

Nursing Audit on Stroke

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Abstract: An investigation was conducted with the objectives to assess the current practice of stroke patients as well as to prepare a planned teaching programme on needed areas of stroke management at Medical and Neurological ward of R. G. Kar Medical College & Hospital, Kolkata-4. Data were collected from 60 respondents attending male medical ward, female medical ward and neurological ward during the period of 03.02.2017 - 30.03.2017 selected by non-probability purposive sampling technique using record analysis and interviewing method as data collection tool used in this work was established by the expert of Royal College of Physicians. The audit revealed that majority (70.3 %) of the respondents were within 60-80 years of age and (29.7%) of them were between 40-60 years of age. Among them (56%) were female, majority (80%) were Hindu and (20%) were Muslim. Cent percentage of the patient (100%) were screened by using FAST, (40%) were suspected TIA, majority (60%) of them had crescendo TIA. Nearly (70%) had been started with Aspirin within one hour (immediately), measure for secondary prevention had been introduced among cent percentage of the patient (100%). The audit also revealed that known hypertensive case of (50%) known diabetes (26.6%), known CHD cases 13.4% and smoke 10%. Majority (80%) of total sample were recovered after treatment and death occurred in 20% of the patients and there is no statistically significant relationship in between age of the stroke patient and TIA.

1. Introduction

More than 2400 years ago the father of Medicine recognized and described stroke as the sudden onset of paralysis until recently, modern medicine has had very little power over this disease, but the world of stroke medicine is changing & better therapies are being developed every day. A Cerebrovascular accident (CVA), and ischemic stroke or "brain attack", is a sudden loss of brain function resulting from a disruption of Blood supply to a part of the brain.

After coronary heart disease and cancer of all types, stroke is the third commonest cause of death worldwide. In one report, the age standardized, gender-specific stroke mortality rate was 44 to 102.6/100,000 for Asian males, compared with only 19.3 for Australian white males. During last decade, the age adjusted prevalence rate was between 250-350/ 100,000. Studies showed that the age adjusted annual incidence rate was 105/100,000 in the urban community of Kolkata and 262/100,000 in a rural community of Bengal.

The aims of this audit is to assess the use of treatment protocol for stroke patients as well as to prepare a planned teaching programme on needed areas of stroke management at Medical and Neurological ward of R. G. Kar Medical College & Hospital, Kolkata-4.

Objectives

- 1) To assess the treatment protocol used for stroke patient in Male, Female Medical Ward and Neurology Ward.
- 2) To assess the felt need of the patient and family members regarding management of patient at home.
- 3) To find out the co-relations and association of the disease with demographic factors

2. Literature review of nursing audit on stroke

Helme. G, Over and et all, (January 2013), in nursing audit at Taruanga Hospital, New Zealand, revealed that focused re-audit of 26 patients admitted with stroke to ASU from June to August 2013 was undertaken. Continence of stool

was present in all 26 patients notes, complete adequately in 65%, and partially in another 27%. Initial swallow screen was performed in 85%. Patients reaching ASU within 4 hours of hospital admission doubled to 38%.^[1]

Kapas Lily & Toong Anindita – conducted an audit on stroke patient related to application of stroke Protocol. Admitted in female medical ward, male medical ward and neurological ward cent percent (100%) of them were screened by using Fast and Majonty (75.6%) of the total care (s) were not offered information regarding the treatment and care that they should be offered about acute stroke patients and their condition including 'understanding NICE guidance' booklet. More than half (56%) of the total patients were not offered information regarding the treatment and care that they should be offered about acute stroke patient and their condition including.^[2]

Tiesong Shang, Dileep R Yavagal (25.9.2012), American academy of neurology, revealed that Anne PERGAM, Jacqueline (April 26,2012) in king's College London revealed that ensuring that the nutrition and hydration and patients in hospital are met is part of the nurse's role. Adequate nutrition and hydration is vital for good health, from both a physical and psychological perspective, and should be considered a priority by nurses.^[3]

Byrne, Bronagh, O'Halloran and Pere (July 13, 2011) in nursing audit on accuracy of smoke diagnosis by registered nurses using the ROSIER tool compared to doctors using neurological assessment on stroke unit revealed that of 106 suspected stroke patients, 78 (73.5%) had a final diagnosis of stroke or transient ischemic attack (TIA) and 28 (26.4%) had an alternative diagnosis. Using the ROSIER tool registered nurses achieved diagnostic sensitivity for stroke of 98% (95% confidence interval 88-89), positive predictive value (PPV) 83% (98% confidence interval 73-90). Doctors using standard neurological assessment has a similar diagnostic sensitivity of 94% (95% confidence interval 86-98). PPV 80% (95% confidence interval 70-88). The mean time from initial assessment by registered nurses using the ROSIER tool, until assessment by doctor on stroke unit 75 min (SD=65.8).^[4]

