

Effective Health Care

Bulletin on the effectiveness
of health service interventions
for decision makers

This bulletin summarises
the research evidence
on the effectiveness of
the most common
conservative (non-
surgical) treatments for
acute and chronic low
back pain.



Acute and chronic low back pain

- Low back pain is very common in developed countries, especially in adults of working age. The costs of back pain to society are huge. In 1998, the direct health care costs of back pain in the UK were estimated at £1632million.
- For acute low back pain, advice to continue ordinary activity can give equivalent or faster symptomatic recovery from the acute attack and lead to less chronic disability and less time off work. Bed rest should not be recommended as a treatment for acute low back pain.
- Non-steroidal anti-inflammatory drugs (NSAIDs) are effective for short-term symptomatic relief in patients with acute low back pain. Several types of NSAIDs appear similarly effective, but can have harmful side-effects.
- Muscle relaxants (benzodiazepines) are effective at reducing pain for patients with acute low back pain but can have harmful side-effects. Different benzodiazepines appeared to be similarly effective.
- There is strong evidence that exercise therapy may help chronic low back pain patients return to normal daily activities and work.
- Multidisciplinary treatment programmes, involving components such as education, active exercise programmes, behavioural treatment, relaxation exercises, and work-place visits, can improve long-term outcomes for pain, functional status and sick leave compared with other treatments for chronic low back pain.

A. Background

Low back pain is very common in developed countries, especially in adults of working age. Low back pain is characterised by a range of symptoms which include pain, muscle tension or stiffness, and is localised between the shoulder blades and the folds of the buttocks, with or without spreading to the legs (sciatica). Low back pain is commonly categorised into acute, sub-acute and chronic. Acute low back pain is usually defined by a period of complaint of six weeks or shorter, sub-acute low back pain as a period between six and twelve weeks and chronic low back pain as a period of complaint longer than twelve weeks.¹ Low back pain is often self-limiting so may resolve with or without treatment.²

In 1998, a national survey reported that 40% of adults said they had suffered from back pain lasting more than one day in the previous 12 months, the same level as reported in 1996.³ The survey also reported that 15% of back pain sufferers said they were in pain throughout the year, and that nearly 40% of back pain sufferers consulted a GP for help; 10% visited a practitioner of complementary medicine (osteopaths, chiropractors and acupuncturists).³ The costs of back pain to society are huge, and for the UK, the NHS expenditure has previously been estimated to be between £265million and £383million per annum.⁴ It has recently been reported that the direct health care cost of back pain in 1998 was £1632million, of which approximately 35% relates to services provided in the private sector.⁵ The scale of the problem has led the Faculty of Occupational Medicine to publish guidelines for the management of low back pain at work.⁶⁻⁸ The Royal College of General Practitioners has also produced guidelines for the management of acute low back pain.⁹ The Swedish Council on Technology Assessment in Health Care has recently published a review dealing with back and neck pain.¹⁰ The impact of psychosocial factors in low back pain has been the subject of two recent reviews of the literature.^{11,12}

There are a number of conservative (i.e. non-surgical) pharmacological and non-pharmacological treatments of acute and chronic low back pain. The principal aims of these treatments are usually to reduce pain, teach patients strategies on how to cope with the pain they experience and improve patients' daily functioning including return to work. This issue of *Effective Health Care* summarises the research evidence on the effectiveness of the most common conservative (non-surgical) treatments for acute and chronic low back pain.

B. Nature of the evidence

Most of the information summarised in this bulletin has been extracted from systematic reviews undertaken by the Cochrane Back Group. For a more detailed discussion of each area, the reader is referred to the original reviews which are regularly updated in the *Cochrane Library*.¹³ Additional information has been taken from three recent overviews of systematic reviews, undertaken by reviewers from the Cochrane Back Group, of the most common interventions for acute and chronic low back pain.¹⁴⁻¹⁶

Reviewers from the Cochrane Back Group report that approximately two-thirds of the randomised controlled trials (RCTs) which were included in the various reviews, were small and of mediocre or poor methodological quality.¹⁷ Pharmacological RCTs were in general of better quality than the RCTs of non-pharmacological treatments. Van Tulder et al. report that the most common methodological shortcomings of included RCTs were an inadequate randomisation procedure, the lack of blinding of patients, therapists and outcome measurements, and an inadequate description of drop-outs.¹⁷

Van Tulder et al. also report a clear trend that methodological quality of RCTs published after 1990 was considerably higher than earlier RCTs.¹⁷ As an example the authors highlight the Cochrane Review on exercise therapy where only 13% of

studies published before 1990 appeared to be of good quality, compared to 58% of studies published in or after 1990. Van Tulder et al. suggest that the reason more recent RCTs are of higher quality, may in part be the fact that many systematic reviews have been published in the past decade, in which the methodological shortcomings of earlier RCTs on low back pain are comprehensively discussed. For a more detailed discussion of the methodological quality of RCTs in each area, the reader is referred to the original reviews.

