

A STUDY TO EVALUATE THE EFFECTIVENESS OF VIDEO TEACHING REGARDING KNOWLEDGE ON SELF CARE MANAGEMENT FOR PATIENTS WITH HEMIPLEGIA IN RMMCH

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Abstract: *Introduction: A stroke or Cerebro Vascular Accident (CVA) is a sudden loss of brain function resulting from disruption of the blood supply to a part of the brain. Patient may be disrupted in their Activities of Daily Living (ADL) and body functions corresponding to many areas of the brain such as motor, sensory, cranial nerve, and cognition. The most common motor dysfunction is hemiplegia. Hemiplegia refers to paralysis of one side of a body, either the right or left. Objectives: To evaluate the effectiveness of video teaching regarding knowledge on self care management for patients with hemiplegia Research Design And Method: Pre-experimental one group pre-test and post-test design. A total 40 patients were selected by using convenient sampling technique. Results: The effectiveness of STP was statistically tested by paired 't' value and results were found to be significant at ($P < 0.001$).*

Key Words: *Structured Teaching Programme, Self care management of patients with hemiplegia.*

1. INTRODUCTION:

A stroke is a condition in which an area of the brain is suddenly severely damaged or destroyed due to a disturbance or interruption to the blood flow in the brain.

Stroke is a rapidly developing clinical signs of local (at times focal) disturbance of cerebral function lasting more than 24 hours or leading to death, with no apparent cause other than that of vascular origin. - **WHO,2006**

A person with diabetes, high blood pressure, or high cholesterol is more at risk for a stroke. Other factors that increase the risk of a stroke include obesity, smoking, leading a sedentary lifestyle, and drinking alcohol. Stroke can cause a wide variety of neurologic deficits depending on the location of lesion, the size of the area of ischemia, and the amount of collateral blood flow.

Patient may be disrupted in their Activities of Daily Living (ADL) and body functions corresponding to many areas of the brain such as motor, sensory, cranial nerve, and cognition. The most common motor dysfunction is hemiplegia. Hemiplegia refers to paralysis of one side of a body, either the right or left. Cerebro vascular accident as the neglect epidemic in Indian perspective, In most developed countries cerebro vascular accident (CVA) or stroke is a common cause of death and disability.

WHO (2006) The annual incidence of stroke is 2 per 1000 population and prevalence rate is about 5 per 1000 population in developed countries.

P. Sethai, et al (2007) surveyed this the crude prevalence rate for stroke in the range of 200 per 100000 persons in India

2. OBJECTIVES:

- To assess the existing level of knowledge on self care management for patients with hemiplegia.
- To test the effectiveness of video teaching regarding knowledge on self care management for patients with hemiplegia.
- To associate pre-test level of knowledge on self care management with clinical variables (Level of consciousness (LOC), duration of hospitalized, physical mobility)

3. HYPOTHESIS:

H₁: The mean level of knowledge regarding self care management of patients with hemiplegia will be significantly higher in post-test than the pre-test.

4. METHODOLOGY:

RESEARCH APPROACH AND RESEARCH DESIGN

Quantitative research and A pre experimental, one group pre test-posttest design was adopted for his study.

O₁ X O₂

O₁ – Pre-test

X – Intervention (structured teaching programme)

O₂ – Post-test

SETTING

Physical and medical rehabilitation division of Rajah muthiah medical college and Hospital, Annamalai University, Chidambaram.

POPULATION

Patients with hemiplegia

SAMPLE

Patients with hemiplegia who are admitted in RMMCH.

SAMPLE SIZE

40 patients with hemiplegia

SAMPLING TECHNIQUE

Convenient sampling

TOOL DESCRIPTION

The instrument consists of the two sections

Section-I:

Part I– Demographic data

It includes the variables like name of the patient, age, educational status, occupation, religion, residence, income per month and received health information.

Part-II: clinical variable

It includes the variables like level of conscious, duration of hemiplegia, stand without support, degree of hand lifting, etc.

Part II: Structured interview questionnaire

It consists of 40 closed ended questionnaire to assess the knowledge regarding self care practices of patients with hemiplegia. Each correct response carries one mark. Wrong response carries zero mark.

4.1 RELIABILITY

Based on the pilot study results, cronbach's alpha formula was used to test the reliability. The reliability (r) value was 0.667, it confirmed the reliability of the tool.

4.2 DATA COLLECTION PROCEDURE

The data collection was done for the period of four weeks .The participants were selected by convenient sampling technique. Purpose of study was explained and obtained informed consent from each participant. Data collection was done using structured interview questionnaire.

Pre-test

The data collection was done between 8am to 1pm for 4 weeks. In a day an average of 5 to 8 samples were interviewed. The duration of interview varied from 10-15 minutes for each participant. Participants were made comfortable during the time of interview.

Implementation of video teaching programme

On the same day after pre-test assessment the VTP was given by investigator using video in tamil. Video took 20 minutes. In a day, VTP was given to 4 participants. The VTP contained information regarding self care practices on hemiplegia.

Post-test

After pre-test, the investigator informed the time of post-test interview schedule. After 5 days post-test was conducted using the same structured interview questionnaire.

5. MAJOR STUDY FINDINGS:

The major findings of the study

Level of knowledge in pre-test 38(95%) of them had inadequate knowledge. 2(5%) of them had moderately adequate knowledge, none of them had adequate knowledge. In post-test only 3(7.5%) of them had moderately adequate knowledge and 37(92.5%) of them had adequate knowledge. It shows that there was an improvement in the level of knowledge in post-test when compared with pre-test knowledge score. The effectiveness of STP was statistically tested by paired 't' value and results were found to be significant at (P<0.001).

