

**Prevalence of musculoskeletal pain and contributory factors among school-going early adolescents.**

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The study revealed that Adolescent Musculoskeletal Pain Questionnaire (AMP AQ) is a valid tool to assess musculoskeletal pain among school children 11 years and over and this formed the basis for the Tool for Assessment of Musculoskeletal Pain among School children (TAMPS) which was used in this study. The prevalence of musculoskeletal pain among school children was 71.2 percent. Prevalence rates for acute, one-time and recurrent pain categories were 19 percent, 16.2 percent and 35.9 percent respectively. A majority (80 percent) of the school children carried their amenities in a backpack. About 97.1 percent of the students carried the backpack on both shoulders. A waist-belt was present in 30 percent of backpacks and 30.5 percent students used the waist-belt. Carrying the backpack over both shoulder (OR 45 degrees to see the blackboard and the mean distance to blackboard was high (398.04 cm), none of these factors were associated with musculoskeletal pain. Approximately 80-87 percent chairs did not match with body dimensions of students. Mismatched seat depth - buttock-popliteal length found to be associated with a 1.65 times risk (95 percent CI: 1.070-2.532) of recurrent pain. Only 12 percent students used the backrest and it lowered the risk of recurrent pain (OR = 0.55 CI: 0.37-0.81). A majority (78.3 percent) of the students was provided with individual desk. In 84.9 percent desk surface was horizontal and 82 percent desks had a foot-rest. Mismatched legroom height - popliteal height was found in 76.3 percent. Despite, a higher proportion (94.7 percent) perceived high comfort in chairs. Children who perceived low comfort, reported recurrent musculoskeletal pain more frequently ( $p=0.006$ ). A majority (81.5 percent) of students slept on a bed with a mattress and it lowered the risk of recurrent pain (OR = 0.67 CI : 0.46-0.97). Functional disabilities (2.41), knowing of a person with similar pain (1.97), abnormal total disability score (2.02), abnormal emotional score (2.29) and abnormal hyperactivity score (1.85) were associated with high risks of recurrent musculoskeletal pain.