



## KNOWLEDGE, ATTITUDE AND PRACTICE OF NEONATAL CARE AMONG POSTNATAL MOTHERS IN A URBAN REFERRAL HOSPITAL.

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**Abstract :** INTRODUCTION The reduction in Neonatal Mortality Rate is a great challenge for us in the present decade. To achieve this the knowledge of mothers regarding the neonatal care is a major impetus. STUDY DESIGN To ascertain the knowledge of mothers in neonatal care we undertook this study in our hospital. The study included a questionnaire to ascertain the knowledge of mothers about the common neonatal illnesses and practices. The study group contained one hundred mothers from lower socio-economic class. RESULTS From the study it was evident that the mothers had adequate knowledge about Weaning, Jaundice and Pre-lacteal feeds. About 47 percent of mothers had an overall score of less than 50 Percent. The knowledge of mothers regarding thermal care, burping, immunisation, use of gripe water, oil instillation umbilical and cord care was very low.

### CONCLUSION

Further fall in Neonatal Mortality Rate can be achieved only with improvements in knowledge of mothers. The secondary education syllabus should contain neonatal care. The national health programs should give more focus on education of mothers.

**Keyword :** Neonatal care, Knowledge score, Temperature maintenance, Immunisation, Weaning, Pre-lacteal Feeds, Oil instillation.

### INTRODUCTION

At present in our country Neonatal Mortality Rate is 34/1000 live births which contribute to 2/3rd of Infant Mortality Rate and half of under five child death(2). The major causes of neonatal deaths were due to prematurity, sepsis, pneumonia, birth asphyxia, and congenital anomalies. Of which 30% death were on the day of birth, 50% of deaths were in first 3 days of life and 20% of death were during 1st week of life. Great advancement in neonatal care was evidenced during the last decade because of NRHM and IMNCI programs. Though health care delivery system for sick neonates improved phenomenally, the rate of fall in NMR was only marginal – 49 in 1990 and 34 in 2009(1). This is due to the lacunae in neonatal health care system like neonatal transport, non-institutional deliveries, knowledge gap among post-natal mothers, etc. Traditionally in India, Neonatal care is more in the domain of the family elders like grandmother and mother than with the health care personnel. The influence they have on the child rearing practice is very significant. Though their influence is helpful in bringing up a child, sometimes it is also

harmful – like oil instillation into the nose. Neonatal care practice after delivery plays a major role in neonatal morbidity and mortality. Essential newborn care practices were helpful to decrease the neonatal morbidity and mortality(3). The practices including clean cord care, thermal care and initiating breast feeding immediately after birth.

### THE AIM OF THE STUDY:

To assess the Knowledge, Attitude and Practice of postnatal mothers from lower socio-economic class regarding the newborn care.

### MATERIAL AND METHOD:

This descriptive study was carried out in postnatal ward of our hospital. Our hospital is a major maternity centre for the surrounding 6 districts with about 7000 live births/year. One hundred consecutive mothers who delivered in our hospital were recruited into the study. Mother who lost their babies and ill mothers were excluded from the study. Consent was obtained from the mothers for the study. Data was collected using a standard questionnaire. Socio-Demographic pattern like Age, level of education, occupation, place of residency, parity and family income were recorded. The questionnaire contained ten questions pertaining to common neonatal illnesses and practices. For each question a score was assigned carefully by the co-authors after obtaining the response from the mothers. The Scoring system is as follows: 2 for the correct response, 1 for a partially correct response and zero for a wrong response. The results were tabulated and analyzed.

### LIMITATIONS OF THE STUDY

Since our hospital is a Government hospital catering mainly to lower socio-economic class, the pattern of Knowledge, Attitude and Practice of Neonatal Care among mothers from middle and higher Socio- Economic Classes can not be made out in this study. Hence our study reflects the Knowledge, Attitude and Practice of Neonatal Care among mothers from Lower Socio Economic Class.

