



## A STUDY TO IDENTIFY COGNITIVE IMPAIRMENT AMONG ELDERLY AT SELECTED OUTPATIENT DEPARTMENTS OF SELECTED HOSPITAL

<sup>1</sup>Sofiya Princess Hema.S , <sup>2</sup>Dr.A.Jayasudha, <sup>3</sup>Sahaya AbarnaJ, <sup>4</sup>Sindhu.S.U, <sup>5</sup>Elsha Mary Joy, <sup>6</sup>Lavanya.R

<sup>1</sup>Associate Professor & HOD, <sup>2</sup>Principal, <sup>3,4,5&6</sup>Final Year Nursing students

<sup>1</sup>Department of Fundamentals of Nursing,

PSG College of Nursing, Coimbatore, TamilNadu, India.

### ABSTRACT

Cognitive impairment, an age-related condition, is often considered a precursor to more serious diseases such as dementia, Alzheimer's disease ,etc... The overall rate of Cognitive impairment among elderly was approximately 23.4% . Cognitive disability or dementia is a relatively common disorder among the elderly.

Cognitive impairment is more prevalent in women than men because the rate at which the brain cells are dying is faster in women than men . -( Gaines Arnold , 2012 )

The main aim and objectives of the study was to identify cognitive impairment among elderly patients and to find out the association of cognitive impairment with selected demographic variables of elderly.

A descriptive design was used in the study. The purposive sampling technique was used to select 70 elderly individuals coming to PSG Hospitals. Data was collected using an interview guide to assess the socio demographic variables and Mini Cog Test for assessing cognitive impairment among elderly. Inferential and descriptive statistics were used to analyze the data. The study reveals that, shows that out of 70 elderly patients , 39 elderly patients are with cognitive impairment (56%) and 31 elderly patients are without cognitive impairment (44%).

There was a significant association of cognitive impairment with the demographic variables of the elderly.(History of intake of medicines)

**KEY WORDS:** cognitive impairment, interview guide

### INTRODUCTION

Cognitive impairment is defined as difficulty in processing thoughts that leads to memory loss , inability to concentrate and learning difficulties .It ranges from mild to severe . (Gaines Arnold , 2012 ).

Most people with cognitive disability live in low- or middle-income countries ; the rate of increase in cognitive disability over the decades is around three times higher in India than high-income countries. A neurologically degenerative disorder is the underlying cause in the majority of cases. Alzheimer's disease is the most common form of dementia . Those who screen positive can be further

evaluated. A study of individuals with mild cognitive impairment (MCI) has shown that those who have memory impairment as a prominent feature in their cognitive profile have the highest probability of developing Alzheimer's disease in the future. (Paramita Sengupta , Division of NCD, Indian Council of Medical Research, New Delhi, India ,2014).

Worldwide ,the prevalence of cognitive impairment is 3.5%. It is higher in rural (2.3%) than in urban population (1.3%) .In addition to a thorough Mental Status examination ,the clinician should check for impairments in memory , language , attention and visuospatial cognition and should find whether cognitive impairment is present or not .

Every year, there are nearly 10 million new cases. In India , more than 4 million people are living with dementia . Worldwide 44 million people are affected with dementia. The prevalence of dementia in India is 2.7% . In India, 2.1 million women and 1.5 million men are affected with dementia. (Charles Pinto ,Indiatoday, 2016 ) .

Many people who are developing or have dementia donot receive a diagnosis . The failure to evaluate memory or cognitive complaints is likely to hinder treatment of underlying diseases and comorbid conditions and may present safety issues for patient and others

### Objectives:

1. To identify cognitive impairment among elderly patients
2. To find out the association of cognitive impairment with selected demographic variables of elderly

### Materials and methods

Descriptive design was used to identify the cognitive impairment among elderly .Purposive sampling technique was adapted to select 70 elderly individuals attending General Medicine , Surgery and Geriatric Medicine OPD of PSG Hospitals and willing to participate in the study as study participants. People who are having hearing loss and visual impairment are excluded from the study. Socio demographic variables was assessed with interview guide and Cognitive impairment was assessed through Mini Cog test. A pamphlet on prevention and management of cognitive impairment was distributed. The study was approved by IHEC and informed consent was obtained from all the participants of the study.

### TOOL

An interview guide and Mini Cog test was used to collect the data. The tool consists of two sections. Section A deals with demographic data which includes sample number, as age , sex , marital status , education , occupation ,family income , locality , family history of cognitive impairment and history of any other illness , any intake of medicines . Section B consists of by Mini Cog Test which includes three item recall test and simple clock drawing test .