C. Acute low back pain

C.1 Advice to stay active

A systematic review of advice to stay active found eight RCTs (n= 1784) of which six were of good quality.¹⁸ The advice to stay active was compared as a single treatment or in combination with other interventions, such as back schools (a gradually increasing programme of activity and behaviour therapy). All eight RCTs showed positive results. Advice to stay active made no difference to pain or to initial recovery but increased patient satisfaction. Three RCTs showed that advice to stay active led to a faster return to work; one showed no significant difference. Chronic disability (three RCTs) and healthcare use for back pain in the next year (one RCT) were reduced. Three RCTs showed that time off work in the next year was reduced. Two RCTs that compared advice to stay active with bed rest were both of high quality and showed that ordinary activity produced faster recovery. There was no evidence that early activity had any harmful effects or led to more recurrences. A Cochrane review is currently being prepared.¹⁹

C.2 Exercise therapy

A systematic review has found strong evidence that exercise therapy is not effective for the treatment of acute low back pain.²⁰ Eight RCTs (n=1149) compared exercise therapy with other

conservative treatments (standard treatment by GP, manipulation, back schools and NSAIDs). Only one RCT reported better outcomes for the exercise therapy group on primary outcomes, i.e. pain and return to work, compared to a mini back school. Two RCTs reported better recovery and more improvement in spinal flexion with manipulation than with exercise. The other five RCTs did not find significant differences on pain intensity, functional status or overall improvement between exercise and other active treatments. Four RCTs (n=888) compared exercise therapy with some type of inactive treatment (bed rest, placebo ultrasound/shortwave diathermy, patient information). Two of the RCTs reported no differences in pain or functional status, whilst one other RCT reported better outcomes for the control group.

There was also evidence that specific exercises for back complaints are not useful in the treatment of acute low back pain. These include flexion, extension, aerobic and muscle relaxing exercises.¹⁴ Studies are in progress into the effectiveness of the strengthening of specific abdominal muscles (transversus abdominus and multifidus). One small trial (n=39) on a subgroup of patients with acute, first-episode, unilateral low back pain and unilateral, segmental inhibition of the multifidus muscle has been carried out.²¹

C.3 Multi disciplinary treatment programmes

Two poor quality RCTs were included in a review examining the effectiveness of multidisciplinary rehabilitation for sub-acute low back pain (pain that lasted for more than four weeks but less than three months).²² The review found that there was limited evidence of a positive effect and that multidisciplinary rehabilitation that included workplace visits led to a faster return to work.

C.4 Bed rest

A systematic review found nine RCTs (n=1435) comparing bed rest with other treatments, like exercise therapy, physiotherapy, manipulation and NSAIDs.²³ Either no difference was found, or bedrest

resulted in worse outcomes in pain, functional status, recovery and sick leave. Bed rest appeared to be no more or less effective than no treatment or a type of placebo treatment. Two good quality RCTs found no significant differences between seven days and two to three days of bed rest in patients with low back pain of different duration with and without radiating pain.

Overall, the review suggests that, at best, bed rest as compared with advice to stay active will have small positive effects, and at worst might have small harmful effects on acute low back pain.

C.5 Spinal manipulation

A systematic review of 36 RCTs assessed the efficacy of spinal manipulation for patients with low back pain.²⁴ Manipulations included: osteopathic, chiropractic, rotational, Cyriax, Kaltenborn, Lewitt, Janda, Stoddard and Maitland. Twelve RCTs (n=899) compared spinal manipulation with other treatment modalities in acute low back pain. Comparison treatments included exercises, massage, back school, analgesics, shortwave diathermy and NSAIDs. Contradictory results were reported with five RCTs reporting positive effects, four RCTs reporting negative effects and three RCTs reporting positive effects in subgroups. Five studies (n=383), of which one was of good quality,

compared manipulation with some kind of placebo therapy (detuned shortwave diathermy or sham manipulation) and found contradictory results on pain reduction.

