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**Research Article** 

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# AWARENESS LEVEL OF NURSES REGARDING MANAGEMENT OF PATIENTS WITH CEREBROVASCULAR ACCIDENT

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#### ABSTRACT

Cerebrovascular accident remains one of the most devastating of all neurological diseases, globally the second leading cause of death and the third leading cause of disability. Cerebrovascular accident mainly affects individuals at the peak of their productive life and layer a greater range of disabilities than any other condition. According to World Health Organization (WHO)<sup>1</sup> criteria, cerebrovascular accident is defined as "rapidly developing clinical symptoms and/or focal and at times global loss of cerebral function, with symptoms lasting more than 24 hours or leading to death, with no apparent cause other than of vascular origin". This study is descriptive in nature. The study sample consists of 30 nurses working in neurology unit. Convenience sampling technique was used to select the samples. Self-structured Validated questionnaire was used to assess the awareness level of nurses regarding management of patients with cerebrovascular accident. The study finding revealed that most the nurses 40% had adequate awareness, 36% of participants had moderate awareness and only 24% of participants had inadequate awareness level regarding management of patients with cerebrovascular accident. And there was no association between the awareness levels of nurses with their demographic variables. It was noted that nurses did not answer some important part of the questions, in which they needed reinforcement and adequate competency. This could be done by engaging them in continuous learning through the various approaches of training programs. This finding suggests that the nurse's awareness need to be increased up to the highest possible mark to ensure safe and quality health care services regarding cerebrovascular accident management and prevention of its complications.

#### **KEYWORDS**

Awareness, Nurses, Management of patients and Patients with cerebrovascular accident.

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#### **INTRODUCTION**

A stroke or Cerebrovascular Accident (CVA) involves the rapid loss of brain function caused by a disruption of blood supply to the brain. Triggered by ischemia (lack of blood flow) or blockage (thrombosis, arterial embolism) or a haemorrhage, cerebrovascular accident has become one of the leading causes of serious, long-term neurologic impairment and functional disability and is the cause of mortality globally. According to the World Health Organization (WHO)<sup>1</sup>, around 15 million people, the world over, suffer from cerebrovascular accident each year. Among these, 5 million die and another 5 million are permanently disabled. Four out of five cerebrovascular accident occur in the low and middle income countries who can least afford to manage with the consequences of this disease<sup>2</sup>.

A cerebrovascular accident can lead to survival with permanent disability in physical, psychological and social functions. Dependency in daily life activities living emotional and psychological change status and deterioration in social communication can affect the type of life of patients suffering from cerebrovascular accident changes the role of experience due to poor autonomy caused by difficulty in the performances of living activities daily, as well as problems related to personal relationships, they also experience psychological maladjustment due to long-term stress<sup>3</sup>. The impact of cerebrovascular accident on people's lives represents an important challenge for society. In addition to being a sudden event, stroke affects both the individual and family, which is overall unprepared to deal with the process of rehabilitation or the disabilities that result from this condition<sup>4</sup>. As a result, a high number of people are unable to work and receive financial assistance after cerebrovascular accident.

Various risk factors for cerebrovascular accidents include: high blood pressure, heart disease, smoking, diabetes, cholesterol, obesity and inactivity, oral contraceptives and oestrogen replacement therapy, history of ischemic attacks, heredity and family history, age, an earlier stroke, carotid bruit, race, an elevated haematocrit (number of red cells in the blood), geographic location<sup>5</sup>. Adherence to medical advice for secondary stroke prevention is poor, with one-quarter of stroke patients discontinuing prescribed medications 3 months after hospital discharge. A systematic review and meta-analysis of prospective epidemiological studies revealed that among cardiovascular diseases (CVD), including cerebrovascular accidents, a substantial proportion of patients does not adhere adequately to cardiovascular medications. Approximately nine percent of all CVD events can be attributed to poor medication adherence<sup>6</sup>.

Many advances have been made in cerebrovascular accident prevention, treatment, and rehabilitation. For example, thrombolytic therapy can limit the extent of neurologic damage from cerebrovascular accident and improve outcome, but the time available for treatment is limited. Healthcare providers, hospitals and communities must develop systems to increase the efficiency and effectiveness of cerebrovascular accident care<sup>7</sup>. The "7 D's of Stroke Care"- detection, dispatch, delivery, door (arrival and urgent triage in the emergency department), data, decision, and drug administration -highlight the major steps in diagnosis and treatment and the key points at which delays can occur<sup>8</sup>. Thus, management and treating such cases are of vital importance in the whole medical field, starting from the emergency department up till admission to the ward and long-term follow up.

# Problem statement

A study to assess the awareness level of nurses regarding management of patients with cerebrovascular accident in selected hospital, Madurai

# **Objectives of the study**

- 1. To assess the awareness level of nurses regarding management of patients with cerebrovascular accident
- 2. To find out the association between the awareness level of nurses regarding management of patients with cerebrovascular accident with their selected demographic variables.

