

Telerehabilitation

Real-time telerehabilitation for the treatment of musculoskeletal conditions is effective and comparable to standard practice: a systematic review and meta-analysis

TYPE OF PROJECT

Systematic review and meta-analysis

AIM OF THE PROJECT

To evaluate the effectiveness of telerehabilitation for the management of muscle injuries and pain.
To determine how telerehabilitation compares to face-to-face treatment.

PUBLICATION DETAILS

Published in Clinical Rehabilitation 2017, Vol. 31(5) 625-638.

Cottrell MA, Galea OA, O'Leary SP, Hill AJ and Russell TG.

STAKEHOLDERS INVOLVED

- School of Health and Rehabilitation Science; Centre for Research Excellence in Telehealth
- University of Queensland
- Physiotherapy Department, Royal Brisbane and Women's Hospital

Background



- Chronic pain can be a serious burden affecting all aspects of life and contributes to diminished quality of life
- Chronic musculoskeletal conditions are a leading cause of pain and disability
- There is a growing body of evidence recognizing the importance of psychological interventions, such as motivational interviewing, in chronic musculoskeletal pain population
- Telerehabilitation may be useful in the management of chronic pain

Results



- Results suggest that telerehabilitation:
 - is effective in the improvement of physical function
 - combined with usual care is more favourable than usual care alone
 - is equivalent to face-to-face treatment for physical function
- The biopsychosocial model is considered best practice with a key component of active self-management
- Improvement of pain was also comparable between the two groups

Discussion



- Regardless of the condition, telerehabilitation intervention or the medium used, the improvement of pain was comparable between cohorts
- This review provides further support to previous positive results for the use of telerehabilitation in the management of musculoskeletal conditions
 - further rigorous clinical trials should consider how telerehabilitation impacts self-efficacy in chronic conditions
- Caution needs to be taken generalising these findings

Recommendations



- In the management of a variety of musculoskeletal conditions, telerehabilitation:
 - is considered to be a viable option
 - appears to be superior when compared to current standard practice for the improvement of physical function
 - is equivalent, and not inferior, to face-to-face care in physiotherapy management in a total knee arthroplasty population
- Telerehabilitation may be used to overcome issues with access to face-to-face care (eg. rural and remote locations)