# Journal of Kufa for Nursing Science Vol. (3) No.(3) 2013

# Practices and Believes of Mothers Toward Treatment of Newborns Jaundice

ممارسات ومعتقدات الأمهات حول علاج أطفالهن باليرقان الولادى

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#### الخلاصة:

الهدف: تهدف الدراسة الى تقييم ممارسات ومعتقدات الأمهات حول العلاج أطفالهن باليرقان الولادي ولإيجاد العلاقة بين ممارسات ومعتقدات الامهات مع. الصفات الديموغرافية

والمنهجية: دراسة وصفية أجريت العينه ل (200) من الامهات المراجعات في مستشفى بابل للطفل والولادة تم استعمال استمارة أستبانة لجمع البيانات للمدة من 2 تشرين الاول2011 ولغايه 15 مارس 2012 ، وتم تحليل البيانات باستعمال الاحصاء الوصفي والاستدلالي (النسبة المئوية والتكرارات والاختبار التأثي ومربع كاي).

ر على المعتقدات الأمهات المعاللة المعا

. الاستنتاج:وجود علاقة بين عمر الأمهات وبين المعتقدات وعلاقة بين ممارسات الأمهات وبين العلاج والمعتقدات لليرقان الولادي التوصيات: توصى الباحثة بأجراء تثقيف صحي للأمهات من خلال الزائرة الصحية ووسائل الأعلام المختلفة لتثقيف للام والعائلة والمحتمع.

### Abstract:

**Aim**: To assess mother's practice and believes toward treatment of newborns jaundice and to found association between practices and believes of mothers with demographic characteristics.

**Methodology:** Descriptive design study, purposive samples deals (200) mothers who attending to the Babylon maternal and child hospital. Questionnaire was used to collect the data from the period of 2 October 2011 to 15 March 2012. Data were analyzed by used descriptive and inferential statistical (percentage, frequency, T.test and chi—square).

**Results**: the study presented that (100%) of mothers used Bendy yellow, the results shows that (100%) of mothers avoid the baby to wear yellows cloths. Also result shows that there are significant relationship between the practices and believes of mothers with age and level of education.

Conclusion: There were association between age of mothers with their practices and believes.

There is no significant association between mothers' practice and believes with treatment of newborn jaundice

**Recommendation:** The research recommended health education programmer by health visitors for mothers and different mass media for mothers, family and community.

Keyword: practices, believes, mothers, Treatment, newborns jaundice.

### **INTRODUCTION:**

Neonatal jaundice referred to as neonatal hyperbilirubineia 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. (1). 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 (1,2). 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 (3). 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 (4). 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 (3). The maximum risk of hyperbilibilrubinemia is kernicterus causes. Parents are often asked to watch their newborns for signs of jaundice, which produces a yellow tint tothe skin and eyes (4). 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 (1).

The American A Academy of pediatric encourages women to continue breast-feeding newborns with jaundice who are otherwise healthy and to focus on increasing the frequency of feeding (about 8 to 12 times every 24 hours).(5) 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(4).

### THE STUDY AIMS TO:

- 1. Assess mother's practices toward newborn jaundice
- 2. Assess mother's believes toward newborn jaundice
- 3. To find out association between's mother's practices with age, educational level, residential area and occupation of mother's
- 4. Find out association between's mother's behaviors with age, educational level and residential and occupation of mother's

### **METHODOLOGY:**

**Part I:** The mothers' demographical data including: the age, educational, employment status residential area, Part II: Practices of mothers it content 7 items.

**Parts III:** Believes of mother's it content 9 items, A three – point likert rating scale is used to measure 1 for No, 2 descriptive study carried out to assess mother's practices and believes with newborn jaundice,: The present study was conducted in Babylon maternal and child hospital between October 2 2011 to 15 march 2012, purposive sample conducted on (200) mothers who attending and the hospital with their child, A questionnaire was developed by researcher for the purpose of this study, mainly to assess mother's practice and believes regarding newborn jaundice. The questionnaire consists of three parts: for some time, and 3 for yes, Data were obtained by the researcher by direct interviewed the mother's and completed the structured questionnaire which developed for this study. The data gathered from mother's at

Babylon maternal and child hospital, the verbal agreements for the participation in the study are obtained and the interview is carried out individually, All participants were informed that the study followed ethical standards for research and that all information collected was strictly confidential. Data were analyzed through the measurement of frequencies, percentage and chi- Square, the test used to determine the significant relation of mother's practice and to their - Demographic characteristics at p value <0.05

