

Poor sitting posture and a heavy schoolbag as contributors to musculoskeletal pain in children: an ergonomic school education intervention program.

ABSTRACT

Objectives: The purpose of this study was to evaluate a multidisciplinary, interventional, ergonomic education program designed to reduce the risk of musculoskeletal problems by reducing schoolbag weight and correcting poor sitting posture. **Methods:** Data were collected twice before and twice following intervention using the Standardized Nordic Body Map Questionnaire, a rapid upper limb assessment for posture evaluation, and schoolbag weight measurement in children aged 8 and 11 years attending two schools within the central region of Malaysia. **Results:** Students who received the ergonomic intervention reported significant improvements in their sitting posture in a classroom environment and reduction of schoolbag weight as compared with the controls. **Conclusion:** A single-session, early intervention, group ergonomics education program for children aged 8 and 11 years is appropriate and effective, and should be considered as a strategy to reduce musculoskeletal pain among schoolchildren in this age group.

Keyword: Assessment; Awareness; Education; Ergonomic; Intervention; Musculoskeletal pain; School children.