

5 May 2021

## **BRIEF19**

*A daily review of covid-19 research and policy*

### **RESEARCH BRIEFING**

#### **Neuropsychiatric symptoms prevalent among those with long covid-19.**

For many who have suffered from covid-19, the initial infection is only the beginning. The lingering effects of covid-19 are referred to as “long covid” or post-covid-19 conditions. Long covid-19 symptoms described in the literature so far [include](#) fatigue, muscle weakness, joint pain, chronic chest pain, shortness of breath, and brain fog. Specific medical conditions such as potentially dangerous blood clots, and kidney problems have also been described, though the rates of these problems among recovering covid-19 patients is not known. Increasingly, neuropsychiatric symptoms, such as headache, depression, anxiety, PTSD, *etc.* have been considered symptoms of long covid.

A new systematic review [published](#) in the preprint server *medRxiv* (and therefore not peer reviewed) describes the state of the medical literature to-date on persistent neuropsychiatric symptoms after SARS-CoV-2 infection.

A total of 51 studies accounting for approximately 18,917 patients were included in the systematic review. Sex, race/ethnicity, and covid-19 severity were not consistently reported in the included studies. The majority of included patients (> 50 percent) had at one point been hospitalized but eventually discharged to their homes.

The most frequent neuropsychiatric symptom? Sleep disturbance (27.4 percent) This was followed by fatigue (24.4 percent), cognitive impairment (20.2 percent), anxiety (19.1 percent), and post-traumatic stress disorder (15.7 percent). In a sub-group analysis of studies that reported on covid-19 severity and the type of hospital stay (i.e. general medical floors versus intensive care units, *etc.*), there was no difference in the prevalence of neuropsychiatric symptoms.

The literature on this topic should be considered incomplete. Some of gaps in these data included the inability to look at sex, race/ethnic, and socioeconomic disparities in patients with persistent post-covid-19 neuropsychiatric symptoms. Furthermore, almost half of the included studies did not look at covid-19 severity, and there was no consistency with regard to how long patients were followed after their initial illnesses.

Finally, and somewhat surprisingly, only 2 of 51 studies (4 percent) reported neuropsychiatric symptoms in a control group (i.e. a comparison group that did not have covid-19). This alone makes it very difficult to determine whether covid-19 independently increases risk for neuropsychiatric symptoms compared to baseline rates for all hospitalizations for countless other non-covid-19 reasons for hospitalization.

The reason for and the prevalence of neuropsychiatric symptoms after covid-19 remains unclear. But while this is sorted out, we can surmise that mental health services are likely to continue to be a pressing need, even after the acute phase of the pandemic comes to and end.

—Joshua Niforatos, MD, MTS

### **POLICY BRIEFING**

#### **New goal set for US vaccinations: 70 percent by the Fourth of July.**

Nothing would say freedom like herd immunity. With that in mind, President Biden today announced a new goal for the country. By Independence Day (July 4), he wants 70 percent of the total population vaccinated. While it is unclear whether this would constitute “herd immunity,” it certainly would represent progress towards it.

To achieve this, 100 million more shots will need to be administered in just 60 days. This comes as daily vaccine rates have declined from their [zenith](#) in early April (the peak was April 1<sup>st</sup>, when 4.2 million doses were given; the latest 7-day average is approximately 2.45 million).

The number of available doses is no longer seen as the bottleneck. Now it's about access and interest. To address that, President Biden says that the administration will work to increase the number of pharmacies that can vaccinate the communities they serve and to send doses to pediatricians. The latter is key as vaccine eligibility extends to younger and younger Americans. Many parents will seek the counsel of trusted pediatricians. Giving doses to these frontline doctors directly will be key then, as some parents who were willing to go to mass vaccination sites might not feel as confident about doing the same with their kids.

Making the process of finding places that vaccinate has also become a priority. People on US soil can now text "438829" (GetVax) to get a toll-free number to call or a link to [Vaccines.gov](#), a new website that helps people find a place to get their shot.

—Jeremy Samuel Faust, MD MS

Kimi Chernoby, MD, JD, Policy Section Founder, Joshua Niforatos, MD Research Section Editor, Frederick Milgrim, MD, Editor-at-Large, Joshua Lesko, MD Lead Policy Analyst, Barb Cunningham, Copy-editor, Benjy Renton, Thread-of-the-Week, Anna Fang, Week-in-Review, Megan Davis, social media, Kane Elfman PhD, Publishing and Design. Jeremy Samuel Faust MD MS, Editor-in-Chief. <http://www.brief19.com/> Twitter: [@brief\\_19](#) [submissions@brief19.com](mailto:submissions@brief19.com). Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health and public policy.