Effectiveness of 'Structured Teaching Programme' (STP)on The Knowledge Regarding Newborn Care Among Primipara Mothers.

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Abstract: *Mother has crucial role in caring newborn baby in all aspects .The main aim of the study is to find out the existing knowledge of primi-mothers and to evaluate an structured teaching programme for primi mothers about general newborn care .In the present research study quantitative evaluative approach & (one group pre-test post-test design)was used. The study was conducted at Govt Doon medical, Hospital Dehradun,UK. 50 Primi mothers were selected as subjects by convenient sampling technique. Data were collected using structured questionnaire in 2 parts. Part A includes the questions regarding demographic characteristics & Part B includes the knowledge questionnaire regarding general newborn care in newborns. The study showed that out of 50 subjects only 10% mothers were having average knowledge & 38% mothers were having very poor knowledge& whereas maximum mother 52% were having poor knowledge.*

Pre-test mean score was 10.08.After intervention 90% primi mothers scored good & only 10% mothers scored in average & the interesting was that no one mother falled in poor knowledge category. The post–test mean was 25.08. Knowledge was found significantly higher than the pre-test Mean score. As evidence from "t" value of 22.01 for df at <0.05 level of significance.

The chi-square test revealed that there was only two demographic variables i.e. educational status and Occupation of primi mothers had significant association with knowledge score regarding newborn care. This study revealed that malpractice was still concern in the study area..

Keywords*: Knowledge, Primi-mothers, Newborn care.*

I. Introduction

The birth of the baby is one of life's most wondrous moments. A healthy adult emerges from a healthy infant. Newborn baby has amazing abilities, yet are completely depend on others for every aspect of such as feeding, warmth and comfort. To become a mother is one of life's greatest blessings. It is a lifelong event that forever changes her. Becoming a mother changes her heart, thoughts, and actions. However, may soon wish her had a few extra hands." After having happily treated the challenges experienced during those 9 months, mothers happiness is doubled when she hold her newborn in her arms[1].

The period from birth to 28 days of life is called neonatal period and infant in this period is termed as neonate or newborn baby. Newborn baby are very susceptible to infection. They are 'at risk' for various health problems, even though they born with average birth weight. The morbidity and mortality rates in newborn infants are high and need optimal care for improved survival. Neonatal care is highly cost effective because saving life of a newborn baby is associated with survival and productivity of the future adult. They constitute the foundation of the life, so essential newborn care is emphasized to reduce the neonatal illness and deaths by preventing neonatal problems like infections including septicemia, meningitis, umbilical sepsis and neonatal tetanus followed by birth asphyxia. Factors related to neonatal infection are lack of knowledge and practice of mother regarding antenatal care and postnatal care including newborn care .[2]

The basic needs of a new born baby include love, touch, warmth, safety and security. New born care is an effective way to meet the baby's needs like warmth, breast feeding, and protection from infection, stimulation, safety and love. The care of the newborn in the family is governed by the family's knowledge of the mother. The mother's knowledge and the practices play a crucial role in safeguarding health and enhancing the newborns adaptation to the new environment. Many times a mother has learnt it by paying a heavy price through the death of 1 or 2 of her infants. There is lack of care in feeding, immunization, umbilical cord care, prevention of hypothermia.

Maintaining the normal body temperature is extremely important because of their larger body surface area. Thermal care is the component of essential newborn care which gets neglected. It is very common practice in India to bath the newborns immediately after birth. This puts the newborn at risk of hypothermia.[5]

Despite the improvements in child survival over the past 25years. There is still virtually no effective health care system for newborn in developing countries. There are estimated 4- million neonatal deaths worldwide each year more ever. It is estimated to account for 40% of under five deaths and two thirds of infants deaths. New born care is of immense importance for the proper development and healthy life of a baby. The health and survival of the new born baby depends upon the health status of the mother and her awareness, education and skills. Mother is the best primary health worker. She has the advantages of instinct, concern and interest to look after her baby. Mother look after her baby with love, affection and sense of sacrifice. Early involvement of the mother in the care of her baby is the best way to promote and encourage breast feeding. Mother is the best person to identify minor developmental deviations and early evidences of disease process because she is constantly and closely watching her baby. The basic knowledge and skills pertaining to mother craft, child nutrition, immunization, environmental sanitation and personal hygiene should be taught to the mother[6].

