



CODEN (USA): IAJPB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.569352>Available online at: <http://www.iajps.com>

Research Article

**AWARENESS AND ATTITUDE OF MOTHERS REGARDING
NEONATAL JAUNDICE**Dr. Abdul Rehman Siyal^{1*}, Dr. Saima Naz Shaikh,² Dr. Ammara zaidi³¹ MBBS, DCH, MD Assistant professor, Paediatrics Department LUMHS² MBBS, (M.Phil) Physiology department LUMHS³ MBBS, Isra University Hyderabad, student of masters in maternal child health,
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Received: 28 November 2016

Accepted: 28 January 2017

Published: 15 February 2017

Abstract:

Objective: The objective of this study was to assess the level of awareness and attitude of mothers regarding neonatal jaundice.

Place & Duration of Study: This cross sectional study was conducted in the department of pediatrics from May 2015 to October 2015.

Material and Methods: Total 100 women were selected for interview after taking verbal informed consent. All the women who were married and have children were included in the study while unmarried and nulliparous were excluded from the study. Women were asked questions regarding awareness and their attitude regarding neonatal jaundice, eg. Sign symptoms of jaundice, what they will do if their babies will develop jaundice etc.

Results: Total 100 women's were enrolled in this study. Regarding their educational status majority i.e. 60(60%) women were uneducated. 60(60%) mothers had knowledge regarding early diagnosis of jaundice and they answered they can diagnosed it by yellowish discoloration of eyes, 90% women don't know why jaundice occurs. 30(30%) women knew that baby will develop fever and will not take feed if jaundice will develop. According to the attitude, 80% mothers said that they will not take their babies to hospital because their blood will be taken for different investigations. 70% mothers believe that medicines will further worsen their symptoms. Regarding behavior, only 20% mothers said that they will take their babies to hospital immediately if they will develop jaundice, 50% said that they will give only sun bath to their babies and they will be fine.

Conclusion: Level of awareness of mothers about neonatal jaundice is very poor in population, majority of them don't want to take their babies to hospitals for management instead they believe that sun exposure, Hakeem medicine and religious pray etc are enough for the management.

Key Words: Awareness, attitude, Neonatal jaundice

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Please cite this article in press as Ammara zaidi et al, *Awareness and Attitude of Mothers Regarding Neonatal Jaundice*, Indo Am. J. P. Sci, 2017; 4(01).

INTRODUCTION:

Jaundice in the neonates is the major leading cause of preventable brain damage, physical and mental handicap, and early death among infants in many communities. Big Knowledge is required in all health workers. Jaundice in the neonates occurs in 60% of term and 80% of preterm infants [1]. Bangladesh study stated that out of 426 neonates with NNJ the commonest cause was physiological jaundice (26.7%) followed by jaundice of prematurity (20.9%) and haemolytic jaundice (11.3%). Severe [2] hyperbilirubinemia can lead to encephalopathy in 2.1%. Other complications include sensorineural hearing loss, paralysis of [3] upward gaze and dental enamel dysplasia and the severity of neurological complications depends on duration of exposure to high bilirubin levels. Risk progressively increased from 2.3% in neonates with exposure of six hours to high bilirubin levels to 26% when the exposure time increased to >12 hours [4]. Neonatology in Pakistan is a developing branch of paediatrics. Jaundice is observed during the first week of life in approximately 60% of term and 80% of preterm infants. The unconjugated form is neurotoxic in neonates above certain concentration Jaundice is clinically visible in adults at a level of 2 mg/dl but in newborn, however it is discernable and under various circumstances [5]. at a level of 6-8 mg/dl [6]. This is due to high haemoglobin concentration present during this period of life. In all studies conducted in various parts of the country jaundice was the most significant problem encountered in neonatal period. 21.6% of total babies admitted in neonatal unit at Peshawar with 7.6% having kernicterus"[7]. Neonatal jaundice is a common condition that paediatricians encounter in their practice. It is also a significant cause of neonatal morbidity worldwide and is estimated to be present in 60% of term neonates and 80% of preterm babies [8,9]. Intervention to prevent progression of neonatal jaundice significantly reduces the morbidity and mortality due to this condition [10]. Since babies and mothers are discharged early, the ability of the mothers to recognize neonatal jaundice becomes important. Jaundice is considered as a most serious condition in the newborn, because severe forms of the illness may result in mortality and morbidity [11,12]. The burden of severe newborn jaundice also includes the challenges of care, particularly exchange blood transfusion which is frequently employed as the most rapid way of reducing serum bilirubin levels in the developing world [13]. Most affected infants are only brought to medical attention as dire emergencies when jaundice is severe and complicated. This explains the high rate of kernicterus complicating newborn jaundice in Nigeria, even in the 21st century [14]. Most of the complications of neonatal jaundice can be prevented if neonate is brought early to hospital. In addition, mostly women had certain myths

