

**A STUDY TO ASSESS THE EFFECTIVENESS OF A PLANNED TEACHING PROGRAMME ON KNOWLEDGE AND SKILL OF ECG MONITORING AMONG STAFF NURSES IN SELECTED HOSPITALS OF UDUPI DISTRICT, KARNATAKA, INDIA.**

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**ABSTRACT**

*Electrocardiogram (ECG) monitoring is an essential nursing responsibility in emergency and critical care settings. Adequate knowledge and skill are necessary for early identification of arrhythmias and other cardiac abnormalities. A quasi-experimental one-group pre-test post-test study was conducted among 50 staff nurses in selected hospitals of Udupi district, Karnataka, India. The pre-test mean knowledge score was 18.4 (50%), which increased to 31.28 (86%) in the post-test ( $t = 12.2, p < 0.05$ ). The pre-test mean skill score was 15.7 (45%), which improved to 32.9 (84.4%) in the post-test ( $t = 19.7, p < 0.05$ ). A strong positive correlation ( $r = 0.945$ ) was found between post-test knowledge and skill scores. The findings revealed that the planned teaching programme was highly effective in improving both knowledge and skill regarding ECG monitoring among staff nurses.*

**Keywords:** ECG Monitoring, Knowledge, Skill, Planned Teaching Programme, Staff Nurses, Effectiveness

## INTRODUCTION

Cardiovascular diseases are a major cause of morbidity and mortality worldwide. Continuous ECG monitoring helps in early detection of life-threatening arrhythmias and myocardial infarction. Nurses are primarily responsible for monitoring ECG changes and initiating timely interventions. Inadequate knowledge and improper electrode placement may delay critical treatment. Structured educational programmes are therefore necessary to improve competency and ensure patient safety.

## OBJECTIVES OF THE STUDY

1. To assess the pre-test level of knowledge regarding ECG monitoring among staff nurses.
2. To assess the pre-test level of skill regarding ECG monitoring among staff nurses.
3. To evaluate the effectiveness of a planned teaching programme on knowledge regarding ECG monitoring.
4. To evaluate the effectiveness of a planned teaching programme on skill regarding ECG monitoring.
5. To find the correlation between post-test knowledge and skill scores.
6. To determine the association between pre-test knowledge scores and selected demographic variables.

## HYPOTHESES

- H01: There is no significant difference between pre-test and post-test knowledge scores.  
H02: There is no significant difference between pre-test and post-test skill scores.  
H03: There is no significant correlation between post-test knowledge and skill scores.

## MATERIALS AND METHODS

A quantitative quasi-experimental one-group pre-test post-test design was adopted. The study was conducted in selected hospitals of Udupi district, Karnataka, India. A purposive sample of 50 staff nurses was selected.

Data were collected using a structured knowledge questionnaire (37 items) and an observation checklist (34 items). Content validity was established by experts. Reliability of the knowledge tool was established using the split-half method ( $r = 0.945$ ).

Pre-test was conducted on Day 1, followed by the teaching programme. Post-test was conducted on Day 8. Data were analyzed using descriptive and inferential statistics including paired t-test and Pearson correlation.

## RESULTS

The mean knowledge score increased significantly from 18.4 (50%) in the pre-test to 31.28 (86%) in the post-test ( $t = 12.2$ ,  $p < 0.05$ ). The mean skill score improved from 15.7 (45%) to 32.9 (84.4%) ( $t = 19.7$ ,  $p < 0.05$ ). A strong positive correlation ( $r = 0.945$ ) was found between knowledge and skill scores, indicating that improved knowledge enhanced clinical performance.

## DISCUSSION

The findings demonstrated significant improvement in both knowledge and skill following the planned teaching programme. Structured educational interventions play a vital role in strengthening theoretical understanding and practical competency among nursing professionals.

## CONCLUSION

The planned teaching programme was highly effective in enhancing ECG monitoring competency among staff nurses. Regular in-service education and competency assessments are recommended to maintain high standards of cardiac care.

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