Att klara skolan när huvudet dunkar och kroppen värker
En studie om återkommande smärta och skolprestation bland skolbarn

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Managing school while fighting aches and pains – a study about recurrent pain and academic achievement among school-aged children

Abstract

Background Recurrent pain is one of the most common public health issues among school-aged children. However, less is known about the consequences of recurrent pain, for instance in terms of academic achievement.

Aims The overall objective was to study and synthesize the evidence for an association between recurrent pain and academic achievement, across different pain locations, frequencies, and number of pain sites, and across different measures of academic achievement, while considering potentials moderators and mediators.

Method The objective of the thesis was investigated in two steps. Step 1 used a systematic review to capture the available evidence for an association between recurrent pain and academic achievement among school-aged children, aged 4 to 18 years. In step 2, knowledge-gaps identified in the review were further investigated in two empirical studies. These studies were based upon two longitudinal total population samples following children from grade 6 to 9 in elementary school. One study focused subjectively measured academic achievement and one objectively measured achievement. The participants in the two studies consisted of 1524 and 1567 children, respectively. The independent variable was recurrent pain and the dependent variables were perceived problem with academic achievement, overall grade points, and secondary school eligibility.

Results Step 1: of the 6387 studies identified in the systematic review, 21 met the inclusion criteria’s, and 13 verified an association between recurrent pain and academic achievement. However, the literature held numerous methodological drawbacks. Thus, the systematic review overall found low evidence for an association between recurrent pain and objectively measured academic achievement, as well as very low evidence for an association between recurrent pain and subjectively measured academic achievement. Step 2: showed that recurrent pain in school-year 6 doubled the odds for perceived problem with academic achievement three years later. This was true across different pain frequencies, pain locations, and number of pain sites. Problem with concentration, sleep and school-absenteeism, did not mediated the relationship between recurrent pain and perceived problem with academic achievement. Moreover, an association was seen between recurrent pain in grade 6 and overall grade points in grade 9. Finally, problem with concentration, school-absenteeism, and perceived problem with academic achievement partly mediated this association.

Conclusion The findings indicated that recurrent pain may predicts low overall grade points and may also impair children’s perception of their academic performance in school. These results may serve as a base for priority setting in the school health services and other health care settings. They may also contribute with knowledge needed for the development of future interventions targeting children with recurrent pain.

Keywords: recurrent pain, academic achievement, school-failure, school-aged children, adolescents.