Research Paper

A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Awareness of Stroke Among Hypertensive Patients Residing at Selected Urban Area of Vijayapur

Yogesh Sonnagi[1], Jayashree Pujari[2], Shilpa Hotakar[3]

[1]Department of Community Health Nursing, [2]Department of Community Health Nursing, [3]Dept of Psychiatric Nursing; Sri Siddhartha College of Nursing Tumkur, Shree B M Patil Institute of Nursing Sciences, Vijayapur, Sri Siddhartha College of Nursing, Tumkur, RGUHS University, Tumkur, India

Corresponding Author: Yogesh Sonnagi

ABSTRACT

Problem statement: The study on "A study to assess the effectiveness of planned teaching program on knowledge regarding awareness of stroke among hypertensive patients residing at selected urban areas of Vijayapur"

Objectives of the study: To assess the self reported health seeking practices among hypertensive patients, knowledge about Awareness of Stroke among hypertensive patients, to plan and implement planned teaching program on awareness of stroke among hypertensive patients residing at selected urban areas of Vijayapur, to evaluate the effectiveness of planned teaching program on knowledge regarding Awareness of stroke among hypertensive patients residing at selected urban areas of Vijayapur, to determine the association between pretest knowledge scores of hypertensive patients with their selected demographical variables.

Study approach: Descriptive approach was adopted for this study.

Design: pre experimental one group pre-test post-test design was adopted for this study.

Settings: The study was conducted at urban areas of PHC Ganesh Nagar.

Sampling Method: 80 samples, non probability purposive sampling technique was used to select the samples.

Method of data collection procedure: Data was collected from the hypertensive patients to assess the level knowledge and awareness of stroke. The collected were tabulated and analyzed by descriptive and inferential statistic.

Results: The result showed that, there was a significant difference between pre-test and posttest level knowledge regarding awareness of stroke among hypertensive patients. The obtain t-value (7.54) was greater than the table value at 0.05 level of significant.

Conclusion: This study concludes that planned teaching module was effective in improving the level of knowledge regarding awareness of stroke among hypertensive patients.

Keywords: [Knowledge, awareness of stroke, Health seeking practice, stroke, planned teaching programme]

INTRODUCTION

Stroke is the third common cause of death in the world after heart diseases and cancers. Stroke or cerebro-vascular accident is the rapid loss of brain. This can be due to ischemia caused by thrombosis, arterial embolism or a haemorrhage. Globally stroke is the third commonest cause of mortality and the fourth leading cause of disease burden in 2005, stroke accounted for nearly 5.7 million deaths.

In 2018, 1 in every 6 deaths from cardio vascular disease was due to stroke. Someone in the United States has a stroke every 40 seconds every 4 minutes someone dies of stroke. Every year, more than

795.000 people in the United States have stroke. About 610000 of these are first or new strokes. About 87% of all strokes are ischemic strokes, in which blood flow to the brain is blocked. stroke is a leading cause of serious long-term disability. Stroke reduces mobility in more than half of stroke survivors age 65 and over14 Hypertension is described as one of the most common cause of stroke and the incidence of stroke among hypertensive patients is increasing in developing countries. Unlike that of developed countries, ischemic stroke, this is mostly associated with poor control of hypertension. The brain and every organ in our body depend on constant supply of energy to function normally. Fuel for the brain is carried in the blood. The brain requires more fuel than other organ in the body. The two main energy sources that the brain uses are sugar and oxygen. When the part of the brain does not receive an adequate supply of blood or when the blood unable to carry oxygen or sugar that portion of the brain becomes abnormal and it unable to perform normal functions.[1]

Stroke is termed as rapidly developing loss of brain functions due to ischemia of the brain cells caused by haemorrhage or clot. Risk factors for stroke included advanced age, hypertension, stroke or transient ischemic attack, diabetes high cholesterol, cigarette smoking and arterial fibrillation. Pregnancy, menopause childbirth hormone replacement therapies are the known risk factors in females.

