

# **Evaluation of a rolling rehabilitation programme for patients with non-specific low back pain**

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Conference paper: ER-WCPT Liverpool 2016

## **Purpose**

Low back pain (LBP) is the leading cause of worldwide disability. Around 85% of LBP is thought to be ‘non-specific’, that is, there is no recognisable underlying pathological cause. Approximately 20% of patients who seek treatment for their condition are reported to go on to develop persistent symptoms. As such, LBP contributes significantly to the health, social and economic burden of both the individual and society.

The back rehabilitation programme (BRP) is group exercise programme for patients with non-specific low back pain that combines cognitive behavioural therapy (CBT) principles and therapeutic exercise to empower patients to self-manage their condition. Poor attendance and high attrition rates resulted in changes to the format of the programme from a standard (consecutive week 1 to week 8) approach to a continual rolling approach.

**Aim:** This study aims to evaluate the effectiveness of a BRP using a continual rolling approach on patient reported outcome measures (PROM), clinical outcomes, and attendance rates.

## **Method**

A service evaluation using a retrospective, observational cohort design which included all patients who attended the rolling BRP in 2014 during a 12-month period. The outcome measures used were: PROM: Bournemouth Questionnaire (BQ); clinical outcomes: fitness tests - sit to stand test, step test and walk test; and attendance.

**Data Analysis:** Descriptive analysis was undertaken using medians and interquartile ranges. Changes between baseline and follow-up were assessed using Wilcoxon Signed Rank test. The significant value was  $p < 0.05$ . Attendance was analysed descriptively by comparing the percentage of patients who completed the rolling BRP in 2014 to the percentage of patients who completed the standard format BRP in 2012.

## **Results**

In total 62 patients attended the rolling BRP in 2014. Forty-one patients (66%) completed all sessions of the programme. Fifty-six percent of patients had an improved BQ score of 47% or more indicating a clinically significant improvement. Inferential testing showed statistically significant improvements in the BQ and all three fitness tests post programme ( $p < 0.0001$ ). Sixty-two patients attended the rolling BRP and 41 patients (66%) completed which was twice the percentage of attendance at the standard programme. However, only 4% of patients eligible for the BRP were referred to the programme.

## **Discussion**

This study suggests that patients with non-specific LBP who have attended the continual rolling BRP show clinical and statistical improvements in a PROM and fitness tests.

Although the rolling format also appears to enhance attendance, the BRP appears to be underutilised.

### **Impact**

There is limited evidence of the effectiveness of a rolling BRP for the management of non-specific low back pain. This evaluation may help to demonstrate how this approach to the management of low back pain could maximise the impact on practice.