

# Home Practices of Kurdish Mothers Regarding Management of Jaundice among Newborns in Erbil City

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**Abstract- Back ground:** Neonatal jaundice is a yellowish discoloration of the skin and other tissues of a newborn. A bilirubin level with more than 85  $\mu\text{mol/l}$  (5 mg/dl) manifests neonatal jaundice. In newborn jaundice is detected by watching the skin, newborn has an apparent Scleral icterus, and yellowing of the face extending down to the chest.

**Objectives:** The study aim to assess Kurdish mother's practice toward management of newborns jaundice and to found out association between practices of mothers with some demographic characteristics of mothers.

**Methods:** A quantitative, descriptive design study non-probability (purposive) sampling technique was carried out through the present study the sample consisted of 130 mothers who attending Primary Health Care Centres, Paediatric Rapareen Teaching and Maternity Teaching Hospitals in Erbil City from 2<sup>nd</sup> May 2016 to 14<sup>th</sup> August 2016 were interviewed using questionnaire. Data was analyzed by using descriptive analysis (frequency and percentage), ANOVA and Kurtosis tests.

**Results:** The study presented that (59.2%) of them expose their child to the flourance, (70.8%) not using Piece gold.(72.3%) not wearing yellow clothes of child.(80.8%) detecting jaundice. Also result shows that there are no significant relationship between the practices of mothers with age and education occupation and residency.

**Conclusion:** According to the results of the study there is no significant association between mothers' practice with management of newborn jaundice

**Recommendation:** The education program could be considered as a need for all mothers.

**Index Terms-** practices, mothers, management, Kurdish, newborns jaundice.

## I. INTRODUCTION

Neonatal jaundice referred to as neonatal hyperbilirubinaemia and physiology jaundice of the newborn is a yellow discoloration of the skin and the white part (the sclera) of the eyes. It results from having too much of a substance called bilirubin in the blood (Andreoli, and Carfenter, 2001). Neonatal morbidity and mortality is still high in African, Asian, Latin American and developing countries of which one of important contributing factors is jaundice it presents in 60% of term neonates and 80% of preterm ( Behram, Kliegman, and Jenson.2001) Bilirubin formed when the body breaks down old red blood cells. The liver usually processes and removes the bilirubin from the blood Jaundice in babies usually occurs because of a normal increase in red blood cell breakdown and the

fact that their immature livers are not efficient at removing bilirubin from the bloodstream Jaundice (Daniel, 2011 ). The baby's liver plays the most important part in bilirubin breakdown. The type of bilirubin that causes the yellow discoloration of jaundice is called unconjugated or indirect bilirubin. This form of bilirubin is not easily removed from the baby's body. The baby's liver changes this unconjugated bilirubin into conjugated or direct bilirubin, which is easier to excrete (Chai.2006).The liver of a newborn baby is immature, so the job of conjugating and removing bilirubin is not done completely well. This causes an elevation of bilirubin, which results in the yellow discoloration of the baby's eyes skin. As the breakdown of red blood cells slows down, and the baby's liver matures, the jaundice rapidly disappears. When jaundice is due to these factors alone, it is termed physiologic jaundice. Neonatal jaundice can be seen in cases of maternal-fetal blood type incompatibility. The mother's body will actually produce antibodies that attack the fetus's blood cells. Physiologic jaundice in newborns most commonly occurs because their livers are not mature enough to remove bilirubin from the blood (Daniel.2011).The maximum risk of hyperbilirubinemia is kernicterus causes. Parents are often asked to watch their newborns for signs of jaundice, which produces a yellow tint to the skin and eyes (Chai.2006).Many mothers and their newborns leave the hospital within 48 hours of the baby's birth, The best home treatment for jaundice is frequent feedings, whether breast-feeding or bottle-feeding, some mothers who breast-feed their babies are concerned that they will need to stop breast-feeding if their babies develop jaundice (Andreoli, Carfenter. 2001).The American A Academy of pediatrics encourages women to continue breastfeeding newborns with jaundice who are otherwise healthy and to focus on increasing the frequency of feeding (about 8 to 12 times every 24 hours).(Maisels MJ,2005) A study in Iran have indicated that many complications in neonates are due to lack of attention, self treatment, use of inappropriate medicine and lack of confidence on new medication. In addition, other beliefs as fluorescent, mannite, manna, hock, willow, rhamnus, tomato juice, or avoiding some foods as dates and raisin are prevalent. However, none of these has an acceptable effect (Chai.2006).