The clinical features of stroke are
- Motor paralysis,
- Visual disturbance
- Speaking and understanding difficulties
- Confusion
- Slurred speech
- Numbness of the face arm or legs
- Problems in seeking one or both eyes
- Headache
- Trouble walking
- May lead to death

Worldwide 15 million people are suffering from a stroke. Out of 15 million people 5 million attain optimal recovery, 5 million people are going to attain death and remaining people are suffering from long lasting disabilities with place a Burden on families and communities (world health organization 2004). Stoke prevention is based on our healthy life style. Health life style includes managing blood pressure, early identification of arterial fibrillation, non smoking, cholesterol lowering, low intake of sodium chloride and fat intake. Hippocrates (460-370 BC) was first to describe the phenomenon of sudden paralysis that is often associated with the ischemia. World health organization stroke as a neurological deficit of cerebro-vascular cause that persists behind 24 hours or is interrupted by death within 24 hours of stroke[2]

LITERATURE REVIEW
A cross sectional study was conducted on awareness of stroke and health seeking practices among hypertensive patients in a tertiary care hospitals of Islamabad. The objectives of study are to assess the awareness of stroke and to determine health seeking practices among hypertensive patients. Standardized questionnaires are used regarding awareness and practices about stroke among hypertensive patients. The sample size was calculated as 384. The results of the study are out of 384 patients evaluated, 80.5% had heard about stroke.71.6% knew someone with stroke, and 76% identified the brain as the organ affected. Sudden onset numbness of limb 66.9% and hypertension 93.5% were common warning symptom and risk factors identified. 87.5% would take stroke patients to a hospital. The researcher concluded that majority of hypertensive patients were aware of stroke but the awareness of risk factors and warning signs was poor. There is a need to increase knowledge regarding risk factors, which will be benefit, the community at large[3].

A cross sectional study was conducted on knowledge and practices related to stroke prevention among hypertensive and diabetic patients attending specialist hospital, sokoto,

Nigeria. The objectives of the study are to determine the knowledge and practices related to stroke prevention among hypertensive and diabetic patients among 248 patients attending hypertension and diabetic clinics of specialist hospitals sokoto Nigeria. A semi structured questionnaires was used to collect data. Study results shows that the mean age of respondents was 48.21± 15.07 years and they were predominantly females (65.7%). The respondents had good knowledge of stroke (70.3%), organs or parts of body affected by stroke (89.1%), signs or symptoms of stroke 87%, stroke risk factors 86.6% and stroke prevention (90.8%). Stroke prevention practices were sub optimal and significantly associated. The researcher concludes that there is need for all stakeholders to focus on both patients' educations and empowerment in halting the rising burden of stroke across the globe[6].

A study was conducted perception of stroke and associated health care seeking behaviour in northern Tanzania. The study objectives were to assess knowledge of stroke symptoms, perception of self risk, and health-care seeking behaviour for stroke. The study revealed that out of 184 (27.4%) knew a conventional stroke symptom and 51 (7.6%) thought they had a chance of having a stroke. Females were less likely to perceive themselves to be at risk than males (OR 0.49%, 95% CI 0.28-0.89,p=0.014) of respondents,558 (88.3%) stated they would present to a hospital for stroke like symptoms. Preference for a hospital was not associated with knowledge with a higher socioeconomic status score (p<0.001). The researcher concludes that knowledge of stroke symptoms and perception of self risk are low in northern Tanzania. But most residents would present to a hospital for stroke like symptoms[7].

A cross sectional study was conducted on hypertensive patient's knowledge of risk factors and warning signs of stroke at Felege Hiwot Referral Hospital Northwest Ethiopia. The study samples were 278 patients attending follow up on hypertension. The study results shows that knowledge regarding stroke risk factors and warning signs was significantly low among hypertensive patients, in which majority of participants were unable to identify any risk factors and warning signs of stroke. Being educated young and urban residence and having sufficient income were significant predictors of good knowledge towards stroke risk factors and warning signs of stroke. The researcher concludes that most of hypertensive patients have extremely limited knowledge of stroke and risk factors, are not familiar with its warning signs and are not aware that stroke is a disease of the blood vessels in the brain[8]

A quasi study was conducted on the effect of health education on Taiwanese hypertensive patient's knowledge and cognition of stroke.103 hypertensive patients are used. The samples were recruited from a cardiologist's outpatient office at a medical center in Kaohsiung city, southern Taiwan. Half of the patients (experimental group n=52) received health education whereas the others received only conventional general outpatient care (control group n=51) all patients underwent a pretest followed by post tests at 4 and 8 weeks after the interventions. A stroke knowledge scale and stroke cognition scale were used for data collection. The study results show that the experimental group scored significantly higher than the control group in level of knowledge and cognition of stroke. The researcher concludes that further studies with a longer follow up (6 month or 1 year) are needed to evaluate the long term effect of health education on stroke knowledge and cognition among patients with hypertension[9].

