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

Moirangthem Sonia1*, Vishramsingh gurjar2, Kailash Kumar Khandelwal3

1Nursing Tutor, All India Institute of Medical sciences, Jodhpur, Rajasthan, India.
2Assistant Professor, Lingya’s institute of health sciences, Faridabad, Haryana, India.
3Principal, Soni Nursing College, Jaipur, Rajasthan, India.

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 whereas 23.33% of staff nurses had adequate knowledge. In practice 45.55% (41) staff nurses had moderate practice whereas 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. Stroke is a common and disabling disorder that involves a high economic burden on public health. 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. Information Booklet is a small, thin book with paper covers, typically giving information on a particular subject of care of cerebrovascular patient. 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.
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 [1].

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 [2].

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 [3].

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 [4].

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 [5].

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 [6].

METHODS
Design
A 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 [7].

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.
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 in service programme were 21.11% (11) and staff nurses who had not attended any in service 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.
whereas 54.44%(49) staff nurses had adequate practice regarding care of CVA patient.

Table 3. Frequency and percentage distribution of practice scores of staff nurses regarding care of cerebrovascular patients.

<table>
<thead>
<tr>
<th>Level of practice</th>
<th>practice score</th>
<th>Frequency (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate practice</td>
<td>Above 75%</td>
<td>54.44%</td>
</tr>
<tr>
<td>Moderate practice</td>
<td>50-75%</td>
<td>45.55%</td>
</tr>
<tr>
<td>Inadequate practice</td>
<td>Below 50%</td>
<td>00%</td>
</tr>
</tbody>
</table>

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 4. Range, Mean, Mean percentage and standard deviation of practice scores of staff nurses regarding care of cerebrovascular accidents patients.

<table>
<thead>
<tr>
<th>Practice</th>
<th>Range</th>
<th>Mean</th>
<th>Mean percentage</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10-14</td>
<td>11.92</td>
<td>85.14%</td>
<td>1.09</td>
</tr>
</tbody>
</table>

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.

Table 5. Corelation between mean knowledge score, mean attitude score of staff nurse regarding care of cerebrovascular accident patients.

<table>
<thead>
<tr>
<th>Area</th>
<th>Mean score</th>
<th>Standard deviation</th>
<th>Co-efficient corelation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>19.26</td>
<td>3.55S</td>
<td>0.1537</td>
</tr>
<tr>
<td>Practice</td>
<td>11.92</td>
<td>1.09</td>
<td></td>
</tr>
</tbody>
</table>

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 was discussed in terms of objective. The study was conducted to assess the knowledge and Practice regarding care of cerebrovascular accidents 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 cavalcantetf 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 revealed 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 serious 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.

ACKNOWLEDGEMENT
Nil

CONFLICT OF INTEREST
No interest

REFERENCES