

A systematic review of Clinical Practice Guidelines for persons with non-specific low back pain with and without radiculopathy: Identification of best evidence for rehabilitation to develop the WHO's Package of Interventions for Rehabilitation

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Background. The identification of evidence-based interventions for rehabilitation for persons with non-specific low back pain (LBP) is a crucial step for the development of the World Health Organization's (WHO) Package of Interventions for Rehabilitation (PIR). Our objective was to conduct a systematic review of clinical practice guidelines (CPGs) about the management of persons with non-specific LBP with and without radiculopathy and synthesize the recommendations to inform the WHO PIR.

Methods. This paper is part of a "Best Evidence for Rehabilitation" (be4rehab) series, developed according to the methodology by the WHO Rehabilitation Program and Cochrane Rehabilitation under the guidance of WHO's Guideline Review Committee Secretariat. Eligible guidelines were published between 2009 and 2019 in English, French, Italian, or Swedish; included adults or children with non-specific LBP with or without radiculopathy; assessed the benefits of interventions for rehabilitation on functioning. We searched electronic databases (MEDLINE, EMBASE, CINAHL, the Canadian Medical Association CPG Infobase, International Guidelines Network, and American College of Physicians Clinical Guidelines and Recommendations) and the grey literature from January 1, 2009 to March 17, 2019. Pairs of independent reviewers assessed the quality of the CPGs using AGREE II. Relevant data were extracted, and the findings were synthesized narratively.

Results: Our search yielded 3,049 articles. We removed 236 duplicates and screened 2,813 articles. Of those, 12 CPGs were eligible for critical appraisal and 4 CPGs fulfilled the quality criteria and were included in our synthesis. One of the included guidelines was about the conservative treatment of LBP and sciatica inpatients ≥ 16 years of age, one was about manual therapy and other rehabilitation treatments for adults (≥ 18 years) with LBP, one included interventional therapies, surgery and interdisciplinary rehabilitation for adults with LBP, and the last included pharmacological, educational and rehabilitation treatments for adults with acute and chronic LBP. Recommended interventions included: 1) education about recovery expectations, self-management strategies, and continuance of usual activities; 2) multimodal approaches incorporating education, exercise and spinal manipulation; 3) NSAIDs in the acute stage with education; and 4) for those with persistent pain, intensive interdisciplinary rehabilitation based on exercise with a cognitive/behavioral approach.

Discussion: Many CPGs for LBP are available, but their quality varies. According to our systematic search and evaluation, most of the retrieved CPGs didn't fulfil the minimum quality criteria to be included in the present review and there is a lack of high-quality clinical practice guidelines for people below 18 years. Our review summarizes recommendations from high-quality CPGs for the rehabilitation of adults with LBP with or without radiculopathy. Overall, the recommendations highlight the benefits of education, exercise and multimodal care that includes manual therapies. However, the use of most passive modalities is not recommended. The collected recommendations were consistent among the guidelines. Implementation strategies are needed to implement the recommendations and evaluation of these strategies to see if there's improvement in patients' outcomes and costs.

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