

A Descriptive Study to Assess the Awareness Regarding Risk Factors and Prevention of Cerebro-Vascular Accident (Stroke) Among People in an Urban Community of Jhunjhunu District with A View to Develop a Self Instructional Module

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Abstract

Introduction : Human nervous system is a highly specialized system responsible for the control and integration of body's activities. Whenever there is an inadequate blood flow to the part of the brain, it causes the death of brain cells resulting in stroke. Thus leading to serious long term disability such as impairment of movement, sensation and emotions that were controlled by the affected area of the brain.

Methodology : Descriptive research design is used in this study. The sample consisting of 100 adults. In this study, the sample was selected through a Non-probability convenient sampling technique. The study was conducted on adults living in an urban community of Surajgarh, Jhunjhunu district. The data was collected by self-structured awareness questionnaires.

Results : The data was analysed by descriptive and inferential statistics. The data finding shows that 4 % of the total samples have poor awareness, 48 % samples have average awareness and 48 % samples have good level of awareness regarding risk factors and prevention of cerebro-vascular accident (stroke). Analysis of awareness score revealed that the highest mean percentage obtained by the people aged above 18 years and above was 67.73% with SD of 4.03.

Conclusions : After the detailed analysis of this study, the result shows that there is an average awareness regarding risk factors and prevention of cerebro-vascular accident (stroke) among people in an urban community of Jhunjhunu district, Rajasthan. There is significant association between awareness score and socio-demographic variable such as Gender and Educational status at 0.05 level of significance. There is no significant association between awareness score and socio-demographic variable such as Age, Marital status, Occupation, Monthly income and Source of information at 0.05 level of significance.

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Introduction

Human nervous system is a highly specialized system responsible for the control and integration of body's activities. Whenever there is an inadequate blood flow to the part of the brain, it causes the death of brain cells resulting in stroke (cerebro-vascular accident). Thus leading to serious long term disability such as impairment of movement, sensation and emotions that were controlled by the affected area of the brain.

Stroke is one of the leading cause of global mortality. National Stroke Association states that, each year nearly 8 lacs people experience a new or recurrent stroke. A stroke happens every 40 seconds. Every 4 minutes someone dies from stroke. Up to 80% of strokes can be prevented at the earliest.

WHO defines stroke as "rapidly developing clinical signs of focal (or global) disturbance of cerebral function, with symptoms lasting for 24 hours or longer, or leading to death with no apparent cause other than of vascular origin". There are many signs and symptoms of a stroke. Since the body is affected on the opposite side of where the stroke occurs in the brain, having one-sided facial drooping or weakness on one side of the body is common. The most frequently observed indicators in an emergency setting are the following: Facial drooping - typically on one side of the face, Vision loss in one eye or blurred or double. Weakness or numbness on one side of the body, weakness or sensation on one side of the body, loss of balance, slurred speech or absence of speech, altered level of consciousness.

The following factors may put a person at a higher risk of having a CVA (stroke): Cigarette smoking, cocaine use, or drinking too much alcohol, Diabetes (high blood sugar), you or a close family member has had a stroke, atherosclerosis (hardening of the arteries) or fatty cholesterol deposits on artery walls, heart disease, such as coronary artery disease, high blood cholesterol (fat), high blood pressure.

The most effective way to decrease the burden of stroke is prevention. Awareness and control of modifiable risk factors can contribute to reduce the incidence and burden of stroke. Non modifiable risk factors include age, gender, race, and hereditary. While modifiable risk factors like hypertension, diabetes mellitus, asymptomatic carotid stenosis, heart diseases, atrial fibrillation, heavy alcohol consumption, hyper-coagulability, hyper-lipidemia, obesity, oral contraceptive use, physical inactivity, sickle cell disease, smoking can be altered through lifestyle changes and medical treatment, thus reducing the risk of stroke.

Prime deciding factor is initiation of treatment within the time window, which requires early recognition of stroke symptoms. There is need to recognize the signs and symptoms of a stroke and react promptly to offer the patient the best chance of recovering from this loss of brain function.

