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"EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING BRAIN STROKE WITH CODE FAST AMONG NURSING OFFICERS IN SELECTED HOSPITAL OF KANPUR"

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ABSTRACT

Brain stroke, a leading cause of morbidity and mortality worldwide, necessitates immediate medical intervention. A stroke occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or bursts. Most of the stroke patients tends to develop loss of mobility, decubitus ulcer, deep vein thrombosis, recurrent strokes, seizures, depression, language disability, pneumonia and disability. Stroke symptoms by learning and sharing the F.A.S.T. Warning signs, use the letters face drooping, arm weakness, speech is slurred, time. The nursing workforce is essential in recognizing and responding to stroke symptoms.

The present study was conducted to assess effectiveness of planned teaching programme on knowledge regarding brain stroke with code FAST among nursing officers. 60 sample were collected by using non probability convenience sampling technique through self-structured knowledge questionnaire the data collected and analysed based on descriptive and inferential statistics. The result of the study showed that the post-test mean score (15.1±4.46) was higher than the pre-test mean (12.3±5.37) score of knowledge. The obtained "t" value is 16.64 with 59 degree of freedom was higher than the table value 2.00 with p value < 0.05 level of significance. This shows that there is significant difference between pre-test and post-test level of knowledge regarding brain stroke, hence the formulated research hypothesis H_1 was accepted. The test revealed that there was no significant association of knowledge with selected demographic variables such as Age in years, religion, education and health care facility. Chi square was computed there is significant association between post- test level of knowledge with demographic variable such as educational qualification (14.24), exposure to workshop or continuous nursing programme (10.17) at p>0.05 level of significant. The study was concluded that there was an effectiveness of planned teaching programme on knowledge regarding brain stroke with code FAST among nursing officer.

Key Words: Assess, Effectiveness, Planned teaching programme, Stroke, Code FAST, Nursing officers

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INTRODUCTION

Brain stroke is also known as cerebrovascular accident, is a critical medical condition characterized by sudden loss of brain function due to an interruption in blood supply. It is a leading cause of morbidity and mortality worldwide, significantly impacting individuals, quality of life and imposing substantial economic burdens on healthcare systems.[1] Major risk factors of stroke are hypertension, diabetes mellitus, dyslipidemia, obesity and body fat distribution, physical inactivity, smoking, alcohol, tobacco use. It includes a variety of disorders that influence blood flow to the brain that results various of neurologic deficits.[2] Worldwide survey shows that, in every year total 20 million people suffers from stroke. In 20 million people 10 million survive, 5 million severely disabled whomever required extensive medical and rehabilitative care and 5 million deaths. Hypertension people are mostly suffered from brain stroke that contributes to more than 12.7 million strokes.[3]

Stroke is a significant global health problem and a major cause of mortality and morbidity in developed countries and increasingly in low-middle income countries. Seventy percent of strokes occur in low middle income, and the subsequent disease burden is greater than that of high-income countries. Life expectancy in India has recently increased to over 60 years of age, leading to an increase in age-related, non-communicable diseases including stroke; making stroke India's fourth leading cause of death and fifth leading cause of disability.[4] The code FAST is used to recognize the signs of the stroke in which F denotes Facial drooping, A denotes Arm weakness that includes muscular weakness, numbness and paralysis on one or both side of the body, S denotes Speech difficulties, T denotes Time.

Facial weakness can indicate a stroke. One should ask the person to smile and then observe their face. If the person is having a stroke one side of the face may be droopy. A stroke can cause muscle weakness, numbness and paralysis on one or both side of the body. For that one should ask the person to raise both of their arms and look for signs of arm weakness. They may be unable to lift one arm or one arm may be drift downward. The person may also experience weakness in their legs. That should result poor coordination. Stroke can also affect speech and understanding. One should ask the person a simple question or ask them to repeat a short phrase. Then one should notice difficulty while speaking or slurred speech. That can indicate a stroke. If a person observes any of the above symptoms, then they should seek immediate treatment. [5]

PROBLEM STATEMENT

"A study to assess the effectiveness of planned teaching programme on knowledge regarding brain stroke with code FAST among nursing officers in selected hospitals of Kanpur, Uttar Pradesh."

OBJECTIVES OF THE STUDY

1. To assess the level of knowledge regarding brain stroke with code FAST among nursing officers.
2. To evaluate the effectiveness of the planned teaching programme on knowledge regarding brain stroke with code FAST among nursing officers.
3. To find out the association between the post-test knowledge score with their selected demographic variables.

HYPOTHESIS:

Positive Hypothesis-

H_1- There is a significant difference between pre-test and post-test level of knowledge regarding brain stroke with code FAST among nursing officers.

