

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

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Relevance: This study is an example of a service evaluation following the implementation of service change. It investigates an innovative approach to the management of low back pain to maximise the impact on practice.

Purpose: Low back pain (LBP) is the leading cause of disability and absenteeism from work. 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 and long term disability. As such, LBP contributes significantly to the health, social and economic burden of both the individual, health service and society.

The back rehabilitation programme (BRP), a 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 effectively. However, this is associated with poor attendance and high attrition rates, which has 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 evaluated the effectiveness of a BRP using a continual rolling approach.

Methods/analysis: 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: Bournemouth Questionnaire (BQ); fitness tests – sit to stand test, step test and walk test; and attendance rate.

Data analysis: Descriptive analysis was undertaken using medians and interquartile ranges. Changes between baseline and follow-up were assessed using Wilcoxon Signed Rank test. 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. Improvements in the BQ and all three fitness tests post programme were statistically significant from baseline to follow-up (all $p < 0.0001$). Sixty-two patients attended the rolling BRP and 41 patients (66%) completed which was twice the percentage of attendance at the standard programme. However, from the total population of patients who were eligible for the BRP, only 4% of these patients were referred to the programme.

Discussion and conclusions: This study suggests that patients with non-specific LBP who have attended the continual rolling BRP show clinical and statistical improvements in patient reported and clinical outcomes. Although the rolling format also appears to enhance attendance, the BRP appears to be underutilised.

Impact and implications: There is limited evidence of the effectiveness of a rolling BRP for the management of non-specific low back pain. This evaluation found that a rolling BRP was an effective approach for this condition. Therefore, physiotherapists need to be aware of these findings and should consider implementing this into their practice.

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