e - ISSN – 2349-0691

AMERICAN JOURNAL OF ADVANCES IN NURSING RESEARCH

Journal homepage: www.mcmed.us/journal/ajanr

PERCEPTION OF REGISTERED NURSES REGARDING STROKE WARNING SIGNS

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Article Info

Received 25/02/2017
Revised 15/03/2017
Accepted 25/03/2017

Key word: Knowledge, Awareness, Registered Nurse, Cerebrovascular Accident, Stroke Warning Signs.

ABSTRACT

A stroke or brain attack occurs when a blood clot blocks an artery or blood vessel breaks, interrupting blood flow to an area of brain. When either of these things happens, brain cells begin to die and brain damage occurs. When brain cells die during a stroke, abilities controlled by that area of the brain are lost. How a stroke patient is affected depends on where stroke occurs in the brain and how much brain is damaged[1]. If caregivers are aware of warning signs of stroke then the complications could be minimized. Hence, this study was conducted on 80 registered nurses to assess the perception of registered nurses regarding stroke warning signs. The result shows that majority of registered nurses working in a tertiary care hospital had average knowledge about stroke warning signs and it is recommended to have frequent update to enhance their knowledge.

INTRODUCTION

Stroke is an acute neurological deficit lasting more than twenty-four hours. Cerebral infarction accounts for 80 to 85% of cases of stroke [1]. Stroke kills about five million people each year making this the second major cause of death worldwide. At least fifteen million others have non-fatal stroke annually, and about a third are disabled as a consequence [2]. Non-modifiable risk factors for cerebral infarction include age, sex, family history, race and ethnicity. Modifiable risk factors for cerebral infarction include hypertension, diabetes mellitus, cardiac disease (particularly atrial fibrillation), hyperlipidemia, smoking, transient ischemic attacks, asymptomatic carotid artery stenosis, alcohol abuse and physical inactivity [3].

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Stroke can happen to anyone at any time, regardless of race, sex or age. Stroke is the third leading cause of death worldwide, killing 2160,000 people each year and leading cause of adult disability. Two million brain cells die every minute during stroke, increasing the risk of permanent brain damage, disability or death. Recognizing symptoms and acting medical attention can save a life and limits disabilities. Although Cerebro vascular accident (CVA) is one of the long-term outcome in such patients have not been clearly identified especially in the Indian context [4].

According to National Stroke Association, "Time is Brain" The more the dead cells, greater then effect of stroke on the victim. These effects can include paralysis, problems with balance and coordination, numbness, diminished memory, thinking, attention, and learning abilities, impaired mental activities, difficulty in speaking or understanding speech, incontinence and depression.[1] Effective stroke intervention and risk reduction depend on

nurses' knowledge of stroke, as nurses are there with the patients 24x7 and can prevent complications of stroke.

Warning signs of stroke are sudden numbness or weakness of face, arm or leg, especially on one side of the body, sudden confusion, trouble in speaking or understanding, sudden trouble seeing in one or both eyes, sudden trouble in walking, dizziness, loss of balance or coordination, sudden severe headache with no known cause other danger signs that may occur include double vision, drowsiness, and nausea or vomiting. Sometimes the warning signs may last only a few moments and then disappear. These brief episodes, known as Transient Ischemic Attacks or TIAs, are sometimes called "mini-strokes"

The nursing staff represents a better educational group of society and attitude of nursing staff reflects the prevailing attitude of educational group of society. Increasing the registered nurses awareness of stroke warning sign is a health priority. Nurses are primary caregiver for the patient, awareness and knowledge of nurses can decrease disability and death due to stroke. Therefore the aim is to assess baseline knowledge of registered nurses regarding stroke warning signs.

Analysis of knowledge regarding risk factors for stroke has occurred in a number of different groups, including community groups, people at high risk of stroke or TIA, and those who have recently had a stroke or TIA. In a community-based study reported that 68% of 1880 respondents to a telephone survey of people asked to identify three risk factors for stroke using free recall correctly listed at least one of the established stroke risk factors[11]. A similar study conducted 5 years later in the same area, yielded 72% (of 2173 participants) correctly naming at least one risk factor [3].

