Original Article

Mothers Knowledge and Attitude about Neonatal Jaundice in Rural Areas of Sargodha

Neonatal Jaundice

Sadaf Liaqat[1], Sajid Hussain Sherazi[2], Rabeya Rehman[3], Nadia Bashir[2], Amna Rashid Butt[4] and Muhammad Yaqoob[1]

ABSTRACT

Objective: To determine the knowledge and attitude towards symptoms, causes and prevention of neonatal jaundice among mothers in rural areas of District Sargodha.

Study Design: Observational / cross-sectional study

Place and Duration of Study: This study was conducted at the Department of Pediatrics, Rai Medical College, Doctors Trust Teaching Hospital Sargodha from 1st April 2018 to 30th September 2018.

Material and Methods: A total of 115 mothers from rural areas of Sargodha were participated and interviewed in this study. The study duration was of six months. The exclusion criteria were all females with no successful pregnancy whereas all married females that delivered at least one live baby were included.

Results: The mean age of the mothers was 28.2±7.6 years. We observed, 48 out of 115 (41.7%), females were below 25 years of age, whereas 55 (47.8%) were between 26-35 and 12(10.4%) were above 35 years of age. 70 (60.8%) females were with education below primary and 45 (39.2%) were above primary level of education. The first or second ranked neonates were observed in 75 (65.2%) females. We observed that 35% of females had, moderate knowledge of all symptoms related to jaundice whereas 55% were with little knowledge or not fully aware of jaundice symptoms.

Conclusion: The knowledge and attitude aspects, about neonatal jaundice, of mothers were insufficient.

Key Words: Neonatal Jaundice, Mortality, Morbidity, Knowledge and attitude, Symptoms

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INTRODUCTION

The first twenty-eight days of life is defined as the neonatal period; this is the period where neonates are at very high risk of various diseases.[1] In developing countries like in Africa and Asia, the neonatal mortality and morbidity is very high, neonatal jaundice has proven a major participant. This involves almost sixty percent full term neonates and 80% preterm pregnancies/births.[1-3]

Poor socioeconomic status of families enforces mothers towards early discharge from hospital with their neonates, has imposed a lot of responsibilities to the mothers about jaundice recognition and proper treatment. Therefore the role of mother has been increased in neonatal jaundice management. Studies are available about the role and time management of the mothers towards neonatal jaundice.[4,5] Neonatal jaundice contributes significantly to neonatal morbidity and mortality. Possible complications arising from unconjugated hyperbilirubinemia include acute bilirubin encephalopathy, kernicterus, seizures, cerebral palsy, mental retardation, and deafness.[6]

Recently, newborns are being discharged early from hospital, so parents have the primary responsibility for early detection of jaundice and seeking proper treatment at the right time and place. Therefore, it is important that parents should have correct knowledge of how to recognize newborn jaundice as well as how to respond appropriately. Many times the delay in seeking medical advice is because of parent's wrong attitudes, e.g. they do self-medications with herbal medicines and homemade remedies due to inadequate knowledge, also having misconceptions about the beneficial role of sunlight in reducing severe jaundice.[7-8] Lack of attention, self-medication or treatment and lack of confidence yield complications reported by various studies.[9-10]

MATERIALS AND METHODS

This observational cross-sectional study was conducted at in a rural area of Sargodha, in Rai Medical College Sargodha from 1st April 2018 to 30th June 2018. A total

1. Department of Paediatrics, Rai Medical College, Sargodha.
2. Department of Paediatrics, Niazi Medical College, Sargodha.
3. Department of Paediatrics, Sargodha Medical College, Sargodha.
4. Department of Paediatrics, Shalamar Medical & Dental College, Sargoha.

Correspondence: Dr. Sadaf Liaqat, Assistant Professor of Paediatrics, Rai Medical College Sargodha.
Contact No: 0306-6006806
Email: sadafliaqat09@gmail.com

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of 115 mothers were participated and interviewed in this study. The study duration was of six months. All females with no successful pregnancy were excluded whereas all married females that delivered at least one alive baby were included. Demographic and socioeconomic information of all the participants were collected. Moreover the mothers were questioned about the knowledge and attitude towards neonatal jaundice, knowledge of mothers regarding way of diagnosis, causes, treatment, complications, and recognition of neonatal jaundice (totally 13.5 scores). All the collected data was stored electronically and analyzed later by using SPSS version 20.

