Mental health and brain research must be a higher priority in global COVID-19 response

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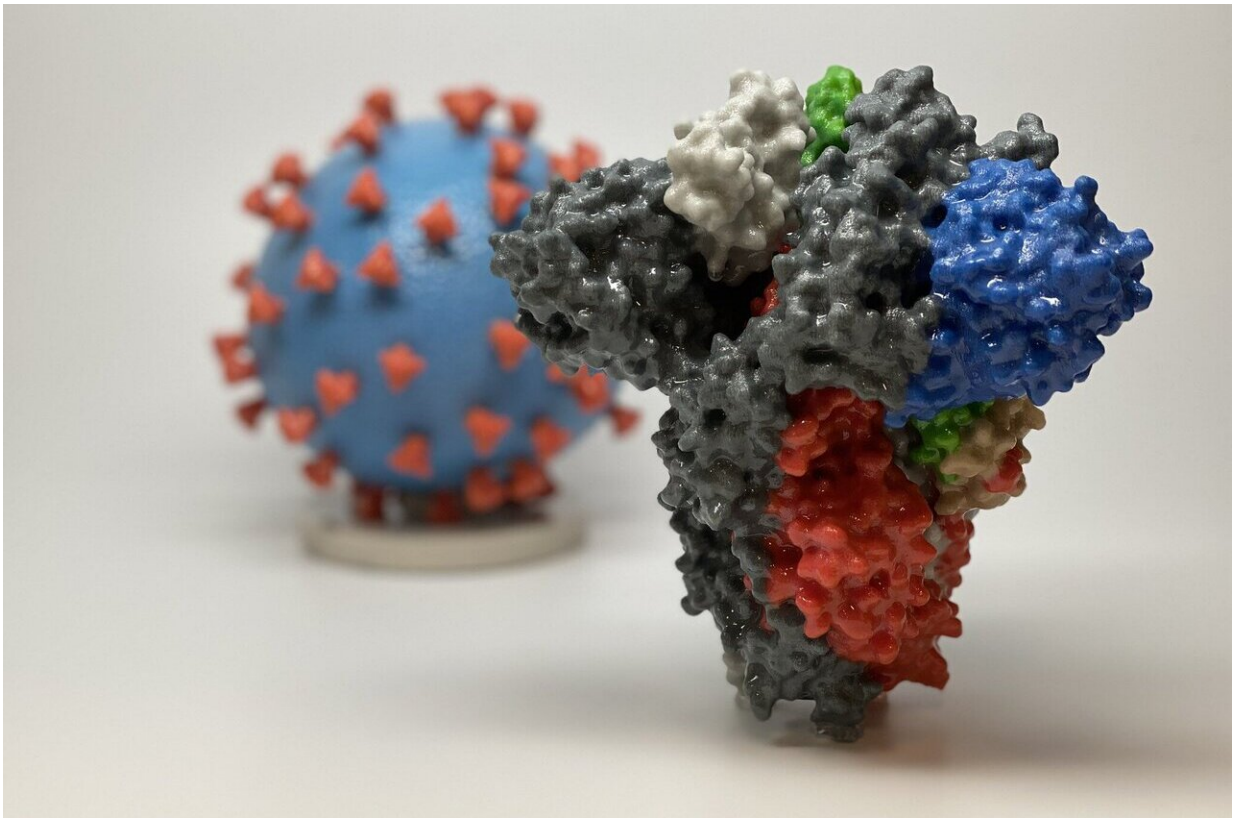

3D print of a spike protein of SARS-CoV-2, the virus that causes COVID-19—in front of a 3D print of a SARS-CoV-2 virus particle. The spike protein (foreground) enables the virus to enter and infect human cells. On the virus model, the virus surface (blue) is covered with spike proteins (red) that enable the virus to enter and infect human cells. Credit: NIH

A new paper, to be published today in The *Lancet Psychiatry*, highlights an urgent need to tackle the harmful impacts of the COVID-19 pandemic on mental health and potentially the brain and calls for research on these areas to be central to the global response to the pandemic.

The paper warns that the COVID-19 pandemic could have a 'profound' and 'pervasive impact' on global mental health now and in the future, yet a separate recent analysis shows that so far, only a tiny proportion of new scientific publications on COVID-19 have been on mental health impacts.

The paper calls for more widespread mental health monitoring and better ways to protect against, and treat, mental ill health—both of which will require new funding and better coordination.

The general public already have substantial concerns about mental health in relation to the pandemic—according to an Ipsos MORI poll of 1099 members of the UK public, and a survey of 2198 people by the UK mental health research charity, MQ, that included many people with experience of mental health conditions.

Both surveys were carried out in late March, the week lockdown measures were announced, to inform the *Lancet Psychiatry* paper. They showed the public had specific concerns related to COVID-19 including increased anxiety, fear of becoming mentally unwell, access to mental health services and the impact on mental wellbeing.

