A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Prevention of Neonatal Hypothermia among Primipara Mothers in Selected Hospital of Dehradun, Uttarakhand

Priti Rebecca[1], Paonam Chanu Dineshwori[2]

[1]*Assistant Professor, Obstetrics and Gynaecological Department, Shri Guru Ram Rai University, Dehradun, India*
[2]*Professor, Obstetrics and Gynaecological Department, Shri Guru Ram Rai University, Dehradun, India*

Abstract - *A study was conducted to assess the effectiveness of a planned teaching program on knowledge regarding the prevention of neonatal hypothermia among primipara mothers in a selected hospital of Dehradun, Uttarakhand. The research design selected was one group pre-test, post-test design. The setting was Shri Mahant Indiresh Hospital, Dehradun. 60 primipara mothers were selected using a convenient sampling technique. A self-developed knowledge questionnaire regarding the prevention of neonatal hypothermia was used to collect the data. The result of the study showed that before the teaching program only (6.66%) of primipara mothers had adequate knowledge, almost (73.33%) had a moderate level of knowledge, and (20%) had an inadequate level of knowledge whereas after the teaching program (96.66%) of primipara mothers had adequate knowledge and only (3.33%) primipara mothers had moderate knowledge. Thus the study concluded that the knowledge gained by primipara mothers regarding neonatal hypothermia was due to the planned teaching program given by the researcher.*

Keywords - *Knowledge, Neonatal hypothermia, Primipara mothers*

I. INTRODUCTION

The human body goes through amazing changes during different stages of gestation, that is, the time that is spent in the mother's uterus. It starts as a tiny, microscopic group of cells that grows and forms all the organs and tissues found in a newborn baby. But the changes don't stop at birth. The neonatal period extends from birth through the first month of life. During this period, the newborn undergoes many physiological and anatomical changes as it adapts to his or her new environment. Neonatal hypothermia is a common problem, particularly in developing countries, causing high neonatal morbidity and mortality. According to WHO, neonatal hypothermia occurs when the body temperature drops below 36.5 degrees Celsius in the newborn.

The first 28 days of life- the neonatal period are the most vulnerable time for a child's survival. Children face the highest risk of dying in their first month of life, at a global rate of 19 deaths per 1,000 live births. Byways of comparison, the probability of dying after the first month but before reaching age 1 is 12, and after age 1 but before turning age 5 is 11. Globally, 2.6 million children die in the first month of life in 2016- approximately 7,000 newborn deaths every day- most of which occurred in the first week, with about 1 million dying on the first. The WHO stated that approximately 125 million infant are born every year in which 8 million die before reaching one year of life due to various complications. Among that, about 2.5% of newborns die due to hypothermia. As some studies revealed, in developing countries, with under-resourced settings, hypothermia at birth is one of the important risk factors for neonatal morbidity and mortality irrespective of their birth weights and gestational ages.

In India, the mothers are not aware of newborn hypothermia due to various factors such as ignorance, low socio-economic status, etc. The researcher plays a vital role in the prevention of newborn hypothermia during the hospitalization of primipara mothers by enriching them with knowledge of newborn hypothermia to reduce newborn mortality and morbidity rate.

II. RESEARCH METHODOLOGY

A. Research Approach
The quantitative evaluative research approach was used in the study.

B. Research Design
The research design selected for the study was a "pre-experimental one-group pre-test- post-test design".

C. Setting

The study was conducted in SMI Hospital, Patel Nagar, Dehradun.

D. Sample and Sampling Technique

The study subjects were selected in the 2nd week of July 2018. Primipara mothers who were admitted in the postnatal and post LSCS ward and those who are fulfilling the selection criteria were selected. The data was collected with the help of a self-developed knowledge questionnaire. The sample consisted of 60 primipara mothers.

A convenient sampling technique was used to select the sample for the study.

E. Instrument

Tool 1: Socio-demographic profile-

This tool was developed to collect information regarding sample characteristics. It consists of 9 items (Age, educational qualification, occupational status, type of family, family income, type of delivery, birth weight of baby, previous knowledge regarding prevention of neonatal hypothermia, and source of information).

Tool 2: Self-developed knowledge questionnaire

A self-developed knowledge questionnaire was developed to assess the knowledge of primipara mothers regarding the prevention of neonatal hypothermia. It consisted of 30 items, each scoring 1 mark for the right answer and 0 for the wrong answer.

III. DATA ANALYSIS
Table –I
Frequency and percentage distribution of Demographic variables

N=60

S.No	Demographic Variables	Frequency	Percentage (%)
1.	Age		
	a. 21-25 yrs	8	13.33
	b. 26-30 yrs	38	63.33
	c. 31-35 yrs	9	1.5
	d. 36-40 yrs	5	8.33
2.	Education		
	a. No formal education	10	16.66
	b. Primary education	7	11.66
	c. High school	6	10
	d. Intermediate	21	35
	e. Graduate	16	26.66
3.	Occupation		
	a. Homemaker	35	58.33
	b. Private employee	19	31.66
	c. Government employee	5	8.33
	d. Daily wage	1	1.66
4.	Type of family		
	a. Nuclear	28	46.66
	b. Joint	32	53.33
5.	Family income		
	a. 5000-10000	15	25
	b. 10001-15000	12	20
	c. 15001-20000	20	33.33
	d. More than 20000	13	21.66
6.	Type of delivery		
	a. Normal vaginal delivery	39	65
	b. Caesarean delivery	21	35
7.	Birth weight of the baby		
	a. Less than 2500gms	7	11.66
	b. 2500-3000gms	41	68.33
	c. More than 3000gms	12	20

Table –II (a)
Percentage distribution of pre-test level of knowledge regarding the prevention of neonatal hypothermia among the primipara mothers

