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## Original Research Article

# A study to assess the effect of teaching cum demonstration on knowledge regarding selected aspects of essential newborn care among postnatal mother admitted in selected hospital, Lucknow

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## ABSTRACT

**Aim:** The present study aims at assess the effect of teaching cum demonstration on knowledge regarding selected aspects of Essential Newborn Care among postnatal mothers. The present study is based on General System Theory (Ludwig von Bertalanffy).

**Introduction:** The Essential Newborn Care Course (ENCC) aims to ensure health workers have the skills and knowledge to provide appropriate care at the most vulnerable period in a baby's life. Health workers are taught to use WHO's Pregnancy, Childbirth, Postpartum and Newborn Care. The investigator during her clinical posting observed that postnatal mothers were not having sufficient knowledge regarding newborn care, so that's why their baby becomes sick and unhealthy. Globally 4 million newborns die every year before they reach the age of one month and approximately 3.4 million newborns die within the first week of life.

**Objective:** The main objective of the present study is to assess the pre-existing knowledge regarding selected aspects of Essential Newborn Care among postnatal mothers.

**Materials and Methods:** The research approach is quantitative approach and the design selected for the study is pre-experimental design, in which one group pre-test – post-test design. Sampling technique is convenience sampling. Samples consists of 30 postnatal mothers who was admitted in selected hospital and those postnatal mothers who satisfies the inclusion criteria are considered as samples. Content validity is done with the help of experts. Split-Half method is used to check the reliability.

**Result :** Evaluate the effect of teaching cum demonstration on selected aspects of Essential Newborn Care among postnatal mothers. And associate the knowledge with selected demographic variable among postnatal mothers. The mean 22.433 of post-test score was more than the mean 13.200 of pre-test score of postnatal mothers. There is total enhancement occur 9.233. The comparison of Pre-test and post-test knowledge on selected aspects of Essential Newborn Care among postnatal mother had significant difference with t value (13.052) at p< 0.05 Level of significance.

**Conclusion-** From this study researcher found that the postnatal mothers have gained knowledge on selected aspects of Essential Newborn Care among postnatal mothers.

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## 1. Introduction

“Children are the wealth of tomorrow. Take care of them if you wish to have a strong India, ever ready to meet various

challenges”. (P. Nehru)

In India, most of the deliveries happen in homes under the watchful eyes of elders or Trained Birth Attendants (TBA). The care of the newborn receives depends a lot on the knowledge of the mother. The primigravida mothers are

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supposed to be lacking in knowledge, practices of newborn care. It is believed that mothers were the first nurse who take care and met the primary needs of the new born babies during wellness and illness.<sup>1-6</sup>

Estimates that 4 million children die during the neonatal period each year, with most deaths occurring in developing countries. Infections are the single most important cause of neonatal mortality. It is estimated that 3,00,000 infants die annually from tetanus, and a further 4,60,000 die because of severe bacterial infections, of which umbilical cord infections are an important precursor. Although increasing access to tetanus toxoid immunization during pregnancy must remain a priority, high rates of umbilical cord infection and sepsis can occur in areas free of tetanus, attributable to unhygienic delivery or immediate postpartum care practices that lead to contamination of the umbilical stump.<sup>7-9</sup>

The Essential Newborn Care Course (ENCC) aims to ensure health workers have the skills and knowledge to provide appropriate care at the most vulnerable period in a baby's life. Health workers are taught to use WHO's Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice (the PCPNC Guide) – and particularly the sections concerned with newborn care – that provides up-to-date evidence-based information and management of babies with a range of needs in the initial newborn period.<sup>10-14</sup>

The investigator during her clinical posting observed that postnatal mothers were not having sufficient knowledge regarding newborn care, so that's why their baby becomes sick and unhealthy. Globally 4 million newborns die every year before they reach the age of one month and approximately 3.4 million newborns die within the first week of life. It will lead to increase neonatal mortality and morbidity rates. So, the investigator felt the need of assess the effect of teaching cum demonstration on knowledge regarding essential newborn care among primi postnatal mother for enhancing their knowledge regarding essential newborn care.

## 2. Review of Literature

(Polite D.F. & Beck, C.T. 2011) Review of literature is an important step in the course of a research study. The review of literature is the systematic review of literatures relevant to the field of study.

Based on the findings of this study the main purpose was to evaluate the effect of teaching cum demonstration on selected aspects of Essential Newborn Care among postnatal mothers of hospitals to increasing the knowledge regarding *breastfeeding, thermoregulation, umbilical cord care, eye care, neonatal sepsis, sponge bathing, and immunization (just after birth)*.