Paper author Professor Emily Holmes from the Department of Psychology, Uppsala University in Sweden, commented:

"We are all dealing with unprecedented uncertainty and major changes to the way we live our lives as a result of the coronavirus pandemic. Our

surveys show these changes are already having a considerable impact on our mental health.

"Governments must find evidence-based ways to boost the resilience of our societies and find ways to treat those with mental ill health remotely to come out of this pandemic in good mental health.

"Front line medical staff and vulnerable groups such as the elderly and those with serious mental health conditions must be prioritised for rapid mental health support."

The paper calls for 'moment to moment' monitoring of anxiety, depression, self-harm, suicide, as well as other mental health issues in the UK and global population. It also calls for the rapid roll out of evidence-based programmes and treatments, which can be accessed by computer, mobile phone or other remote ways, to treat mental health conditions and increase resilience to keep people mentally healthy.

24 leading experts on mental health, including neuroscientists, psychiatrists, psychologists, public health experts and those with lived experience of a mental health condition, came together to create the roadmap that is published today. The expert group was established and supported by the Academy of Medical Sciences and the mental health research charity, MQ.

Professor Matthew Hotopf CBE FMedSci, Vice Dean Research at King's College London's Institute of Psychiatry Psychology & Neuroscience and Director NIHR Maudsley Biomedical Research Centre and one of the paper authors, said:

"This paper gives us a research roadmap to help protect our mental health at this incredibly difficult time and in the future.

"We are calling for real time monitoring of mental health of the population to develop effective treatments. This needs to be on a bigger scale than we have ever seen previously, and must be coordinated, targeted and comprehensive to give us an evidence based picture of what is really going on in societies around the world.

"Knowing what is happening in real time will allow us to respond by designing more user friendly and effective ways to promote good mental health while people are in their homes. Above all, however, we want to stress that all new interventions must be informed by top notch research to make sure they work."

The paper stresses there will be no 'one size fits all' approach to keeping us mentally healthy—and any new approaches will need to be tailored to particular groups of people, such as front line medical and social care staff.

It also calls for research to understand what makes people resilient in the face of this crisis, and actions to build resilience in society—whether supporting people to sleep well, be physically active or do activities that improve their mental health. The surveys showed many people had already started activities to boost their mental health, such as prioritising family time, staying connected, connecting to nature and doing exercise.

Study author Kate King MBE, Adviser on lived experience to The Mental Health Act Review 2018, has personal experience of severe depression and said:

"It is not surprising that concerns reported in our surveys related to anxiety and isolation, or that social communication is seen by many as important in supporting good mental health. This highlights the vulnerability of those who have little contact with family or friends, and particularly those for whom relationships are abusive.

"The digital age, for all its problems, has bestowed a real gift: social media, the internet, video and phone meetings mean that social communication and research can continue in a way that would have been impossible even twenty years ago. We are all in this together so at this time it's essential that researchers continue to listen and work with people with lived, and living, experience to help those living with mental health challenges."

The paper notes that 'almost nothing is yet known with certainty about the impact of COVID-19 on the human nervous system'. As other coronaviruses have been shown to pass into the central nervous system, the paper recommends research to monitor and understand whether COVID-19 also has effects on the brain and nervous system. It calls for a new database to be set up to monitor any psychological or brain effects of COVID-19 and for research to look at the way the virus could enter the nervous system.

Study author Professor Ed Bullmore FMedSci, Head of Department of Psychiatry, University of Cambridge, said:

"We need an unprecedented research response if we are to limit the negative consequences of this pandemic on the mental health of our society now and in the future.

"To make a real difference we will need to harness the tools of our digital age—finding smart new ways to measure the mental health of individuals remotely, finding creative ways to boost resilience and finding ways to treat people in their homes. This effort must be considered central to our global response to the pandemic."

Previous outbreaks of infectious disease have been known to have an impact on mental health of the population, for example, the SARS epidemic was associated with a 30% increase in suicide in over 65s and

29% of healthcare workers experienced probable emotional distress. Authors stressed that an increase in suicides as a result of the COVID-19 pandemic was not inevitable, but that monitoring and research is needed urgently.

The paper urges UK research funding agencies to work with researchers and people with experience of the mental health impacts of the pandemic to create a 'high-level co-ordination group' to ensure these mental health science research priorities are tackled as a matter of urgency.

Professor Rory O'Connor, Professor of Health Psychology, University of Glasgow, and one of the paper authors said:

"Increased social isolation, loneliness, health anxiety, stress and an economic downturn are a perfect storm to harm people's mental health and wellbeing.

"If we do nothing we risk seeing an increase in mental health conditions such as anxiety and depression, and a rise in problem behaviours such as alcohol and drug addiction, gambling, cyberbullying or social consequences such as homelessness and relationship breakdown. The scale of this problem is too serious to ignore, both in terms of every human life that may be affected, and in terms of the wider impact on society.

"Despite this situation making some of us feel trapped, it shouldn't make us feel powerless—we can make a difference if we act now. We are calling on funding bodies, research institutes and policy to act now to limit the impact the pandemic has on all our lives."

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