

A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING ALZHEIMER'S DISEASE AMONG ADULTS IN SELECTED AREAS OF PUNE CITY.

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Abstract

Introduction: Alzheimer's disease, the most prevalent cause of dementia worldwide, is a degenerative neurological condition that mainly affects those 65 and older. People may disregard early warning signals of the disease because they think memory loss is a natural aspect of aging. Furthermore, people may be unaware of the services and therapies that are available to help manage symptoms and enhance the lives of those who are impacted. This ignorance highlights the need of raising knowledge about Alzheimer's disease, particularly given that number of affected individuals is predicted to rise sharply in the years to come. Improving early detection can result in better outcomes and more prompt interventions; therefore, filling in these knowledge gaps is crucial.¹ **Aim of the study:** To assess the knowledge regarding Alzheimer's disease among adults in selected areas of Pune city. **Material and methods:** In the present study, researcher adopted non-experimental descriptive research design. It was carried out on 300 samples. Non-probability purposive sampling method was used. Data was collected using demographic profile and a set of self-structured questionnaires. Data analysis was done mainly using descriptive and inferential statistics. **Result:** Result revealed that knowledge regarding Alzheimer's disease among adults in which Majority 43% were having were poor knowledge, 42% were having average knowledge and 14.6% were having good knowledge. **Conclusion:** The study concludes that 43% were having were poor knowledge, which need awareness to be given among adults regarding the disease condition.

Key words: assess, knowledge, Alzheimer's disease, Adult.

INTRODUCTION

Alzheimer's disease is a progressive neurodegenerative disorder and the leading cause of dementia worldwide, primarily affecting individuals aged 65 and older characterized by memory loss, cognitive decline, and changes in behavior, it results from the buildup of amyloid plaques and tau tangles in the brain, impairing neuronal communication and causing cell death. First identified by Dr. Alois Alzheimer in 1906, the disease presents a growing public health challenge, with its prevalence rising due to an aging global population. Despite its impact, awareness and understanding of Alzheimer's disease remain insufficient. Many people mistake memory loss as a normal part of aging, dismissing early warning signs

and delaying diagnosis. Misconceptions and limited knowledge about risk factors, symptoms, and progression prevent individuals from seeking early intervention or utilizing available resources. This lack of awareness can negatively affect patients and caregivers, leading to missed opportunities for symptom management and support.²

Patients and their caregivers may suffer as a result of misconceptions regarding Alzheimer's disease. For example, some people may disregard early warning signals of the disease because they think memory loss is a natural aspect of aging. Furthermore, people may be unaware of the services and therapies that are available to help manage symptoms and enhance the lives of those who are impacted. This ignorance highlights the need of raising knowledge about Alzheimer's disease, particularly given that the number of affected individuals is predicted to rise sharply in the years to come. Improving early detection can result in better outcomes and more prompt interventions; therefore, filling in these knowledge gaps is crucial. In order to raise knowledge and understanding of Alzheimer's disease, policymakers and healthcare professionals should concentrate on developing focused educational initiatives.

Promoting public education is crucial for early detection and improved outcomes. Policymakers and healthcare professionals must work to improve access to resources and support services, ultimately reducing the burden of Alzheimer's disease on patients, caregivers, and society as a whole.³

NEED FOR STUDY

Alzheimer's disease is a growing global health concern, particularly as the population ages. Early detection is vital for better care and quality of life, but gaps in public understanding and stigma often delay diagnosis and support. This research examines whether adults, especially caregivers for elderly family members, possess adequate knowledge to manage the disease effectively. With dementia prevalence among those aged 60 and above at 5-7% globally, and higher rates in regions like Latin America, the burden is significant. India faces a major challenge, with over 3.7 million affected and numbers expected to double by 2030. Caring for dementia patient's costs families around \$43,000 annually. Educating adults, who often have elderly family members with Alzheimer's, is crucial for fostering awareness and preventive behaviors. Schools provide an ideal setting to equip young people as advocates, guiding public health strategies and helping reduce future risks through improved understanding and early intervention. By teaching them early, they can become advocates in their communities, helping spread awareness about Alzheimer's. Studying their knowledge also helps to understand the population's overall health literacy, which can guide public health strategies to address Alzheimer's more effectively. Therefore, raising awareness among adults is key for future research and public health efforts.⁴

AIM OF THE STUDY

To assess the knowledge regarding Alzheimer's disease among adults in selected areas of Pune city and to determine the association between levels of knowledge regarding Alzheimer's disease with selected demographic variables.

RESEARCH METHODOLOGY

Research objective:

1. To assess the knowledge regarding Alzheimer's disease among adults in selected areas of Pune city.

2. To determine the association between levels of knowledge regarding Alzheimer's disease with selected demographic variables.

Research Approach: In this study the investigator had applied quantitative research approach.

Research Design: Non-experimental descriptive research design was adopted for this study.

