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## Original Research Article

## A pre experimental study to evaluate the effectiveness of structured teaching programme regarding management of dementia among geriatric care givers

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BPSD: Behavioural and Psychological Symptoms of Dementia  
 NPI: National Provider Identifier  
 MBPC: Memory and Behaviour Problems Checklist  
 CBT: Cognitive Behavioural Therapy

## ABSTRACT

**Introduction:** Dementia is a chronic progressive debilitating disease that is largely a disorder of old age. It is characterized by widespread impairment of mental functioning, progressive memory loss, language difficulties, confusion and disorientation. These impairments are often accompanied by behavioral and psychological disturbance. The behavioral disturbances associated with dementia are defined as symptoms of disturbed perception, altered thought content, mood and Behavior.

**Materials and Methods:** A pre-experimental research design with one group pre-test and post-test design was adopted. Sixty samples of geriatric care givers were selected from Chhatauna and Mandir Hausad, Arrang, Raipur, (C.G.). Samples were using by convenient sampling technique. A self structured knowledge questionnaire was prepared as a tool to assess socio demographic variables, and knowledge of geriatric care givers regarding management of dementia. Collected data was analyzed using paired „z“- test and chi-square test.

**Results:** In the pretest 38 (63.33%) are having poor knowledge, 22 (36.66%) are having Average knowledge and no one had good Knowledge. After administration of structured teaching programme in the post test level of knowledge has improved in 34 (56.66%) are having average Knowledge and 26 (43.33%) are having good knowledge and no one had poor knowledge. Hence it can be interpreted that in the pretest majority of the geriatric care giver were in the poor category and after structured teaching programme the geriatric care giver gained adequate knowledge regarding management of dementia of the subject were in the good category. In the pre test the calculated mean is 9 the mean score 30% the standard deviation is 3.86 and in the post test the calculated mean is 20.5, the mean score 66.83% and the standard deviation is 5.27, hence it can be interpreted that there is a striking difference between the mean pretest and post test knowledge score of geriatric care giver which explains that the structured teaching programme was effective in enhancing the knowledge score regarding management of dementia among geriatric care givers in selected area of Raipur, Chhattisgarh. Hence, it can conclude that the structured teaching programme was highly effective. And they gain knowledge i.e 36.83% using „z“- test it was found that at 0.05 level of significance the table value is 2.00 and the calculated value is 7.81 ( $p > 0.05$ ) which shows that the calculated value is higher than the table value, so the test was highly Significant at 0.05 level. Research hypothesis ( $H_1$ ) was accepted.

**Conclusion:** Findings of the study indicates significant difference in the knowledge level after administration of Structured teaching Programme regarding Management of Dementia among Geriatric care Givers in Selected Area of Raipur, Chhattisgarh.

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## 1. Introduction

Dementia is a collective term used to describe the problems that people with various underlying brain

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disorders or damage can have with their memory, language and thinking. Alzheimer's disease, vascular disease, front temporal dementia are the best known and most common disorders under the umbrella of dementia.<sup>1</sup> Dementia as a Clinical Syndrome is Characterized by global Cognitive impairment, which represents a decline from previous level of functioning, and is associated with impairment in functional abilities and, in many cases, Behavioral and Psychiatric disturbances.<sup>2</sup>

Dementia is a group of conditions characterized by impairment of at least two brain functions, such as memory loss and judgment.<sup>3</sup> Symptoms include forgetfulness, limited social skills and thinking abilities so impaired that it interferes with daily functioning.<sup>4</sup> Medication and therapies may help manage symptoms. Some causes are reversible.

The Causes of Dementia depend on the age at which symptoms begin. In the elderly population (usually over 65 years of age), a large majority of cases of dementia are caused by Alzheimer's disease, vascular dementia or both. The Hypothyroidism sometimes causes slowly progressive cognitive impairment as the main symptom, and this may be fully reversible with treatment.<sup>5</sup> The Front-temporal lobar degeneration and Huntington's disease account for most of the remaining Cases. Stroke or Cerebro-Vascular accidents can cause Dementia and are associated with sudden onset of focal Neurologic deficits. Psychiatric diseases such as; Dementia of Depression, Schizophrenia are also causes dementia.<sup>6</sup>

