



ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2016; 2(6): 297-299
www.allresearchjournal.com
Received: 09-04-2016
Accepted: 10-05-2016

Mukesh Shukla
Department of Community
Medicine, Hind Institute of
Medical Sciences, Ataria,
Sitapur, Lucknow, India.

Monika Agarwal
Department of Community
Medicine & Public Health, K
G's Medical University UP,
Lucknow, India.

Knowledge of mothers regarding neonatal jaundice attending immunisation clinic at a tertiary care hospital of Lucknow

Mukesh Shukla and Monika Agarwal

Abstract

Background: Neonatal jaundice is one of the prominent cause of preventable brain injury, physical and mental impairment, and early death among infants in many countries.

Objective: The objective of the present study was to assess the knowledge of mothers with children aged 0-23 months regarding neonatal jaundice attending immunisation clinic at a tertiary care hospital of Lucknow, capital of Uttar Pradesh.

Methodology: A hospital based cross-sectional study was conducted at immunisation clinic, KG's Medical University. Systematic random sampling was done and a total of 240 mothers with children aged 0-23 months old attending immunisation clinic were interviewed. A pretested questionnaire was adopted after a short pilot study.

Results: About 80.0% of the mothers had heard about neonatal jaundice. Out of 192 mothers 91.6% were aware about neonatal jaundice. About 68.7% of the mothers were aware about fever as a danger sign. 53.6% of mothers opined that consuming special food could prevent neonatal jaundice while about one-fifth (18.7%) believed that use of medicine could prevent neonatal jaundice.

Conclusions: This study revealed that mothers had suboptimal and inadequate knowledge about neonatal jaundice. Therefore more health education on neonatal jaundice should be given to all mothers during each and every opportunity.

Keywords: Knowledge, Neonatal jaundice.

1. Introduction

Jaundice is one of the most common conditions needing medical attention in newborn babies. Jaundice refers to the yellow discolouration of the skin and the sclera caused due to accumulation of bilirubin in the skin and mucous membranes [1]. Neonatal jaundice is one of the most common condition affecting newborn babies. About two thirds of neonates develop clinically apparent indirect hyperbilirubinaemia during first few days of life, thereby making it the most common clinical ailment in the neonates requiring urgent clinical evaluation as well as adequate management [2]. Neonatal morbidity and mortality remain very high especially in the developing countries [3], and neonatal jaundice is one of the important contributors [4]. Because of early discharge of newborn after delivery, role of mothers about recognising jaundice has increased [5]. Therefore parent's knowledge has become an important predictor for the final outcome of neonatal jaundice. Exposure levels higher than 20mg/dl, even for less than 6 hours, results in neurological disorders in 2.3 per cent of the cases [6]. Possible complications includes acute bilirubin encephalopathy, kernicterus, seizures, cerebral palsy, mental retardation, deafness, etc [7]. Therefore the study was conducted to assess the knowledge of mothers about neonatal jaundice regarding risk factors, complications, treatment options, and preventive strategies.

2. Materials and Methods

2.1 Study Design: Hospital-based cross-sectional study.

2.2 Study Setting: The study was conducted at immunisation clinic, Queen Mary Hospital, King George's Medical University, Lucknow.

Correspondence
Mukesh Shukla
Department of Community
Medicine, Hind Institute of
Medical Sciences, Ataria,
Sitapur, Lucknow, India.

2.3 Study population: A maximum of 240 mothers with children 0-23 months old attending immunisation clinic were enrolled in study during the study period of nine months from January 2015 to September 2015.

2.4 Data Management: A pretested questionnaire was adopted after a short pilot study after availing informed verbal consent from the mothers. The questionnaire includes the information about bio-social characteristics and questions regarding knowledge of symptoms, dangers, aetiology, complication, treatment and prevention of neonatal jaundice. The data collected was transferred on the pre- designed classified tables and analysed according to aims and objectives.

3. Results

In the present study, out of 240 mothers interviewed, majority (75.8%) belonged to socioeconomic class III or below according to modified B.G. Prasad socioeconomic classification. Majority (77.9%) of the mothers were educated up to high school (11.2% were illiterate). About four-fifth (82.5%) of the mothers were of Hindu religion and 71.3% of the mothers were residing in a nuclear family. One-third (29.2%) of the mothers were currently working, with majority of them unskilled workers. Out of 240 children, 83.3% of the children were of birth order less than or equal to two.

Eighty per cent of the mothers attending immunisation had heard about neonatal jaundice. The major source of information were community health workers like ASHA, Anganwadi workers and Auxiliary nurse and midwives followed by relatives and mass media (40.6% and 32.8% respectively).

Table 1: Awareness and source of information of mothers about neonatal jaundice. (N=240)

Awareness about neonatal jaundice	Number	Percentage (%)
Heard about neonatal jaundice		
Yes	192	80.0
No	48	20.0
Source of information (n=192)*		
Relatives	78	40.6
Community health worker	167	69.5
Television/Radio/Mass media	63	32.8

*Multiple responses

Out of 192 mothers who were aware about neonatal jaundice, majority had knowledge about symptoms of jaundice to be viewed in sclera (91.6%) followed by palms, soles and skin. (74.4% and 49.4% respectively). Only 40.0% of the mothers had knowledge about all the three symptoms. However the knowledge regarding danger signs of neonatal jaundice was quite less. Although about two-third of the mothers were aware about fever as a danger sign, but with respect to other danger signs like seizures, down rolling of eyes, arching of back, the knowledge was least. Although half of the mothers were aware about prematurity as a cause of neonatal jaundice, only few were aware about infection and blood group incompatibility. The knowledge about complication of neonatal jaundice was minimal among the mothers. However about 53.6% of mothers opined that consuming special food could prevent neonatal jaundice while about one-fifth (18.7%) believed that use of medicine could prevent neonatal jaundice.

