Knowledge and Practice Regarding care of Cerebrovascular Accident Patients among the Staff Nurses with a View to Develop an Information Booklet in the Selected Hospital

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Abstract

Stroke or cerebrovascular accidents remains to be one of the major health care problems around the World. Stroke is the second leading cause of death, responsible for 4.4 million (9%) of the total 50.5 million deaths each year. In developed countries, stroke is the first leading cause for disability, second leading cause of dementia and third leading cause of death. Stroke is also a predisposing factor for epilepsy, falls and depression in developed countries. Among stroke survivors 31% required assistance with self care, 20% require assistance with ambulation, 71% have some impairment in vocational abilities up to 7 years following the stroke and 16% are institutionalized. The objective of the study was to assess the knowledge and practice among the staff nurse regarding care of cerebrovascular accidents patients. The design adopted was an Exploratory descriptive design. Knowledge was assessed by using a structured questionnaire and check list to assess the practice of staff nurse regarding care of cerebrovascular accidents patients. The samples included in the study were 90. The result found for this study revealed that about 63.3%(57) of staff nurses had moderated knowledge wherease 23.33% of staff nurses had adequate knowledge. In practice 45.55% (41) staff nurses had moderate practice wherease 54.45%(49) staff nurses had adequate practice.The study reveals that the samples were having moderate knowledge and practice regarding care of cerebrovascular accident patients. So the researcher felt a need to develop an informational booklet regarding care of CVA patients.

Highlights

1. Stroke is a common and disabling diorder that involves a high economic burden on public health.

2. The aim of the study was to assess the knowledge and practice of staff nurses regarding care of Cerebrovascular Accident patient and to assess the need of teaching and instructional module.

3. Information Booklet is a small, thin book with paper covers, typically giving information on a particular subject of care of cerebrovascular patient.

4. Staff nurses have moderate knowledge and practice regarding the care of Cerebrovascular Accident patient and there is a need to improve knowledge and practice by planning an information booklet.

Keywords: Cerebrovascular Accidents; Epilepsy; Disability; Dementia; Impairement and Paralysis .

Introduction

A cerebrovascular accident otherwise known as Stroke or Brain attack occurs when the blood circulation to the brain fails. Brain cells can die from decreased blood flow and the resulting lack of oxygen leads to dysfunction of brain tissue in that area. A stroke can have an effect on many body functions, including motor activity, bladder and bowel elimination, spatial, perceptual alterations, personality, affect, sensation, swallowing and communication. Stroke is also a predisposing factor for epilepsy, falls and depression in developed countries. Among stroke survivors 31% required assistance with self care, 20% require assistance with ambulation, 71% have some impairment in vocational abilities up to 7 years following the stroke and 16% are institutionalized.

Background

Stroke is a major public health problem in present scenario. According to World Health Organization (WHO), stroke has caused about 5.54 million deaths worldwide in 1999 with two-thirds of these deaths occurring in less developed countries. Cerebrovascular accident can result in profound disruption of life of the individual. The ability to perform Activities of Daily Living (ADL) may require many adaptive changes as well as assistance from the family members. Home management of the patient may be a challenging situation for the care giver if they are ignorant about the care of the patient. Meeting the educational needs of the family care giver is essential to optimize the quality of life for both the patient and family.

The incidence of stroke is likely to rise in the coming years due to increase in population, increase in life expectancy, rapid urbanization resulting from migration from villages to the cities, changing lifestyles involving sedentary habits, smoking, excess alcohol use and rising stress level in life.

Scientists combed through more than 100 studies from 1990 to 2010 studying stroke patients across the world and also used modelling techniques when there wasn't enough data. They found the incidence of stroke has jumped by a quarter in people aged 20 to 64 and that those patients make up almost one-third of the total number of strokes. Researchers said most strokes still occur in the elderly and that the numbers of people suffering strokes are still increasing as the world's population ages. "Some of the increase we will see in strokes is unavoidable because it has to do with people aging, but that doesn't mean we should give up."

Most strokes occur when a clot blocks the blood supply to the brain. Patients often experience symptoms including a droopy face, the inability to lift their arms and garbled speech. If not treated quickly, patients can be left with long-term side effects, including speech and memory problems, paralysis and the loss of some vision.

The researcher with their previous experiences in clinical practice felt that the knowledge and practice level of staff nurses is incompetent for providing a quality care for cerebrovascular accident patient, so planned to conduct the study among the staff nurses. CVA is a major challenging life threatening condition which the population is facing and with the help of this study the researcher will be able to assess the knowledge and practice level as well as to fill the gap between knowledge & practice among the staff nurses regarding care of cerebrovascular accident patient by developing an information booklet.