# METHODOLOGY

#### **Research Approach**

Quantitative approach

# Study Design

A Descriptive research design used to assess the awareness level of nurses regarding management of patients with cerebrovascular accident.

#### Sampling Technique

Convenience sampling technique was used to select the sample

### Sample Size

The samples comprised of 30 nurses working in neurology unit

# Tool

Self-structured Validated questionnaire

### Section A

Demographic variables (Age, Gender, Professional qualification and Years of experience)

#### Section B

Self-structured questionnaire (15 questions with multiple choice items related to management of Cerebrovascular accidents and prevention of its complications)

Each question has score 1 with maximum total score of 15 and based on the score the score interpretation was done

0-6: Inadequate

7-12: Moderate

≥13: Adequate

#### **RESULTS AND DISCUSSION**

# Section I: Description of sample characteristics (Demographic Variables)

Table No.1 Portrays distribution of sample characteristics according to demographic variables and displays the frequency and percentage scores obtained. It depicts that 97% (29) of participants belong to the age group between 25 to 30 years, 100% (30) of the participants were females, 67% (20) of the participants were B.Sc. graduate and 87% (26) of participants has 0 to 5 years of working experience.

# Section II: Awareness level of nurses regarding management of patients with cerebrovascular accident

Figure No.1 Portrays distribution of sample according to the frequency and percentage distribution of awareness level of nurses regarding management of patients with cerebrovascular accident. It depicts that most of the participants 40% (12) had adequate awareness, 36% (11) of participants had moderate awareness and only 24% (7) of participants had inadequate awareness level

regarding management of patients with cerebrovascular accident.

# Section III: Association of awareness level of nurses with their demographic variables

Table No.2 Portrays the association between the awareness level of nurses with their demographic variables and the chi square  $(\chi^2)$  scores obtained. It reveals that there is no association between the awareness level of nurses with their demographic variables.

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S.No	Demographic variables	Frequency	Percentage (%)				
	Age (in years)						
	25-30	29	97				
1	31-35	0	0				
	36-40	1	3				
	Above 40	0	0				
	Gender						
2	Male	0	0				
	Female	30	100				
	Professional qualification						
3	DGNM	10	33				
3	B.Sc. (Nursing)	20	67				
	M.Sc. (Nursing)	0	0				
	Years of experience						
	0-5 years	26	87				
4	6-10 years	3	10				
	11-15 years	0	0				
	Above 15 years	1	3				

Table No.1: Frequency and	nd percentage distribution	of demographic variables

Table No.2: Frequency and percentage distribution of awareness level of nurses with their demographic variables

variables												
S.No	Variables	N=30	Adequate		Moderate		Inadequate		$\chi^2$			
			Ν	%	Ν	%	Ν	%	χ			
Age (in years)												
1	25-30	29	11	37.93	11	37.93	7	24.13	1.542			
2	31-35	0	0	0	0	0	0	0				
3	36-40	1	1	100	0	0	0	0				
4	Above 40	0	0	0	0	0	0	0				
Gender												
5	Male	0	0	0	0	0	0	0	0			
6	Female	30	12	40	11	36.66	7	23.33				
Professional qualification												
7	DGNM	10	1	10	5	50	4	40	95.42			
8	B.Sc (Nursing)	20	11	55	6	30	3	15				
9	M.Sc (Nursing)	0	0	0	0	0	0	0				
Years of experience												
10	0-5 years	26	10	38.46	9	34.61	7	26.92	1.601			
11	-10 years	3	1	33.33	2	66.66	0	0				
12	11-15 years	0	0	0	0	0	0	0				
13	Above 15 years	1	1	100	0	0	0	0				



Figure No.1: Frequency and percentage distribution of awareness level of nurses regarding management of patients with cerebrovascular accident

#### CONCLUSION

Cerebrovascular accident is a preventable and treatable disease. Over the past two decades a growing body of evidence has overturned the traditional perception that cerebrovascular accident is simply a consequence of aging that inevitably results in death or severe disability<sup>9</sup>. Evidence is accumulating for more effective primary and secondary prevention strategies, better recognition of people at highest risk, and interventions that are effective soon after the onset of symptoms<sup>10</sup>. Understanding of the care processes that contribute to a better outcome has improved, and there is now good evidence to support interventions and care processes in cerebrovascular accident rehabilitation. The best way to help prevent a cerebrovascular accident is to eat a healthy diet, exercise regularly, and avoid smoking and drinking too much alcohol. These lifestyle changes can reduce risk of problems like: arteries becoming clogged with fatty substances (arthrosclerosis), high blood pressure and high cholesterol levels<sup>11</sup>

It was noted that the awareness level of nurses regarding management of patients with cerebrovascular accident was adequate among most of the samples. Practicing nurses have favourable opportunities to upgrade their knowledge regarding updates available in caring a patient with cerebrovascular accidents.

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#### **CONFLICT OF INTEREST**

We declare that we have no conflict of interest.

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