PREVALENCE AND ITS RISK FACTORS FOR LOW BACK PAIN AMONG OPERATION AND MAINTENANCE PERSONNEL IN CHINESE WIND FARMS

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Background: With the increasingly severe energy shortage and climate change problems, developing wind power has become a key energy development strategy and an inevitable choice to protect the ecological environment worldwide.

Aim: The purpose of this study is to investigate the prevalence of low back pain (LBP) and analyze its risk factors among operation and maintenance personnel in wind farms (OMPWF).

Methods: A cross-sectional survey of 151 OMPWF was performed, and a comprehensive questionnaire, which was modified and combined from Nordic Musculoskeletal Questionnaires (NMQ), Washington State Ergonomics Tool (WSET) and Syndrome Checklist-90 (SCL-90) was used to assess the prevalence and risk factors of LBP among OMPWF.

Results: The prevalence of LBP was 88.74 % (134/151) among OMPWF. The multivariable model highlighted four related factors: backrest, somatization, squatting and lifting objects weighing more than 10 lb more than twice per minute.

Conclusions: The prevalence of LBP among OMPWF appears to be high and highlights a major occupational health concern.

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