

## REHABILITATION AFTER SEVERE NEUROLOGICAL COMPLICATIONS POST SARS-COV2 INFECTION

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### Abstract

**Introduction.** Medical rehabilitation is a multi-professional / interdisciplinary process aimed at enhancing and restoring functional ability (activity and participation) and quality of life to people with impairments or disabilities. Rehabilitation is applied throughout the continuum of care. COVID-19 patients may develop a myriad of acute medical problems (linked to the virus per se, or as consequences of the invasive procedures), which can cause acute, post-acute and long-term consequences requiring rehabilitation. Information about short and long-term sequelae of COVID-19 indicate an increasing need for rehabilitation. The paper is focused on two main aspects: rehabilitation of the severe neurological disabilities that occurred during the acute phase and continuing in the chronic phase (i.e., different neuro-logical sensory-motor and cognitive deficits secondary to stroke, encephalitis, seizures, encephalopathies). The other main issue is generated by the disruption of regular rehabilitation in people with neurological disabilities and chronic diseases (people living with sequels after stroke, Parkinson's disease, multiple sclerosis) due to quarantine, social isolation, movement restriction, and other disruptions of the healthcare systems. **Method.** Internet literature search (Lit Covid and PubMed) using the following keywords (Covid-19, Coronavirus, neurological complications, rehabilitation).

During 2020-2021 were published 88 papers (in 2020 = 54, and in 2021= 54), with 21 reviews (2020 = 15; 2021 = 8), and 2 systematic reviews, referring to neurorehabilitation in Covid-19 subacute and long-term cases.

**Discussion.** REH-COVER Cochrane Rehabilitation WHO initiative (Rapid Living Systematic Reviews Sec-ond Edition, 2020), contains the main cornerstones for a tailored rehabilitation program, the best (current) available rehabilitation evidence on recovery interventions, for the patients living with sequelae of COVID-19.

**Conclusions.** More than one and a half years since the outbreak of the COVID-19 pandemic, it is obvious that rehabilitation services play a crucial role in post-COVID recovery trajectories. A further achievement of research and evidence focussed on the clinical management, comprehensive treatments, and efficacy need to be targeted on short and long-term (neuro)-rehabilitation ser-vice models of care, for COVID-19 survivors.