MATERIALS & METHODS

Study design: pre experimental design, one group pre test post test research design

Setting of the study: The setting of this study area is urban areas of Vijayapur.

Sample size: 80

Sampling Technique: The purposive sampling technique used for this study. Sampling Criteria

INCLUSION CRITERIA
- Those are willing to participate
- Can understand either English or Kannada language
- Hypertensive patients residing at selected urban areas of Vijayapur

EXCLUSION CRITERIA
- Below 20 years of age group
- Mentally and critically ill patients.

STATISTICAL ANALYSIS [As Applicable]

RESULT

SI.NO	SAMPLE CHARACTERISTICS	FREQUENCY	PERCENTAGE
1	**AGE IN YEARS**		
	a) 27-47	36	45%
	b) 47-67	35	43.75%
	c) 67-87	09	11.25%
2	**GENDER**		
	a) Male	56	70%
	b) Female	24	30%
	c) Transgender	00	00%
3	**RELIGION**		
	a) Hindu	51	63.75%
	b) Muslim	22	27.5%
	c) Christian	07	8.75%
	d) Others	00	00%
4	**TYPE OF FAMILY**		
	a) Nuclear family	22	27.5%
	b) Joint family	58	72.5%
	c) Extended family	00	00%
5	**LEVEL OF EDUCATION**		
	a) Primary	24	30%
	b) High school	16	20%
	c) College	07	8.75%
	d) University	16	20%
	e) No formal education	17	21.25%
6	**MARITAL STATUS**		
	a) Single	04	05%
	b) Married	73	91.25%
	c) Divorced-male	03	3.75%
	d) Divorced-female	00	00%
7	**DIETARY PATTERN**		
	a) Vegetarian diet	31	38.75%
	b) Mixed Diet	49	61.25%
8	**OCCUPATION**		
	a) Professional	16	20%
	b) Skilled worker	11	13.75%
	c) Unskilled worker	33	41.25%
	d) Unemployed	20	25%
9	**FAMILY INCOME**		
	a) >10000	00	00%
	b) 10001-15000	37	46.25%
	c) 150001-20000	33	41.25%
	d) 20001-25000	09	11.25%
	e) >25000	01	1.25%
10	**DO YOU HAVE HABIT OF SMOKING?**		
	a) Yes	32	40%
	b) No	48	60%
	If yes, how many cigarettes per day?		
	a) 2	16	50%
	b) 4	08	25%
	c) 6	08	25%
11	**DO YOU TAKE ANY HYPERTENSIVE MEDICATIONS?**		
	a. No	24	30%
	b. Yes	56	70%
	If yes since how many years?		

	a. 10years	01	1.78%
	b. 6years	08	14.28%
	c. 5 years	07	12.5%
	d. 4years	01	1.78%
	e. 3years	10	17.8%
	f. 2years	23	41.07%
	g. 1 year	06	10.71%
12	**DO YOU HAVE A HABIT OF CONSUMING ALCOHOL?**		
	a) Yes	40	50%
	b) No	40	50%
	If yes, how many times in a week?		
	a) 10 times	04	10%
	b) 8 times	04	10%
	c) 4 times	01	2.5%
	d) 3 times	11	27.5%
	e) 2 times	20	50%

SELF REPORTED HEALTH SEEKING PRACTICE AMONG HYPERTENSIVE PATIENTS N=80

Level	Scores	Frequency	Percentage
Poor	0-30	0	0%
Average	30-60	68	85%
Good	>60	12	15%

Table :1 Shows that distribution of hypertensive patients according to their selfreported health seeking practice among hypertensive patients. N=80

