

Physiotherapy intervention through postural education in children and adolescents in the 2nd and 3rd cycles of basic education

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ABSTRACT

BACKGROUND: First middle school years are crucial when it comes to the arising of musculoskeletal disorders in growth stage children, primarily due to bad postural habits adopted while carrying their school supplies to and from school^[1]. Those same bad postural behaviors, that Dagge and Filgueiras^[2] concluded that may increase intervertebral pressure by almost 30% for the same weight conditions. The best way to avoid poor postural habits, is to teach children good postural behaviors for performing their everyday life activities^[3]. **OBJECTIVE:** to analyze the effects of Physical Therapy intervention and its influence on postural habits and pain levels, through a postural education program implemented in schools in the district of Viseu, Portugal. **METHODS:** the effect of postural education through the application of a postural education program with a pre-test (T0) and post-test (T1) evaluation and analysis. The postural education program was applied to the 2nd and 3rd cycle students in the EBIS school, aged between 10 and 16. The sample consisted of 124 students divided into control and experimental groups. Intervention through cognitive-motor teaching and learning lasted 15 minutes, often once a week for 8 weeks, with the purpose of transmitting some knowledge of the anatomy, biomechanics and pathophysiology of spinal pain and ideal posture habits in the following situations: Seated posture, standing posture, lying posture, backpack transport, lifting weights, weight transfer. **RESULTS:** The results of the study indicated that for all the variables studied, the experimental group obtained significant improvements in the reduction of complaints of musculoskeletal pain ($p= 0.043$) and in the ideal postures of the participants ($p= 0.005$), in the remaining variables also obtained improvements but they did not represent significant differences. **CONCLUSIONS:** We can conclude that the intervention of Physiotherapy in the school context is essential for the adoption of better postures in the day-to-day. It is also worth noting the importance of studies that use multidisciplinary methodologies and user-centered procedures to analyze postural behavior in a real interaction situation.

Keywords: *musculoskeletal pain; changes in postural habits; postural education*

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