



A STUDY TO DETERMINE THE EFFECTIVENESS OF COMPETENCY-BASED TEACHING PROGRAMME ON PREVENTION OF NEONATAL HYPOTHERMIA AMONG STAFF NURSES WORKING IN NICU AT SELECTED HOSPITALS, GONDA

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ABSTRACT

Hypothermia is one of the main causes of neonatal morbidity and mortality in developing countries. Neonatal hypothermia is caused more by lack of knowledge than lack of equipment and it is an important cause of neonatal death. The aim of the present study was to assess the effectiveness of competency-based teaching programme on prevention of neonatal hypothermia among staff nurses working in NICU. A pre-experimental one group, pre-test post-test design was used for the study. Purposive sampling technique was used to select 30 staff nurses working in NICU. The investigator assessed the knowledge by using structured interview schedule and a competency – based teaching programme was administered to the subjects and on the seventh day post- test was conducted

with the same questionnaire. The collected data was analyzed by using descriptive and inferential statistics.

Keywords: Neonatal hypothermia, competency-based teaching programme, NICU.

INTRODUCTION

A newborn is precious not only to her parents but also to the community, nation and to the world. “A healthy child has a sure future” is one of the themes of WHO. If primary neonatal care is inadequate, it leads to unacceptable high neonatal morbidity and mortality. According to the National Family Health Bureau 2007, 26.9 million babies are born in India each year, out of which, 70% of the babies are born at home, 1.2 million newborns die within their first month of life, the majority of the death occur within first seven days of life. Throughout the country, 75% of all infant’s deaths occur within the first month of life and 39 newborns die within the first month of life for every 1000 live births. The highest neonatal mortality rates are in Asia and

Africa, which accounts for 92 percent of all the neonatal deaths in the world. The main causes of early neonatal deaths are hypothermia, asphyxia, birth trauma, infection and prematurity.

Problem Statement

A study to assess the effectiveness of competency-based teaching programme on prevention of neonatal hypothermia among staff nurses working in NICU at NICU at selected hospitals, Gonda.

Objectives of the Study

1. To assess the pre-test knowledge on prevention of neonatal hypothermia among staff nurses working in NICU at selected hospitals, Gonda.
2. To provide competency-based teaching programme on prevention of neonatal hypothermia among staff nurses working in NICU at selected hospitals, Gonda
3. To assess the post test knowledge on prevention of neonatal hypothermia among staff nurses working in NICU at selected hospitals, Gonda.
4. To find out the effectiveness of competency-based teaching programme on prevention of neonatal hypothermia among staff nurses by comparing pre-test knowledge score with post test knowledge score.
5. To find out the significant association between pre-test knowledge score on prevention of neonatal hypothermia among staff nurses working in NICU with their selected demographic variables.

Conceptual framework

A frame work is a brief explanation of theory or those portions of theory which are to be tested in a quantitative study. It helps to organize the study and provide a context for the interpretation of the study results. The conceptual framework formalizes the thinking process so that others may read or know the frame of reference basic to the research problem. It provides frame of reference for clinical practice, research and education. The present study aims at evaluating the effectiveness of CTP for staff nurses for the prevention of neonatal hypothermia. The framework selected for this study is Imogine King's Goal Attainment model. This model focuses on the interpersonal relationship between the client and the nurse, and this interaction is influenced by the perception of both client and the nurses. This interaction leads to mutual goal setting that is to be subjected by the subject. In the present study, interaction takes between the investigator and the staff nurses.

RESEARCH METHODOLOGY

Research Approach: Research approach includes the description of the plan to investigate the phenomenon under study in a structured (quantitative), unstructured or a combination of the two methods. An evaluatory research approach has been adopted for this study

Research Design: The research design used in this study was quasi experimental one group, pre- test post-test design.

Population: staff nurses working in NICU

Development of the tool

The tool was prepared according to the objectives of the study. The tool used to collect the data consisted of:

Part I: Baseline proforma

Part II: Structured interview schedule on prevention of neonatal hypothermia for staff nurses. of SCPM Hospital, Gonda.

