

Implementation of acute low back pain guideline recommendations: a cluster randomized controlled trial with chiropractors and physiotherapists

French SD¹, O'Connor DA², McKenzie JE², Page MJ², Mortimer DS², Walker BF³, Turner S², Keating JL², Grimshaw JM⁴, Michie S⁵, Francis JJ⁶, Green SE²

Affiliations

1. Macquarie University, Sydney, Australia
2. Monash University, Melbourne, Australia
3. Murdoch University, Perth, Australia
4. University of Ottawa, Canada
5. University College London, United Kingdom
6. City University of London, United Kingdom

Abstract text (*Arial, size 10 font, left aligned, maximum 250 words*) currently 246 words

Background

Low back pain (LBP) is common, has high burden, and there are evidence-to-practice gaps in the chiropractic and physiotherapy setting.

Objectives

Determine if, for LBP patients, the intervention:

- (i) Reduced x-ray referral.
- (ii) Improved disability for patients at three months.

Method

Chiropractic and physiotherapy practices were randomly assigned to receive a guideline for acute LBP (control), or to facilitated interactive workshops and peer support (intervention). Primary outcomes were x-ray referral, and LBP-specific disability (at 3 months). Secondary outcomes were measured via practitioner and patient questionnaire.

Results

104 practices (43 chiropractors, 85 physiotherapists; 755 patients) were randomised to the intervention and 106 practices (45 chiropractors, 97 physiotherapists; 603 patients) to the control. There was no statistically significant difference in the odds of patients being referred for x-ray (Adjusted (Adj) OR: 1.40; 95%CI 0.51, 3.87). There were no important differences in LBP-specific disability (Adj mean difference: 0.37; 95%CI 0.48, 1.21). Patients in the intervention group were more likely to be given advice to stay active (Adj OR: 1.96; 95%CI 1.20, 3.22). Intervention group practitioners were more likely to intend to adhere to the guideline for x-ray referral (Adj OR 0.27; 95%CI 0.17, 0.44) and for giving advice to stay active (Adj OR 2.37; 95%CI 1.51, 3.74), but there was no difference in intention related to general imaging referral (Adj OR 0.61; 95%CI 0.32, 1.15).

The intervention did not change the primary study outcomes, with no difference in x-ray referral and no difference in patient outcomes between groups.

Australian New Zealand Clinical Trials Registry, ACTRN12609001022257; funded by the National Health and Medical Research Council.