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Title

Musculoskeletal pain in 13-year old children: a chronic and daily problem

Priority 1 (Research Category)

Child and adolescent health

Presenters

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Abstract

Context

Musculoskeletal (MSK) pain is a common reason for consultation in general practice and frequently reported in children and adolescents.

Objective

This study examined the prevalence of MSK pain in 13-year-old children and assessed associations with physical activity, physical and psychosocial factors.

Study Design and Analysis

A Cross-sectional study with descriptive statistics and multinomial logistics regression was performed.

Setting or Dataset

Data was collected in The Generation R Study, a population-based prospective cohort study focusing on growth, development, and health from fetal life until young adulthood based Erasmus MC University Medical Center in Rotterdam, the Netherlands

Population studied

For this study data from the follow-up phases at the age of 6 and 13 years was used.

Intervention/Instrument

Data was derived from physical examinations at the research center and self- and parent-reported questionnaires.

Outcome Measures

Prevalence and characteristics of MSK pain were assessed using a pain mannequin at 13 years of age

Demographics and data on physical activity, sedentary behaviors, previous reported MSK pain, and behavioral problems were extracted from questionnaires. The body mass index (BMI) SD-score was calculated from objectively measured weight and height

Results

A prevalence of 23,3% was found for MSK pain in children of which 87,2% persisted for more than three months (i.e. chronic), 45,5% experienced pain daily. Physically active children and children with a higher BMI reported MSK pain more frequently compared to non-MSK pain and no pain. The knee was the most often reported location. Children with MSK pain were more likely to have reported MSK pain at age 6. Multivariable analyses showed significant associations for being physically active(OR 1.41, 95% CI 1.03-1.91), male sex(OR 0.74, 95% CI 0.56-0.98), high maternal educational(OR 0.69, 95% CI 0.49-0.96), higher BMI(OR 1.19, 95% CI 1.05-1.35) and behavioral problems(OR 1.85, 95% CI 1.33-2.59) with the presence of MSK pain.

Conclusions

In children MSK pain already has a relatively high prevalence, chronic character and is often experienced daily that is reported more often by physically active children.