H_2- There is a significant association between post-test level of knowledge score with their selected demographic variables.

Null Hypothesis

$H0_1$- There is no significant difference between pre-test and post-test level of knowledge regarding brain stroke with code FAST among nursing officers.

$H0_2$- There is no significant association between post-test level of knowledge with their selected demographic variables.

MATERIALS AND METHODS

RESEARCH APPROACH:

The research approach for the present study is quantitative evaluative research approach.

RESEARCH DESIGN:

A Quasi Experimental One Group Pre-Test Post-Test Research Design is used for present study.

SETTING OF THE STUDY:

The present study was conducted in emergency, casualty & neurology wards, neurology ICU department of Rama Hospital & Research Centre in Kanpur, U. P.

POPULATION:

In the present study the population comprises of all nursing officers in Kanpur, U.P.

TARGET POPULATION:

In the present study target population is comprises of nursing officers in selected hospitals in Kanpur and who are available at the time for data collection.

ACCESSIBLE POPULATION:

In the present study accessible population is nursing officers who are working at Rama Hospital& Research Centre in Kanpur Uttar Pradesh.

SAMPLE:

In present study, the sample is nursing officers working in Rama Hospital & Research Centre, Mandhana, Kanpur, who are met inclusion criteria.

SAMPLE SIZE:

The sample size of the present study is 60 nursing officers.

SAMPLING TECHNIQUE:

The sampling technique selected for the study is Non-Probability Convenience sampling technique.

INCLUSION CRITERIA:

- The study includes the nursing officers who are working in emergency, casualty, neurology wards & neurology ICU department.
- The study includes nursing officers who are available at the time of data collection.

EXCLUSION CRITERIA:

- Nursing officers who are not willing to participate in the study.
- Nursing officers who undergone certification courses & such type of training programs.
- Nursing officers who are not registered to state nursing council.

DESCRIPTION OF TOOL:

In present study following tools are used for collecting data which consisted of two sections.

SECTION A:

Socio-demographic data are Age, Gender, Educational Status, Income, year of experience, area

of working, marital status, previous knowledge & source of information.

SECTION B:
In consists of self -structured knowledge questionnaire on the knowledge regarding brain stroke with code FAST. It comprises of 30 multiple choice questions. Each questions carries four options; one correct answer was given a score of "1" & "0" for wrong answer. Thus, a total no. of 30 marks were allotted for 30 items.

INTERPRETATION OF TOOL-

Table 1: Description of Score & Percentage of Knowledge.

GRADE	KNOWLEDGE SCORE	PERCENTAGE
INADEQUATE	1-10	1-33 %
MODERATE	11-20	34-66 %
ADEQUATE	21-30	67-100 %

RESULTS AND FINDING
SECTION-A (SOCIO DEMOGREAPHIC VARIABLE)

- Majority 22(36%) belongs to the age group 27-29 years, 16 (27%) the age group of≥30 Years, 15(25%) the age group of 24-26 years and 7(12%) in the age group of ≤23 Year.
- Majority 49 (81%) are female and 11 (19%) are males.
- Majority 24 (40%) belongs to post basic BSc Nursing, 13 (22%) MSc Nursing, 12 (20%) GNM and 11 (18%) B.Sc Nursing.
- According to monthly income, majority 30 (50%) belongs to 20001 to 30000, 15 (25%) 30001 to 40000, 12 (20%) ≤ 20000 and 3(5%) ≥40001.
- According to experienced majority 35 (58%) belongs to ≤3 years, 17 (28%) 4 to 6 years, 6 (10%) 7 to 9 years and 2 (4%) ≥10 years.
- According to area of working majority 24 (40%) works in Neurology ICU, 18(30%) works in neurology ward, 10(17%) works in casualty and 8(13%) works in Emergency ward.
- Majority 30 (50%) are unmarried, 15 (25%) are married, 15 (25%) are divorced and no one is widow.
- Majority 34 (56.67%) are having no exposure to workshop , 26 (43.33%) are having exposure to workshop or continuous nursing education programme on brain stroke.

SECTION - B
Frequency and percentage wise distribution of nursing officers according to their pre-test and post-test level of knowledge regarding brain stroke with code FAST.

Table No:1. Frequency and percentage wise distribution of nursing officers according to their pre-test knowledge level regarding brain stroke with code FAST. n=60.

S. no	Pre-test Knowledge	Frequency	Percentage
1	Inadequate Knowledge (1-10)	15	25%
2	Moderate Knowledge (11-20)	42	70%
3	Adequate Knowledge (21-30)	3	5%

In that majority 42 (70%) had moderate knowledge, 15 (25%) had inadequate knowledge, 3 (5%) were having adequate knowledge.

