A Study to Assess Effectiveness of Structured Teaching Programme (STP) on Knowledge Regarding Dementia among Adults in A Selected Community Area at Delhi NCR

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ABSTRACT

Dementia is a collective term used to describe the problems that people with various underlying brain 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. 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. It 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 behavioural disturbances associated with dementia are defined as symptoms of disturbed perception, altered thought content, mood and behavior. 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. Additional mental and behavioral problems often affect people who have dementia, and may influence quality of life and the need for institutionalization. As dementia worsens individuals may neglect themselves and may become disinhibited, the individual may become incontinent as their condition worsens. Depression affects 20–30% of people who have dementia, and about 20% have anxiety. Psychosis and agitation/aggression also often accompany dementia. The evidence base on the prevalence of dementia is expanding rapidly, particularly in countries with low and middle incomes. There is such a wide range of dementia and levels of severity that the associated complications are vast. Complications may include increased infections anywhere in the body, loss of ability to function or care for self, loss of ability to interact, abuse by an overstressed caregiver, reduced lifespan, and side effects of medications used to treat the disorder. We select this problem as our research study because we want to assess effectiveness of structural teaching programme (STP) on knowledge regarding dementia among adults in a selected community area at Delhi/ NCR”. The study aims to assess the knowledge regarding knowledge regarding dementia among adults in a selected community area at Delhi/ NCR”. This study is a type of experimental research. The research approach used in this study was experimental survey approach. A purposive sampling technique was used to select the samples. The size of the sample was 30 individuals. Data were collected by using closed questionnaire schedule. Analysis was done by descriptive and inferential Statistics. The result showed that the mean post-test knowledge score (20) was higher than the mean pre-test score (20). The mean difference pre-test score (6.8) of knowledge was significant at 0.05% level at the “t”=7.42*P<0.05. Hence research hypothesis H1 was accepted. This indicates that the planed reaching program was effective in increasing the knowledge about dementia and prevention of dementia among adults.
**Key words:** Dementia disorders, knowledge level of adults, effectiveness of structural teaching programme.

**INTRODUCTION**

Dementia is the most feared and devastating disorder of late life. Current estimates reveal that there are about 18 million cases of dementia in the world and there will be about 34 million suffering from dementia. The overall prevalence of dementia ranges from 5 percent to 7 percent. Alzheimer’s disease is the most common dementing disorder accounting for 80 percent of all cases of dementia. The number of people with dementia is steadily increasing. Alzheimer's Society believes that careful planning for the future is needed now to ensure that the right care and support is available.[1]

Current research focuses on many different aspects of dementia. This research promises to improve the lives of people affected by the dementia and may eventually lead to ways of preventing or curing these disorders. Indian aged population is currently the second largest in the world. By 2020, of the countries with the largest elderly population in the world.[2]

Alzheimer’s disease is officially listed as the sixth-leading cause of death in the United States. It is the fifth-leading cause of death for those age 65 and older. However, it may cause even more deaths than official sources recognize. Most people with dementia live in developing countries an individual can lead a normal happy life only if he has a sound intellectual capacity with a good memory. Worldwide, 35.6 million people have dementia and there are 7.7 million new cases every year.[3]

Caring for a dementia patient can be challenging, as well as stressful. It can also take a physical and emotional toll on the caregiver. To provide the best possible care for patients, caregivers can start by looking after their own health and wellbeing. Having a strong support network really helps too. Apart from friends and family, help can also come from fellow caregivers in support groups. Support groups provide caregivers a place to share their feelings, gain emotional support and talk to people who they can relate to. Studies have shown that a healthy lifestyle can reduce the risk of developing chronic diseases and certain types of dementia.[4]

Dementia is an illness that affects the brain and its ability to function. Identifying the warning signs early can make a positive difference to the patient and family. The Alzheimer Society had conducted education series for people with dementia and their care partners to explore the journey ahead in a positive, informative and supportive environment. Participants had to learn about dementia, explore strategies to cope with changes and maximize quality of life, review information on planning for the future, and meet others who are going through similar experiences. Education helps the people to find out early signs of dementia and help them to take preventive measures. There are five healthy behaviors that appear to significantly reduce the risk of dementia. Those habits are: regular exercise, no smoking, low bodyweight, a healthy diet, and a low alcohol intake. Dementia mainly affects older people, although there is a growing awareness of cases that start before the age of 65. Creating awareness among adults regarding dementia will help in prevention and early detection of the early signs of dementia. Keeping above facts in view the researcher is keen to educate the adults regarding dementia. Thus has chosen to take up the present study.[5]

**OBJECTIVES**

1. To assess the knowledge regarding dementia among adults.
2. To assess the practice regarding dementia during adults.
3. To evaluate the effectiveness of structure teaching programme on
knowledge and practice regarding dementia.

