Understanding recurrent limb pain in Icelandic schoolchildren: The role of sociodemographic factors, health symptoms and physical activity

Scott Gribbon, Podiatrist/Project Manager

Guðrún Kristjánsdóttir, prófessor

Limb pain is a prevalent complaint among children and adolescents, with significant implications for their physical and psychological well-being. Despite its high prevalence, research on pediatric limb pain remains sparse, particularly in terms of its sociodemographic determinants, comorbid health symptoms, and the role of physical activity. This study utilizes data from the 2014 Icelandic Health Behaviours of School-aged Children (HBSC) survey, the only national dataset within the HBSC network to include extremity pain as a specific symptom. This unique focus allows for an in-depth investigation of limb pain and its influencing factors among Icelandic schoolchildren. The primary objective is to assess the relationship between limb pain and key sociodemographic variables, including age, sex, family structure, and socioeconomic status, to better understand how these variables shape the prevalence and reporting of pain. The co-occurrence of limb pain with other physical and psychological health complaints will also be investigated, offering a novel examination of symptom clustering and its impact on the pain experience. Additionally, the impact of distinct types and levels of phsycial activity on limb pain will be explored to ascertain whether physical activity serves as a protective or risk factor. The research will employ quantitative methods including descriptive statistics, and regression analysis to assess these relationships. This project offers significant scientific value by addressing an under-researched area in pediatric pain and will contribute to both national and international research. The novel dataset, combined with a detailed analysis of sociodemographic, health, and physical activity variables, will offer a comprehensive understanding of the multifaceted nature of limb pain, informing the development of targeted interventions and treatment strategies. The findings will provide actionable insights for healthcare providers and policymakers, whilst addressing a critical gap in the literature.