N=60

S. No.	Level of knowledge	No. of person	Percentage (%)
1.	Adequate knowledge	4	6.66
2.	Moderate knowledge	44	73.33
3.	Poor knowledge	12	20

The pre-test table II(a) depicts that few(6.66%) of primipara mothers had adequate knowledge, and almost all of them (73.33%) had a moderate level of knowledge, and few (20%) had an inadequate level of knowledge.
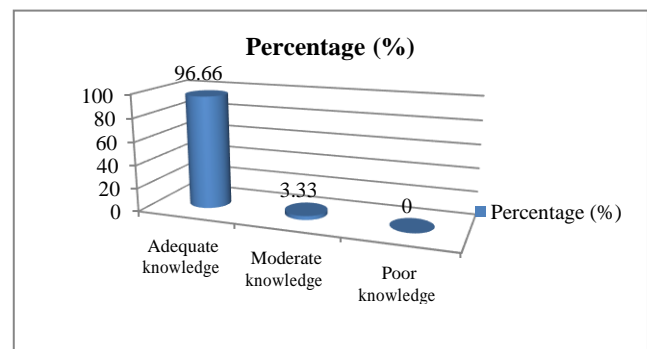

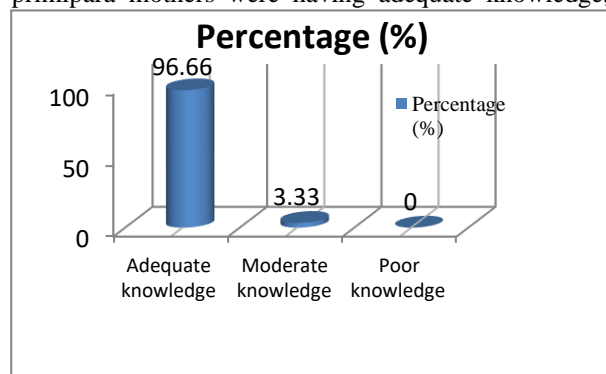**Fig.1: Percentage-wise distribution of Pre-test knowledge**

Table –II (b)
Percentage distribution of post-test level of knowledge regarding the prevention of neonatal hypothermia among the primpara mothers

N=60

S. No.	Level of knowledge	No. of person	Percentage (%)
1.	Adequate knowledge	58	96.66
2.	Moderate knowledge	2	3.33
3.	Poor knowledge	0	0

The post-test in table II(b) reveals that (96.66%) of primipara mothers were having adequate knowledge,

Fig.2: Percentage-wise distribution of Post-test knowledge

whereas only a few (3.33%) primipara mothers had moderate knowledge.

evaluative research approach was used in which the pre-experimental research design was taken. The study was conducted on 60 primipara mothers admitted to SMI Hospital, Patel Nagar, Dehradun, Uttarakhand. The self-developed knowledge questionnaire was administered to assess the pre-test knowledge of primipara mothers regarding the prevention of neonatal hypothermia. The planned teaching program was administered, and the post-test was conducted after 2 days to assess the effectiveness of the planned teaching program among primipara mothers regarding the prevention of neonatal hypothermia.

The study concluded that the knowledge gained by primipara mothers regarding neonatal hypothermia was due to the planned teaching program given by the researcher.

IV. DISCUSSION

Recommendations

Based on the findings of the study, the following recommendations have been made for further study-

• A similar study can be carried out on a large scale so that generalization of the study can be done.

• An experimental study can be undertaken with the control group.

• A similar study can be conducted by using various instructional media for obtaining the most effective method, i.e., simulation, STP, video method, etc.

• A comparative study can be done between primipara and multipara mothers to evaluate the effectiveness of the planned teaching program on knowledge regarding the prevention of neonatal hypothermia.

• Another study can be done on mothers' knowledge and practices regarding neonatal hypothermia.

• Another study can be done in assessing the knowledge and practices of staff nurses working in the labor room and neonatal unit.

V. CONCLUSION

The researcher undertook the study with the purpose of providing knowledge with the help of a planned teaching program among primipara mothers regarding the prevention of neonatal hypothermia. The quantitative

REFERENCES

[1] Datta Parul., The newborn infant. Pediatric nursing. 2nded. New Delhi: Jaypee brother. 85.

[2] Arenson Janet, Drake Patricia., Transition to extrauterine life. Quick look nursing: Maternal and newborn health. 187.

[3] Marlow R Dorothy, Redding A Barbara., The neonate, the family, and the nurse. Textbook of pediatric nursing. 6th ed. Elsevier. 346.

[4] Marlow R Dorothy., Redding A Barbara. The neonate, the family, and the nurse. Textbook of pediatric nursing. 6th ed. Elsevier. 370-71.

[5] Datta Parul., Introduction to child health. Pediatric nursing. 2nd Ed. New Delhi: Jaypee brother. 6.

[6] Sharma K Suresh., Literature review, Nursing Research and Statistics. 2nd ed. New Delhi: Reed Elsevier India Private Limited; (2012) 103.

[7] Sharma SK., Analysis of data, Nursing research and statistics. 2nded. New Delhi: Reed Elsevier India Private Limited, (2012) 299.

[8] Thermal management. Available from: www.newbornwhocc.org/2014_pdf/Thermal%20management%202014.pdf.

[9] WHO/New-borns: reducing mortality. Jan 2016, factsheet. Available from: http://www.who.int/mediacentre/factsheets/fs333/en/

[10] Research methodology. Available from: https://en.m.wikipedia.org/wiki/methodology

[11] WHO/ Infant, Newborn. Available from: http://www.who.int/topics/infant_newborn/en/

[12] Neonatal hypothermia and associated risk factors. Available from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4145526.