Manipulation can provide short-term improvement in pain and activity levels and higher patient satisfaction. The optimum timing for this intervention is unclear. The risks of manipulation are very low if carried out by people competent in manipulation. A Cochrane review updating spinal manipulation for low back pain is currently being prepared.²⁵

C.6 Traction

A systematic review including 17 RCTs found inconclusive evidence that traction is an effective therapy for back and neck pain.²⁶ Included in the review were two poor quality RCTs (total n=225) in which traction was compared with a corset and infra-red therapy. One RCT found more overall improvement after one and three weeks, but the other RCT found no difference in overall improvement after two weeks. Side-effects were not reported in the trials.

C.7 Non-steroidal anti-inflammatory drugs (NSAIDs)

A systematic review including 51 RCTs (total n=6057) suggests that NSAIDs are effective for short-term

Box 1 Summary of the effectiveness of conservative treatments for acute low back pain (adapted from Van Tulder et al. 2000)¹⁴

Evidence for effectiveness	Advice to stay active NSAIDs* Muscle relaxants* Analgesics*
Unclear effectiveness (no, limited or contradictory evidence for effectiveness)	Acupuncture Back schools Behavioural treatments Colchicine Electro myographic biofeedback Epidural steroid injections* Facet joint injections Ligamental injections Lumbar supports Multidisciplinary programmes Physical treatments Spinal manipulation Traction Transcutaneous electrical nerve stimulation (TENS) 'Trigger point' injections
Evidence for ineffectiveness	Bedrest Exercise therapy

*Please see text for a discussion of the side-effects of these medications.

symptomatic relief in patients with acute low back pain.²⁷ Several types of NSAIDs appeared similarly effective. In the nine RCTs (total n=1135) comparing NSAIDs with placebo, NSAIDs increased the number of patients who improved (pooled OR after 1 week was 2.00; 95% CI: 1.35, 3.00) and reduced the additional use of analgesics (pooled OR: 0.64; 95% CI: 0.45, 0.91). The review also found that there is conflicting evidence as to whether NSAIDs are more effective than paracetamol, and that there is moderate evidence that NSAIDs are not more effective than other drugs. No difference was found in pain and overall improvement between NSAIDs and muscle relaxants and opiates, and no differences were found in pain and mobility between NSAIDs and physiotherapy or manipulation.

Side-effects of NSAIDs (in particular with high dosage and/or use in the elderly) can be serious. In the RCTs presented in the review, side-effects were also frequently reported, including abdominal pain, diarrhoea, oedema, dry mouth, rash, dizziness, headache, tiredness etc.²⁷ Most side-effects were considered to be mild to moderately severe according to the authors of the studies. However, the sample sizes of most of the studies were relatively small and, therefore, the authors state that no clear conclusion can be drawn from these studies regarding the risks for gastrointestinal and other side-effects of NSAIDs.²⁷ Although statistical pooling of all side-effects of NSAIDs compared to placebo for acute low back pain showed an increased RR, more sophisticated analyses of the risks of upper and lower gastrointestinal side-effects and central nervous system side-effects separately are needed.

Henry et al. reported the results of a meta-analysis of controlled epidemiological studies on the relative risks of serious gastrointestinal complications due to NSAIDs.²⁸ The authors concluded that ibuprofen was associated with the lowest relative risk of serious gastrointestinal complications. However, this was mainly attributable to the low doses of ibuprofen used in clinical practice.

Because there are no important differences in efficacy between the different types of NSAIDs, Henry et al. recommended the use of the lowest effective doses of drugs that seem to be associated with a comparatively low risk of serious gastrointestinal complication.²⁸

C.8 Analgesics

The recent overview of reviews found six RCTs (n=329), of which three compared the effectiveness of analgesics with NSAIDs.¹⁴ Paracetamol appeared as effective as meptazinol and diflunisal in terms of pain reduction, but less effective than mefenamic-acid. Aspirin was found to be equally as effective as indomethacin and phenylbutazone. The studies mentioned side-effects of analgesics (constipation and drowsiness) in approximately 50% of patients. Another systematic review has shown that the addition of codeine to analgesics increases such side-effects.²⁹ No RCTs were found in which analgesics were compared to placebo for acute low back pain.