Fig :1 Shows that distribution of hypertensive patients according to their selfreported health seeking practice among hypertensive patients.
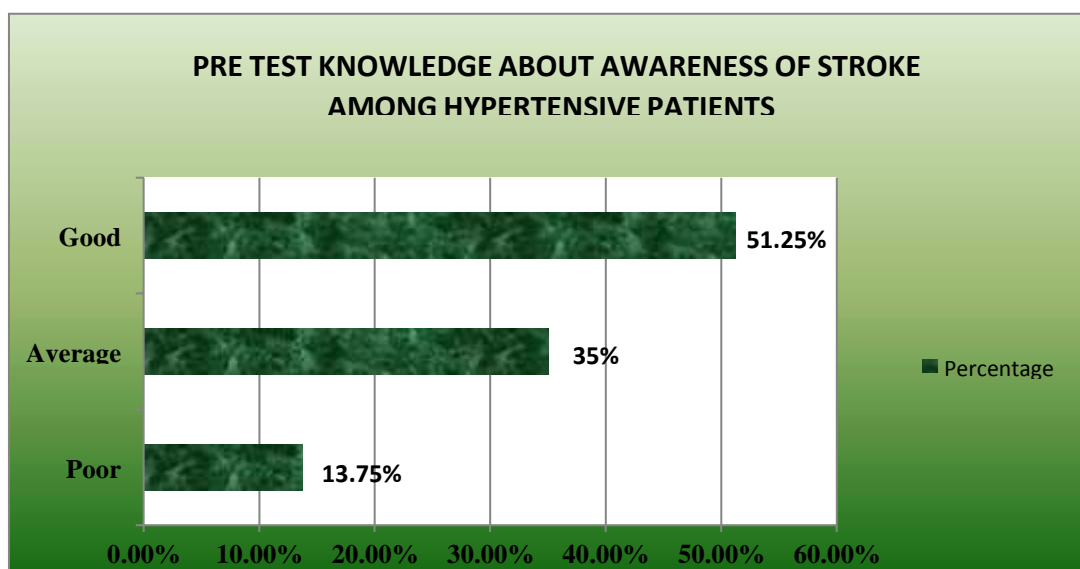
The above table and diagram reveals that the distribution of hypertensive patients according to their self reported health seeking practice here,85% patients were average and 15% patients having good practice.

PRE TEST KNOWLEDGE SCORES OF HYPERTENSIVE PATIENTS

Level	Scores	Frequency	Percentage
Poor	0-9	11	13.75%
Average	9-18	28	35%
Good	18-27	41	51.25

Table :2 Shows pre test knowledge about awareness of stroke amonghypertensive patients N=80
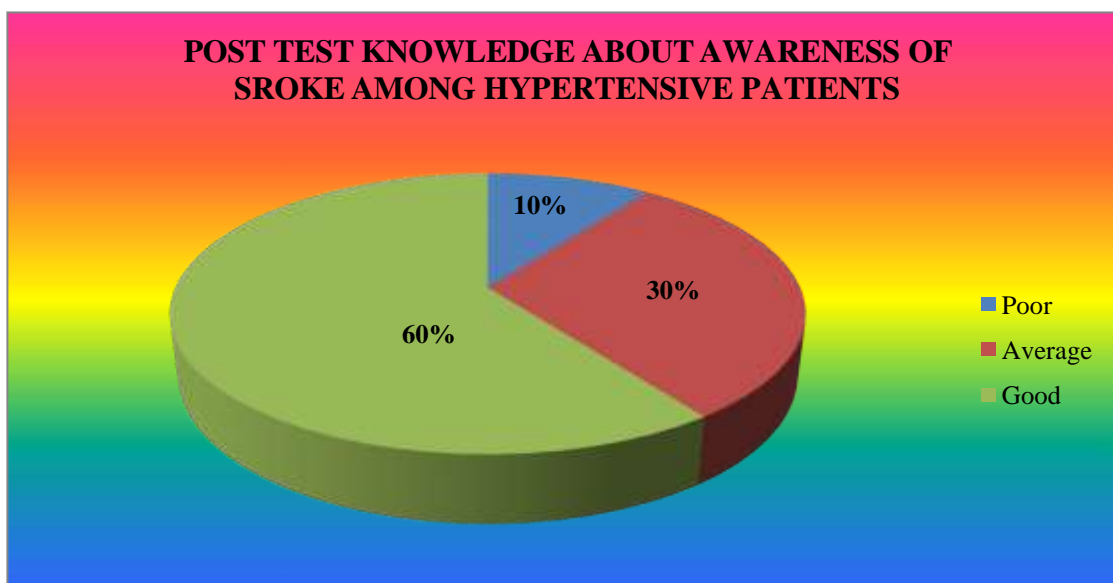
Fig :2 Shows pre test knowledge about awareness of stroke among hypertensivepatients