regarding neonatal jaundice which need to be corrected. Mothers have important role in the life of their newborn that is why this study was designed. The aim of this study was to assess the level of awareness and attitude of mothers regarding neonatal jaundice.

PATIENTS & METHODS:

This cross sectional study was conducted in the department of pediatrics of Isra University from May 2015 to October 2015. Total 100 women were selected for interview after taking verbal informed consent. Questionnaire was made after interview of some women generally, and according to their most common answers. All the women who were married and have children were included in the study while unmarried and nulliparous were excluded from the study. Women were asked questions regarding awareness and their attitude regarding neonatal jaundice, eg. sign symptoms of jaundice, what they will do if their babies will develop jaundice etc. All the information was recorded on self-made questionnaire and data was analyzed by SPSS version 16. Frequencies and percentages were calculated to show the results.

RESULTS:

Total 100 women were enrolled in this study. Regarding their educational status 60% women were uneducated, 20% women had got primary education and 15% had received secondary education while 5% women were graduate. Results of our study showed that mothers had poor knowledge about neonatal jaundice. Only 60% mothers had knowledge regarding early diagnosis of jaundice as; yellowish discoloration of eyes if their babies develop, almost all women don't know regarding causes of jaundice. Only 5% women had good knowledge how jaundice can be confirmed. Only 10(10%) mothers knew to some extent that sun bath should be given if jaundice develops. Only 10(10%) mothers knew that baby can die if neonatal jaundice is not treated. (**Table 1**)

Regarding attitude of mothers, 80(%) mothers said that they will not take their babies to hospital because their blood will be taken which will further harm their babies. 70(70%) mothers believe that medicines will further worsen their symptoms. 60% mothers are afraid from hospital so they will not took their babies to hospital. Majority of the mothers, i.e. 90(90%) stated that jaundice is effectively treated by religious prays. (**Table 2**)

Regarding behavior, only 40(40%) mothers said that they will take their babies to hospital immediately if they will develop jaundice, 70(70%) said that they will give only sun bath to their babies and they will be fine, 60(60%) mothers thought that their babies should be treated with local remedies and only 20(20%) mothers think that drugs must be given to cure their jaundice. (**Table 3**)

Table 1: Awareness of Women Regarding Neonatal Jaundice n=100

Questions	Correct answer	Incorrect answer
Do u know regarding early diagnoses Jaundice	60(60%)	40(40%)
Do you know regarding causes jaundice	10(10%)	90(90%)
What will be the symptoms if jaundice develops	30(30%)	70(70%)
Do you know regarding its treatment	10(10%)	90(90%)
Baby can die if jaundice is not treated	10(10%)	90(90%)

Table 2: Attitude of Women Regarding Neonatal Jaundice n=100

Questions	Number (%)
If I will take baby to hospital they will take blood which will be more painful	80(80%)
By giving medicines in jaundice it will worsen the symptoms	70(70%)
I was afraid from hospital so did not took my baby to hospital	60(60%)
Jaundice can be effectively corrected by religious pray	90(90%)
Jaundice occurs due to eating some types of food during breast feeding	70(70%)

Table 3: Behaviour of Women Regarding Treatment Neonatal Jaundice n=100

Variables	Number (%)
Treatment from hospital	40(40%)
Sun bath given	70(70%)
Treat with local remedies	60(60%)
Treat with Hakeem medicine	20(20%)

DISCUSSION:

Majority of the of newborns i.e about 50% clinically develop jaundice during their first week of life. Babies who are affected by severe neonatal jaundice, are at increased risk of development of cerebral palsy [15,16]. In the studies conducted in Europe and North America has found that timely recognizing and early management may reduce the complications of neonatal jaundice [17,18].

