

## FEATURE ARTICLE

### **The cardiorespiratory fitness, level of physical activity and cardiovascular risk factors among university security guards**

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#### **Abstract**

This cross-sectional study explores the correlation of cardiorespiratory fitness, physical status and cardiovascular risk factors among security guards in a public university in Sarawak, Malaysia. A questionnaire was used to collect socio-demographic information, and the International Physical Activity Questionnaire — Short-form (IPAQ-SF) was used to collect information on physical activity level. Physical fitness of respondents was determined using the YMCA three minutes physical fitness test and blood test to check fasting sugar and cholesterol levels. Data was analysed using SPSS version 19. A total of 98 respondents participated in the study of which the majority were male (89.8%). The respondents were found to have a mean  $VO_{2max}$  of  $24.46 \pm 3.58$  mL/kg/min as an assessment of their cardiorespiratory fitness. Fifty-three per cent of respondents were self-reported smokers, while 34.7% had high blood pressure, 37.8% had abnormal cholesterol level, 37.8% had abnormal blood glucose and 34.7% had an abnormal body mass index (BMI). More than 90% of the respondents self-reported a moderate to high level of physical activity. Analysis of multiple linear regression shows physical activity level (PAL) (adj *b*