



# FOCUS ON RESEARCH

## Physiotherapy Led Web-Based Rehabilitation for People with Multiple Sclerosis (MS)

### Researchers

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### Aim

The aim of the study was to design web-based physiotherapy rehabilitation and to explore the feasibility, effectiveness and patient satisfaction of web-based physio for people with Multiple Sclerosis.

### Project Outline/Methodology

The website, developed in collaboration with a steering group, consists of a home page, exercise pages and an advice section. Each exercise page within the website consists of a video in half of the screen, a written explanation of the exercise and an audio description of the exercise. Thirty people moderately affected with MS were recruited from the MS Service, NHS Ayrshire and Arran. Participants were randomised to receive 12 weeks of web-based physiotherapy or usual care. Outcome measures were taken before and after the 12 week intervention period. The main outcome measure was change in walking speed. Other outcomes included a range of physical, functional and psychological measures. The intervention was an individualised rehabilitation programme, consisting of a range of cardiovascular, strengthening and balance exercises. Participants were advised to complete the programme at least twice a week and exercise programmes were progressed/alterd by the physiotherapist, as required by remotely changing any combination of exercises, level of difficulty or number of repetitions. Following the web-based rehabilitation programme participants completed an evaluation questionnaire and telephone interview to obtain participants views.

### Key Results

From the evaluation questionnaire, all participants stated that they would be happy to receive web-based rehabilitation in the future and would recommend it to others with MS. From the telephone interviews, participants reported that they enjoyed the programme with the half of participants feeling benefits in their balance, walking ability and function. A noticeable number of participants reported that they had previously found exercise classes embarrassing and so they preferred web based physiotherapy. All

participants reported the website was easy to use and that they felt adequately supported. There were trends toward improvements in walking speed, MS symptoms and physical impairment following the 12 weeks of web based physiotherapy.

### Conclusions

The results of this study demonstrate that web based physiotherapy is an acceptable and feasible model for delivering rehabilitation for people with MS and has the potential to improve physical and functional outcomes.

### What does this study add to the field?

This is the first UK based study of web based physiotherapy for people with MS and, although a small study, the results are similar to previous research investigating the use of telerehabilitation for people with MS and other neurological conditions. In addition the results are comparable to studies investigating home-based and group-based physiotherapy for people with MS.

### Implications for Practice or Policy

Web-based physiotherapy allows patients access to therapy regardless of day, time and geographical location. It allows physiotherapy to be delivered to hard to reach groups and those who would otherwise not chose to access services. This model of delivery could be rolled out to all patients with MS as well as other long-term conditions. Web-based rehabilitation may reduce costs and future demand on the NHS although this requires further investigation.

### Where to next?

The encouraging results of this study will be used to inform a definitive randomised controlled trial and, with minor modifications, the the web based physiotherapy programme will be evaluated in patients with other long-term conditions.

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