A Study to assess the Effectiveness of Video Assisted Teaching (Vat) Regarding Knowledge on, Care of Stroke Patients among the Care Givers in a Selected Hospital, Bangalore.

Mr. Madan Mohan Gupta, Mr.Alan. V. Joseph, Ms. Daxina Verma, Ms. Shahin Usmani, Mr. Anwar Shahjad

Faculty of Nursing, Rama University, Uttar Pradesh, Kanpur

Email Id: dean.nursing@ramauniversity.ac.in

Abstract

Stroke is the leading cause of disability and the third leading cause of death worldwide, including India. The annual morbidity and mortality statistics in India show that there are increasing trends in mortality and morbidity .Social support helps patients with stroke to cope with the stress associated with the disease and treatment. Social support group has positive effect on nursing care and health. Thus nursing staff needs to consider the patients' social support systems, including home environment, family and partners. Hence a study to assess the effectiveness of Video Assisted Teaching (VAT) regarding knowledge on, care of stroke patients among the care givers in a selected hospital, Bangalore was done. Quantitative approach was adopted for the study. Pre- experimental one group post test design was used to conduct the study in, Spandana hospitals, Bangalore. Non probability purposive sampling technique was used to select 40 care givers. A pretest with structured knowledge questionnaire was administered, followed by administration of Video Assisted Teaching (VAT) to the samples. After conducting pretest and intervention at all 3 hospitals, posttest was conducted. The mean Post-test knowledge score [38.71± 9.99] was higher than mean Pre-test knowledge score [20.26 ± 8.08]. Thus VAT is effective in improving the knowledge of caregivers on care of stroke patients.

Keywords stroke, care givers, video assisted teaching.

Introduction

Stroke or Cerebrovascular accident is the most common neurological disorder in adults and is the third leading cause of death, after heart disease and cancer. Stroke is a medical emergency and cause permanent neurological damage and death if not promptly diagnosed and treated [1].

Stroke or Cerebrovascular accident (CVA) is the clinical designation for a rapidly developing loss of brain function due to an interruption in the blood supply to all or part of the brain. This phenomenon can be caused by thrombosis, embolism, or haemorrhage. Stroke and care of stroke patients have complex associated care need which share the common goal of maximizing the patients and their dependence in self care for a long as possible and supporting overall coping [2].

Current trends in managing stroke survivors which includes thrombolytic therapy, carotid endarterectomy, interdisciplinary management, rehabilitation, physical and occupational therapy, extended care facilities, continuity and co-ordination of patient care, post discharge monitoring, transition to community and community support [3]. Reduction in the risk factors for initial stroke especially hypertension and cardiac disorders will help in modification in life style changes [4].

Little research has been devoted toward understanding the complex and multilayered phenomenon of caregiving, beyond patient dependence and the emotional or psychological aspects of caregiving after stroke. Very few studies have investigated the interactions between patient characteristics, caregiver attributes, and support mechanisms, which eventually determine burden of care and quality of life (QOL) experienced by caregivers [5]. Furthermore, literature on longitudinal changes in caregiver perceptions of burden and QOL is conflicting and suggests that these outcomes and their determinants may vary between the acute and chronic phases of stroke. There is no study that has systematically investigated how patient, caregiver, and support determinants contribute to changing perceptions of caregiver burden and QOL at different time points after stroke in a large sample. This information is important because strategies directed at caregivers are likely to be more successful if they target modifiable determinants of the caregiving burden and address specific caregiver needs. Knowledge of these determinants would also help to identify caregivers most at risk of poor outcomes and deliver specific interventions at the appropriate time [5]

Objectives of the study

1. To assess the pre-test level of knowledge on care of stroke patients among the caregivers.
2. To find out the effectiveness of video assisted teaching on knowledge regarding care of stroke patients among caregivers.
3. To explore the association between post-test level of knowledge of caregivers on care of stroke patients with their selected demographic variables.

Hypotheses

H_1 There will be significant gain in mean post-test knowledge scores of caregivers exposed to video assisted teaching on care of stroke patients.

H_2 There will be significant association between post-test level of knowledge on care of stroke patient and selected demographic variables of caregivers.

Material and methods used

Research design: Pre- experimental one group post test design was used for the study.

Research approach: Quantitative approach was adopted for the present study.

Setting of the study: The study was conducted in rural area, Spandana hospitals, Bangalore.

Population: Population for the present study was care givers

Sampling and sample size: Purposive sampling technique was used to select 40 caregivers who fulfilled the sampling criteria for the present study.

Variables

Dependent variables: Level of knowledge on care of stroke patients

Independent variables: Video assisted teaching on care of stroke patients

Demographic variables: age, gender, educational status, occupation, family income, type of family, number of aged people in family, relationship with the patient and previous exposure to health education and source of health education on care of stroke patient

Sampling criteria
Inclusion criteria
Caregivers:
➢ who were willing to participate
➢ of the stroke patients admitted to the Spandana Hospital.

Exclusion Criteria
Caregivers who
➢ were not available at the time of data collection
➢ Would not understand and read both Kannada and English.

Development and description of tools used in the study
Structured knowledge questionnaire used for data collection. The tool consists of two sections

Section-A Demographic data consist of 10 items include age, gender, educational status, occupation, family income, type of family, number of aged people in family, relationship with the patient and previous exposure to health education and source of health education on care of stroke patient.

Section-B A structured knowledge questionnaire was prepared consisting of 46 items on knowledge about care of stroke patients.