4. To provide education regarding dementia.

**HYPOTHESES**

**Ho:** There will be no significant difference in knowledge regarding dementia among adults attending in community area pre and post interventional experimental group.

**H1:** There will be significant difference in knowledge regarding dementia among adults attending in community area pre and post interventional experimental group.

**RESEARCH APPROACH**

The research approach adopted in the present study was experimental survey approach, which was considered as appropriate because this study aims to assess the level of knowledge regarding dementia in adults.

**RESEARCH DESIGN**

The research design is the master plan specifying the method and procedure for collecting and analysing the needed information in a research study. The selection of design depends upon the objectives of the study and variables to be studied. It determents how the study will be organized when data will be collected and what interventions are to be implemented. Research design selected for the present study was experimental design.

**VARIABLES IN THE STUDY**

Variables are qualities, properties or characteristics of person, things or situations that change or vary.

**DEPENDENT VARIABLE** - A dependent variable is the outcome of response due to the effect of the independent variable, which researcher wants to predict or explain. In this study knowledge regarding the dementia among adults is the dependent variable.

**INDEPENDENT VARIABLE** - An independent variable is a stimulus or activity that is manipulated or varied by the researcher to create an effect on the dependent variable. In this study structured teaching programme in terms of knowledge of among adults regarding dementia.

**EXTRANEOUS VARIABLE** - Extraneous variable is an uncontrollable variable that greatly influences the result of the study. In this study, the extraneous variable refers to age, gender, religion, marital status, monthly income, number of children in the family.

**RESEARCH SETTING**

Setting is the physical location and condition in which data collection takes place in a study. The present study was conducted in the selected kasna community area at Delhi/NCR. The researcher selected this setting for the following reason such as availability of sample and economic feasibility for conducting the study.

**ASSUMPTION:**

1. Adults may have some knowledge about dementia.
2. To Planned teaching programme is an accepted teaching strategy.
3. Adults will be interested and willing to participate in the study.
4. Willing to adopt the preventive practice.
5. Willing to give free and frank response during pre and post test.

**DELIMITATION**

The study will be limited to the individual who are-

1. Have under 25-35 years of age.
2. Present during the period of data collection.

**POPULATION**

The term population refers to the entire set of individual or objects that possess specific characteristics that the researcher is interested in studying. In this study, comprises of adults with the age group 25 to 35 age of among adults undergoing in selected kasna community area at Delhi/NCR.

**SAMPLE**

**Sample size:** Sample is a subject of the population selected to participate in a research study. In the present study, the
sample consists of 30 individual was considered as samples for the study.

**Sampling Technique:** Sampling defines the process of selecting a group of people or other elements with which to conduct a study. The purposive sampling is based on the belief that a researcher’s knowledge about the population can be used to hand pick the cases to be included in the sample. The sampling technique used in this study was purposive sampling technique. In this study purposive sampling method will be used to select the subjects. In this study, out of 3 community area 1 community was selected through simple random sampling. The data collected from the 30 samples who met the inclusion criteria from community area.

**SAMPLING CRITERIA:**

**INCLUSION CRITERIA**

1. Assess knowledge regarding dementia in adults.
2. Patients, who can able to read, speak and understand Hindi or English.
3. Patients who are willing to participate in this study.

**EXCLUSION CRITERIA**

1. Adults who are.
2. Dementia among adults.
3. Having other co morbid disorders and altered

**DESCRIPTION OF TOOL**

Research instruments or research tools are the devices used to collect data. The tools facilitate the observation and measurement of variables. The following tools are used for collecting data in this study. The tools has three parts

Tool 1: - Demographic Performa- It consists of 9 items, which includes with age, religion, annual income (INR), education status, gender, personal habit (substance use), sleeping hour in a day, physical activity, personal hygiene.

