

The influence of exercise intensity on psychosocial outcomes in musculoskeletal disorders: a systematic review

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BACKGROUND

Psychosocial parameters play an important role in the onset and persistence of chronic musculoskeletal disorders (CMSDs)

- Exercise therapy = valuable therapeutic modality
- Exercise intensity = key factor for changes in pain and disability



But what do we know about the impact of exercise intensity on psychosocial outcomes?

AIM

To identify the effects of different modes of exercise intensity on psychosocial outcomes in persons with CMSDs

MATERIALS & METHODS

Systematic literature search



PubMed Cochrane
PEDro Web of science

- P** adults with CMSDs
I exercise therapy as sole intervention
C different modes of exercise intensity
O psychosocial outcomes

Risk of bias assessment

PEDro checklist

Data extraction

| | |
|--------------|--------------------------------------|
| Patient | n, condition, duration, sex |
| Intervention | intensity, frequency, duration, type |
| Outcome | type, mean & SD |

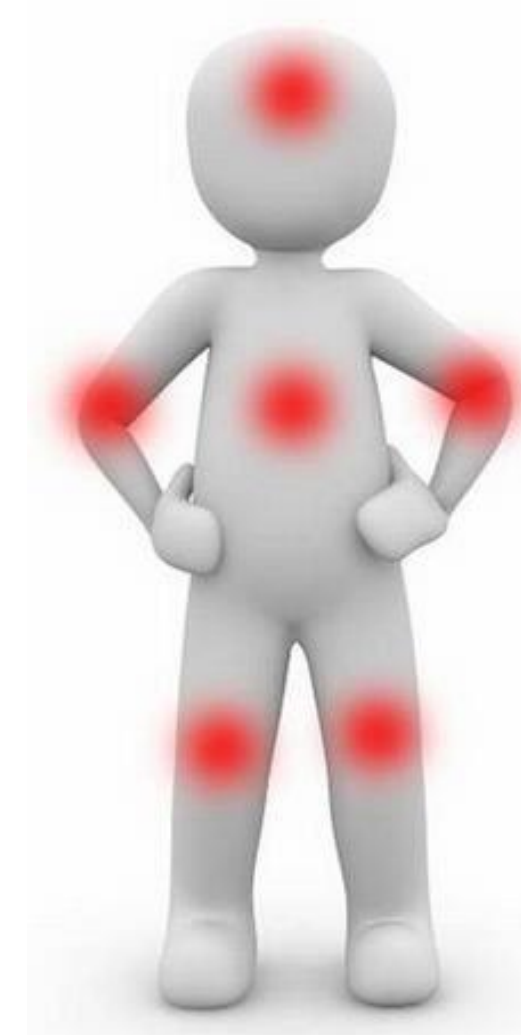
TAKE HOME MESSAGE



If you aim to improve psychosocial outcomes, it is necessary to adapt the exercise intensity to the specific CMSD

RESULTS

Systematic literature search



22 studies including 985 persons

- Chronic low back pain (CLBP)
- Fibromyalgia (FM)
- Knee osteoarthritis
- Axial spondyloarthritis

Risk of bias assessment

Majority: fair to good (mean PEDro score 5.77/10)

Data synthesis

Only consistent effects found in:

Fibromyalgia benefits more from:

- Low to moderate intensity
 - Anxiety & depression
- Any intensity
 - Quality of life

Chronic low back pain benefits more from:

- High intensity
 - Anxiety, depression & quality of life

CONCLUSION



Psychosocial outcomes are influenced by the intensity of exercise therapy in FM and CLBP, but effects differ across other CMSDs