

## Brain & neurocognitive functions of COVID-19 patients

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A novel coronavirus (SARS-CoV-2) currently led to previously unknown COVID-19 pandemic. The clinical profile of COVID-19 infection, ranges from asymptomatic infection to severe pneumonia, Acute Respiratory Distress Syndrome (ARDS) and/or subsequent multiorgan failure, myalgia and fatigue. In addition to the lungs, COVID-19 may cause damage to many systems such as the heart, the kidneys, the liver, and the brain, as well as blood and the immune system. Studies describe patients that suffer from acute Central Nervous system Symptoms (CNS) in individuals affected by COVID-19 such as inflammatory CNS syndromes encephalitis, cerebrovascular or confusion/altered mental state, headache, dizziness, impaired consciousness, ataxia, acute cerebrovascular disease and epilepsy, sensory-related symptoms hypogeusia, hyposmia. It is reported by studies that course of the infection is mild or asymptomatic in about 80–90% of cases. Symptoms from CNS are more common in older patients and those who have more underlying medical diseases with vascular risk factors, such as hypertension, diabetes or obesity hypertension and to be less likely to show the most typical symptoms, such as fever and dry cough. These variety of symptoms have an important social impact on patients, families, health care professionals and society. It is important that healthcare costs to be reduced leading to recovered patients' optimal neurocognitive functioning. Permanent cognitive dysfunction influences independent living. Cognitive decline is an important problem for the patient and family, and also for the community. It causes major financial burden of medical costs to the family and health services and impacts independent living and daily activities of patients.

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### Biography

Kalliopi Megari is an experienced psychologist working in the hospital & health care industry. She is a lecturer at University of Western Macedonia in Greece. Skilled in Clinical Neuropsychology, Clinical Research and Learning Disabilities. Graduated from Aristotle University of Thessaloniki and attended further education from University of Macedonia, in people with special needs and disabilities. She holds undergraduate degrees in Nursing and Psychology, as well as a Master's and a PhD in Neuropsychology from Aristotle University of Thessaloniki. She has many years of experience working with chronic disease patients as well with people with disabilities. Her work has earned her many prestigious international awards. She has given lectures at Aristotle University of Thessaloniki and University of Warsaw. She is postdoctoral researcher and has published more than 10 research articles in journals. She is the Global Engagement Representative of International Neuropsychological Society and member of the Ethics Committee of Hellenic Neuropsychological Society.