In other studies conducted in similar community groups in Australia and the USA, comparable but slightly higher proportions of people correctly identified at least one risk factor [5]. Interestingly, those aged ≥75 years (56%) correctly listed at least one risk factor less often than those <75 years of age (72%; $p < 0.001$) [6]. Importantly, a minimum of 20% of people could not correctly name at least one risk factor for stroke.

Nicol, et al. (2005) summarized the findings of fifteen studies about knowledge of stroke warning signs and risk factors in both high and, low risk populations. In general, there appears to be low levels of knowledge of both risk factors and warning signs among communities studied. Using free recall, 20% to 30% of respondents could not name a single risk factor. Respondents in older age group and lower levels of educational attainment tended to have l 15 less knowledge of risk factors and warning signs of stroke than those in younger age groups and with more education [7,8].

Poor awareness of stroke contributes to delay in the arrival of patient in hospitals emergency department to immediate effective treatment. Reduction in the risk of stroke and increase in the speed of hospital presentation after onset of stroke both depends on the level of knowledge of registered nurse. Being alert to the signs of stroke is important because the longer the stroke continue without treatment, the greater the no. of brain cells that will die.

MATERIALS AND METHODS

The study was conducted in November & December 2016. This was an exploratory study which used a structured self- administered knowledge questionnaire to assess the knowledge of registered nurses about stroke warning signs in a tertiary care hospital located in New Delhi.

Tools Used: The knowledge questionnaire consisted 32 questions. It was self- generated and adapted from literature. The questionnaires were pretested by conducting a pilot study. The scoring as for correct '1' score and for wrong as '0' score. The questionnaire covered 1) Terminologies related to stroke, 2) Causes, 3) Warning signs, 4) Symptoms, 5) Complications and 6) Management of stroke.

***Study Subjects*:** 80 registered nurses working in different clinical areas like ICU, emergency etc. of Indraprastha Apollo Hospital, New Delhi.

Data Collection: In the study, 80 registered nurses of different clinical units (like ICU, emergency etc.) were selected by purposive sampling method. They were interviewed personally by the researchers. Before the questionnaire was given to the participants, the aims and objectives the study were explained to them. Grading criteria for knowledge questionnaire was Good (score >70%), Average (score 50-70%) and Poor (Score <50%).

RESULTS

Table 1 shows the distribution of background information of the registered nurses. Out of 80 participants, 68(85%) were in age group of above 25 years, 11(13.75%) were between 26-30 years, 1(1.25%) was in age group of 31-35 years. Majority 74(92.50%) were females and 6 (7.50%) were males. 25(31.25%) registered nurses have GNM qualification, 37(46.25%) registered nurses have BSC qualification and 18 (22.50%) registered nurses have post BSC qualification. 15(18.75%) were posted in HDU, 17 (21.25%) in C.C.U, 9(11.25%) in Emergency and 39(48.75%) in various ICUs except Neuro and stroke ICU. Maximum 59(73.75%) had 0-2 years and 21(26.25%) have 2-4 years of working experience.

The data presented in Table 2 highlights the item wise frequency and percentage distribution of correct response towards the knowledge of registered nurse .Data shows that maximum number of registered nurses 63(76.25%) had average, 13 (16.25%) had poor and 4 (5%) had good knowledge.

Table 1. Frequency Distribution of Demographic Data

N=80

Demographic Information	Frequency (f)	Percentage (%)
AGE		
21- 25 years	68	85%
26-30 years	11	13.75%
31-35 years	1	1.25%
Above 35 years	0	0%
SEX		
Male	6	7.50%
Female	74	92.50%
QUALIFICATION		
GNM	25	31.25%
BSC	37	46.25%
Post BSC	18	22.50%
PLACE OF WORK		
HDU	15	18.75%
CCU	17	21.25%
Emergency	9	11.25%
ICU	39	48.75%
TOTAL YEARS OF EXPERIENCE		
0-2 years	59	73.75%
2-4 years	21	26.25%
4-6 years	0	0%
More than 6 years	0	0%

