personnel. Because of media reports about the increased number of deaths among nursing facility residents, many families were reluctant to allow their loved ones to be discharged to rehabilitation and/or long-term care facilities. In addition, many nursing facilities began requiring negative COVID-19 screening results before someone being admitted or returning to their facilities. Given the initial delay in receiving test results, this also prolonged hospital stays and there were some patients who needed placement but refused coronavirus testing. Finally, there was the problem of disposition for anyone who was homeless, but did not qualify for a rehabilitation bed or long-term placement. Psychiatrists experienced prolonged difficulty at finding placement for patients with COVID-19 who required psychiatric hospitalization.

# **Conditions Neglected**

Most of those surveyed, especially internists and emergency medicine physicians, were frustrated that so many patients with potentially life-threatening or other significant pathology came to medical attention late out of fear of contracting the disease. This delay in seeking medical care meant that these patients arrived with more advanced disease and poorer prognoses. Those in emergency departments were more critically ill, creating facility and staff overload with more hospitalizations and likelihood of admission to intensive care units. Cardiologists complained that these fears and associated delays resulted in more severe cardiac events, and neurologists also often saw patients hesitant to seek care, despite overt stroke-related symptoms. Surgeons reported that because of COVID-19, most elective procedures were postponed. Even individuals with symptoms indicative of COVID-19 arrived for care later and sicker, thus creating further distress for caregivers.

# What Helps?

Physicians explained which interventions helped to reduce stress, as in the following sections.

## **Celebrating Small Victories**

Keeping perspective was a common stress reliever. Instead of ruminating about patients lost, focusing on the one who no one expected to survive but did was helpful. It was the same for those who were thought to be infected with COVID-19, but turned out not to be. Physicians derived satisfaction from focusing on clinical victories even though the pandemic was far from over. Most physicians had inspiring COVID-19 recovery stories to share once they were encouraged to do so.

## **Paying Attention**

COVID-19 first responders are lauded by the community with pride; that recognition diminished stress, which is in stark and unfortunate contrast to the early acquired immunodeficiency syndrome caregivers who were similarly stressed, but rarely received support or appreciation. In COVID-19, a banner over an intensive care unit that read "Heroes Work Here," significantly raised medical staff morale; anything that improved the nurses' outlook made doctors and other healthcare workers more comfortable. Although many survey respondents had not noticed such tokens of appreciation, those who did were pleased and comforted by the recognition.

## **Avoiding Coronavirus News Saturation**

Physicians should be up to date on illness guidelines, but many were frustrated by constant, often-changing reporting about the virus. Limiting their exposure to conflicting and distressing news reports and using off-duty time to focus on other activities alleviated stress.

## **Engaging in Acts of Kindness**

Anything doctors did to boost nurses' morale improved the work environment and thus reduced their own stress. This included friendly greetings, such as asking about family, expressing appreciation for dedication and commitment, and saying that we are all in this together was helpful. Also positive was advocating on their behalf with hospital administrators and generally being more considerate than they were typically. These activities helped nurses feel better, combatted physician feelings of helplessness, and reduced their level of stress.

#### **Attending to Self-Care**

Given that they worked long hours under stressful conditions, most physicians never mentioned self-care as a stress reliever. Those who did often recognized the benefits retrospectively, noting how much better they felt after taking time off and being able to delegate responsibilities. Although many physicians intellectually recognized the benefit of attending to self-care, some of them did not put it into practice. Many of them intellectually recognized the benefit of such care, but were less good at compliance. Several of them adopted a stoic demeanor, working endless hours, and feeling that they were indispensable. The value of self-care often was recognized only in hindsight. 9,10

## **Promoting Activism**

Involvement on hospital boards or community agencies that set policies for coronavirus care promoted professional energy and optimism. It also combatted feeling of helplessness. Lobbying for terminally ill patients to have some personal contact with family members gave physicians a sense of satisfaction, even if such attempts were unsuccessful. Raising alarms about protective gear and COVID-19 equipment shortages and delays in obtaining coronavirus test results gave physicians satisfying feeling that they were making a difference.

## **Appreciating Prayer**

Prayer was mentioned as a coping mechanism. Physicians received some solace when families and coworkers promised to pray for them.

## Reflections

The COVID-19 pandemic created challenges for doctors already struggling with low morale, long work hours, increased administrative responsibilities, and time-consuming medical record documentations. The study suggests that physicians tend to underestimate the psychological toll that caring for sick patients entails and the value of having avenues available for debriefing. They frequently adopt a stoic attitude to avoid emotional overload and feelings of helplessness. There seemed to be a general belief that they should not allow themselves to think about how emotionally overwhelming providing such care is; the result may be upsetting and diminish confidence and/or quality of medical care. Many respondents seemed relieved to discuss the emotional stressors related to COVID-19 illness with comments such as, "I'm glad you asked me that question," and "Thanks for giving me an opportunity to talk about this." Physicians did not mention debriefing as a tension-relieving intervention. Recommendations for greater calm were more about "doing something" rather than allowing themselves to "feel something." These findings were not unexpected and are common among physicians caring for critically ill patients, regardless of patient diagnosis.

Some surveys discuss stressors for one subspecialty, such as emergency medicine, or examine all physicians. Our study differed in some respects from other published literature; it focused on a variety of specialties and the issues germane to each population.

# Summary

The most common stressors across all medical specialties were fear of transmitting infection to family members, low hospital staff morale, and consequences of restrictive family visitation policies. Specific responses based on medical specialty are summarized in the Table. The interviews were conducted in October and November 2020. Respondents reported a lessening of concern about shortages of personal protective equipment as time and experience caring for these patients progressed. Few physicians mentioned concerns about their own mental health

## Table. Physician stressors by specialty

Addiction Medicine	Loss of usual patient coping mechanisms to remain drug free
	Consequences of lockdown-related boredom
	More substance abuse, more overdose deaths
Cardiology	Delays by seriously ill patients at seeking medical care
Emergency Medicine	Shortages of protective gear
	Long lag time to obtain test results
	Delays in seeking medical care
Hematology/Oncology	Questionable accuracy of and delay in receiving test results
	Hard to determine cause of death in patients with COVID-19
Internal Medicine	Personal protective equipment shortages
	Restrictive family visitation policies
	Low staff morale
	Problems in obtaining appropriate patient dispositions
Medical Intensivists	Concern about infecting family members
	Personal protective equipment shortages
Neurology	Prolonged neurocognitive deficits of patients with COVID-19
	Delays among very ill patients at seeking medical care
Obstetrics/Gynecology	Fear of infection exposure
Palliative Care	Watching patients die alone
	Diminished patient intimacy
	Difficulty setting goals for care
	Restrictive family visitation policies
Psychiatry	Diminished patient intimacy
	Concern about personally becoming infected
	Suicidality and substance abuse relapse
	Placement issues for suicidal or psychotic patients with COVID-19
Surgery	Concern about infecting family members
	Personal protective equipment shortages

COVID-19, coronavirus disease 2019.

and were more likely to allude to the consequences of overburdened members of the nursing staff and ancillary personnel. The most common remedies were appreciating even small clinical successes, paying attention to community support, avoiding coronavirus news oversaturation, and attending to self-care. Although several respondents expressed gratitude for having been given the opportunity to discuss COVID-19-related stress, paradoxically, few of them had used discussions with colleagues about the psychological impact of providing coronavirus care.

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