

“Evaluate the effectiveness of Information Booklet on knowledge regarding stroke rehabilitation among caregivers of stroke patients”

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Abstract: A quantitative experimental study to evaluate the effectiveness of information booklet on knowledge regarding stroke rehabilitation among caregivers of stroke patients. The sample size consisting of 60 caregivers of stroke patients in selected hospitals were selected by using purposive sampling technique. The tool comprised of structured self-administered questionnaire. The pre-test was conducted and the information booklet was administered. The post test was conducted after one week. The data obtained were analyzed by using descriptive and inferential statistics. The mean score of post-test knowledge 26.98 (84.31%) was apparently higher than the mean score of pre-test knowledge 11.9 (37.18%), suggesting that the information booklet was effective in increasing the knowledge of caregivers of stroke patient regarding stroke rehabilitation. The mean difference 15.08 between pre-test and post-test knowledge score of the caregivers of stroke patients were found to be significant.

Key words: Evaluate, Effectiveness, information booklet, care givers, stroke rehabilitation.

Date of Submission: 03-08-2019

Date of Acceptance: 19-08-2019

I. Introduction

Stroke is becoming an important cause of premature death and disability in low-income and middle-income countries like India, largely driven by demographic changes and enhanced by the increasing prevalence of the key modifiable risk factors. As a result developing countries are exposed to a double burden of both communicable and non-communicable diseases. The poor are increasingly affected by stroke, because of both the changing population exposures to risk factors and, most tragically, not being able to afford the high cost for stroke care. Majority of stroke survivors continue to live with disabilities, and the costs of on-going rehabilitation and long term-care are largely undertaken by family members, which impoverish their families. Strokes fall into three main categories: Transient ischemic attack (TIA), ischemic stroke, and hemorrhagic stroke.

The goal of stroke rehabilitation is to help for relearn skills which patient lost when a stroke affected part of brain. Stroke rehabilitation can help to regain independence and improve quality of life. The severity of stroke complications and each person's ability to recover vary widely. Researchers have found that people who participate in a focused stroke rehabilitation program perform better than most people who don't have stroke rehabilitation.

The primary goals of stroke management are to reduce brain injury and promote maximum patient recovery. Rapid detection and appropriate emergency medical care are essential for optimizing health outcomes. When available, patients are admitted to an acute stroke unit for treatment. These units specialize in providing medical and surgical care aimed at stabilizing the patient's medical status. Standardized assessments are also performed to aid in the development of an appropriate care plan.

Stroke rehabilitation should begin early while the survivor is still in the hospital. Nurses and other hospital personnel should work together to prevent secondary problems such as stiff joints, falls, bedsores, and second stroke etc. It is so important for family to be involved in the process of stroke rehabilitation. Family participation is a huge factor in the success of rehabilitation. If a family member has a positive attitude and knowledge it can make a huge difference. Family members need to understand what the stroke survivor has been through and how the disabilities will affect the person.

A study was conducted by Bhavya SV in the year 2017, at J.S.S. Hospital at Mysuru. “To assess the knowledge and attitude of caregivers regarding home care management of stroke patients.” The descriptive study approach was used. Non probability convenience sampling technique was adopted to select 60 care givers of stroke patients. The study revealed that majority 25(41.65%) care givers have average knowledge, 23(38.3%)

have good knowledge and 12(20%) care givers have poor knowledge. Majority 40(66.6%) care givers have unfavorable attitude and 20 (33.3%) have favorable attitude. Hence, study findings concluded that knowledge is the basis for development of positive attitude. There should be more provision to increase the awareness of caregivers of stroke patients regarding prevention, home care management and rehabilitation of stroke.

II. Research Elaboration

Statement of problem-

“Evaluate the effectiveness of information booklet on knowledge regarding stroke rehabilitation among caregivers of stroke patients in selected hospitals at Udaipur, Rajasthan.”

III. Objectives

1. To assess the knowledge regarding stroke rehabilitation among caregivers of stroke patients.
2. To evaluate the effectiveness of information booklet on knowledge regarding stroke rehabilitation among caregivers.
3. To find out the association between the pretest knowledge score with selected socio demographic variables.

IV. Hypothesis

H₁- There is a significant difference between pre-test and post-test level of knowledge regarding stroke rehabilitation among caregivers of stroke patients.

H₂- There is a significant association between pretest knowledge score with selected socio demographic variables.

V. Material And Methods

Population – Caregivers of stroke patients.

Sample - Caregivers of stroke patients in selected hospitals in Udaipur.

Sample size – 60 Caregivers of stroke patients.

Setting - Geetanjali Medical College & Hospital, Pacific Medical College and Hospital and GBH American hospital at Udaipur.

The conceptual framework for the study was developed on the bases of Imogene King’s goal attainment theory.

VI. Research design

The research design selected for the present study was a one group pre- test post- test research design.

