Original Article

Effectiveness of structured teaching programme on knowledge regarding early identification and home care management of Alzheimer's disease among family of elderly persons at selected hospital

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Abstract

Aim: A study was conducted to determine the effectiveness of structured teaching programme on knowledge regarding and homecare management of Alzheimer's disease among family members of elderly persons.

Study design: A Quasi experimental design is used this study.

Place and Duration of Study: This study was conducted in Dr.Kamakshi Memorial Hospital, Pallikaranai,Chennai it is 300 bedded hospital.The study duration is 2 weeks.

Methodology: The researcher used the Non-probability purposive sampling technique. Population is the family members of elderly clients made distribution between target and accessible population. The sample size was 60 family members in elderly persons.

Results:The results of pretest most of them had inadequate knowledge 40(67%), had moderate knowledge 18(30%), had adequate knowledge 2(3%). In posttest the most of them had moderate knowledge 32(54%), had adequate knowledge 22(37%), had inadequate knowledge 6(10%). The study concluded by family members having a Moderate knowledge on Alzheimer's disease.

Conclusion: The study findings revealed there was an increase level of knowledge after the structured teaching programme on family members.

1. INTRODUCTION

Older people live longer life and better living condition as a result increase in life expectancy and increased standard of living. In India elderly population in 2009 is 88 (7%) million aged 60 years above. By 2015 it is expected elderly people population to be increased by 315 million (20%).

In this generation elders are affected with many problems ageing associated disease like arthrosclerosis, cardiovascular disease, cancer, cataract, osteoporosis, hypertension, diabetic mellitus, and Alzheimer's disease. Now Alzheimer's disease is more common in elderly peoples on the above 60 years. More than 1 million of Alzheimer's disease has been diagnosed every year.

It affects the family members who are responsible for caring for there loved one. Eighty percent of Alzheimer's care is provided by the family members. Family caregivers spend much time for taking care of Alzheimer's disease. Family caregivers may have low level of knowledge of Alzheimer's disease. They do not fully understand the common characteristics, progression, symptoms, causes, or available resources when family caregivers have a higher level of knowledge, they tend to exhibit less stress and burden. Therefore, it is important that they learn about the disease to improve their own quality of life. If the caregivers have adequate knowledge about the disease so they can provide quality care to their loved one.

Every seven seconds a new dementia case diagnosed in the world, therefore the theme for world Alzheimer"s day 2018 is "Dementia its time for action". Every 65 seconds, someone in India develops Alzheimer"s disease, and by mid- century this number will increase each year. By 2050 there will be nearly a million new cases Alzheimer"s disease was the seventh leading cause of death over the age of 60 years.It is a vital to make dementia as a global priority.

A study was conducted in a geographically defined U.S community to determine the prevalence of Alzheimer's disease in a community population of older people in 2001. A stratified sample of 467 persons underwent neurological, neuropsychological, and laboratory examination. The researchers concluded that clinically diagnosed Alzheimer's disease is a common condition and will continue to increase with increase in the old age population.

Largest numbers of elders diagnosed with Alzheimer's disease doubles every 5 years in India. India's elderly population

above 60 years is expected to increase from 70 million in 2001 to 179 million in 2031.and further 31.5 core in 2051.In Kolkata there are about 46,000 patients with Alzheimer's in 2005.In Delhi it accounts for amount 50,000 Alzheimer's disease patients in 2008.and in Bangalore there are 30,000 elders patients suffering from Alzheimer's disease. Today in India 32,00,000 people are affected by dementia. As a elderly women experience higher expectancy than the male person. The rising old age population and increase in the number of Alzheimer's disease cases each day has created an interest in the student researcher to assess the knowledge level of the caregivers of elderly peoples regarding early warning signs and home care management of Alzheimer's disease. Early warning signs of Alzheimer's disease.

Family members need proper knowledge on home care management of Alzheimer's disease. So the health care professionals give a proper health education to the family members. So it helps in extend the life span of elderly person. As a researchers Alzheimer's is a emerging one in elderly population only way to confront the challenges we face more we know the more we can do.

