

EDITORIAL

Long COVID-19: A New Challenge to Public Health

COVID-19 continues to spread, and the pandemic remains a global emergency, disrupting many aspects of life for the world's populations. It has cost millions of lives and exposed weaknesses in public health care. At the same time, the public is tired of the restrictions imposed by this pandemic and is confused as a result of the politicized handling of the pandemic, the polarization between governments and the scientific community, and partisan views fostering refusal, distrust, and hesitancy with respect to protective measures and vaccination. Meanwhile, scientific research has rapidly increased our understanding of COVID-19, providing effective and life-saving interventions. Researchers have accelerated advances in effective vaccine development, manufacturing, and delivery to protect the population from critical illness and to mitigate the death toll^{1,2}. However, vaccine acceptance in many countries remains lower than needed, despite proven efficacy.

The pandemic is at a dangerous and shifting stage, with rising waves of infections placing unsustainable pressure on health-care services and affecting all aspects of social life and economic activity and even, some believe, impacting a cornerstone of democracy. That last viewpoint has been triggered by attempts by many governments to combat vaccine hesitancy and safeguard their citizens by imposing mandates, generating heated debate about the extent and limits of individual freedom of choice. With regard to economic activity, financial organizations express concerns that the world economy might be entering a period of weak growth and high inflation, with shortages of goods and products, reminiscent of the 1970s.

Global vaccination is a needed approach to end this pandemic. As of now, fewer than 4 billion people globally have received 1 dose of vaccine, with approximately 3 billion of them being fully vaccinated; only 2% of fully vaccinated individuals reside in Africa. Inequality of this magnitude is not only unjust and indicative of the lack of international solidarity to address the pandemic, it also undermines global health security and economic recovery. The vaccines, while proven effective at protecting against severe illness and death, are not fully effective at stopping the transmission of the virus. The identification of new, more contagious variants demands continuous and more intensive monitoring of the protection provided by the

existing vaccines. Many high-income countries already offer booster vaccination for high-risk patients and the elderly, or even their entire adult populations, despite a lack of clear evidence of their need in the general population. At the same time, the goal to kick-start delivery of vaccines to reach two-thirds of the world's population by mid-2022 is moved further away.

The COVID-19 pandemic is already a historical landmark, but its quantitative impact is not clear yet. In the first year we were just counting deaths, and not accurately. The pandemic's true death toll is estimated to be double the officially reported global COVID-19 deaths on average and much higher in certain regions such as Africa and Asia. Policymakers must be aware of the detection bias caused by unobservable infections in every attempt to control the pandemic's curve^{3,4}.

It is too early to discern all of the ways in which this pandemic has disrupted the course of history. Recently, long-term sequelae of COVID-19, "long COVID," in thousands of survivors are becoming a prominent issue. Reports on large series of patients who survived severe illness and were followed for >1 year after discharge from the hospital reveal that 49% to 62% of them presented at least 1 prolonged symptom. Fatigue, myalgia, and muscle weakness predominate, followed by depression and anxiety^{1,2}. It has been estimated that, globally, there are 27% and 25% more cases of depressive and anxiety disorders, respectively, compared with the pre-pandemic period, associated with increasing COVID-19 infection rates and decreasing human mobility⁵. Strategies to promote mental well-being, to target determinants of diminished mental health exacerbated by the pandemic, and to provide interventions to treat these mental health disorders are priorities.

The long course of rehabilitation for patients with long COVID challenges the economics of our health-care systems, which are already overburdened by the thousands of people around the world who continue to be infected by COVID-19. In addition, large populations lack access to testing, treatments, and safe and effective vaccines, which will inevitably perpetuate the pandemic and both its acute and long-term consequences.

Orthopaedic and rehabilitation specialists owe it to the global community to work collaboratively to mitigate the impact of the pandemic, exploring and further elucidating

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how to best handle the long-lasting sequelae of COVID-19 and help survivors return to their normal productive lives. We need to know more about the precise epidemiology of and risk factors for long-COVID syndrome as well as how novel variants of COVID-19 affect illness severity and how we might

reduce an individual's risk. JBJS is dedicated to these tasks and welcomes relevant, high-quality work to publish through the peer-review process. ■

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