Anticipatory guidance is a major part of providing care to the healthy newborn. Educating parents about the care of their baby, especially new mothers, is of utmost importance. Nutrition is a primary educational objective. All babies must have an appropriate feeding routine established prior to discharge. Breast-feeding and breast milk are the most beneficial for the infant as well as the mother. The mother should be counseled on the nutritional and immunological benefits of breast milk (e.g., provides protection against illnesses such as gastroenteritis and otitis media). In cases where breastfeeding is not feasible (medically contraindicated or lack of maternal interest), then it is imperative that the infant successfully establishes bottle feeding prior to discharge. A newborn feeds every 1 to 4 hours, with longer intervals expected in formula fed infants as breast milk tends to empty from the stomach faster than formula. A typical feeding session should last approximately 20-30 minutes. Prior to discharge the infant should have voided and passed meconium. The first void may not occur until 16 hours of life, but in general 90% of babies will have voided by this time. In addition, 98% of infants have had their first stool by 24 hours of age. The mother should be counseled on the change in appearance of stool from meconium (dark green sticky sludge) to transitional to normal milk feeding stools and the variability between formula fed stools (tends to be brown) and breast fed stools (tends to be yellow, loose and seedy). The mother should also be aware of the appropriate number of wet diapers per day. By the end of the first week, the infant should be voiding 5 to 7 times per day[7]

I.1 NEED AND JUSTIFICATION
"A healthy child is a sure future" is one of the themes of WHO

The newborn health challenge faced by India is more formidable than that experienced by any other country in the world. The newborn health is inevitably affected by the traditional care practices of the mothers causing high infant morbidity and mortality.[12]

India carries the highest share of neonatal deaths in the world and contributes around a quarter of neonatal deaths. Of the 26 million babies born in India, every year one million babies die before the age of one month[1].The neonatal period (0-27 days) is the most vulnerable period for a newborn. It is therefore not surprising that in 2013, 2.8 million babies across the world died during this period. The 2.8 million neonatal deaths account for 44 per cent of all under-five deaths in children.

India has the highest number of neonatal deaths in the world. Of the three million neonatal deaths globally in 2012, 779,000 took place in India.[7]

If the neonatal period is vulnerable, the first day of life (24 hours) is even more critical. Of the 2.8 million babies dying across the world during the first 27 days, death during the first day of birth alone accounts for one million. What is poignant is that over 300,000 newborn deaths in India are on the very first day of birth. Thus, India accounts for about one-third of all babies dying globally on the first day of birth. New estimates in Levels and Trends in Child Mortality 2014 show that in 2013, globally, 6.3 million children under five years of age died from mostly preventable causes. Compared with 2012, the 2013 numbers show a reduction of 200,000 deaths. The reduction is only marginal as there are still 17,000 child deaths every day in the world.[2]

The care of New born in the family is governed by the family's knowledge, awareness, and cultural practices. So the adequate knowledge of mothers on new born care is needed to control the mortality. New born care practices immediately after delivery play a major role in causing neonatal morbidities and mortalities. Essential new born care practices were outlined to decrease the neonatal morbidity and mortalities. These practices include clean cord care, thermal care, and initiating breast feeding immediately after birth (within 1/2 hour) The traditional practices like applying cow dung on the umbilical stump, oil instillation into nose also contribute to newborn's risk of morbidity and mortality. The purpose of this study is to educate the correct knowledge, of antenatal mothers regarding the newborn care.[6]

I.2 Statement of the problem

A study to assess the Effectiveness of Structured Teaching Programme on knowledge regarding care of Newborn among Primi-mothers admitted in Doon Medical College Hospital Dehradun, Uttarakhand.

