# RAPID RESEARCH

### May 2023

### Inside This Week: Is Telehealth Physical Therapy Effective?

- Effectiveness of Tele-Rehab in Physical Therapy
- Tele-Rehab in Physical Therapy Practice

Tele-Rehab vs. Face to Face PT



@physicaltherapyresearch



## EFFECTIVENESS OF TELE-REHAB IN PHYSICAL THERAPY

<u>Click for Full Text</u> (Seron et al. 2021)



This systematic review summarized the available information on telerehabilitation in physical therapy in terms of clinical effectiveness, functionality, and quality of life.



# **KEY FINDINGS**

### 53 systematic reviews included;

### Types of Rehab & Outcomes:

Cardiorespiratory [15 studies], MSK [14 studies], Neuro [13 studies], Mixed [11]. FOR Pain, Function, Health-related Quality of Life

### Cardio Respiratory Outcomes:

Coronary heart disease had better tele-rehab outcomes for all-cause mortality. For COPD, no differences in clinical effectiveness between groups.

### Musculoskeletal Outcomes:

No difference in clinical effectiveness for pain intensity, functionality, or HRQL. Some results favored tele-rehab for functionality in patients with knee OA or LBP.

### Neuro Outcomes:

No difference between groups for balance, functionality, and HRQL. Patients with MS had improved balance and HRQL with tele-rehab.

## MAIN TAKEAWAYS

### Overall for Tele-rehab vs in-person or no rehabilitation:

13 reviews with low risk of bias favored tele-rehabilitation.

- 17 reported no differences between the groups.
- 35 with unclear/high risk of bias showed mixed results.

Tele-rehab in Physical Therapy could be comparable with inperson rehabilitation or better than no rehabilitation for conditions such as osteoarthritis, low-back pain, hip and knee replacement, and multiple sclerosis and also in the context of cardiac and pulmonary rehabilitation.

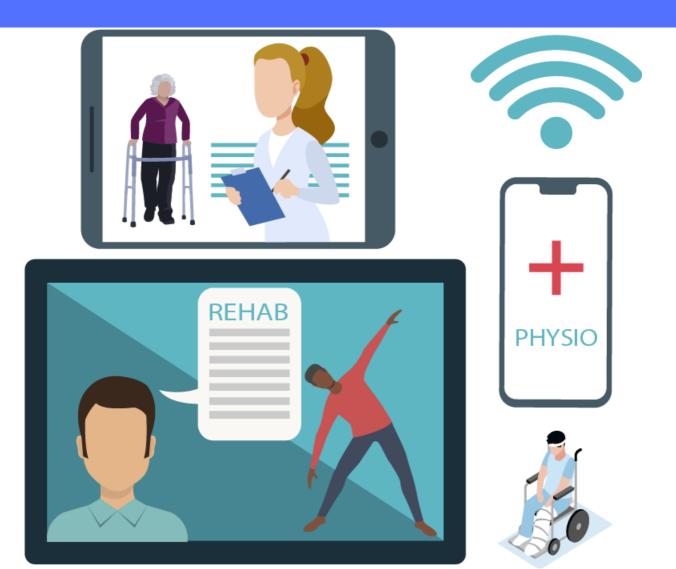
## TELEREHAB IN PHYSICAL THERAPIST PRACTICE

MAY 2023

<u>Click for Full Text</u> (Suso-Marti et al. 2021)



This systematic review determined whether telerehabilitation could be an effective alternative to conventional rehabilitation in physical therapist practice



# **KEY FINDINGS**

#### 29 studies were included;

#### Outcomes; Tele-rehab vs. Usual care:

### **Outcomes in Cardio-Respiratory Conditions:**

No statistically significant difference for patient function, or other outcomes.

### **Outcomes in Musculoskeletal Conditions:**

No statistically significant difference for patient function, or other outcomes.

### **Outcomes in Neurological Conditions:**

Statistically significant but negligible effect size (6 reviews) in favor of telerehabilitation to improve functional outcomes.

## MAIN TAKEAWAYS

Telerehabilitation offers positive clinical results regarding physical function and even comparable with conventional face-toface rehabilitation approaches, especially in patients with neurological conditions.

The advantages of lower cost and less interference by the rehabilitation processes in patients' daily life could justify implementing telerehabilitation in clinical settings.

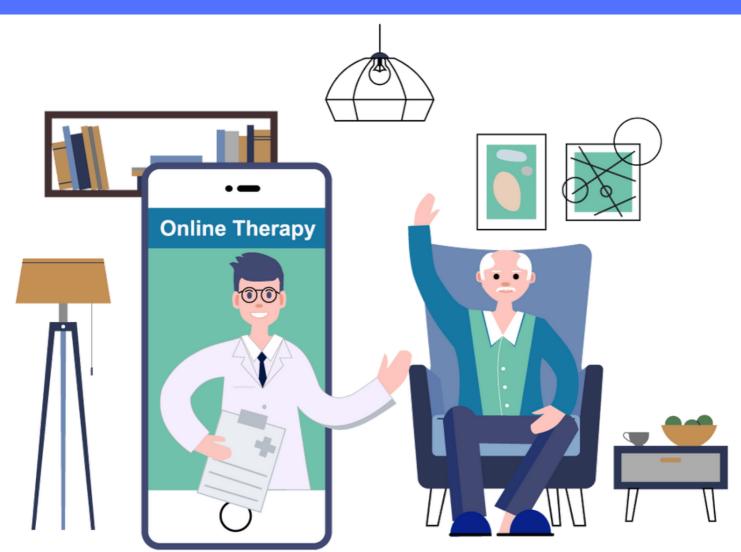
Adapting telerehabilitation to the usual practice of physical therapy has to be achieved through a change of paradigm to ensure an effective patient-based telerehabilitation.