## II. METHODOLOGY

The present study was carried out through the application of quantitative descriptive design study non-probability (purposive) sampling technique was carried out through the present study the sample consisted of 130 mothers who were attending Primary Health Care Centres, Paediatric Rapareen Teaching and Maternity Teaching Hospitals in Erbil City from 2<sup>nd</sup> May 2016 to

14<sup>th</sup> August 2016 were interviewed using questionnaire. The questionnaire included three parts, part one socio demographic information mothers, part two socio demographic information babies and part three Mother's practices toward newborn jaundices which contain (15) items. Inclusion criteria were: the Kurdish mothers who attending Primary Health Care Centres, Paediatric Rapareen Teaching and Maternity Teaching Hospitals.

Data was analyzed by using descriptive analysis (frequency and percentage), ANOVA test was used to find the relationship between normal distribution variables such as age, education, and Kurtosis test was used to find the relationship between abnormal distribution variables such as occupation and residential area.

III. RESULTS

Table (1) Demographic characteristics of mother's

age of mothers	Frequency	Percent
< 22.00	15	11.5
23 - 35	106	81.5
>36	9	6.9
Education level	Frequency	Percent
illiterate	29	22.3
primary	54	41.5
secondary	29	22.3
institute	15	11.5
College	3	2.3
occupation	Frequency	Percent
Un employee	108	83.1
Employee	22	16.9
residency	Frequency	Percent
urban	56	43.1
suburban	59	45.4
rural	15	11.5

This table shows that most of mothers' age was among 23 - 35 years which Presents (81.5%). With regard to the level of mother's education, the highest percentage was primary (41.5%). Regarding the mother's occupation, the majority of mother's were unemployed, which presents (83.1%). In respect to residential area, most of mother's were from suburban areas (45.4%).

Table (2) Demographic characteristics of baby's

parity	Frequency	Percent
primi_para	40	30.8
multi_para	90	69.2
complaint	Frequency	Percent
yes	50	38.5
no	80	61.5
delivery	Frequency	Percent
NVD	90	69.2
CS	40	30.8
Sex child	Frequency	Percent
male	72	55.4
female	58	44.6
feeding	Frequency	Percent
exclusive	50	38.5

breast and formula	70	53.8
exclusive formula	10	7.7

This table showed that most of mothers' were multi-para which present (69.2%). the highest percentage of not having complaint is (61.5%). Regarding the mother's delivery, the majority of mother's were NVD, which presents (69.2%). In respect to Sex child, most of male which presents (55.4%) and Regarding feeding most of them breast and formula (53.8%) .

**Table (3): Mother's practices toward newborn jaundices**

<b>Delivery before 9m</b>	<b>Frequency</b>	<b>Percent</b>
Yes	48	36.9
No	82	63.1
<b>sunlight</b>	<b>Frequency</b>	<b>Percent</b>
yes	58	44.6
no	72	55.4
<b>Dark room</b>	<b>Frequency</b>	<b>Percent</b>
yes	10	7.7
no	120	92.3
<b>Herbal</b>	<b>Frequency</b>	<b>Percent</b>
yes	26	20.0
no	104	80.0
<b>flourescent</b>	<b>Frequency</b>	<b>Percent</b>
yes	77	59.2
no	53	40.8
<b>bath</b>	<b>Frequency</b>	<b>Percent</b>
yes	52	40.0
no	78	60.0
<b>Yellow fish</b>	<b>Frequency</b>	<b>Percent</b>
yes	17	13.1
no	113	86.9
<b>Kershan with oil seed</b>	<b>Frequency</b>	<b>Percent</b>
yes	46	35.4
no	84	64.6
<b>Piece gold</b>	<b>Frequency</b>	<b>Percent</b>
yes	92	70.8
no	38	29.2
<b>Yellow clothes</b>	<b>Frequency</b>	<b>Percent</b>
yes	36	27.7
no	94	72.3
<b>Yellow restrain</b>	<b>Frequency</b>	<b>Percent</b>
yes	27	20.8
no	103	79.2
<b>Put ring</b>	<b>Frequency</b>	<b>Percent</b>
yes	49	37.7
no	81	62.3
<b>necklace</b>	<b>Frequency</b>	<b>Percent</b>
yes	42	32.3
no	88	67.7
<b>Detecting jaundice</b>	<b>Frequency</b>	<b>Percent</b>
yes	105	80.8
no	25	19.2