Table 2: Knowledge of mothers about clinical presentation of neonatal jaundice. (N=192)

Knowledge about neonatal jaundice*	Number	Percentage (%)
Symptoms of neonatal jaundice		
Sclera	176	91.6
Palm and sole of foot	143	74.4
Neonates skin	95	49.4
Danger signs of neonatal jaundice		
High pitched cry	62	32.2
Fever	132	68.7
Seizure	13	6.7
Down rolling of eyes	5	2.2
Refusal to feed	98	51.1
Arching of the back	2	1.0
Causes of neonatal jaundice		
Infection (Septicaemia)	23	11.9
Blood group incompatibility	3	1.6
Prematurity	96	50.0
Complication of severe neonatal jaundice		
Neonatal death	12	6.2
Brain injury	3	1.5
Mental retardation	2	1.0
Seizure in future	4	2.0
Prevention steps during pregnancy		
Consuming special food	103	53.6
Not consuming fat foods	16	8.3
Use of medicine	36	18.7

*Multiple responses

4. Discussion

The study reveals that mothers had some knowledge on few aspects of neonatal jaundice; however knowledge was less in other domains. Only 40.0% had knowledge about all three symptoms which is quite similar to findings reported by Khalesi *et al.*, conducted in Pakistan [5], while it is much lower as compared to a study conducted among community health workers which reported about 75.8% to be aware of all three symptoms of neonatal jaundice [8]. With respect to danger signs majority of the mothers were unaware. Similar findings were also reported in previous studies [5, 9]. This is quite a matter of concern as the awareness directly affects the health seeking behaviour of mothers. Only very few mothers had knowledge about complication of neonatal jaundice. Similar findings were also reported in an earlier study, [5] while it was much lower as compared to a study conducted by Yuen Ng *et al.*, in Malaysia. [10]. Khalesi *et al.*, opined that this could have an influence on the perceived severity of jaundice and consequence on the steps taken by mothers. Misconceptions among the mothers that diet during pregnancy could prevent neonatal jaundice was found among more than half of the mothers. Similar findings were also reported in previous studies [5, 10, 11]. However as the study was conducted at immunisation clinic; therefore the generalizability of the study is limited.

5. Conclusions

The findings of the study concluded about suboptimal and inadequate knowledge of the mothers with respect to neonatal jaundice. This revealed the importance of need to increase knowledge of mothers on all aspects of neonatal jaundice. More intensified information, education and communication (IEC) based activities and proper campaigning through community health workers can play a pivoted role in achieving the optimal knowledge among mothers.

6. References

1. Neonatal jaundice. NICE clinical guideline 98. Developed by the National Collaborating Centre for Women's and Children's Health. Available from: [http://www.rcpch.ac.uk/sites/default/files/asset_library/Research/Clinical%20Effectiveness/Endorsed%20guidelines/Neonatal%20Jaundice/NICE%20Guideline Z.pdf](http://www.rcpch.ac.uk/sites/default/files/asset_library/Research/Clinical%20Effectiveness/Endorsed%20guidelines/Neonatal%20Jaundice/NICE%20Guideline%20Z.pdf) [Last accessed on May 12, 2015].
2. Watchko JF, Maisels JM. Neonatal Jaundice. *Semin Neonatol.* 2002; 7:101-3.
3. Zupan J. Perinatal mortality in developing countries. *New Engl J Med.* 2005; 352:2047-2048.
4. Parkash J, Das N. Pattern of admissions to neonatal unit. *J Coll Physicians Surg Pak.* 2005; 15:341-344.
5. Khalesi N, Fatemeh Rakhshani. Knowledge, attitude and behaviour of mothers on neonatal jaundice. *J Pak Med Assoc.* 2008; 58(12):671-4.
6. Maisels MJ, Jaundice. In: MacDonald MG, Mullett MD, Seshia MMK eds. *Avery's neonatology.* 6th ed. Philadelphia: Lippincott Williams & Wilkins, 2005, 789-91.
7. Behrman R, Neonatal jaundice. In Kliegman RM, Jenson HB (Editors). *Nelson Text book of Pediatrics* 18th ed. Philadelphia: WB Saunders, 2007, 756-763.
8. Olusoga B, Ogunfowora Olusoji J, Daniel. Neonatal jaundice and its management: knowledge, attitude and practice of community health workers in Nigeria. *BMC Public Health.* 2006; 6:19.
9. Singh J, Shakya N, Jain DC, Bhatia R, Bora D, Pattanayak PK et al. A survey on community perception of jaundice in east Delhi: Implications for prevention and control of viral hepatitis. *Trans R Soc Trop Med Hyg.* 2000; 94:243-46
10. Su Yuen Ng, Sze Yee Chong. What Do Mothers know about Neonatal Jaundice? Knowledge, Attitude and Practice of Mothers in Malaysia. *Med J Malaysia.* 2014; 69:252-5.
11. Dehghani F, Mohammadalizadeh S, Kazemian M. Knowledge, Attitude and Practice of mothers about neonatal jaundice. *J of Gilan University of Medical sciences.* 2001; 10:42-47.