## TELE-REHAB VS. FACE TO FACE PT

<u>Click for Full Text</u> (<u>Muñoz-Tomás et al.</u> <u>2023)</u>



This systematic review determined the effectiveness of telematically prescribed therapeutic exercise, as well as to identify those pathologies for which therapeutic exercise is most frequently applied and the most frequently used digital tools.



# KEY FINDINGS

### 11 studies included.

### <u>Telerehabilitation is most frequently used to treat:</u>

Musculoskeletal, Cardiac & Neurological pathologies.

### Most Commonly Preferred Tele-Rehabilitation Tools:

Videoconferencing systems, Tele-monitoring and Online platforms.

### Protocols:

Exercise programs ranged on average from 10 to 30 minutes. Similar across both intervention and control groups.

### Outcomes:

In all the studies, results proved to be similar in both groups when measuring functionality, quality of life and satisfaction.

## MAIN TAKEAWAYS

Most of the studies concluded that physiotherapy interventions using telerehabilitation were at least as effective as traditional rehabilitation interventions and are considered feasible and effective options.

Telerehabilitation interventions were shown to improve functional level and quality of life, as no significant differences with control groups were observed.

Telerehabilitation tools were generally implemented in the treatment process.

### GIVE US YOUR FEEDBACK!

MEMBERS

We are on a mission to make research more accessible, easier to interpret, and quicker to implement.

Help us by giving 1 minute of your time to leave feedback for us.

We would greatly appreciate any feedback you have, as it helps us continually improve!

### **Leave Review**

#### JBI CRITICAL APPRAISAL CHECKLIST FOR SYSTEMATIC REVIEWS AND RESEARCH SYNTHESES

Author: Seron et al. Year: 2021

		Yes	No	Unclear	Not applicable		
1.	Is the review question clearly and explicitly stated?	+					
2.	Were the inclusion criteria appropriate for the review question?	+					
3.	Was the search strategy appropriate?	+					
4.	Were the sources and resources used to search for studies adequate?	+					
5.	Were the criteria for appraising studies appropriate?	+					
6.	Was critical appraisal conducted by two or more reviewers independently?	+					
7.	Were there methods to minimize errors in data extraction?	+					
8.	Were the methods used to combine studies appropriate?	+					
9.	Was the likelihood of publication bias assessed?		x				
10.	Were recommendations for policy and/or practice supported by the reported data?	+					
11.	Were the specific directives for new research appropriate?	+					
Overall appraical: $10/11(90\%)$							

#### Overall appraisal: 10/11 (90%)

LIMITATIONS:

Grey literature was not searched.

The data extraction process and evaluation of the risk of bias were not performed in duplicate.

#### JBI CRITICAL APPRAISAL CHECKLIST FOR SYSTEMATIC REVIEWS AND RESEARCH SYNTHESES

Author: Suso-Marti et al. Year: 2021

		Yes	No	Unclear	Not applicable
1.	Is the review question clearly and explicitly stated?	+			
2.	Were the inclusion criteria appropriate for the review question?	+			
3.	Was the search strategy appropriate?	+			
4.	Were the sources and resources used to search for studies adequate?	+			
5.	Were the criteria for appraising studies appropriate?	+			
6.	Was critical appraisal conducted by two or more reviewers independently?	+			
7.	Were there methods to minimize errors in data extraction?	+			
8.	Were the methods used to combine studies appropriate?	+			
9.	Was the likelihood of publication bias assessed?	+			
10.	Were recommendations for policy and/or practice supported by the reported data?	+			
11.	Were the specific directives for new research appropriate?	+			

#### Overall appraisal: 11/11 (100%)

LIMITATIONS:

Many of the included studies presented low methodological quality and a high risk of bias.

Considerable variability between the systematic reviews in terms of the interventions as well as the end points used for the evaluation.

#### JBI CRITICAL APPRAISAL CHECKLIST FOR SYSTEMATIC REVIEWS AND RESEARCH SYNTHESES

Author: Munoz-Tomas et al. Year: 2023

		Yes	No	Unclear	Not applicable
1.	Is the review question clearly and explicitly stated?	+			
2.	Were the inclusion criteria appropriate for the review question?	+			
3.	Was the search strategy appropriate?	+			
4.	Were the sources and resources used to search for studies adequate?	+			
5.	Were the criteria for appraising studies appropriate?	+			
6.	Was critical appraisal conducted by two or more reviewers independently?	+			
7.	Were there methods to minimize errors in data extraction?	+			
8.	Were the methods used to combine studies appropriate?	+			
9.	Was the likelihood of publication bias assessed?		x		
10.	Were recommendations for policy and/or practice supported by the reported data?	+			
11.	Were the specific directives for new research appropriate?	+			

#### Overall appraisal: 10/11 (90%)

LIMITATIONS:

Some studies may not have been included due to some databases not being searched.

Difficult to compare results across studies due to different diagnoses and treatments.

Overall, small sample sizes and the lack of a follow-up.