

# PAIN<sup>®</sup>

## The Journal of the International Association for the Study of Pain

### NEWS RELEASE FOR IMMEDIATE RELEASE

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### **Chronic Pain in Children and Adolescents Becoming More Common**

Systematic Review Published in *PAIN*<sup>®</sup> Indicates Scope of Problem

Philadelphia, PA, December 8, 2011 – Children who suffer from persistent or recurring chronic pain may miss school, withdraw from social activities, and are at risk of developing internalizing symptoms such as anxiety, in response to their pain. In the first comprehensive review of chronic pain in children and adolescents in 20 years, a group of researchers found that more children now are suffering from chronic pain and that girls suffer more frequently from chronic pain than boys.

“We found that persistent and recurrent chronic pain is overwhelmingly prevalent in children and adolescents, with girls generally experiencing more pain than boys and prevalence rates increasing with age,” said lead investigator Sara King, PhD, currently Assistant Professor, Mount Saint Vincent University, Halifax, Nova Scotia. “Findings such as these argue that researchers and clinicians should be aware of the problem and the long-term consequences of chronic pain in children.”

Researchers from Dalhousie University and the IWK Health Centre, Halifax, systematically examined epidemiological studies of pain to evaluate progress made since the first comprehensive review of pain in children and adolescents, published by Goodman and McGrath in *PAIN*<sup>®</sup> in 1991.<sup>1</sup> Additionally, they identified a set of criteria to assess the quality of the studies included in the review. They looked at 32 studies and categorized them according to the type of pain investigated: headache, abdominal pain, back pain, musculoskeletal pain, combined pain, and general pain.

Their findings indicate that most types of pain are more prevalent in girls than in boys, but the factors that influence this gender difference are not entirely clear. Pain prevalence rates tend to increase with age. Psychosocial variables impacting pain prevalence included anxiety, depression, low self-esteem, and low socioeconomic status. Headache was found to be the most common studied pain type in youth, with an

estimated prevalence rate of 23%. Other types of pain, ie, abdominal pain, back pain, musculoskeletal pain, and pain combinations, were less frequently studied than headache, and prevalence rates were variable because of differences in reporting. However, the overall results indicated that these pain types are highly prevalent in children and adolescents, with median prevalence rates ranging from 11% to 38%. "These rates are of great concern, but what is even more concerning is that research suggests that the prevalence rates of childhood pain have increased over the last several decades," stated Dr. King.

Researchers also found that many studies did not meet quality criteria and there was great variability in prevalence rates across studies due to time periods over which pain was reported. The authors suggest that future epidemiological studies in this area are in need of better operational definitions of pain and better measures of pain intensity, frequency, and duration. Such quality criteria across studies would allow for direct comparison.

The review identified several demographic and psychosocial factors associated with high prevalence rates of specific pain types. "By shifting focus to factors associated with chronic and recurrent pain, it may be possible to identify the most salient risk factors, leading to early and intensive interventions for the most at-risk groups," concluded Dr. King.

The article is, "The epidemiology of chronic pain in children and adolescents revisited: A systematic review," by S. King, C.T. Chambers, A. Huguet, R.C. MacNevin, P.J. McGrath, L. Parker, A.J. MacDonald (DOI: 10.1016/j.pain.2011.07.016). It appears in *PAIN*®, Volume 152, Issue 12 (December 2011) published by Elsevier.

<sup>1</sup> Goodman JE, McGrath, PJ. The epidemiology of pain in children and adolescents: A review. *Pain* 1991;46:247-64.

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#### **NOTES FOR EDITORS**

Full text of the article is available to credentialed journalists upon request. Contact Christine Rullo at 215-239-3709 or [painmedia@elsevier.com](mailto:painmedia@elsevier.com) for copies.

Sara King completed this work at the IWK Health Centre as part of a postdoctoral fellowship funded by the Canadian Child Health Clinician Scientist Program (CCHCSP). She is now an Assistant Professor at Mount Saint Vincent University, Halifax, Nova Scotia.

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