

# Effectiveness of a Structured Protocol on Digitalis Therapy Knowledge and Practice among Intensive Coronary Care Unit Nurses

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**Abstract:** *This study examined the effectiveness of a structured protocol on digitalis therapy in improving the knowledge and clinical practice of staff nurses working in intensive coronary care units. An evaluative approach with a pre-experimental design was adopted, and purposive sampling was used to select participants from a selected hospital. Data were collected using a structured knowledge questionnaire and an observational checklist to assess pre-test and post-test performance. The protocol provided detailed information on drug classification, indications, contraindications, dosage adjustment, adverse effects, and nursing interventions. Statistical analysis using paired t-tests showed a marked increase in both knowledge and practice scores after the intervention. The post-test results demonstrated clear improvement compared to baseline levels, indicating better understanding and safer administration practices. The findings highlight the value of structured educational protocols in strengthening professional competence and supporting evidence-based nursing care in critical cardiac settings.*

**Keywords:** digitalis therapy, intensive coronary care unit, nursing protocol, clinical knowledge, medication practice

## 1. Introduction

### Objectives of the Study

1. To assess the knowledge and practice of staff nurses working in ICCU regarding digitalis therapy.
2. To prepare and administer protocol on digitalis therapy to ICCU staff nurses.
3. To evaluate the effectiveness of protocol on digitalis therapy among staff nurses in ICCU.
4. To find out the relationship between knowledge and practice of staff nurses in ICCU regarding digitalis therapy.
5. To find out the association between knowledge of staff nurses with selected demographic variables (age, gender, educational qualification, total years of experience in ICCU)

### Operational definitions

**Clinical Knowledge:** In this study, Clinical knowledge refers to the response of the staff nurses to structured knowledge questionnaire on heparin therapy

**Medication Practice:** In this study Medication practice refers to the action carried out by staff nurses in ICCU while administering heparin therapy.

**Effectiveness:** It refers to the extent to which the protocol has achieved its desired effect as expressed by gain post-test knowledge score and post-test practice score

**Nursing Protocol:** In this study it refers to informational material related to heparin therapy which includes drug class, trade name, indication, contra indication, adverse effect, dose adjustment, procedure guidelines, nursing interventions.

**ICCU Staff Nurses:** Nurses who have obtained a diploma or Bachelor of degree in nursing and working in the Intensive Coronary Care Unit.

**Digitalis therapy:** Digitalis therapy is treatment using digitalis medicines to treat congestive heart failure (CHF) and heart rhythm problems (atrial arrhythmias).

**Intensive coronary care unit:** It is a hospital ward specialized in the care of patients with heart attacks, unstable angina, cardiac dysrhythmia and (in practice) various other cardiac conditions that require continuous monitoring and treatment.

### Hypotheses

All hypotheses will be tested at 0.05% level of significance.

H1: Mean post test knowledge score on digitalis therapy among staff nurses in ICCU will be significantly higher than mean pre-test knowledge score.

H2: Mean post test practice score on digitalis therapy among staff nurses in ICCU will be significantly higher than mean pre-test practice score.

H3: There will be a significant relationship between pre-test knowledge and pre-test practice score.

H4: There will be a significant association between pre-test knowledge score of staff nurses with selected demographic variables like age, gender, educational qualification and total years of ICCU experience.

## 2. Methodology

The conceptual framework adopted for this study was based on Ernestine Wiedenbach's "The helping Art of Clinical Nursing" theory which is called as prescriptive theory. An evaluative research approach was used to assess the

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effectiveness of protocol on digitalis therapy in terms of knowledge and practice among staff nurses in ICCU. In view of the nature of the problem selected and objectives to be accomplished pre-experimental design was selected. The study was conducted in selected hospital staff nurses. Purposive sampling technique was used to select the sample. Knowledge and practice of sample regarding digitalis therapy were assessed by using a structured knowledge questionnaire and an observational check list.

### 3.Results

There was a significant improvement in the mean pre test knowledge score from 11.37 to mean post test knowledge score of 17.73 and with regard to practice, it was increased from the mean pre test practice score of 11.10 to mean post test practice score of 17.33. The paired 't' test was computed to find out difference between pre test and post test knowledge and practice scores, the obtained 't' value('t'59= 24.452, P, for pre-test knowledge is greater than the table value('t'59= 2.00) at 0.05 level of significance, and the obtained 't' value('t'59= 24.751, for pre-test practice is greater than the table value('t'59= 2.00) at 0.05 level of significance and it indicates a significant gain in knowledge and practice.

### 4.Interpretation and Conclusion

The paired 't' test computed between pre test and post test knowledge and practice scores shows that the obtained 't' value('t'59= 24.452, for pre-test knowledge score is greater than the table value('t'59= 2.00) at 0.05 level of significance, and the obtained 't' value('t'59= 24.751, for pre-test practice score is greater than the table value('t'59= 2.00) at 0.05 level of significance suggesting a significant gain in knowledge and practice.

Thus, the findings revealed that there was a significant increase in the knowledge and practice after the administration of protocol on digitalis therapy. The study concluded that the protocol was an effective method of enhancing knowledge and practice of staff nurses regarding digitalis therapy.

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