### 1.1. Need for the study

Dementia is a broad category of brain diseases that cause a long-term and often gradual decrease in the ability to think and remember that is great enough to affect a person's daily functioning. Other Common Symptoms include emotional problems, difficulties with language, and a decrease in motivation. A person's consciousness is usually not affected. A Dementia diagnosis requires a change from a person's usual mental functioning and a greater decline than one would expect due to aging. These diseases also have a significant effect on a person's Caregivers.<sup>7</sup>

By looking into all the previous studies, abstracts, journal and personal experience during my clinical postings I concluded that dementia is major health problems and caring the people with dementia is a major challenge for the caregivers therefore as a mental health nurse I choose this topic for my research study "A Pre Experimental Study to Evaluate the Effectiveness of Structured Teaching Programme Regarding Management of Dementia Among Geriatric Care Givers in Selected Area of Raipur, Chhattisgarh".<sup>8</sup>

### 1.2. Statement of the problem

"A Study to Evaluate the Effectiveness of Structured Teaching Programme Regarding Management of Dementia Among Geriatric Care Givers in Selected Area of Raipur, Chhattisgarh."

## 2. Objectives of the Study

1. To assess the pre test and post test level of knowledge regarding management of dementia among geriatric care givers
2. To evaluate the effectiveness of Structured teaching Programme regarding management of dementia among geriatric care givers
3. To find out the association between pre test levels of Knowledge regarding Management of Dementia with the selected Demographic variables.

### 2.1. Hypothesis

1.  $H_1$ :- There is a difference between the pre test and post test level of knowledge regarding Management of Dementia among Geriatric Care Givers.
2.  $H_2$ :- There is an association between the pre test level of knowledge regarding Management of Dementia with the selected Demographic Variables.

### 2.2. Research approach

Quantitative experimental research approach was adopted.

### 2.3. Research design

In this study the design used is pre-experimental (one group pre-test post-test experimental design).

## 3. Variable Under Study

### 3.1. Independent variables

In this study the independent variable is the structured teaching programme.

### 3.2. Dependent variables

In this study the dependent variable is the knowledge regarding management of dementia.

### 3.3. Setting of the study

The setting for the study was Chhatauna and Mandir Hasaud, Aarang Raipur.

### 3.4. Sample

The sample for the present study is 60 geriatric care givers and who had agreed to participate in the study.

