

Association between Physical Activity and Instrumental Activities of Daily Living in Elderly People with Type 2 Diabetes Mellitus

MF Noordeen¹ and AH Wettasinghe¹

¹Faculty of Medicine, University of Colombo, Colombo, Sri Lanka

#medbspt18437@stu.cmb.ac.lk

Abstract

Elderly people with Type 2 Diabetes Mellitus (T2DM) are rapidly growing, with significant impact on both Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). Physical Activity (PA) plays an important role in glycemic control and maintaining independency in ADL and IADL. “Instrumental activities of daily living” is a term used to describe more complex tasks like transportation and shopping, managing finance, and shopping and meal preparing. This study aimed to assess the association between PA and IADL in elderly people with T2DM. Sixty older adults, age more than 60 years having T2DM for more than five years were recruited from diabetes clinics at National Hospital of Sri Lanka. Convenience sampling method was used to select participants. Data on demographics and diabetes-related medical indicators were obtained through an interviewer administered questionnaire. International Physical Activity Questionnaire (IPAQ) and Lawton-Brody Instrumental Activities of Daily Living Scale were used to assess level of PA and IADL respectively. Study sample was consisted of 60 participants (mean age= 71.8±4.0 years) with 50% (n=30, age=72.0±3.4 years) males and 50% (n=30, age=71.5±4.6) females. Among the study subjects, 15.0% (n=9) were inactive, 66.7%(n=40) were moderately active, and 18.3% (n=11) were highly active. Mean PA score was significantly higher in females compared to males (females=2355.8±1496.8 MET-min/week; males= 1416.9±1106.3 MET-min/week, $p=0.008$). Mean IADL score was not significantly different between males and females (males=6.7±1.6; females=6.0±1.7, $p=0.126$). Although PA and IADL was not significantly associated ($p=0.104$) in the sample, PA and IADL in active elderly people were significantly correlated ($p=0.015$). Majority of the elderly with T2DM were moderately active, but independent in their IADL. Therefore, elderly, especially males with T2DM need to engage in recommended levels of PA, in order to increase the independency in IADL.

Keywords: PA, IADL, Elderly people, T2DM