A Pre-experimental study was conducted to assess the effect of planned teaching programme on knowledge regarding prevention of neonatal hypothermia among 60

post-natal mothers admitted in post-natal ward of KLE'S Dr. Prabhakar Kore Charitable Hospital Belgaum. A structured knowledge questionnaire is used for PTP assessment. The result came that PTP was effective method for mothers to improve their knowledge regarding prevention of neonatal hypothermia.

A pre-experimental study to assess the effect of video assisted teaching on knowledge regarding ENC among primigravida women attending antenatal OPD of selected hospital, Bhopal. The sample consisted of 60 samples by using purposive sampling technique. A questionnaire was utilized to assess the knowledge on ENC. The positive mean difference of knowledge score shows that video assisted teaching was effective.<sup>15-19</sup>

A study conducted a 5 days training programme on essential newborn care about care of the baby keeping baby warm, cord care, eye care & breast feeding for primigravida mother and postpartum mothers. The reason behind this programme was each year over 4 million babies less than one month of age die, most of them during the critical week at life, for this the intervention is strengthen health system as well as community intervention.

A study was conducted to assess the effect of questionnaire on thermoregulation knowledge and practice of 260 health professionals in Gujarat, Italy, Indonesia, Nepal, Brazil and Mozambique. The researcher concluded that awareness of the importance of thermal control and basic knowledge on thermal regulation and thermal protection were insufficient and this basic knowledge can be acquired through ongoing in-service education programmes.<sup>20-24</sup>

The retrospective study was conducted to evaluate the efficacy of kangaroo mother care method on thermoregulation and weight gain of a 56 preterm & termed newborn in Dakar. Samples were randomly selected to assess the mean weight and gestational weight. The result of this study pointout efficacy of kangaroo method on the thermoregulation, weight gain and survival of babies.

### 2.1. Research statement

“A study to assess the effect of teaching cum demonstration on knowledge regarding selected aspects of Essential Newborn Care among postnatal mother admitted in selected hospital, Lucknow.”

## 3. Aim of the Study

To increase the level of knowledge on selected aspects of Essential Newborn Care through teaching cum demonstration among postnatal mother.

## 4. Objectives

1. Assess the pre-existing knowledge regarding selected aspects of Essential Newborn Care among postnatal

mothers.

- Evaluate the effect of teaching cum demonstration on selected aspects of Essential Newborn Care among postnatal mothers.
- Associate the knowledge with selected demographic variable among postnatal mothers.

## 5. Research Methodology

Research Approach	Quantitative Approach
Research Design	Pre experimental research (one group pre-test and post- test design) design
Research Setting	Balaganj Hospital & Maternity Center, Lucknow.
Population	All Postnatal mothers of Lucknow
Target population	Postnatal mothers admitted in Balaganj Hospital & Maternity Center. Lucknow.
Sample Size	The sample size was 30.
Sample Technique	Convenience Sampling technique

## 6. Analysis & Interpretation Data

### 6.1. Section I: Frequency and Present Distribution according to Socio Demographic Variable no

#### 7. Table Reveals

- According to Age among 30 samples of group, 6 (20%) were from 19-24 year age group, 9(30%) were from 25-30 year age group, 9(30%) were from 31-36 year age group and 6(20%) were from 37 & above year age group.
- According to Educational qualification among 30 samples of group, 2(6.6%) were illiterate, 5(16.6%) were have secondary knowledge, 10(33.3%) were have senior secondary knowledge, and 13(43.3%) were graduate and above.
- According to Monthly income of family among 30 samples of group, 5 (16.6%) were from Below Rs. 10,000, 9(30%) were Rs.10,001- Rs.20,000, 9(30%) were Rs.20,001- Rs. 30,000 and 7(23.3%) were Rs. 30,001 & above.
- According to Type of family among 30 samples of group, 14(46.6%) were from nuclear family, 16(53.3%) were from joint family.
- According to Previous knowledge among 30 samples of group, 18(60%) were having knowledge and 12(40%) were not having knowledge.
- According to Source of information among 30 samples of group, 6(20%) were have information from media, 4(13.3%) were having knowledge from health care worker & public health programme, 4(13.3%) were having knowledge from family & relatives and

4(13.3%) were having knowledge from others.

