



ASSESSMENT OF COGNITIVE IMPAIREMENT AMONG ELDERLY RESIDING IN SELECTED COMMUNITY SETTING AT ERNAKULAM DISTRICT, KERALA

Aswathy O.S, Jihi, Cebi paul, Starmine.C, Ammu Rajan

Dept. of Mental Health Nursing, MOSC College of Nursing, Kolenchery, Kerala, India – 686661.

ABSTRACT

The present study is conducted to assess the cognitive impairment among elderly residing in selected community setting at Ernakulam district, Kerala. The objective is to assess the cognitive impairment among elderly and to identify the determinants of cognitive impairment. Descriptive study was conducted among elderly between the age group of 65-75. Cognitive function was assessed by applying standardized Mini-Mental Status Examination (MMSE). It is observed that among the 50 subjects 2 of them were having severe cognitive impairment and 7 subjects were having mild cognitive impairment and 41 were not having cognitive impairment. It is found that there is a significant association of cognitive impairment with physical illness ($p=0.0004$). No significant association were found with cognitive impairment and socio personal variables.

Key words: Elderly, Cognitive impairment, Mini-Mental Status Examination.

Corresponding Author

Starmine.C

Email: starsujin6pearl@gmail.com

Article Info

Received 12/05/2019; Revised 20/05/2019

Accepted 04/07/2019

INTRODUCTION

The geriatric population is defined as population aged 60 years and above. People aged 60 years and over are expected to constitute 10.2% of the total world population. This study was intended to identify the cognitive impairment of the elderly subjects residing in a selected community setting. So, the aim is to evaluate the cognitive impairment among elderly subjects [1].

METHODS AND MATERIALS

Objectives

1. Assessment cognitive impairment among elderly
2. To identify the determinants of cognitive impairment among elderly

Study design and setting -descriptive study was conducted among elderly between the age group of 60-75 who were residing in the Kadayiruppu panchayath, Ernakulam district.

Inclusion criteria

- Elderly people who are at the age group 60-75
- Elderly people residing in kadayiruppu panchayathu

Exclusion criteria

- Elderly above the age group 75 years
- Elderly below the age group below 60

Assessment of cognitive function

Cognitive function was assessed by applying standardized Mini-Mental State Examination (MMSE) [2].

Analysis and interpretation

1. Assessment of cognitive impairment among elderly

It is observed that among the subjects 2 of them were having severe cognitive impairment and 7 subjects were having mild cognitive impairment and 41 were not having any cognitive impairment.

It is found that there is a significant association of cognitive impairment with physical illness ($p=0.000$).



Table 1: Frequency and percentage distribution of cognitive impairment**n=50**

| Variable | Frequency | Percentage (%) |
|-------------------------|-----------|----------------|
| Cognitive impairment | | |
| No cognitive impairment | 41 | 82 |
| Mild | 7 | 14 |
| Severe | 2 | 4 |

*Significant at $p < 0.05$.**Table 4: Association of cognitive impairment with selected socio personal variables****n=50**

| Variable | Category | | | Chi-square/fisher exact | P value |
|-------------------------|-------------------------|---------------------------|-----------------------------|-------------------------|---------|
| | No cognitive impairment | Mild cognitive impairment | Severe cognitive impairment | | |
| Age | | | | | |
| 60-65 | | | | Fisher exact test | 0.32 |
| 66-70 | 0 | 2 | 21 | | |
| 71-75 | 1 | 3 | 14 | | |
| Gender | | | | | |
| Male | 1 | 2 | 6 | Fisher exact test | 0.84 |
| Female | 1 | 5 | 23 | | |
| Education | | | | | |
| Primary education | 1 | 3 | 9 | Fisher exact test | 0.09 |
| High school | 1 | 3 | 19 | | |
| Higher secondary/PDC | 0 | 0 | 13 | | |
| | 0 | 1 | 0 | | |
| Occupation | | | | | |
| Employed | 1 | 1 | 15 | Fisher exact test | 0.5 |
| Unemployed | 1 | 6 | 25 | | |
| Retired | 0 | 0 | 1 | | |
| Marital status | | | | | |
| Married | 2 | 5 | | Fisher exact test | 1 |
| Widow/widower | 0 | 2 | 31 | | |
| Religion | | | | | |
| Hindu | 2 | 3 | | Fisher exact test | 0.7 |
| Christian | 0 | 3 | 15 | | |
| | 0 | 1 | 19 | | |
| Income | | | | | |
| < 10,000 | | | 7 | Fisher exact test | |
| 10,000-20,000 | | | | | |
| >20,000 | | | | | |
| Family history | | | | | |
| Yes | | | | Fisher exact test | *0.0004 |
| No | | | | | |
| Physical illness | | | | | |
| Yes | 1 | 0 | | Fisher exact test | |
| No | 1 | 7 | 29 | | |
| Substance use | | | | | |
| Yes | | | 12 | Fisher exact test | *0.0004 |
| No | 1 | 4 | | | |



| | | | | | |
|--------------------------|---|---|----|-------------------|------|
| Area of residence | 1 | 3 | 10 | Fisher exact test | 0.19 |
| Rural | | | 31 | | |
| Semi urban | | | | | |
| Urban | | | | | |

*Significant at $p < 0.05$.

DISCUSSION

The present study concluded that there is a significant association of cognitive impairment with physical illness ($p=0.0004$). Information regarding sociodemographic and behavioral characteristics was done using semi-structured questionnaire, and cognitive function was screened using mini-mental status

examination tool. The most common NCD was hypertension (71.2%), followed by diabetes (56.2%) and bronchial asthma (15%). Proportion of cognitive impairment was 10.8% (95% confidence interval: 7.4–15.0) The study found that one in ten NCD patients has mild cognitive impairment[3-5].

REFERENCES

1. Elango S. (1998) A study of health and health related social problems in the geriatric population in a rural area of Tamil Nadu. *Indian J Public Health*, 42, 7-8.
2. Bulletin of the World Health Organization. 82, 2004, 213-18.
3. Bhende A, Kanitkar T. (1997) Principles of population studies. 6th revised ed. Mumbai: Himalaya Publishing House; pp. 137-40.
4. Annual report: Health plan and policy. New Delhi: Ministry of Health and Family Welfare; 2002. Ministry of Health and Family Welfare, Government of India; p. 15.
5. Sharma S. Ageing: An Indian experience. Souvenir of ANCIPS 94, Madras.1994, 101-5.

