



AGING LEADS TO MODERATELY ACTIVE LIFESTYLE AMONG ELDERLY OF AGE 60-75 YEAR

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ABSTRACT Aging is an inevitable process and is associated with decrease in the physical activity level. For descriptive research design, International Physical Activity Questionnaire (IPAQ) was chosen. Study Area was selected purposively. Total sample size comprised of 90 (45 males and 45 females of the age between 60-74 year) from Haldwani Block of district Nainital, Uttarakhand, India was chosen conveniently. Through IPAQ scores, it was found that approximately half of the males (51.11 percent) and females (48.88) were moderately active. But, the physical activity level of males was high comparatively to females. There is a significant difference (3.7909 at 1 % level of significance) in average physical activity level among males and females. The results suggest that there is difference in physical activity level of males and females. This is due to the biological composition of men and women. This physical activity level can be improved by regular exercises, yoga, walking etc.

KEYWORDS : Ageing, Physical activity, Metabolic Equivalent Task (MET), Regular exercises.

INTRODUCTION

Ageing is the biological process and is simply the maturation process that takes place since an individual's birth. But, old age term is being used to define the elderly population of age 60 year or above and is associated with the sign and symptoms of decreased mobility, wrinkled skin, decreased physiological activity, weak immune system and decreased cognitive power. The other factors that are responsible for the poor condition of the elderly are their socio-economic status, poor nutrition, chronic illness, mental shock etc. According to Hirsch *et al.* (2010) better overall health and smaller number of depressive symptoms and were less likely to have hypertension, diabetes, obstructive lung disease, or coronary heart disease were observed in the most active men and women. According to Press, V., I. Freestone and C.F. George (2003), physically inactive people can have as much as twice the risk of coronary heart disease. As per Sattelmair, J.R. *et al.* (2010), a 25–30 percent reduction in stroke among active individuals;

Lee, I.M. (2003) risk reduction for breast cancer of approximately 20–40 per cent for those who do vigorous physical activity for 30–60 minutes on five days each week.

Apart from these factors, the comfortable lifestyle as a result of raised living standards is also an important factor. The world of fully automated machines makes an individual dependent on these amenities. These machines make the life more comfortable by decreasing the physical activity participation and limit the movements in an individual, and hence responsible for the functional limitations.

Higher age often brings about health problems and a decrease in functional capacity. This means that a growing number of people living with chronic diseases, health problems and decreasing capacity.

METHODOLOGY:

A total sample size comprised of 90 (45 males and 45 females of the age between 60-74 year). The data was collected from Haldwani Block of district Nainital, Uttarakhand, India which was chosen conveniently. A standardized IPAQ questionnaire was used to determine the Physical Activity Level. This questionnaire and its scoring protocol were adapted from IPAQ website: www.ipaq.ki.se. Questions were based on the kind of physical activities that people do as a part of their everyday lives. The information based on job-related physical activity; transportation physical activity; housework, house maintenance, and caring for family; recreation, sport, and leisure-time physical activity; time spent sitting. The respondent was asked to think about all the vigorous and moderate activities that were performed by them in the last 7 days along with the time they spent in it.

Based on the responses, Metabolic Equivalent Task (MET) score for each respondents were calculated by using the IPAQ protocol.

Respondent having MET score 3000 and above minutes / week was considered as highly active, MET score between 600 to 3000 minutes/week was considered as moderately active and MET score below 600 minutes per week had a low physical activity level.

RESULTS AND DISCUSSION

International Physical Activity Questionnaire adapted from IPAQ website: www.ipaq.ki.se for assessing the physical activity level based on metabolic equivalent of task (MET). MET is expressed in terms of minutes/week.

The Table 1 revealed that 42.22 percent and 24.44 percent were highly active males and females respectively; 51.11 percent and 48.88 percent were moderately active males and females respectively; 6.66 percent and 26.66 percent of the male and female respondents were respectively classified as lower activity level. So this shows that males are more active than females.

The result of the study found to be co-inside with the study of Milanovic, Z. *et al.* (2013) in which energy consumption calculated by the following the protocol of International Physical Activity Questionnaire which shows moderate physical activity is dominant among respondents.

Table 1: Percentage and frequency distribution of the respondents according to the Physical Activity Level Based on Metabolic Equivalent of task Values

Activity Level	N=90	
	MALE (n=45)	FEMALE (n=45)
HIGH (3000 and above MET minutes / week)	19(42.22)	11(24.44)
MODERATE (between 600 to 3000 MET minutes / week)	23(51.11)	22(48.88)
LOW (less than 600 MET minutes / week)	3(6.66)	12(26.66)

Note: Value in Parenthesis indicate percentage

Comparing the average physical activity score among males and female

For comparing the average physical activity score of males and females z test was applied. It was found that the average MET score or physical activity score of males and females are highly significant at 1% level i.e. 3.7909 (Table 2). Milanovic, Z. *et al.* (2013) also found significant reduction ($P < 0.05$) in the value of the Metabolic Equivalent of Task in total physical activity among men and women older than 60 years. His study found that the reduction in physical activity level was equal for both men and women and was due to the aging process.

Table 2: Z values to compare average physical activity level among males and females

PHYSICAL ACTIVITY SCORE (MET minutes/ week)	Males		Females		Z
	Mean	SD	Mean	SD	
	3115.36	2039.67	1685.19	1498.48	3.7909**

** Significant at 1% level.

CONCLUSION:

There are various physiological differences in men and women which shows the significant difference in the physical fitness level of women. The lung capacity of the men is 25-30 percent greater than women, men has greater bone mass etc. These physiological limitations generally lead to unequal performance of the women in comparison to men. But the physical capacity of both either male or female, young or old age people can be enhanced, retained or maintained only through the active participation in the physical activities like Yoga, exercise, walking etc or we can regular exercise. The lines by anonymous says *No man can stop the clock, but everyman can slow its tick*. The same way Regular exercise cannot stop ageing but helps to delay the ageing process. For the physical and mental health of almost everyone, including older adults regular exercise and physical activity are important. Being physically active can help in doing things we enjoy and stay independent as person ages. Regular physical activity over long periods of time can produce long-term health benefits. Health experts suggest that older adults should be active every day to maintain their health.

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