C.9 Muscle relaxants (benzodiazepines)

Of the 14 RCTs (total n = 1160) found by Van Tulder et al. nine RCTs (n=762) compared a muscle relaxant (tizanidine, cyclobenzaprine, dantrolene, carisoprodol, baclofen, orfenadrine and diazepam) with placebo.¹⁴ Seven of the RCTs showed that muscle relaxants were effective with a significant reduction in pain, muscle tension and increased mobility after one and two weeks. The different medications appeared to be similarly effective. However, the side-effects, especially dependence and risk of falls for the elderly, can be serious.⁹

C.10 Transcutaneous electrical nerve stimulation (TENS)

Two RCTs (n=98) examining the effectiveness of TENS were identified by the recent overview of reviews.¹⁴ One RCT comparing TENS to a rehabilitation programme found no differences in pain or functional status. The other RCT reported a significant improvements at six weeks in pain and mobility for TENS when compared to paracetamol. No information on adverse effects was reported.

C.11 Epidural steroid injections

A systematic review of 15 RCTs evaluating the effects of epidural steroid injections included two RCTs assessing their effectiveness for acute low back pain.³⁰ One RCT (n = 57) compared epidural steroid injections with subcutaneous lidocaine injections in patients with lumbar radicular syndrome. This RCT found no differences after one month, but more pain-free patients in the corticosteroid group after three months. The other RCT (n=63) compared epidural steroid injections with epidural saline, epidural bupivacaine and 'dry needling' punctures and found no difference in the number of improved or recovered patients. No major complications were reported in the RCTs presented in the review, but the authors do state that some serious side-effects have been reported (epidural abscesses, bacterial meningitis, intraocular haemorrhage).³⁰

C.12 Unknown effectiveness

Insufficient evidence of effectiveness was found for several interventions.¹⁴ No RCTs were found for acupuncture, anti-depressants, electro-myographic biofeedback, facet joint injections, 'trigger point' injections, ligamental injections, or lumbar supports. Interventions for which only one RCT was found were physical treatments (e.g. ice, massage etc), behavioural treatments, and colchicine.

D. Chronic low back pain

D.1 Behavioural treatments

A systematic review, in which various types of behaviour therapies were compared (cognitive, operant and respondent treatments), found that behavioural treatment has a moderate positive effect.³¹ Results from the 20 RCTs included in the review showed that behavioural treatment has a positive effect on pain intensity, general functional status, and behavioural outcomes when compared to waiting list controls or no treatment, although the effects were only moderate or

small. The review also reported conflicting evidence on the effectiveness of behavioural treatment compared to other conservative treatments. It was unclear what type of patients benefit most from what type of behavioural treatment.

D.2 Multidisciplinary treatment programmes

Van Tulder et al. identified ten RCTs (n=1691) assessing multidisciplinary treatment programmes, of which four were of good quality.¹⁵ Multidisciplinary treatment programmes aim to improve function and help patients to cope with their symptoms. They involve several different health professionals and mainly consist of intensive physical and psychosocial programmes which include education, active exercise programmes, behavioural treatment, relaxation exercises, and work-place visits. The RCTs provided strong evidence that up to one year after treatment, multidisciplinary treatment programmes had better results on pain, functional status and sick leave than other conservative treatments. The duration of multidisciplinary treatment programmes was mostly three weeks and they were given to groups of 10 to 12 patients.

D.3 Exercise therapy

A systematic review of exercise therapy for low back pain concluded that exercises may help chronic low back pain patients return to normal daily activities and work.²⁰ All types of exercises subscribed or performed in the treatment of low back pain (specific back exercises, abdominal, flexion, extension, static, dynamic, strengthening, stretching or aerobic exercises) were included. Additional treatment modalities, such as ultrasound or shortwave diathermy were allowed. Nine RCTs (n=1105) compared exercise therapy with other conservative treatments (standard treatment by the GP, conventional physiotherapy, back schooling or behaviour therapy). The three RCTs in which exercise therapy was compared to conventional physiotherapy found no differences, but the three RCTs in which exercise therapy was compared to 'usual treatment' by the GP found better

outcomes with exercise therapy for sick leave, pain intensity and functional status. Six RCTs (n=587) compared exercise therapy with an 'inactive' treatment (like hot-packs and rest, placebo, waiting list controls) and reported conflicting results for pain, functional status and overall improvement. Three small, less good quality RCTs (n=153) compared extension with flexion exercises and found contradictory results.

