Musculoskeletal Disorders among Medical Laboratory Professionals-A Prevalence Study

Agrawal, Parul, R¹.; Maiya, Arun, G².; Kamath, Veena³; Kamath, Asha⁴

¹Assistant professor (selection grade), Dept. of physiotherapy, School Of allied Health Sciences, Manipal University, Manipal-576104, India. Email: parulmahe@gmail.com

²Professor, Dept. Of Physiotherapy, School Of allied Health Sciences, Manipal University Manipal-576104, India. Email: ajmaiya@yahoomail.com

³Professor and head, Department Of Community Medicine, KMC, Manipal, India. Email: drveenakamath@gmail.com

⁴Associate Professor (statistics), Dept. Of Community Medicine, KMC, Manipal, India. Email: asha.kamath@manipal.edu

Abstract

Background: Work --related musculoskeletal disorders (WRMSD) have been reported very often in various occupations. Laboratory personnel are also exposed to many ergonomic risk factors due to the nature of their work. As their work demands awkward and static postures, high repetition, excessive force, excessive reaching, compression or contact stress, forceful or static exertions, lifting and pinch grip lifting, and repetitive motions, they may be at increased risk for work related musculoskeletal disorder which is often ignored. So the study was aimed at estimating the prevalence of work related musculoskeletal disorders among laboratory professionals. Methods: It was a cross sectional study done on 250 laboratory professionals (lab technicians, pathologists, microbiologists, biochemistry technologist) in Udupi district of Karnataka state and validated questionnaire was used to screen for the symptoms. Data were analyzed using descriptive statistics. Results: Prevalence of musculoskeletal symptoms among laboratory professionals was found to be 21.2%. The neck and lower back are observed to be the most affected with symptoms of pain and discomfort with prevalence of 8% and 6.8% respectively. Conclusion: Medical laboratory professionals are at high risk for the development of MSDs related to cumulative trauma. Thus, laboratory professionals are strongly encouraged to adopt preventive measures before symptoms develop.

Keywords: Work related musculoskeletal disorders; Occupational; Health Risk; Cumulative trauma, Laboratory professional

Introduction

Musculoskeletal disorders (MSDs) are an increasing health problem in workplaces. These disorders are a major cause of concern for several reasons: the health problem leading to workers' disability and the lost time from work *(WHO, 2003)*. Work-related Musculoskeletal Disorders (WMSDs) are the musculoskeletal disorders to which the work environment and the performance of work contribute significantly (Wolf et al, 2006).

Hospitals are large, organizationally complex, system driven institutions employing large numbers of workers from different professional streams. They are also potentially hazardous workplace and expose their workers to a wide range of physical, chemical, biological,