

Post-COVID Neuropsychiatric Sequelae in India: Are We Ready for it?

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Severe acute respiratory syndrome coronavirus 2-(SARS-CoV-2) is the pathogen responsible for coronavirus disease-2019 (COVID-19).^{1,2} As per World Health Organization (WHO), it has affected the 224 million population, and 4.62 million succumbed to death as of September 13, 2021, worldwide (in India—33 million population got affected and 0.44 million succumbed to death), resulted in global healthcare crises and strained health resources due to its pandemic.³

Among survivors, COVID-19 presented with constellation of persistent or emerging symptoms involving multiple organ systems like cardiovascular, pulmonary, renal, hematological, and neuropsychiatric beyond 4 weeks of infection. It demonstrates a similar, reinforcing concern following the SARS epidemic of 2003 and the Middle East respiratory syndrome (MERS) outbreak of 2012.^{1,4}

Migraine-like headache, chronic malaise, diffuse myalgia, chronic fatigue, cognitive dysfunction (“brain fog”), depressive symptoms, and nonrestorative sleep are common neuropsychiatric post-COVID-19 sequelae. In addition, a few of them also have diagnosable depression, anxiety, and sleep disorders. Like other critical illnesses requiring intensive care, the complications of acute COVID-19 include stroke, hypoxic-anoxic damage, encephalopathy, altered sensorium, ataxia, amnesia, convulsion, and acute disseminated myelitis, which may lead to lingering or permanent neurological deficits requiring extensive neuropsychiatric rehabilitation.^{5,6} The prevalence varies between studies and ranges from 51 to 94%. This variation in disorder prevalence may be due to sample size, the timing of post-COVID assessment, and the type of assessment and screening tool used.⁷ This burden adds to the community’s existing COVID-19 related fear, panic, anxiety, sleep disorder, increased alcohol-related problems, and xenophobia in the general population.⁸ These are likely to have an adverse impact on the mental, physical, and cognitive health of COVID-19 survivors.

WHAT COULD BE THE PREVALENCE OF POST-COVID-19 NEUROPSYCHIATRIC SYNDROME IN INDIA?

India has had at least 33 million SARS-CoV-2 infections after ignoring the undetected infections, and 67.6% turned seropositive in the fourth round of National serosurvey conducted between June 14, 2021, and July 6, 2021⁹ Parliament of India (Ministry of Health and Family Welfare), Lok Sabha, Government of India. If we assume that 50% of SARS-CoV-2 infections result in post-COVID-19

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neuropsychiatric syndrome, India can expect 16.5 million people to suffer from post-COVID-19 neuropsychiatric syndrome.

HOW TO BRIDGE THE COMMUNITY’S NEUROPSYCHIATRIC GAP DURING THE COVID PANDEMIC IN INDIA AND WHAT’S NEXT?

- Raising community awareness of the post-COVID-19 neuropsychiatric syndrome through information, education, and communication (IEC) activities.
- Scaling up and skill-building training of primary care doctors Doctor, Nurses, Community Health Workers and other allied healthcare and mental health professionals to screen and identify patients with anxiety, depression, sleep disturbances, post-traumatic stress disorder, dysautonomia, attention, dysexecutive symptoms, and fatigue among post-COVID-19 survivors to assess the post-COVID neuropsychiatric syndrome.^{4,6}
- Allowing telemedicine services to digitally screen for post-COVID neuropsychiatric syndrome and make an appropriate referral to a “post-COVID clinic.”
- To begin interdisciplinary “post-COVID clinic” services in secondary and tertiary care centers in India for post-COVID syndrome.
- To develop evidence-based national clinical practice guidelines on post-COVID syndrome and enable the safe and effective practice.
- To fund research in this area in order to better understand the prevalence, a constellation of symptoms involving various organs, disability, burden, and policy-based clinical practice in India.

- Appropriate policies should be developed to allocate independent funding and human resources to provide holistic evidence-based post-COVID syndrome treatment and research.
- The authority should monitor the policy implementation on “post-COVID syndrome care”.

The ongoing COVID-19 pandemic-related mental health problems and post-COVID neuropsychiatric syndrome are major public health concerns both worldwide and in India. The technology-driven “post-COVID-19 clinic” can provide multidisciplinary, integrated, and holistic care to post-COVID survivors. There is a need for research, policy, a separate budget, and resource allocation to help reach the community’s unreached vulnerable population.

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