Ear injury	Frequency	Percent
yes	6	4.6
no	124	95.4

This table showed that (36.9%) of mother's delivery before 9 month cause of jaundice. (55.4%) not expose the child to the sunlight, (92.3%) not using dark room. (80.0%) not using herbal, (59.2%) of them expose their child to the flourance. Also the table shows that (60.0%) of the mother's did not bath. while (86.9%) of the samples not yellow fish kept in front child. (64.6%) kershan with oil seed not apply to child. (70.8%) not using piece gold. (72.3%) not wearing yellow clothes of child. (79.2%) not rapid yellow restrains. (62.3%) not Put ring gold. (67.7%) were not wearing yellow necklace. (80.8%) were detecting jaundice. (95.4%) were not Injury ear.

**Table (4) Association between practices of mother's in the newborn baby with their ages**

Mothers age	Poor practice (%)	Fair practice (%)	Good practice (%)	F	P value
< 22.00	0(0.0)	0(0.0)	15(100.0)	0.341	0.711
23.00 - 35	0(0.0)	3(2.8)	103(97.2)		
>36	0(0.0)	0(0.0)	9(100.0)		

The results of table (4) indicated that there is no significant relationship between age of mothers and practices regarding newborn jaundice.

**Table (5) Association between mother's practices and their educational level**

Education level	Poor practice (%)	Fair practice (%)	Good practice (%)	F	P value
illiterate	0(0.0)	1(3.4)	28(96.6)	0.196	0.940
primary	0(0.0)	1(1.9)	53(98.1)		
secondary	0(0.0)	1(3.4)	28(96.6)		
institute	0(0.0)	0(0.0)	15(100.0)		
College	0(0.0)	0(0.0)	3(100.0)		

There is no significant relationship between levels of mother's education with their Practice.

**Table (6) Association between mothers' practices and occupation regarding newborn jaundice**

occupation	Poor practice (%)	Fair practice (%)	Good practice (%)	Chi-Square	P value
Un employee	0(0.0)	3(2.8)	105(97.2)	0.621	0.431
Employee	0(0.0)	0(0.0)	22(100.0)		

This table show that there were no significant relationship between occupation of mother's with newborn jaundice

**Table (7) Association between mother's practice with resident area regarding newborn baby**

residential area	Poor practice (%)	Fair practice (%)	Good practice (%)	Chi-Square	P value
urban	0(0.0)	0(0.0)	56(100.0)	3.667	0.160
suburban	0(0.0)	3(5.1)	56(94.9)		
rural	0(0.0)	0(0.0)	15(100.0)		

Table7 showed that there no significant relationship between residential area of mothers with their practice regarding newborn jaundice.

#### IV. DISCUSSION

Results of the present study show that the highest percentage of them was (81.5%) among 23-35 years and finding of the present study is similar to results (71.0%) were in the age group of (26-35) years. of previous study was conducted by BA Egube, etal Departments of Community Health and Obstetrics and Gynaecology, University of Benin Teaching Hospital, Benin City, Nigeria<sup>6</sup>

With regard to the level of mother's education, the highest percentage was primary (41.5%) and finding of the present study is similar to results 24(48%) were educated up to primary level of previous study was conducted by Manjubala Dash Mother Theresa Post Graduate and Research Institute of Health Sciences (MTPG & RIHS), Puducherry-6, India.<sup>7</sup>

Regarding the mother's occupation, the majority of mother's were unemployed, which presents (83.1%) and finding of the present study is similar to results mother's occupation house wives (73.2%) of previous study was conducted by B K N R Rodrigo<sup>1</sup>, Gayan Cooray<sup>2</sup>, 1Acting Paediatrician, 2 Senior House Officer, Provincial General Hospital, Badulla.<sup>8</sup>

In respect to residential area, most of mother's were from suburban areas (45.4%) and finding of the present study is similar to results (14.4%) of previous study was conducted by [Abdolahad Amirshaghghi](#) etc. Children's Hospital, Tabriz University of Medical Sciences<sup>9</sup>

