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A Descriptive Study to Assess the Knowledge and Attitude on Neonatal Jaundice among the Mothers in a Selected Village of Puducherry.

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Research Article

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ABSTRACT

A descriptive study to assess the knowledge and attitude on neonatal jaundice among the 50 mothers in selected villages of Puducherry was conducted with Interview schedule and convenient sampling technique. The objectives of the study are—to assess the existing knowledge and attitude of the mothers on neonatal jaundice and management of baby during neonatal jaundice. The findings of the study shows that 21(42%) mothers were in the age group of 21 - 25 years, 48(96%) were Hindus, 24(48%) were educated up to primary level, 40(80%) belong to joint families, 38(76%) were primi, 12(24%) were multi mothers. Regarding the knowledge on neonatal jaundice, only one 1(2%) mother had adequate knowledge. In relation to their attitude it showed that 15(30%) mothers had positive attitude towards the management pattern of the baby on jaundice— that is taking the baby to hospital for treatment, continuing breast feeding etc. conclusion— mother is the first care giver for the baby, so they must identify the colour change and seek immediate medical care, by which they can prevent the complications and save the life.

INTRODUCTION

Neonatal jaundice is a yellowish discoloration of the skin and other tissues of a newborn. A bilirubin level more than 85 $\mu\text{mol/l}$ (5 mg/dl) manifests neonatal jaundice. In newborn jaundice is detected by watching the skin, newborn have an apparent icteric sclera, and yellowing of the face extending down to the chest. In neonates the dermal icterus is first noted in the face and as the bilirubin rising level proceeds caudal to trunk and then to the extremities. Hyperbilirubinemia in the first 24 hrs often results in hemolytic diseases of the newborn erythroblastosis fetalis an abnormal rapid rate of RBC destruction [1,2].

In neonate, jaundice tends to develop because of two factors, the breakdown of fetal hemoglobin and the relatively immature hepatic metabolic path ways which are unable to conjugate and so excretion of bilirubin is as quickly as an adult, this cause an accumulation of bilirubin in the blood leading to the symptom of jaundice [3,4].

Other causes of neonatal jaundice are large or small for gestational age, prematurity, trisomy syndrome, use of oxytocin in labor, presence of bruising cephalo hematoma and a family history of neonatal jaundice [3,4].

Determinants of perinatal and neonatal mortality shows that although global and national effort have been made to improve child mortality, especially in the neonate phase; less attention has been given to determinants as perinatal and neonatal mortality. Neonatal mortality has gradually increased as a percentage of total, child mortality. This data are estimated by the survey registration system and national family health survey [5,6].

Amongst all age group neonates are most susceptible to mortality and morbidity. According to UNICEF news letter on April 24, 2008 out of every four, a child dies under the age of one in the world, one is an Indian child. The infant mortality rate in the country is 67% per thousand live births, in which neonatal mortality contributes 43.4 /1000 against the annual death of 9 /1000 (2008) In India neonatal jaundice, contributes 4.55% death in neonatal period. In Pondy cherry the cause of neonatal death due to neonatal jaundice ranks to 6 contributing 3.8% of death [5,6,7].

Mohamed Asif Padiyath et al carried out a study to assess the knowledge attitude practice of neonatal care among the post natal mothers at JIPMER, reported that 34% of mothers considered for neonatal jaundice as abnormal. 33% were considered as normal. With this result they concluded that there was lack of awareness and negative attitude of postnatal mothers towards neonatal care [8].

The complication of hyperbilirubinemia is kernicterus. It is due to the severe accumulation of unconjugated bilirubin. According to a study by NasrinKhalesi, kernicterus causes 10% of mortality and 70% of morbidity among neonates. However, the correct use of phototherapy and timely blood exchange will control serum bilirubin level which can prevent complications [9].

Integrated management of neonatal and childhood illnesses (IMNCI) emphasizes that mothers should be able to identify the disorders among newborns for appropriate health care seeking. Nowadays because of early discharge of mothers and neonates from the hospitals, the responsibility of mothers in recognizing the jaundice has increased. Mothers therefore, play a vital role in the early identification and prevention of complication [6].

Smitherman et al, suggested that mother, as the primary caretaker, have a clear understanding of how to recognize neonatal jaundice and how to respond appropriately, since early recognition and prompt treatment decrease the likelihood of development of the potentially permanent complication [10].

