

NUTRITIONAL STATUS, PHYSICAL ACTIVITY LEVEL, PHYSICAL
FITNESS LEVEL AND COGNITIVE STATUS AMONG OLDER
ADULTS IN KUALA SELANGOR

By

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DECLARATION

“We, Fatin Nabilah Binti Samsudin, Nur Ilyani Binti Mohmed Azmin, Nurul Farahanis Binti Ibrahim and Syarifah Nur Barirah Binti Sayed Abdul Rahman, hereby declare that this dissertation is our own work and efforts, as to enhance our knowledge on nutritional status, physical activity level, physical fitness level and cognitive status among older adults in Kuala Selangor. It contain no previously published or written material by neither person nor material which to a substantial extent has been accepted for the award of another degree or diploma of a university or any other institutes, except where due acknowledgement has been made in the text”.

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ABSTRACT

Ageing population has increased significantly as observed in developing countries. This increase has highlighted the importance of health-related quality of life through healthy ageing. Older adults who do not practice healthy lifestyle are at higher risk to develop deterioration in physical and mental capacity. In Malaysia, there are limited studies that address relationship between nutritional status, physical activity and its effect on physical fitness function and cognitive function among older adults. This study is in congruent with The Academy of Nutrition and Dietetics of United States (2012) which stress the role of nutritious diet and physical active lifestyle as the key influential factors in reducing the physical and mental deterioration associated with ageing. Thus, this research can provide better understanding on the current diet and physical activity practices among Kuala Selangor older adult and its outcome to their fitness and cognitive function. The purpose of this was to assess the nutritional status, physical activity level, physical fitness function and cognitive function among older adults in Kuala Selangor. Besides that, this study was carried out to determine the correlation between nutritional status, physical activity and cognitive function. Participants for this study were 40 males and 117 female community-dwelling older adults aged from 60 to 85years old from several villages in Jeram district, Kuala Selangor. Their nutritional status was assessed by using Diet History Questionnaire, Mini Nutritional Assessment and anthropometry data. The physical activity was assessed by using International Physical Activity Questionnaire and for physical fitness; it was assessed by using hand grip test and Senior Fitness Test. For cognitive function, it was assessed by using Montreal Cognitive Assessment. The mean age for males was 67.0 ± 9.00 , and for females was 68.0 ± 9.00 , respectively, while BMI (kg/m^2) for male and female respectively= 23.9 (5.30), 24.3 (6.00), waist circumference (cm) for male and female were = 89.4 (15.10), 90.7 (14.45), respectively. Fat percentage (%) for males and females were 29.5 (6.50), 33.3 (9.40) respectively. There was a correlation between energy, protein with right hand grip strength among female older adults. There were significant differences seen in physical activity and age in female ($p = 0.007$). For

physical fitness, there was association between age and balance ability in male and female, ($p = 0.015$ & $p = 0.024$) respectively. Meanwhile, there were also significant difference between cognitive function and education level in male and female ($p < 0.005$). This study found that, there was relationship between dietary intake and physical fitness. There was association between nutritional status and anthropometry data in female. There was also association between physical fitness and age. There was association between cognitive function and age, education level and nutritional status.