

Brain health and its management in the time of COVID-19: future implications

The COVID-19 pandemic has had a major impact on health, on behaviour and risk management, on psychosocial wellbeing and on the ability of health systems to respond to ever-greater numbers of patients with complex and competing needs.

Think Brain Health Global has identified three areas for which experiences during the COVID-19 pandemic have implications for brain health and its management. Some of these were highlighted during our recent virtual congress, *Think Brain Health – a policy, clinical*



<u>and research challenge</u>. The recent <u>Lancet Commission paper</u> also described challenges and implications for patients, healthcare professionals, health systems and the general public due to the ongoing pandemic.

1. Impact of the COVID-19 pandemic on dementia risk factors

- COVID-19 may increase mortality risk in people with dementia https://onlinelibrary.wiley.com/doi/10.1002/gps.5468
- Diabetes, frailty and dementia: the implications of a COVID-19 risk factor for dementia
 - https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568(20)30019-2/
- Social isolation and risk of dementia https://www.the-scientist.com/features/how-social-isolation-affects-the-brain-67701

2. COVID-19 and the management of chronic neurological disorders

- Early observations suggest COVID-19 is a major problem for people with neurological conditions, which impose significant and complex management challenges
 - https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(20)30434-X/fulltext
- Long-term implications of the COVID-19 pandemic for dementia and the challenges for primary care physicians https://www.bmj.com/content/370/bmj.m3709/rr-6
- Impact of COVID-19 pandemic on people with Parkinson's disease https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7242824/



3. Implications of short- and long-term health system changes for the future of brain health management

- The need for patient protection is driving uptake and implementation of telemedicine
 - https://jamanetwork.com/journals/jamaneurology/fullarticle/2765073
- Minimizing long-term effects of COVID-19 in dementia care https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32024-9/fulltext
- The Cochrane Library provides an evolving source of reviews on telemedicine approaches applied to various conditions during the pandemic, including dementia, covering aspects such as preventive medicine, clinical and psychological support

https://www.cochranelibrary.com/collections/doi/SC000043/full

Based on the available evidence, the COVID-19 pandemic has had a profound effect on brain health, which is likely to persist long after the initial reduction of infection, symptomatic treatment and subsequent vaccine programmes. It may be that the behavioural responses to the pandemic have left more people than ever at risk of developing brain disease, such as dementia. However; the response of health systems to offering patient care via remote, digital channels offers new models for helping vulnerable, worried individuals to access healthcare with minimal disruption to their daily living.