Abstract

Title: Work-Related Musculoskeletal Disorders Among University Faculty in Kolkata: An Institutional-Based Cross-Sectional Study.

Background: Musculoskeletal disorders (MSDs) are a major occupational health issue among university faculty due to prolonged sitting, repetitive tasks, and poor ergonomics. Understanding their prevalence and associated factors is essential for targeted intervention.

Objective: To assess the prevalence, anatomical distribution, and gender-based associations of MSDs among university faculty members in Kolkata.

Methods: A cross-sectional study was conducted using a structured questionnaire administered to 300 university faculty members, of whom 240 responded (response rate: 80%). The questionnaire collected data on demographic variables, MSD symptoms over the past 12 months and 4 weeks, and work-related factors such as sitting and computer use. Descriptive statistics were used to analyze prevalence, and Pearson's chi-square test assessed gender-based associations.

Results: Among the 240 respondents, 75.8% reported MSD symptoms in the past 12 months, and 53.3% within the past 4 weeks. The most affected regions were the neck (28.8%), lower back (24.2%), shoulders (13.8%), and upper back (12.5%). Average daily sitting and computer use times were 4.8 and 3.5 hours, respectively. Chi-square analysis revealed no significant gender association for most anatomical regions, except for hip/thigh pain ($p = 0.015$). Borderline associations were observed for upper back ($p = 0.076$) and wrist/hand pain ($p = 0.071$).

Conclusion: Thaere is a high prevalence of MSDs among university faculty in Kolkata, especially in the neck and lower back regions. Although most gender differences were not statistically significant, the findings highlight the need for ergonomic education and preventive measures within academic institutions.

Keywords: Musculoskeletal disorders, university faculty, ergonomic risk, cross-sectional study, occupational health, Kolkata.

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