

Neck, upper back and lower back pain and associated risk factors among primary school children.

ABSTRACT

Ergonomic among children is important as it will influence their growth, which mainly results from the development of the musculoskeletal system. Their anthropometric characteristics are totally different from adults. A cross-sectional study was conducted on 100 school children from two primary schools in Malaysia. Year 2 and 5 children were randomly selected and were given questionnaires to obtain information on their background, musculoskeletal pain/discomfort complaints, previous skeletal injuries and satisfaction with classroom furniture. A TANITA electronic weighing scale was used to measure their body weights, schoolbag load and relative schoolbag weight. A Harpenden anthropometer was used to measure their standing height. Neck pain (NP) was the most prevalent musculoskeletal disorder (MSD) with lifetime prevalence (LP) of 33% and a periodic prevalence (PP) of 15.3%, followed by the upper back pain (UBP) with a LP of 20.2% and a PP of 9.1% and lastly low back pain (LBP) with a LP of 13.1% and a PP of 8.1%. Binary logistic regression performed, showed the LP of neck pain were significantly influenced by factors namely: overall satisfaction with the classroom furniture, satisfaction with the backrest shape and desk height. Results showed that the schoolbag load and classroom furniture significantly influenced the prevalence of MSD.

Keyword: School children; Musculoskeletal disorder; Schoolbag weight; Classroom furniture.