PRE –TEST (Dependent variable)	TREATMENT (In dependent variable)	POST-TEST (Dependent variable)
O1	X	O1
Knowledge of caregivers of stroke patients	Information booklet regarding stroke rehabilitation	Knowledge of caregivers of stroke patients

Table 1: Pre Experimental One group pre-test and post-test research design.

The interpretation of the symbol are as below:

O1 = Assessment of knowledge by pre-test.

X = Information booklet on stroke rehabilitation

O2 = Assessment of knowledge by post-test.

ETHICAL CONSIDERATION

After obtaining permission from research committee of Geetanjali College of Nursing, prior permission was obtained from Geetanjali Medical College & Hospital, Pacific Medical College & hospital (Bedla), GBH American hospital, Udaipur and consent was taken from each participant who had participated in the study.

DESCRIPTION OF THE TOOL

The structured knowledge questionnaire consisted of two parts i.e. part – I & II.

Part - I: consists of 9 items on socio-demographic variables such as age in years, gender, relationship with patient, type of family, family income (monthly), marital status, occupational status, educational qualification, any previous knowledge.

Part – II: consists of 32 knowledge item. Each item was multiple choices in nature with 4 choices.

SCORING

The knowledge of caregivers of stroke patients regarding the outcomes of stroke rehabilitation was scored as follows, one mark for each answer and zero mark for incorrect answer. The maximum score was 32, to interpret interpretation of knowledge:

LEVEL

RANGE

Inadequate knowledge 0-50%

Moderate knowledge

50-75%

Adequate knowledge

75-100%

An answer key was prepared for scoring answer to the structured knowledge questionnaire.

DATA COLLECTION AND DATA ANALYSIS

The data was presented under the following section

Section – I: Description of socio-demographic variables of the respondents

Section – II: Distribution of respondent according pre-test and post-test level of knowledge score.

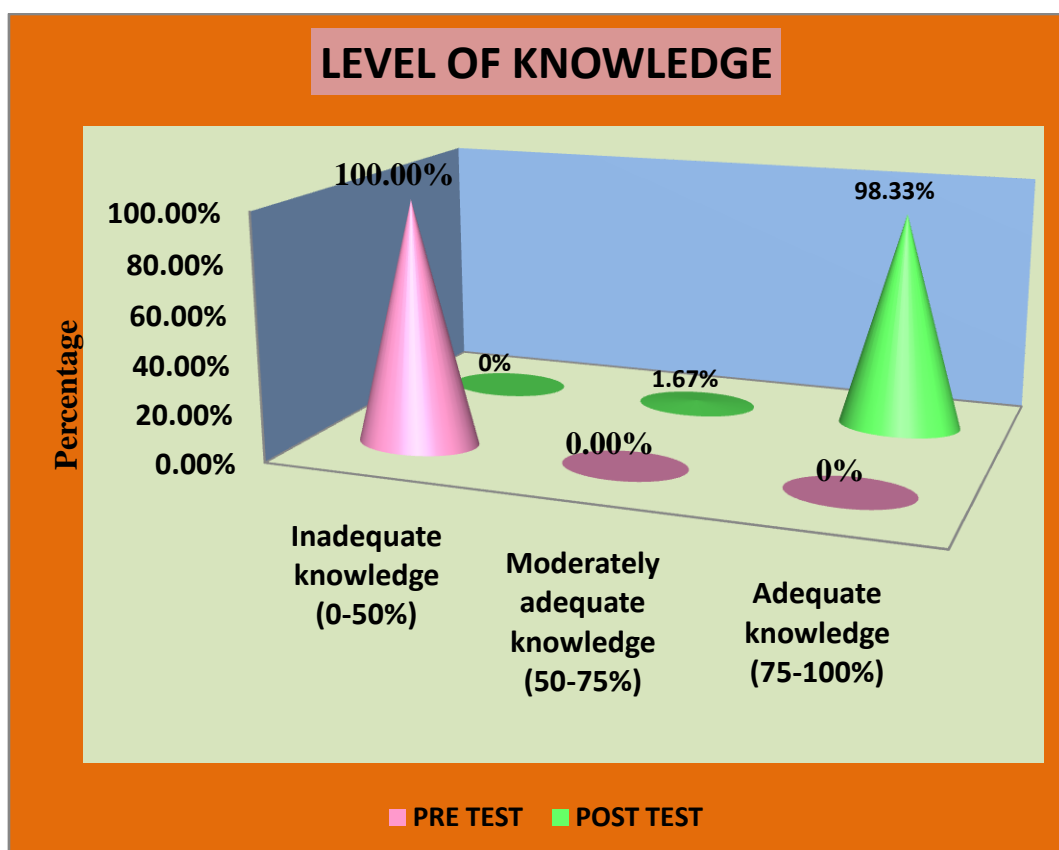
Section – III: Effectiveness of information booklet on knowledge of caregivers of stroke patients regarding stroke rehabilitation.

