A Quasi Experimental Study To Assess The Effectiveness of Structured Teaching Program on The Level of Knowledge Regarding Dementia Among Elderly in A Selected Village At Villupuram District

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Abstract- *A quasi experimental study was conducted to assess the effectiveness of structured teaching program on the level of knowledge regarding dementia among elderly in a selected village at Villupuram district. The objectives of the study were to assess the pretest and posttest level of knowledge regarding dementia among elderly in experimental group and control group. To evaluate the effectiveness of structured teaching program on the level of knowledge regarding dementia among elderly in experimental group.To find the association between the posttest level of knowledge on dementia and the selected demographic variable among elderly in experimental group with their selected demographic variables. The research design used was a quasi-experimental design. Study was conducted among 60 elderlies, 30 elderlies in experimental group and 30 in control group who were selected by purposive sampling technique and the Study was conducted in Mangalapet at Villupuram district. After the pretest Structured Teaching Programme was conducted for elderly in experimental group and then post test was conducted. Data obtained were edited, organized, analyzed and interpreted by descriptive and inferential statistics.The findings of the study showed that there was a significant (p<0.05) improvement on level of knowledge regarding dementia after the structured teaching programme among experimental group. There was no significant association between level of knowledge and selected demographic variables in experimental group. The conclusion of the study was that structured teaching programme was an effective method for improvement of knowledge on dementia among elderly.*

Keywords- Dementia, Elderly

I. INTRODUCTION

Demographic aging is a global phenomenon with differential impact on world. Though the biological phenomenon of aging is universal, the daily life of an older person varies considerably according to social, economic, and cultural contexts. Aging and health has many socio-cultural determinants. Dementia in the elderly is called senile dementia or senility and viewed as a normal and somewhat inevitable aspect of growing old, rather than as being caused by any specific diseases. It becomes more common with age. While only 3% of people between the ages of 65–74 have dementia, 47% of people over the age of 85 have some form of dementia. As more people are living longer, dementia is becoming more common.

Dementia is not merely a problem of memory. It reduces the ability to learn reason, retain or recall past experience and there is also loss of patterns of thoughts, feelings and activities. Depression affects (20–30%) of people who have dementia, and about (20%) have anxiety. Psychosis and agitation/aggression also often accompany dementia.

As the disease stage progresses to the middle stage, patients might still be able to perform tasks independently, but may need assistance with more complicated activities. In the late stage patient will not be able to perform even the simple tasks independently and will require constant supervision. They may eventually to lose the ability to swallow food and fluid and this can ultimately lead to death.

There is currently no cure for the disease. Currently available medications offer relatively small symptomatic benefit for some patient but do not show disease progression. It helps a little for the memory. The sun will continue to show its rays on the world. The waves of the vast ocean will continue their rush to reach the shore and the wind will continue to blow the leaves of thetree.But let us all accept the patient with Dementia and give them a better tomorrow.

III. NEEDS OF THE STUDY

Dementia is characterized by loss of or decline in memory and other cognitive abilities and reduces the lifespan of affected people. In 2005, it was estimated that 2.4 million worldwide and 1.8 million people in India are affected with dementia. In India the number of people with Alzheimer's disease and other dementias is increasing every year because of the steady growth in the older population and stable increment in life expectancy and it is expected to increase two-fold by 2030 and three- fold by 2050. Dementia is often associated with physical, mental and financial burden and evidence suggests that elderly people with dementia in developing countries do not often utilize health care services, and when they do, the health care system is often ill prepared to provide quality services for dementia.

According to the Alzheimer's disease International (ADI) Delphi consensus study, by 2040 71% of people with dementia will be living in developing countries. It is estimated that there are about 1.5 million people with dementia inIndia

In developed countries, dementia awareness is growing rapidly, with the media playing an important part. Nurses are vital sources in educating the public on various health related issues. Hence the investigator is interested to assess the knowledge of elders regarding Dementia. Furthermore, the study of this kind will serve as guidelines for future elders to provide comprehensive care forDementia.

IV. STATEMENT OF THE PROBLEM

A quasi experimental study to assess the effectiveness of structured teaching program on the level of knowledge regarding dementia among elderly in a selected village at Villupuram District.