The above table and diagram reveals that the distributions of hypertensive patients according to pre tests knowledge about awareness of stroke among hypertensive patients.51.25% are having good knowledge.

POST TESR KNOWLEDGE SCORES OF HYPERTENSIVE PATIENTS

Level	Scores	Frequency	Percentage
Poor	0-9	08	10%
Average	9-18	24	30%
Good	18-27	48	60%

Table 3: Shows post test knowledge about awareness of stroke amonghypertensive patients N=80

Fig 3: Shows post test knowledge about awareness of stroke amonghypertensive patients

The above table and diagram reveals that the distribution of hypertensive patients according to post tests knowledge about awareness of stroke among hypertensive patients. Here 60% are having good knowledge.30% of patients are having average knowledge and 10% students are having poor knowledge.

MEAN COMPARISION OF PRETEST AND POST TEST KNOWLEDGE SCORES

Sr No	Level of knowledge	Mean	SD	t -value	Df	Tablevalue	P value	Remark
1	Pretest							
2	Post test	1.66	2.03	7.54	79	1.664	0.0001	Significant

ASSOCIATION BETWEEN PRETEST KNOWLEDGE SCORES OF HYPERTENSIVE PATIENTS WITH SELECTED DEMOGRAPHICAL VARIABLES

Sl No	Demographical Variable	Df	Chi square	Table value	P value	Significance	Remarks
1	Age In years	2	69.44	5.99	0.00001	S	Research hypothesis is accepted and Nullhypothesis is rejected
2	Gender	1	1.09	3.84	0.296	NS	Null hypothesis is accepted and researchhypothesis is rejected
3	Religion	3	1.33	7.81	0.722	NS	Null hypothesis is accepted and research hypothesis is rejected
4	Type of family	2	3.14	5.99	0.2080	NS	Null hypothesis is accepted and research hypothesis is rejected
5	Level of education	4	9.57	9.48	0.04	S	Research hypothesis is accepted and Null hypothesis is rejected
6	Marital status	3	3.22	7.81	0.358	NS	Null hypothesis is accepted and research hypothesis is rejected
7	Dietary pattern	1	2.5	3.84	0.113	NS	Null hypothesis is accepted and researchhypothesis is rejected
8	Occupation	3	2.83	7.81	0.418	NS	Null hypothesis is accepted and research hypothesis is rejected
9	Family incomeper month	4	13.96	9.48	0.007	S	Research hypothesis is accepted and Null hypothesis is rejected
10	Habit ofsmoking	1	2.75	3.84	0.97	NS	Null hypothesis is accepted and researchhypothesis is rejected

It depicts the chi square test value established at 0.05 level of significant for finding out the association between pretest knowledge scores with their selected demographical variables. The above table denotes that calculated chi squares values for pretest knowledge of stroke among hypertensive patients with their selected demographic variables. Here age of the patients, level of education habit of smoking in that number of cigarettes per day, family income and hypertensive medication taking history these are statistically significant and remaining chi square values are statistically not significant.

