

Chapter 36

Social Telerehabilitation

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ABSTRACT

Social telerehabilitation, which focuses on solving limitations and social issues associated with health conditions, represents a further specialization in telerehabilitation. Both telerehabilitation and social telerehabilitation are grounded in the delivery of rehabilitation services through telecommunication networks, especially by means of the internet. Essentially, telerehabilitation comprises methods of delivering rehabilitation services using ICT to minimize the barriers of distance, time, and cost. One can define social telerehabilitation as being the application of ICT to provide equitable access to social rehabilitation services, at a distance, to individuals who are geographically remote, and to those who are physically and economically disadvantaged.

INTRODUCTION

In a relatively short time, information and communication technologies (ICT) have spread worldwide, from defense and space exploration to large industrial applications, and to the worlds of commerce, education, and entertainment. ICT is changing people's daily lives, the way they work, buy, sell, and learn, and also the way that services are run in the healthcare sector. Consequently, *e-health*, *telehealth*, and *telemedicine* are now terms that are commonly used in this sphere, encompassing three main computer-assisted areas in healthcare, namely: clinical assessment, diagnosis, and therapy. E-health comprises the monitoring of patients' health, the promotion of good practices, and the prevention and treatment of health conditions by electronic means, as well as the provision of online access to literature and medical knowledge. One of the first reviews of telehealth is that provided by Winters (2002), who identified two major subsets of telehealth: telemedicine (i.e., delivery of clinical services) and telehealthcare (i.e., management of disability and health).

Nowadays, there is a progressive specialization within the field of e-health, and the specificity of the different branches appears to be increasingly sharp.

Telerehabilitation is a recent emerging field in telehealthcare area and this chapter presents social telerehabilitation, a new specialized sector of telerehabilitation.

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BACKGROUND

Before to deal with social telerehabilitation, the more general notions of rehabilitation and telerehabilitation ought to be introduced.

In fact, social telerehabilitation, which focuses on solving limitations and social issues associated with health conditions, represents a further specialization in telerehabilitation. Figure 1 shows the position of social telerehabilitation within the general framework of telehealth.

It has to be noted that social telerehabilitation results from a change in the concept of rehabilitation, which has seen a shift in view point away from a predominantly medical one, towards an increasingly complex one in which psychological and socio-cultural aspects are deemed to be of equal importance (Brown & Hughson, 1993; Wade & de Jong, 2000; Altman, Swick, Parrot & Malec, 2010; Karkou, Martinsone, Nazarova & Vaverniece, 2011).

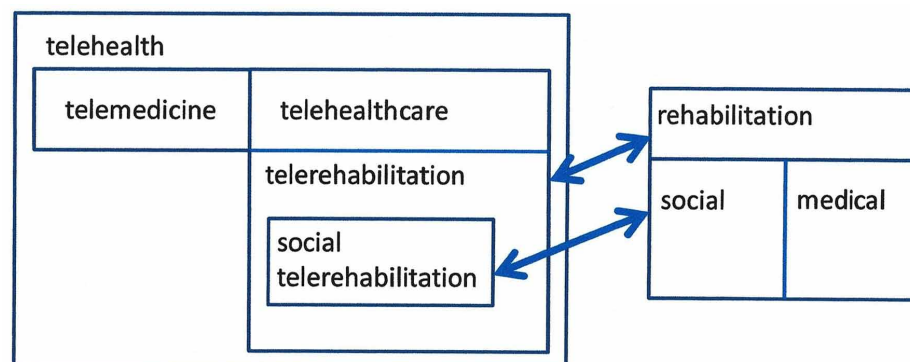
The Notion of Rehabilitation

In general, rehabilitation encompasses any services or providers that are directed to the reduction of impairments, activity limitations, or social participation restrictions experienced by an individual (Figure 2). The World Health Organization describes rehabilitation for people with disabilities as being a process aimed at enabling them to reach and maintain their optimal physical, sensory, intellectual, psychological, and social functional levels.¹

Generally, two different forms of rehabilitation can be distinguished: *medical* and *social*, or, in the latter case, also referred to as *vocational*.

Both forms are aimed at developing the functional and psychological abilities of the individual and, if necessary, his/her compensatory mechanisms, in order to enable him/her to attain self-dependence and lead an active life. The main difference between them is that medical rehabilitation is more restricted to curative medicine, and involves intensively trained clinicians and different health professionals, especially physiotherapists, whilst social rehabilitation focuses more on the individuals' social sphere, and includes services such as rehabilitative nursing, occupational therapy, speech and language therapy, audiology, dietetics, prosthetics and orthotics, podiatry, art therapy, music therapy, and social work. However, although social rehabilitation is directed, for example, at overcoming barriers for people to

Figure 1. Social telerehabilitation within the telehealth general framework



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