2. METHODOLOGY

One group pretest and posttest design was adopted for this study. The researcher used the Non-probability purposive sampling technique. Population is the family members of elderly clients made distribution between target and accessible population. The sample size was 60 family members in elderly persons. This study was conducted in Dr.Kamakshi Memorial Hospital, Pallikaranai,Chennai. It is 300 bedded hospital.The study duration is 2 weeks. The study was conducted using the structured teaching programme. The tools was validated by the dissertation committee. The instrument consists of two parts. I part consists of demographic variables like age, religion, educational status, occupational, types of family, place of the residence, family income and II part consists of 20 questionnaire to assess the knowledge among family members, 10 positive statement to assess the knowledge and each positive statement was given one mark was used on knowledge regarding early identification and home care management of Alzheimer's. Permission was obtained from the hospital OPD incharge and medical officer of the hospital to conduct the study, after analyzing the protocol of the study by ethical clearance of Venkateswara Nursing college. The investigator selected the samples by using non-probability purposive sampling technique. A structured teaching programme was conducted and knowledge question was given in selected group. After 2 weeks post test conducted for the group using same questionnaire.

3. RESULTS AND DISCUSSION

Table 1: Frequency and percentage distribution among family members of elderly.

N=60

S.no	Demographic Variables	Frequency	Percentage
1.	Age of the family member		
	20-30 years	19	32%
	31-40 years	17	28%
	41-50 years	6	10%
	51- 60 years	18	30%
2.	Age of the senior citizen		
	60-70 years	44	73%
	81 above	16	27%
3.	Religion		
	Hindu	43	71%
	Muslim	2	3%
	Christian	14	23%
	Others	1	2%
4.	Education of the family member		
	No formal education	8	13%
	Primary education	14	23%
	Higher secondary	25	42%
	Graduate	13	22%
5.	Occupation Farmer		
	Daily wages	2	3%
	Professional	9	15%
	workers	43	72%
	Business	6	10%
6.	Type of family		
	Nuclear family	38	63%
	Joint family	22	37%
7.	Place of the residence		
	Urban	45	75%
	Rural	10	17%
	Semi-urban	5	8%
8.	Monthly income		
	Rs. <10,000	27	45%
	Rs. 1000-20,000	18	30%
	>20,000	15	25%

The above table show that frequency and percentage distribution among family members of elderly. With respect to the age of study subject, out of 60 majority that is 19(31.6%) of them between 20-30 years,18(30%) in the age group of 51-60 years
,17(28.3%) in the age group of 31-40 years and ,6(10%) in the age group 41-50 years.Regarding sex majority age them that in 44(73.3%) female and ,16(26.6%) female.
Regarding of occupation majority 43(71.6%) professional workers ,9(15%) daily wages ,6(10%) business and only ,2(3.3%) farmer .Regarding type of family majority 38 (63.3%) live is a nuclear family and, 22(36.6%) in joint family, With respect to the Education status majority 25(41.6%) higher secondary school education ,14(23.3%) studied up to primary education,13(21.6%) were graduates and ,8(13.3%) had no formal education.

With respect religion, majority is 43(71%) were hindu,14(23.3%) chiristian,2(3.3%) Muslim and only 1(1.6%) was belongs to others.Regarding place of residence, 45(75%) were living in a urban,10(16.6%) rural area and 5(8.3%) living as semiurban area. Regarding family income majority of in 27(45%).lessthanRs. 10,000,18(30%) were earning between Rs.10,0001-20,000 and only 8(25%) were earning more than RS. 20,000.

Table 2: Frequency and percentage distribution of pretest level of knowledge on early identification and home care management of Alzheimer's disease among family members of elderly.

N=60

S.no	Level of Knowledge	Frequency	Percentage
1.	Inadequate	40	67%
2.	Moderate	18	30%
3.	Adequate	2	3%

The above table shows that, frequency and percentage distribution of pretest level of knowledge on early identification and home care management of Alzheimer"s disease among family members of elderly most of them, 40(66.6%) of them had inadequate knowledge,18(30)had moderate knowledge and only 2(3.3%) had adequate knowledge.

Section-C

Table 3: Frequency and percentage distribution of post test level of knowledge on early identification and home care management of Alzheimer's disease among family members of elderly.

N=60

S.no	Level of Knowledge	Frequency	Percentage
1.	Inadequate	6	10%
2.	Moderate	32	53%
3.	Adequate	22	37%

The above table shows that the frequency and percentage distribution of post test level of knowledge on early identification and home care management of Alzheimer"s disease among family members of elderly.32(53.3%) of them had moderate knowledge,22(36.6%) had adequate knowledge and only
,6(10%) had inadequate knowledge.

Table 4: Comparison of mean and standard deviation between pretest and post test level of knowledge among family members of elderly.

