Predictors for repetitive strain injury of upper extremities among office workers in a government agency, Putrajaya

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ABSTRACT

Introduction: Repetitive strain injury (RSI) of upper extremities is a work-related disorder that has been on the rise among the office workers over the past three decades due to various workplace factors. The prevalence of RSI among office workers ranged from 20% to 70% worldwide; one recent local study concluded that 67.2% of university workers suffered from RSI. The burden of RSI can be enormous in terms of the direct treatment cost and the indirect cost on work productivity loss. In Malaysia, 57.3% of the workforce are office workers. It is essential to identify the risk factors of RSI to implement preventive strategies and to promote sustainable health. Methods: This is a cross sectional study conducted in a government agency using pre-tested selfadministered questionnaires. 230 office workers, who fulfilled the selection criteria, were randomly selected via stratified sampling. Prior ethical approval was obtained from the ethic committee. Results: The response rate was 85.7%. The prevalence of RSI of upper extremities among the respondents was 20.8%. Univariate analysis has identified the following significant factors: management and professional group [odds ratio(OR)2.4, 95% confidence interval (CI) (1.2-4.8), overtime frequency >3times/week [OR2.5,95%CI(1.1-5.7)], high work demand [OR2.2,95%CI(1.1-4.8)], poor break time [OR2.6,95%CI(1.3-5.5)], and presence of daytime sleepiness [OR2.7,95%CI (1.3-5.5)]. The final model by multivariate analysis, after adjusting for age and gender, suggested that both poor break time and presence of daytime sleepiness [adjustedOR2.8,95%CI(1.3-6.0)] are the significant risk factors of developing RSI among the respondents. Discussion: The prevalence of RSI of upper extremities among the respondents is comparatively low. This model has identified two predictors for RSI but the causal relationship needs to be explored further. Interventional study is recommended to promote regular break during work. Further study is needed to investigate the reason of daytime sleepiness among the respondents.

KEY WORDS:

Repetitive strain injury, office workers

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Predictors of health-related quality of life (EQ-5D) among rural lbans of Sarawak

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ABSTRACT

Introduction: Sarawak is multi-ethnic, with the majority of its population being Iban, half still living in rural areas. Health services in rural areas remain a challenge, with mobile health a key to providing equitable health coverage. In line with the goal of health for all in the SDG, information and factors related to health and quality of life of rural populations are vital for stakeholders to better target limited resources for healthcare improvement. Methodology: A total of 804 rural Ibans were surveyed as part of an evaluative study on rural mobile health services. The respondents were sampled from randomly selected villages within operational areas of 60 rural clinics throughout Sarawak. A local validated EQ-5D-5L instrument was used. Information on socio-demographics, chronic medical conditions and an accessibility score developed for this study were included. The EQ-5D-5L index value was analysed using binary logistic regression to ascertain significant predictors. Results: The eldest was 91 with the mean age of 50.3 (±15.7) years. Majority were females (59%), had primary level or no formal education (73%) and 53% are farmers. The mean EQ-5D index value was 0.863 (±0.203). Many of them (63.6%) were completely healthy with a maximum index value of 1.000. Most of them had problems with pain (29.7%) and movement (22.9%). Binary logistic regression analysis revealed that quality of life was significantly (p<0.05) affected by age, chronic joint pains, visual impairment and multiple chronic illness. Discussion: Overall quality of life was comparable to other ethnic groups in Malaysia, despite poor accessibility to health facilities. Healthcare provision via mobile services were essential to bridge this gap in access. In conclusion, accessibility to health care services continue to be a challenge for rural Ibans in Sarawak. Improvements in mobile services with a focus on elderly, pain-management and ophthalmology will further improve quality of life.