Prevention of stroke through control or avoiding risk factors and early detection, effective risk factor intervention, proper awareness and proper government policies offers a real hope of reducing stroke morbidity and mortality. Due to increase in burden of stroke in coming years and limited availability of stroke care in India, it would be better to study on early identification of risk factors and preventive measures that will reduce the incidence of stroke.

Urban areas are more prevalent to stress, hypertension and diabetes mellitus, so there is a need for recognition of stroke risk factors, its warning signs which helps in bringing stroke awareness and its prevention. Therefore keeping this in view, the researcher felt that there is a need for assessing the risk factors of cerebro-vascular accident (stroke), its prevention and bring awareness among people in urban community.

Objectives

1. To assess the awareness regarding risk factors and prevention of cerebro-vascular accident (stroke) among people in an urban community of Jhunjhunu district.
2. To find out the association between awareness regarding risk factors and prevention of cerebro-vascular accident (stroke) with selected socio-demographic variables.
3. To develop a self instructional module regarding risk factors and prevention of cerebro-vascular accident (stroke).

Methodology

The present study was aimed at assessing the awareness regarding risk factors and prevention of cerebro-vascular accident (stroke) in an urban community of Jhunjhunu district. Descriptive research approach and Descriptive research design was used for this study.

The study was conducted by using self structured awareness questionnaires to assess awareness regarding risk factors and prevention of CVA.

A formal written permission was obtained from Govt. Nursing College (S.M.S.) Jaipur, and concerned authorities, at Jhunjhunu district to conduct the study.

In this study research variable is to assess the awareness regarding risk factors and prevention of cerebro-vascular accident (stroke). A self developed structured questionnaire was developed for socio-demographic variables and research variable to attain the objectives of the study. Ten experts did the content validation of demographic performance and self structured questionnaire. Pilot study was conducted on 20 people aged 18 years and above living in ward no. 12, Jhunjhunu, Dist.-Jhunjhunu, Rajasthan from 12/07/2022 to 18/07/2022. It gave a basis to conduct research study. Reliability computed through the Kuder-Richardson (KR-20) method. The value of reliability coefficient is 0.83, which proved that the tool is reliable. They were chosen by Non-probability convenient sampling technique. Actual study was conducted on 100 people (samples) aged 18 years and above living in an urban community of Surajgarh, Jhunjhunu district, Rajasthan. They were chosen by Non-probability convenient sampling technique.

Results

SECTION 1. Description of socio-demographic characteristics of people in an urban community.

- v Majority of people of urban community i.e. 32% belonged to 31-40 year age group, 29% belonged to 18-30 year age group, 20% belonged to more than 50 year age group and 19% belonged to 41-50 year age group.
- v Majority of people of urban community i.e. 59% belonged to be male and 41% belonged to be female category.
- v Majority of people educational status i.e. 45% were found to be educated up to graduation and above, 19% of people were found to be educated up to primary level, 16% of people were found to be educated up to matriculate level, 14% of people were found to be educated up to senior secondary and 6% of people were found to be illiterate.
- v Majority of 70% respondents were married, 5% respondents were widow/widower and 25% respondents were un-married.
- v Majority of 46% respondents belonged to un-employed, 19% respondents belonged to Labour/daily wages, 17% respondents belonged to Govt. job, 16% respondents belonged to private job and

only 2% respondents belonged to business occupation.

- v Majority of 55% family's monthly income were below 10000, 27% family's monthly income were between 10001-25000, 10% family's monthly income were above 40000 and 8% family's monthly income were between 25001-40000 Rupees.
- v Majority of respondents i.e. 38% obtained information regarding CVA through newspaper, by social media 31% whereas only 10% of people in urban community obtained information through health worker and 21% by others.