Delayed initiation of breastfeeding or insufficient feeding result in poor mobility of the gut, that leads to poor excretion of bilirubin, resulting in accumulation of bilirubin leading to hyperbilirubinemia. Inadequate milk leads to delay the passage of meconium. Passage of baby through the vagina during birth helps stimulate milk production in the mother. When the baby is born by caesarian section the milk secretion is slightly delayed and the mothers will also be in pain and in sedation, so the feeding is delayed, these babies are at higher risk for this condition. Mothers should be aware of initiating breastfeeding as early as possible, either she had caesarian section or had a normal delivery [11].

Many mothers fail to recognize the importance of early diagnosis of neonatal jaundice. By the time they recognize them; they almost become serious and sometimes fatal. Therefore mothers should be adequately educated about the care of jaundiced baby and early identification of danger signs and also its complications. It helps in effective treatment and also in the prevention of jaundice [12].

Objectives

- To assess the existing knowledge of mothers on neonatal jaundice.
- To assess the attitude of mothers towards management of baby during jaundice.

Assumption

It is assumed that mothers will have inadequate knowledge and unfavorable attitude related to neonatal jaundice and its management.

Delimitation

- The age group of samples is between 15 to 35 years.
- The areas selected for the study are Kalapet, Kanagachettykulam
- The time period of the study is one month

METHODOLOGY

Research Approach and Design

The research approach was a descriptive approach and design was non experimental study design selected for this study, aimed at exploring the phenomena in the natural setting.

Study Setting

The study was conducted in the villages called kalapet and Kanagachettykulam.

Sample and Sample Size

Sample were the mothers present during the period of data collection and size was around 50 mothers

Sampling Technique

The sampling technique used for this study was convenience sampling technique.

Criteria for Sample Selection

Inclusion Criteria

- Mothers those were in the age group of 15 to 35 years.
- Mothers with children.

Exclusion Criteria

- Mothers who were unwilling to participate in the study
- Mothers who were physically unfit for the study.

Development of Tool

The instrument development and used to collect the data were based on the objective. A semi structured interview schedule was prepared and based on the statement of problem, review of books, journals, guidance of experts opinion was considered.

The questionnaire has three sections–

Section A –Demographic variables

Section B –Knowledge regarding neonatal jaundice

Section C –Attitude of mothers on management of baby with neonatal jaundice

Scoring Key for Knowledge

Percentage interpretation for knowledge

- 1 to 05 –<50% – Poor knowledge
- 6 to 10 –50–77% – Moderate knowledge
- 11 to 15 –76–100% – Adequate knowledge

Scoring Key for Attitude Statement

Attitude statements scoring was prepared according to the Likert's five– point Scale.

- 5 – Strongly agree
- 4 – Agree
- 3 – Neutral
- 2 – Disagree
- 1 – Strongly disagree

The content validity of the tool was obtained from the experts, suggestion given by the experts was incorporated and the tool was finalized before data collection.

Data Collection Procedure

Formal written permission was obtained from the concerned authorities to conduct the study. Kalapet and Kanagachettykulam, the two villages were selected in puducherry . Period of data collection was from 7.2.2011 to 12. 2. 2011. Before the data collection the mothers were explained and oral consents were obtained. In an average, each interview was taken from 20 to 30 minutes, 10 mothers were interviewed in one day by the Researcher. All the mothers cooperated well and they were allowed to clarify their doubts.

Plan for Data Analysis

Data collected from 50 mothers were organized, tabulated in master sheet. Demographic variables such as age, religion, type of family, occupation, education, gravid, knowledge and attitude were analyzed and represented through descriptive statistics method like frequency, percentage, diagrams and tables.

FINDINGS

Table1: Distribution of the demographic variable of the mothers(age, religion,education, occupation,type of family and gravida)

Variables	N	Percentage
15 – 20 yrs	10	20%
21 – 25 yrs	21	42%
26 – 30 yrs	17	34%
31 – 35 yrs	2	4%
Hindu	48	96%
Christian	2	4%
Primary education	24	48%
Higher education	22	44%
Graduation	3	6%
Other	1	2%
House wife	49	98%
Farming	0	0%
Private job	1	2%
Nuclear family	10	20%
Joint Family	40	80%
Primi	38	76%
Multi	12	24%

Table 1 depicts that 21(42%) were in the age group of 21–25 years, 46(96%) mothers were Hindus, 24(48%) of the mothers had primary education, 49(98%) were house wives, 10(20%) were in nuclear family and 40(80%) were in joint families, 38(76%) were primi mothers and 12(24%) mothers were multi mothers

Section II – Assessment of the knowledge of the mothers regarding Neonatal Jaundice

Table 2: Item wise assessment of knowledge of mothers regarding neonatal jaundice

