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Implications of COVID-19 sequelae for health-care personnel



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The COVID-19 pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was initially described as causing a severe acute respiratory syndrome. Clinical studies have since shown that COVID-19 is a systemic illness with the potential for multiorgan complications. As the pandemic unfortunately continues, COVID-19 has the potential for a broader and more insidious effect, including the loss of skilled health-care personnel to post-COVID-19 disabilities.

Persistent and diverse postviral symptoms have been described in survivors of COVID-19, including those with a mild initial disease course.¹ The development of neuropsychiatric disturbances following a viral infection is well known to health-care providers (ie, postviral syndrome or in this case, so-called long COVID). Postviral neurological sequelae have been described following infections such as with influenza virus,² West Nile virus,³ Ebola virus,⁴ and Zika virus,⁵ and after herpes virus reactivation.⁶ Despite the known relationship between infections and postviral syndromes, the pathophysiology of postinfectious neurological complications and risk factors are unclear. Overwhelming fatigue with altered sleep, postexertional neurological exhaustion, multidomain cognitive dysfunction, persistent headaches, demyelinating syndromes, peripheral neuropathy, and autonomic instability are prominent features in postviral syndromes; similar concerns present among people with persistent COVID-19 symptoms. Currently, no curative treatments are available for postviral syndromes. Therapy is directed at symptom alleviation and coping strategies. Additionally, the economic effect of postviral syndromes can be substantial, including loss of productivity and employment, and increased need for disability benefits and financial support.

As of Dec 19, 2020, the US Centers for Disease Control and Prevention (CDC) reported 283 906 cases of COVID-19 among US health-care personnel,⁷ although this is probably an undercount due to incomplete reporting from states. In one study, health-care personnel were up to 24 times more likely than the general community to test positive for SARS-CoV-2.⁸ In our own neuropsychiatric and brain health clinics, we have seen numerous patients for long-term symptoms following mild cases of COVID-19. Many include health-care personnel who struggle to return to work long after

the resolution of their respiratory illness. The barriers to returning to work are often low energy, cognitive symptoms, and affective symptoms. For example, a middle-aged, critical care nurse with years of both clinical and academic experience described having poor focus during patient encounters, forgetting names of essential medications, and debilitating fatigue after a typical workday. She is but one example of the many health-care providers who, like their patients, are struggling with residual postviral neurocognitive symptoms.⁹

The prevailing cultural framework in health care has long valued hard work at the expense of self-care, which now prompts calls for medical institutions to safeguard the wellness of their workforce.¹⁰ In our experience, health-care personnel who want to return to work but who have no changes in workflow or support, even during the pandemic, become overwhelmed with an exacerbation of symptoms. In the USA, a country already facing a potential shortage of medical personnel, loss of skilled frontline health-care personnel will only further strain the health-care system during the pandemic.

Currently, return-to-work guidelines in the USA focus primarily on infection status—including those from the CDC¹¹ and the Occupational Safety and Health Administration¹²—and provide no guidance for those with long COVID, leaving institutions and employees to establish their own policies or consider medical leave or disability benefits. Furthermore, in the USA, the Coronavirus Aid, Relief, and Economic Security Act passed in March, 2020, and offers support for practices and hospitals struggling financially in the midst of the pandemic; however, it offers no funding or relief for frontline workers with COVID-19 and its sequelae themselves.¹³ Similarly, the Families First Coronavirus Response Act expanded family and medical leave for some workers, but allowed exemptions for health-care institutions.¹⁴ Some institutions have established peer-support groups, expanded mental health-care access and remote work when possible, and have made other accommodations for health-care personnel as they return post-COVID-19. At this point, though, the process by which employers promote the wellbeing of health-care personnel after having COVID-19 is variable in scope and adherence, which might exacerbate existing social inequities. For the sake of workers with COVID-19

who continue to live with the consequences—and to promote public health as cases again rise in another wave—we recommend that health-care employers strategise effective ways to support and promote the safe return to work for their employees.

Specific return-to-work guidance for health-care personnel with long COVID should be implemented with the goal of successful reintroduction into the workforce, recognising that those with neuropsychiatric symptoms often need complex, individualised accommodations. Current recommendations for long COVID include the identification and treatment of concurrent general medical problems (including physical therapy and pulmonary rehabilitation for persistent fatigue and dyspnoea); management of psychiatric syndromes with medications or psychotherapy when appropriate; and the promotion of a brain healthy lifestyle of adequate sleep, exercise, social engagement, and nutrition. Specific return-to-work strategies should be guided by a multidisciplinary team. This team might include individuals with specialism in neurology, psychiatry, psychology, pulmonology, physiatry, and other subspecialties, in collaboration with primary care staff. Examples include reintroduction into the workforce in phases, limiting shift schedules that disrupt natural circadian rhythms, mandating breaks to avoid postexertional neurological symptoms, partnering with other workers to facilitate oversight while multitasking, and gradually increasing responsibility and workloads. Although these measures might be costly in the short term, they might also allow for a previously healthy, skilled health-care professional to continue working long term.

We encourage leadership to break down return-to-work barriers with shift coverage, reduced hours, reduced workloads, extended deadlines, shared responsibilities, frequent breaks, and remote working as needed. We support collaborative dialogue between employers and affected workers about their needs so that they can fulfill their responsibilities competently. We recommend that provisional accommodations for broad medical investigation and treatment optimisation should be supported for all health-care personnel with long COVID. Finally, as the US Congress considers another coronavirus relief package, and as the Biden–Harris transition team meets with its coronavirus task force, we would advocate for the

creation of funding sources to support health-care personnel and institutions to optimally manage the sequelae of COVID-19 and return to work with the above accommodations. Not only does the health-care system need this support to ensure its livelihood and long-term functioning, it is a moral obligation to those who have sacrificed their health.

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