

Understanding chronic Covid-19

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In their timely study, Hampshire and colleagues show that chronic Covid-19 negatively effects cognitive ability, likening the decrease in ability to the age-related decline in cognition between 50 and 70 years of age.¹ However, additional information on participant characteristics and severity of medical treatments may help with contextualising the study results. For instance, approximately 59% of participants were female, and according to Townsend and colleagues² chronic fatigue following Covid-19 infection is more prevalent in females. Consequently, this may mean that cognitive decline may also be more prevalent in females or that cognitive decline may result from long-term fatigue following infection. Furthermore, about 35% of study participants were mechanically ventilated (MV) and this increases the risk of associated health concerns, especially in patients with comorbidities.³ Ibrahim and colleagues⁴ found a prevalence of complications from invasive MV in Covid-19 patients, and that the risk of complications increased when patients had existing health concerns such as obesity, hypertension, chronic renal or cardiac disease. Additionally, MV in animal studies has shown a propensity toward inducing neuroinflammation, neuronal damage, and cognitive impairment, all of which presumably may extinguish cognitive abilities.⁵ Therefore, the cognitive decline observed by Hampshire and colleagues may have been due to participant characteristics and/or be iatrogenic and a causal association of Covid-19 with the observed decline requires more thorough investigation into these, and potentially other, confounding variables.

Contributors

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None to declare.

Declaration of interests

None to declare.

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