Organization of the study findings

The data are organized and presented under the following headings:

Section I: Description of the baseline characteristics of the staff nurses

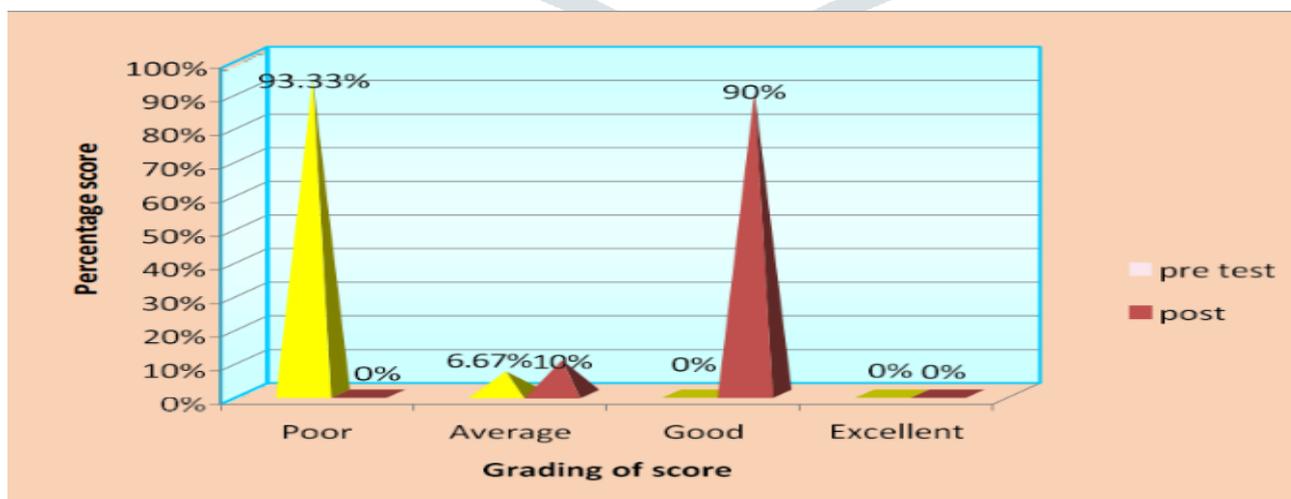
Section II: Description of knowledge level of staff nurses regarding prevention of neonatal hypothermia.

Section III: Assessment of the effectiveness of CTP in terms of gain in knowledge score

Section IV: Association between pre-test knowledge scores of staff nurses regarding prevention of neonatal hypothermia and selected baseline variables such as education of mother, occupation of mother, income, type of family, course and any previous exposure to information regarding prevention of neonatal hypothermia.

Grading of Pre test and Post test Knowledge Scores of Staff nurses

Grading	Percentage e (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
Poor (≤10)	≤35	2 8	93.33	-	-
Average (11-14)	36-50	2	6.67	3	10.00
Good (15-23)	51-80	-	-	27	90.00
Excellent (24-30)	81-100	-	-	-	-



majority of the subjects (90%) had good knowledge score ranging between 51-80% in the post-test, whereas in the pre-test none of the subjects had good knowledge, 93.33% had poor knowledge and 6.67% had average knowledge.

Mean, Standard Deviation and Mean Percentage of pre-test and post- test level of knowledge

N=30

	Mean	SD	Mean %
Pre-test	7.47	1.63	24.89
Post-test	17.57	2.09	58.56

Maximum possible score= 30

It is evident that the mean post-test knowledge score (17.57) was higher than the mean pre-test knowledge score (7.47).

Mean, Mean Difference, SD Difference and 't' value of Pre-test and Post- test Knowledge Scores.

N=30

Group	Mean knowledge score	Mean difference	SD of difference	't' Value
Pre-test	7.47	10.1	0.46	15.34*
Post-test	17.57			

Data shows that the mean post-test knowledge score (17.57) was significantly higher than the mean pre-test knowledge score (7.47). The computed 't' value (15.34) was higher than the tabled value ($t_{29} = 2.045$ at $p < 0.05$ level of significance). Hence the null hypothesis H_{01} was rejected and research hypothesis was accepted. So it is inferred that CTP was effective in increasing knowledge of staff nurses regarding prevention of neonatal hypothermia.

Summary

Descriptive and inferential statistic was used for analysis. The analysis was carried out on the basis of objectives and hypotheses of the study. The mean post-test knowledge score (17.57 ± 2.09) was higher than the mean pre-test knowledge score (7.47 ± 1.63). The computed 't' value ($t_{29} = 15.34$); $p < 0.05$ showed a significant difference suggesting that PTP was effective in increasing the knowledge on prevention of neonatal hypothermia. Chi-square was computed to find out the association between the pre-test knowledge scores and selected baseline variables and no association was found.

CONCLUSION

The conclusion drawn based on the findings of the present study. This study attempted to assess the knowledge of neonatal hypothermia on prevention of neonatal hypothermia and to educate them about causes, signs, symptoms, prevention and management of hypothermia, especially by prevention of neonatal hypothermia. This would help the staff nurses to gain knowledge in the respective areas and take preventive measures.

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