Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

COVID-19 and mental health

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While the effects of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on the nervous system remain unclear, there is no doubt that the COVID-19 pandemic is bad for mental health. To alleviate the impact of both the virus and the measures taken to control its spread, we need high quality information about their immediate and long-term effects, and which countermeasures are most effective. The good news is that by October, 2020, mental health was top of the charts in terms of published papers and preprints on the effects of COVID-19. The bad news is that the quantity of papers is not matched by quality. In March, 2020, Holmes and colleagues outlined the priorities for mental health research during the pandemic. How much have we learned since then?

A post-mortem case series showed that the main effect of SARS-CoV-2 on the brain is through inflammation. Early case reports and the first paper from the UK CoroNerve surveillance platform described some new-onset psychosis, as well as patients with altered mental status, and others with cerebrovascular events. A study using US electronic health records found an increased incidence of a first diagnosis of psychiatric disorders within 90 days of a COVID-19 diagnosis, but the relation between cause and effect was uncertain. Studying the phenomenon of so-called long COVID might provide further information on the neurological effects of the virus, and its physical and mental consequences.

For people with mental illness, database studies so far have produced contradictory findings: in South Korea, a history of mental illness was not associated with increased likelihood of testing positive for SARS-CoV-2, but patients with a history of severe mental illness had a slightly higher risk for severe clinical outcomes of COVID-19 than patients without such a history. In the USA, a recent diagnosis of a mental disorder was associated with an increased risk for infection, which was exacerbated among African Americans and women, and a higher frequency of some adverse outcomes of the infection. Differences in SARS-CoV-2 testing policies and mental health services make international comparisons difficult: studies from other countries and on cohorts with specific disorders should help clarify the picture.

Taking a broader view on the pandemic as a whole, Holmes and colleagues asked, what is the effect of COVID-19 on risk of mental illness? A plethora of cross-sectional online surveys of convenience samples have reported that people who respond to such surveys are anxious and depressed. Fortunately, longitudinal studies, several using established cohorts with pre-pandemic data for comparison, are starting to provide more detailed and reliable evidence, including how different groups are affected. For example, in the UK, mental distress was higher than expected when accounting for previous trends, particularly in people aged 18–34 years, women, and people living with young children. So far, in high-income countries, suicide does not seem to have increased, and researchers have warned about the possible harmful effects of overly dramatic and under-researched reporting on the subject. Although numerous stories have been published in newspapers, there are no reliable data for low-income and middle-income countries. Rigorous, national surveillance systems are needed to provide the basis for evidence-based services and prevention measures, because the economic consequences of the pandemic will be felt for many years.

Holmes and colleagues also called for trials to determine the efficacy of mechanistically based digital and non-digital interventions and evaluate optimal models of implementation. Unfortunately, while many digital services have been introduced, few have been evaluated and too few seem to be mechanistically based. Similarly, while many hospitals have provided psychological support for health-care staff, reports of these are mainly descriptive. Research during a public health crisis is difficult but the Recovery trial showed that it could be done in the evaluation of treatments for COVID-19: a similarly ambitious programme is needed for mental health.

Hopefully, the other questions identified by Holmes and colleagues are being addressed, such as how best to deliver mental health services for vulnerable groups, outreach methods to support those at risk of domestic abuse, how media consumption about COVID-19 influences mental health, and how to promote adherence to behavioural advice about COVID-19 while enabling mental wellbeing and minimising distress. For these to be addressed successfully, interventions must be informed by mental health science, evaluated impartially, and the outcomes shared. ■ *The Lancet Psychiatry*

For the **number of papers on COVID-19 and mental health** see https://www.nature.com/articles/d41586-020-03564-y

For **Holmes and colleagues** see **Position Paper** *Lancet Psychiatry* 2020; **7:** 547–60

For the **post-mortem case series** see **Articles** *Lancet Neurol* 2020; **19:** 919–29

For the **neuropsychiatric effects of COVID-19** see **Articles** *Lancet Psychiatry* 2020; **7:** 875–82

For the **South Korean study** see **Articles** *Lancet Psychiatry* 2020; **7:** 1025–31

For the **US study** see *World Psychiatry* 2020; published online Oct 7. https://doi.org/10.1002/wps.20806

For the **UK mental distress study** see **Articles** *Lancet Psychiatry* 2020; **7:** 883–92

For the **harms of overly dramatic reporting** see **Correspondence** *Lancet Psychiatry* 2020; **7:** 15–17

For the **Recovery trial** see https://www.recoverytrial.net/