

RESPIRATORY SYMPTOMS AND ITS RISK FACTORS AMONG JANITORIAL WORKERS IN SABAH PUBLIC UNIVERSITY, EAST MALAYSIA

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ABSTRACT

Introduction: The janitorial workforce is particularly vulnerable to respiratory symptoms due to continuous exposure to respiratory hazards such as dust, chemicals, and biological agents. Despite the significant health risks associated with this occupation, limited research has been conducted in this population. Objective: Therefore, this study aimed to determine the prevalence of respiratory symptoms and its association with sociodemographic and occupational factors among the janitorial workers at a public university in Sabah, East Malaysia. Methodology: A cross-sectional study was conducted at University Malaysia Sabah among 200 janitorial workers, comprising cleaners and landscape workers. To gather sociodemographic, respiratory symptom, and occupational exposure information, an interviewer-administered questionnaire was employed. A standardized and validated Malay Version of American Thoracic Society Division of Lung Disease in Adult Respiratory Questionnaire (ATS-DLD-78A) was adopted for data collection. Results: Based on this study, the prevalence of at least one respiratory symptom was 32.5%, with cough being the most common symptom (22.5%), followed by breathlessness (12.0%), phlegm (8.5%), and wheezing (3.0%). A significant association was observed between the duration of employment and respiratory symptoms, with an adjusted odds ratio (AOR) of 1.273 (95% CI=1.173-1.381, p-value < 0.001). A positive association was found between job type and respiratory symptoms, with landscape workers having an AOR of 1.916 compared to cleaners (95% CI=0.823-4.461, p-value=0.132). Similarly, a strong positive association was observed between compliance to respiratory PPE and respiratory symptoms, with non-compliance associated with an AOR of 2.800 compared to compliant workers (95% CI=0.966-8.121, p-value=0.058). Conclusion: With the high prevalence of respiratory symptoms among janitorial workers and the duration of employment serving as a significant risk factor, it is crucial to employ control and prevention measures targeting long-term workers, such as enhancement of administrative control to prevent the development of chronic respiratory symptoms that may result in irreversible occupational lung disease in this vulnerable population.

Keywords: janitor, cleaner, farmer, agricultural worker, respiratory symptom
