

Physiotherapy Rehabilitation Protocol Among Post COVID-19 Patients with Persistent Symptoms Worldwide: A Systematic Review Study

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Abstract

Introduction: Since 2020 the world witnessed a new epidemic called COVID-19 that completely turned everything upside down and made all people get attracted to this cursed pandemic. So, most scientists and researchers united their effort to find and know anything about this epidemic, so as physical therapist students we decided to look for something related to our specialty and see the role of physiotherapy in the treatment of persistent symptoms post COVID-19 patients since many patients still reporting fatigue, dyspnea, joint, and chest pain. Aim: We aim to find out the physiotherapy rehabilitation protocol post-COVID-19 patients with persistent symptoms worldwide. Methods: A systematic review study design was used to conduct data with 10 studies included and 28 studies excluded, collected from PubMed, Google Scholar, and Oxford Academy after assessing inclusion and exclusion criteria for each article. Result: 10 articles were included in this review, evidence from nine observational articles demonstrated that SARS-CoV patient's persistent symptoms had improved after physical therapy rehabilitation in comparison to control group (healthy or lung condition), after assessing several outcome measures such as 6MWT, FIM scale, Borg scale, and lung function tests (FVC, FEV1, DLCO).

Evidence from one randomized controlled trial (RCT) found that a rehabilitation protocol consisting of respiratory muscle training, cough exercises, diaphragmatic training, and stretching exercises significantly improved pulmonary function in comparison to a control group. Conclusion: Dyspnea, fatigue, pulmonary dysfunction, and general weakness were the significant remaining impairments post-COVID-19 infection. Researchers and clinicians can use these findings to understand the potential impairments and rehabilitation needs of people recovering from the current COVID-19 persistent symptoms. All the included articles demonstrated that exercise can improve pulmonary rehabilitation and had

a positive impact on functional capacity despite the variability in the severity of these post-COVID-19 patients, which can improve respiratory function, strength, decrease dyspnea and fatigue but has little significant improvement on depression in the elderly. Further research is required to determine the effectiveness of exercise in people recovering from similar infections (e.g., COVID-19).