Relationship between Anthropometric Status and Cardiopulmonary Endurance and Balance in the Elderly

by Krisnanda Dwi Apriyanto, S.Or., M.Kes., Prof. Dr. Suharjana, M.Kes., Dr. Cerika Rismayanthi, S.Or., M.Or., Dr. Satya Perdana, S.S., M.A.

ABSTRACT

Elderly is the final stage of development that humans will go through. Increasing age during the elderly will bring various compensations in terms of decreased function and increased prevalence of degenerative diseases in the elderly. Efforts that can be made to prevent a decline in function and an increase in the prevalence of degenerative diseases in the elderly are to maintain physical activity. Physical activity has great benefits because it can improve the elements of physical fitness, namely the heart and respiratory system, joint flexibility, balance and muscle strength. Physical activity can also prevent metabolic syndrome. Increasing age is accompanied by changes in body composition which include an increase in fat mass, a decrease in fat-free mass and a decrease in bone mass. Anthropometrics is a method for measuring people's nutritional status. Apart from measuring nutritional status, anthropometry can also be used to screen for obesity. Several anthropometric indices include Body Mass Index (BMI), weight for age, height for age, weight for height, upper arm circumference, thickness of subcutaneous fat according to age and Waist to Hip Ratio. In this study, physical fitness was measured using a physical fitness measurement instrument specifically for the elderly, cardiopulmonary endurance was measured using the 2-minute step test instrument and balance with the 8-foot up and go test. The instruments used to collect anthropometric status data are scales to measure body weight, stadiometers to measure height, BMI, Waist circumference and hip circumference were measured using a measuring tape. The results of the study showed that there was no correlation between anthropometric status and physical fitness, especially cardiopulmonary endurance and balance in the elderly.

Kata Kunci: Anthropometrics, Cardiopulmonary Endurance, Balance, Elderly.