### 7.1. Section II: Mean & mean percentage % distribution comparison of Pre-test and Post-test knowledge scores

**Table 1:** Figure depicts comparison between pre-test and post test knowledge scores

Aspects	Mean	Mean %	SD	Paired t test	Df
Pre test	13.200	44%	1.97222		
Post test	22.433	74.76%	3.3495	13.052	29
Enhancement		9.233			

Significant at < 0.05% level

Table The mean 22.433 of post-test score was more than the mean 13.200 of pre-test score of postnatal mothers. There is total enhancement occur 9.233. The comparison of Pre-test and post-test knowledge on selected aspects of Essential Newborn Care among postnatal mother had significant difference with t value (13.052) at  $p < 0.05$  Level of significance.

### 7.2. Section III: Association between pre-test level of knowledge with the selected demographic variable

- The researcher calculated the value of chi square in order to find out the association between the level of pre-test knowledge score with their selected socio demographic variable among postnatal women at  $p < 0.05$  level of significance.
- The data present in the above table shows that there was significant difference between level of knowledge with age (0.082), educational qualification (0.721), family monthly income (3.05), type of family (1.87), previous knowledge (0.62), and source of information (2.18) at  $p <$  level of significance.
- Hence, it was concluded that all the chi-square values were less than the table value. So, the research hypothesis is not accepted.

## 8. Description of Tool

- Lesson plan* -It consist of introduction, definition, purpose and advantages of Essential Newborn Care.
- Questionnaire* – It was prepared to assess the knowledge of postnatal mothers regarding Essential Newborn Care.

## 9. Discussion

This chapter dealt with findings of the present study, “A study to assess the effect of teaching cum demonstration on knowledge regarding selected aspect of Essential New-born Care among postnatal mothers admitted in selected hospital,

S No.	Demographic data	Category	Frequency (N)	Percentage (%)
1	Age (in years)	19-24	6	20%
		25-30	9	30%
		31-36	9	30%
		37 & above	6	20%
2	Educational qualification	Illiterate	2	6.6%
		Secondary	5	16.6%
		Senior secondary	10	33.3%
		Graduate & above	13	43.3%
3	Monthly income in the family (in rupees)	Below Rs. 10,000	5	16.6%
		Rs.10,001- Rs.20,000	9	30%
		Rs. 20,001- Rs.30,000	9	30%
4	Type of family	Rs. 30,001& above	7	23.3%
		Nuclear family	14	46.6%
		Joint family	16	53.3%
5a	Previous knowledge	Yes	18	60%
5b	Source of information	No	12	40%
		Media (tv, radio, newspaper)	6	20%
		Health care worker & Public health programme	4	13.3%
		Family & relatives	4	13.3%
		Others	4	13.3%

SNo.	Demographic data	Category	Frequency (N)	Df	$\chi^2$ value	p value
1	Age (in years)	19-24	6	6	0.082	12.59
		25-30	9			
		31-36	9			
		37 & above	6			
2	Educational qualification	Illiterate	2	6	0.721	12.59
		Secondary	5			
		Senior secondary	10			
		Graduate & above	13			
3	Monthly income of the family	Below Rs. 10,000	5	6	3.05	12.59
		Rs.10,001- Rs.20,000	9			
		Rs. 20,001- Rs.30,000	9			
4	Type of family	Rs. 30,001& above	7	2	1.87	5.99
		Nuclear family	14			
		Joint family	16			
5a	Previous knowledge	Yes	18	2	0.62	5.99
No	12					
5b	Source of information	Media (tv, radio, newspaper)	6	6	2.18	12.59
		Health care worker	4			
		Family & relatives	4			
		Others	4			

Lucknow.” In this chapter, an attempt has been made to discuss the findings of other studies. The present study was conducted in the *Balaganj Hospital and Maternity Center, Balaganj, Lucknow*. Total sample was 30 postnatal mother who were admitted in the hospital. Convenient sampling technique was used to select the sample. Before returning collecting the data, the investigator introduce herself, explained the purpose of the study and obtained written consent. Socio demographic was used to collect personal information of subjects and tool was used to assess

the knowledge on selected aspects of Essential Newborn Care among postnatal mothers.

## 10. Conclusion

From this study researcher found that the postnatal mothers have gained knowledge on selected aspects of Essential Newborn Care among postnatal mothers. And this study was done to assess the effect of the teaching cum demonstration programme regarding knowledge on selected aspects of

Essential Newborn Care.

## 11. Nursing Implications

The present study emphasized regarding knowledge on selected aspects of Essential newborn care among postnatal mothers.

