

e-Proceeding

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ASSESSING THE PHYSICAL ACTIVITY OF DAILY LIVING AMONG THE ELDERLY AT RETIREMENT HOMES

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Abstract

Regular physical activities (PA) at the green outdoor lead to improved health for the elderly, enabling them to be healthy for a prolonged period. Activities Daily Living (ADLs) scale was developed by Sidney Katz in 1960 to measure the elderly ability to function, such as walking, bathing, and transferring (indoor and outdoor). Physical activity (PA) through Activities of Daily Living (ADLs) is an imperative and valuable way of enlightening coordination, maintaining independence, flexibility, balance, and muscle strength. The study aims to assess the significance of Activities of Daily Living (ADLs) methods to the needs of physical activity (PA) for the elderly in the green area. Activity of Daily Living (ADLs) is the potential mechanism to improve physical activity (PA) and supports social connection for the elderly. Assessing the elderly with Activity of Daily Living (ADLs) provides a useful starting point for describing the importance of green space for the elderly in long-term care facilities.

Keywords: *physical activity; the elderly; activities daily living; long-term care; green space*

1.0 INTRODUCTION

In the coming decades, the number of elderly people will rise due to an aging population. The rising number of older adults in the world continues to pressure the public health system, care and social services. As a result of the growing number of aged people in the years to come, the need for long-term residential treatment will rise. Elderly individuals living in retirement homes are among the most disadvantaged in society. Submission to a nursing home is typically attributed to increased disabilities related to various health issues. Almost 40% of the elderly living in a retirement home complain that the lack of control has adversely affected their quality of life. Quality of life is suggested to be related to the performance of daily tasks. Older adults living in nursing homes suffer from numerous debilitating problems, resulting in disabilities and decreased fitness (Schram et al., 2008).

The elderly living in long-term care facilities are the most physically inactive. For this population, physical inactivity negatively affects Activities of Daily Living (ADL) and physical fitness (Paw, van Poppel, & van Mechelen, 2006). When an older adult is relocated to a retirement home, there is also a decline in health and a growing reliance on activity daily living (ADL) tasks, such as walking and dressing. Retirement homes inhabitants are highly inactive, and there is a significant decline in health and a growing reliance on activities daily living (ADL) behaviors.

Physical activity (PA) and fitness play a vital role in preserving health functioning and quality of life later in life. Physical exercise is a modifiable risk factor for activities related to the maintenance of well being and successful functioning of older adults.

2.0 THE ACTIVITIES DAILY LIVING (ADL)

The activities daily living (ADL) is a term used together to describe specific skills that are important for self-care, such as feeding, washing, walking, and mobility. Sidney Katz used the word "daily life" for the first time in 1950. ADL (Activity Daily Living) is also a key element in an effort to measure the quality of life and functional status (Spritzer, 1987). The Lawton Instrumental Activities of Daily Living (IADL) Scale is used to evaluate independent living skills (Lawton & Brody, 1969), and ADL also is used to measure functional status of an individual.

Over the years, a variety of other physical impairment interventions have been implemented that cover behaviour close to Katz ADL scale. Most of these different measures of ADLs add some extent of mobility, such as walking, getting around inside, and getting around outside (Fillenbaum, 1987). Walking is also known as 'ambulating' in technical terms.

3.0 THE METHODS OF ACTIVITIES DAILY LIVING (ADL)

3.1 Design and Instruments

ADL (Activity Daily Living) status and scale are good predictors of a wide range of health-related behavior for the elderly at retirement or nursing homes. The importance of ADL (Activity Daily Living) is to improve the elderly's quality of life and their performance of six (6) instrumental activities of daily living (ADL) (Jette et al. 1986). The functional status is measured using the instrumental activities of daily living (IADL) scale, adapted from Jette et al. (1986). IADL activities include household tasks within the house, like washing the dishes, cleaning, preparing meals, and activities outdoors like walking outside the home, shopping, and gardening (Heuvelen et al., 2000).

In this paper, the instrumental activities of daily living (IADL) scale only accomplish the elderly's mobility, including engagement with the garden, relaxing, and recreation at green space. It also includes walking a certain distance at green or outdoor space and building (outdoor) activities in retirement homes (*Refer Table 1.0*).

IADL (Instrumental activity daily living) method uses score or scale by the expertise of researchers. The score or ranking range from 1 (least ADL) and to 5 (Most ADL). The elderly (individuals) are scored according to their highest level of function in the physical activities (PA). This may lead either to over-estimation or under-estimation of the elderly ability to perform physical activity.