**Table 1:** Frequency and percentage distribution of subjects according to socio demographic variables (N=60)

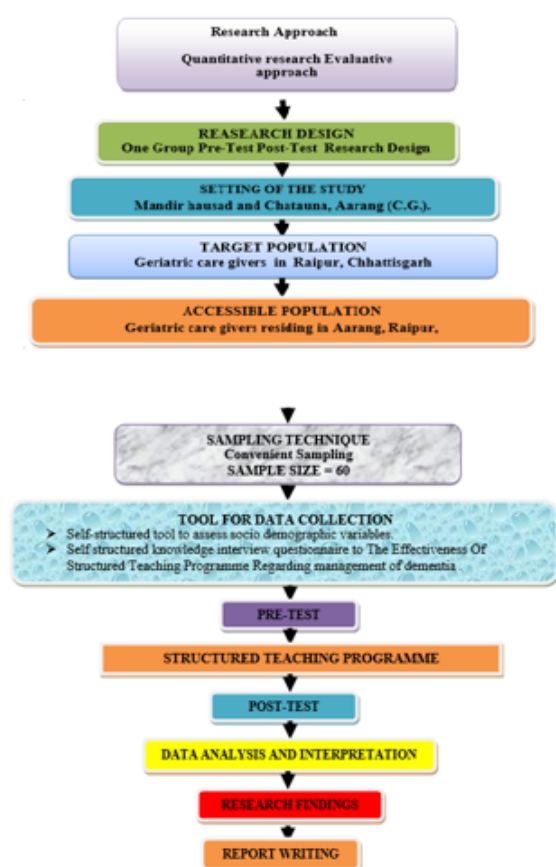
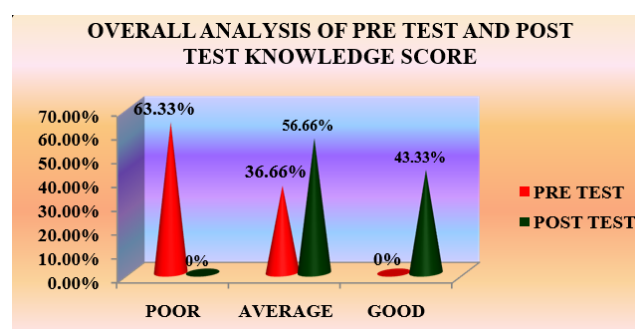
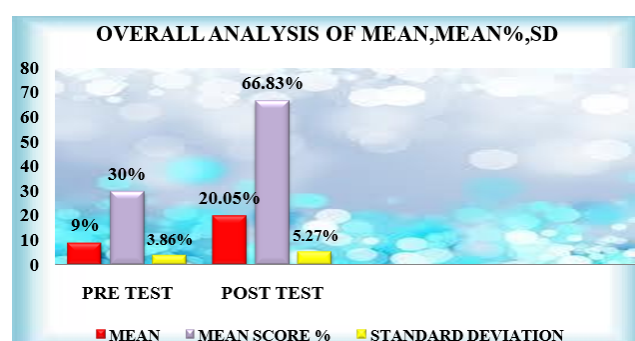
Sl.No	Demographic Data	Frequency (f)	Percentage ( %)
1	<i>Age</i>		
	20-30 Years	10	16.66
	30-40 Years	19	31.66
	40-50 Years	25	41.66
2	Above 50 Years	6	10
	<i>Sex</i>		
	Male	26	43.33
	Female	34	56.66
3	<i>Religion</i>		
	Hindu	29	48.33
	Muslim	13	21.66
	Christian	14	23.33
4	Other	4	6.66
	<i>Education</i>		
	Illiterate	6	10
	Primary	23	38.33
5	Higher Education	31	51.66
	<i>Marital Status</i>		
	Unmarried	21	35
	Married	31	51.66
6	Widow/Widower	8	13.33
	<i>Occupation</i>		
	Labor	16	26.66
	Business	15	25
7	Private	19	31.66
	Government	10	16.66
	<i>Type Family</i>		
	Nuclear	22	36.66
8	Joint	38	63.33
	<i>Type of Admission</i>		
	Self	38	63.33
	By Relatives	22	36.66
9	<i>Number of Children</i>		
	Nil	26	
	1-2 Years	28	
	3-4 Years	6	
10	<i>Duration of Care</i>		
	6 Month	18	
	1 Year	31	
	More Than 2 Years	11	
11	<i>Place of Care</i>		
	Home	33	
	Private	16	
	Government	11	
12	<i>Age of Care Taker</i>		
	60-65 Years	18	
	65-70 Years	21	
	70-75 Years	14	
13	Above 75 Years	7	
	<i>Durations of Suffering from Dementia</i>		
	1-4 Yrs	26	
	5-9 Yrs	19	
	10-15 Yrs	11	
	Above 15 Yrs	4	
	Total	100	

**Table 2:** Analysis the overall pre-test and post test level of Knowledge regarding management of dementia among geriatric care givers in selected area of Raipur, Chhattisgarh. (N=60)

Sl. No	Levels of knowledge	Pretest		Posttest	
		Frequency	Percentage	Frequency (f)	Percentage (%)
1	Poor	38	63.33%	0	0%
2	Average	22	36.66%	34	56.66%
3	Good	0	0%	26	43.33%
	TOTAL	60	100%	60	100%

**Table 3:** Assessment the effectiveness of structured teaching programme regarding Management of dementia among geriatric care Givers in selected area of Raipur, Chhattisgarh. (N=60)

Knowledge	Mean	Mean score %	Sd	Gain in marks in %.	"z" calculated value	Df	T- value	Inference
Pre-test	9	30	3.86					
Post-test	20.05	66.83	5.27	36.83 %	7.44	59	0.05 2.001	Highly significant

**Fig. 1:****Fig. 2:** Cone diagram representing the over all analysis of pre test and post test knowledge score**Fig. 3:** Bar diagram representing the overall analysis of mean, mean percent and standard deviation of pre test and post test knowledge Score.