1. Nursing practice
2. Nursing administration
3. Nursing research
4. Nursing education

## 12. Recommendations

1. A similar study can be replicated on a larger sample.
2. An evaluative study may be conducted to investigate the effect of selected aspects of Essential newborn care knowledge on well being of the mother and her newborn baby.
3. A study needs to be carried out in the urban and rural areas to find out the difference in knowledge.
4. A comparative study can be carried out between primi postnatal mothers and multigravida mothers.

## 13. Source of Funding

None

## 14. Conflict of Interest


None.

## References

1. Myles. Textbook for Midwives. 14th ed. Philadelphia. Churchill Livingstone publications; 2005. p. 354–6.
2. World Health Organization; Essential practice (the PCPNC Guide) Situation and trends; 2013. Available from: [http://www.who.int/gho/child\\_health/mortality/neonatal\\_text/en/](http://www.who.int/gho/child_health/mortality/neonatal_text/en/).
3. Gupta P. Essential Paediatric Nursing. 1st ed. and others, editor; 2004. p. 231–2.
4. World Health Organization Neonatal Mortality, Situation and trends; 2013. Available from: [http://www.who.int/gho/child\\_health/mortality/neonatal\\_text/en/](http://www.who.int/gho/child_health/mortality/neonatal_text/en/).
5. Gupte S. The short textbook of paediatrics. 10th ed. Jaypee Brothers Medical Publishers Private limited; 2004. p. 988.
6. Amolo L. Knowledge and Attitude of Postnatal Mothers on Essential Newborn Care Practices at Kenyatta National Hospital. *Pan Afr Med J.* 2014;doi:10.11604/pamj.2017.28.97.13785.
7. Maternal Child Survival Program: Essential Newborn Care. Available from: <https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/newborn-health/essential-newborn-care#:~:text=Essential%20newborn%20care%20includes%3A,Resuscitation%20when%20needed.>
8. Monebenimp F, Mongo ME, Chelo D. Mothers Knowledge and Practice on Essential Newborn Care, Cameroon. *Health Sci Dis.* 2013;14(2):1–3.
9. Lawn JE, Cousens S, Zupan J. 4 Million Neonatal Deaths When? Where? Why? *Lancet.* 2005;365(9462):891–900. doi:10.1016/S0140-6736(05)71048-5.
10. AIIMS New Delhi. Essential Newborn care. Module VII, Nightingale Nursing Times; 2007.
11. World Health Organization: Essential newborn care; 2010. Available from: <https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/newborn-health/essential-newborn-care>.
12. Sharma SK. Nursing research and statistics. 2nd ed. Haryana: Elsevier; 2011. p. 624.
13. Polit DF, Beck CT. Nursing research Generating and assessing evidence for nursing practice. 10th ed. Philadelphia: Lippincott Williams & Wilkins; 2011. p. 784.
14. Shrestha T, Kalpana SB. Effects of Educational Intervention among postnatal mothers group on care of newborn. *JNMA; J Nepal Med Assoc.* 2013;52:612.
15. Pradhan R, Nayak G. Effectiveness of video assisted teaching module on knowledge regarding Neonatal Resuscitation protocol as per NSSK guidelines of staff nurses in IMS and SUM Hospital, Bhubaneswar, Odisha. *Asian J Nurs Educ Res.* 2017;12:112.
16. Sharma SK. Nursing research and statistics. 3rd ed. Haryana: Elsevier; 2011. p. 624.
17. Sharma SK. Nursing research and statistics. 3rd ed. Haryana: Elsevier; 2011. p. 624.
18. Polit E. Nursing research principals and methods. 7th ed. and others, editor. Philadelphia Lippincott Williams; 2008. p. 784.
19. Kothari CR. Research Methodology Methods and Techniques. 4th ed. New Age International Publishers; 2002. p. 480.
20. Polit DF, Beck CT. Nursing research Generating and assessing evidence for nursing practice. Philadelphia: J.B. Lippincott Williams and Wilkins publishers; 2008.
21. Chaudhary SP, Bajaj RK, Gupta RK. Knowledge about Neonatal care among primipara mothers. *Indian J Pediatr.* 2000;67:491–6.
22. Sharma SK. Nursing research and statistics. Haryana: Elsevier; 2011. p. 624.
23. Polit DF, Beck CT. Nursing research Generating and assessing evidence for nursing practice. 10th ed. Philadelphia: J.B. Lippincott Williams and Wilkins publishers; 2008. p. 784.
24. Sharma SK. Nursing research and statistics. 4th ed. Haryana: Elsevier; 2011. p. 482.

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