

POSTER PRESENTATION PP23

Prevalence of Work-Related Musculoskeletal Disorders (WMSDs) and Associated Risk Factors Among Healthcare Workers Providing Direct Patient Care at Hospital Sultanah Aminah

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ABSTRACT

Background and Objectives: Work-related musculoskeletal disorders (WMSDs) are painful inflammatory conditions common in high-demand healthcare settings. This study determined the prevalence of WMSDs among healthcare workers at Hospital Sultanah Aminah (HSA), identified the body regions most affected, and evaluated associated occupational and demographic risk factors. **Methods:** A cross-sectional study was conducted among 315 healthcare professionals at HSA using the Nordic Musculoskeletal Questionnaire (NMQ). Data were analyzed using IBM SPSS version 32. Associations were screened using Pearson Chi-Square and Fisher's Exact tests, followed by Binary Logistic Regression ($p < 0.25$ threshold) to identify independent predictors. **Results:** The 12-month prevalence of WMSDs was 77.1% ($n = 243$), with the lower back (74.0%), shoulders (70.5%), and neck (67.0%) most affected. The 7-day prevalence for lower back pain was 50.5% ($n = 159$). Multivariate analysis revealed that Lifting Heavy Objects ($p = 0.005$, OR = 0.262) and Age (20–29 years, $p = 0.038$; 30–39 years, $p = 0.040$) were the only significant independent predictors. **Conclusion:** WMSDs are highly prevalent at HSA, driven primarily by mechanical loading and age-related vulnerability. Management should prioritize structural ergonomic changes, including mechanical lifting aids and targeted training for junior staff, to reduce physical burden.

Keywords: Musculoskeletal disorders (WMSDs); Healthcare workers; Nordic Musculoskeletal Questionnaire (NMQ); Lifting Heavy Objects

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