A recent trial (n=187), yet to be included in the Cochrane review, compared a progressive exercise programme with usual primary care management for patients with low back pain.³² Participants were aged 18-60 years with mechanical low back pain of four weeks to six months' duration. This appears to be a heterogeneous group and the findings should therefore be interpreted with caution. The exercise programme, led by a physiotherapist in the community and based on cognitive-behavioural principles did not seem to influence the intensity of pain but did affect the participants' ability to cope with the pain in the short term and even more so in the longer term.

D.4 Back schools

Nine RCTs were included in a systematic review assessing back schools for chronic back pain.³³ A back school was defined as consisting of an education and skills programme, including exercises in which all lessons are given to groups of patients and supervised by a paramedical therapist or medical specialist. Five RCTs (total n=861) compared back schooling with exercise therapy, manipulation, NSAIDs and physiotherapy and found that back schools were more effective with respect to pain reduction and functional improvement in the short term (up to six months). However, no differences were found at one year. Six RCTs (total n=425) comparing back schools with no treatment, waiting list controls or placebo ultrasound treatment, found contradictory effects with respect to pain, functioning and sick-leave. Finally, five RCTs (total n=880) found that back schools in occupational settings were more effective than no treatment, but not in comparison to

other treatments (like physiotherapy and group training).

D.5 Spinal manipulation

Four RCTs (n=514) comparing manipulation with placebo, and eight studies (n=545) comparing manipulation with other conservative treatments (for instance standard treatment by the GP, exercise therapy, back schooling, medication, ultrasound treatment) were found.¹⁵ The results of these RCTs were contradictory for pain, functional status and overall improvement. A Cochrane review is currently being prepared.²⁵

D.6 Traction

Two RCTs (total n=176) were found in which traction was compared with placebo-traction of a maximum of 25% of body weight.¹⁵ Both RCTs found no differences in overall improvement, pain and functional status after five and nine weeks. The authors concluded that traction is not effective for chronic low back pain.

D.7 Lumbar supports

In a systematic review of 11 RCTs and two non-randomised controlled trials, there was no clear evidence that lumbar supports were better than other interventions for chronic low back pain. Most studies included participants with both chronic and acute low back pain. Only one small RCT (n=19) assessed the use of lumbar supports and corsets for chronic low back pain.³⁴ The RCT found that patients wearing a lumbar support with a rigid insert showed significantly more global improvement (measured subjectively) than patients without the rigid insert.

D.8 Transcutaneous electrical nerve stimulation (TENS)

Van Tulder et al. report contradictory evidence from four RCTs (n=253) with regard to the effectiveness of TENS in the treatment of chronic low back pain.¹⁵ One RCT (n=42) found greater pain reduction with TENS after one week, but not after three and six months, and one other RCT with a cross-over design (n=33) found slight overall improvement with TENS. The remaining two RCTs (n=178) found no differences in pain, functional status and mobility.

D.9 Acupuncture

A systematic review of 11 RCTs (n=542) assessed the effects of acupuncture for the treatment of non-specific low back pain.³⁵ Some of the study populations contained people with acute or unspecified low back pain. Three RCTs compared acupuncture to no treatment, which were of low methodological quality and provided conflicting evidence. Two RCTs found that acupuncture is not more effective than trigger point injection or TENS. Eight RCTs compared acupuncture to a placebo or sham acupuncture. Of the two RCTs of higher methodological quality, one was neutral and one was positive although the positive one noted that the control group seemed to have more severe complaints at baseline. Five of the six remaining lower quality RCTs indicated that acupuncture was not more effective than placebo or sham acupuncture, and in one study the overall conclusion was 'unclear'.

D.10 Electromyographic biofeedback

Five small RCTs (n=168) were found by Van Tulder et al. assessing the effectiveness of electromyographic biofeedback, where patients learn to control the tension in their muscles by receiving feedback on the electrical activity of their muscles.¹⁵ Three of the RCTs found no difference between electromyographic biofeedback and placebo or waiting list controls with respect to pain and functional status. Two studies (n=30) compared biofeedback with progressive relaxation training and found contradictory results for pain and functional status.

