

Impact of Structured Teaching Programme (STP) on knowledge among the mothers of Newborn Regarding Prevention of Neonatal Hypothermia in a Selected Hospital, Bhubaneswar, Odisha, India

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Abstract: A quasi experimental study with pre and post test without control group design was undertaken on 50 mothers of newborn at Capital Hospital, Bhubaneswar, Odisha. And the samples were selected by purposive sampling technique. Data were collected by the use of structured closed ended questionnaire and analyzed by using descriptive & inferential statistics. Findings revealed that the overall mean score in the pretest was (7.82±2.77) which is 19.55% of the total score revealing that the mothers had poor knowledge regarding care of newborn on prevention of hypothermia where as the overall post test knowledge score was (35.12±2.01) which is 87.8% of the total score revealing excellent knowledge score. Highly significant difference was found between pre and post test knowledge scores. No Significant association was found between post test knowledge scores with their selected demographic variables. Statistical analysis of data revealed that STP was effective in improving knowledge of the mother regarding care of newborn to prevent hypothermia.

Keywords: Hypothermia, Newborn, Structured teaching programme (STP), Kangaroo mother care (KMC), Low birth weight baby (LBW)

I. Introduction

“The most beautiful necklace a mother can wear is not gold or games but her child arms around her neck.”
(George Herbert)

A neonate is a god’s divine precious gift given to a mother. Hence the birth of a neonate is one of the most awe inspiring and marvelous joyful events that occur in every woman’s life time. The cry of neonate is the only means of communication and brings a message that “I need care”. This also aims at keeping the newborn safe from the environmental and practical harm such as maintaining the normal body temperature.

The WHO has provided guidelines for thermal care in low-resource settings and the 10-step warm chain described previously highlights specific practices that need to be promoted for both home and facility births. A specific recommendation is to delay bathing for at least 6 hours after birth; showed that bathing of newborns increased hypothermia even in the presence of skin-to-skin contact and the use of warm water [1]. Hypothermia in neonate is a common problem and is associated with increased morbidity and mortality. Prevention of Hypothermia is therefore an essential aspect of neonatal care especially in the immediate neonatal period [2]. Newborns are more prone to get hypothermia because of their limited ability to generate and conserve heat. Hypothermia is an essential aspect of neonatal care especially in the immediate neonatal period. So great care is necessary by cloth the baby properly and to maintain the surrounding temperature and humidity, which suits the individual infant [3]. Neonatal hypothermia, defined by the World Health Organization (WHO) as axillary temperature less than 36.5°C, is a major contributor to neonatal illnesses and deaths both in the developed and developing parts of the world of 150 babies aged 0 to 648 hours, 93 had hypothermia with an incidence of 62%. Mild and moderate hypothermia accounted for 47.3% and 52.7% respectively. The incidence of hypothermia was highest (72.4%) among babies aged less than 24 hours. It was also higher among out-born babies compared to in-born babies (64.4%). Preterm babies had significantly higher incidence of hypothermia (82.5%) compared with 54.5% of term babies [4]. By this findings, the investigator was interested to conduct the research study on prevention of neonatal hypothermia & also planned for the enhance of the knowledge regarding prevention of neonatal hypothermia among mothers of newborn.

1.1 Statement of problem “A study to assess the effectiveness of structured teaching programme (STP) on knowledge regarding prevention of neonatal hypothermia among mothers of newborn in capital hospital, Bhubaneswar, Odisha, India”

1.2 Objectives of the study

To assess the existing knowledge on prevention of neonatal hypothermia among mothers of newborn prior to administering Structured teaching Programme.

- To find out the effectiveness of Structured Teaching Programme on prevention of neonatal hypothermia among
- To compare the knowledge score of the mothers with their selected demographic variables.
- To find out the association between post-test knowledge score with their selected demographic variables.

1.3 Hypothesis

H₁ → There will be a significant difference between pre & post-test knowledge regarding neonatal hypothermia among mothers of newborn.

H₂ → There will be a significant association between post- test knowledge regarding neonatal hypothermia among mothers of newborn with their selected demographic variables.