#### Association between mother's practice and their age

The finding indicated that there were no significant relationship between practices and their age at p 0.711, this result agree by (Ho NK 2006) which indicated that there were no significant difference between the age of mother's with their practices.<sup>10</sup>

#### Association between mother's practices and their educational level

The finding revealed that there was no statistical significant association between mother's practices and their level of education at p 0.940, the present study disagree with the (Campos Ado C 2006) who reported that there is relationship between mother's practices and their level of education<sup>11</sup>

#### Association between mother's practice and occupation

The finding revealed that there is no significant relationship between occupations of mother's with practice at p0.431, this result conduct by (Harrison SL.etal2004) revealed that there is no significant association between practice of mother's and occupation of mother's<sup>12</sup>

#### Association between practices of mother's and residential area

the present study showed that there are no significant relationship between residential area of mother's with practice at p 0.160, the study conducted by (Afifa Radha Aziz 2013) which support the findings of present research there are no significant relationship between mother's practices and residential area.<sup>13</sup>

#### V. RECOMMENDATION

It is dire need to arrange for health education program session for mothers, with main emphasis on important of management jaundice. Media (television) was the most important source which can be used for spreading health education message.

#### REFERENCES

- [1] Andreoli, T. and Carfenter, C. Cecil (2001) Essentials of Medicine. 5<sup>th</sup> ed. Philadelphia: W.B. Saunders. pp 371-2
- [2] Behrman, R., Kliegman, R., and Jenson, H., (2001) Text book of Pediatrics. 17<sup>th</sup> ed. Philadelphia. PP.3342
- [3] Chai, H., (2006) knowledge, attitude and practice of community health workers in Nigeria. BMC Public Health. Vol.6, p. 19-25.
- [4] Daniel, OJ., (2011) An old traditional herbal remedy for neonatal jaundice with a newly identified risk, Journal of pediatric child health. 29, pp.292.
- [5] Maisels, MJ., (2005) Jaundice. In: MacDonald MG, Mullett MD, Seshia MMK eds. Avery's neonatology. 6<sup>th</sup> ed. Philadelphia: Lippincott Williams & Wilkins, pp 789-9.
- [6] B.A. Egube, A.N. Ofili, A.R. Isara, JU Onakewhor.2013, Neonatal jaundice and its management: Knowledge, attitude, and practice among expectant mothers attending antenatal clinic at University of Benin Teaching Hospital, Benin City, Nigeria. Nigerian Journal of Clinical Practice Vol 16, Issue 2 P:188- 194
- [7] Manjubala Dash. 2013, A Descriptive Study to Assess the Knowledge and Attitude on Neonatal Jaundice among the Mothers in a Selected Village of

- Puducherry. Mother Theresa Post Graduate and Research Institute of Health Sciences (MTPG & RIHS), Puducherry-6, India P: 41-46
- [8] B K N R Rodrigo , Gayan Cooray.2010, The knowledge, attitude & behaviour on neonatal jaundice of postnatal mothers in Provincial General Hospital, Badulla. Sri Lanka Journal of Child Health, 2011; 40(4): 164-168
- [9] Abdolahad Amirshaghghi, Kamyar Ghabili, Mohammadali M. Shoja and Hossein Kooshavar, 2008. Neonatal Jaundice: Knowledge and Practice of Iranian Mothers with Icteric Newborns. Pakistan Journal of Biological Sciences, 11: 942-945
- [10] Ho N.K (2006). Traditional Chinese medicine and treatment of neonatal jaundice. Singapore med J 37: 645-51.
- [11] Campos Ado C, LeitaoGda C. (2006) Beliefs and feelings experienced by mothers of children under phototherapy. Rev GauchaEnferm ; 26: 50 -6.
- [12] Harrison SL, Buettner PG, MacIennan R.(2004) Why do mothers still sun their infants? J Pediatric Child Health 2007; 35: 296 -9ith a newly identified risk. JPaediatr Child Saunders, pp 523-599.
- [13] Aziz. R. A. 2013 Practices and Believes of Mothers Toward Treatment of Newborns Jaundice .Journal of Kufa for Nursing Science Vol. (3) No.(3) P:

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