

Relationship between Functional Independence and Physical Activity of Elderly Persons in Selected Homes for the Elderly in Nairobi, Kenya

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Abstract

There is a growing evidence of the contribution of physical activity in maintaining mobility and independence and particularly for certain conditions associated with old age. Previous studies by gerontologists have concluded that where older people have engaged in regular activity, they have increased their muscle strength, balance, joint suppleness and overall physical coordination. This in turn enhances

their functional control in carrying out ADLs and mobility in the homes for the aged. This study focused on the relationship between Functional Independence Measures (FIM) and Physical Activity levels (METs) of elderly citizens residing in selected homes for the elderly in Nairobi Province. A total of 144 both male and female elderly ≥ 60 years residing in three homes for the aged, registered and affiliated to HelpAge Kenya in Nairobi Province were used in the study. The intensity of activity levels was measured using METs while the independence level was scored using a Modified Barthel Index to establish the FIM. Both type (home activities, recreational activities, mild activities and conditional exercise) and intensity of the physical activity (MET values) were examined along with FIM of ADLs and mobility. Data was analyzed using SPSS where Pearson's Product Moment Correlation coefficient index at significance level of ≤ 0.01 was used to test the hypothesis. The participation of the elderly persons against physical activity intensities were: 0-3 METs (22.9%); 3-6 METs (31.4%) and > 6 METs (45.7%). Additionally, 71% of the senior citizens were established to be functionally independent having scored between 50-99 FIM. There was a statistically significant relationship between physical activities and the level of functional Independence of the institutionalized elderly in ADLs and mobility. This is because a correlation coefficient of 0.363 was obtained ($r = .363, p < .05$). Therefore, the study concluded that there was a significant relationship between METs of Physical activities and the level of functional independence of the old adults residing in the homes for the aged in Nairobi Province, Kenya. The administrators and caregivers should encourage more involvement of the senior residents in home activities, recreational activities, conditional activities among other activities compatible with the overall body conditioning of the elderly.

Key Words: Physical Activity, Metabolic Equivalent, Functional Independence, Activities of Daily Living