Table 2. Frequency and Percentage of Knowledge Scores of Registered Nurse

N=80

S.No	Items	Correct response	Percentage
1.	Meaning of Stroke	76	95%
2	Meaning of Ischemia	30	37.5%
3	Other name for CVA	46	57.5%
4	Causes of CVA	49	61.25%
5	Clinical manifestation of stroke	72	90%
6	Blood supply to the brain that is briefly interrupted describes	52	65%
7	Cause of ischemic stroke	57	71.25%
8	FAST stand for	26	32.5%
9	Mini stroke	51	63.75%
10	Signs of stroke except	53	66.25%
11	Function of Right section or hemisphere of brain	43	53.75%
12	Transient ischemic attack	35	43.75%
13	Patient suffering from stroke	18	22.5%
14	Cause of hemorrhagic stroke	59	73.79%
15	Disability that results from is paralysis on one side of the body	69	86.25%
16	Problem of forming or understanding speech.	60	75%
17	Terms related to Stroke	54	67.5%
18	Effectiveness of T PA	42	52.5%

19	Clinical manifestation of left sided CVA	46	57.5%
20	Stroke always leave the patient permanently disabled	69	86.25%
21	CVA in the right side of brain affect	65	81.25%
22	Stroke cause by blood clot	53	66.25%
23	Complication of stroke	60	75%
24	Common sign of hemorrhagic stroke	62	77.5%
25	Complication from stroke may include except	41	51.25%
26	General symptom suggestive of stroke	63	78.75%
27	Warning sign of stroke	59	73.79%
28	Symptom of heart attack but not a symptom of stroke	54	67.5%
29	Stroke recognize by asking patient	29	36.25
30	Steps of confirmation for speech	51	63.75%
31	Diagnosis of stroke in numbness	62	77.5%
32	Warning sign of stroke	65	81.25%

DISCUSSION

The study was conducted with an aim to assess knowledge of stroke warning sign among registered nurse as well as to identify the areas which were needed to improve in their knowledge and reduce the complications. Majority of registered nurses had average knowledge about stroke warning signs. A similar study conducted by McNamara, et al. (2008) depicts that approximately two thirds of emergency medical services (EMS) providers from urban and frontier counties had adequate stroke knowledge.[8] In another study by Das K, (2007) conducted a study to assess the awareness among 4000 general population and stroke survivors of the risk factors and warning signs of stroke in West Bengal, India. Poor knowledge or the awareness of risk factors and warning symptoms of stroke was found in both the groups [9].

In the end, knowledge of stroke warning sign among registered nurse is average. Recommendations to refine the shortfall include continuing nursing education program on stroke warning signs.

REFERENCES

1. Warlow CP, Dennis MS, Van Gijn J, Hankely GL, Sandercock PAG, Bamford J, et al. (2000) Stroke: A practical guideline to management,2nd ed. Blackwell scientific publications; Oxford.
2. Fayyaz M. Risk factors and early prognosis in stroke. Annals 1999; Stroke Awareness of Signs, Symptoms And Risk Factors, A Population Based Survey. *Journal of Cerebrovascular Diseases*, 5(1), 12-15.
3. Schneider, AT et al. (2003). Trends in community knowledge of warning signs and risk factors of stroke. *The Journal of American Medical Mission*, 289(3), 343-6.
4. Panicker K et al. (2003). Long term outcome of stroke patients. *Neurology India*, 51 (2), 285-6.
5. Yoon SS, Heller RF, Levi C, et al. (2001) Knowledge and perception about stroke among an Australian urban population. *BMC Public Health*, 1, 14.
6. Pancioli AM, Broderick J, Kothari R, et al. (1998) Public perception of stroke warning signs and knowledge of potential risk factors. *J Am Med Assoc*, 279, 1288–99
7. Nicol MB and Thrift AG. (2005) Knowledge of Risk Factors and Warning Signs of Stroke. *Vascular Health and Risk Management*, 1(2), 137–147.
8. Mc Namara et al. (2008) Stroke Knowledge Among Urban and Frontier First Responders and Emergency Medical Technicians in Montana. *The Journal of Rural Health*, 24(2), 189-193.
9. Das K, Mondlar GP, Dutta AK, Mukharjee B, Mukharjee BB. (2007). Awareness of earning symptoms and risk factors of stroke in the general population and survivors of stroke. *Journal of clinical Neurosciences*, 14(1), 12-6.