

BEHAVIOURAL THERAPY (UPDATED MARCH 2005)

CLINICAL QUESTION

Is behavioural therapy effective in the management of chronic non-malignant low back pain ≥ 3 months' duration?

What type of behavioural therapy is the most effective?

THE EVIDENCE

Treatment	Condition	Comparator	Relevant Results/Authors' Conclusions [#]
Behavioural therapy [†] (cognitive, operant, respondent [progressive relaxation {PR} or electromyographic {EMG} biofeedback], or cognitive-behavioural)	Chronic non-malignant low back pain	Waiting list controls (WLC)	<p>Moderate evidence that PR has a positive effect on pain and behavioural outcomes and that a combination of respondent and cognitive therapy has a positive effect on pain, compared to WLC, in the short term.</p> <p>Moderate evidence of no difference between EMG biofeedback and WLC on pain and behavioural outcomes, in the short term.</p> <p>Conflicting evidence that operant therapy improved pain compared to WLC, in the short term.</p> <p>Limited evidence of improvement in generic functional status with PR compared to WLC, in the short term.</p>
		Exercise Usual care	Conflicting evidence when compared to other conservative treatments.
Behavioural therapy (cognitive, operant, or cognitive-behavioural) plus [‡] : <ul style="list-style-type: none"> ▪ physiotherapy and back education ▪ multidisciplinary treatment program ▪ inpatient pain management program ▪ pharmacotherapy or physical therapy ▪ exercise therapy 	Chronic non-malignant low back pain	The other treatment alone	Moderate evidence that adding a behavioural component to another treatment does not improve patient outcomes.
Comparisons among different types of behavioural therapy [§]	Chronic non-malignant low back pain	Cognitive versus operant or respondent; cognitive-behavioural versus cognitive, operant, or respondent	Moderate evidence that various types of behavioural treatment do not differ in their effectiveness.

[†]Based on one **GOOD***, one **AVERAGE***, and eight **POOR*** quality randomised controlled trials (RCTs), as assessed by the authors of this review, published between 1982 and 1995; [‡]Based on six **POOR*** quality RCTs published between 1990 and 1998; [§]Based on one **GOOD***, one **AVERAGE*** and five **POOR*** quality RCTs published between 1982 and 2003; [#]Refer to Grading Key document for explanation of evidence grading

IMPLICATIONS FOR PRACTICE

What we don't know:

- Is behavioural therapy more effective than other conservative treatments?
- Which of the various behavioural therapies is the most effective for which patient subgroups?

Research Evidence: What we know

In patients with chronic low back pain, evidence indicates that:

- combined cognitive-respondent therapy and progressive relaxation therapy alone is more effective than waiting list controls in the short term;
- behavioural therapy offers no advantage when combined with other treatments.

The various types of behavioural therapy (cognitive, operant, respondent [relaxation training or electromyographic biofeedback], cognitive-behavioural) do not differ in their effectiveness.

Recommendation from Clinical Ambassadors

Although behavioural therapy may be effective, a more multidisciplinary approach is recommended.

Among the various forms of behavioural treatment, cognitive-behavioural therapy (CBT) has the broadest appeal. It focuses on self-management of pain rather than environmental control. CBT is appropriate for patients who are ready to learn skills for pain management.

Refer to a psychologist or other provider who has specific training and experience with this approach. CBT for chronic pain management is not part of the skill set of generalist mental health providers.

Progressive Muscle Relaxation (PR) training is also an option to consider since more mental health professionals are familiar with training patients with this technique.

The Clinical Ambassadors: Dr Pamela Barton, Dr Saifee Rashid, Dr Paul Taenzer

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Reference: This Evidence Brief is based on results from an **AVERAGE*** quality systematic review (SR).
Ostelo RWJG, van Tulder MW, Vlaeyen JWS, Linton SJ, Morley SJ, Assendelft WJJ. Behavioural treatment for chronic low-back pain.
Cochrane Database Syst Rev. 2004;(3):CD002014.

***Quality ratings for RCTs & SR:** Good ● Average ● Poor ●

[Key to Evidence Gratings](#)

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[Methodology](#)

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