Variable: Knowledge regarding Alzheimer's disease among adults

Selected Demographical Variable: Age, gender, educational status, occupational status, type of family.

Setting: In this research study, setting was selected urban areas of Pune city.

Population: Target population: Adults.

Sample: In this study, adolescents who are available at the time of data collection.

Sample selection criteria for the study:

Inclusion Criteria:

1. Adults who can read and write English or Marathi.
2. Adults who were present at the time of data collection.

Exclusion Criteria:

1. Adults who are unwilling to participate in the research study.

Sample Size: 300

Sampling technique: Non- Probability Purposive Sampling technique.

Data collection tool:

Section A: Demographical variables

Section B: Self structured tool.

Description of tool:

Section A:

Demographical variables (will be consisting of 05 items; age, gender, education status, occupational status, type of family.)

Section B:

Self- structured questionnaire was consisted of total 20 items.

Reliability: Reliability was done 09/05/2024 to 16/05/2024. Ten percent (30 samples) of the entire sample size (300) was taken in order to assess the tool's reliability. Informed consent and tool were share with the participants and collected after 30 minutes. The reliability of assessment tool was calculated by test re-test methodology using Karl Pearson coefficient formula. Reliability score for the assessment was 0.993 which means tool was reliable.

Pilot study: For pilot study, total 30 participants were taken and assessed with demographic tool and with self-structured questionnaire to evaluate the current study. Instruments for validity, clarity, and applicability which was completed on May 28, 2024.No any problem faced, study was found to be feasible.

RESUL: Section I: Demographic Profile

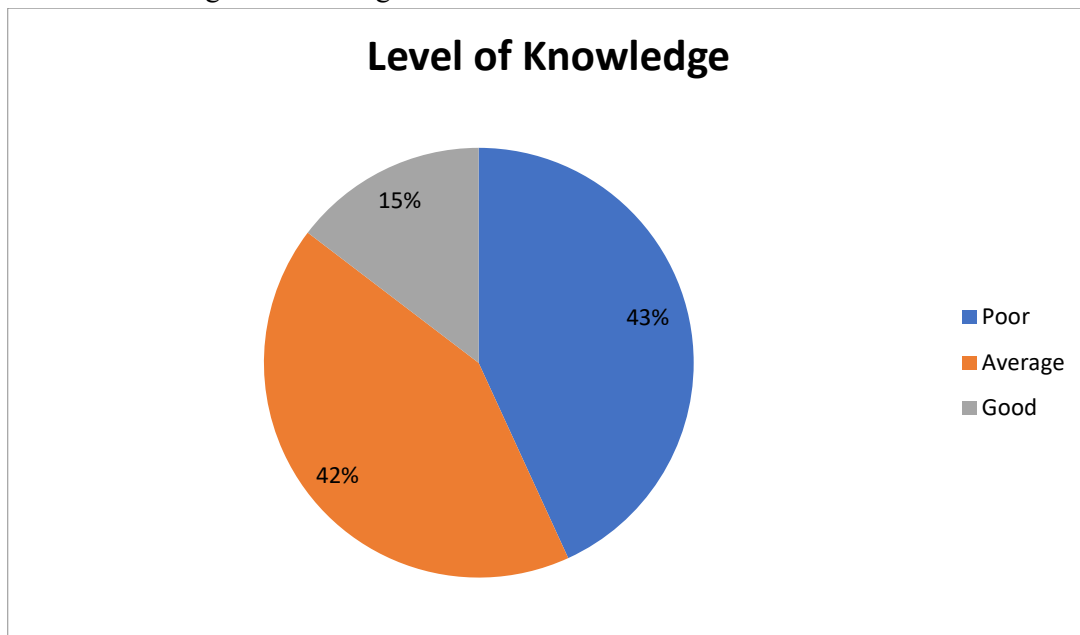
Description of the samples (adults) according to the frequency and proportion of their individual traits.

It shows majority 30% of the adults had age between 31.1-36 years, where 57% adults were male. In terms of educational status, 38% had graduate and among them 40% had were private employee. And In terms of types of family, 48% adults were having extended family.

Section II: Finding Related to level of knowledge regarding Alzheimer's disease among adults.**Table 1: Knowledge regarding Alzheimer's disease among adults in selected areas of Pune city****n=200**

Level of Knowledge	f	%	Mean	SD
poor(1-7)	130	43.33333	8.87	3.45
Average(8-13)	126	42		
Good(14-20)	44	14.66667		

Table 1: The data depicts findings related to the level of knowledge regarding Alzheimer's disease among adults. 43.3% of samples have poor knowledge, 42% have average knowledge, and 14.7% have good knowledge. The overall mean is 8.87 with a standard deviation of ± 3.45 .

