Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to the Editor

Risk of COVID-19 disease in the elderly population and physiotherapy

Dear Editor,

COVID-19 occurs with symptoms like fever, cough, myalgia, fatigue, muscle weakness, and impairment in other important bodily functions [1]. As a result of the clinical course of COVID-19 infection, rapidly developing acute respiratory distress syndrome (ARDS) requires intubation and mechanical ventilation (MV) [2]. Comorbid diseases like aging, diabetes mellitus, hypertension, cerebrovascular diseases, chronic respiratory diseases, cancer, etc. along with ARDS were reported to be risk factors for death in patients with COVID-19 [3]. Elderly individuals who are vulnerable to disease are hospitalized in the intensive care unit because they experience the disease more severely and their mortality risk is higher [4]. However, while the health services attempt to prevent patients from dying, early physiotherapy management of COVID-19 patients with ARDS in ICU has been ignored. Studies show that early respiratory physiotherapy of patients with ARDS is an important evidence-based method for the treatment of ARDS. But in the ICU, patients with ARDS are immobilized due to MV or intubation. Immobilization has a dominant effect on diaphragm and limb muscle weakness in patients with critical illness in the ICU [5]. So passive-active mobilization with specific muscle training is required for COVID-19 patients with ARDS in ICU, not only respiratory training. Immobilization, infections, MV and prolonged steroid administration are well-known risk factors for ICU-acquired weakness (ICUAW) which has significant effects not only on patient recovery, and length of ICU stay, but also on rehabilitation in 100% of ICU survivors. Patients with ICUAW develop muscle atrophy, paresis, and reduced deep tendon reflexes which are effective on long-term (after ICU or hospital discharge) rehabilitation management [6]. Rehabilitation after discharge from the ICU is often noticeably slow, particularly in elderly patients. Neuromuscular recovery, especially, is prolonged or incomplete due to exposure to MV for a long time. In the literature, it was reported that up to 65% of these patients have functional limitations after discharge and neuromuscular disorders may continue for many years in some of them [7]. Elderly patients may develop sarcopenia that becomes more severe among those admitted to the ICU due to ARDS and act as a cause or aggravating factor in terms of weakness [8]. We conclude that because of these reasons elderly patients should have early physiotherapy treatment with medical treatment because early physiotherapy will be important for improvement of functional status and quality of life in the elderly in the early period after discharge from the ICU or hospital.

Conflict of interest

None declared.

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