

Prevalence and Risk Factors of Musculoskeletal Disorders among School Teachers in Mangalore: A Cross Sectional Study

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Abstract : Background: Musculoskeletal disorders are one of the main causes of occupational illness. Mechanisms and the factors like repetitive work, physical effort and posture, endangering the risk of musculoskeletal disorders would now appear to have been properly identified. Teacher's exposure to work-related musculoskeletal disorders appears to be insufficiently described in the literature. Little research has investigated the prevalence and risk factors of musculoskeletal disorders in teaching profession. Very few studies are available in this regard and there are no studies evident in India. Purpose: To determine the prevalence of musculoskeletal disorders and to identify and measure the association of such risk factors responsible for developing musculoskeletal disorders among school teachers. Methodology: An observational cross sectional study was carried out. 500 school teachers from primary, middle, high and secondary schools were selected, based on eligibility criteria. A signed consent was obtained and a self-administered, validated questionnaire was used. Descriptive statistics was used to compute the statistical mean and standard deviation, frequency and percentage to estimate the prevalence of musculoskeletal disorders among school teachers. The data analysis was done by using SPSS version 16.0. Results: Results indicated higher pain prevalence (99.6%) among school teachers during the past 12 months. Neck pain (66.1%), low back pain (61.8%) and knee pain (32.0%) were the most prevalent musculoskeletal complaints of the subjects. Prevalence of shoulder pain was also found to be high among school teachers (25.9%). 52.0% subjects reported pain as disabling in nature, causing sleep disturbance (44.8%) and pain was found to be associated with work (87.5%). A significant association was found between musculoskeletal disorders and sick leaves/absenteeism. Conclusion: Work-related musculoskeletal disorders particularly neck pain, low back pain, and knee pain, is highly prevalent and risk factors are responsible for the development of same in school teachers. There is little awareness of musculoskeletal disorders among school teachers, due to work load and prolonged/static postures. Further research should concentrate on specific risk factors like repetitive movements, psychological stress, and ergonomic factors and should be carried out all over the country and the school teachers should be studied carefully over a period of time. Also, an ergonomic investigation is needed to decrease the work-related musculoskeletal disorder problems. Implication: Recall bias and self-reporting can be considered as limitations. Also, cause and effect inferences cannot be ascertained. Based on these results, it is important to disseminate general recommendations for prevention of work-related musculoskeletal disorders with regards to the suitability of furniture, equipment and work tools, environmental conditions, work organization and rest time to school teachers. School teachers in the early stage of their careers should try to adapt the ergonomically favorable position whilst performing their work for a safe and healthy life later. Employers should be educated on practical aspects of prevention to reduce musculoskeletal disorders, since changes in workplace and work organization and physical/recreational activities are required.

Keywords : work related musculoskeletal disorders, school teachers, risk factors funding, medical and health sciences

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