

“A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING ALZHEIMER'S DISEASE AMONG SENIOR CITIZEN IN SELECTED OLD AGE HOME OF JAIPUR”.

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ABSTRACT

Background of the study: The nervous system is the master controlling and communicating system of the body. Every thought, action and emotion reflects its activity. Its electrical impulses, which are rapid and specific, can cause almost immediate responses. The nervous system is divided into central nervous system and peripheral nervous system. The central nervous system consists of brain and spinal cord. Brain is the intellectual centre that allows thought, learning, memory and creativity..

Method: The research design adopted for the study was pre experimental research design. A formal written permission was obtained from the Principal of Institute of medical technology and nursing education Sitapura Jaipur. Non-probability convenient sampling technique was used to select 50 senior citizen in the age group between 60 to 90 years as samples for the study.

Results: The results of the study revealed that significant association is found between knowledge regarding the Alzheimer's disease with Age, Gender, Religion, marital status, educational status, and source of information.

Conclusion: The study revealed with the assumption of the study that the knowledge level of senior citizen of Alzheimer's disease is high.

Keywords: Senior citizen, Level, Information booklet, Alzheimer's disease.

INTRODUCTION

“Memory is the mother of all wisdom.”-Samuel John

Background of the study:

The nervous system is the master controlling and communicating system of the body. Every thought, action and emotion reflects its activity. Its electrical impulses, which are rapid and specific, can cause almost immediate responses. The nervous system is divided into central nervous system and peripheral nervous system. The central nervous system consists of brain and spinal cord. Brain is the intellectual centre that allows thought, learning, memory and creativity. 1

Aging of the brain is a continuous linear process that begins at conception. Two thirds of all people eventually experience some significant loss of mental lucidity and independence as a result of aging. People aged 60 years and older experience significant cognitive decline, including declines in memory, concentration, clarity of thought, focus and judgment with an increase in the onset of several neurological problems. 2

Old age consists of ages nearing or surpassing the average life span of human beings, and thus the end of the human life cycle. Terms for old people include seniors, senior citizens and the elderly. There are three different categories of old age: Young-old 55- 75years, Old-old 75-85 years and Oldest-old 85 years and above.3

Alzheimer's disease is a chronic, progressive, degenerative disease of the brain. It is most common form of dementia accounting for approximately 60% to 80% of all cases of dementia. 4

The significance of these markers has been debated for almost 90 years. In recent years, intense research has revealed additional genetic and environmental clues for the development of the disease, the formation of plaques, and the mechanism by which brain cells shrink and die. 5

The majority of Alzheimer's cases are sporadic and late-onset, developing after the age of 65 years; the causes of this disease type are not completely understood. Alzheimer's disease disrupts the three processes that keep neurons healthy: communication, metabolism and repair. The destruction of brain cells lead to memory failure, personality changes, and problems on carrying out activities of daily living. 6

Alzheimer's disease is often confused with senile dementia which also is a progressive or permanent decline in intellectual function and often, but always, is caused by Alzheimer's disease. Senile dementia is non-specific and may be caused also by other organic diseases that affect the brain. 7

The memory lapses are similar to those of someone in the earliest stage of Alzheimer's, and some experts see it as a precursor to Alzheimer's or other forms of dementia. People with mild cognitive impairment do develop Alzheimer's at higher rates than the general population of older adults. But mild cognitive impairment is not the same as Alzheimer's, nor does everyone with mild cognitive impairment develop Alzheimer's. The early symptoms of Alzheimer's disease can be missed because they resemblesigns that many people attribute to natural aging. 8

Family history is a risk factor of Alzheimer's disease. People who have a parent or sibling suffering from Alzheimer's are two to three times more likely to develop the disease than those with no family history. If more than one close relative has been affected, the risk increases further. Scientists believe that genetics also play a role in many cases of Alzheimer's disease. 9

The Alzheimer's and related disorders society of India, is a national organization dedicated to the care, support and research of dementia in the country and is a full member of Alzheimer's disease international which seeks to improve the quality of life of people with dementia and their caregivers and particularly to raise awareness about the disease among the public. 10

Alzheimer's diseases and other dementias have been reliably identified in all countries, cultures and races in which systematic research has been carried out. However, levels of awareness vary enormously. 11

OBJECTIVES OF THE STUDY

- i. To assess the pre- test knowledge regarding the Alzheimer's disease among senior citizen.
- ii. To develop an information booklet.
- iii. To evaluate the effectiveness of information booklet on knowledge regarding Alzheimer's disease among senior citizen.
- iv. To find out the association between knowledge score with selected demographic variable.

