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## DEFINITIONS AND ASSESSMENTS OF PAIN WITH IMPACT IN CHILDREN AND ADOLESCENTS: A SCOPING REVIEW

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**Background:** There is growing recognition that a substantial proportion of children and adolescents are challenged by pain. However, there are inconsistencies as to how pain is defined. There is no consensus on what constitutes pain with sufficient impact to warrant concern for a child or adolescent.

**Objectives:** The aim of this scoping review is to provide an overview of the descriptors used to define pain with impact on children and adolescents.

**Methods:** We considered studies on pain in children and adolescents of school age (6 to 19 years). The definitions of pain with impact in children and adolescents were descriptively reported. To analyze the structure of the pain definitions, we grouped the definitions according to the impact of pain and based on 4 main domains: (1) presence of physical complaint, (2) impact of physical complaint, (3) temporal characteristic of the physical complaint, and (4) association with secondary disorders.

**Results:** Searches identified a total of 52,731 records and based on our inclusion criteria, 436 articles were included in this scoping review. Of these, 352 studies proposed to assess pain as a primary outcome but did not provide information on how pain was defined. In these studies, the most reported painful condition was "chronic pain," with symptoms over 3 months, and the most used measurement instrument was the Numerical Rating Scale (NRS). Eighty-four studies assessed the impact of pain and provided a definition. For the description of 'symptoms', the most used terms were "pain" or "discomfort", but few studies mentioned "impact", the most used terms being "not being able to participate in daily activities" and "functional disability". The most used assessment instrument was the Numerical Rating Scale (NRS).

**Conclusion:** Most studies did not propose a detailed definition and there is no standardization of the terms used even to search for the same concept. The lack of consensus on a definition of pain with impact in children and adolescents makes it difficult to compare the findings.

**Implications:** Although many studies include in their primary data the investigation of pain with impact, there is a lack of descriptions regarding the 'impact' of the condition in children and adolescents. Although the most used tools for assessing pain with impact have been the Numerical Rating Scale (NRS) and the Visual Analog Scale (VAS), these tools are quantitative and may not capture the complexity of the pain or its potential impact on the patient's life.

**Keywords:** Pain with impact, Children, Adolescents

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## PREVALENCE OF DISABLING MUSCULOSKELETAL PAIN IN CHILDREN AND ADOLESCENTS: A CROSS-SECTIONAL STUDY

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**Background:** The burden of musculoskeletal pain in children and adolescents is uncertain. Estimates of prevalence vary considerably and the impact of pain on children's life is often not considered.

**Objectives:** To determine the one-month prevalence of disabling musculoskeletal pain in children and adolescents living in an urban setting in Brazil. The secondary aims of this study are: 1) to determine the body region with the highest prevalence of disabling musculoskeletal pain; 2) to understand the characteristics of the children with disabling musculoskeletal pain; and 3) to describe the parents' perception of the prevalence of disabling musculoskeletal pain.

**Methods:** This study was conducted in public and private schools in the state of São Paulo (Itu, Salto, São Sebastião, São Paulo) and Ceará (Fortaleza), Brazil. We measured the prevalence of disabling musculoskeletal pain (primary outcome) by frequency and percentage. We also measured pain intensity; the presence of psychosomatic symptoms; and quality of life.

**Results:** A total of 2,688 children and adolescents were included in this study, of which 27.6% (95% CI 25.95 to 29.33) reported disabling musculoskeletal pain in the last month. The body region with the highest estimated prevalence of disabling musculoskeletal pain was the back, followed by the legs. Children and adolescents with disabling musculoskeletal pain were mostly girls, with a mean age of 12.2 years old. In addition, we observed that parents tend to underestimate the presence of pain in their children.

**Conclusion:** The prevalence of disabling musculoskeletal pain in children and adolescents was 27.6%, with the back being the most affected body region.

**Implications:** Understanding the prevalence estimated of musculoskeletal pain in children and adolescents will allow us to understand the current scenario of this condition, especially in Brazil. Prevalence studies are important to elucidate the burden of the condition and to support the identification of future priorities in healthcare and research.

**Keywords:** Musculoskeletal pain, Children, Adolescents