SECTION-II - Assessment of awareness regarding risk factors and prevention of cerebro-vascular accident (stroke) among people in an urban community

Table 01: Frequency and percentage distribution of awareness regarding risk factors and prevention of Cerebro-vascular accident (stroke) among people in an urban community

Category	Frequency {f}	Percentage {%}
Poor (0-10)	4	4 %
Average (11-20)	48	48 %
Good (21-30)	48	48 %

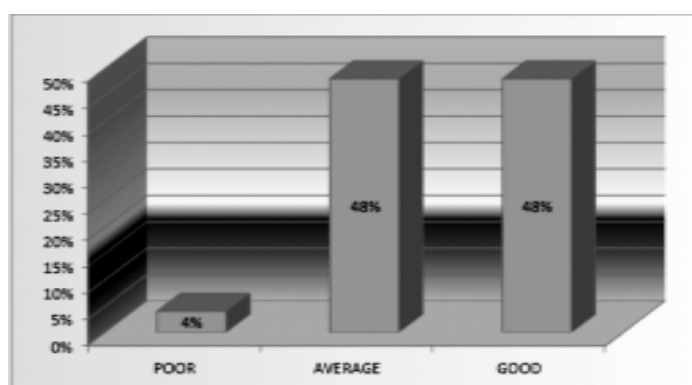


Figure : frequency and percentage distribution of awareness regarding risk factors and prevention of cerebro-vascular accident (stroke) among people in an urban community

Table 02 : Mean, Median, Mode, Mean percentage and Standard deviation of awareness regarding risk factors and prevention of Cerebro-vascular accident (stroke) among people in an urban community. N=100

S.No.	Maximum score	Mean	Median	Mode	Mean percentage	Standard deviation
1.	30	20.32	20	20	67.73%	4.03

SECTION-III - Table 03: Association of the level of awareness with selected socio- demographic variables among people of an urban community

S.No.	Demographic Variables	Categories	Frequency	Awareness score			Calculated value	Degree of freedom	Tabulated value	L.O.S @0.05
				Poor	Average	Good				
1	Age (In years)	18-30	29	1	12	16	7.66	6	12.59	NS
		31-40	32	1	18	13				
		41-50	19	1	5	13				
		>50	20	1	13	6				
2	Gender	Male	59	1	23	35	8.19	2	5.99	S
		Female	41	3	25	13				
3	Educational status	Illiterate	6	2	3	1	42.26	8	15.51	S
		Primary	19	1	17	1				
		Matriculate	16	0	8	8				
		Senior secondary	14	0	9	5				
		Graduation and above	45	1	11	33				
4	Marital status	Unmarried	25	1	10	14	6.113	4	9.48	NS
		Married	70	3	33	34				
		Widow/Widower	5	0	5	0				
5	Occupation	Private Job	16	0	7	9	12.68	8	15.51	NS
		Business	2	0	1	1				
		Govt. job	17	0	3	14				
		Labour/daily wages	19	1	11	7				
		Un-employed	46	3	26	17				
6	Monthly Income (IN Rupees)	<10000	55	3	32	20	9.77	6	12.59	NS
		10001-25000	27	1	12	14				
		25001-40000	8	0	2	6				
		Above 40000	10	0	2	8				
7.	Source of information	News paper	38	1	22	15	6.20	6	12.59	NS
		Social media	31	1	10	20				
		Health worker	10	1	5	4				
		Others	21	1	11	9				

Discussion

Overall analysis of awareness score related to cerebro-vascular accident (stroke) revealed that the highest mean percentage obtained by the people aged 18 years and above in an urban community of Jhunjhunu district was 67.73 % with S. D. of 4.03. It was found that there is significant association between awareness score and socio-demographic variable such as Gender and Educational status and there is no significant association between awareness score and socio-demographic variable such as Age, Marital

status, Occupation, Monthly income and Source of information.

In this study, researcher developed a self instructional module for awareness regarding risk factors and prevention of Cerebro-vascular accident (stroke) among people in urban community.

Conclusions

The chi square test is used to find out association between awareness regarding risk factors and prevention of cerebro-vascular accident (stroke) with selected socio-demographic

variables. There is significant association between awareness score and socio-demographic variable such as Gender and Educational status at 0.05 level of significance. There is no significant association between awareness score and socio-demographic variable such as Age, Marital status, Occupation, Monthly income and Source of information at 0.05 level of significance. The result shows that there is an average awareness regarding risk factors and prevention of cerebro-vascular accident (stroke) among people in an urban community of Jhunjhunu district, Rajasthan.

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