Results of our study showed that mothers had poor knowledge about neonatal jaundice. Only 60(60%) mothers knew that jaundice can be diagnosed by yellowish discoloration of eyes if their babies develop, 90(90%) women don't know why jaundice occurs; only 30(30%) women knew that baby will develop fever and will not take feed if jaundice will develop. This they knew because their babies had already developed jaundice. Only 5(5%) women knew that how jaundice can be confirmed. Only 10(10%) mothers knew to some

extent that sun bath should be given if jaundice develops. Only 10(10%) mothers knew that baby can die if neonatal jaundice is not treated. Similar findings are seen in the study conducted by Khalesi N et al [19]. Study conducted by Rodrigo et al also showed that the awareness of mothers regarding neonatal jaundice among postnatal mothers was very low [20]. Regarding attitude of mothers, if their babies will develop jaundice, it was observed that 80(80%) mothers said that they will not take their babies to hospital because their blood will be taken which will further harm their babies. 70(70%) mothers believe that medicines will further worsen their symptoms. 60(60%) mothers said because they are afraid from hospital so they will not took their babies to hospital. Majority of the mothers, i.e. 90(90%) stated that jaundice is effectively treated by religious pray. Similar results were seen in the study conducted in Iran, whose results showed that awareness of their

women regarding neonatal jaundice, their causes, and complications was inappropriate [21]. Inappropriate knowledge regarding the etiology, management, complications, and danger signs and symptoms of neonatal jaundice (NNJ) along with various misconceptions and myths regarding the condition may adversely affect the actions of the mothers in the prevention of some of the causes of NNJ such as neonatal sepsis as may occur from poor umbilical cord hygiene.

Similar findings are seen in the study conducted by Boo NY et al [22] whose results showed that women had poor knowledge regarding awareness of neonatal jaundice. In their study total 400 mothers from the obstetric outpatient or inpatient of a general hospital were enrolled in cross sectional study. They were assessed by a structured questionnaire. The results showed that most (93.8%) of them were aware about neonatal jaundice, and 71.7% knew that if jaundice remains for more than two weeks was abnormal, but only 34.3% women knew that jaundice in first 36 hours of neonate's life was pathological. Only 20% knew about fetal-maternal blood incompatibilities. Only 38.4% of them knew that hearing impairment could be caused by severe jaundice. A very low percentage (27.1%) knew that putting jaundiced infants in direct sunlight could cause worsening of jaundice and dehydration. Out of score of 15, the mean maternal knowledge score was 7.4. Most of the multiparous mothers (83.1%) with history of neonatal jaundice in previous baby practiced direct sunlight exposure to their infants. The study showed a wide gap regarding knowledge of care of neonatal jaundice among Malaysian mothers. Direct sunlight exposure was still a common²².

In this study regarding behavior, only 40(40%) mothers said that they will take their babies to hospital immediately if they will develop jaundice, 70(70%) said that they will give only sun bath to their babies and they will be fine, 60(60%) mothers thought that their babies should be treated with local remedies and only 20(20%) mothers think that drugs must be given to cure their jaundice. Mostly c believed that sun exposure is beneficial for their infants, as shown in some other studies [23], and they cases had thought the sun exposure is sufficient to reduce the jaundice. In an Australian study stated that nearly half of cases medical staff recommended sun exposure to manage jaundice of the neonates [24]. Insufficient evidence regarding advantage of the sunlight for jaundice of the neonates [25] and are no recommendations are in the literature regarding advantages of direct sunlight for jaundice of the neonates in the medical literature[26]. Nevertheless, especially in developing countries it is believed that exposure to sunlight is beneficial, even considered an

alternative phototherapy source by medical staff for the treatment of neonatal jaundice [27]. Most of the mothers also belief that religious pray are enough to control neonatal jaundice. Majority of women also believe that jaundice to their neonates occurs because they had eaten some wrong diet during breast feeding.

CONCLUSION:

Level of awareness of mothers about neonatal jaundice is very poor in population, dig prevalent of them don't want to take their babies to hospitals for management instead they believe that sun exposure and religious pray etc are enough for the management. They have certain myths which need to be clarified. Knowledge should be improved of pregnant mothers and should be counselled during antenatal visits and before discharge from hospital after their delivery.

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