I.3 Research objectives

- To assess the Pre test knowledge regarding newborn care among Primipara mothers admitted in Doon Medical College, Hospital Dehradun,U.K.
- To administer the Structured Teaching Programme regarding newborn care to the Primipara mothers admitted in Doon Medical College, Hospital Dehradun, U.K.
- To assess the post test knowledge regarding newborn care among Primipara mothers admitted in Doon Medical College, Hospital Dehradun,U.K.
- To determine the effectiveness of Structured Teaching Programme regarding Newborn care among Primipara mothers admitted in Doon Medical College, Hospital Dehradun, U.K.
- To find out the association between pre test knowledge score of Primipara mothers regarding newborn care with demographic variables.

I.4 Hypothesis

H1- There will be significant difference between the pre-test and post test level of knowledge scores regarding care of newborn among Primi-mothers.

H2- There will be significant association between the pre-test knowledge score of primi mothers regarding care of newborn with their selected demographic variable

II. Methodology

Methodology is a significant part of any research study which enables the researcher to project blue print of research undertaking**. (Kerlinger NF 2007)**

An evaluative approach is used for this study. "An evaluative research is an applied form of research that involves finding out how well a programme, practice, and policy is working". The main goal is to assess or evaluate the success of the intervention

The research design adopted for the study was Pre experimental, (One group pre test post test design).

. The study was conducted at Govt.doon medical college hospital in Uttarakhand, INDIA. The sample of 50 Primipara mothers were selected by using convenient sampling technique. The tool used for the study was the structured knowledge questionnaire designed by the researcher consisting of section A (Socio- demographic variables such as age, educational qualification, occupation, monthly income, type of delivery, living area ,their previous knowledge regarding newborn care with source of information and Section B (consisting of 29 items related to Knowledge regarding Newborn Care in three aspects i.e. related to general care of newborn, breast feeding and related to cord care). The content validity of the tool was ensured by giving the tool to experts in the field of Nursing and Medical from Obstetrics and Gynecology, Child health and Neonatology. A pilot study was conducted on 10 Primipara mothers in the selected hospital. Reliability of tool was established by split half method following spearman brown formula. The reliability of tool was calculated and it was r = 0.89.

III. Results and Findings

III.1: Demographic Characteristics of Subjects.

Table 1: Percentage Distribution of the Subjects Characteristics

S.NO	DEMOGRAPHIC VARIABLE		FREQUENCY (f)	PERCENTAGE (%)
1	Age	18-21	19	38
		22-25	18	36
		26-29	9	18
		30,and above	4	8
2	Educational qualification	Illiterate	18	36
		Primary	12	24
		Secondary	12	24
		Graduate &above	8	16
4	Family monthly income	<_10,000	40	80
		10,001-20,000	10	20
		20,001-30,000	-	-
		>30,000	-	-
5	Type of delivery	Normal-vaginal delivery	29	58
		LSCS	21	42

6	Living area	Rural Urban	26 24	52 48
7	Previous knowledge about newborn care	Yes No	21 29	42 58
8	Source of information	Health care workers T.V,News papers Family others	5 4 12 0	23.8 19.04 57.14 0

The above table shows that according to the age 19 (38%) mothers were belongs to age group in 18-21 years .followed by 18(36%) mothers were in age group 22-25 years. and next 9 (18%) mothers were in age group 26-29.and only 4 mothers were age of 30 and above.

Regarding educational qualification most of the mothers i.e.18 (36%) were illiterate followed by 12(24%) mothers were primary and next 24% mothers were having secondary and only 8(16) mothers were graduate and above. Regarding occupation most of the mothers i.e.35 (70%) were home maker and only 15(30%) mothers were on daily wages. And no one mother was having any type of job.

Regarding family monthly income most of the mothers 40(80%) were belongs to <10,000Rs monthly income group. And remaining 10(20%) mothers were belongs to 10,001-20,000Rs monthly income group.

