



Awareness of the Importance of Handling Skills Among the Staff Nurses in Stroke ICU

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Abstract

Background: Today, stroke has become the most common condition that people in every age group are facing. There are various reasons why a stroke can happen, whether it is a symptom or a complication. The main goal is to handle these people, especially in their early stages. **Objective:** The objective of this research is to study the awareness of the importance of handling skills among the staff nurses in stroke Intensive Care Units (ICU). **Method:** A simple random sampling technique was used to select the 93 nursing staff of Krishna Vishwa Vidyapeeth Karad based on inclusion and exclusion criteria. The study period was 6 months. The devices included a demographic questionnaire and a recognition scale for checking the proficiency of nurses in managing stroke cases. From the literature reviews, the researcher developed the entirety of the questionnaire. The analysis's conclusion showed that the average individual age was 29 years. Their age range was 23-36 years. The male participants were 62% while females were 38%. The survey questionnaire highlighted multiple areas where nurses exhibited limited awareness. These areas encompassed understanding common patient positions, employing effective methods for patient positioning, recognising the advantages of early mobilisation and the essential role that nurses perform in facilitating optimal positioning and early mobilisation for stroke patients. The results were calculated based on the responses and then presented with the help of statistical analysis. **Results:** Based on the statistical analysis, it was found that there is a lack of and incomplete knowledge about the various aspects of the handling methods of a stroke patient in the ICU. **Conclusion:** Findings show that nurses are facing various difficulties and have little knowledge about the handling methods of stroke patients, their positioning and changing the patient's clothes.

Keywords: Awareness, Handling Skills, ICU, Staff Nurses, Stroke

1. Introduction

Stroke is the second leading cause of disability after dementia. Disability may include loss of vision and/or speech, paralysis and confusion¹. A stroke results in significant consequences affecting the overall health of the individual due to brain damage. Stroke triggers a cascade of life-changing events that affect the stroke survivor, the family and the community. Low- and Middle-Income Countries (LMICs) experience stroke rates that are 70%

higher than those in high-income nations, leading to an increased disease burden. Life expectancy in India has recently increased to over 60 years of age.

After a stroke, numerous factors may affect the muscles, leading to pain, rigidity and limitations of movement¹. Aligning, positioning and supporting the body correctly can help reduce these consequences. While in the hospital, healthcare professionals will suggest safe and comfortable ways to position the body of patients who have suffered a stroke¹.

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Nurses working in stroke units have an important role because they can implement positioning and early mobilisation strategies 24 hours a day, reducing the risk of complications and improving functional recovery².

Patient positioning is considered by nurses as a therapeutic approach to enhance comfort and prevent conditions such as pressure sores, chest infections and deep venous thrombosis³. Maximising oxygenation and enhancing breathing are perceived by some as the primary objectives of patient positioning³.

Nurses assisting acute stroke patients are guided by physiotherapists regarding the positioning of patients to help them restore function³. Patients who had experienced a stroke were traditionally put in positions that facilitated compensatory movements on the side of the body which was affected⁴. As time passed, it became evident that this technique was linked to an increase in contractures and stiffness³. This led to the idea that the affected side should be addressed through physiotherapy and proper positioning to promote typical movement³. Despite the vastly disparate methods employed by these writers, all shared the same objective of enhancing the affected side's function and thereby improving the patient's condition⁴.

The benefits of physical rehabilitation include not only restoring functional independence, muscle strength and health-related aspects of life but also improved neuronal maturation in the early post-stroke stage⁵. Previous research suggests that the incidence of stroke in India ranges between 105 and 152/100,000 people per year⁴.

Stroke-related risk factors are non-modifiable risk factors and modifiable risk factors. Non-modifiable risk factors is the age which is the most important contributor to stroke risk. After the age of 55, the incidence of stroke increases every ten years. The second one is genetics in which the single-gene conditions are linked to stroke (CADASIL, CARASIL, Alpha-galactosidase A deficiency, Haemoglobin S disease, Cystathionine beta-synthase deficiency and connective tissue disorders)⁶. Modifiable risk factors are alcohol consumption and substance abuse. Light and moderate alcohol consumption⁶ which is less than 4 units/day has been reported to be associated with a lower risk of Ischemic Stroke whereas higher quantities are associated with an increased risk of stroke⁶. Alcohol consumption has a linear relationship with ICH risk⁶. Recreational drugs including cocaine, heroin and cannabis are associated with an increased risk of stroke (non-ischemic stroke and ICH)⁶.

Thus, the main responsibility for attending to the positioning of patients clearly lies with the nursing staff, who are the only group of health professionals continuously present⁷. Through teaching and involving both patients and their caregivers, they can greatly influence the posture of stroke patients directly⁷.

