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A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PRIMARY PREVENTION OF CEREBRO-VASCULAR ACCIDENTS AMONG NURSING STUDENTS OF THE SELECTED NURSING COLLEGE AT JAIPUR.

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ABSTRACT

INTRODUCTION: *Blood pressure is the force of blood pushing against the walls of the arteries as the heart pumps blood. If this pressure rises and stays high over time, known as Hypertension. High blood pressure (hypertension) can quietly damage your body for years before symptoms develop. There is a natural tendency for blood pressure to rise with age due to the reduced elasticity of the arterial system. Age is therefore one of the factors that needs to be taken into account in deciding whether a person blood pressure is too high.*

AIM OF THE STUDY: *assess the effectiveness of structured teaching programme on knowledge regarding primary prevention of the cerebro-vascular accidents among nursing students of the selected nursing colleges at Jaipur.*

MATERIAL AND METHOD*: A pre-experimental one group pre-test post-test study was used in order to evaluate effectiveness of structured teaching programme (the Independent variable) on knowledge regarding primary prevention of the cerebro-vascular accidents (the dependent variable) among nursing students of selected by non-probability purposive sampling technique in nursing colleges at Jaipur. Each participant was informed about the study and that they could withdraw at any time and a written consent was also obtained.*

RESULT: *The finding study showed that the analysis and interpretation of data collected from 60 nursing students of the selected nursing colleges at Jaipur to assess the knowledge regarding primary prevention of the cerebro-vascular accidents. Descriptive and inferential statistics were used for analysis. It was found that pre- test knowledge level of the nursing students was adequate with mean knowledge score 7.83 ± 2.31. It was found that mean post-test knowledge score was significantly higher than mean pre-test knowledge score with mean difference of 9.78 ± 1.75. Showed highly significant difference suggesting that the structured teaching was effective in increasing the knowledge of nursing student's parents regarding primary prevention of the cerebro-vascular accidents.*

CONCLUSION: *It can be concluded that nursing students had adequate knowledge regarding primary prevention of the cerebro-vascular accidents as per current research recommendations. Structured teaching programme was effective in improving the knowledge of nursing students regarding primary prevention of the cerebro-vascular accidents and Regular classes can be conducted for nursing college to refresh their knowledge regarding primary prevention of the cerebro-vascular accidents and encourage them to impart knowledge to nursing students of the selected nursing colleges at Jaipur.*

KEY WORDS: *Knowledge, STP, Nursing Students, Cerebro-vascular accidents.*

INTRODUCTION & BACKGROUND OF THE STUDY

Cerebrovascular accident (CVA), or stroke is a condition where the brain is seriously dam aged by the interrupted or greatly reduced brain blood supply that causes the brain to lack of oxygen and not having enough nutrition to feed the cells. There is not enough blood supply, within minute's brain cells will begin to die. One can completely recover from stroke, or it can lead to dead if it is not treated immediately. The National Institute of Neurological Disorders and Stroke states that stroke is also brain attack – a sudden stoppable blood supply to part of brain. A stroke happens when the clot obstructing the flow of blood to brain or blood vessels rupturing and preventing blood flow to brain. It is a medical emergency when "time is brain", the longer waiting, the more brain cells will die.

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Stroke or cerebrovascular accident (CVA) is a disease which affects the brain function. The brain is vital to our existence. In controls our voluntary movements and it regulates involuntary activities such as breathing and heartbeat. The brain serves as the seat of human consciousness. It stores our memories, enables us to feel emotions, and gives us our personalities. In short, the brain dictates the behaviors that allow us to survive and makes us who we are.

According to the World Health Organization, the epidemic of tobacco is one of the severe public health problems worldwide, it leads to 8 million deaths per years all throughout the planet. Direct tobacco use is killing over than 7 million people and second-hand smoke is the consequences of more than 1.2 million deaths of non-smokers. Smoking significantly raise the risk of coronary heart disease, stroke, lung cancer, diabetes, etc. To be more precise, risk of coronary heart disease and stroke increase by 2 to 4 times because of smoking. It is strongly advised to stop smoking which is a crucial positive change for health. Not only reduce risk factor of cerebrovascular diseases, cancer and other smoking-related diseases, smoking cessation also bring huge benefit for health, maintain, and improve life's quality.

Indian Council of Medical Research (2015) says that Stroke is a major cause for loss of life, limbs and speech in India, estimating there were 9.3 lakh cases of stroke and 6.4 lakhs deaths due to stroke in India, most of the people being less than 45 years old. Experts say that if deaths as well as disability are counted together, then India lost 63 lakhs of disability-adjusted life years in 2004. In India will report 1.6 million cases of stroke annually, at least one-third of whom will be disabled.

Healthcare professionals, especially nurses are in the key role to help patients understand what a cerebrovascular accident (stroke) is, develop an awareness of the risk factors for stroke, provide essential knowledge as well as lifestyle advice, support people to reduce smoking, promote healthy eating and regular exercise to prevent the appearance of this disease through education. Preventing risk factors and stroke occurrences are the most effective method to alleviate the consequences of health and economy of patients.

