

**Prevalence of upper limb musculoskeletal disorders and its associated risk factors among janitorial workers: A cross-sectional study**

**ABSTRACT**

Introduction: Janitorial workers are considered a high-risk group to develop WRMSDs based on their numerous hazardous job tasks and frequent non-fatal injuries being reported. This study aimed to determine the prevalence of upper limb musculoskeletal disorders (ULMSDs) and its associated risk factors among janitorial workers. Methods: This cross-sectional study involved janitorial workers in a university in Sabah, Malaysia. The participants, who included supervisors, cleaners, and landscape workers, were recruited via universal sampling. Those with at least 12-months of experience in their present employment were included, while those with prior musculoskeletal injuries were excluded. Data were collected through interviews using the Malay version of Standardized Nordic Musculoskeletal Questionnaire (SNMQ), and Job Content Questionnaire (JCQ), followed by Ergonomic Risk Assessment (ERA). Data were analyzed and produced using SPSSv.26, encompassing descriptive statistics, Pearson's Chi-Square, and Multiple Logistic Regression analysis. Ethical approval and respondents' informed consents were obtained prior to the study. Results: Among 142 respondents, ULMSDs were found to be prevalent in 76.8% of janitorial workers, with the highest prevalence (71.6%) reported in the shoulder regions. None was at negligible risk, with 95.1% in the medium or high-risk categories for RULA assessment. The significant associated factors were landscape workers [aOR = 3.07, 95% CI = 1.04, 9.91], more than three years of employment [aOR = 2.47, 95% CI = 1.06, 5.79], and low job control [aOR = 2.69, 95% CI = 1.16, 6.23]. Conclusions: Given the high prevalence of ULMSDs, risky awkward postures, and low job control, amendments in working apparatuses and improvements in administrative procedures, are highly recommended to prevent the occurrence of ULMSDs.