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♠ A scoping review of "remote" rehabilitation interventions to address COVID-19 sequalae

Julie Whitney¹, Lindsay Bearne¹, Patrick White¹, Arietta Spinou¹, Emma Godfrey¹, Matthew O'Connell¹, Julia Fox-Rushby¹, Graham Fisher², Katie Sheehan¹

¹King's College London, University of London; ²Patient representative

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Julie Whitney

ABSTRACT

Plain English Summary

Many people who have been unwell with COVID-19 are suffering long-term problems with their fitness and ability to participate in usual activities of daily life. Symptoms include muscle weakness, breathlessness, changes in sensation, pain and fatigue. There are also effects on psychological and mental health. Rehabilitation could help with these issues. However, there are challenges in providing this rehabilitation because so many patients need to access these services and because face to face treatment is not always possible due to social distancing. There has been increasing interest in remote rehabilitation interventions from researchers and App. developers in recent years. Remote interventions use technology such as video, smartphone applications and interactive conferencing (i.e. Zoom) to deliver rehabilitation programmes.

We will search for evidence about remote rehabilitation interventions and application stores to identify existing remote interventions that might meet the needs of COVID-19 survivors. This information will allow rehabilitation teams to direct patients to suitable remote interventions. This may be needed to replace or to enhance their rehabilitation programme.

ATTACHMENTS

scoping review protocol version 4.pdf

DOI

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PROTOCOL CITATION

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Protocol registration

The protocol is registered on protocols.io.

2 Inclusion criteria

Papers / applications that describe a rehabilitation intervention:

- that is aimed at long-term symptoms known to be associated with COVID-19 (i.e. fatigue, breathlessness, weakness)
- aimed at community based or self-management level of acuity (excluding hospital or inpatient rehabilitation)
- devlirered remotely

The intervention type, dose and delivery should be clearly described / replicable.

The intervention should be currently accessible as an application / web-based tool to the public (although may be behind a paywall).

Programmes should be available in English language and based in the UK.

Types of evidence sources: meta-analysis, systematic review, randomised controlled trial, non-randomised or before / after study design as well as selected commentaries.

3 Search strategy

The review will use a five-step search strategy:

- 1. An initial search of two databases (MEDLINE and CINAHL) with selected papers analysed for potential additional keywords.
- 2. A full search across all databases (Embase, Cochrane trails register) using any newly identified keywords as search terms
- 3. A search of reference lists of selected papers.
- 4. A search of grey literature including conference proceedings from tech in health conferences; selected commentaries
- 5. App. Stores search (Apple, Google Play and NHS Apps library) and in the website www.fnd.io.

4 Data extraction

Data from papers:

Source details

oAuthor / date

oConditions / populations for which the intervention is designed (including acuity) oMedia type

Type of rehabilitation

oType of exercise / activity

oDose (intensity / frequency / duration) of intervention

Delivery of the intervention

oQualifications / profession of developer / instructor

oMotivational tools incorporated into the intervention (use template to quantify)

oTheories to support delivery

oOpportunity for social interaction / peer support incorporated into the intervention

oFollow up / support provided within the tool / intervention

oCosts of the interventions (simple i.e. whether it requires a fee to use)

Data from applications:

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Source information

oApp name, platform, version, developer, size, star rating, number of installs. oPrivacy policy statement and medical product status. oConditions / populations for which the intervention is designed (and acuity)

Type of rehabilitation
 oType of exercise / activity
 oDose (intensity / frequency / duration) of intervention

• Delivery of the intervention

oQualifications / profession of developer / instructor
oMotivational tools incorporated into the intervention (use template to quantify)
oTheories to support delivery
oOpportunity for social interaction / peer support incorporated into the intervention
oFollow up / support provided within the tool / intervention
oCosts of the interventions (simple i.e. whether it requires a fee to use

5 Analysis

Interventions will be summarised narratively according to target condition and demographic, media type and rehabilitation type (dose (frequency, intensity, duration) and support provided (including motivational tools / theories to support delivery)) using tables and/or charts. Interventions relevant to different COVID-19 rehabilitation needs (addressing different symptoms) will be illustrated using tables and/or charts.

Consultation

Findings will be reviewed by a stakeholder group of rehabilitation clinicians and academics that we have assembled for a related project.