D.11 Trigger-point and ligamental injections

Limited evidence was found suggesting that a combination of corticosteroid injections and local anaesthetic injections in trigger points and phenol-injections in lumbar ligaments were effective in chronic low back pain.¹⁵ One RCT (n=57) compared 'trigger-point' injections with methyl-prednisolone plus lidocaine versus triamcinolone plus lidocaine versus lidocaine alone. 60-80% of patients with a combination of lidocaine and

corticosteroid had complete relief of pain after three months compared to 20% in the lidocaine group. The other RCT (n=81) compared ligamental dextrose-glycerine-phenol injections with saline. The decrease in pain and improvement in functional status was larger with phenol than with saline at one, three and six months.

D.12 Facet joint injections

Van Tulder et al. identified two RCTs (n=206) comparing intra-articular corticosteroid injections with intra-articular saline.¹⁵ Both RCTs found no differences in pain, functional status, and flexibility after one, three and six months. One other RCT (n=86) compared facet-joint-injections with facet-nerve-inhibitors and found no differences in pain reduction after two weeks, one month and three months.

D.13 Epidural steroid injections

A systematic review identified 15 RCTs evaluating the effects of epidural steroid injections.³⁰ Of the seven RCTs of epidural corticosteroid injection (n=216) for chronic low back pain, three used epidural saline for comparison, and the other four RCTs used epidural bupivacaine, procaine, midazolam or lidocaine and morphine respectively. The RCTs found contradictory results on pain reduction.

D.14 NSAIDs

A systematic review identified four RCTs assessing the effectiveness of NSAIDs for chronic low back pain.²⁷ All four of the RCTs included different comparisons of NSAIDs (naproxen vs. diflunisal vs. placebo; diflunisal vs. placebo; diclofenac vs. chiropractic manipulation vs. physiotherapy; and piroxicam vs. indomethacin) and found no difference. One RCT (n=30) reported that NSAIDs were more effective than paracetamol, another (n=37) found that diflunisal was more effective than placebo. For discussion of side-effects, see the section on acute back pain.

D.15 Antidepressants

A systematic review of nine RCTs assessed the effectiveness of antidepressants for chronic low back pain.³⁶ Seven RCTs comparing various antidepressants with placebo showed that there was conflicting evidence that antidepressants were more effective in relieving pain, and there was strong evidence that antidepressants do not reduce depression in patients with chronic low back pain.

D.16 Unknown effectiveness

Insufficient evidence of effectiveness was found for the following interventions.¹⁵ No RCTs were found for colchicine, advice to stay active,

Box 2 Summary of the effectiveness of conservative treatments for chronic low back pain (adapted from Van Tulder et al. 2000)¹⁵

Evidence for effectiveness	Back schools Behavioural treatments Exercise therapy Multidisciplinary programmes NSAIDs *
Unclear effectiveness (no, limited or contradictory evidence for effectiveness)	Advice to stay active Analgesics Antidepressants Bedrest Colchicine Epidural steroid injections Ligamental injections Lumbar supports Muscle relaxants Physical treatments Spinal manipulation Transcutaneous electrical nerve stimulation (TENS) 'Trigger point' injections
Evidence for ineffectiveness	Acupuncture Electro myographic biofeedback Facet joint injections Traction

*Please see text for a discussion of the side-effects of these medications.

bed rest or physical treatments (shortwave diathermy, ultrasound, ice, heat, massage). Interventions for which only one RCT was found were analgesics and muscle relaxants.

E. Implications

- Those involved in the treatment of acute and chronic low back pain need to maintain up-to-date knowledge by regularly checking, one or more sources of relevant evidence such as the Cochrane Library, or *Clinical Evidence*.¹⁶
- For acute low back pain, advice to continue ordinary activity can give equivalent or faster symptomatic recovery from the acute attack and lead to less chronic disability and less time off work. Bed rest should not be recommended as a treatment for acute low back pain.
- Non-steroidal anti-inflammatory drugs (NSAIDs) are effective for short-term symptomatic relief in patients with acute low back pain. Several types of NSAIDs appear similarly effective. However they can have harmful side-effects.
- Muscle relaxants (benzodiazepines) are effective at reducing pain for patients with acute low back pain but can have harmful side-effects. Different benzodiazepines appear to be similarly effective.
- There is strong evidence that exercise therapy may help chronic low back pain patients return to normal daily activities and work.
- Multidisciplinary treatment programmes, involving components such as education, active exercise programmes, behavioural treatment, relaxation exercises, and work-place visits, can improve long-term outcomes for pain, functional status and sick leave compared with other treatments for chronic low back pain.

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Effective Health Care

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