

The impact of a multidisciplinary rehabilitation (with or without workplace intervention) on pain, functional status and return to work in employees suffering from (sub)acute low back pain.

A SYSTEMATIC REVIEW

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Background

Low back pain (LBP) is the leading cause of global disability and an enormous cost for society e.g. healthcare use and work absenteeism.

Early **multidisciplinary interventions (MDI)** are recommended in the (sub)acute stage. Integrating health and work-place management seems essential in reducing sick leave.

There are some uncertainties regarding recommendations for (sub)acute LBP → may be due to the absence of multiple direct comparisons of the available multidisciplinary treatments.

Objective: To perform a systematic literature search on the effectiveness of a MDI, with or without additional workplace intervention, for (sub)acute LBP among adults, with a focus on pain, back-specific disability, return to work (RTW) and sick leave.

Methods

Comprehensive search: EMBASE, MEDLINE, Web of Science, Cochrane, CENTRAL, Scopus and hand search (last search: June 2021).

Systematic screening against **predefined inclusion criteria (see figure)**.

Risk of Bias assessment: RoB 2-tool for RCT-studies
ROBIS-tool for systematic review.

Level of conclusion 1, 2, 3 or 4 per cluster according to Dutch EBRO (1=highest to 4=lowest).

Evidence table of relevant information + **Narrative synthesis**.

Flowchart

1591 articles screened on title and abstract

65 articles screened on full text

12 articles included in synthesis

1 Systematic review
11 RCT's

Results

MDI vs. usual care

- 5 studies
- MDI has more beneficial effects on pain and functional outcome. **(Level 1 conclusion)**
- Conflicting results concerning work-related outcomes (RTW and sick leave). **(Level 4 conclusion)**

MDI vs. another intervention

- 6 studies
- Conflicting evidence concerning the favorable effects of MDI for pain and functional status. **(Level 4 conclusion)**
- MDI is not more beneficial regarding work-related outcomes. **(Level 1 conclusion)**

Additional workplace intervention

- 1 study
- An additional workplace intervention results in earlier RTW than usual care. **(Level 2 conclusion)**
- No beneficial effect on pain or functional status. **(Level 2 conclusion)**

Subgrouping patients

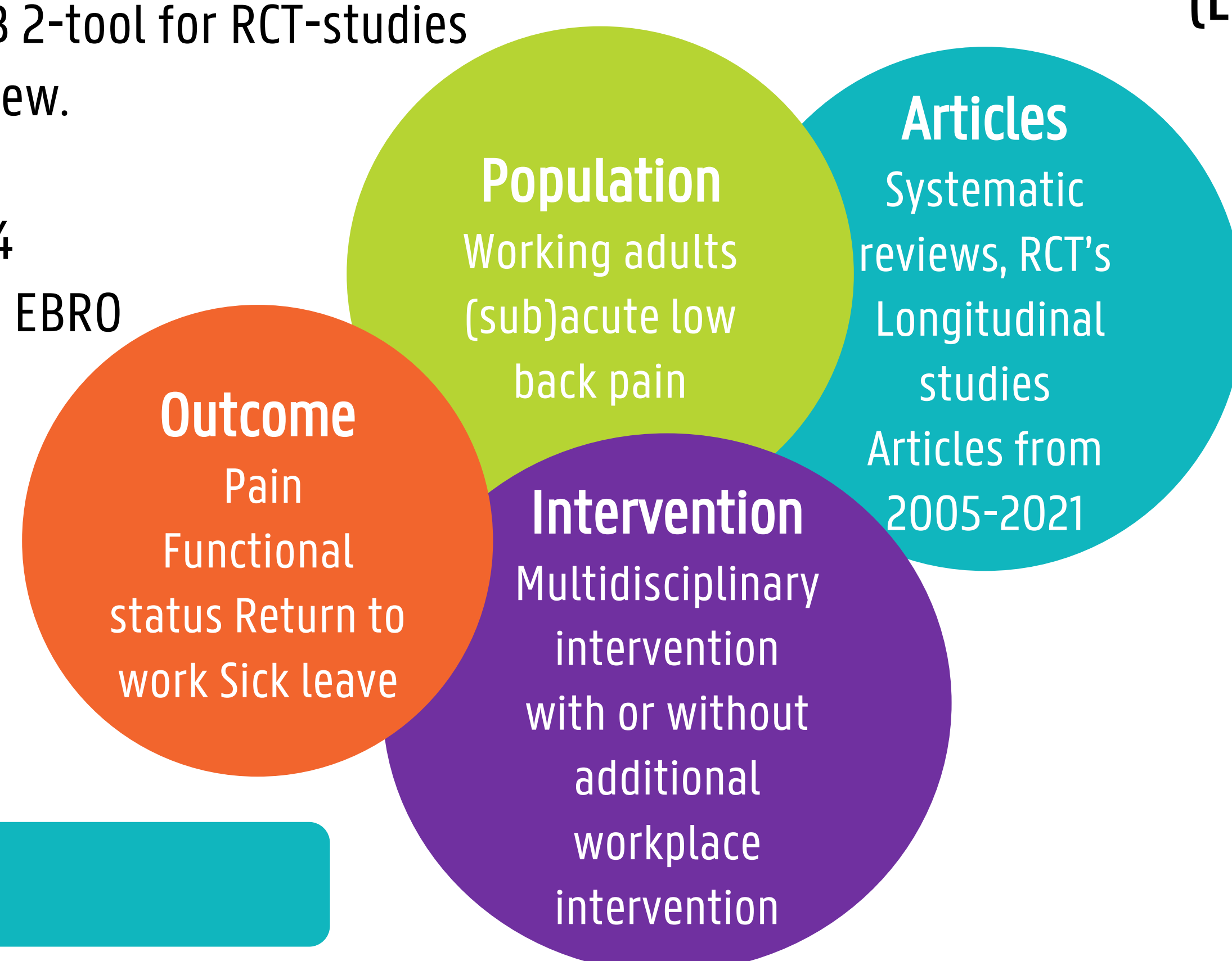
- 3 studies
- Subgrouping patients regarding work-related factors has an influence on the type of intervention that fits best for that subgroup and is useful to achieve earlier RTW. **(Level 2 conclusion)**

Conclusions

A multidisciplinary intervention has favorable effects compared with usual care regarding pain scores and functional status.

An additional workplace intervention on top of usual care might be beneficial for RTW, but evidence is lacking.

Future studies should focus more on investigating the effects of a multidisciplinary intervention in patients with (sub)acute LBP combined with interventions at work.



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