A Study To Assess The Knowledge And Practices Among Caregivers Of Stroke Patient With a View To Develop An Information Booklet Regarding Home Care Management Of Stroke At Selected Hospitals, Guwahati, Assam.

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BACKGROUND OF THE STUDY

Our brain is supplied with lots of blood vessels and capillaries which supply blood with nutrients and oxygen. When blood flow to a part of the brain stops, it results in a condition known as “Stroke”. A stroke is sometimes called a "brain attack”, it means cutting off vital supplies of blood and oxygen to the cerebral cells controlling everything we do speaking, walking and breathing. A stroke occurs when an artery becomes blocked (ischemic stroke) or ruptured (hemorrhagic stroke). Most strokes occur when arteries are blocked by blood clots or by the gradual build-up of plaque and other fatty deposits.

The most effective way to decrease the burden of Stroke is prevention. Awareness and control of modifiable risk factors can contribute to reducing the incidence and burden of Stroke. Modifiable risk factors are those that can potentially be altered through life style changes. The modifiable risk factors include hypertension, diabetes mellitus, heart disease, smoking, excessive alcohol consumption, obesity, lack of physical exercise, poor diet and drug abuse.

Hypertension is the most important modifiable risk factor independently increases the risk of Stroke. This risk can be reduced by upto 42% with appropriate treatment of hypertension. Diabetes mellitus is a significant risk for Stroke. The risk for Stroke in people with diabetes mellitus is 4 to 5 times higher than in general population. Increase in serum cholesterol and smoking are also risk for Stroke.

Advancement in science and technology specially in medicine has brought gradual change in the attitude towards the care of Stroke patient. Mortality has been declining in many countries probably due to social and economical changes and availability of the modern treatment facilities. A 30% decrease in the incidence of stroke has occurred in developed countries during the past twenty years.

Approximately 25% of people who recover from their first stroke will have another stroke within five years. This is known as recurrent stroke. Recurrent stroke is a major contributor to stroke-related disability and death, with the risk of severe disability or death from stroke increasing with each additional recurrent stroke. The risk of a recurrent stroke is greatest right after a stroke; however, this risk will usually decrease with time. About 3 % of stroke patients will have another stroke within 30 days of their first stroke, and one-
third of recurrent strokes will take place within two years of the first stroke. Recurrent ischemic stroke and transient ischemic attack are common problems in primary care, with stroke survivors averaging 10 outpatient visits per year. Risk factors such as hypertension, diabetes, and hypercholesterolemia should be evaluated during each visit. Attention should be given to lifestyle modification including management of obesity, smoking cessation, reduction in alcohol consumption, and promotion of physical activity.

NEED FOR THE STUDY

Every year, 15 million people worldwide suffer a stroke. Nearly six million die and another five million are left permanently disabled. Stroke is the second leading cause of disability, after dementia. Disability may include loss of vision and / or speech, paralysis and confusion. Globally, stroke is the second leading cause of death above the age of 60 years, and the fifth leading cause of death in people aged 15 to 59 years old.

There will be an estimated 12 million stroke deaths, 70 million stroke survivors, and more than 200 million lost globally each year by 2030, with low- and middle-income countries bearing the brunt of the problem.

In India by 2015, 1.6 million cases of stroke will die annually and within 5 years of a stroke, over half of patients aged ≥ 45 years will die 52% of men and 56% of women.

Assam has an alarmingly high incidence of brain stroke. A study conducted in 2006 had found that 270 people out of every lakh suffer brain stroke in the state every year, which is the highest in the country. The study found that 40 per cent of the total cases of stroke could be attributed to hypertension alone, 20 per cent to hypertension and diabetes, 10 per cent to hypertension and other risk factors and 5 per cent to diabetes and heart diseases.

The caregivers need knowledge, understanding of importance to help them to reformulate their life, assimilate the losses and adjust to the change. Discharge from the hospital can be time of stress for the patient with Stroke and their families. The provision of care and their changes in life style to support them after hospital discharge is an important component of Stroke management. It helps to minimize the long term adverse effect of Stroke that has been reported by patients and their immediate care givers.

STATEMENT OF THE PROBLEM

A study to assess the knowledge and practices among caregivers of stroke patient with a view to develop an information booklet regarding home care management of stroke at selected hospitals, Guwahati, Assam.

OBJECTIVES

• To assess the knowledge among caregivers of stroke patient regarding home care management of stroke.
• To assess the practices among caregivers of stroke patient regarding home care management of stroke.
• To correlate the knowledge and practices score among caregivers of stroke patient regarding home care management of stroke.
• To associate the knowledge and practices score among caregivers of stroke patient regarding home care management of stroke with their selected demographic variables such as age, gender, marital status, educational status, occupation, family income, previous experiences of care of patient, attending any training program on care of paralysis patient, sources of health information and family history of stroke.

OPERATIONAL DEFINITION

• Assess – According to oxford dictionary, it means to evaluate or estimate the nature, quality, ability, extent, or significance.
In this study, it refers to find out the knowledge and practice of caregivers regarding home care management of stroke patient.

• **Knowledge** – According to oxford dictionary, it means facts, information, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject.

In this study, it refers to the information and understanding obtained by the caregivers evaluated in terms of correct responses to the knowledge items on home care of patients with stroke as measured by semi structured questionnaire.

• **Practice** – According to oxford dictionary, it means to use an idea or actually put it into place.

In this study, it refers to the activities performed by the care givers while taking care of stroke patient.

• **Information booklet** – According to oxford dictionary, it means a small book that has a paper cover and that gives you information about something.