### Results

In our study 40% mothers were from urban and 60% from rural area. The study group contained 45% of primiparous mothers and 55% of multiparous mothers. The study group contained 23% mothers who studied less than V std, 47% mothers who have studied up to X std and 30% mothers who have studied up to XII std.

### 1. THE OVERALL KNOWLEDGE SCORE OF THE MOTHERS:

The overall knowledge score of the mothers for the questionnaire is shown below.

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SCORE (MAX- 20)	NUMBER OF MOTHERS (n=100)
>16	20
11-15	33
<10	47

From the above table it is evident that only 20% of the mothers obtained a score of above

16. It is painful to note that about 47% mothers scored below 10.

### 2. KNOWLEDGE SCORE FOR INDIVIDUAL QUESTIONS:

SL NO	QUESTION	CORRECT ANSWER GIVEN BY (no)
1	Temperature Maintenance	27
2	Umbilical Cord Care	40
3	Prelacteal Feeds	57
4	Jaundice	87
5	Oil Installation	45
6	Immunisation	25
7	Burping	33
8	Gripe Water	20
9	Weaning	75
10	First Baby Bath	30

From the above table it is evident that the mothers had a good knowledge about neonatal jaundice, weaning and the harmful effects of prelacteal feeds. It can be also noted that the mothers had a poor knowledge about temperature maintenance, immunisation, gripe water and first bath.

### 3. KNOWLEDGE SCORE AND EDUCATION:

EDUCATIONAL STATUS	SCORE <10	SCORE 11-15	SCORE >16
<5 STD (n= 23)	8 (35%)	8 (35%)	7 (30%)
5-10 STD (n= 47)	22 (47%)	22 (47%)	3 (6%)
11 & 12 (n= 30)	17 (57%)	8 (10%)	10 (33%)

In our study, as evident from the above table the educational status did not have much influence on the overall knowledge score (P value = 0.199). It may be due to confounding factors like parity and socio economic status.

### 4. KNOWLEDGE SCORE AND PARITY:

PARITY	SCORE <10	SCORE 11-15	SCORE >16
PRIMI (N=45)	20 (44%)	12 (27%)	13 (29%)
MULTI (N=55)	11 (20%)	19 (35%)	25 (45%)

From above table we observed that Multiparous mother have more knowledge score than their Primiparous counterparts.

### 5. KNOWLEDGE ABOUT THERMAL CARE:



From the above chart, it is evident that only 27% of mothers have adequate knowledge about temperature maintenance in neonates. It can also be noted that about 18% of mothers did not have any knowledge about the temperature maintenance.

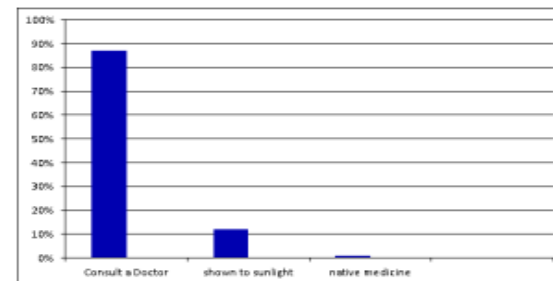
### 6. UMBILICAL CORD CARE:

About 40% of mothers had adequate knowledge about umbilical cord care. About 60% of mothers answered that they will apply either coconut oil or talcum powder.

### 7. KNOWLEDGE ABOUT PRELACTEAL FEEDS:

In our study about 57% of mothers said that they did not practice prelacteal feeds. 43% mothers said that they gave either sugar water or honey.

### 8. KNOWLEDGE ABOUT NEONATAL JAUNDICE:



From above chart, it is evident that 87% of postnatal mothers were aware of neonatal jaundice and said that they would seek medical advice and only one mother said she will give native medicine.

### 9. KNOWLEDGE ABOUT OIL INSTALLATION:

In our study 67% of postnatal mothers are well aware of complications of oil installation. 33% of mothers said that oil installation would help for cleaning nose and good for cold.

