

The influence of exercise on work absenteeism in chronic low back pain: a systematic review

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INTRODUCTION

Chronic low back pain (CLBP) affects 619 million people worldwide, with working-age individuals being the most affected^{1,2}.

It is a leading cause of disability, contributing to 13% of all work absenteeism³.

Many patients experience

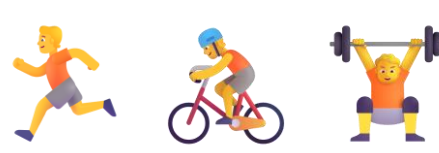
- Prolonged sick leave³ 🧑🏻‍💼🏠
- Reduced productivity⁴ 📉⌚
- Early retirement⁵ 💼❌

CLBP is linked to psychosocial factors like stress, fear avoidance, and low self-efficacy, which further hinder return to work⁶.

Exercise therapy can improve physical function, reduce pain, and address these psychological barriers⁷.

When combined with pain neuroscience education, it may enhance self-confidence and work participation⁷.

However, its role in facilitating return to work (RTW) for CLBP patients remains inadequately understood



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AIM

This review explores the impact of exercise therapy and their modalities on work absenteeism in chronic low back pain patients.

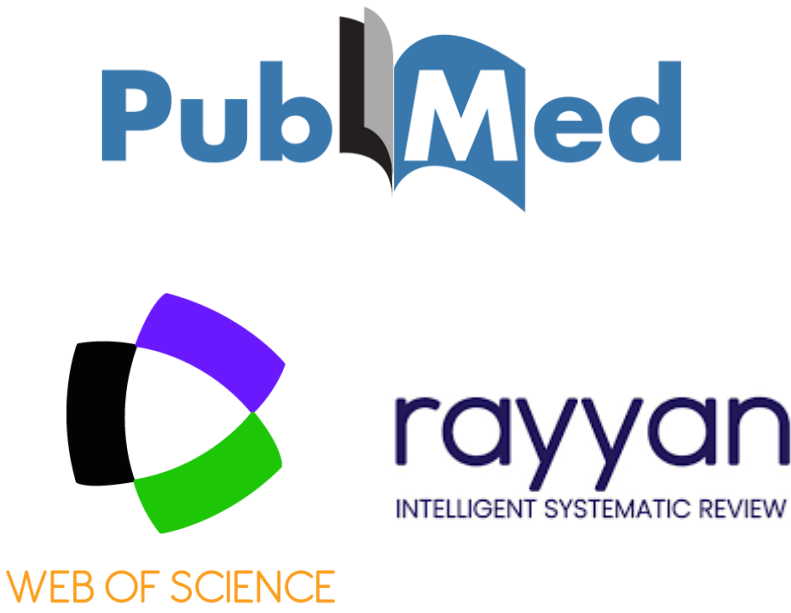
METHODS

This review was registered in the international Prospective Register of Systematic Reviews (CRD42024576788) and performed following the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) guidelines..

10 studies including 17 active interventions are included in this review.

INCLUSION CRITERIA

- Studies involving active exercise interventions or exercise therapy, including combinations of exercise therapy and other interventions
- Studies with return to work or work absenteeism as outcome measure
- Studies including patients aged between 18 and 65 years, with non-specific chronic low back pain (NSCLBP) for at least 6 weeks



RESULTS

Frequency	<2w (2/17)	≥2w (11/17)
RTW rates (# interventions)	N/A	40-83.5% (5)
Sick leave ↓ (# interventions)	No significant impact (2)	26%-67% (3) ↓risk (2) no significant impact (1)
Program duration	<12w (10/17)	≥12w (4/17)
RTW rates (# interventions)	40-83,5% (4)	52% (1)
Sick leave ↓ (# interventions)	27-67% (2) no significant impact (2) ↓risk (2)	26-41% (2) No significant impact (1)
Supervised	Yes (15/17)	No (2/17)
RTW rates (# interventions)	40-83,5% (4)	57% (1)
Sick leave ↓ (# interventions)	26-67% (4) no significant impact (5) ↓risk (2)	No significant impact (1)
Delivery	Individual (10/17)	Group (7/17)
RTW rates (# interventions)	50-83,5% (3)	40-52% (2)
Sick leave ↓ (# interventions)	26-67% (4) ↓risk (1) no significant impact (2)	No significant impact (4) ↓risk (1)

CONCLUSION

- More frequent (≥2 weeks), supervised, and individually delivered interventions tend to show
 - better return-to-work rates 📅🤝
 - some reduction in sick leave.
- Duration of program implementation (< 12 weeks vs. ≥ 12 weeks) does not show a consistent pattern in influencing outcomes.
- Results are mixed, and not all programs show significant impact, suggesting variability in effectiveness.

There is a lack of consistency in the reporting of exercise intervention highlighting the need for further investigation to identify the key components that make interventions successful.

The TechnoHIT trial aims to address this challenge by investigating innovative, technology-enhanced exercise approaches to reduce disability including work absenteeism.

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