In this study, it refers to a small book of systematically planned, organized information with specific objectives for educating the caregivers of stroke patient which includes medication, diet, exercises, hygienic needs, prevention, complication and follow up of stroke patient.

• **Homecare** – According to oxford dictionary, it means care provided in an individual's home, normally of a personal nature such help with dressing, washing or toileting.

In this study, it refers to the way the caregivers of stroke patient will provide care at home with regard to medications, diet, exercises, hygienic needs, prevention, complication and follow up of stroke patient.

• **Caregivers** – According to oxford dictionary, it means a family member who regularly looks after a child or a sick, elderly, or disabled person.

In this study, it refers to the patient’s family members and relatives who attend to the immediate needs and take care of stroke patient at home after discharge.

**ASSUMPTION**

The study is based on the following assumptions:

• The caregivers may have some knowledge regarding home care of patients with stroke.
• Knowledge on stroke may influence the practice.
• Information booklet regarding home management of stroke may increase the knowledge of the caregivers.

**DELIMITATION**

The study is delimited to the caregivers who are taking care of the stroke patients.

**RESEARCH METHODOLOGY**

Research approach: Descriptive survey approach
Research design: Non-experimental design
Setting of the study: Guwahati Neurological Research Center (GNRC)
Sample and sampling technique: The sample consisted of caregivers of stroke patient. The technique used was non probability convenient sampling technique.
Sample size: 50 (fifty)
Tools and techniques: The tools used were semi structured questionnaire and inventory checklist. The technique include in this study was self report.

**VARIABLES**

**Dependent variables:** The dependent variables in this study are knowledge and practice regarding home care management of stroke patient among the caregivers.
Extraneous variables: In this study the extraneous variables are individual differences, time and level of knowledge.

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria: The inclusion criteria was caregivers of follow up patient diagnosed with stroke.

Exclusion criteria: The exclusion criteria was caregivers of stroke patient who are not available during study period.

ANALYSIS AND INTERPRETATION

Obtained data were analyzed, organized, categorized and presented under following sections:

Section I: Demographic data:-

• Age: Out of 50 participants, 17 (34%) participants belonged to 20-29 years of age group, 19 (38%) participants belonged to 30-39 years of age group, 13 (26%) participants belonged to 40-49 years of age group and 1 (2%) participants belonged to 50 years of age group and above.

• Gender: Majority 26 (52%) participants were male and 24 (48%) participants were female.

• Marital status: Majority 43 (86%) participants were married and 7 (14%) participants were unmarried.

• Educational status: Out of 50 participants, 41 (82%) participants were graduate, 6 (12%) participants were from secondary level, 2 (4%) participants were from primary level, 1 (2%) participant was post graduate and no one were illiterate.

• Previous experience of caring of stroke patient: Majority 43 (86%) participants had no experience of caring of stroke patient and 7 (14%) participants had experience of caring of stroke patient.

• Family income: Majority 42 (84%) participants had more than Rs.15,000, 5 (10%) participants had Rs.10000-15,000, 1 (2%) participants had Rs.5000-10,000 and 2 (4%) participants had less than Rs.5000.

• Attending training program on care of stroke patient: Majority 49 (98%) participants had not attended training program on care of stroke patient and 1 (2%) participant had attended training program on care of stroke patient.

• Source of health information: Out of 50 participants, 14 (28%) participants were got health related information from newspaper, 1 (2%) participant from radio, 4 (8%) participants from television, 2 (4%) participants from internet sources and 29 (58%) participants from medical personal.

• Family history of stroke: Majority 40 (80%) participants had no family history and 10 (20%) participants had family history of stroke.

Section II: Assessment of knowledge and practice of caregivers regarding home care management of stroke patient.

The overall mean knowledge score was found to be 18.50 and standard deviation 3.30. Out of 50 participants (caregivers), 10 participants (20%) had inadequate knowledge, 23 participants (46%) had moderately adequate knowledge and 17 participants (34%) had adequate knowledge.

The overall mean score of practice was 17.44 and standard deviation 1.89. Out of 50 participants (caregivers), 28 participants (56%) had inadequate knowledge and 22 participants (44%) had moderately adequate knowledge.
Section III: Correlation between knowledge and practice of caregivers regarding home care management of stroke patient.

The study reveals that the average scores of knowledge and practice was found to be 18.50±3.30 and 17.44±1.89 respectively. It shows that the average knowledge of the caregivers is greater than practice in percentage scale. Correlation half matrix was investigated by Pearson correlation between knowledge and practice and the value of ‘r’ between knowledge and practice was found to be 0.42. It showed positive correlation between knowledge and practice i.e, increase in knowledge would show substantial increase in practice.

Section IV: Association of knowledge and practice with the selected demographic variables.

There was no significant association between the knowledge and age, gender, marital status, educational status, occupation, previous experiences of care of patient, and family history of stroke at 0.05 level of significant.

There was no significant association between the practice and age, gender, marital status, educational status, occupation, previous experiences of care of patient, and family history of stroke at 0.05 level of significant.

CONCLUSION

This study revealed that out of fifty samples 23 (46%) caregivers had moderately adequate knowledge score and 22 (44%) had moderately adequate practice regarding home care management of stroke patient. The study also revealed that there was positive correlation between knowledge and practice of caregivers i.e, 0.42. There was no association between knowledge and practice of the caregivers with selected demographic variables.

Recommendation

• A similar study may be conducted on a large sample for better generalization of the findings.

• A study may be conducted to assess the knowledge and attitude of the caregivers regarding management of stroke.

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