There was a significant association between knowledge with distance of hand lifting of the subjects (P<0.054). The other clinical variables such age level of conscious, duration of illness, standing without support, daily living activities were not significant.

Table1: Distribution Of Level Of Knowledge Of Subjects Regarding Self Care Management For Patients With Hemiplegia In Pre-test

S.No	Aspects	Pre-test					
		Inadequate ($\leq 50\%$)		Moderate (51-75%)		Adequate ($> 75\%$)	
		No.	%	No.	%	No.	%
1	General aspects of hemiplegia	20	50	18	45	2	5
2	Activities of daily living						
	a. Mobility	37	92.5	3	7.5	-	-
	b. Nutrition	27	67.5	10	25	3	7.5
	c. Dressing and elimination	35	87.5	5	12.5	-	-

Distribution of knowledge of subjects. Regarding general aspects of hemiplegia in pretest. Twenty (50%) of them had inadequate knowledge, 2(5%) of them had adequate knowledge in activities of daily living, with regard to mobility 37(92.5%) of them had inadequate knowledge, 3(7.5%) of them had moderately adequate knowledge. In relation to nutrition 27(67.5%) of them had inadequate knowledge, 3(7.5%) of them had adequate knowledge and with regard to dressing and elimination 35(87.5%) of them had inadequate knowledge and 5(12.5%) of them had moderately adequate knowledge.

Table2: Distribution Of Level Of Knowledge Of Subjects Regarding Self Care Management For Patients With Hemiplegia In Post-test

S.No	Aspects	Post-test					
		Inadequate ($\leq 25\%$)		Moderate (26-50%)		Adequate (51-75%)	
		No.	%	No.	%	No.	%
1	General aspects of hemiplegia	1	2.5%	2	5%	37	92.5%
2	Activities of daily living a. Mobility	-	-	2	5%	38	95%
3	Nutrition	-	-	1	2.5%	39	97.5%
4	Dressing and elimination	-	-	2	5%	38	95%

The distribution of knowledge of subjects in post-test. Regarding general aspects 1(2.5%) had inadequate knowledge, 37(92.5%) had adequate knowledge, in activities of daily living, related to knowledge on mobility 38(95%) of them had adequate knowledge, with regard to knowledge on nutrition nearly 39(97.5%) of them had adequate score and regard to knowledge on dressing and elimination 38(95%) of them had adequate score.

Table3: Frequency Distribution Of Overall Knowledge Score Among The Subjects On Self Care Management Of Hemiplegia In Pretest And Posttest

S.No	Level of knowledge	Pre-test		Post-test	
		NO.	%	NO.	%
1	Inadequate knowledge	38	95%	-	-
2	Moderately adequate	2	5%	3	7.5%
3	Adequate knowledge	-	-	37	92.5%

Frequency distribution of overall knowledge score among the subjects on self care management of hemiplegia in pre-test and post-test. Level of knowledge in pre-test 38(95%) of them had inadequate knowledge. 2(5%) of them had moderately adequate knowledge, none of them had adequate knowledge. In post-test only 3(7.5%) of them had moderately adequate knowledge and 37(92.5%) of them had adequate knowledge. It shows that there was an improvement in the level of knowledge in post-test when compared with pre-test knowledge score.

6. DISCUSSION:

A total of 40 patients were selected for the study using convenient sampling method. Written consent of the samples were obtained and the pre-test was conducted by using structured interview questionnaires. Video teaching on self care management of patients with hemiplegia was given by the investigator. The post-test was conducted 7th day from the day of intervention by using same structured questionnaire.

Regarding general aspects of hemiplegia in pre-test. Twenty (50%) of them had inadequate knowledge, 2(5%) of them had adequate knowledge in activities of daily living, with regard to mobility 37(92.5%) of them had inadequate knowledge, 3(7.5%) of them had moderately adequate knowledge. In relation to nutrition 27(67.5%) of them had inadequate knowledge, 3(7.5%) of them had adequate knowledge and with regard to dressing and elimination 35(87.5%) of them had inadequate knowledge and 5(12.5%) of them had moderately adequate knowledge.

The mean knowledge score in pre-test was 7.025 with a standard deviation of 2.032. In post-test the mean score was 18.875 with the standard deviation of 1.713. The improvement was statistically tested by paired 't' test and the results were found to be significant ($P < 0.001$). This finding indicated structured teaching programme on self care management of hemiplegia was effective.

There was a significant association between knowledge with distance of hand lifting of the subjects ($P < 0.054$). The other clinical variables such age level of conscious, duration of illness, standing without support, daily living activities were not significant.

7. RECOMMENDATIONS:

In the light of the findings of the study the following recommendations are put forth.

- A similar study can be conducted in different hospitals
- A study can be conducted with a large sample.
- A similar studies can be undertaken to evaluate their practices .
- A comparative study may be conducted to find out the similarities and difference between knowledge and management of patients with hemiplegia in different hospitals.

8. CONCLUSION:

The present study assessed the knowledge on self care management among patients with hemiplegia and found that the majority of them had inadequate knowledge in pre-test. Video teaching was given and created awareness. Majority of the patients had adequate knowledge in post-test.

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