

PB.7. Physical fitness literacy in the Malaysian Army

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Background: Physical fitness is crucial for the military personnel for them not just to meet the demand of their job, but also as a symbol of discipline, strength and professionalism. Physical fitness literacy enables the personnel and the organization to better understand and helps manage and maintain their fitness. The objective of this study was to determine the factors associated with physical fitness in the Malaysian Army.

Methods: A cross sectional study was conducted involving 634 Malaysian Army personnel. Socio-demographics and occupational variables, smoking, physical activity, and 24-hour dietary intake were assessed using self-reported questionnaires. Measurements were taken for anthropometrics (height, weight, BMI and WC and body compositions (BF%, fat mass, and muscle mass). Physical fitness was assessed using standard Malaysian Army fitness test including 2.4km run, sit-up and push-up. Associations were measured using Binary Logistic Regression in SPSS v22. Statistical significance was set at $p < 0.05$.

Results: At the univariate level, the odds of failing the fitness test were higher among those who had served 10-15 years (OR=2.0), senior rank (OR=1.75), and overweight and obese (OR=1.71). Male personnel who failed the fitness test had a higher mean BMI, BF%, fat mass and muscle mass. However, body BMI and body compositions were not associated with fitness level among female personnel. Those who failed the fitness test also had a higher mean fast food visits (mean=1.23) and total fat % intake. Light smoker had a lower odd of failing the fitness test compared to who never smoked (OR=0.63). However, in the multivariate analysis, only overweight and obesity (OR=1.54) and fast food visits (mean=1.22) showed significant association with failing the fitness test. Physical activity was not associated with physical fitness.

Conclusions: Overweight and obesity and unhealthy eating had significantly affected the physical fitness in the Malaysian Army. These factors could have outweighed their routine physical activity and intense training. More proactive and aggressive measures should be taken to address these modifiable factors to ensure the personnel are able to maintain their fitness level.