Tools 2: - Knowledge profile.

Tools 3: - Practice profile.

**VALIDITY OF TOOL**

Validity refers to which an instrument measures what it is intended to measure. Content validity is the extent to which the method of measurement includes all the major elements relevant to the concept being measured. The demographic Performa statement of problem, objectives, hypothesis and operational definitions and criteria check list for validation of the tool were submitted to 7 experts to establish to content validity. The experts were requested to give their opinion regarding relevance, appropriateness and usefulness of the items of the tool. Tool was collected from all the experts and modification was made as per the suggestion.

**PILOT STUDY**

Pilot study helps to assess the data collection plans, identify the inadequacies of the plan and make due modification as requiring, find out the feasibility of conducting the present study and to determine the methods of statistical analysis. The pilot study was conducted on 7th April to 12th April 2019 to find out the feasibility, reliability and practicability of the study. The permission has been taken from the community area. The tool was administered to adults after obtaining their consent. At the end of the study respondents were thanked for their cooperation. The research design and the tools were found to be appropriate, clear and feasible. A pilot study has been conducted by 3 dementia among adults at selected community area in Delhi/NCR. The tools were used knowledge profile and Practice profile.

**RELIABILITY OF THE TOOL**

Reliability of the research instrument is defined as the extent to which the instrument yields the same results on repeated measures. If is then concerned with how consistently the measurement technique measures the topic of interest. Reliability of the tool was established by the use of 10 samples by means of split half method. Reliability of back inventory was established by CRONBACH’S ALPHA.
reliability coefficient which was 0.9. It indicates that tools are reliable.

**DATA COLLECTION PROCEDURE**

Data collection process is the gathering of information to address a research problem. To conduct study in community area at Delhi/NCR, formal written permission was obtained from the community area Chairman Municipal Corporation at Delhi/NCR. Data was collected from 15th April 2019 to 20th April 2019. The investigator before collecting the data explained to fill the demographic Performa and standardized tools.

**DATA ANALYSIS**

Analysis is the method of organizing, shorting and structuring data in such a way that researcher can be answered or meaningful inferences can be drawn. This chapter deals with the analysis and interpretation of data collected from the 30 sample. The collected data were coded, entered in master sheet, compiling and categorizing the information to summarize and organize the data meaningfully. Analysis and interpretation of data are based on the objectives of the study are presented. It consists of both descriptive and inferential statistics. Frequencies, percentage, mean standard Deviation, “t”-test.

To identify the level of knowledge and practice profile, percentage, mean and standard deviation will be used. Distribution of respondents according pre-test and post-test level of knowledge score according to frequency and percentage.

Effectiveness of planned teaching programme on knowledge on prevention of dementia among adults in pre –test and post-test used by paired “t” test and P value.

Table:-1 Percentage wise distribution of adults according to their knowledge score

<table>
<thead>
<tr>
<th>Knowledge Grades</th>
<th>scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good knowledge</td>
<td>16-20</td>
</tr>
<tr>
<td>Good knowledge</td>
<td>11-15</td>
</tr>
<tr>
<td>Average knowledge</td>
<td>6-10</td>
</tr>
<tr>
<td>Poor knowledge</td>
<td>0-5</td>
</tr>
</tbody>
</table>

Table:-2 Distribution of adults according pre-test and post-test level of knowledge score

<table>
<thead>
<tr>
<th>knowledge</th>
<th>pre-test frequency</th>
<th>pre-test percentage</th>
<th>post-test frequency</th>
<th>post-test percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>very good knowledge</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3.33</td>
</tr>
<tr>
<td>good knowledge</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>23.33</td>
</tr>
<tr>
<td>average knowledge</td>
<td>5</td>
<td>16.66</td>
<td>18</td>
<td>60</td>
</tr>
<tr>
<td>poor knowledge</td>
<td>25</td>
<td>83.33</td>
<td>4</td>
<td>13.33</td>
</tr>
</tbody>
</table>

Fig - 1 bar graph showing the frequency and percentage of the knowledge score of pre-test
The result showed that the mean post-test knowledge score (20) was higher than the mean pre-test score (20). The mean difference pre-test score (6.8) of knowledge was significant at 0.05% level at the ‘t’ = 7.42 * P<0.05. Hence research hypothesis H1 was accepted. This indicates that the planned teaching programme was effective in increasing the knowledge about dementia and prevention of dementia among adults.

