

SYSTEMATIC REVIEW OF EXERCISE AND CHRONIC LOW BACK PAIN.

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Exercise is popularly used in the rehabilitation of chronic low back pain (CLBP) patients; however a consensus does not exist on the most effective programme design. This review aimed to investigate current evidence relating to the type and quality of exercise being offered within randomised controlled trials (RCTs), and to assess how treatment outcomes are being measured. **Methods:** A two-fold methodological approach was adopted: a methodological assessment identified RCTs of “medium” or “high” methodological quality. Exercise quality was subsequently assessed according to the predominant exercise used within the trial. Outcome measures were analysed based on current recommendations (Bombardier, 2000). **Results:** 54 relevant RCTs were identified, of which 51 were scored for methodological quality. Sixteen RCTs involving 1730 patients qualified for inclusion in this review based upon their methodological quality, and chronicity of symptoms; exercise had a positive effect in all 16 trials. Seventy-five percent of programmes (n=12) incorporated strengthening exercise, of which 85% (n=10) maintained their positive results at follow-up. Supervision and adequate compliance were common aspects of trials. 72% of trials supervised maintained their positive results at follow-up. A wide variety of outcome measures were used. Outcome measures did not adequately represent the guidelines for impairment, activity and participation, and impairment measures were over-represented at the expense of others (WHO, 2000). **Conclusions:** The review highlighted the diversity of exercise programmes offered. The key finding is that exercise has a positive effect on CLBP patients, and results are largely maintained at follow-up, despite this diversity. Strengthening is a common component of exercise programmes, however the role of exercise co-interventions must not be overlooked. More high quality trials are needed to accurately assess the role of supervision and follow-up, together with the use of more appropriate outcome measures.

Keywords: chronic low back pain, exercise, outcome measures, supervision, compliance, methodological quality.

References:

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The authors acknowledge grant support from the Department of Education and Learning (NI).