

# Prevalence of Work-Related Musculoskeletal Disorders among Primary School Teachers

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## ABSTRACT

**Aim:** To assess musculoskeletal disorders in primary school teachers in the city of Pune, India and the personal, psychological and work factors that may affect them.

**Objective:** To assess the sociodemographic, work and personal factors that contribute to pain through a self-made questionnaire, identify the site of pain using the Standard Nordic Questionnaire (SNQ), predict risk of future work disability using Short version of Örebro Musculoskeletal Pain Questionnaire (ÖMPSQ-Short), assess posture of the teachers during work using the Rapid Entire Body Assessment (REBA) tool, measure stress using the Perceived Stress Scale (PSS). To correlate occurrence of pain and MSDs with sociodemographic, anthropometric, work factors and work postures.

**Methodology:** Study Design: Cross-sectional study. Study Population: Primary school (Std. 1<sup>st</sup> - 4<sup>th</sup>) teachers. Sampling Technique: Cluster Sampling Sample Size: 80 Criteria: Primary school teachers who were willing to participate. Subjects who were suffering from any cardiovascular, neuromuscular disorders or diagnosed with a benign or malignant tumor, had any fractures or major surgeries in the last 1 year or were pregnant were excluded.

**Results:** The prevalence of musculoskeletal pain in primary school teachers was 81.89%. The commonest sites were lower back (16.41%), neck (14.55%) and shoulders (14.24%). Multivariate logistic regression analysis with pain product showed school type: government aided [odds ratio (OR) 0.082, p=0.01], working between 2 and 4 hours per day [OR = 0.246, p=0.044], blackboard usage for less than 60 minutes [OR= 0.165, p=0.05] and paper correction time of less than 60 minutes [OR= 0.117, p= 0.017] to be significant.

**Conclusion:** There is a high prevalence of MSDs in primary school teachers in India. Strong associations with ergonomic and work factors were found.

**Keywords:** School teachers, Musculoskeletal disorders, Standard Nordic questionnaire

