

**A STUDY OF KNOWLEDGE AND PRACTICE OF POSTNATAL MOTHERS ON
NEWBORN CARE AT A HOSPITAL SETTING***¹Dr. P. Punitha and ²Dr. K. S. Kumaravel¹*Asst Professor of Pediatrics, Govt Dharmapuri Medical College, Dharmapuri, Tamilnadu.²Professor of Pediatrics, Govt Thiruvannamalai Medical College, Thiruvannamalai, Tamilnadu.***Correspondence for Author: Dr. P. Punitha**

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ABSTRACT

Introduction: Care of the newborn baby had always been traditionally done by mothers. Knowledge of mothers on neonatal care could help in bringing down the neonatal mortality further. **Methods:** This descriptive study was carried out in the postnatal ward of Govt Thiruvannamalai Medical College Hospital, Thiruvannamalai, Tamilnadu. One hundred consecutive mothers who delivered in our hospital were recruited into the study. Data was collected using a standard questionnaire developed for this study. **Results:** About 12% of mothers had adequate knowledge, 78% of mothers had inadequate knowledge and 10% mothers had poor knowledge about neonatal care. More than 50% of the mothers in the study group had adequate knowledge about prelacteal feeds, neonatal jaundice, harmful effects of oil instillation, advantages of burping, uselessness of gripe water and correct weaning practices. But adequate knowledge was lacking in areas like kangaroo mother care, umbilical cord care, complete immunisation schedules and the time for first baby bath. Urban domicile, multiparity, higher education and higher maternal age were associated with significantly higher knowledge scores. **Conclusion:** This study has found out the key areas to focus - kangaroo mother care, umbilical cord care, complete immunisation schedules and the time for first baby bath. Hence effective strategies should be planned for increasing the knowledge of mothers in neonatal care.

KEYWORDS: prelacteal feeds, neonatal jaundice, harmful.**INTRODUCTION**

India contributes to one fifth live births and one fourth of neonatal deaths globally. There has been a significant reduction in the number of neonatal and child deaths in the last decade.^[1] The impact of introduction of National Rural Health Mission in India in 2005 has seen increasing infrastructure and admissions in neonatal nursery and decreasing death rate.^[2] Care of the neonates had always been traditionally done by mothers irrespective of their education, income and social class. The important function of mothers in India traditionally is to bring up their children. Studies report that most newborns in low income countries like India die at home while they are cared by mothers, relatives and traditional birth attendants.^[3,4,5] Knowledge of mothers on neonatal care and proper practice of that knowledge could help in bringing down the neonatal mortality further. Studies have shown that if the mothers do not possess adequate knowledge pertaining to dangers signs, hygienic practices, immunisation schedules, kangaroo mother care, feeding, weaning, health and nutrition of children, it will affect the well being of their children.^[6] Thus the present study was aimed to assess the level of awareness among mothers in our hospital regarding their newborn care.

MATERIAL AND METHOD

This descriptive study was carried out in the postnatal ward of Govt Thiruvannamalai Medical College Hospital, Thiruvannamalai, Tamilnadu which is a maternity centre with about 2000 live births every year. One hundred consecutive mothers who delivered in our hospital were recruited into the study. Mother who lost their babies and ill mothers who were not able to comprehend were excluded from the study. An informed consent was obtained after assuring the anonymity and confidentiality from the recruited mothers. Data was collected using a standard questionnaire developed for this study. The questionnaire contained ten questions pertaining to common neonatal illnesses and practices. For each question a Likert scale of score was assigned carefully after obtaining the response from the mothers. The Scoring system is as follows: 2 for the adequate knowledge, 1 for inadequate knowledge and zero for poor knowledge. Socio-Demographic details like Mother's Age, level of education, occupation, place of residency, parity and family income were recorded. The results were tabulated and analyzed using Microsoft Office Excel®.

RESULTS

TABLE: 1 SOCIO-DEMOGRAPHIC PATTERN OF MOTHERS.

Age of the mothers	
<20 years	18%
21-25 years	60%
26-30 years	12%
>31 years	10%
Parity	
Primi parous	48%
Multi parous	52%
Domiciliary status	
Urban	8%
Rural	92%
Educational status	
Uneducated	4%
Primary	2%
High school	38%
Higher secondary	52%
Graduate	4%
Occupational distribution	
Unemployed	14%
Unskilled	48%
Semi skilled	6%
Skilled	10%
Clerical	2%
Semi professional	18%
Professional	2%
Family income distribution	
<Rs.5000 per month	50%
Rs.5000 to Rs.10000 per month	28%
>Rs.10000 per month	22%

The Socio-demographic pattern of the study population is depicted in Table: 1. About 60% of mothers were in the age group of 21 to 25 years. About 92% hailed from rural area. About 56% have completed higher secondary education. About 86% mothers were employed and half

the mothers in the study population had an average monthly income of less than Rs.5000.

The overall pattern of knowledge about the neonatal care and the awareness to the individual component is depicted in table: 2.