2. Methods

This study has been approved by the Ethical/Protocol Committee. The research involved 93 participants who were nursing staff in the stroke ICU which were chosen using the formula of $n = Z^2pq/L^2$ for the observational study using a simple random sampling method and survey approach via questionnaires to recognise and educate the nursing staff working in stroke ICU. A formal questionnaire on handling skills and positioning of the patients served as a fundamental tool for this study. Nursing staff residing in Krishna Vishwa Vidyapeeth Karad participated in this study. Prior written permission was acquired. Sample size (n) was taken as 93. The study was conducted in Krishna Vishwa Vidyapeeth Karad, Maharashtra. The inclusion criteria for the study were an age group of 23–36 Both the genders and the exclusion criteria included an age group above 36 years and nurses who were not willing to participate in the study.

3. Results

The study involved 93 participants residing in Karad which included the nursing staff working in the stroke ICU.

Findings regarding the knowledge of nurses are given in Table 1.

Table 1. Frequency and percentage distribution of the awareness level for handling skills among staff nurses in stroke ICU

Knowledge Level	Frequency	Percentage
Excellent	2	2.15%
Good	39	41.94%
Average	24	25.81%
Poor	28	30.11%

Table 1 and Figure 1 depict that out of 93 staff nurses, 41.94% had good knowledge, 30.11% had poor knowledge, 25.81% had average knowledge and 2.15%

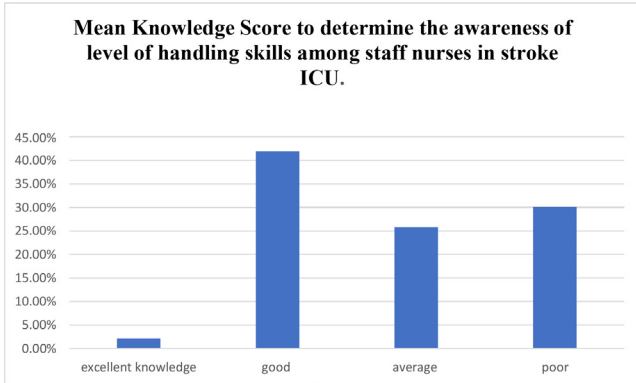


Figure 1. Mean knowledge score to determine the awareness of the level of handling skills among staff nurses in stroke ICU

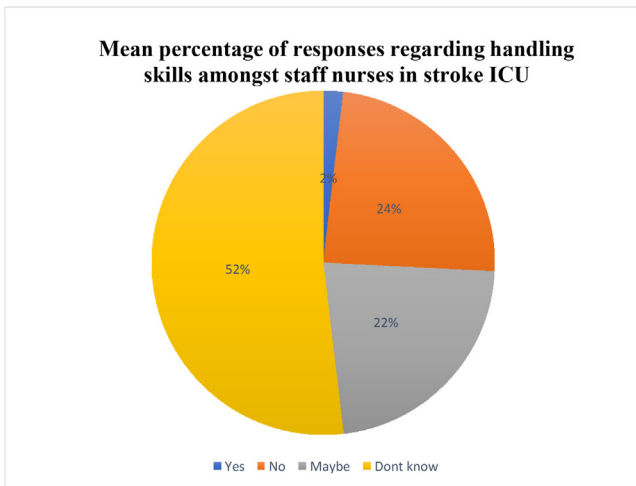


Figure 2. Mean percentage of responses regarding handling skills amongst staff nurses in stroke ICU

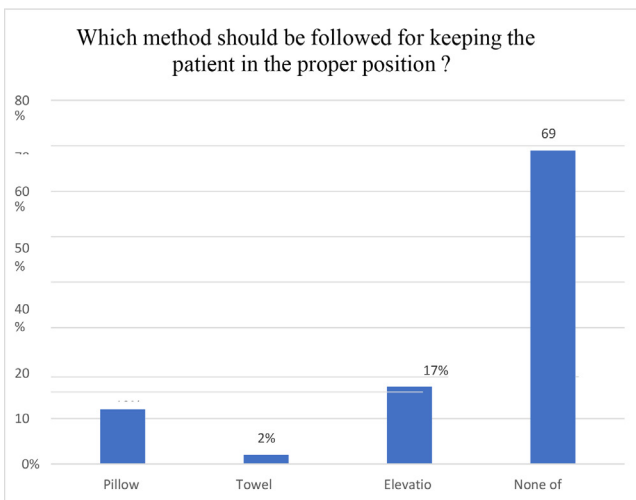


Figure 3. Method followed for keeping the patient in proper position.

