

Telerehabilitation for Stroke Patients in the Time of Covid-19

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The emergence of coronavirus disease (COVID-19) from Wuhan, China in December 2019 has left many countries with administrative, social, economic and health challenges. Countries across the world have adopted strategies for maintenance of social distance and avoiding unnecessary individual movements by closing parks, gyms, educational institutions, setting up quarantine center and by implementing micro-lockdowns in area of greater risk for Covid-19 spread.¹ It is a challenge for health care systems to simultaneously manage Covid-19 patients. COVID 19 infection increases the risk of many neurologic complications and is also associated with increased risk of stroke. Stroke is the most common cause of mortality, hospital admission and a leading cause of long term disability across the world. Stroke survivors often face difficulty performing activities of daily living (ADL), increasing the economic cost and burden. Therefore early assessment and rehabilitation of patient is necessary to decrease the morbidity and mortality rate.² Many patients are deprived of rehabilitation services due to closure of rehabilitation centers to control the spread of virus. Ischemic stroke is among one of the most serious neurologic complications in patients with COVID-19 infection.

The pandemic outburst has increased the popularity of telerehabilitation for provision of health care services without in person contact of the patient and physician. Various technologies are used for communication between therapist and patient for example, use of videos calls, voice call via telephone and internet-based conferences. Virtual or augmented environments generated via computers can be used for stroke patient rehabilitation, where patient completes a task shown on computer screen.³ Literature has revealed that

clinicians and patients are highly satisfied regarding telerehabilitation services and is known to be cost effective in many ways. It reduces the travel time of clinicians, who visit patients to provide rehabilitation services at home. In addition, telerehabilitation is a way of continuing the rehabilitation program after discharge of patients from inpatient rehabilitation facilities. Furthermore, telerehabilitation decrease face to face supervision and provides a mechanism for increasing the dosage of therapy.⁴ Telerehabilitation is an effective approach for improving motor and cognitive function among stroke survivors. Psychological problems such as anxiety and depression are also widely observed among stroke survivors during covid-19. Telerehabilitation can significantly improve the psychological health of stroke patients providing counseling and medicine prescription without moving out of house.⁵ The use of this technology for stroke survivors can improve physical and mental functions without unnecessary visits to hospitals thus reducing the risk of corona virus infection.

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