RESEARCH METHODOLOGY: -

- **Research approach:** - Quantitative approach
- **Research design:** - Quasi- experimental research design (One group pre - test and post- test design).
- **Setting:** - Selected old age home of Jaipur.
- **Duration of study:** -
 1. Complete study 18 month.
 2. Data collection 6 weeks.
- **Methods of selection of study subjects: - Variables: - Independent variable: - Information Booklet**
- **Dependent variable:** - regarding the Alzheimer's disease among senior citizen.
- **Demographic variable:** - Age, gender, marital status, educational status, area of living, religion, habits source of information.

- **Population :-** senior citizen
- **Target population:** - senior citizen in selected old age home at Jaipur.
- **Accessible population:** - senior citizen in selected old age home of city who are available at the time of data

collection.

- Sample: - senior citizen (aged 60-80 years).
- Sample size: The sample consist of 50 senior citizen.
- Sampling technique: - Non probability convenient sampling technique will be used in this study.
- Methods for data collection: - Structured questionnaire.

DATA ANALYSIS AND INTERPRETATION

ORGANIZATION OF FINDINGS

The analysis and interpretation of the observations are given in the following section:

- **Section A:** Distribution of senior citizen with regards to demographic variables.
- **Section B:** Assessment of pretest and post-test knowledge regarding the Alzheimer's disease among senior citizen.
- **Section C:** Analysis of effectiveness of information booklet on knowledge regarding the Alzheimer's disease among senior citizen.
- **Section D:** Association of pre-test and post-test knowledge score regarding the Alzheimer's disease among senior citizen with selected demographic variables

SECTION A

- This section deals with percentage wise distribution of senior citizen in relation to knowledge regarding Alzheimer's disease among senior citizen of selected old age home at Jaipur. A convenient sample of 50 subjects was drawn from the study population, who were from selected old age home of the city. The data obtained to describe the sample characteristics including Age, Gender, Religion, marital status, educational status, and source of information.

Table 4: Percentage wise distribution of senior citizen according to their demographic characteristics.

Demographið/variables	Frequency	Percentage
Age in years		
60-70 yrs.	40	80%
71-80 yrs.	8	16%
ñ 81-90 yrs.	2	4%
Gender		
Male	40	80%
Female	10	20%
Religion		
Hindu	42	84%
Muslim	3	6%
Sikh	4	8%
Christian	1	2%
Others	0	0
Marital status		
Married	10	20%
Unmarried	9	18%
Divorce	2	4%
Widow/ widow man	29	58%
Educationabstatus		
Higher secondary education	25	50%
Senior secondary education	15	30%
Graduation	6	12%
Post-graduation	4	8%
Sources of awareness about Alzheimer's disease		
Social media	5	10%
News paper	10	20%
Health worker	15	30%
Books	5	10%
No information	15	30%

SECTION B

ASSESSMENT OF PRE-TEST AND POST TEST KNOWLEDGE OF SENIOR CITIZEN REGARDING THE ALZHEIMER'S DISEASE IN SELECTED OLD AGE HOME AT JAIPUR.

Table 4: Distribution of senior citizen with regards to level of pretest knowledge regarding the Alzheimer's disease N=50

Level of knowledge score	Score Range	Level of Pretest Knowledge Score	
		Frequency	Percentage
Poor	0-10	39	78%
Average	11-20	10	20%
Good	21-30	1	2%
Mean±SD			11.98 ± 4.22
Mean %			39.93%
Range			04 to 21

The above table no 4 shows the frequency and percentage wise distribution of senior citizen from selected old age home of the city according to pretest level of knowledge the Alzheimer's disease. The levels of knowledge were seen in to 3 categories, poor, average, good. 78% of senior citizen in pre-test had poor level of knowledge score, 20% had average, and 2% had good level of knowledge score.

Mean Pre-test knowledge score of the senior citizen was 11.98± 4.22.