V. OBJECTIVES OF THE STUDY

- To assess the pretest and posttest level of knowledge regarding dementia among elderly in experimental group and control group.
- To evaluate the effectiveness of structured teaching program on the level of knowledge regarding dementia among elderly in experimental group.
- To find the association between the posttest level of knowledge on dementia and the selected demographic variables among elderly in experimental group

HYPOTHESES

H_1: There is a significant difference between the pretest and posttest level of knowledge regarding dementia after STP among elderly in experimental group.

H_2: There is a significant difference in posttest level of knowledge regarding dementia among elderly between experimental group and control group.

H_3: There is a significant association between the posttest levels of knowledge on dementia among elderly and their demographic variables in experimental group.

VI. REVIEW OF LITERATURE

Bhardwaj A (1) et.al (2014), conducted a study on the prevalence of dementia in Migrant, urban, rural, and tribal elderly population of Himalayan region in Northern India. Four settings identified for the purpose of this study included a migrant, urban, rural, and tribal. The study was conducted in two phases a screening phase and a clinical phase among 2,000 individuals above 60 years of age. To complete the required sample of 2,000 elderly individuals, 500 individuals were approached from each site. Nobody refused to participate. The result of the study was a total of 32/2,000 (1.6%) elderly individuals were classified as demented. No case of dementia was reported from tribal population. A look at sex differential reveals that majority (21/32; 66%) of individuals identified as demented were females. As age advanced scores on cognitive screen decreased with elders above 80 years of age showing lowest scores. Out of 32, 18 (56%) of patients classified as demented were more than 80 years of age. The findings of this study are in agreement with previous studies which point towards differential distribution of dementia across populations.

Rullier L et.al (2013) conducted a study was conducted on providing education about Alzheimer's disease. Improving carers' knowledge of Alzheimer's disease has been associated with benefits for carer well-being. Dementia knowledge was measured before and after interventions designed to improve knowledge in a sample of 100 undergraduate students. Results showed that education improved Knowledge of Alzheimer's disease by 50% to 85%, as measured by increased scores on a dementia knowledge questionnaire. This study has important implications for public education about dementia and resource allocation for service providers.

VII. METHODOLOGY

RESEARCH DESIGN

The research design selected for the present study was a quasi-experimental pre and posttest design to evaluate the effectiveness of structured teaching program on level of

knowledge regarding dementia among elderly. There were two groups, experimental and control group. The experimental group included those elderly who differed from control group only with regard to attending the structured teaching program. Pretest were measured in both experimental and control group. Structured teaching program was attended by experimental group elderly. Posttest were measured for both groups.

VARIABLES

Independent variable: Structured teaching program on dementia. It is a Systemic Structured lecture given by the investigator for 50 minutes with the help of showing pictures regarding dementia. **Dependent variable**: level of Knowledge of elderly regarding dementia. Extraneous variable: Age, gender, religion, marital status, educational status, occupation, number of children, type of family, family income, area of living hobbies, previous sources of information regarding dementia.

SETTING

The selection of setting was done on the basis of feasibility of conducting the study, availability of subjects and cooperation of the authorities. The data was collected in Mangalapet at Villupuramdistrict.

Population consists of the entire set of individual events, places or objects that possess the specific characteristics or attributes being studied. It also refers to the aggregate or totality of all the subjects.

Target population In this study, elderly were the target population.

Accessible population The accessible population selected for this study was elderly who are living in mangalapet at Villupuram district.

SAMPLE AND SAMPLE SIZE The sample size was 60 elderly in which 30 were in experimental group and 30 were in control group

SAMPLING TECHNIQUE Non-probability purposive sampling technique.

SAMPLE SELECTION CRITERIA

- Inclusion criteria: elderly
- Who are available at the time of data collection
- Who are willing to participate

- Who are able to cooperate throughout the period of the data collection
- Who knows to read and write Tamil.
- Exclusion criteria
- Who are sick at the time of data collection.
- Who have already undergone teaching program regarding dementia.

DEVELOPMENT OF TOOL

The investigator developed a structured knowledge questionnaire as tool after exploring all sources of information like extensive library search, internet sources and consultation with experts. The experts were requested to check for the relevance, sequence and clarity of the tool. Modification was done according to expert's opinion and the final tool was developed. The tool was translated into Tamil and again it was retranslated into English, thereby, the language validity was ascertained. In the present study the reliability of the structured questionnaire was established by test – retest method, among 10 elderly. Reliability coefficient was r =0.92 and the tool were found to be reliable for the study.

DESCRIPTION OF THE TOOL The tool consists of two parts.

