

Measures of physical activity and fear avoidance in people with chronic pain

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Conclusion

- Having widespread pain tended to affect the aerobic capacity negatively while self-reports of reaching recommended levels of physical activity did not differ between groups.
- Fear avoidance in relation to physical activity and especially in relation to work was more noticeable in subjects with chronic pain compared to those with no pain.
- Measures of aerobic capacity and information of fear avoidance beliefs might help health professionals to better tailor the nonpharmacological treatment for subjects with chronic pain.



Background

Physical activity (PA) has the possibility to contribute to improved health and quality of life in the population as well as in people with chronic diseases. Most often PA is self-reported while measures of the aerobic capacity are more seldom measured in subjects with chronic pain.

Objectives

To describe self-reported physical activity and aerobic capacity in people with chronic pain classified as regional or widespread, and to compare the findings with a group that report no pain.

Methods

146 subjects from the Swedish population based Epipain cohort (n 1321), were invited to a clinical assessment:

Aerobic capacity was assessed by using a submaximal bicycle test, the Ekblom-Bak test, together with the Borg scale for perceived exertion (RPE). Aerobic capacity was classified as low, average or high according to data from the general population.

Self-reported PA was coded as MVPA_{rec} if recommended levels of PA was reported (physically active on a moderate level ≥ 150 min/week (MPA) or on a vigorous level ≥ 75 min/week (VPA) or not).

The Fear Avoidance Beliefs Questionnaire for PA (FABQ-PA, 0-24 best to worst) and for work (FABQ-W, 0-24 best to worst) was assessed.

The participants were classified as having chronic widespread pain (CWP), chronic regional pain (CRP) or no chronic pain (NCP) based on a pain mannequin presenting 0-18 pain regions and if pain had lasted for 3 months or more.

Statistics: Chi2 and Kruskal-Wallis tests were performed to study differences between the three pain groups.

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Results

141 subjects mean (SD) age 59.4 (8.2) years, 61% women, could be classified into pain groups:

43 as CWP (84% women)

43 as CRP (42% women)

55 as NCP (58% women)

	CWP n 43	CRP n 43	NCP n 55
Age, mean (SD) years	57.0 (7.6)	61.9 (6.9)	59.2 (9.0)
Areob cap, mean (SD) lO ₂ /min	2.2 (0.5)	2.6 (0.6)	2.5 (0.7)
Areob cap, mean (SD) mlO ₂ /kg*min	29.5 (7.6)	33.1 (7.4)	33.4 (7.8)
Aerob cap level, % Low/medium/high, MVPA rec %	21/47/32 70	7/20/73 81	10/27/63 74
RPE, mean (SD) 6-20	13.8 (15.7)	13.4 (1.5)	13.1 (1.0)
BMI, mean (SD) kg/m ²	26.9 (4.4)	25.9 (5.1)	26.5 (4.2)
FABQ-PA, mean (SD) 0-24	8.9 (6.7)	11.2 (7.3)	6.0 (6.0)
FABQ-W, mean (SD) 0-24	18.9 (15.7)	10.0 (12.5)	6.5 (9.1)

- Subjects with CWP had lower aerobic capacity compared with subjects in the CRP and the NCP group, p 0.01 and 0.03
- In the CWP group, a larger proportion was classified as having low aerobic capacity, p 0.04
- In FABQ-PA subjects with CWP or CRP had worse scores compared to subjects in the NCP group, p 0.02 and p<0.001
- In FABQ-W subjects with CWP had worse scores compared with subjects in the CRP or NCP group, p 0.001 and p<0.001
- MVPA_{rec}, BMI and RPE did not statistically differ between the groups

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