TABLE: 2 DISTRIBUTION OF KNOWLEDGE SCORES

Overall scores on knowledge about neonatal care (maximum score = 20)			
< 10			10%
11 – 15			78%
>16			12%
Knowledge score distribution for individual component			
Neonatal care component	Poor knowledge	Moderate knowledge	Adequate knowledge
Kangaroo mother care	50%	14%	36%
Umbilical cord care	30%	34%	36%
Pre-lacteal feeds	4%	16%	80%
Neonatal Jaundice	18%	8%	74%
Harmful effects of Oil instillation into airway	16%	24%	60%
Immunisation schedule	8%	80%	12%
Advantages of Burping	10%	10%	80%
Uselessness of Gripe water	46%	2%	52%
Correct Weaning practices	10%	8%	82%
Correct time for First baby bath	84%	8%	8%

From the above table it is evident that about 78% mothers had inadequate knowledge and about 10% mothers had poor knowledge about the neonatal care. The average score in the study group is 13.12 and the mode value is 12. On analysing the individual components, more than 50% of the mothers in the study group had adequate knowledge about prelacteal feeds, neonatal jaundice, harmful effects of oil instillation,

advantages of burping, uselessness of gripe water and correct weaning practices. But adequate knowledge was lacking in areas like kangaroo mother care, umbilical cord care, complete immunisation schedules and the time for first baby bath.

The impact of various socio-demographic factors on the knowledge about neonatal care is shown in table: 3.

TABLE: 3 IMPACT OF SOCIO-DEMOGRAPHIC FACTORS ON KNOWLEDGE SCORES

Factor	Score <10	Score 11-15	Score >16
RESIDENCY STATUS			
Urban	0	4(50%)	4(50%)
Rural	6(6.5%)	64(69.5%)	22(24%)
PARITY STATUS			
Primi parous	3(6.25%)	42(87.5%)	3(6.25%)
Multi parous	8(15%)	32(62%)	12(23%)
EDUCATIONAL STATUS			
< high school	2(5%)	38(86%)	4(9%)
>high school	4(7%)	38(68%)	14(25%)
MATERNAL AGE			
Age of mother < 20 years	0	18(100%)	0
>20 years	6(7%)	64(78%)	12(15%)
MONTHLY FAMILY INCOME			
Family income <Rs.5000	5(10%)	35(70%)	10(20%)
Rs.5001 – Rs.10000	2(7%)	20(71.5%)	6(21.5%)
>Rs.10001	1(5%)	16(73%)	5(22%)

On analysing the impact of various socio-demographic factors on the knowledge of neonatal care, the urban domicile, multiparity, higher education and higher maternal age is associated with significantly higher knowledge scores. However the family income did not have significant impact on the knowledge score.

DISCUSSION

Various cultural practices, family background and hereditary influences, together with a lack of neonatal care knowledge are the important factors affecting neonatal care knowledge and practices. Understanding the depth of mother's knowledge and practices will help in reduction of neonatal mortality. In the present study only about 12% of mothers had adequate understanding of neonatal care. In a study done in Bangladesh, 81.3% of mothers had poor awareness about neonatal physiology.^[7] A similar study done in Nepal revealed that 38.7% mothers had adequate knowledge on neonatal care.^[8] A study done in Udipi, India showed that majority of mothers had adequate knowledge about neonatal care which was inconsistent to our study.^[9] In the present study 36% of mothers had adequate knowledge about cord care, while in a study from Nepal it was only 8.41%.^[7] In the present study more than 50% of the mothers in the study group had adequate knowledge about prelacteal feeds, neonatal jaundice, harmful effects of oil instillation, advantages of burping, uselessness of gripe water and correct weaning practices. Adequate knowledge was lacking in areas like kangaroo mother care, umbilical cord care, complete immunisation

techniques and the time for first baby bath. Many studies have reported the practice of prelacteal feeds in India which in contrast to our study.^[10,11] Mothers with educational grades below high school had lower knowledge scores compared to mothers with higher educational grades. This observation was made by many other researchers also.^[7,12] In our study only 8% mothers had the adequate knowledge of timing for first bath of the baby. In a study from Bangladesh, about 10% of mothers practised correct timing of first baby bath.^[13] In our study 36% of mothers had adequate knowledge about umbilical cord care which is against 85.17% observed in a study.^[7] Analysing the impact of socio-demographic factors on the knowledge scores, we observed that urban residency, maternal age more than 20 years, higher educational grades and multiparity were associated with increasing knowledge scores which was comparable with other studies.^[7,8,12]

CONCLUSION

It is universally agreed that the mothers have a predominant role in the care of their newborn babies. So it becomes imperative to educate the mothers for neonatal care. This study has found out the key areas to focus - kangaroo mother care, umbilical cord care, complete immunisation schedules and the time for first baby bath. Hence effective strategies should be planned for increasing the knowledge of mothers in neonatal care which will have a direct impact on the reduction in neonatal mortality.

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CONFLICT OF INTEREST

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