

# REVIEW OF TELEREHABILITATION OF PHYSICAL THERAPY

Sakshi Gandole<sup>1</sup>, Vaishnavi Yadav<sup>2</sup>

<sup>1</sup>UG SCHOLAR, Ravi Nair Physiotherapy College Datta Meghe Institute of Medical Science, SawangiMeghe, Wardha, Maharashtra, India.

<sup>2</sup>Associate professor, Department of Cardiovascular Physiotherapy Datta Meghe Institute of Medical Science SawangiMeghe, Wardha, Maharashtra, India.

Email: vaishnavi20162@gmail.com

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## Abstract

**Objective:** The purpose of the research was to bring together all of the information on telerehabilitation in physical therapy then had gathered through systematic reviews.

**Methods:** Systematic reviews of various illnesses, groups, and situations were included, with the intervention being telerehabilitation by physical therapy. The outcomes were clinical efficacy, functioning, quality of life, happiness, adherence, and safety depending on the condition. The reviewer extracted the data and assessed the possibility of bias with a second reviewer performing non-independent verification. In the tables and figures, the findings are presented qualitatively.

**Results:** There were 53 systematic reviews in total, with 17 of them having a low chance of prejudice. There were fifteen reviews devoted to cardiorespiratory rehabilitation, fourteen to musculoskeletal issues, and thirteen to neurorehabilitation. Other types of conditions and therapy were addressed in the other 11 assessments. Thirteen reviews have a low chance of being biased and found that telerehabilitation was superior to in-person rehabilitation or no therapy, whereas 17 found no differences between the groups. Thirty-five reviews with a high or uncertain risk of bias yielded conflicting results. Telerehabilitation is defined as "the delivery of rehabilitation services using information and communication technology." It includes assessment, prevention, therapy, education, and counseling. Instead of drugs or surgery, physical therapies such as massage, heat treatment, and exercise are used to treat illness, injury, or deformity.

**Keywords:** telerehabilitation, physical therapy, systemic, telemedicine, cardiorespiratory, neurorehabilitation, musculoskeletal.

## INTRODUCTION

Telerehabilitation is a telemedicine subdiscipline that encompasses any rehabilitation that is delivered through telehealth technologies like videoconferencing, sensors, chat/text, educational portals, and more. The most well-known type of telerehabilitation is the replication of one-on-one physiotherapy via videoconferencing, which is now referred to as "Virtual Care."

Rehabilitation is required to enhance people's functioning and quality of life by improving their abilities to live, work and learn as much as feasible. The impact is felt throughout the neighborhood, society of the economy is a while rehabilitation multifaceted, multicomponent, and interdisciplinary intercede, it is also a multifaceted, multicomponent, and multidisciplinary intervention. The minimum components necessary are determined by the specific health condition as well as other factors such as the health system or method available.

As the population ages and chronic diseases become more common, Rehab and physical therapy services are in high demand extending degenerative ailments stemming from current life situations become more common. Rehabilitation is a multidimensional, multicomponent, and multidisciplinary intervention, as well as an interdisciplinary, multicomponent, and interdisciplinary intervention. This high demand can sometimes result in service saturation and the establishment of waiting lists, causing treatment delays (3). When distance is a factor, telehealth is centered To administer health treatments outside of traditional health clinics researchers depend on telecommunications and virtual technology. Telehealth is a dynamic notion that changes as requirements and technology terminologies like tele Health, Although m-Health, computerized health, virtual health, and digital therapeutics have grown in popularity, they are not interchangeable due to distinctions. (4)

From the availability to the actual administration of cutting-edge treatment specialist operations, technology has altered every aspect of medical rehabilitation. Telerehabilitation is a sort of information and communication technology that allows people to receive rehabilitation services from their homes or other locations via the internet. (5) For both doctors and patients making technology to conduct rehabilitation services has various advantages. It gives the patient a sense of personal freedom and accreditation capability to manage their treatment other words rather than being passive recipients passive recipients of care, they are becoming active participants. It makes healthcare more accessible to the person, people who live in rural locations or have physical difficulties, transportation issues, or socioeconomic concerns. Additionally lowers the cost and time spent traveling both the healthcare practitioner and patient. According to research people with long-term conditions such as stroke, traumatic brain injury, and other neurological infections have unmet rehabilitation needs in their communities (5).

A HEP is a treatment plan created for a single patient in a setting that focuses on the specific challenges identified by their physiotherapist. This exercise program may be customized between physiotherapy treatments, including repetition set and supplementary strengthening endurances to be completed by the patient at home. Continued home training guarantees that the patient's condition has improved over time, and this has been recognized. The physiotherapist's ongoing customization of the HEP from each session added to the patient's resilience and trust in their altering regimen. When the patient has returned to (or possibly beyond) their baseline better outcome for the patient is indicated by both the patient's and physiotherapist's understanding of and commitment to reaching both short- and long-term objectives. Non-compliance rates as low as 20% have to exist reported in various reports measuring patient compliance (7-18).

In addition to the elements and models stated above, other factors and models can influence the patient's capacity to answer favorably to home exercise programs although Gender and age have been demonstrated to have minimal effect on these rates. age and gender have shown to have little effect on these rates there have been goal setting is one of the aspects discovered and investigated in the research that may affect compliance. The transtheoretical model, self-efficacy, intrinsic and extrinsic motivation (self-determination theory), and self-determination theory. Physical activity levels were low in the start anxiety, despair, and pain (19-30).

- A perception of exercise hurdles
- A lack of social support
- A lack of knowledge of their situation
- It is hard to necessary workout time
- High treatment

That's where telerehabilitation's potential comes into play. Telerehabilitation is an improvement of healthcare-related treatments and services, as detailed in the previous sections. Because mobile technologies are still in their infancy and are only beginning to gain traction, information and study are scarce on their use and benefits (31-37).

## Review

### Musculoskeletal rehabilitation

The researchers published 14 systematic reviews on musculoskeletal rehabilitation, one of which included meta-analyses. The most prevalent conditions were low back pain, hip arthroplasty, total knee arthroplasty, and osteoarthritis. Pain intensity as a measure of clinical effectiveness (as measured by the WOMAC assessment) was the most often reported outcome.

### Neurorehabilitation

Thirteen systematic reviews included meta-analyses covering neurorehabilitation. Children's strokes were the most common illness. The most often reported outcomes were motor function, mobility, balance, activities of daily living, and cognitive function.

There have been 15 systematic studies, including meta-analyses, on cardiorespiratory rehabilitation. There have been studies on cardiorespiratory rehabilitation, including meta-analyses. The most frequent medical disorders were coronary artery disease, heart failure, and chronic obstructive pulmonary disease (COPD) Exercise ability was the most commonly mentioned clinical effectiveness outcome.

## Conclusion

To see how useful telerehabilitation is as a form of physical treatment. attention technique in a diversity of conditions, groups, and settings. Despite the inconsistent results, telerehabilitation in manual treatment is gaining popularity. cardiac and pulmonary rehabilitation are among illnesses that require telerehabilitation. It could be as good as or better than in-person treatment. Clinical studies and systematic reviews of high quality are necessary.

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