



## A DESCRIPTIVE STUDY ON ASSESSMENT OF FUNCTIONAL STATUS AND QUALITY OF LIFE OF ELDERLY RESIDING AT OLD AGE HOME, VELLORE (TAMILNADU)

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### ABSTRACT

Health is determined by many economic, social, psychological and physiological factors.. Poor health and morbidity diminish the quality of life and wellbeing of the elderly. Increasing psychological distress and perception of vulnerability, with increase in age and disability becomes a major concern, while it seriously limits the function in daily life and hence increasing the care giving burden. In old age physical strength deteriorates, mental stability diminishes, financial power becomes bleak and eye sight suffers a setback. It is a period of disappointment, dejection, disease, repentance and loneliness. Low levels of physical activity are associated with an increased risk of mortality in people over the age of 65 years. Low levels of physical activity are associated with an increased risk of developing chronic health conditions in people over the age of 65 years.

The objective of this descriptive study was to assess the functional status and quality of life elderly. Demographic variables were assessed. The functional status i.e., ADL and IADL was assessed using Katz index of activities of daily living scale and Lawton-Brody instrumental activities of daily living. Quality of life measured by WHO-QOL-BREF questionnaire. Data analysis was done to find the frequency, percentage, mean, standard deviation and Chi-square to find out the association between the functional status and quality of life with selected demographic variables. The assessment revealed that the majority 93% of elderly were highly dependent on their functional status. 90.7% had poor quality of life and only 9.3% had good quality of life. Chi-square values reveals, there was association between the IADL and Habits of elderly, and QOL was associated with the age, gender, educational qualification, hobbies and history of comorbid illness.

**KEYWORDS :** Elderly, Functional status, ADL, IADL, Quality of life.

### INTRODUCTION

Ageing is a natural process of life is due to gradual changes in metabolic activity of organs and disability in regeneration capacity of cells. Worldwide, the average life span of people has been increasing. Several factors including heredity, life style and healthy diet, avoiding smoking and physical activity can effect on the longevity of life. There is evidence from high quality studies to strongly support the positive association between increased levels of physical activity, exercise participation and improved health in older adults.

In general, ageing is defined in terms of chronological age with a cut off age of 60 or 65 years. This definition is partly true due to the fact that retirement age is also similar to this cut off age .Globally, the 60 plus population constitutes about 11.5 percent of the total population of 7 billion. By 2050, this proportion is projected to increase to about 22 percent when the elderly will outnumber children (below 15 years of age).

Most common disability among the aged persons was loco motor disability and visual disability as per census 2011. State wise data on elderly population divulge that Kerala has maximum proportion of elderly people in its population (12.6 percent) followed by Goa (11.2 percent) and Tamilnadu (10.4 Percent) as per population census 2011. The aging process can have an enormous impact on the human body. As people age, they may notice a loss of agility, balance, endurance and strength as well as a loss of bone density and muscle mass. Likewise, they may also notice an increase in body fat and possible joint injuries. It is estimated that four out of every five adults aged 50 years and above are suffering from at least one condition that is chronic.

### NEED FOR THE STUDY

In health care, quality of life (QOL) has come to be an important concept and outcome measure as well as one of the main goals in medical care (Norden felt, 1991). An important quality of life component from elderly people's perspective is functional independence (Hellstrom & Hall berg, 2004). Functional status has been used to describe motor function ability to perform Activities of Daily Living (ADL) and the ability to perform Instrumental Activities of Daily Living (IADL) (Knight, 2000). As people grow old they may experience that their health deteriorates and that being old often involves functional decline (Bank, 1995). Quality of life and its relationship to basic and instrumental ADL decline in elderly population with medical illnesses has been described in various studies.

Vulnerability among older persons increases with the declining functional abilities. Activities of daily living (ADL) are the basic tasks of everyday life such as feeding, bathing, dressing, mobility, use of toilet and continence and when older persons are not able to perform these activities, they require assistance. Among all the ADL difficulty is higher for elderly women than men, indicating higher vulnerability for women. Similarly, limitations with ADL also increase with age.

Elderly population needs our services to maintain high level of quality of life and health status. If people can experience these extra years of life in good health and if they live in a supportive environment, their ability to do things they value will be little different from that of a younger person. If these added years are dominated by declines in physical, mental capacity, the implications for older people and for society are more negative.

Environments have an important influence on the development and maintenance of healthy behaviors. Maintaining healthy behaviors throughout life particularly eating a balanced diet, engaging in regular physical activity and refraining from tobacco use, all contribute to reducing the risk of non-communicable diseases which will improve physical and mental capacity. Behaviors also remain important in older age. Strength training to maintain muscle mass and good nutrition can both help to preserve cognitive function, delay care dependency and reverse frailty.

Ageing is generally a process of deterioration in the functional capacity of an individual that results from structural changes with advancement of age. Longevity must come along with the quality and then feeling of contentment could be achieved. To emphasize the medical and psychological difficulties faced by geriatric people is the need of current time. Research in this field would be helpful to know the exact status of the quality of lives of the elderly people. Result of the study could provide a baseline initiative for more research and intervention strategies with this in the prospect, a study would be very much beneficial among the elderly population to know their quality of lives.

### METHODS AND MATERIALS:

The research approach used for this study was quantitative approach. Descriptive research design was adopted for this study. Based on the objectives of the study, demographic profile, standardized tools like Katz-Index of Independence in activities of daily living (ADL), Lawton-Brody Instrumental activities of daily living (IADL) scale was

used to assess functional status and WHO-QOL-BREF was used to assess the quality of life of elderly.