**CONCLUSION**

The study aimed at testing the effectiveness of planned teaching programmes on knowledge regarding Dementia among adults. The result showed that the planned teaching program was...
highly effective. Dementia is biologically, physiologically, and psychologically stressful, even for healthy people and post test score of knowledge and practice regarding dementia among adults will be analyzed through following statistical technique. Descriptive statistics: - Mean, standard deviation, range and mean score percentage will be used to quantify the level of knowledge before and after structured teaching program. Inferential statistics: - paired t-test will be used to examine the effectiveness of structured teaching program by comparing the pre-test and post scores.

The present study was designed to evaluate the effectiveness of self-modules on knowledge regarding Dementia in selected community are of Delhi/NCR. Based on the nature of the problems under study and to achieve the objective of the study experimental pre-test post-test research design was adopted since the study tried to find the effectiveness of self- instructional module on knowledge regarding dementia. Purposive sampling technique was adopted for the study to select the sample. The data was collected from 30 community people who are adults.

The following conclusions related to major findings are:
1. Distribution of sample according to age revealed that 100% (30) sample from the age group 25 to 35.
2. Distribution of sample according to the gender the highest percentage 56% (17) sample from the males and 43% (13) samples from females.
3. Distribution of sample according to the educational status 3% (1) adults are no formal education,3% (1) from primary level,10% (3) from secondary level,83% (25) from graduation.
4. Finding of analysis show that 90% (27) adults were Hindu,10% (3) were Muslim,0% (0) were Christian and 0% (0) were Sikh.
5. Distribution of sample according to Annual income50% (15) adults belongs to below 1 Lakh,43% (13) lies between 1-3 Lakh,3% (1) lies between 1-6 Lakh and 3% (1) belongs to 7&above.
6. Distribution of sample according to personal habits70% (21) were no habits,10% (3) were alcoholism,0% (0) were tobacco chewing,20% (6) were any other.
7. Distribution of sample according to sleeping hours in a day 16% (5) were sleeping less than 3 hours,6% (2) were 3-5 hours,66% (20) were 6-8 hours,10% (3) more than 8 hours.
8. Distribution of sample according to physical activity 63% (19) were very good habits,36% (11) were fairly good habits,0% (0) were fairly bad habits,0% (0) were very bad habits.
9. Distribution of sample according to personal hygiene 73% (22) were very good habits,23% (7) were fairly good habits,3% (1) were fairly good habits,0% (0) were very bad habits.
10. The pre-test of adults, out of 30 Adults majority 16.66% (5) had average knowledge, 83% (25) had poor knowledge, 0% (0) had very good knowledge and 0% (0) had good knowledge regarding dementia. In post-test of adults out of 30 adult’s majority 3.33% (1) had very good knowledge, 23.33% (7) had good knowledge, 60% (18) had average knowledge and 13.33% (4) had poor knowledge regarding dementia.
11. The result showed that the mean post-test knowledge score (20) was higher than the mean pre-test score (20). The mean difference pre-test score (6.8) of knowledge was significant at 0.05% level at the “t”=7.42*P<0.05. Hence research hypothesis H1 was accepted. This indicates that the planed reaching program was effective in increasing the knowledge about dementia and prevention of dementia among adults.

Limitations
Limitations of the study were as follows-
1. The study was conducted only in one community with sample (100); hence generalization of the study is restricted.
2. The study focuses on assessing the knowledge rather than improvement in the behaviour.
3. The study was limited on only eligible couples not to whole family.

**Recommendation**
Keeping in view the findings of the present study, the following recommendations were made since the study was carried out on a small sample. The results can be used only as a guide for further studies.
1. The study can be repeated by taking a large sample in other parts of country.
2. A descriptive study can be conducted on dementia among adults.
3. An experimental study can be carried out to find out the effectiveness of planned teaching program on dementia to reduce the case among adults.

**REFERENCES**

Mrs. Sushma Yadav, Associate Professor in the department of psychiatric nursing, Prakash College Of Nursing, Omega - IV, Greater Noida, UP- 201310, India received Master’s degree in the psychiatric Nursing from Rajiv Gandhi University of Health Sciences, Bengaluru, Karnataka

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