### 10. KNOWLEDGE ABOUT IMMUNISATION:

This study shows that only 25% of postnatal mothers have complete knowledge about immunisation, its schedule and the usefulness of individual vaccines. The remaining 75% had incomplete knowledge and were not able to enumerate the individual diseases against which vaccines are given and the schedule which is being followed now.

### 11. KNOWLEDGE ABOUT BURPING:

In our study 33% of postnatal mothers were practicing burping immediately after breastfeeding, remaining 67% mothers were not practicing burping or it was improper.

### 12. KNOWLEDGE ABOUT GRIPE WATER:

It is observed that 80% of mothers were using gripe water and said that it helps for easy digestion and relieve abdominal pain in neonates.

### 13. KNOWLEDGE ABOUT WEANING:

In our study 75% of postnatal mothers were found to have adequate knowledge about weaning and only 25% of mother did not have adequate knowledge about weaning.

### 14. KNOWLEDGE ABOUT 1ST BATH:

30% of mothers said they will give their baby the 1st bath after the cord has fallen and 70% of mothers did not have idea about 1st bath.

### Discussion

In our study about 47% of mothers had the overall knowledge score of less than 10. This finding calls for the education of these mothers with regard to neonatal care. This education can start from the ante-natal period. From this study it is evident that the knowledge score is good with regard to weaning, jaundice and pre-lacteal feeds. But the score was poor on aspects like temperature maintenance, cord care, immunisation, burping, use of gripe water and first baby bath. The focus for education of mothers

should be on these areas. This study did not find any significant difference in the knowledge score among various educational classes included in the study. This study also revealed significant difference in the scores between primiparous and multiparous mothers. The multiparous mothers scored better as they had prior experience in neonatal care.

As only 27% mothers had adequate knowledge about Thermal care of Neonates, the practice of Kangaroo Mother Care should be emphasized as this is a low cost and effective way to prevent hypothermia. Oil instillation into the nose is an age old custom which should be curtailed. Data from our own hospital showed that in the last one year there were 28 neonates admitted in our NICU for Oil Aspiration Pneumonitis. Mothers should be clearly explained about the harmful effects of oil instillation into the nose of neonates. Pictorial illustrations might be helpful in this regard. With regard to weaning and prelacteal feeds, it is heartening to know that many mothers have good knowledge. This is because of the sustained efforts by "Baby friendly Hospital Initiative", which has started yielding good results.

Even though the mothers were aware about the importance of the immunisation, they were not able to enumerate the diseases covered and the immunisation schedule. Hence this aspect should be given a fillip in the immunisation programs. We were happy to know that about 87% mothers were aware of neonatal jaundice and said they will seek medical help. One mother in the study group said she will take native treatment and was counselled by the authors. Burping is a simple and easy method to prevent Gastro-Esophageal Reflux. But this procedure was not known to 67% mothers. This should be one of the important aspects in educating the mothers. Regarding the use of gripe water, it should be emphasized that the babies should be exclusively breast fed in the first six months and even water should not be given. It should also be stressed that the use of gripe water to a baby with colic may mask any serious illness the baby is having. The first bath for the baby should be given only after the cord has fallen(4). This should be one of the aspect in teaching the mothers.

#### **CONCLUSION:**

##### **1.Bridging the knowledge gap:**

This can be achieved by educating mothers during ante-natal and post-natal visits. Considerable amount of time should be spent by health care provider for educating mothers about neonatal care.

##### **2.Incorporation of Neonatal Care as a subject in Secondary education.**

The present secondary education syllabus consists of considerable extent of human anatomy, physiology and diseases. Neonatal care should also be included into the syllabus of secondary education. This will help the children, who are the future parents, to understand the normal neonatal behaviour and neonatal illnesses.

##### **3.Health education as a Major impetus to fall in NMR.**

Further reduction in Neonatal Mortality Rate can only be achieved with improvements in knowledge of mothers about Neonatal care. So considerable resources should be spent on educating the mothers about the neonatal illnesses.

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