

ASSESS THE EFFECTIVENESS OF PLANNED TEACHING ON KNOWLEDGE REGARDING EARLY WARNING SIGNS AND MANAGEMENT OF ALZHEIMER'S DISEASE AMONG CARE GIVERS OF ELDERLY CLIENT.

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Abstract:

Background: More than four million people in India have some sort of Alzheimer's. This global estimate of 43.8 million people living with Alzheimer's in 2016 in the World Alzheimer's Study is close to an estimated 46.8 million in 2015. A study published on early detection and diagnosis of Alzheimer's by the Alzheimer's association. In the study, they concluded that education years among caregivers is a predictor of Alzheimer's experience. It appears that family members, especially those with lower levels of education, need to have more knowledge of Alzheimer's.

Objectives:

- 1) To assess the existing knowledge regarding early warning signs and its management of Alzheimer's disease among care giver of elderly client.
- 2) To evaluate the effectiveness of planned teaching on knowledge regarding early warning signs and its management of Alzheimer's disease among care giver of elderly client.
- 3) To associate the knowledge scores with selected demographic variables.

Methodology: The pre-test and post-test research design was used. Research approach was Interventional Evaluatory Approach and the sample for the study is general population. The Samples size is 50 will be obtained by using Non-Probability Convenient sampling technique. The setting of the study is selected area of Wardha.

Expected Results: The result of the present study is intended to examine the improvement of the knowledge score early warning sign's and their management of Alzheimer's disease among elderly caregivers, hence it will also be evaluated by post-test.

Keywords: Effectiveness, Planned Teaching, Early Warning Signs, Alzheimer's Disease, Care Giver

INTRODUCTION

Alzheimer's disease (AD) is a progressive and debilitating disease which affects both races and genders.¹ Ask a healthy senior what they're most afraid of getting older, and you'll probably lose your mind with Alzheimer's. Then you lose your body. Alzheimer's disease (AD) is a terminal condition that has no cure. A average adult brain consists of 100 billion neurons. Every neuron has long extensions of branches that form complex connections to other neurons. Such linking points are called synapses (it has 100 trillion of them in the brain).

The synapses allow information to flow from one neuron to another via chemical pulses. Think of it as one huge communication highway for memories, ideas, emotions, feelings, and gestures. Deposits of beta-amyloid protein accumulate hard plaque into outside nerve cells (neurons). At the same time, irregular versions of the protein tau accumulate within the neurons causing the microtubule carrying a neuron to collapse. Those neurons start to work less efficiently over time, gradually losing the ability to interact with each other. Brain tissue starts to shrink as neurons die. And as the disease reaches out into the brain's outer layer (cerebral cortex), it worsens one's decision. It is the beginning of the end for Alzheimer's sufferers.

Let's take a quick look at the three phases identified by the "American Health Assistance Foundation, and their Alzheimer's behaviors".

Stage I (Mild): This stage takes place within the first 2 to 4 years. It is characterized by lack of control, mood swings, irritation and rage. Some typical habits include loss, difficulties in handling household affairs (bills and money management), poor judgment, loss of items, repeated questions, mood and personality changes

Stage II (Moderate): This longest period lasts from 2 to 10 years, which is when the patient is visibly affected. A person can do simple tasks but needs help with more complex activities. Depression, lack of motivation, irritability, restlessness, apathy and withdrawal are typical behaviors. Paranoia and physical abuse have more serious behaviors.

Stage III (Severe): In this final stage, the person can lose the ability to communicate, recognize others, lose body functions and the ability to feed themselves, lasting from 1 to 3 years. Memory is virtually nonexistent. Constant attention is typically required.²

Alzheimer's Early Warning Sign

There are 10 early warning signs of Alzheimer's diseases, such as memory loss, difficulty planning and problem solving, everyday activities are a struggle, times and locations are confused, vision changes, words and interactions are challenging, items fail, judgement lapse, social detachment and mood changes.³

Management of Alzheimer's

Medical management

Current Alzheimer's drugs can help with memory problems and other cognitive improvements over a period of time. Two types of drugs are commonly used to treat cognitive symptoms:

1) Cholinesterase Inhibitors :- These medications function by improving cell-to - cell connectivity rates by maintaining a chemical messenger that is destroyed by Alzheimer's disease in the brain. It may also enhance neuropsychiatric symptoms , such as anxiety or depression. Cholinesterase inhibitors widely prescribed include Donepezil {Aricept}, Galantamine {Razadyne}, and Rivastigmine {Exelon}.

2) Namenda { Memantine } :- The medicine acts in another network of contact with brain cells and delays the development of mild to extreme Alzheimer's symptoms. It is also used in conjunction with an inhibitor of Cholinesterase. Dizziness and frustration are fairly normal side effects.

Alternative medicine

Various herbal treatments, vitamins and other supplements are commonly used as treatments which can help cognitive health or avoid or postpone Alzheimer's. Mixed findings have been provided by clinical trials with outcome to support them as successful therapies. Some of the remedies which were recently reviewed include:

- 1) **Omega-3 Fatty Acids** :- this acids or from fish supplements may reduce chance of dementia.
- 2) **Curcumin** :- The herb originates from turmeric and has antioxidant and anti-inflammatory effects which can influence the chemical processes of the brain.
- 3) **Vitamin E** :- Although vitamin E is successful to avoid Alzheimer's disease, taking two thousand units daily may help delay the progression in people who already have the disorder.