VII. Result

N=60

Level of knowledge	Score	Frequency		Percentage	
		pre test	post test	pre test	post test
Inadequate knowledge (0-50%)	0-16	60	0	100%	0%
Moderate knowledge (50-75%)	17-24	00	01	0%	1.67%
Adequate knowledge (75-100%)	25-32	00	59	0%	98.33%
TOTAL	32	60	60	100%	100%

Table 2: Frequency and Percentage distribution of respondents to their level of knowledge score



The result showed that, in the pre-test most of the respondents i.e. 100% respondents had inadequate knowledge, 0% respondents had moderately adequate knowledge and 0% respondents had adequate knowledge.

Where as in post-test most of the respondents i.e. 98.33% respondents had adequate knowledge and only 1.67% respondents had moderate knowledge and 0% had inadequate knowledge on stroke rehabilitation.

SECTION: III

Evaluate the effectiveness of information booklet on knowledge regarding stroke rehabilitation among caregivers of stroke patients”

The “z”value was computed to determined the effectiveness of information booklet on knowledge regarding stroke rehabilitation among caregivers of stroke patients.

Table :3Area wise pre- test and post -test knowledge score

Area	Maximum score	Pre Test			Post Test		
		Mean	Mean%	SD	Mean	Mean %	SD
INTRODUCTION OF BRAIN	02	1.15	57.5	0.40	1.73	86.67	0.44
DEFINITION, TYPES AND RISK FACTOR	06	2.28	38.05	0.78	5.13	85.55	0.59
SIGNS AND SYMPTOMS OF STROKE	02	0.93	46.67	0.52	1.62	80.83	0.52
TREATMENT AND PREVENTION OF STROKE	02	0.98	49.17	0.43	1.67	83.33	0.47
REHABILITATION OF STROKE (DIET & BASIC CARE)	10	3.2	64	1.00	8.4	26.25	0.69
EXERCISES	10	3.32	33.17	1.32	8.43	84.33	0.87

Table 3:The result showed that the mean, standard deviation and percentage of pre-test and post-test knowledge score on different areas of stroke rehabilitation.

In pre- test, mean percentage obtained by the respondents was 64% with SD 1.00 in aspect of rehabilitation of stroke, 57.5% with SD of 0.40 in the aspect of introduction of brain, 49.17 % with SD of 0.43 in the aspect of treatment and prevention of stroke, 46.67% with SD 0.52 in aspect of sing and symptoms of stroke, 38.05% with SD 0.78 in aspect of introduction of stroke, types and its risk factor and the minimum mean percent obtained by the respondents was 33.17% with SD 1.32 in the aspect of exercises. In post-test the mean percentage obtained by the respondents is 86.67% with SD of 0.44 in the aspect introduction of brain, 85.55% with SD 0.59in the aspect of introduction of stroke, types and its risk, 84.33% with SD 0.87 in aspect of exercises, 83.33% with SD 0.47 in aspect of treatment and prevention of stroke, 80.83% with SD 0.52 in aspect of sign and symptoms of stroke, 26.25% with SD 0.69 in aspect of rehabilitation of stroke (basic care and diet). Therefore, the result confirmed that the information booklet was highly effective in improving the knowledge of caregivers of stroke patients regarding stroke rehabilitation.

Table 4: Effectiveness of information booklet on knowledge regarding stroke rehabilitation among caregivers of stroke patients”

Knowledge assessment	Mean	Mean %	SD	Enhancement	Enhancement percentage (%)	df	Z	Inference (p=0.05)
Pretest	11.9	37.18	1.88	15.08	47.13	59	51.90	S
post test	26.98	84.31	1.19					

Table 4: The result showed that the mean post-test knowledge score was 26.98 (84.31%) was greater than the mean pre-test knowledge score 11.9 (37.18%). The above table also depicts that the enhancement in the knowledge of respondents was 15.08 (47.13%) supporting the post-test knowledge score were higher than the pretest knowledge score. The data further represent that the ‘z’ value of 51.90 was significantly higher than the table value 1.96 at 0.05 level of significance. Hence research hypothesis **H₁**was accepted. This indicates that information booklet was effective in improving the knowledge score of caregivers of stroke patients.

VIII. Conclusion

The study aimed at testing the effectiveness of information booklet on knowledge regarding stroke rehabilitation among caregivers of stroke patients. The result showed that the information booklet was highly effective. The implication of this study emphasize on inclusion of information booklet on stroke rehabilitation among caregivers of stroke patients as continue education program, so that the complications can be prevented.

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Chandrapal Singh. “Evaluate the Effectiveness of Information Booklet on Knowledge Regarding Stroke Rehabilitation among Caregivers Of Stroke Patients” .IOSR Journal of Nursing and Health Science (IOSR-JNHS), vol. 8, no.04 , 2019, pp. 06-10.