Effectiveness of a biopsychosocial multidisciplinary intervention in the evolution of non-specific sub-acute low back pain in the working population: cluster randomised trial.

Background

The guidelines for non-specific low back pain (LBP) recommend pharmacological and non-pharmacological resources and patient education. Integrate earlier multidisciplinary treatment strategies (physical, psychological and social/occupational) to patients with non-specific sub-acute LBP, may avoid chronification, besides reduce individual and social impact.

Research question(s)

Analyse the effectiveness of a biopsychosocial multidisciplinary intervention (rehabilitation or physiotherapy and cognitive-behavioural therapy), in the improvement of disability, reduce pain severity and better quality of life, compared to usual clinical care.

Methods

A cluster randomised clinical trial, conducted in 39 Primary Health Care Centres in Province of Barcelona. Included patients between 18-65 years old (n=501; control group=239 and intervention group=262). Control group received usual care, according to guidelines. Intervention group received usual care plus a biopsychosocial multidisciplinary intervention (sessions of 10 hours in total). Main outcome is the Roland Morris disability questionnaire (RMDQ). Other outcomes: severity of pain (Mc Gill Pain questionnaire) and quality of life (SF-12). Assessed at baseline, 3, 6 and 12 months. Analysis by intention to treat, analyst blinded.

Results

Total 501 participants, remained 84% at 3 months and 77.2% at 12 months. Mean age 46.8 (SD:11.5) years-old and 64.7% women. Intervention group presented older population and female predominance. Intervention group showed a decrease in disability (-3.8 units; 95% CI:-4.5 to −3.2) on the RMDQ at 3 months and 12 months (-5.1 units; 95% CI:-5.8 to −4.3). In the level of pain, intervention group decreased -2.7 points at 3 months (95% CI:-3.2 to −2.2) and -3.6 points (95% CI:-4.1 to −3.0) at 12 months. Control group showed lower decrease in the intensity of pain. Physical and mental health scores of the SF-12 increased in both groups (>4 points), with greater effect in intervention group.

Conclusions

A multidisciplinary biopsychosocial intervention showed an improvement in disability, pain and quality of life in working people with non-specific sub-acute LBP.