Table No:2. Frequency and percentage wise distribution of nursing officers according to their post-test knowledge level regarding brain stroke with code FAST.

n = 60

S. no	Post-test Knowledge	Frequency	Percentage
1	Inadequate Knowledge (1-10)	5	8%
2	Moderate Knowledge (11-20)	43	72%
3	Adequate Knowledge (21-30)	12	20%

In that majority 43(72%) had moderate knowledge, 12(20%) had adequate knowledge, 5(8%) had inadequate knowledge.

SECTION-C

Table No:3. Mean and standard deviation of pre and post-test level of knowledge among nursing officers.

n= 60

S. no	Variables	Mean	SD	Calculated 't' value
1	**Pre test**	12.3	5.37	16.64 Df=59 Table t value= 2.00
2	**Post test**	15.1	4.46	

In the above table shows that post- test mean value (15.1±4.46) of knowledge regarding brain stroke with code FAST was higher than the knowledge of pre-test mean value (12.3±5.37). The obtained "t" value was 16.64, which is greater than the table "t" value 2.00. It shows that there was significant difference between pre-test and post-test knowledge regarding brain stroke with code FAST. Hence H_1 that is significant difference between pre-test & post-test level of knowledge has been accepted.

SECTION-D

Table No:4. Association between the levels of post-test knowledge score with selected demographic variables of nursing officers.

Sl. No	Demographic Variables	Inadequate knowledge	Moderately adequate knowledge	Adequate knowledge	Chi square Value	Inference
1	**Age**					
	≤23 year	2	4	1	x^2= 6.67	
	24 – 26 years	1	9	5	df= 6	NS
	27-29 years	1	17	4	p = 0.05	
	≥30 year	1	13	2	T= 12.592	
2	**Gender**				x^2= 4.66	
	Male	2	5	4	df= 2	NS
	Female	3	38	8	p = 0.05 T= 5.991	
3	**Educational qualification**					
	G.N.M	2	9	1	x^2= 14.24	
	B.Sc. Nursing	1	6	4	df=c 6	S
	Post basic B.Sc	1	22	1	p = 0.05	
	M.Sc. Nursing	1	6	6	T= 12.592	
4	**Monthly Income**					
	≤20000	2	7	3	x^2= 6.11	
	20001 to 30000	1	23	6	df= 6	NS
	30001 to 40000	1	12	2	p = 0.05	
	≥40001	1	1	1	T=12.592	
5	**Years of experience**					
	≤ 3 years	4	28	3	x^2= 7.26	
	4 to 6 years	1	11	5	df= 6	NS
	7 to 9 years	0	3	3	p = 0.05	

	≥10 years	0	1	1	T=12.592	
6	**Area of working**					
	Neurology ward	1	14	3	x^2= 3.66	
	Neurology ICU	1	17	6	df= 6	NS
	Casualty	2	7	1	p = 0.05	
	Emergency ward	1	5	2	T= 12.592	
7	**Marital status**					
	Married	2	10	3	x^2= 3.22	
	Unmarried	2	20	8	df= 6	NS
	Divorced	1	13	1	p = 0.05	
	Widow	0	0	0	T=12.592	
8	**Exposure to workshop or CNE programme on brain stroke**					
	Yes	1	15	10	x^2=10.17	S
	No	4	28	2	df= 2 p = 0.05 T= 5.991	

NS = Non-significant
S = Significant
DF = Degree of freedom

The above Table shows that there was significant association between the post-test levels of knowledge with demographic variables of nursing officers such as educational qualification (14.24),exposure to workshop or CNE programme (10.17) at p=0.05 level of significant. Hence H_2that there is a significant association between post-test level of knowledge with their selected demographic variables of nursing officer has been accepted.

SUMMARY

Study analysis findings shows that, among 60 nursing officers, in pre-test 42 (70%) had moderate knowledge, 15 (25%) had inadequate knowledge, 3 (5%) were having adequate knowledge. In post-test, 43(72%) had moderate knowledge, 12(20%) had adequate knowledge, 5(8%) had inadequate knowledge. The mean post-test knowledge score (15.1±4.46) was greater than the mean pre-test knowledge score (12.3±5.37). The obtained calculated "t" value was 16.64, which is greater than the table "t" value 2.00. The study conducted that level of knowledge was improved after planned teaching program. Thus it is an effective strategy which can help in improving the level of knowledge among nursing officers.

CONCLUSION

Planned teaching program significantly increase the knowledge on brain stroke with code FAST among nursing officers. So in future can conduct study an effective planned teaching program to improve the knowledge of nursing officers.

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