The study was conducted in the selected Old Age Home at Vellore, Tamilnadu. The population selected for this study was elderly of 60 years and above. The sample selected for this study was elderly of 60 years and above residing in Mahatma Gandhi Old Age Home, Vellore, Tamilnadu.

Simple random sampling technique was used to select the elderly for the study. The study included 150 elderly, who met the inclusion criteria. The variables used were the functional status and quality of Life of elderly. The demographic variable included their age, gender, educational status, habits, hobbies and history of comorbid illness. **Katz-index of independence in activities of daily living (ADL)** is the most appropriate instrument to assess the activities of daily living, **Lawton-Brody Instrumental activities of daily living (IADL)** was used to assess the instrumental activities of daily living such as Ability to use Telephone, Shopping, Food preparation, House Keeping, Laundry, Mode of transportation, Responsibility for own medications, ability to handle finances. Quality of life of elderly was assessed using WHO-QOL-BREF questionnaire.

WHO-QOL-BREF tool comprises 26 items in which it measures the broad domains such as Physical Health, Psychological, Social Relationship and environment. Demographic data was collected by the researcher prior to the start of the study which consisted of information related to age, gender, marital status, educational level, Habits, Hobbies and history of any co-morbid illness.

Once informed consents were signed an interview schedule was done individually to assess their, activities of daily living using Katz-Index of Activities of daily living and instrumental activities of daily living using Lawton-Brody instrumental activities of daily living. Quality of life was assessed by WHO-QOL-BREF questionnaire.

**ETHICAL CONSIDERATION:**

The administrator of old age home has granted permission to conduct the study with in each facility. Ethical clearance of written permission from the head of institutions to conduct the research at Mahatma Gandhi Old Age Home, and informed consent from the study participants were obtained. Confidentiality and anonymity of the subjects was maintained throughout study.

**RESULTS AND DISCUSSION:**

Data Analysis was done by calculating frequency, percentage, mean, standard deviation and Chi-square to find the association between the selected demographic variables and functional status & Quality of life of Elderly.

Among the elderly population 51.3% were above 70 years of age, 34.7% were 66-70 years and 14% were in 61-65years of age. Regarding gender 77.3% were females and 22.7% were males.

**Table.1. Frequency and percentage, of Functional Activities of Daily Living among elderly.**

| Functional Status | ADL              |           | Total |
|-------------------|------------------|-----------|-------|
|                   | Highly dependent | Dependent |       |
| Frequency         | 140              | 10        | 150   |
| Percentage        | 93.3             | 6.7       | 100.0 |

The data presented in table.1 depicts the functional status of activities of daily living, 93.3% of elderly were highly dependent and 6.7% were dependent.

**Table.2. Frequency and percentage, of Instrumental Activities of Daily Living among elderly**

| Functional status | IADL             |           | Total |
|-------------------|------------------|-----------|-------|
|                   | Highly dependent | Dependent |       |
| Frequency         | 138              | 12        | 150   |
| Percentage        | 92.0             | 8.0       | 100.0 |

Table.2. reveals that the instrumental activities of daily living among elderly, majority 92.0% were highly dependent and 8.0% was dependent. So the functional assessments reveals that majority of elderly were highly dependent.

**Table.3. Mean and standard deviation of Functional Status of elderly.**

| Functional Status | Mean   | Standard Deviation |
|-------------------|--------|--------------------|
| Katz Index of ADL | 1.8800 | 1.05500            |
| Lawton-Brody IADL | 2.1200 | 1.57548            |

Table.3, presents, the mean and standard deviation of ADL were 1.8800 and 1.0550, the mean and standard deviation of IADL of elderly were 2.1200 and 1.5754 respectively.

**Table.4. Frequency and Percentage of Quality of Life of elderly.**

| Quality of Life | Poor QOL | Good QOL | Total |
|-----------------|----------|----------|-------|
| Frequency       | 136      | 14       | 150   |
| Percentage      | 90.7     | 9.3      | 100.0 |

Table. 4. Depicts the quality of life of elderly, which reveals that 90.7% have poor QOL and only 9.3% of elderly have good quality of life.

**Table.5. Mean and Standard Deviation, of Quality of Life of elderly.**

| Quality of Life- Domains | Mean          | Standard Deviation |
|--------------------------|---------------|--------------------|
| Physical Health          | 9.485         | 2.79               |
| Psychological            | 8.995         | 2.23               |
| Social Relationships     | 9.773         | 2.15               |
| Environment              | 11.400        | 1.22               |
| <b>Total</b>             | <b>39.654</b> | <b>0.536</b>       |

Table.5. depicts that the quality of life related with environment is high, 11.400 comparing with the other domains such as the physical health, psychological and social relationships.

**DISCUSSION:**

On assessing the functional status and the quality of life using the standardized scales, revealed that among elderly, 93.3% were highly dependent, 6.7% were dependent and none of them were independent on ADL. 92.0% were highly dependent, 8.0% were dependent and none of them independent on IADL. Regarding the QOL, 90.7% had poor QOL and only 9.3% had good QOL. On comparing the physical health, psychological, social and environmental domains in QOL, the elderly population were better in environmental domain with mean 11.400 and standard deviation 1.565.

**RECOMMENDATIONS:**

- A similar study can be conducted with exercise intervention to improve QOL of elderly.
- A similar study with larger population can be conducted to generalize the results.
- A comparative study can be carried over with the younger population.
- A multi interventional study can be conducted to analyze the best one to improve QOL of elderly.

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