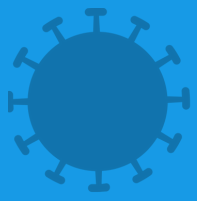

Factsheet
N.13

COVID-19: DIGITAL HEALTH FACILITATING TELEREHABILITATION

DEPARTMENT OF EVIDENCE AND INTELLIGENCE
FOR ACTION IN HEALTH
OFFICE OF THE ASSISTANT DIRECTOR
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COVID-19 | Fact Sheet | Digital Health

COVID-19: Digital health facilitating telerehabilitation

IMPORTANT NOTE: Stay informed with timely information on the coronavirus disease (COVID-19), available at the PAHO and WHO websites and through your national and local public health authorities.

What is telerehabilitation?

Rehabilitation is a set of interventions needed when a person experiences—or is likely to experience—limitations in daily functioning. It includes physiotherapy, occupational therapy, speech and language therapy, psychology, and prosthetic and orthotic services. Most people are likely to require rehabilitation at some point in their lives, either due to aging or a health condition (chronic illness or disorder, injury, trauma, etc.).

Telerehabilitation is a branch of telemedicine in which information and communication technologies (ICTs) and, in advanced cases, remote-control technologies such as robotics are used to directly provide remote rehabilitation activities. [1]

Telerehabilitation should be performed by the interdisciplinary team responsible for the person's treatment

What is the difference between physical and mental telerehabilitation?

Telerehabilitation is designed as an ICT-based response to needs across the broad spectrum of rehabilitation. Both physical (PhTr) and mental telerehabilitation (MTr) can be provided. PhTr focuses primarily on treating partial or total loss of congenital, degenerative, or acquired musculoskeletal or neurological functions, the latter typically following a cerebrovascular accident (CVA), spinal cord injury, or traumatic brain injury (TBI). Physiotherapy, occupational therapy, and cardiological and respiratory rehabilitation are also included.[1 2] MTr is strongly associated with the life experience of disability and, in particular, the behavioral impact of organic brain syndrome (post-CVA or post-TBI). It is also an activity that intersects with mental telehealth, which has been developed for depression, anxiety, post-traumatic stress disorder,[3] and substance abuse, [4] among many other disorders.

Why is telerehabilitation essential during the pandemic?

As part of the measures implemented as a result of the Covid-19 pandemic, telerehabilitation is a process that allows continuity of care for patients who can benefit from remote consultations, while ensuring greater protection for those who are members of vulnerable groups. [5 6 7 8]

Also, for chronic or long-term treatments where non-disruption is key to success, it is a safe way to maintain continuity of care.

What are the minimum requirements for telerehabilitation?

The specific requirements for telerehabilitation do not differ much from the basic requirements for telemedicine in general. This includes a fast, secure internet connection, ideally with the possibility of video connection and recording; remote access to medical information systems such as the patient's medical history, as well as imaging software and remote patient monitoring; and the possibility of prescriptions and/or payment of benefits, where applicable. As for physical telerehabilitation, depending on the patient's condition, access to specific equipment or physical space may be required to do exercises.

What disciplines does telerehabilitation include?[9]

Teleconsultation	Telecare at home	Telemonitoring
Teletherapy	Mental telehealth	Telelearning

What ICTs can help strengthen telerehabilitation?

Many technologies can be used to provide services associated with telerehabilitation. These include cell phones, instant messaging platforms, video conferencing platforms, and virtual reality, as well as the use of technologies such as wearable sensors and remotely controlled robots. Older communication technologies such as basic landline telephones can also be used.

What are the limitations of telerehabilitation?

Telerehabilitation can have various limitations depending on the context and target population, such as:

- Providers and patients may have little or no access to the necessary information technology.
- Little or no access to additional technology and/or equipment required for rehabilitation in specific situations.
- Services and interventions that require physical contact with trained health professionals.
- Health workers in charge of rehabilitation services may lack training in the use of ICTs.
- Lack of protocols, lack of knowledge of protocols, and/or need to adapt protocols to provide telerehabilitation services.
- Lack of knowledge of the rights and responsibilities associated with access to telerehabilitation services.

What considerations should be borne in mind? [10]

- Train users and people with disabilities in the use of technology necessary for access to telerehabilitation.
- Train the professionals who are part of interdisciplinary health teams that treat persons with disabilities.
- Adapt and integrate telerehabilitation into the regulatory framework of digital health, including privacy, security, and confidentiality requirements.
- Automate administrative processes associated with telerehabilitation services, including billing or coverage agreements with health insurers.
- Have a backup plan in case of technical interruption or communication failure.
- Adapt educational and intervention materials to the telerehabilitation format.
- Have protocols for referral from virtual to in-person modalities, as required.

Additional information and references

1. Telerehabilitation: Review of the State-of-the-Art and Areas of Application
2. Telerehabilitation for chronic respiratory disease
3. Efficacy of synchronous telepsychology interventions for people with anxiety, depression, posttraumatic stress disorder, and adjustment disorder: A rapid evidence assessment
4. Telemedicine-delivered treatment interventions for substance use disorders: A systematic review
5. The five 'W' of cognitive telerehabilitation in the Covid-19 era
6. Musculoskeletal Physical Therapy During the COVID-19 Pandemic: Is Telerehabilitation the Answer?
7. The future is now: a call for action for cardiac telerehabilitation in the COVID-19 pandemic from the secondary prevention and rehabilitation section of the European Association of Preventive Cardiology
8. COVID-19 and the Advancement of Digital Physical Therapist Practice and Telehealth
9. Telerehabilitation: State-of-the-Art from an Informatics Perspective / Parmanto
10. American Telemedicine Association's Principles for Delivering Telerehabilitation Services

Interprogrammatic collaboration

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