Methods

Design

An quantitative approach with an Exploratory descriptive design was adopted for the study. The target population was the staff nurse working in various hospitals. A non-probability convenient sampling technique was used to select the 90 staff nurse working in hospital.

Development of the Tools

A structured knowledge questionnaire and checklist was developed to assess the knowledge and practice amongst the staff nurse regarding care of cerebrovascular accidents patients. The following steps were adopted in the development of the tool which consist of review of literature, personal consultation, discussion with the nursing experts and nephrologists and the blue print was prepared. The Content validity of the tool was done by the experts. Reliability testing of the tool was done by using test retest reliability technique. Clear information was gathered by direct questioning and through observation of a sample of subjects who have specified inclusive criteria. Information booklet was prepared by the investigator regarding care of CVA patients which covers the content in the areas of personal hygiene, passive exercises, meeting the nutritional and elimination needs and the complete management and care of CVA patients.

Tool

Data collection tools are the instruments used by the investigator to observe or measure the key variable in the research problem. In this study the tool consisted of:-

Section A: Structured knowledge questionnaire to assess the demographic data of staff nurses such as age, sex, education qualification etc. in selected hospital.

Section B: Structured knowledge questionnaire to assess the knowledge of the staff nurses regarding care of cerebrovascular accident patients.

Section C: Check list to assess the practices regarding care of cerebrovascular accident patient.

Section D: Prepare an Information booklet regarding care of CVA

Ethical Consideration

The pilot study and the main study was conducted after the approval from the medical superintendent of the hospital. An informed Consent will be obtained from staff nurse after proper explanation about the purpose and usefulness of the study. Participation on voluntary basis and they can withdraw themselves from study at any time. Confidentiality and anonymity will be maintained.

Research Procedure

Methodology of research indicates the general pattern for organizing the procedure for gathering valid and reliable data for an investigation (Polit and Hungler, 1998). An Exploratory descriptive study design was adopted for the study. The samples or the subjects are the staff nurses who are was selected with the use of non-probability convenience sampling technique.

The permission was obtained from the medical and nursing supirintendent of the responsible hospital and pilot study was conducted for 1 week. In main study 90 samples were selected. Self administered questionnaires and checklist were administered to assess the knowledge and practice level of staff nurse regarding care of CVA patient. The tools was administered for an average of time period for 45min. The data was obtained and statistical analysis was done with the use of diferential and inferential statistics and result was interpreted. After assessing the knowledge and practice level among the staff , the investigator had distribute an Information booklet regarding care of CVA patient.

Results

The significant finding of the study were that most of the samples 44.44% (40) staff nurses were found to be in the age group of less than 25 years, 24.45% (22) staff nurses were in the age group of between 26-28 years, 18.89% (17) staff nurses was found to be in the age group more than 32 years and 12.22% (11) staff nurses was found in the age group of between 29-32years. In relation to gender, majority of staff nurses 60% (54) were Male & remaining 40% (36) were Female who participant in the study. In religion distributions it shows that majority of 82.22% (74) staff nurses belongs to the Hindu religion, 12.22% (11) staff nurse belongs to Christian religion and 5.56% (05) nurses belongs to Muslim religion.

In professional qualification majority of the participant 76.67% (69) had undergone GNM courses, 8.89% (08) staff nurses held PB BSc Nursing, 8.89% (08) staff nurse were BSc Nursing and 5.55% (05) staff nurses had undergone other certify courses.

In working area distribution of staff nurses shows that majority of 54.44% (49) staff nurses working in Intensive care unit, 27.78% (25) staff nurses were working in general ward and 8.89%(08) staff nurses were working in the surgical ward and neurology ward.

Majority of 38.89% (35) staff nurses were employed for less than 2 years of total working experience, 27.78% (25) staff nurses were working for 2-5 years and 33.33% (30) staff nurses were employed for more than 5 years of working experience. Staff nurse who had attended inservice programme were 21.11% (11) and staff nurses who had not attended any inservice programme on the care of CVA patient were 78.89% (71).

As shown in Table 1 it revealed that 63.33% (57) of staff nurses had moderate knowledge whereas 23.33% (21) of staff nurses had adequate Knowledge and 13.33% (12) had inadequate knowledge regarding care of CVA patient.