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3. Methodology

A retrospective review approach was adopted in this audit. Data were collected from 60 respondents attending male medical ward, female medical ward and neurological ward during the period of 03.02.2017 - 30.03.2017. Respondent were selected by non-probability purposive sampling technique. Along with the patient the family members and nursing staffs of those units were included. Record analysis applied for the data collection of utilization of stroke protocol established by the expert of Royal College of Physicians and interviewing method was used to collect data from the care givers using a validated tool. Content validity of the stroke protocol was established by the experts of Royal college of physicians according to the NICE guideline. After obtaining permission the data was collected during 3-5 pm working hour at male and female medicine ward and neurological ward in R. G. Kar Medical College and Hospital respectively.

4. Result and Discussion

Section I: Related to sample characteristics

The audit revealed that majority (70.3 %) of the respondents were within 60-80 years of age and (29.7%) of them were between 40-60 years of age. Among them (56%) were female, majority (80%) were Hindu and (20%) were Muslim.

Table 1: Frequencies and percentage distribution of sample by their demographic characteristics in terms of Hypertension, Diabetes, CHD and Smoking history (n=60)

Criteria	Frequency	Percentage
Known hypertension		
Yes	30	50
No	30	50
Known diabetes		
Yes	16	26.6
No	44	73.4
Known CHD		
Yes	8	13.4
No	52	86.6
Smoker		
Yes	6	10
No	54	90

Table I revealed that among them (50%) were known hypertensive case, (26.6%) had diabetes, known CHD cases were 13.4% and 10% were having smoking history

Section II: Finding related to rapid recognition of symptoms and diagnosis and specialist care of stroke patients.

The audit revealed that Cent percentage of the patient (100%) were screened by using FAST as per NICE Guideline. (40%) were suspected TIA, majority (60%) of them had crescendo TIA. Nearly (70%) had been started with Aspirin within one hour (immediately), Measure for secondary prevention had been introduced among cent percentage of the patient (100%).

Table 6: Frequency and percentage distribution of additional patient information in terms of CT scan shows hemorrhage and thrombosis and outcome of the patient (n=60)

Criteria	Frequency	Percentage
CT scan shows thrombosis		
Yes	28	46.6
No	32	53.3
CT scan shows Haemorrhage		
Yes	32	53.3
No	28	46.6
Outcome		
Death	12	20
Recovery	48	80

Majority (80%) of total sample were recovered after treatment and death occurred in 20% of the patients.

The family members were interested about the daily living activities of the recovered patients. Among the 60 family members 65% were female, 55% had primary level education, 68% were worried about personal hygiene, 23% were enquired about the ambulation of the patient and 4% of them were interested to know about the maintenance of nutrition at home.

The audit also revealed those standardized tools were mostly used by the physicians. Only 23% the nursing staff of those unit were oriented with the standardized tool and specific measure regarding stroke patient's rehabilitation were inducted by 55% of the registered nurses.

Section III: There was no statistically significant relationship with the stroke and demographic factors of the patient.

According to the nursing audit conducted by Byrne, Bronagh, O'Halloran and Pere (July 13, 2011), 73.5% had TIA which support the findings of this audit though the setting is different. There is a lacking of the assessment of the patient by the nurses which is not at per the findings of Byrne et al.

5. Conclusion

On the basis of the findings of the present audit it can be concluded that among the patients who were admitted in female medical ward, male medical ward and neurological ward cent percent (100%) of them were screened by using FAST. Physicians are using the assessment protocol. Nursing personnel need to be inducted regarding the NICE Guideline of stroke management. During the stay of the patient's family members is to be taught about the rehabilitation measure of stroke patients at home. Depending on the findings a second phase of the audit has been under processing considering the care givers of stroke patient. The audit was limited to small sample and in one setting. Replication can be done.

References

- [1] Helme G Over and et all. Tauranga Hospital. New Zealand. Nursing audit. 2013 January 1-4.^[1]

[2] Tiesong Shang, Dileep R Yavagal (25.9.2012)^[3]
[3] Byrne, Bronagh, O'Halloran and Pere (July 13, 2011)^[4]

Author Profile



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