PART I:Background data of elderly, consists of 12 questions seeking information on the background data of students. The items included Age, gender, religion, marital status, educational status, and occupation, number of children, type of family, family income, hobbies, and previous sources of information regarding dementia.

PART 2:Structured questionnaire for assessing the level of knowledge regarding dementia among elderly.It contains 25 items, each carries 1 mark. The highest possible score is 25.The lowest score for each question is0.

VALIDITY OF THE TOOL Eight experts validated the tool for its content. The experts were requested to check for the relevance, sequence and clarity of the tool. Modification was done according to expert's opinion and the final tool was developed. The tool was translated into Tamil and again it was retranslated into English, thereby, the language validity was ascertained.

RELIABILITY OF THE TOOL

In the present study the reliability of the structured questionnaire for experimental group and control group was established by test –retest method, among 10 elderly.

Reliability coefficient was r =0.92 and the tool were found to be reliable for the study.

STRUCTURED TEACHING PROGRAMME The content was validated by the experts.

DATA COLLECTION METHOD

Permission was bought and obtained from authorities of the village. The study samples were selected by Non probability purposive sampling technique based on sample selection criteria. The study purpose and method were explained to the selected sample. Informed consent was obtained from the study participant's for participating in the study. The sample size was 60elderlypeople.

Pretest was conducted for 30 elderly in experimental, 30 elderly in control group. Background data and level of knowledge were collected by using structured knowledge questionnaire to assess the level of knowledge regarding dementia among elderly. After pretest elderly in the experimental group attended the structured teaching programme.Post test score was assessed with same questionnaire 10 days after the structured teaching programme for both control groups, experimental group.

PLAN FOR DATA ANALYSIS

Back ground Data obtained from the sample organized and summarized with the help of descriptive statistics like frequency, mean, percentage distribution, standard deviation. Comparing the pretest and posttest knowledge scores of experimental group elderly by using paired t'test. Data on identifying the association between the pretest knowledge with selected socio-demographic variables of experimental group were analyzed using descriptive and chi-square test. Data on effectiveness of structured teaching programme on dementia among control group and experimental group with the use of unpaired't test.

ETHICAL CONSIDERATION

For the present study, the investigator took into consideration the ethical values. The study was accepted by the research and ethical committee. Prior permission was obtained in mangalapet at Villupuram. Explanation regarding the purpose of the study was done and informed consent obtained from the study participants for participating in the study. Study participants have the right to discontinue from the study at any time.

VIII. DISCUSSION

The results of the study were discussed according to the objectives of the study.

Objectives 1: To assess the pretest and posttest level of knowledge regarding dementia among elderly in experimental group and control group.

The obtained overall post test mean 36.33, standard deviation 2.96, and the mean percentage 81.57, range 17-30. Pretest mean 24.47, standard deviations (SD) 8.96; and24.47mean percentage mean difference36.57, 't' value 16.43($p<0.05$) was significant. It was inferred that posttest knowledge score was increased after the structured teaching programme in experimental group.

Objectives 2: To evaluate the effectiveness of structured teaching programme on the level of knowledge regarding dementia among elderly in experimental group.

The obtained over all experimental group posttest knowledge score is high, mean 36.33; standard deviation 2.96, mean percentage was 81.57, range 17-30. In control group posttest knowledge score is low, mean 12.5, standard deviation 3.56, mean percentage 35.71, and the mean difference was 45.86, range 14, mean difference 45.86, 't' value t=16.45 ($p<0.05$) was significant.

It was inferred that posttest knowledge score in experimental group significantly high compare to posttest knowledge score in control group. So, the structured teaching programme was effective among experimental group of elderly.

Objective: 3 To find the association between the posttest level of knowledge on dementia and the selected demographic variables among elderly in experimental group.

It was inferred that there was no significant association between the posttest level of knowledge and selected background factors such as age, gender, religion, marital status, educational status, occupation, number of children, type of family, family income, hobbies and previous source of information among elderly in experimental group.

IX. LIMITATIONS

- Structured teaching procedure was time consuming.
- Sample size was less to make any generalization.
- Limited to only elders.

X. RECOMMENDATIONS

- A similar study can be conducted in a large group of elders in community.
- The study can be replicated in different setting to strengthen the finding.

XI. CONCLUSION

Thus from the findings of the study, Structured teaching method is an effective way of propagating information to people. This method helps to easy understanding and makes more awareness about dementia among elderly and caregivers.

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