Creating a safe and supportive environment by following routine habits

- Wallets, mobile and other valuables are still kept in the same location at home, so that they don't get misplaced.
- Place the drug in a safe spot. To keep track of dosages using a routine checklist.
- Arrange automatic billing and automatic deposit for finances.
- Carry a location capable cell phone so a caregiver can monitor their position.
- Make sure the daily rendezvous is as much as possible on the same day.
- Track daily schedules using a home calendar or whiteboard. Develop the habit of checking out everyday task accomplished.
- Discard unnecessary furniture, clogging and tossing rugs.
- Mount durable handrails in bathrooms and stairs.
- Make sure slippers and shoes are comfortable and track decent.
- Reduce the number of mirror. People with Alzheimer's can find images disturbing or dismaying in mirrors.
- Ensure that an Alzheimer's patient is marked or wears a medical alarm bracelet.
- Keep photos and other significant items around the house.⁴

Background of the Study

More than four million people in India have some sort of Alzheimer's. Our global estimate of 43.8 million people living with dementia in 2016 is close to the 2015 estimate of 46.8 million in the World Alzheimer's Survey 2015. In addition, the GBD estimate of a doubling in the number of prevalent cases and an rise in dementia deaths of 148 per cent (140–157) over the 26-year period from 1990 to 2016 is of the same order as the previously recorded doubling time of 20 years. An Alzheimer's diagnosis is life altering for the person with the disorder, as well as his family and friends. People over the age of 60 make up around 5 per cent of patients in tertiary care settings. High prevalence of psychiatric morbidity among seniors resident in the community was recorded. Alzheimer's disease (AD) is the most prevalent psychiatric illness in late life. We need Community-based approaches to treat specific conditions such as Alzheimer's disease (AD) in late life. There is a need to determine the efficacy of those interventions. Identifying risk

factors for Alzheimer's in our population is significant. To reduce the prevalence of these conditions we have to try and modify these factors.^{5,6}

Need of the Study

India is undergoing a rapid period of population ageing. The number of sufferers from Alzheimer's and other late-life mental health issues is projected to increase in the near future. As the number of elderly people with Alzheimer's disease (AD) continues to grow, the position of care givers will remain essential. Most find themselves playing the role of caregiver with the disease for an aging family member. As there is a lack of information and community understanding about the disease, disease progression, signs and symptoms, and available services, these concerns indicate a need to raise awareness of Alzheimer's disease (AD) as an increasingly significant public health problem for elderly client caregivers. For order to deliver the required treatment, care givers need to be well educated about the disease cycle and how to deal with changing behaviours. Providing caregivers with information about the transmission of disease and what to expect during the various stages of the disease can help to decrease their stress levels and help them cope with the situation .

Recognizing the needs and concerns of individuals impacted by Alzheimer's disease (AD) appears to be central to caregiving. However, substantial numbers of caregivers continue to overestimate the physical and mental capacities of Alzheimer's disease (AD) patients under their treatment. They often fail to understand that it might be difficult for Alzheimer's disease (AD) patients to obey even basic directions and instructions because of their dementia. Consequently, inability of their patients to comply with directives often leads both the patient and the caregiver to disappointment, rage and depression. In order to have a healthy death experience for a individual with Alzheimer's disease (AD), caregivers need to know about the particular problems in supporting and maintaining those rights^{10,11}.

Methodology: The pre-test and post-test research design was used. Research approach was Interventional Evaluatory Approach and the sample for the study is general population. The Samples size is 50 will be obtained by using Non-Probability Convenient sampling technique. The setting of the study is selected area of Wardha. IEC, DMIMS (DU)/IEC) received ethical approval.

Inclusion Criteria:

- People in designated areas who are prepared to take part in the study.
- People who are eligible while gathering the data.
- People able to comprehend and write English and Marathi.

Exclusion Criteria: People who have participated in similar form of research already.

Randomization: The sequentially numbered system will assign all caregivers randomly.

Interventions: The pre test was conducted and planned teaching was given by the researcher under the guidance of the professor of medical surgical nursing and after 7 days the post test is conducted.

Statistical analysis: The statistical analysis carry out with the help of using the software version of SPSS. ANOVA test (Analysis of Variance), independent t-test will be used for data analysis.

Ethics and Dissemination: This research is endorsed by the Committee on Institutional Ethics of Datta Meghe Institute of Medical Science (DMIMS (DU)/IEC/). All participants must request that the informed consent be read and signed.

Discussion: A study published on early detection and diagnosis of Alzheimer's by the Alzheimer's association. The objective of the study to better understand the level and predictors of knowledge among family caregivers. This research explored the level of knowledge of 142 members of the Family by using ADKS { Alzheimer's Disease knowledge Scale } to have about the Alzheimer's. Scores on the ADKS were positively associated with self-reported knowledge of Alzheimer's, and members of the Family with higher educational backgrounds were more predictable to knowledge about the were more likely. In the study , they concluded that education level among caregivers is a

predictor of Alzheimer's experience. It appears that members of the family, especially those with less educational attainment, need to know more about Alzheimer's. ⁶ The result of the present study is intended to examine the improvement of the knowledge score early warning sign's and their management of Alzheimer's disease among elderly caregivers, hence it will also be evaluated by post-test. Few articles on geriatric population were reviewed ^{12,13,14}. Khan et al reported unusual presentation of focal tubercular meningoencephalitis in an elderly female¹⁵. Mudey et al conducted assessment of quality of life among rural and urban elderly population of Wardha District¹⁶. Panchabhai addressed the needs of oral rehabilitation needs in the dependent elderly in India^{17,18}. Some rare cases in elderly were reported ^{19,20}. Grover et al conducted study on assessment of health-care needs of patients with severe mental illnesses²¹. Tripathi et al addressed Gender Differences in Obsessive-Compulsive Disorder in elderly²².

Conclusion: The statistical analysis will draw conclusions.

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