Table 1: Frequency and percentage distribution of knowledge scores of staf nurses regarding care of cerebrovascular patients   N=90

Level of knowledge	Knowledge score	Frequency (f)
Adequate knowledge	Above 75%	23.33%
Moderate knowledge	50-75%	63.33%
Inadequate knowledge	Below 50%	13.33%

The mean score which was found to be 19.46 with a standard deviation of 3.55 and range between 16-28. The mean score percentage was computed and it was found to be 69.45%. From the above results it explores that the sampled subjects were having moderate knowledge regarding care of cerebrovascular accident patient (Table 2).

In Table 3 shows the practice level which was found to be 45.55% (41) staff nurses had moderate practice, whereas 54.44%(49) staff nurses had adequate practice regarding care of CVA patient.

Overall maximum practice Score of staff nurse was 14. The mean score was 11.92, with standard deviation of 1.09 and range between 10-14. The mean score percentage was computed and it was found to be 85.14%. From the above results it revealed that the sampled subjects were having moderate practice regarding care of cerebrovascular accident patient (Table 4).

Table 2: Range,mean ,mean percentage and standard deviation of knowledge scores of staff nurses regarding care of cerebrovascular accidents patients   N=90

	Range	Mean	Mean percentage	Standard deviation
Knowledge	16-28	19.46	69.45%	3.55

Table 3: Frequency and percentage distribution of practice scores of staf nurses regarding care of cerebrovascular patients   N=90

Level of Practice	Practice Score	Frequency (f)
Adequate practice	Above 75%	54.44%
Moderate practice	50-75%	45.55%
Inadequate practice	Below 50%	00%

Table 4: Range,mean ,mean percentage and standard deviation of practice scores of staff nurses regarding care of cerebrovascular accidents patients   N=90

	Range	Mean	Mean percentage	Standard deviation
Practice	10-14	11.92	85.14%	1.09

Table 5: Corelation between mean knowldege score ,mean attitude score of staff nurse regarding care of cerebrovascular accident patients   N=90

Area	Mean score	Standard deviation	Co-efficient corelation
Knowledge	19.26	3.55S	0.1537
Practice	11.92	1.09	

The rank co-relation between knowledge and practice of staff nurses regarding care of CVA patient was found to be r_k = 0.1537. It indicates that there is significant co-relation between knowledge & practice score of staff nurses regarding care of CVA patient.

The findings of the present study revealed that there was statistically significant Association of knowledge and practice of staff nurses regarding care of cerebrovascular accidents patients with the selected demographic variables such as Present working area and professional experience. The chi square value of present working area for knowledge was found to be 1.221 and practice was 1.211 which was found to be significant at p<0.005. The chi square value of professional experience for knowledge was 2.708 and practice was 3.888 which was found to be significant at p<0.005.

Discussion

The finding of the study were discused in terms of objective. The study was coducted to assess the knowledge and Practice regarding care of cerebrovascular acidents among staff nurses in selected hospital.

In the present study it was found that maximum mean score (72.00%) was obtained in the area of introduction, definition and etiology. The least mean score (67.14%) was found in the area of clinical manifestation and average mean score (69.23%) in management and nursing care.

A similar study was also done by cavalcantetfto to assess the impact of information package on patients with stroke and their significant caregivers.

The results revealed that patients and staff nurse in the intervention group tended to know more about stroke and they were more satisfied with the information they have received (p=0.04). The researchers concluded that providing information leaflets have led to improved knowledge about stroke several months after they have been distributed. These findings are worth in following up with larger studies.

It was found that about 45.55% (41) of staff nurses had moderate practice, whereas 54.44% (49) of staff nurses had adequate practice and none of them had inadequate practice regarding care of CVA patient. Therefore it was revelaed that the staff nurses have moderate knowledge and practice regarding the care of CVA patient.

Conclusion

In the present scenario cerebrovascular accident is considered to be a disease with chronic disability which needs further assistance in performing activity in daily living. Cerebrovascular accidents remains a seroius complication in old age and mortality is increasing. The following conclusions were drawn from the following findings that the staff nurses have moderate knowledge and practice regarding the care of CVA. So, researcher felt a need to prepare an information booklet which consists of all important information regarding care of cerebrovascular accidents patients which was later distributed among the staff nurses.

In order to reach this objective, the following recommendations for clinical practice are made:

• Ongoing in-service training must be introduced into hospitals and ICUs to improve knowledge of staff nurses regarding advance care of CVA patients.

• Orientation of new staff members in ICU's should include education on strategies regarding care of CVA patients.

• Unit protocols should be reviewed regularly as updates and new evidence for best practice are constantly emerging and staff should be educated on the updated protocols.

• ICU training programmes should include evidence based guidelines of care of CVA patients.

• Nursing lecturers and clinical facilitators should incorporate evidence based measures to prevent complication on CVA patients.

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