Table 1: The instrumental of activity daily living (IADL)

Category (ADL)	Physical Activities (PA)
Engagement with Green (gardening)	Pottering in the green/garden, cutting the grass & tending to window to see nature/green.
Relaxation	Relaxing at garden/green space and sitting
Walking in green space	Walk to green space/garden.
Recreation/exercise at green space	Walking around the green space and the building at Retirement or Nursing Homes.

(Source : Author, 2020)

Based on *Table 1.0*, the precedent and previous study by Jette et al. (1986) revealed the ADL of individual elderly for walking to green space by using a scale indicator, and the reliability result of the scale was 0.87. Others, Kempen, Ormel, de Greef (1997) explored the relationship between performance-based health and expected health in an aging population with an average age of 68.9 years. They observed a mean correlation of 0.25 for males and 0.23 for females between performance-based and perceived fitness components, with the highest association ($r=.52$ for males and $r=.43$ for females) between perceived stamina and performance-based stamina. These findings were supported by Schuler and Marzilli (2003).

However, there is a well-established association between involvement in physical exercise and ADL performance, such as self-reported difficulties in stooping or kneeling (Mullen, McAuley, Satariano, Kealey & Prohaska, 2012), but physical activity depends on a variety of determinants; one of which is the climate of long-term care facilities.

ADL is performed by exploring the beneficial effects of physical exercise on institutionalized elderly people with regard to the components of the pathway (walking/ambulating) from physiological fitness to ADL performance problems. Exercise is a subcategory of physical activity in which scheduled, organized, and repeated body movements are conducted to enhance or sustain one or more components of physical health at a high degree of intensity (Howley et al., 2001).

4.0 FINDINGS

4.1 The Significant of Activities Daily Living (ADL) and Green Area (Physical Activities) to The Elderly

Plentiful research suggests that activity daily living (ADL) involvement in mild physical activity (PA) has important health effects for the elderly. A literature search revealed one prior review with the focus on the effects of exercise on physical fitness in a residential home population (Rydwick et al., 2004). Physically active lifestyles have been established to mitigate physiological changes associated with aging and to postpone or avoid the onset of certain chronic diseases (Singh, 2002).

Keysor and Jette (2001) have stated that they engaged in their analysis of physical activities that increase the physical condition of the elderly, particularly muscle strength, cardiovascular capability, balance and durability. In addition to the health impacts, daily physical activities were offered to the elderly with social advantages. Too, Silverstein and Parker (2002) found that the Swedes elderly who increased activity participation in 9-year period duration have seen an improvement in life satisfaction and improve their quality of life at retirement homes.

Prospective research has found that physical activity, such as a long stroll, will minimize the risk of future depression (Strawbridge, Delger, Roberts & Kaplan, 2002). Weuve et al. (2004) have found that higher levels of physical activities (walking more than 1.5 hours a week) at retirement homes are correlated with increased cognitive function and memory in elderly women.

The previous study by Cress et al. (2011) showed the elderly at retirement homes took an average of 3,000 steps per day in support of their activity daily living (ADL). MacRae et al. (1996) revealed 94% of the elderly at retirement homes spent their time sitting, even though they were capable of ambulation (walking) without nursing assistance. It is shown that the potential mechanisms of health benefits of residential greenness on ADL and IADL could be that green space promotes physical activity and social engagement (Koohsari et al. 2015; Hunter et al. 2015).

5.0 CONCLUSION

The activities of daily living (ADL) can improve the elderly's confidence and independence in their physical activity at retirement homes. This helps to keep aging individuals active and healthy, both mentally and physically. Improvements in mental health, emotional, psychological, and social wellbeing, and cognitive functioning are all related to daily physical exercise. Therefore, the types of activities of daily living (ADL) that are suitable to be conducted for the elderlies at retirement homes should improve their attention, memory, visuospatial functioning, and executive functioning.

In the future, in order to track the effects of physical exercise on physical health and ADL performance, the related findings should be assessed at a regular basis. The relationship between of psychological factors to ADL performance in vulnerable older people should be examined since some research revealed that, while not explicitly linked to activity daily living (ADL) performance, expectations of the elderly physical health can form the basis for participating in physical activity, which in turns has a positive impact on the success of everyday life activities.

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Tarikh : 20 Januari 2023

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Setuju.

27.1.2023

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