Regarding type of delivery 29(58%) mothers were having normal vaginal delivery and remaining 21(42%) mothers were having operated delivery.

Regarding living area most of the mothers i.e.26 (52%) were living in rural area. And next 24(48%) were from urban area. Regarding previous knowledge only 21(42%) mothers were having previous knowledge about newborn care and remaining 29(58%) mothers were not having previous knowledge.

Out of 21 mothers most of the mothers i.e.12(57.14%) were having source of information from their family only and 5 (23.8%) mothers were having source of information from health care workers and only 4(19%) mothers were having source of information from T.V, News papers.

III.2 – Findings related to the pre-test and post test knowledge score regarding newborn care among Primi mothers.

Table 2: Frequency and percentage distribution of pre test and post test knowledge score.

KNOWLEDGE SCORE	VERY POOR (<30%)		POOR (31-60%)		AVERAGE (61-80%)		GOOD (81-100%)	
	FREQUENCY	%	FREQUENCY	%	FREQUENCY	%	FREQUENCY	%
Pre test	19	38	26	52	5	10	0	0
Post test	0	0	0	0	5	10	45	90

The above table shows that the frequency and percentage (%) distribution of pre test and post test knowledge score of primi mothers regarding care of newborn. The table depicts that in pre test 19 (38%) of the mothers had very poor knowledge, 26 (52%) of the mothers had poor knowledge and only 5 (10%) of the mothers possess average knowledge. In post test none of the mothers had poor and very poor knowledge, 5 (10%) mothers had average knowledge and majority of the mothers i.e. 45 (90%) possess good knowledge regarding care of newborn.

III.3: Effectiveness of structured teaching programme in terms of increasing the knowledge level of primimothers regarding newborn care.

Table 3-Pre-test knowledge score and post-test knowledge score of primimothers regarding care of newborn.

N=50

Knowledge Score Value	Mean	SD	T - value
Pre-test score	10.8	4.55	22.09
Post test score	25.08	1.47	

Tabulated value "t"(0.05)=1.96 $p < 0.05$

Table-3**:** revealed that the post test knowledge score mean among primimothers were significantly higher than the mean of pre test value. The calculated "t' value (22.09) is more than the table value at 0.05 level of significance .therefore it can be said that planned teaching programme was effective in increasing the knowledge among Primi mothers.

III.4: Association between socio demographic variables and pre-test knowledge score of subjects

S.NO	VARIABLE	df	CALCULATED CHI VALUE	TABULATED CHI VALUE
1	Age	6	6.36	12.59
2	Educational status	6	13.71	12.59 *
3	Occupation	2	24.05	5.99 *
4	Family monthly income	2	0	5.99
5	Types of delivery	1	0.827	3.84
6	living Area	1	0.6167	3.84
7	Previous knowledge	1	1.38	5.99
8	Source of information	4	5.56	9.49

In the above table result of chi square analysis presented, indicates that only two demographic variables such as educational status and their occupation were having statistically significant association with the pre test knowledge score and there was no significant association of other demographic variables with pre test knowledge score.

IV. Conclusion
Based on the findings of the study. The following conclusions were drawn on the basis of the present study

1. The findings showed that out of 50 postnatal mothers only 5 had average level of knowledge and no one had good level of knowledge in the pre-test knowledge score regarding newborn care. On the other hand 45 mothers had Good level of knowledge in the post-test knowledge score regarding newborn care and only 5 mothers had average knowledge. The mean post-test percentage score was found to be significantly high
2-From the findings of the study, it can be concluded that the administered a teaching programme was effective as a method to improve the knowledge of postnatal mothers by saying that cognitive change can be brought about by teaching programme.
3-. From the findings of the study,
 It can be concluded that the selected variables viz. age, family income, type of delivery, living area, previous knowledge and source of information have no significant association with the knowledge regarding newborn care but education and occupation of the mother had the significant association with knowledge.

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