In order to improve quality healthcare for the population, health professionals provide crucial services that promote health and prevent diseases. As such, nurse is primarily an educator who provides information and guidance to populations so as to promote healthy lifestyles. (WHO 2021.) Patient education is one of the most essential roles of nurse in primary prevention of illness. So, in cases of cerebrovascular accidents, the nurse's responsibility is to encourage patients to adopt a healthy lifestyle by engaging in physical activities and balanced diet as well as reducing tobacco and alcohol consumption. Besides, nurses also motivate high-risk people to take preventive medication, for example, antihypertensive, anticoagulant, lipid-lowering drugs, etc. Furthermore, by planning and delivering health promotion intervention, nurse raises awareness of risk factors to reduce stroke occur in the future. Nurses are not only educators but are also researchers in primary prevention of stroke. They evaluate current preventive services and research development to enhance stroke prevention services better. In addition, nurses serve as clinical leader and manager in stroke prevention. Thus researcher decided to do a interventional study to educate nurses regarding prevention of the stroke as nurses are the first person who used to be contacted by community people.

OBJECTIVES OF THE STUDY

- To assess the existing knowledge level regarding primary prevention of the cerebro-vascular accidents among nursing students of the selected nursing colleges at Jaipur.
- To evaluate the effectiveness of the structured teaching program on knowledge regarding primary prevention of the cerebro-vascular accidents among nursing students of the selected nursing colleges at Jaipur.
- To find association between baseline knowledge level regarding primary prevention of the cerebro-vascular accidents and selected demographic variables of nursing students of the selected nursing colleges at Jaipur.

HYPOTHESIS OF THE STUDY

- H1. There will be a significant increase in knowledge level regarding primary prevention of the cerebro-vascular accidents after structured teaching program among nursing students of the selected nursing colleges at significance level <0.05.
- H2. There will be a significant association between baseline knowledge level regarding primary prevention of the cerebro-vascular accidents among nursing students of the selected nursing colleges and selected demographic variables at significance level <0.05.

OPERATIONAL DEFINITION

- **ASSESS:** It refers to examine the knowledge level regarding primary prevention of the cerebro vascular accidents among nursing students.
- **KNOWLEDGE:** In this study it refers to the information regarding primary prevention of the cerebro vascular accidents acquired from nursing students through a structured knowledge questionnaire. It will be assessed through structured

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knowledge questionnaire. Score above 75% indicates adequate knowledge.

- **EFFECTIVENESS:** It refers to the change in the knowledge level after administration of the structured teaching program on primary prevention of the cerebro-vascular accidents measured through structured knowledge questionnaire.
- **PREVENTION:** - In this study it refers to the measures need to be taken to reduce the risk of stroke like, dietary modification, physical workout, yoga, meditation, regular health check-up, controlling hypertension and diabetes.
- **STROKE: -** It refers to the rapid loss of brain function duo to disturbance in the blood supply the brain. This can be due to ischemia (lack of blood flow) caused by blockage (thrombosis, arterial embolism), or a haemorrhage.
- **NURSING STUDENTS: -** In this study nursing students refers to undergraduates, BSc Nursing students, and GNM.

ASSUMPTION

- Nurses may have average knowledge regarding primary prevention of the cerebrovascular accidents.
- The knowledge regarding primary prevention of the cerebrovascular accidents may vary with the selected demographic variables of nursing students of the selected nursing colleges at Jaipur.
- The STP on primary prevention of the cerebrovascular accidents may improve the knowledge of nursing students of the selected nursing colleges at Jaipur.

DELIMITATION

- The study is delimited to undergraduates nursing students of selected nursing colleges.

RESEARCH METHODOLOGY

- **RESEARCH APPROACH**
- A Quantitative research was used in the study to effectiveness of structured teaching programme on knowledge regarding primary prevention of the cerebrovascular accidents among nursing students of the selected nursing colleges at Jaipur.
- **RESEARCH DESIGN**
  A pre-experimental design, one group pre-test post-test design was adopted for the study.

RESEARCH VARIABLE

- **Independent variable**: Structured teaching programme regarding primary prevention of the cerebrovascular accidents.
- **Dependent variable**: Knowledge regarding primary prevention of the cerebrovascular accidents among nursing students of the selected nursing colleges at Jaipur.
- **Demographic variables:** Demographic profile of parents such as age, gender, course of nursing student, religion and previously attended seminar or any educational program on Cerebro-vascular accident-vascular accident.

POPULATION

- In this study target population was nursing students of the selected nursing colleges at Jaipur.

SAMPLING SIZE

In this study, the sample consist 60 nursing students.

SAMPLING TECHNIQUE

- The sampling technique used in this study was purposive sampling technique. This entails the use of the most readily available persons in a study. Sample who meet the criteria for sample selection were selected.

RELIABLITY OF THE TOOL

- The tool was tested for reliability for using split half method and Spearman brown coefficient formula. Correlation coefficient r =0.94.