Table 5: Distribution of senior citizen with regards to level of post-test knowledge regarding the Alzheimer's disease N=50

Level of knowledge score	Score Range	Level of Post test Knowledge Score	
		Frequency	Percentage
Poor	0-10	08	16%
Average	11-20	26	52%
Good	21-30	16	32%
Mean±SD			16.76 ± 4.90
Mean %			55.86 %
Range			7 to 26

SECTION C ANALYSIS OF EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING THE ALZHEIMER'S DISEASE NURSING AMONG SENIOR CITIZEN IN SELECTED OLD AGE HOME AT JAIPUR

Table 6: Significance of difference between knowledge scores in pre and post test of senior citizen regarding the Alzheimer's disease

Overall	Mean	SD	Mean & SD Difference	T-value	P-value
Pre Test	11.98	4.22	04.78 ± 0.68	2.010	7.80 S*
Post Test	16.76	4.90			

Table no 6 depicts the overall mean pre -test and post- test knowledge scores of senior citizen from selected old age home of the city which reveal that post-test mean knowledge score was higher 16.76 with SD of ±4.90 when compared with mean pre- test knowledge score which was 11.98 with SD of ±4.22.

The statistical Student's paired t test implies that the difference in the pre -test and post -test knowledge among senior citizen was found to be T-value 2.010 and P-value 7.80. which is statistically significant at 0.05% level of significance.

Hence it is statistically interpreted that information on knowledge regarding the Alzheimer's disease among senior citizen was effective. Thus, H₁ is accepted.

SECTION D ASSOCIATION BETWEEN PRE-TEST AND POST TEST KNOWLEDGE REGARDING THE ALZHEIMER'S DISEASE AMONG SENIOR CITIZEN INSELECT EDOLDAGE HOME AT JAIPUR WITHSELECTED DEMOGRAPHIC VARIABLES.

Table7: Association between pre-test of knowledge score with selected demo graphic variables.

N=50

Demographic variables		Knowledge score			DF	T-value	P-value	Remark
		Poor (0-10)	Average (11-20)	Good (21-30)				
Age	60-70 yrs	36	3	1	4	9.49	10.01	S
	71-80 yrs	2	6	0				
	81-90 yrs	1	1	0				
Gender	Male	35	4	1	2	5.99	6.70	S
	Female	4	6	0				
Religion	Hindu	37	3	0	8	15.91	8.62	NS
	Muslim	2	1	0				
	sikh	0	4	0				
	Christian	0	0	1				
	Others	0	02	0				
Marital status	Married	6	04	0	6	12.59	12.60	S
	Unmarried	8	01	0				
	Divorce	1	1	0				
	Widow/widower	24	4	1				
Educatin a status	Higher secondary education	22	2	1	6	12.59	12.62	S
	Senior secondary education	10	5	0				
	graduation	4	2	0				
	Post-graduation	3	1	0				
Source of information	Social media	3	2	0	8	15.51	4.98	NS
	newspaper	8	2	0				
	Health worker	12	2	1				
	books	3	2	0				
	Others (specify)	13	2	0				

Table8: Association between post-test of knowledge score with selected demographic variables.

Demographic variables		Knowledge score			DF	T-value	P-value	Remark
		Poor (0-6)	Average (7-12)	Good (13-18)				
Age	60-70 yrs	04	24	12	4	9.49	9.76	S
	71-80 yrs	3	1	4				
	81-90 yrs	1	1	0				
Gender	Male	5	26	9	2	5.99	7.70	S
	Female	3	0	7				
Religion	Hindu	06	22	14	8	15.91	12.62	NS
	Muslim	1	1	1				
	sikh	1	2	1				
	Christian	0	1	0				
	Others	0	0	0				
Marital status	Married	2	6	2	6	12.59	12.96	S
	Unmarried	2	5	2				
	Divorce	1	1	0				
	Widow/widower	3	14	12				
Educational status	Higher secondary education	4	20	1	6	12.59	13.1	S
	Senior secondary education	2	3	10				
	graduation	1	2	3				
	Post-graduation	1	1	2				
Source of information	Social media	1	3	1	8	15.51	15.89	S
	newspaper	2	6	2				
	Health worker	3	9	3				
	books	1	3	1				
	Others (specify)	1	5	9				

Summary: This chapter described the statistical outcomes of demographic variables of senior citizen from selected old age home of city, effectiveness of information booklet on knowledge regarding the Alzheimer's disease among senior citizen using descriptive and inferential statistics on the basis of previously drawn objectives. All relevant information regarding research findings is covered in this chapter.

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