



Prevalence of Work Related Musculoskeletal Disorders Symptoms among Construction Workers: a Case Study in Malaysia

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Abstract

Background: The nature of work in the construction industry is closely associated with many human factor hazards. Manual construction workers are exposed to hand-arm vibration, repetitive movements, holding of heavy loads and tools, and frequent manual materials handling hazards in their daily tasks. Work related musculoskeletal disorders are major problems faced by construction workers, which involve the nerves, tendons, muscles and other supporting structures of the body. Two main objectives of this study were firstly, to determine the risk factors and the prevalence and secondly, to identify the association of the risks with muscular musculoskeletal disorders symptoms among construction workers.

Methods: Evaluation was done through survey questionnaire which also involved the standardized Nordic questionnaire. Sixty male construction workers aged between 17 to 50 years old took part in the study. Their main daily tasks are bricklaying, skim coating, housekeeping and plastering.

Results: 66.7% of the workers who took part in the study had high prevalence of musculoskeletal disorders symptoms at their elbows, wrists or hands and ankles or feet.

Conclusion: Manual construction workers are highly exposed to the risks of getting work related musculoskeletal disorders and there are significant associations ($P = 0.023$) between working duration with MSDs symptom among construction workers with respect to the workers lower limb.

Keywords: Musculoskeletal disorders, Manual construction workers, Risk factors

Introduction

The term musculoskeletal disorders (MSDs) refer to conditions that involve the nerves, tendons, muscles and supporting structure of the human body. MSD is one of the major problems faced by construction workers. Workers who are performing heavy physical work have a significantly higher prevalence of MSDs in different regions of the body. In many types of occupational groups,

MSDs are major causes of work related disability and lost time due to illness. The nature of construction work is closely associated with human factor hazards, and these hazards exist in their routine job tasks (1).

Leung et al. (2) conducted a study among 105 construction workers in Taiwan. Their study showed a high majority (76.2%) of construction