DISCUSSION
SECTION I: SOCIO DEMOGRAPHICAL VARIABLES OF PATIENTS

Findings revealed that maximum number of hypertensive patients 36 (45%) were in the age group of 27-47 years and majority 56 (70%) were males, majority of hypertensive patients 51 (63.75%) were belongs to Hindu religion most of the family members are belongs to joint family 58 (72.5%).Most of the patients having primary education 24 (30%) and most are married 73 (91.25%) and practicing mixed diet pattern 49 (61.25%) ,and most of patients are unskilled workers 33(41.25%). Most of the hypertensive patients 37 (46.25%) having income of 10001-15000.Majority of the patients 32(40%) having habit of smoking in that most of the patients out of 32 patients 16 patients were smoking 2 cigarettes per day. Majority of patients were taking hypertensive medications 56 (70%) in that out of 56 patients 23 patients were taking medications from 2 years. Majority of patients were consuming alcohol 40 (50%) in that out of 40 patients 20 patients were drinks alcohol twice in a week.

SECTION II: SELF REPORTED HEALTH SEEKING PRACTICE AMONG HYPERTENSIVE PATIENTS

Findings revealed that maximum number of hypertensive patients 68 (85%) practicing average (30-60) self reported health seeking practice. and remaining patients 12(15%) practicing good self reported health seeking practice. This is supported a study on Kevi (2012) had conducted quasi experimental study to assess the effectiveness of individual teaching programme on knowledge and practice regarding lifestyle modification among patients with hypertension in selected urban community at Mangalore. pre test level of knowledge (35%), post test level of knowledge (92%).the study concluded that individual teaching programme was very effective to improve knowledge and practice regarding lifestyle modification among patients with hypertension

SECTION III: PRE TEST KNOWLEDGE ABOUT AWARENESS OF STROKE AMONG HYPERTENSIVE PATIENTS

Findings revealed that the maximum number of hypertensive patients 51.25% (41 patients) having good knowledge.35% patients are having average knowledge and 13.75% patients are having poor knowledge.

SECTION IV: POST TEST KNOWLEDGE ABOUT AWARENESS OF STROKE AMONG HYPERTENSIVE PATIENTS

Findings revealed that the maximum number of hypertensive patients 60% (48) patients having good knowledge and 30% patients are having average knowledge and remaining patients (10%) having poor knowledge.

SECTION –V: ASSOCIATION BETWEEN PRETEST KNOWLEDGE SCORES OF HYPERTENSIVE PATIENTS WITH SELECTED DEMOGRAPHICAL VARIABLES

Finding revealed that association between pretest knowledge scores with their selected demographical variables. Here values for pretest knowledge of stroke among

hypertensive patients with their selected demographic variables. Here age of the patients, level of education habit of smoking in that number of cigarettes per day, family income and hypertensive medication taking history these are statistically significant and remaining chi square values are statistically not significant.

CONCLUSION

Maximum number of hypertensive patients 36 (45%) were in the age group of 27-47 years and majority 56 (70%) were males, Majority of hypertensive patients 51 (63.75%) were belongs to Hindu religion .most of the family members are belongs to joint family 58 (72.5%).

Most of the patients having primary education 24 (30%) and most are married 73 (91.25%) and practicing mixed diet pattern 49 (61.25%) ,and most of patients are unskilled workers 33(41.25%). Most of the hypertensive patients 37 (46.25%) having income of 10001-15000.Majority of the patients 32(40%) having habit of smoking in that most of the patients out of 32 patients 16 patients were smoking 2 cigarettes per day. Majority of patients were taking hypertensive medications 56 (70%) in that out of 56 patients 23 patients were taking medications from 2 years. Majority of patients were consuming alcohol 40 (50%) in that out of 40 patients 20 patients were drinks alcohol twice in a week. Maximum number of hypertensive patients 68 (85%) practicing average (30-60) self reported health seeking practice. and remaining patients 12(15%)practicing good self reported health seeking practice. In pre test maximum number of hypertensive patients 51.25% (41 patients) having good knowledge.35% patients are having average knowledge and 13.75% patients are having poor knowledge. In post test maximum number of hypertensive patients 60% (48) patients having good knowledge and 30% patients are having average knowledge and remaining patients (10%) having poor knowledge. Association between pretest knowledge scores with their selected demographical variables. Here values for pretest knowledge of stroke among hypertensive patients with their selected demographic variables. Here age of the patients, level of education habit of smoking in that number of cigarettes per day, family income and hypertensive medication taking history these are statistically significant and remaining chi square values are statistically not significant.

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