### 3.5. Sampling technique

Convenient sampling is a type of non probability sampling that involve the sample being drawn from that part of the population that is close to hand

**Table 4:** Chi Square Analysis to find out the association between pre test Level of knowledge and demographic variables.(N=60)

S.no	Socio demographic variable	Criteria			Chi -square value		D f	Significance
					Table	Calculated		
1	<i>Age in years</i>							
	20-30	6	4	0				
	30-40	10	9	0	12.59	3.41	6	p>0.05 S*
	40-50	19	6	0				
2	Above 50	5	1	0				
	<i>Sex</i>							
	Male	16	10	0	7.8	0.54	3	p>0.05 HS*
3	Female	24	10	0				
	<i>Religion</i>							
	Hindu	18	11	0	12.59	0.6	6	p>0.05 S*
	Muslim	10	3	0				
4	Christian	9	5	0				
	Other	3	1	0				
5	<i>Education</i>							
	Illiterate	4	2	0	9.4	0.6	4	p>0.05 S*
	Primary	14	9	0				
6	Higher education	22	9	0				
	<i>Marrital status</i>				9.4	2.13	4	p>0.05 S*
	Unmarried	16	5	0				
	Married	18	13	0				
7	Widow/widower	6	2	0				
	Unmarried	16	5	0				
	<i>Occupation</i>				12.59	6.79	6	p>0.05 S*
	Labour	8	8	0				
8	Business	10	5	0				
	Private	10	9	0				
	Govt	10	0	0				
	<i>Type of family</i>				7.8	0.57	3	p>0.05 S*
9	Nuclear	17	5	0				
	Joint	23	15	0				
	<i>Type of admission</i>				7.8	0.57	3	p>0.05 S*
10	Self	24	14	0				
	Relatives	16	6	0				
	<i>Number of children</i>				9.4	1.75	4	p>0.05 S*
	Nil	18	8	0	Nil			
11	1-2 years	18	10	0	1-2 years			
	3-4 years	4	2	0	3-4 years			
	<i>Duration of care</i>				9.4	1.75	4	p>0.05 S*
	6 month	14	4	0				
12	1 year	21	10	0				
	>2 years	5	6	0				
	<i>Place of care</i>							
	Home	22	11	0				
13	Private	12	4	0				
	Govt.	6	5	0				
	<i>Age of care taker in years</i>				12.59	0.96	6	p>0.05 HS*
	60-65	14	4	0				
14	65-70	12	9	0				
	70-75	9	5	0				
	Above 75	5	2	0				
	<i>Duration of suffering with dementia in years</i>				12.59	3.7	6	p>0.05 S*
15	1-4	16	9	0				
	5-9	15	5	0				
	10-15	7	4	0				
	Above 15	1	3	0				

S – Significant, N.S- Not Significant, H.S- Highly Significant

### 3.6. Sample selection criteria

The samples were selected with the following pre-determined set criteria.

### 3.7. Inclusive crite: RIA

1. Willing to participate in the study.
2. Available during the period of data collection.
3. Both gender
4. Geriatric care giver able to read English

### 3.8. Exclusive criteria

1. Geriatric care givers who are not available during study
2. A caregiver who are illiterate

### 3.9. Pilot study

Pilot study was under taken covering the entire process of research In chattuana Raipur (C.G.) After obtaining permission from the Principal of Our College RITEE College of Nursing, Raipur (C.G) to conduct the study. 6 subjects were selected for the study by convenient sampling technique. The purpose of the study was explained to each subject and consent was obtained from them. The investigator assured them that information will be kept confidential starting from the first day in the study. The researcher spent 25-30 minutes with each care givers . The tool was found to be feasible to collect the required information related to management of dementia. The subject did not experience any difficulty in understanding the tool. Finally the tool was adopted.

## 4. Materials and Methods

1. *Section-I:* Frequency and percentage distribution of subject according to socio demographic variables.

*Section–II:* Analysis of overall pre test and post test level of knowledge score regarding Management of Dementia among Geriatric care Givers in selected area of Raipur, Chhattisgarh.

*Section-III:* Analysis of effectiveness of structured teaching programme regarding Management of Dementia among geriatric care givers in selected area of Raipur, Chhattisgarh.

*Section-IV:* Chi -Square Analysis the Association

Between Pre Test Level of Knowledge regarding management of dementia with the Socio Demographic Variable.

### Section -I Table 1

Analysis the findings of association between the pre test level of knowledge regarding management of dementia among geriatric care givers with the selected demographic variables.

## 5. Summary

This chapter presents a brief account of the present study, conclusion drawn from the findings, implications, delimitation and recommendation for future research in the area.

## 6. Source of Funding

None.

## 7. Conflict of Interest

None.

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