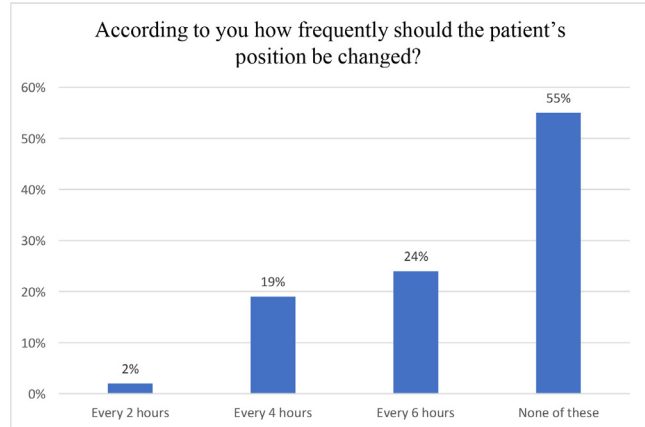


Figure 4. Frequency of the patients position to be changed

had excellent knowledge about the handling skills and positioning of patients in the stroke ICU.

Thus, it may be concluded that 41.94% of staff nurses of Karad had a good level of knowledge about the handling skills and positioning of patients in stroke ICU.

Figure 2 depicts that out of 93 staff nurses, 52% did not know about the benefits of handling skills in the Stroke ICU.

The above graph shows that 69% of the nurses who were working in the stroke ICU did not know which method should be followed to keep the patient in a proper position.

The above graph shows that 55% of the nurses who were working in stroke ICU did not know how frequently the patient's position should

4. Discussion

The primary objective of the survey was to assess the level of awareness among staff nurses in stroke ICUs concerning the importance of handling skills when dealing with stroke patients. To achieve this, a sample group of 93 staff nurses was selected based on specific inclusion and exclusion criteria.

The study's findings revealed a significant lack of awareness regarding the proper handling of stroke patients within the ICU setting. Specifically, nurses exhibited a lack of understanding regarding the appropriate methods for patient positioning and the benefits associated with early mobilisation in stroke care.

Examining the demographic characteristics of the surveyed nurses, the study identified an average age of approximately 29 years among the participants. This demographic profile suggests that many of the nurses may

be relatively early in their careers, potentially indicating a lack of extensive experience or exposure to specialised training programs tailored to stroke patient care.

Several factors may contribute to the observed lack of knowledge among nurses regarding patient positioning and early mobilisation for stroke patients. Notably, the absence of dedicated continuing education courses specifically designed to address the nuanced needs of stroke patients within clinical practice settings could be a crucial factor. Furthermore, the lack of well-defined protocols and guidelines pertaining to patient positioning and early mobilisation in stroke care might exacerbate this knowledge gap.

The survey questionnaire highlighted multiple areas where nurses exhibited limited awareness. These areas encompassed understanding common patient positions, employing effective methods for patient positioning, recognising the advantages of early mobilisation and comprehending the critical role that nurses play in facilitating optimal positioning and early mobilisation for stroke patients.

In summary, the survey findings underscore a critical deficiency in the knowledge and awareness of nurses, particularly those working in stroke ICUs, regarding patient handling skills, positioning and early mobilisation for stroke patients. Addressing this gap requires targeted interventions such as specialised training programs, the development of clear protocols and comprehensive guidelines tailored to stroke care in ICU settings. These measures are crucial to enhance the expertise of nurses and ensure improved patient outcomes in stroke care.

According to a study conducted in Malaysia regarding the effects of early mobilisation of patients by Leong YI, Abdul Rahman Rasnah and Chong concluded that to improve patient mobility initiatives and foster collaboration with physicians and physical therapists, it is essential to provide nurses with education on identifying patient classification and assessing readiness for early mobilisation⁸. Furthermore, the survey has heightened awareness within healthcare organisations regarding the significance of physicians, nurses and physical therapists adhering to and reinforcing these guidelines⁸.

5. Conclusion

In summary, the survey highlighted a notable lack of awareness among staff nurses in stroke ICUs regarding

essential handling skills, patient positioning and early mobilisation for stroke patients. This knowledge gap, observed across various critical aspects of stroke care, calls for targeted interventions such as specialised training programs and the development of clear protocols to enhance the expertise of nurses and improve patient outcomes in stroke care settings.

The implications of this lack of awareness are far-reaching and have significant repercussions for patient care quality and outcomes in stroke ICUs.

Since the study group was small, study results cannot be generalised for the entire population. Limitations were faced because of the shorter duration of the study.

6. References

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