**Section III:** Analysis pertaining to item-by-item examination of an adult self-structured questionnaire about Alzheimer's disease.**n=300**

SR.NO	KNOWLEDGE QUESTIONARE	PERCENTAGE
1	What do you mean by Alzheimer's disease?	60.3
2	Alzheimer's disease can occur due to?	25.3
3	Which organ is affected in Alzheimer's disease?	33.3
4	At what age does the risk of developing Alzheimer's disease significantly increase?	45.7
5	Which of the following is a common early symptom of Alzheimer's disease?	49
6	What type of memory is most commonly affected first in Alzheimer's disease?	42.7

7	Which of the following is a sign of Alzheimer's disease?	36.7
8	Which of the following are risk factors for Alzheimer's disease?	46.7
9	How is Alzheimer's disease diagnosed?	32.33
10	Which professional is typically involved in the diagnosis and treatment of Alzheimer's disease?	34.33
11	Which lifestyle change is most beneficial for someone at risk of Alzheimer's disease?	48.67
12	How long should a person with Alzheimer's disease continue the treatment?	29.7
13	What is the most appropriate therapy given to the Alzheimer's disease patients?	51.3
14	Which is most common form of Alzheimer's disease?	50.3
15	Which of the following activities is recommended to help maintain cognitive function in Alzheimer's disease patients?	39.7
16	Which of the following is Alzheimer's disease?	56.3
17	What is the primary management for Alzheimer's disease?	64.7
18	Which type of therapy has been shown to help improve the cognitive function of Alzheimer's disease patients?	46.3
19	Which of the following is a non-drug approach to managing Alzheimer's disease symptoms?	43
20	Which of the following is one of the most appropriate nursing management for Alzheimer's disease patients?	50.7

Table 2: It suggests that Minimum 25.3% adults having knowledge of 'Alzheimer's disease' and Maximum 64.7% adults having knowledge regarding 'primary management for Alzheimer's disease'.

Section III

Analysis of data related to the association between level of knowledge regarding Alzheimer's disease and selected demographical variables.

Since the p-values corresponding to demographic variable age were small (**less than 0.05**), hence the demographic variable age was found to have significant association with the knowledge among adults regarding Alzheimer's disease.

DISCUSSION

This study utilizes a quantitative descriptive survey method to evaluate adults' knowledge of Alzheimer's disease and explore the relationship between the knowledge and various demographic factors. The population consisted of adults from selected areas in Pune city, with a sample size of 300 participants who met the study's inclusion criteria. A non-probability purposive sampling technique was utilized to select the sample. Data was collected using a structured questionnaire designed to assess participants' understanding of Alzheimer's disease. The following section presents an analysis of the results in comparison to previous research findings. The results of this study are in line with comparable research done by Joji Mathew in November 2007, which evaluated 100 persons' knowledge of Alzheimer's disease. Based on the findings, 16% of participants knew a lot about Alzheimer's disease, 37% knew a little, and 47% knew very little. Adults' mean score was 16.17, with a standard deviation of 15.5, indicating an average knowledge level of 53.9%.⁵

The finding analysis shows that 14.6% of them had good knowledge, 42% had moderate knowledge, and 43% had inadequate knowledge. The overall mean is 8.87 with a standard deviation of 3.45. The results of the study show that demographic traits and age demographic data have a substantial correlation, which explains the sample's association with age.

An article by [M L Maas](#), [K C Buckwalter](#), "Research should continue in testing nursing interventions to maintain optimal cognitive, physical, social, and emotional function of Alzheimer's disease patients. Explanatory theories should be devised and tested to advance the development of nursing knowledge in the care of Alzheimer's disease patients and family caregivers. Finally, more evaluation research is needed to test the cost effectiveness of home-based and institutional programs, including effects on Alzheimer's disease patients, family members, and staff caregivers".⁶

CONCLUSION

The study employed a quantitative descriptive survey method to evaluate knowledge of Alzheimer's disease among adults and its relationship with demographic factors. Key findings indicated that the majority of participants were male, aged between 31 to 36 years, had a Graduate level education, worked as private employees, and lived in extended families. Knowledge levels varied, with 43% of participants were having poor knowledge, 42% were having average knowledge, and 15% were demonstrating good knowledge. The overall mean score was 8.87 ± 3.45 . A comparison with similar studies supported these results. Notably, age was the only demographic variable significantly associated with knowledge, while other demographic factors showed such as gender, education, occupation and type of family is no significant correlation. The study shows that 25.3% of adults are only aware of the disease etiology and the management technique for Alzheimer's disease is only 64.7% of adults. The results of this study are in line with comparable research done by Joji Mathew in November 2007, when he evaluated 100 persons' knowledge of AD. Based on the findings, 16% of

participants knew a lot about AD, 37% knew a little, and 47% knew very little.⁵ The study concludes that targeted interventions, particularly focusing on education, are essential to enhance awareness and reduce the impact of Alzheimer's disease among adults.

Conflict of interest:

The authors certify that not be involved in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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