

A Study to Assess the Effectiveness of Structured Teaching Programme (STP) on Knowledge and Practice of Personal Hygiene among Primary School Teachers at Kanpur, Uttar Pradesh

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Abstract

Stroke is a major global health concern and a leading cause of mortality and disability. Nurses play a vital role in the management and care of stroke patients, particularly in neurology and intensive care settings. A descriptive research design was used in this study. A total of 100 staff nurses from selected hospitals in Kanpur, Uttar Pradesh, were selected through a convenient sampling technique. Data were collected using a structured questionnaire. The findings revealed that 60% of nurses had moderate knowledge, 25% had adequate knowledge, and 15% had inadequate knowledge regarding stroke care. Significant associations were found between knowledge levels and age ($\chi^2 = 24.42$, $p = 0.0004$), years of experience ($\chi^2 = 31.67$, $p = 0.0001$), and previous knowledge ($\chi^2 = 8.54$, $p = 0.014$). No significant association was observed with gender ($\chi^2 = 3.40$, $p = 0.18$), education ($\chi^2 = 5.72$, $p = 0.057$), or working unit ($\chi^2 = 2.03$, $p = 0.36$). The study indicates that while most nurses possess moderate knowledge of stroke care, there remains a need to improve competency levels.

Keywords: Stroke, knowledge, staff nurses, neurology, intensive care.

Introduction

Stroke is the second leading cause of death worldwide, and a major cause of disability. The incidence of stroke is increasing because the population is aging.¹

Effective post-stroke care is essential to improve outcomes for both patients and families; however, limited skills and competence, as well as low levels of awareness and knowledge, represent barriers to optimal evidence-based practice in stroke care.²

The aim of this editorial is to highlight the importance of stroke-related knowledge and skills

among nurses and allied professionals.³

Previous studies demonstrated that nurses did not have the adequate knowledge and skills to allow them to screen for and treat dysphagia in post-stroke patients, and that they required additional training.⁴

In addition, a survey of cardiovascular nurses reported poor knowledge and training in the area of atrial fibrillation and oral anticoagulant therapy, which is vital to prevent stroke.⁵

Clinical protocols to manage fever, high sugar, and dysphagia, made digitally available by the Quality in Acute Stroke Care Trial, were down loaded by

less than half of the 159 healthcare professionals from 21 countries participating in the study, and the instructions for protocol implementation were not always followed successfully.⁶

This descriptive study consisted of 245 nurses who work in Farabi Hospital of Karadeniz Technical University Health Application and Research Centre in Trabzon city centre. Data are collected using “Introductory Information Form” and “Acute Stroke Knowledge Level Measurement and Awareness Form” created within the scope of “T.R. Ministry of Health Stroke Clinical Protocol”. The suitability of data for normal distribution was evaluated with the Shapiro-Wilk and Kolmogorov-Smirnov tests. One-Way analysis of variance and independent samples t-test were used to compare the data with normal distribution, whereas the Kruskal-Wallis and Mann-Whitney U test to compare data without normal distribution and chi-square test for categorical data. The significance level was taken as p values of <0.05.

The average age of the nurses was 32.19±7.76 (minimum: 20, maximum: 60) years, wherein 64.9% had a bachelor's degree and 93.1% were clinical/ service nurses. The common correct answers were given to questions about nursing care in acute stroke, whereas wrong answers to questions about stroke scale, tPA dose, and stroke time management. A positive, weak, and statistically significant relationship was found between the knowledge score of the nurses and their ages ($r=0.158$; $p=0.013$). Nurses who followed professional publications and attended congresses, courses, and symposium programs answered the questions more accurately.

Improving the knowledge level of nurses on acute stroke is necessary to organize postgraduate and in-service training programs to ensure the participation of nurses in scientific meetings and develop stroke care clinical practice guidelines for quality patient care.

Statement of The Problem

A study to assess the knowledge towards care of stroke patients among staff nurses in neurology and intensive care unit at selected hospitals of Kanpur, Uttar Pradesh.

Objectives of The Study

01. To assess the knowledge of staff nurses regarding care of stroke patients in neurology and intensive care unit.
02. To determine the association between knowledge score of staff nurses regarding care of stroke patient with demographic variables.

Hypothesis

H₀: There is no significant association between knowledge of staff nurses regarding care of stroke patient with selected demographic variables.

H₁: There is a significant association between knowledge of staff nurses regarding care of stroke patient with selected demographic variables.

Methods and Materials

Research Approach

The present study used a descriptive research approach.

Research Design

The research design used in the present study was descriptive research design.

Variables

Research Variables

Knowledge of staff nurses regarding care of stroke patient were the research variables.

Demographic Variables

Selected demographic variables such as age, gender, educational qualification, years of experience, ward and previous knowledge.

Population

The population of the present study consisted of staff nurses working in selected hospitals of Kanpur, Uttar Pradesh.

Target Population

The target population included staff nurses working in neurology ward and intensive care unit of Ursula Horsman memorial hospital at Kanpur, Uttar Pradesh.

