

**MOTHERS' KNOWLEDGE REGARDING NEWBORN CARE: A CROSS-SECTIONAL STUDY****Mrs. Bananee Dash¹, Dr. Darshan Sohi², Dr. Manjubala Dash³**¹ Research scholar, Himalayan university.² Supervisor, Professor in Himalayan university.³ Co supervisor, Professor and HOD Department of OBG, MTPGRIHS. Puducherry.**Abstract:**

Background: Newborn care practices play a critical role in reducing neonatal morbidity and mortality, particularly in the first 28 days of life. Mothers' knowledge about essential newborn care is a key determinant of neonatal survival. Aim: To assess the knowledge of postnatal mothers regarding newborn care. **Methods:** A descriptive cross-sectional study was conducted among 120 postnatal mothers admitted in a tertiary care hospital. Data were collected using a structured knowledge questionnaire covering domains such as breastfeeding, cord care, thermal care, immunization, and hygiene. Data were analyzed using descriptive and inferential statistics. **Results:** Out of 120 mothers, 30% had good knowledge, 50% had average knowledge, and 20% had poor knowledge. Highest knowledge scores were in breastfeeding (mean 8.5 ± 1.2) and immunization (7.9 ± 1.3), whereas cord care (5.1 ± 1.4) and thermal care (4.8 ± 1.6) showed lower scores. A significant association was found between maternal education, parity, and knowledge levels ($p < 0.05$). **Conclusion:** While mothers demonstrated adequate knowledge in breastfeeding and immunization, gaps were evident in cord care and thermal care practices. Structured health education programs focusing on essential newborn care can enhance maternal knowledge and improve neonatal outcomes.

Keywords: Newborn care, maternal knowledge, breastfeeding.

INTRODUCTION

The neonatal period (0–28 days) is the most vulnerable time for child survival. According to WHO, nearly 47% of under-five deaths occur during this period, with causes including infections, birth asphyxia, and hypothermia. Many of these deaths are preventable with simple newborn care practices.

Mothers' knowledge about essential newborn care (such as exclusive breastfeeding, thermal protection, cord care, immunization, and hygiene) is a cornerstone of neonatal health. Inadequate awareness often leads to

harmful traditional practices, especially in low-resource settings. Previous studies in India and other developing countries revealed that while mothers generally have knowledge about breastfeeding, their awareness regarding cord care and thermal protection is poor.

This study aimed to assess the knowledge of postnatal mothers regarding newborn care, identify areas of deficiency, and examine associations with demographic factors.

OBJECTIVES:

1. To assess the knowledge of mothers regarding essential newborn care.
2. To identify areas of knowledge deficiency among mothers.
3. To find the association between mothers' knowledge and selected demographic variables..

METHODOLOGY:

- **Design:** Descriptive cross-sectional study
- **Setting:** Postnatal wards of a tertiary care teaching hospital
- **Population:** Postnatal mothers within 7 days after delivery
- **Sample Size:** 120 mothers
- **Sampling Technique:** Purposive sampling
- **Tool:** Structured knowledge questionnaire consisting of 30 items covering:
 - Breastfeeding (10 items)
 - Cord care (5 items)
 - Thermal care (5 items)
 - Immunization (5 items)
 - Hygiene & general care (5 items)
- **Scoring:**
 - Good knowledge: $\geq 75\%$ (≥ 23 correct answers)
 - Average knowledge: 50–74% (15–22 correct)
 - Poor knowledge: $< 50\%$ (< 15 correct)
- **Validity & Reliability:** Tool validated by subject experts; reliability tested using KR-20 = 0.82.
- **Data Collection:** Structured interviews with informed consent.
- **Data Analysis:** SPSS software; descriptive statistics (frequency, %, mean, SD) and Chi-square test for associations.

RESULTS:

The demographic variable of mothers showed that around 66.7% mothers were in the age group of 21-30 years, 54.2% were primi mothers and 58.3% had secondary education.(Tab-1)

Table 1: Demographic Profile of Postnatal Mothers (N = 100)

Variable	Frequency (n)	Percentage (%)
Age (years)		
< 20	18	15%
21–30	80	66.7%
> 30	22	18.3%
Education		
No formal education	20	16.7%
Secondary	70	58.3%
Graduate & above	30	25%
Parity		
Primipara	65	54.2%
Multipara	55	45.8%

With regards to level of knowledge among mothers highlights that highest percentage 50% had average knowledge about newborn care and around 20% mothers had poor knowledge regarding newborn care highlights awareness programmes needed to educate mothers regarding newborn care(Tab-2). Further domain wise mean knowledge score highlights that highest score 8.5 ± 1.2 present related to breastfeeding among the mothers and lowest mean score 2.4 ± 1.6 towards thermal care(tab-3)

Table 2: Overall Knowledge Levels of Mothers

Knowledge Level	Frequency (n)	Percentage (%)
Good knowledge	36	30%
Average knowledge	60	50%
Poor knowledge	24	20%

Table 3: Domain-wise Mean Knowledge Scores

Domain	Max Score	Mean \pm SD
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Breastfeeding	10	8.5 ± 1.2
Immunization	5	3.9 ± 1.3
Cord care	5	2.6 ± 1.4
Thermal care	5	2.4 ± 1.6
Hygiene	5	3.1 ± 1.0

With regards to association with demographic variables the variable education and parity shoed statically significant with related to newborn care.

Table 4: Association of Knowledge Levels with Demographic Variables.

Variable	χ^2 value	df	p-value	Interpretation
Age	2.35	2	0.31	NS (Not significant)
Education	14.22	2	0.001*	Significant
Parity	6.85	1	0.009*	Significant

*Significant association at $p < 0.05$; NS = Not Significant

DISCUSSION:

This study revealed that while most mothers had average knowledge regarding newborn care, gaps were evident in cord care and thermal protection. Similar findings were reported by Singh et al. (2020), where 40% of mothers had inadequate knowledge about cord care practices.

Mothers demonstrated good knowledge in breastfeeding, which is consistent with Kumar et al. (2019), who found that over 70% of mothers knew about exclusive breastfeeding for 6 months. However, only 30% had adequate knowledge of thermal care, which is concerning given the high prevalence of neonatal hypothermia in low-resource settings (WHO, 2017).

Education was found to be significantly associated with maternal knowledge, highlighting the importance of literacy and health education interventions. Parity was also associated, suggesting that multiparous mothers benefit from prior experience.

Thus, there is a clear need for structured health education programs focusing on essential newborn care, especially targeting primipara and less educated mothers.

CONCLUSION:

Mothers had good knowledge in breastfeeding and immunization but poor awareness of cord and thermal care. Education and parity significantly influenced maternal knowledge. Strengthening postnatal counseling, community-based health education, and involvement of health workers can improve maternal practices and reduce neonatal morbidity and mortality.

REFERENCES:

1. WHO. *Essential Newborn Care Course*. Geneva: World Health Organization; 2017.
2. Kumar P, Singh A, Sharma S. Knowledge and practices of mothers regarding newborn care: A hospital-based study. *Indian J Child Health*. 2019;6(5):215–220.
3. Singh R, et al. Assessment of maternal knowledge regarding newborn care in rural India. *Int J Community Med Public Health*. 2020;7(8):3124–3130.
4. Polit DF, Beck CT. *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. 10th ed. Wolters Kluwer; 2017.
5. Ministry of Health & Family Welfare, Govt. of India. *Operational Guidelines for Newborn and Child Health*. New Delhi; 2021.

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