

# Telerehabilitation for Stroke Patient; Advantages and Challenges

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Article Info	ABSTRACT
<b>Article type:</b> Review article	<b>Background and Aim:</b> Telerehabilitation is the use of information and communication technology to deliver rehabilitation at a distance. Telerehabilitation can be an alternative or supplement to traditional rehabilitation to increase the availability, support and tailoring of available programmes. Stroke is one of the most common causes of disability and mortality worldwide[1]. Currently, stroke survivors can access health care through a multidisciplinary stroke unit, which can result in positive outcomes. However, despite this positive evidence, and while 75% of patients with stroke having ongoing rehabilitation needs, only 46% of survivors were referred for rehabilitation in 2017[2]. This shows that many stroke survivors are missing out on rehabilitation that could improve their function[3]. Therefore, the purpose of the present study was to investigate telerehabilitation for stroke patients.
<b>Article History:</b> Received: 20 January 2020 Revised: 04 March 2020 Accepted: 14 May 2020	<b>Materials and Methods:</b> In this study, a systematic review of the databases google scholar, pubmed, science direct, Elsevier between the years 2007 and 2019 with the keywords telerehabilitation, stroke patients, advantages, challenges Search is done. In this process, studies that examined the benefits and challenges of telerehabilitation were included in the study.
<b>Keywords:</b> Rehabilitation Stroke Stroke-rehabilitation	<b>Results:</b> <i>Advantages of telerehabilitation:</i> The use of TR can eliminate practical barriers, such as difficult weather conditions and long travel distances. Differences between municipalities can be reduced by the provision of specialised rehabilitation where this is not available. TR allows for more frequent exercise sessions than traditional centre-based rehabilitation programmes, which are often provided 1-2 times a week. Furthermore, the technology can encourage exercise regularity through tailored motivational messages, which can prevent dropout during holiday periods[4]. TR can be conducted individually or in groups. Interactive features and gamification elements can create group affiliation and increase training motivation. Rehabilitation in the home environment can also support long-term exercise maintenance. The use of VR and serious games for older adults are generally categorized in improving upper and lower limbs movements, balance, mobility training, daily living, neglect, and cognition[5]. <i>Challenges of telerehabilitation:</i> The challenge is to provide enough amount and intensity and therefore, various technological approaches have been proposed. Adopting TR in clinical practice requires organisation changes which may be challenging. Computer literacy among the users may affect adherence, and the technology must be available and affordable to those who want to make use of TR[6]. <b>Conclusion:</b> Telerehabilitation uses information and communication technology and offers accessible and affordable services to people in their homes[7]. The cost-effectiveness of TR remains still unknown. Future studies should therefore evaluate organisational and economic effects of TR.