Sample

The sample for the present study comprised staff nurses who fulfilled the inclusion and exclusion criteria.

Sample Size

The sample size for the present study consisted of 100 staff nurses working in selected hospitals of Kanpur, Uttar Pradesh.

Sampling Technique

Convenient sampling technique was used to select the samples for the present study.

Sampling Criteria

Inclusion Criteria

- Staff nurses working in neurology and intensive care unit.
- Staff nurses willing to participate in the study.
- Staff nurses available during data collection.
- Nurses who have more than 5 years of experience.

Exclusion Criteria

- Staff nurses who were on leave during data collection.

- Staff nurses not willing to participate in the study.
- Nurses who have less than 5 years of experience.

Development of Research Tool

A structured research tool was based on review literature, expert consult and research guide.

Description of The Tool

Section - A

Demographic Variable: It includes age, gender, educational qualifications, experience, ward, and previous knowledge.

Section- B

Structured knowledge questionnaire: Consist of 20 questions regarding care of stroke patient is self-structured knowledge questionnaire. Each question comprises of one mark. The maximum score of the correct response to each item is 1 for the incorrect response is 0. The total highest score is 20.

Table no. 1 Classification of level of knowledge.

S.NO.	LEVEL OF KNOWLEDGE	SCORE
1	INADEQUATE	0-6
2	MODERATE	7-13
3	ADEQUATE	14-20

Result and Findings

Section A

- Majority of the staff nurses 55% were in the age group 31 to 40 years.
- Majority of the staff nurses 75% were female.
- Majority of the staff nurses 55% have done B.Sc. nursing.

- Majority of the staff nurses 40% had 10 years of work experience.
- Majority of the staff nurses 52% was in ICU unit.
- Majority of the staff nurses 55% had previous knowledge.

Section B

Table no. 2 Percentage wise distribution of staff nurses according to their knowledge score.

Sr. no.	Level of knowledge	Score range	Frequency	Score in percentage	Mean	SD
1	Inadequate	0-6	15	15%		
2	Moderate	7-13	60	60%	10.7	4.37
3	Adequate	14-20	25	25%		

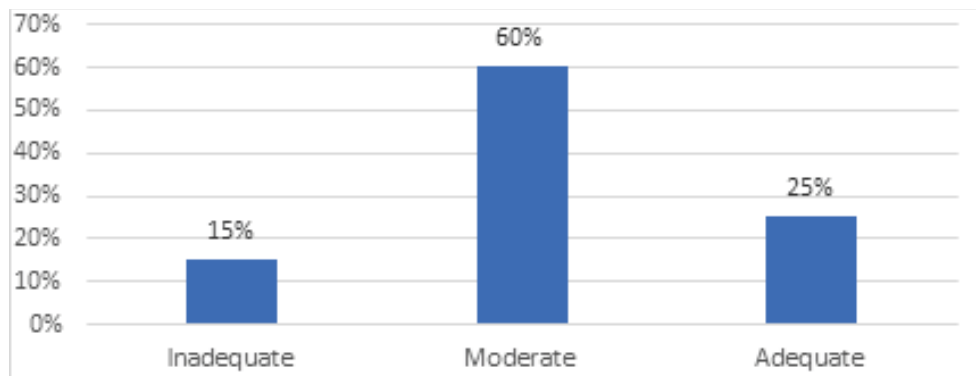


Figure no.1 Bar graph represents the percentage distribution of staff nurses' knowledge regarding care of stroke patients.

SECTION C

Association between demographic variables with their knowledge.

Demographic variables	Inadequate	Moderate	Adequate	Chi- square	Inferences
Age in years					
20-30 year	10	10	5		
31-40 years	5	20	30	24.42	0.0004*
41-50 years	5	0	5		
51-60 years	0	10	0		
Gender					
Male	10	5	10	3.40	0.18
Female	20	25	30		
Education					
GNM	10	18	17	5.72	0.057
B.Sc. nursing	10	15	30		
Experience					
5 years	15	5	10		
10 years	0	20	20	31.67	0.0001*
15 years	0	20	10		
Ward					
Neuro	5	13	30	2.03	0.36
ICU	5	22	25		
Previous knowledge					
Yes	0	25	30	8.54	0.014*
No	5	10	30		

This table shows that age, experience and previous knowledge have significant association and other variables like gender, education and ward has no significant association.

Interpretations:

Nursing Implications

The present study focuses on understanding how

well staff nurses are prepared to care for patients who have experienced a stroke. The findings of this study have several important implications for nursing practice, education, administration, and research.

Nursing Practice

The study highlights the need for nurses to be well-

informed and confident in identifying early warning signs, preventing complications, and supporting rehabilitation.

Nursing Education

Education is the foundation of quality nursing care. The study suggests that there is a need to strengthen both basic and continuing education related to stroke management.

Nursing Administration

From an administrative perspective, it is essential to create an environment that supports learning and professional growth. Nursing leaders should ensure that staff nurses are provided with opportunities for training and skill development.

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Conflicts of interests: There is no conflict of interest

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