N=60

Comparison	Mean	Standard Deviation	Paird "t"Test	P Value
Pre-test	8.91	9.02		
			10.50	2.00
Post-test	14.43	14.22		

The above table shows that the comparison of mean and standard deviation between pretest level of knowledge and post test level of knowledge was done by using paired "t" test. The was a increase in mean value from 8.91 to 14.43 and the standard deviation from 9.02 to 14.22 respectively and the t value 10.50 was found to be highly significant at 5% level significance.
The above finding indicates a increase in the level of knowledge following the structured teaching programme. Hence the research hypothesis H1 states that there will be significance difference between pre-test level of knowledge and post- test

level lf knowledge of family members Alzheimer‟s disease of elders is accepted .

Table 5: Associations of post-test level of knowledge regarding on early identification and homecare management of Alzheimer's disease among family members of elderly persons with their demographic variables.

N = 60

S.no	Demographic Variables	Level of knowledge						Chi square χ^2 distribution
		Inadequate		Moderate		Adequate		
		No	%	no	%	No	%	
1.	Age of the family member							
	a)20-30 years	1	2%	10	17%	9	15%	
	b)31-40 years	-	-	11	18%	5	8%	$\chi2=4.536$
	c)41-50 years	1	2%	3	5%	2	3%	df=6
	d)51- 60 years	4	7%	8	13%	6	1%	(NS)
2.	Age of the senior citizen							
	a)60-70 years	4	7%	21	35%	17	28%	$\chi2=7.958$
	b)81 above	2	3%	11	18%	5	8%	df=2
								(S)
3.	Religion							
	a)Hindu	6	10%	21	35%	16%	27%	$\chi2=20.618$
	b)Muslim	-	-	2	3%	-	-	df=6
	c)Christian	-	-	7	12%	7%	12%	(S)
	d) Others	-	-	1	2%	-	-	
4.	Education							
	a)No formal education	2	3%	5	8%	1	2%	$\chi2=5.689$
	b) Primary	2	3%	8	13%	5	8%	df=6
	c)HSE	1	2%	12	20%	13	22%	(NS)
	d)Graduate	1	2%	6	10%	4	7%	
5.	Occupation							
	a) Farmer	-	-	1	2%	1	2%	
	b) Daily wages	-	-	5	8%	3	5%	$\chi2=15.792$
	c)Professional workers	6	10%	21	35%	15	25%	df=6
	d)business	-	-	3	5%	5	8%	(S)
6.	Type of family							
	a) Nuclear family	3	5%	20	33%	14	23%	$\chi2=7.148$
	b) joint family	3	5%	11	18%	9	15%	df=2
7.	Place of the residence							(S)
	a)Urban	5	85	23	38%	17	28%	$\chi2=25.86$
	b)Rural	1	2%	5	85	4	7%	df=4
	c)Semi-urban	-	-	3	5%	2	3%	(S)
8.	Monthly income							
	a)< 10,000	2	3%	11	18%	14	23%	$\chi2=8.21$
	b)10,001-20,000	2	3%	13	22%	3	5%	df=4
	c)>20,000	2	3%	7	12%	6	10%	(NS)

Note: S- Significant, NS- Non significant

CONCLUSION

Frequency and percentage distribution of pretest level of knowledge on early identification and home care management of Alzheimer's disease among family members of elderly most of them, 40(66.6%) of them had inadequate knowledge,18(30)had moderate knowledge and only 2(3.3%) had adequate knowledge.

Frequency and percentage distribution of post test level of knowledge on early identification and home care management of Alzheimer's disease among family members of elderly.32(53.3%) of them had moderate knowledge,22(36.6%) had adequate knowledge and only ,6(10%) had inadequate knowledge.

The comparison of mean and standard deviation between pretest level of knowledge and post test level of knowledge was done by using paired "t" test. The was a increase in mean value from 8.91 to 14.43 and the standard deviation from 9.02 to 14.22 respectively and the t value

10.50 was found to be highly significant at 5% level significance. It was found that there is significant association between the pre test level knowledge and demographic variables such religion and occupation at 5% significance and does not shown any significant with other demographic variables.

It was found that there is a significant association between the post test level of knowledge and demographic variables such age of the senior citizen , religion ,occupation, type family, place of the residence at 5% significance and does not shown any significant with other demographic variables.

A study to determine effectiveness of structured teaching programme on knowledge regarding early identification and home care management of Alzheimer‟s disease among family members of elderly person. The study findings revealed there was an increase level of knowledge after the structured teaching programme on family members. Hence the researcher found that there was significant relationship between structured teaching programme on level of knowledge regarding early identification and home care management of Alzheimer‟s disease among family members.