Factors influencing physical activity participation in adults with chronic cervical spine pain: A systematic review

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Purpose

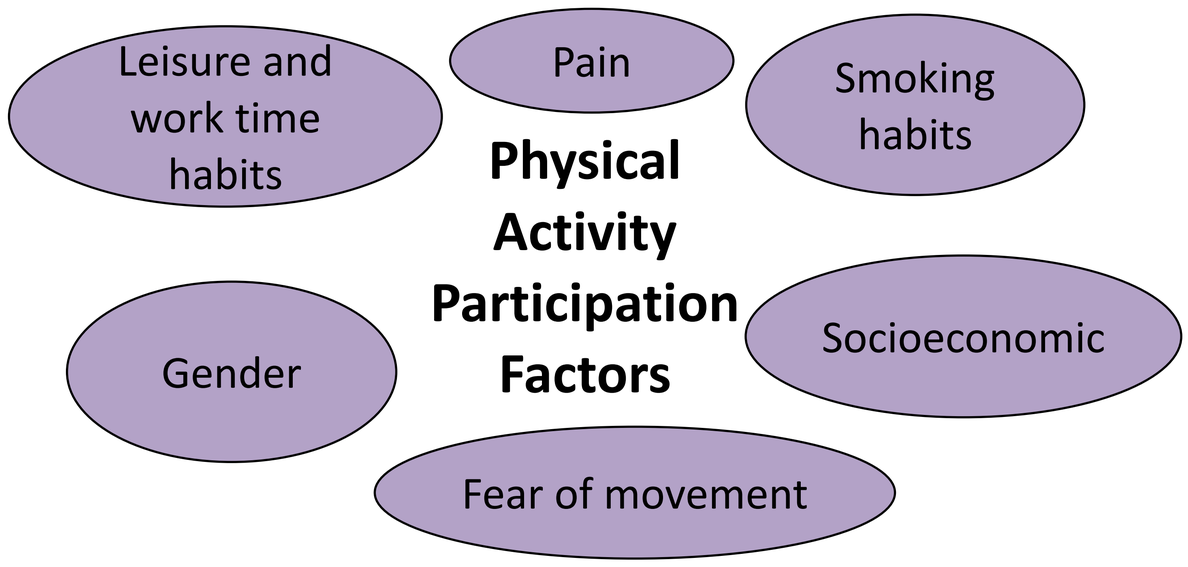
- To determine the factors associated with physical activity participation in adults with chronic cervical spine pain.

Methods and Analysis

- A systematic review was conducted including searches of PubMed (MEDLINE), EMBASE and CINAHL from inception to June 12th 2016. Grey literature and reference checking was also undertaken.
- Quantitative studies including factors related to physical activity participation in adults with chronic cervical spine pain were included.
- Two independent authors conducted the searches, extracted data and completed methodological quality assessment using a modified Downs and Black tool. Due to heterogeneity a narrative analysis was undertaken.

Results

- 2781 citations were screened and 4 moderate quality papers were finally included in the final review.
- Six factors associated with Physical Activity (PA) were identified: Pain, fear of movement, smoking habits, socioeconomic status, gender and leisure and work time.
- A significant relationship was demonstrated between pain (p=0.04) and PA, meaning subjects were less likely to participate in physical activity if they were in pain.
- A statistically significant association was demonstrated between neck pain and decreased leisure time PA measured by accelerometry (ANOVA Testing, p=<0.05).
- During working time there was a statistically significant association between neck pain subjects and reduced PA measured by steps taken (ANOVA Testing, p=0.009) and walking time (ANOVA Testing, p=0.026). Subjects with neck pain were less likely to participate in physical activity in their leisure and work time.



Conclusions and Implications

- Based on a small number of heterogeneous studies demonstrated key factors that are likely to affect physical activity in people with chronic neck pain, most notably, pain levels, leisure and work habits.
- Whilst pain, fear of movement, smoking habits, socioeconomic status, gender and leisure and work time are factors associated with engagement with physical activity, only pain and leisure and work habits were shown to have significant impact on physical activity participation for patients with chronic cervical spine pain.
- This review suggests that more in-depth, high quality studies are required to fully understand the impact of chronic pain on physical activity.

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