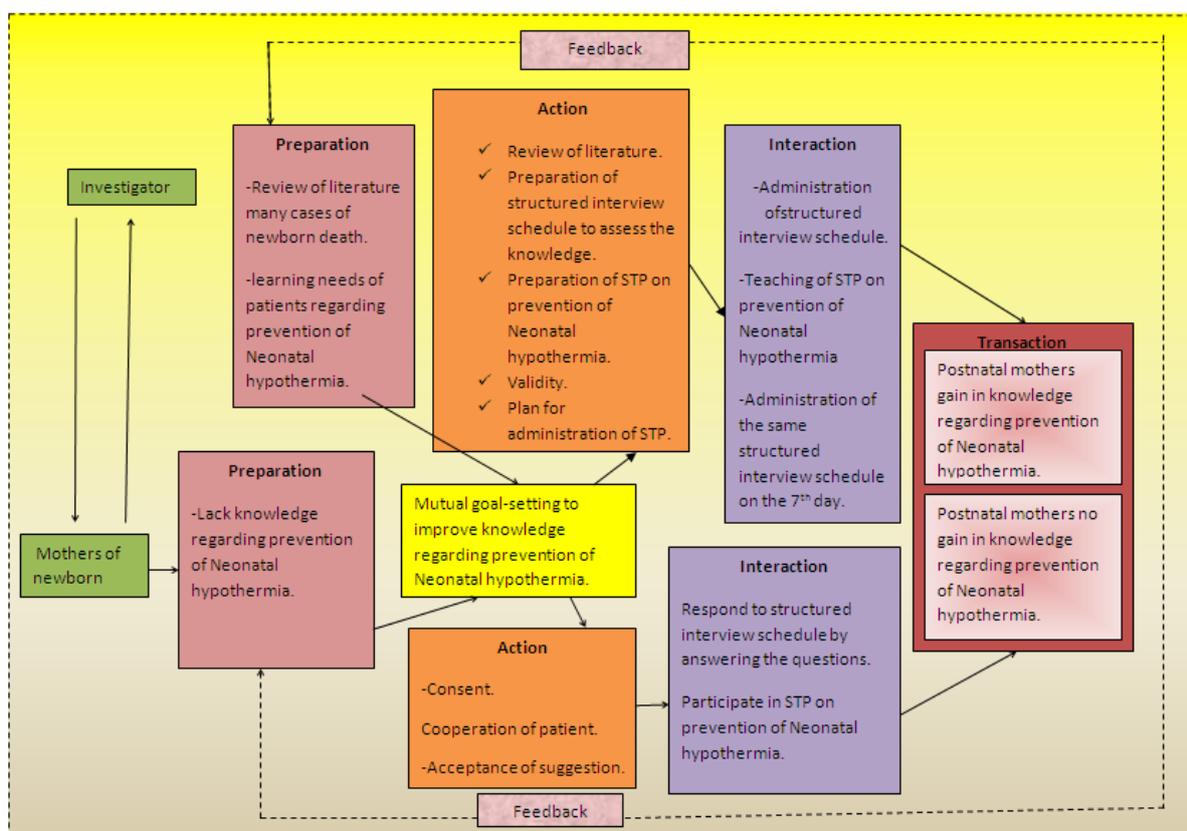


Figure 1: Conceptual framework on effectiveness of STP to mothers of newborn regarding prevention of Neonatal hypothermia based on Imogene Kings goal attainment model.

II. Material And Method

An evaluative research approach with pre-experimental research design was used to conduct the study. The study was conducted in capital hospital, Bhubaneswar, Odisha, where 50 mothers of newborn were selected by purposive sampling technique. The tool was developed in 2 sections. Section -A includes the demographic variable and section-B includes structured knowledge questionnaire regarding care of newborn to prevent hypothermia. Permission was obtained from the Director of capital hospital, Bhubaneswar, Odisha and informed consent was taken from the respondents. Pretest was conducted by using closed ended questionnaires followed by implementation of STP. After 7 days post test was done. Descriptive and inferential statistics was used for data analysis.

2.1. Inclusion criteria

- Mothers who have undergone caesarian section/ normal delivery and are hospitalized in Capital Hospital, Bhubaneswar.
- Mothers who are willing to participate.
- Mothers who are able to read & understand Odia/English.

2.2 Exclusion criteria

- Mothers whose babies are severely ill at the time of data collection.
- Mothers those who are absent at the period of study.

III. Findings

Table No- 1: Distribution of mothers according to their demographic variable.

Sl.no	Demographic variable	Frequency	Percentage
1.	Age		
a.	< 25	24	48%
b.	25-30	26	52%
c.	31-35	0	0%
d.	Above 35	0	0%
2.	Religion		
a.	Hindu	36	72%
b.	Muslim	12	24%
c.	Christian	2	4%
3.	Population		
a.	Govt. employee	5	10%
b.	Private/corporate employee	10	20%
c.	Housewife	30	60%
d.	Business	5	10%
4.	Educational Qualification		
a.	Illiterate	3	6%
b.	Primary	14	28%
c.	Secondary & higher secondary	28	56%
d.	Graduate & post graduate	5	10%
5.	Type of family		
a.	Nuclear	14	28%
b.	Joint	15	30%
c.	Extended	21	42%
6.	Place of residence		
a.	Urban	12	24%
b.	Rural	30	60%
c.	Slum	8	16%
7.	Parity of mother		
a.	Primipara	27	54%
b.	Multipara	20	40%
c.	Grand multipara	3	6%

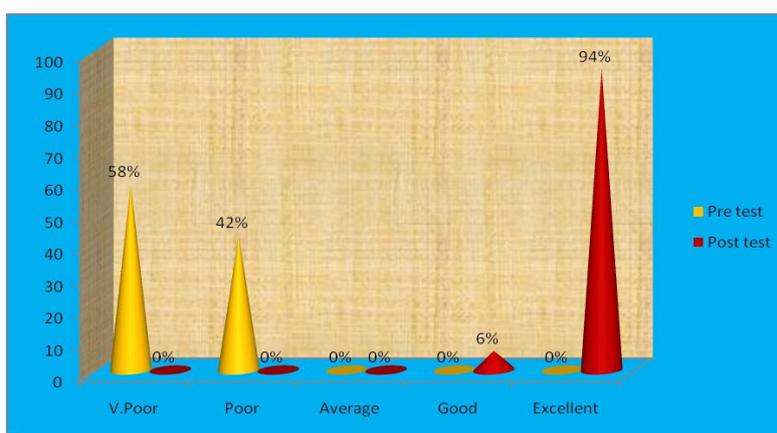


Figure-1: Bar diagram represents the pre & post test knowledge scores of mothers regarding prevention of neonatal hypothermia.