**RESULTS AND DISCUSSION** The significant findings of the study:

**Table 4.2**

### Frequency and Percentage distribution of elderly with cognitive impairment based on Mini Cog Test n=70

S.No	Category	Frequency(f)	Percentage(%)
1.	Positive cognitive impairment	39	56%
2.	Negative cognitive impairment	31	44%

Table 4.2 reveals that, shows that out of 70 elderly patients , 39 elderly patients are with cognitive impairment (56%) and 31 elderly patients are without cognitive impairment (44%)

Table 4.3

Association of cognitive impairment with their selected demographic variables of elderly.

n=70

S.No	Demographic variables	Positive cognitive impairment	Negative cognitive impairment	X <sup>2</sup> (calculated value)	P (tabulated value)	Inference
1.	Age	39	31	4.19	5.99	NS
2..	Gender	39	31	0.37	3.84	NS
3.	Marital status	39	31	1.3	7.82	NS
4.	Education	39	31	2.61	9.49	NS
5.	Occupation	39	31	1.11	9.49	NS
6.	Family Monthly Income	39	31	5.3	7.82	NS
7.	Locality	39	31	3.38	3.84	NS
8.	Family history of cognitive impairment	39	31	0.63	3.84	NS
9.	History of other health problems	39	31	2.9	3.84	NS
10.	History of intake of medicines	39	31	4.09	3.84	S

**S-Significant****NS-Not significant**

Table 4.3 shows that there was a significant association of cognitive impairment with the demographic variables of the elderly (History of intake of medicines)

## Discussion

**Kus Narayanaswamy hwaha.S, Talwar.P , et al (2017)** conducted a study on the risk factors and behavioural abnormalities among dementia subtypes in North Indian population at Delhi. 1876 patients records were collected. They found that alzheimer's disease, mixed dementia, vascular dementia, parkinson's related dementia has an high impact on cognitive impairment. They also found that men and people from rural area have an increased risk of developing cognitive impairment. This study is similar to our study such that male and rural prevalence is higher.

**Uday Shankar Singh (2018)** conducted a study on the prevalence of cognitive impairment in Gujarat. The study revealed that in above 50 years of aged people, 25% (140 participants) of them had cognitive impairment and 75% (420 participants) of them had no cognitive impairment. This is contradicted with our study findings as nearly 56% of elderly had cognitive impairment

**Marketa Marvanova (2016)** conducted a study on drug induced cognitive impairment. The study revealed that cardiovascular agents carry a risk for cognitive impairment via several potential mechanisms leading to acute, subacute and chronic changes in cognitive function. Older adults, individuals with pre-existing cognitive impairment are at higher risk. This study is similar to our study as there is an association of intake of medicines and cognitive impairment.

### Conclusion:

Elderly people are prone to develop cognitive impairment. Most of the cognitive problems increases as age increases. In this study the patients with cognitive impairment were counselled to consult the physician to prevent the complication of cognitive impairment and to improve their quality of life. All patients who were screened for cognitive impairment were provided pamphlets on the management of cognitive impairment as a part of our research. This can be utilized to plan future program to reduce the risk of cognitive impairment among elderly and help them to lead a healthy lifestyle and thereby improve their quality of life.

The study findings showed that about 50% of women had inadequate knowledge on awareness on menopause. This gave an insight to the investigator that more awareness need to be imparted to the women population to manage the symptoms of menopause and prevent complications of menopause like osteoporosis

### REFERENCES

1. Tapati Bhattachaya, (2011), Textbook of Geriatric Nursing, First edition, Pune, CBS Publishers and Distributors Pvt Ltd.
2. Annette. G. Lueckenotte, (2000), Textbook of Gerontological Nursing, Second edition, United States of America, Elsevier Publications.
3. Leena Myrtle Gomez, (2009), Textbook of Geriatric Nursing, First edition, New Delhi, Jaypee Publishers.
4. Patricia. M. Burbank, Deborah Riebe, (2002), Promoting exercises and Behaviour changes in older adults, First edition, United States of America, Springer Publishers.
5. Graham. D. Rowles, Nancy. E. Schoenberg, (2002), Textbook of Qualitative Gerontology, Second edition, United States of America, Springer Publishers.
6. Gloria Hoffman Wold, (2008), Basic Geriatric Nursing, Fourth edition, Canada, Elsevier Publications.
7. Christine Brown Wilson, (2013), Caring for older people, First edition, Chennai, India, SAGE Publishers.
8. Charlotte Eliopoulos, (2010), Textbook of Gerontological Nursing, Seventh edition, China, Lippincott Publishers.
9. Sharma. D. Mazta S, Parashar A [2004], Prevalence of cognitive impairment and related factors among elderly; A population based study [volume II, pg:171] . J Dr NTR Univ Health Sciences, India.
10. DeCarli C [2003], Mild cognitive Impairment: Prevalence, prognosis, Aetiology and Treatment [Volume II, pg: 15-21]. Lancet Neurol.
11. Wolters Kluwer [2018.], Indian Journal of Community Medicine: Official Publication of Indian Association of Preventive and Social Medicine: Prevalence Study of Cognitive Impairment, Medknow Publications, Gujarat, India.