RESULTS

Table No.1: Mothers knowledge about neonatal jaundice

Knowledge	No.	%
Usual Symptoms of Jaundice		
Neonates Skin	82	71.3
Palm and sole	43	37.4
Sclera	101	87.8
Worst symptoms of jaundice		
Fever	40	34.8
Listlessness	23	20.0
Feed refusal	57	49.6
Back arching	2	1.7
High pitched crying	23	20
Seizures	21	18.3
Neonatal Jaundice Causes		
Infections	58	50.4
Mother & child blood group difference	25	21.7
Prematurity	17	14.8
Jaundice severe complications		
Mental retardation	32	27.8
Brain injury	35	30.4
Neonatal death	58	50.4
Future Seizures	44	38.3
Diagnosis		
Blood test	63	54.8
Urine Test	23	20.0
Appearance	7	6.1
No information	3	2.6
Treatment of Jaundice		
Phototherapy	46	40.0)
Blood Exchange	1	0.9
Both treatment	58	50.4
No information	12	10.4
Prevention (during pregnancy)[misconceptions]		
Use of special food	17	14.8
No native warm food	55	47.8
Use of herbal medicine	13	11/3
Less fatty food use	55	47.8

The mean age of the mothers was 28.2±7.6 years. We observed 48 (41.7%) females were below 25 years of age, whereas 55 (47.8%) were of 26-35 and 12(10.4%) were above 35 years of age. 70 (60.8%) of the females had education below primary and 45 (39.2%) had above primary level of education. The first or second ranked neonates were observed in 75 (65.2%) females. We observed 35% of females had moderate knowledge of all symptoms related to jaundice whereas 55% were with low level of knowledge about jaundice symptoms and 10% had no knowledge of jaundice or they were not aware of any symptom. The knowledge assessment of all the mothers was summarized in table 1. We calculated Knowledge scores based on the awareness regarding symptoms, complications, diagnosis and treatment of neonatal jaundice and observed the mean knowledge score as 7.1±2.3 (Table 2)

Table No.2: Level of knowledge of mothers about neonatal jaundice

Knowledge Level	No.	%
Knowledge score	7.1±2.3	
Low level	63	55.0
Moderate level	40	35.0
Null	12	10.0

DISCUSSION

The present study showed that the knowledge score was below to the mark. Our study reports ,the knowledge of mothers about symptoms of jaundice is below forty percent, which is low, where as other studies estimate the symptoms knowledge were above seventy percent which is quite high as compared to us.[4] Our study also reports that the knowledge about worst symptoms of jaundice was very less and inappropriate ,somehow similar to the Indian reported studies.[8] The knowledge about causes was limited in our study mothers; similar findings were reported in India.[8] This study showed that most of the mothers were aware of neonatal jaundice diagnosis and treatment i.e. they knew the jaundice is curable. Similar findings were observed in other published studies in India.[11] The effective treatment knowledge was limitedly reported about blood exchange by our study. The mother's knowledge of neonatal jaundice complications was weaker as only one fifth of respondent knew the neonatal jaundice complications. Another finding of our study was that, the majority of mothers had believed about the diet in pregnancy can control over neonatal jaundice. Goodman et al[9] in Iran showed similar results. This was clearly a misconception by the mothers and this leads to risky and unsafe acts during pregnancy. In this way it is very important to educate the pregnant women.

Our study reported that almost 50% mothers were with correct attitude towards neonatal jaundice. But a large number of mothers practice the herbal medicines during and after pregnancy to cure the neonatal jaundice.

Actually they believed it is harmless. Similar findings were reported by other studies.[12,13] Contradict to the above fact, studies available which report the herbal use can lead to damage to health i.e. liver injury and hypertension in neonates.[10] Our study reports a large number of mothers agreed to hospitalize the neonates who suffer from jaundice, and the phototherapy treatment. These findings were similar to other published reports.[14,15]

In present study we found that 35% of mothers had moderate level, 55% had low level and 10% had no knowledge level towards neonatal jaundice. We calculated knowledge scores based on the awareness regarding symptoms, complications, diagnosis and treatment of neonatal jaundice and observed the mean knowledge score as 7.1±2.3. A study conducted by Sharmila[16] reported that 49.90% mothers had low level of knowledge, 28.60% had moderate level and 22% had adequate level of knowledge about neonatal jaundice. Some other studies results regarding mother knowledge and attitude towards neonatal jaundice were comparable to our study.[17]

CONCLUSION

The knowledge and attitude of mothers about neonatal jaundice were insufficient; there should be proper awareness workshops or programs to educate the mothers.

Author's Contribution:

Concept & Design of Study:	Sadaf Liaqat
Drafting:	Sajid Hussain Sherazi, Rabeya Rehman
Data Analysis:	Nadia Bashir, Amna Rashid Butt, Muhammad Yaqoob
Revisiting Critically:	Sadaf Liaqat, Sajid Hussain Sherazi
Final Approval of version:	Sadaf Liaqat

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