Fig-1: Levels of pre test & post test knowledge score of mothers regarding prevention neonatal hypothermia depicts that in pretest, (58%) of the mothers had V.POOR knowledge & (42%) of them had POOR knowledge whereas in post test majority (94%) of the staff nurses had EXCELLENT knowledge & (6%) had GOOD knowledge.

H₁- There will be significant difference in the pretest and posttest level of knowledge score among the caregivers after administration of structured teaching programme.

Table-2: Area wise comparison between pre and post test knowledge score of the mothers of newborn regarding care of newborn on prevention of hypothermia.

Sl.No	Area	*t'Value	Level of significant
1	General information on neonatal hypothermia	4.85	Highly significant.
2	Causes of hypothermia	5.86	Highly significant.
3	Clinical features	10.2	Highly significant.
4	Assessment of temperature in neonate	5.86	Highly significant.
5	Prevention of neonatal hypothermia	8.26	Highly significant.s
Overall		25.2	Highly significant.

(df=49)(table value=2.00),(p<0.05)

Table:2 Paired 't' test was calculated to assess the significant difference between the area wise score values of pre test and post test .Thus, the difference observed in the mean score value of pre test and post test were true difference and not by chance. Hence stated null hypothesis is rejected (p<0.05) and statistical hypothesis is accepted it can be interpreted that structured teaching programme was effective for all the areas.

H₀: There will be significant relationship between level of knowledge among the mothers who receives structured teaching programme.

Table No -3: Association between post test knowledge score of mothers of newborn on neonatal hypothermia with their demographic variables

Sl.No	Variables	Chi-square value	Level of significant
1	Age	5.84	Not significant.
2	Religion	5.99	Not significant.
3	Occupation	7.82	Not significant.
4	Educational qualification	7.82	Not significant.
5	Type of family	5.99	Not significant.
6	Residence	5.99	Not significant.
7	Monthly income	11.07	Not significant.
8	Parity of the mother	5.99	Not significant.

(df=1)(Table value=3.84),(p≥0.05)

Table no -3: From the Chi square test it is interpreted that there was no significant association between knowledge scores of the mother regarding care of newborn from prevention of hypothermia in post test when compared to relationship with the age, religion, occupation, Educational qualification, type of family, place of residence, monthly income, parity of mother (P≥0.05)..Hence the difference in mean score related to the demographic variables only by chance and not true hence the null hypothesis is accepted.

IV. Implication

4.1. Nursing practice

- The content of Structured teaching programme (STP) will help the mothers of newborn for reinforcing their knowledge on prevention of Neonatal hypothermia.
- The mothers of newborn can utilize this STP in their work field.

4.2. Nursing education

- The nurse educator can use the Structured teaching programme to teach mothers of newborn in prevention of Neonatal Hypothermia.
- The study has proved the importance of improving the knowledge of mothers of newborn regarding formulation of STP.

4.3. Nursing administartion

- With technological advances and ever growing challenges of nursing, the nurse administrators have responsibility to provide the nurses with substantive educational opportunities.
- Nursing administrator should provide necessary facilities and opportunities for mothers to equip themselves with knowledge and skill to prevention of Neonatal Hypothermia.

4.4. Nursing research

- This study helps the nurse researchers to develop appropriate health education plans for educating the mothers of newborn regarding prevention of Neonatal Hypothermia.

4.5. Limitations

Study is limited to care of mothers of newborn.

- The study was limited to Capital hospital, Bhubaneswar.

4.6. Recommendations

- An experimental study can be undertaken with control groups.
→ A similar study can be conducted by using various instructional media for obtaining the most effective method, i.e simulation, SIM, VATM etc.

V. Conclusion

It was inferred that STP was the best teaching strategy in imparting on prevention of Neonatal hypothermia which is commonly encountered in developing countries, can be prevented if mothers are educated through on going in teaching programme by nurses.

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References

- [1]. WHO. Thermal control of new born. Maternal and safe motherhood programme 2003.
- [2]. Halliday HL, Jenkins JG (2010) Interventions to prevent hypothermia at birth in preterm and/or low birthweight infants.
- [3]. Parul.Datta . Pediatric Nursing. second edition . Jay pee brothers medical publishers (P) Ltd.2009 P 124-40
- [4]. WHO. Neonatal care: report of WHO scientific group. Technical report. Series No: 424 Geneva. WHO 8
- [5]. Sachdev HP (2006): Commentary: utilizing information on causes of neonatal deaths in less-developed countries.Int J Epidemiol 2006, **35**:718-719