

School physiotherapy program: Effects on the improvement of non-specific low back pain and postures adopted in adolescents

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Low back pain (LBP) has become a growing public health problem in adolescents, presenting a relatively high prevalence during school age. In southern Portugal, 966 adolescents were evaluated, aged between 10 and 16 years and the results revealed that 15.7% of students had LBP at the present time, 47.2% had experienced it in the last year and 62.1% had lifetime prevalence of LBP. Several factors may be involved in the pathogenesis of LBP, such as genetic, psychosocial, physiological, anthropometric and environmental, among them ethnicity, age, sex, smoking, obesity, physical activity practice, sedentary activities such as television watching and computer use, adoption of wrong postures and incorrect transportation and excess weight in school backpacks. Minghelli et al. study found that students who sit with the spine incorrectly positioned presented 2.49 (95% CI: 1.91-3.2, $p < 0.001$) greater probability of having LBP, and students using improper positions for watching TV or playing games have 2.01 (95% CI: 1.55-2.61, $p < 0.001$) greater probabilities compared to those who adopted correct postures. Physiotherapy in the school health field emerges with the objective of promoting knowledge and health conditions in this specific area of LBP and postural changes, optimizing the technical and personal skills of teachers and students, and developing individual and collective health potential. The performance of the

Physiotherapist in schools should involve a salutogenic approach in order to create in schools a stimulating environment of creativity and a critical sense, and not just an intervention aiming at changes in risk factors. Empowerment, capacity and motivation must be given so that adolescents and the entire school community are responsible for their own health choices. Several studies have verified the effectiveness of a school health program in improving students' posture and knowledge about ergonomic issues, however, there are still no guidelines and little is known about the effectiveness of such a program. The objective of this oral presentation will be to disseminate the guidelines of scientific studies that were used in school health programs and their effectiveness and to present a school health project developed in schools in the south of Portugal.

Biography

Beatriz Minghelli is an Adjunct Professor in the School of Health Jean Piaget/ Algarve, Piaget Institute of Study Cycles in Physiotherapy and Nursing since 2006. She is Member of Research in Education and Community Intervention (RECI) –Piaget Institute PhD in Public Health, Epidemiology specialty, in the National School of Public Health, NOVA University Lisbon, Portugal, and Master of Science in Physical Therapy from the School of Human Kinetics, University of Lisbon, Portugal, and Physiotherapist by Education School Helena Antipoff - Rio de Janeiro, Brazil. With regard to research, she has 27 publications in national and international journals and several participations in scientific events through work in the form of poster and oral presentations. Reviewer of scientific article for several journals: Journal of Public Health, BMC Musculoskeletal Disorders, International Journal of General Medicine, Clinico Economics and outcomes research, Journal of Spine and Neurosurgery, Adolescent Health, Medicine and Therapeutics, Archives of Physiotherapy, Journal of Pain Research). She is a Member of the Editorial Board of the Journal Austin Spine, EC Orthopaedics Journal, research and reviews. Most investigations are related to epidemiology studies, including obesity, low back pain, scoliosis, postural changes, and injuries in different sports (soccer, surf, cycling and martial arts).

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