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MAJOR FINDING OF THE STUDY

Table 1
Frequency and percentage distribution of demographic variables among nursing students.
(N=60)

S. No	Socio-demographic variable		Frequency	Percentage
1	Age	20-21 years 22-23 years >23 years	7 39 14	11.07 % 65.00 % 23.03 %
2	Gender	Male Female	26 34	43.03 % 56.07 %
3	Residence	Urban Rural	44 16	73.03 % 26.07 %
4	Course	B.Sc. Nursing GNM	34 26	56.07 % 43.03 %
5	Previous Workshop/ seminar attended for prevention of CVA	Yes No	40 20	66.06 % 33.04 %

Table 1 Depicted that the nursing students participated in the study, Relation with Age (in years) 22-23 (39, 65%), Gender Female (34, 56.07%), Residence Urban (44, 73.03%), Course B.Sc. Nursing (34, 56.07%), Previous attend seminar & workshop Yes (40, 66.06%).

Table No. 2: Frequency and percentage distribution of the samples pre-test level of knowledge regarding primary prevention of the cerebrovascular accidents. (N=60)

KNOWLEDGE LEVEL	PRE TEST		POST TEST	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
adequate	40	66.7 %	52	86.7 %
Moderate adequate	16	26.07 %	08	13.3 %
Poor	04	6.7 %	00	00 %
Mean	7.83		9.78	
SD	2.31		1.75	

Table No. 2 depicted that the pre-test knowledge regarding primary prevention of the cerebrovascular accidents among nursing students. The major finding are 86.7% of nursing students had adequate knowledge. The overall pre-test mean percentage knowledge score is 66.7% with the mean of 7.83 ± 2.31 Based on the findings we can conclude that the overall and as well as its different aspects pre-test adequate. In posttest majority (86.7%) the sample had adequate knowledge, followed by 13.3% with the mean of 9.78 ± 1.75 had moderately adequate knowledge and no one had the poor knowledge regarding prevention of the Cerebrovascular accidents. Based on the findings we can conclude that the overall and as well as its majority aspects post-test knowledge score of samples regarding prevention of the Cerebrovascular accidents.

Table No. 3: Mean difference of the pre-test and post-test knowledge score of nursing students regarding prevention of the Cerebrovascular accidents

(N=60)

Test	Mean difference	t test	df	P value
Pre-test Knowledge Score	7.16±4.95	8.07	59	<0.001*
Introductory	1.16±1.40	6.43	59	<0.001*
Sign & Symptoms	0.10±0.57	1.35	59	0.1
Management	0.81 0.70	8.21	59	<0.001*
Awareness	1.13±1.87	4.68	59	<0.001*
Prevention	1.95±2.55	5.91	59	<0.001*

Table No. 3 shows that, the depicts association of knowledge level regarding prevention of the Cerebrovascular accidents among Nursing students with their socio demographic characteristics. The association is calculated using chi square. A statistical significant association is found between knowledge level regarding prevention of the cerebrovascular accident and age and previous workshop/seminar attended for prevention of CVA. In the light of above findings table.3 statistical significant association between knowledge level regarding prevention of the cerebrovascular accident and age and previous workshop/seminar attended for

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prevention of CVA at <0.05 level of significance. Hence H02 there will not be a significant association between knowledge level regarding primary prevention of the cerebro-vascular accidents among nursing students of the selected nursing colleges and selected demographic variables at significance level <0.05 is rejected and H2 is accepted.

DISCUSSION

The hypothesis made in the study is there is significant difference in pretest and post test scores on aspects of knowledge regarding prevention of the cerebrovascular accident among nursing students with selected socio- demographic variables at the level of $P < 0.05$. There is significant association between pre-test knowledge score on prevention of the cerebrovascular accident and selected socio demographic variables of nursing students at the level of $p \leq 0.05$.

- The three assumptions were made in this study. The first one was the finding of the study reveals that after introducing the STP, the nursing students may have average knowledge regarding primary prevention of the cerebrovascular accidents. Similar studies were also done in different parts of the country and same results were found that all the nursing students were having excellent knowledge regarding primary prevention of the cerebrovascular accidents.
- The second assumption was the finding of the study reveals that the knowledge regarding primary prevention of the cerebrovascular accidents may vary with the selected demographic variables of nursing students of the selected nursing colleges at Jaipur.
- The third assumption was The STP on primary prevention of the cerebrovascular accidents may improve the knowledge of parents having nursing students of the selected nursing colleges at Jaipur.

CONCLUSION

The present study assessed the effectiveness of structured teaching program. The study findings revealed that there was a significant improvement in the level of knowledge after providing structured teaching program. Based on the statistical findings, it was evident that provision of such kind of structured teaching program would motivate the students and help them to acquire knowledge regarding care of the patient with Cerebero Vascular Accident. Therefore structured teaching program was very important to provide quality-nursing care which helps to meet the needs of the patients for their well-being.

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