Effectiveness of a high intensity training program on quality of life in persons with chronic nonspecific low back pain

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BACKGROUND

Exercise therapy is a valuable therapeutic modality as part of chronic nonspecific low back pain (CNSLBP) rehabilitation

- Exercise intensity = key factor
- High intensity training (HIT) is more effective than moderate intensity training (MIT)
  - HIT > MIT: physical fitness & disability

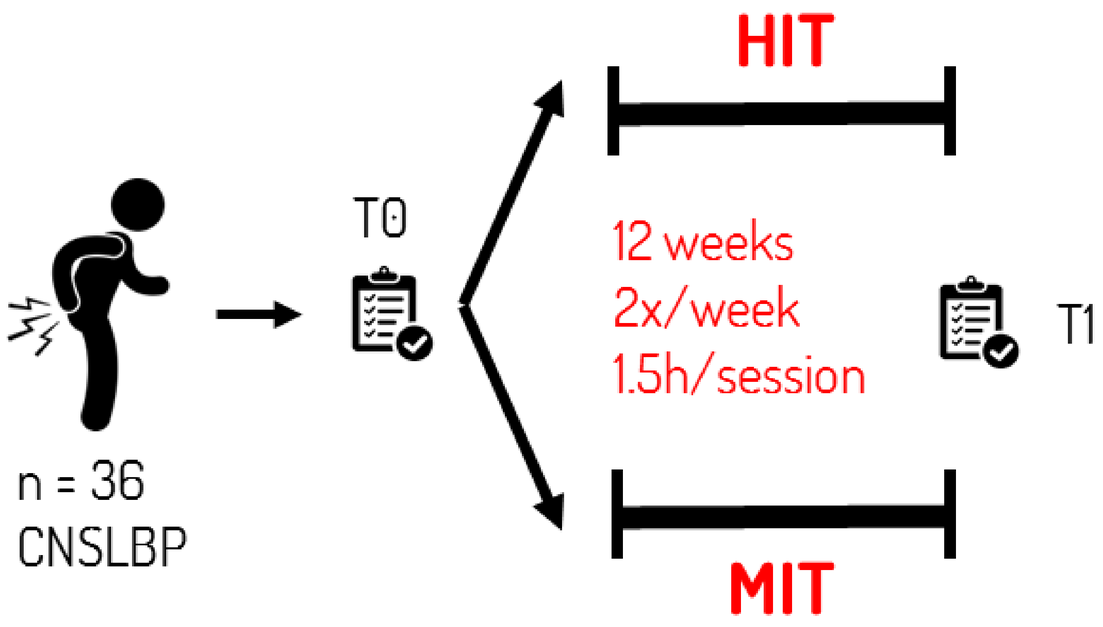
Quality of life (QoL): CNSLBP < healthy persons

- **HIT > MIT: QoL in CNSLBP?**

AIM

To compare the effects HIT with MIT on QoL in persons with CNSLBP

MATERIALS & METHODS



Training content	HIT	vs	MIT
Cardiorespiratory training	100%	60%	V02max
Resistance training	80%	60%	1RM
Lumbar stabilization training	60%	Progressive	MVC

Outcome

- Short form health survey 36 (SF-36)
  - Total score
  - Physical component score (PCS)
  - Mental component score (MCS)

Statistical analysis

Linear mixed model

TAKE HOME MESSAGE

HIT is an effective treatment modality in CNSLBP rehabilitation to improve QoL

GO FOR (H)IT!

RESULTS

Within group differences

	HIT	MIT
Total score	↑	↑
PCS	↑	↑
MCS	=	=

Between group differences

- SF-36 total score
  - HIT = MIT
- PCS
  - HIT > MIT
- MCS
  - HIT = MIT

CONCLUSION

Both HIT as MIT improve QoL in persons with CNSLBP. However, HIT improves the physical aspects of QoL more than MIT.