

Unmet needs of mental illness issues in COVID-19: the importance of analyzing neuropsychiatric manifestations

Letter to the Editor

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Dear Editor,

I read with a great interest the letter entitled “How concerned should we be about neurotropism of SARS-CoV-2? A brief clinical consideration of the possible psychiatric implications” by De Berardis,¹ and it has captured my interest from the first sight. Although the letter has focused on psychiatric disorders, both neurological and psychiatric disorders are interconnected in many different ways under the mental health illnesses.

There is a lack of sufficient knowledge about the exact mechanism of neurotropism in severe acute respiratory syndrome-related coronavirus (SARS-CoV) and its role in neuropsychiatric manifestations among novel coronavirus (COVID-19) patients. Also, there is a growing global interest in research in this field, especially after the global pandemic outbreak and announcement of COVID-19 as pandemic by the World Health Organization (WHO) on March 11, 2020.² A major concern about mental illness epidemic has emerged within the current COVID-19 pandemic with subsequent affection of different ethnicities, races, and even generations.³ Accordingly, I would like to express my thanks to De Berardis¹ for the interesting and informative letter.

Unfortunately, there is a lack of reviews and studies on mental health issues among COVID-19 patients until time being, that is why studying the possible mechanisms of psychiatric disorders among those patients is an important early step in raising awareness and better understanding of mental illness spectrum in COVID-19 patients. The possible mechanisms of different neurological manifestations in COVID-19 patients were studied by Ibrahim² systematic review and included: (1) brain edema and severe hypoxia leading to confusion or encephalopathy, (2) marked inflammatory and procoagulant response leading to stroke, (3) direct invasion of nasal mucosa and specific tropism of these viruses for structures of the olfactory/taste sensory epithelium leading to taste or smell impairment, and (4) cytokine storm syndrome which has a role in many neurological disorders such as rhabdomyolysis, myalgia, and acute hemorrhagic necrotizing encephalopathy.

The newly identified term “Long COVID” in recent literature focuses on the neuropsychiatric manifestations among survivors of COVID-19 infections as in Butler et al’s⁴ letter which described the short and long-term neuropsychiatric manifestations including delirium and fatigue. Nonetheless, future sufficient studies regarding “long COVID” are needed due to the scarcity of clinical data and high morbidity from such manifestations with a negative impact on society.

Also, studying mental illnesses among healthcare workers dealing with COVID-19 patients is very crucial although it is not widely studied. For example, a review by Ornell et al³ highlighted the mental health concerns in healthcare professionals and emphasized the importance of protecting the psychological wellbeing of the healthcare community worldwide.

A major obstacle in COVID-19 clinical studies is the lack of reported psychiatric manifestations in most of the studies, as evident in the review article by Ibrahim² which included 20 studies with over 2000 COVID-19 patients who did not report any psychiatric manifestations even those in the studies which included larger number of participants.

The role and importance of neurologists in the care of COVID-19 patients was discussed by Sellner et al’s⁵ letter which focused on the neuro-invasive potential of SARS-CoV2 via a synapse-connected route from the lung and airways, leading to respiratory failure in COVID-19 patients. Better understanding of the mechanism of neurotropism can help in the early identification of high-risk patients. Meanwhile, the lack of similar data for psychiatrists is considered as an important health issue, not just among COVID-19 patients, but extended to involve healthcare professionals and even family members of patients.

In conclusion, there are unmet needs regarding the neuropsychiatric manifestations (in terms of pathogenesis, clinical spectrum, management, and prognosis) among COVID-19 patients and healthcare workers which should be addressed to limit morbidities from these manifestations and improve outcomes.

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