Data collection procedure
The written permission letter was obtained from the authorities concerned. The purpose of the study was explained to the caregivers and informed consent was obtained from the respondents. A pre-test with structured knowledge questionnaire was administered, followed by administration of Video Assisted Teaching to the samples on 3 consecutive days. Samples from second hospital were given pre-test and intervention on the subsequent 3 days, followed by 4 days at third hospital. After conducting pre-test and intervention at all 3 hospitals, post-test was conducted for 3 days in the first hospital and subsequently at second and third hospital. The data collection process was terminated by thanking the respondents for their patience and co-operation.

Plan for data analysis
The data analysis was planned to include descriptive and inferential statistics.

Descriptive statistics

- To describe the demographic data and level of knowledge of the caregivers by frequency and percentage distribution.
- To compute mean and standard deviation for the pre and post-test knowledge among caregivers.

Inferential statistics
- Paired' test to assess the effectiveness VAT on assessment of knowledge of caregivers.
- Chi-square test to study the association between post-test knowledge and demographic variables of caregivers.

Data analysis and major findings
Section 1 Demographic data

➢ Majority of the caregivers 30% were in the age group of 36-45 and minority 7.5% were below 24 years of age.
➢ Majority of the caregivers 62.5% were females.
➢ Most of the 40 caregivers completed 32.5% past high school diploma.
➢ Nearly half 47.5% of the caregivers were unemployed and only 10% were government employees.
➢ Out of 40 caregivers, majority 57.5% of caregivers had monthly income less than <5000 per month and only 5% caregivers had a monthly income more than 15,000.
➢ Of the 40 caregivers, 62.5%were from nuclear family. Rests were from joint family. No one was from extended family.
➢ Majority of caregivers 40% were wife, 17.5% were husbands, 15% were daughters.
➢ Among 40 caregivers majority 30 (75%) caregivers have no previous exposure to health education regarding care of stroke patients.
➢ Maximum number 4 (40%) of the caregivers got information from television, radio and films, 3 (30%) caregivers have exposure to health education from magazines and newspaper.

Section 2 Description of knowledge scores

In pre-test, among 40 caregivers 67.55% had moderate knowledge with regard to care of stroke patients. Remaining 32.5% had inadequate knowledge. In Post-test 77.5% of caregivers exhibited adequate knowledge and 22.5% exhibited moderate knowledge and no subjects had inadequate knowledge regarding scare of stroke patients.

The mean Post-test knowledge score [38.71± 9.99] was higher than mean Pre-test knowledge score [20.26 ± 8.08]. From the data available, it is evident that, after the administration of video assisted teaching, there was an increase in knowledge score among the caregivers with regard to the care of stroke patients. As the obtained 't' value is more than table value at p< 0.05 level, the value is found to be statistically significant. Hence the video assisted teaching on care of stroke patient is highly effective.
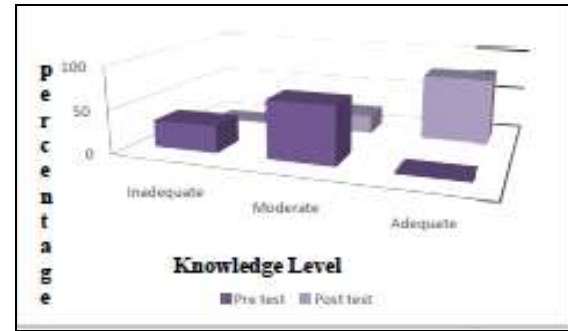

Figure. 1 Column diagram showing comparison of pre-test and post-test level of knowledge score

Section 3 Association of post-test knowledge scores with selected demographic variables.

There was no significant relationship between gain in knowledge and personal characteristics of the caregivers with chi-square calculation. Hence the hypothesis H_2 rejected

Table 1 Overall pre and post-test knowledge scores of caregivers

Aspects	Overall pre-test and post-test				Paired 't' Test
	Max. Score	Mean	Mean (%)	S D (%)	
Protest	46	20.26	44.04	8.08	
Post-test	46	38.71	84.15	9.99	20.54*
Enhancement	46	18.45	40.11	±1.91	

* Significant at 5% level,   (0.05, 39 DF) = 1.684

The mean posttest knowledge score of caregivers (38.71±9.99) was higher than that of the mean pretest knowledge score (20.26±8.08). The computed 't' test value was higher than the table value at 0.05 level of significance. Hence the hypothesis H_1 accepted.

Recommendations

➢ A replication of present study can be conducted with a large population and wider area for wider generalization.
➢ A study can be done to evaluate the planned teaching programme on care of stroke patients.
➢ A similar study can be replicated with a control group.

- ➤ A comprehensive study may be conducted to compare the knowledge and practice of caregivers regarding care of stroke patient.
- ➤ A follow up study can be conducted to evaluate the effectiveness of video Assisted Teaching on care of stroke patients among caregivers.
- ➤ A comparative study can be conducted to compare the findings of rural and urban caregivers regarding video assisted teaching on care of stroke patients.

Conclusion

The present study assessed the knowledge of caregivers on assessment of care of stroke patients among caregivers through Video Assisted Teaching and found that majority (67.55%) of the caregivers had moderate knowledge and (32.5%) had inadequate knowledge in the pretest. In posttest 77.5% of caregivers had adequate knowledge. It shows that there is a significant improvement in knowledge of caregivers after the VAT. Thus VAT is effective in improving the knowledge of caregivers on care of stroke patients. Hence the Video Assisted Teaching is instructionally effective, appropriate and feasible. It can be used in the hospital and community setting for the caregivers to improve their knowledge.

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