Items	No of mothers identified	Percentage
Definition of Jaundice	23	46%
Bilirubin	12	24%
Risk Group	23	46%
Period of Neonate	21	42%
Areas of Occurrence of Yellowish Discoloration	45	90%
Types of Jaundice	1	2%
Risk Factor	18	36%
Causes of Jaundice	0	0
Signs and Symptoms	22	44%
Danger Signs	43	86%
Diagnosis	28	56%
Treatment	13	26%
Care of Baby	14	28%
Prevention	20	40%
Complication	0	0

Table 2, fig 1 describes that 45(90%) of the mothers were able to identify the areas where yellowish discoloration occurs, 43(86%) were able to identify danger signs.

Figure 1: Diagrammatic representation of the knowledge of the mothers on Neonatal Jaundice

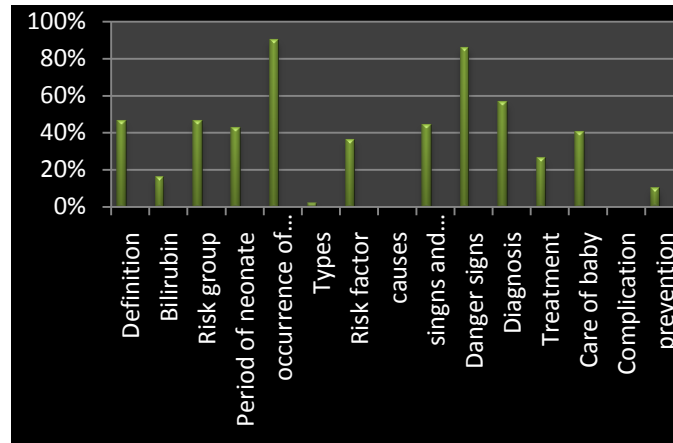


Table 3: Level of knowledge of the mothers related to neonatal jaundice

No of items identified	Total no of mothers	Percentage
1 - 5	22	44%
6 - 10	27	54%
11 - 15	1	2%
	50	100%

Table 3, Describes that 22(44%) mothers had poor knowledge, 27(54%) had moderate knowledge, 1(2%) adequate knowledge on neonatal jaundice which shows that most of the mothers had poor to moderate knowledge regarding neonatal jaundice.

Section III – Assessment of the attitude of the mothers regarding neonatal jaundice

Table 4: Attitude of the mothers related to neonatal jaundice statement wise assessment

Statements	Positive attitude	neutral	Negative attitude
Taking the child to hospital with jaundice	50(100%)		
Jaundice is a dangerous disease	50(100%)		
Breast feeding can be given to jaundiced baby	10(20%)	17(34%)	13(26%)
Jaundice is a communicable disease	12(24%)	36(72%)	2(4%)
Herbal medicines is the treatment for jaundice	38(76%)	10(20%)	2(4%)

Table 4, represents though all the mothers (100%) able to identify jaundice was a dangerous condition but they were not aware to feed the baby during this time, which is very much essential.

SUMMARY

The present study is aimed at primarily to assess the knowledge and attitude regarding neonatal jaundice among the mothers. As per the interview schedule we found out that none of the mothers were able to identify complications and types of neonatal jaundice. Most of the mothers (90%) were able to identify the areas of yellowish discoloration. Regarding mothers attitude towards neonatal jaundice most of them had neutral to positive attitude that jaundice was dangerous disease but they had negative attitude towards breast feeding to the baby and regarding the treatment of the jaundice.

CONCLUSION

Mothers had moderate knowledge on neonatal jaundice, especially very low knowledge over complications and types of neonatal jaundice, which has to be improved through adequate education from antenatal period itself. Positive attitude to be improved in breastfeeding the child during neonatal jaundice as it is essential to prevent the complications.

Implications

Nursing Education

The nursing students should be educated about the importance of good antenatal care, necessity of institutional delivery, importance of breast feeding, early identification of jaundice and appropriate treatment of jaundice as early as possible.

So as future nurses, they will have good knowledge and practice on neonatal jaundice, management and prevent complications of neonatal jaundice

Similarly staff nurses also should be given continuous and in service education on neonatal jaundice, its complications and treatment.

Nursing Research

There is lack a of knowledge of mothers' regarding neonatal jaundice, so similar research can be studied in different settings.

Recommendations

- ✦ Experimental study can be conducted in the same topic
- ✦ Same type of study can be conducted in different settings, with large samples and two groups as control and experimental.
- ✦ comparative study can be conducted in urban and rural areas

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