

Exercises for prevention of recurrences of low-back pain (2010)

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Overview of the study

Objectives

- To investigate the effectiveness of exercises for preventing new episodes of low-back pain or low-back pain-associated disability

Methods

- Evidence current up to 24 July 2009
- Participants: Adults (aged 18 or older) who currently had, or had ever had at least one prior episode of non-specific low-back pain (LBP)
- Intervention: Exercises*
- Outcomes measured: Recurrences of LBP (defined as an episode of pain, sickness absence or disability resulting from the pain)

* Defined as physical activity that is planned or structured and may be done to improve or maintain one or more components of physical fitness

Results & Conclusion

- 13 studies (1520 participants) included.

Treatment	Evidence	Quality of evidence
Post-treatment exercises	Post-treatment exercises were more effective than no intervention for reducing the rate of recurrences at one year	Moderate
	Number of recurrences was significantly reduced at one-half to two years follow-up.	
	The days on sick leave were reduced at one-half to two years follow-up	Low

⇒ There is moderate quality evidence that post-treatment exercise programmes can prevent recurrences of back pain but conflicting evidence was found for exercise treatment in reducing the number of recurrences or the recurrence rate

Lumbar supports for prevention and treatment of low back pain (2008)

Ingrid van Duijvenbode, Petra Jellema, Mireille van Poppel, Maurits W van Tulder



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Overview of the study

Objectives

- To assess the effects of lumbar supports for prevention and treatment of non-specific low-back pain

Methods

- Evidence current up to 30 December 2006
- Participants: Adult workers (aged 18 to 65 years) with non-specific low-back pain
- Intervention: Any type of lumbar support
- Outcomes measured: Proportion of patients who recovered; had improvement of pain and function; return-to-work, measures of objective physical impairment (e.g. Spinal flexion, improvement in straight leg raise, alteration in muscle power, change in neurological signs), adverse effects

Results & Conclusion

- 15 trials (15,798 participants) included

Intervention	Evidence	Quality of evidence
Lumbar supports	No more effective than no intervention or training in preventing low-back pain	Moderate

⇒ It remains unclear whether lumbar supports are more effective than no or other interventions for treating low-back pain

Manual material handling advice and assistive devices for preventing and treating back pain in workers (2011)

Jos H Verbeek, Kari-Pekka Martimo, Jaro Karppinen, P Paul FM Kuijer, Eira Viikari-Juntura, Esa-Pekka Takala



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Overview of the study

Objectives

- To determine the effectiveness of manual material handling (MMH) advice and training and the provision of assistive devices in preventing and treating back pain

Methods

- Evidence current up to 29 November 2010
- Participants: Working adults (16 to 70 years) who were engaged in jobs with MMH to the extent that their risk for back pain was increased
- Intervention: MMH techniques, and the use of assistive devices to decrease the mechanical load of MMH on the back
- Outcomes measured
 - Primary outcomes: non-specific back pain, time to return-to-work
 - Secondary outcomes: number of days on sick leave due to back pain, recurrences of back pain, intensity of symptoms, functional status, QoL, psychological/psychosocial outcomes

Main Results & Conclusion

- 18 studies (42,391 participants) included

Treatment	Evidence	Quality of evidence
MMH training with or without assistive devices	Level of back pain is similar to those who received no intervention or minor advice (video)	Moderate

⇒ No evidence shows that MMH advice and training are useful in the prevention or treatment of back pain when compared to no intervention or alternative interventions.