### **RESULTS:**

Table 1 Demographic characteristics of mother's with newborn jaundice

Item	No.	Percentage	
Mothers age			
29 or less	44	22	
30-39 years	64	32	
More than 40	92	46	
Total	200	100	
Mother's education level			
Illiterate	32	16	
Read and write	60	30	
Primary	59	29.5	
Intermediate and secondary	43	21.5	
Institute and college	6	3	
Total	200	100	
Mother's occupation			
Employed	34	17	
Unemployed	166	83	
Total	200	100	
Residential area			
Rural	80	40	
Urban	120	60	
Total	200	100	

This table shows that most of mothers' age were more than 40 years which presents (42%). With regard to the level of mother's education, the highest percentage was read & writes (32%). Regarding the mother's occupation, the majority of mother's were unemployed, which presents (83%). In respect to residential area, most of mother's were from urban areas (60%).

Table (2): Mother's practices toward newborn jaundices.

		Alway	ys (3)	Some	etime (2)	Never	(1)	Mean	leve
N	Practices	F	%	F	%	F	%	score	ls
0									
1	Expose the child to the sunlight	20	10	30	15	150	75	1.2	LL
2	fluorescent		66.5	40	20	27	13.5	1.73	LL
3	Bath the child well	87	43.5	20	10	93	46.5	1.97	LL
4	Check the color of sclera of eye	22	11	12	6	166	83	1.22	LL
5	Monitor the color of urine	78	39	52	26	70	35	2.04	HL
6	Monitor the color of stool		22	27	13.5	129	64.5	1.57	LL
7	Exposure Child continues to breast feeding	180	90	0	0	20	10	2.8	HL

Low Level: Medium Level: High

Level:

This table should that (75%) of mother's not expose the child to the sunlight, mean score 1.2, while (66.5%) of them expose their child to the flourance mean score

1.73. Also the table shows that (93%) of the mother's did not bath the child mean score 1.97, while (83%) of the samples not check the color of sclera of the eyes mean score 1.22 and (70%) of them monitor the color of urine mean score is 2.04. Also the table stated that (64.5%) of mother's not monitor the color of stool mean score is 1.57 and (90%) of them continuous the breast feeding of child during newborn jaundice mean score 2.8.

Table(3) Assessment of mother's believes toward newborn jaundices

	able(5) Assessment of	Alway			time (2)	Neve		Mean	Levels
NO	Believes	F	%	F	%	F	%	score	
1	you used Bead yellow in mummy restrain	200	100	0	0	0	0	3	HL
2	you put the ring on mummy restrain	200	100	0	0	0	0	3	HL
3	Did you a void the baby to wear yellow cloths	200	100	0	0	0	0	3	HL
4	you use the necklace with seven of gartic	153	76.5	21	10.5	26	13	2.63	HL
5	Do you avoid to eat bananas	136	68	36	18	28	14	2.54	ML
6	you used lentils of dull in a piece of cloth to swacloth on mummy restrain	163	81.5	32	16	5	2.5	2.79	HL
7	Do you avoid to eat pomegranates	95	47.5	22	11	83	41.5	2.06	ML
8	Do you avoid using yellow color of tools And supplies in baby room		90	8	4	12	6	2.81	HL
9	Do you use herbal medicine to treat the baby	177	88.5	12	6	11	5.5	2.83	HL

ML= Medium Level: HL= High Level

This table shows that (100%) of mother's used Bead yellow on mummy restrain, put the ring on mummy restrain and avoid the baby to wear yellow cloths, mean score 3, also the table stated that (76.5%) of mother's use the necklace of seven garlic mean score 2.63, (68%) of the sample avoid eating bananas mean score 2.54, while (81.5%) of them put lentils in piece of cloth to the mummy restrain mean score 2.7. Also the table shows that (83%) of mother's did not avoid to eat pomegranates mean score 2.06, (90%) of them avoid using yellow color tools and supplies in baby room mean score is 2.8. Also the table shows that (88.5) of mothers using herbal medicine mean score is 2.83

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

Ages	Yes		Uncer	Uncertain		No 1		Total	
	3		2						
	F	%	F	%	F	%	F	%	
29 or less	20	13.16	10	33.34	8	44.44	38	19	
30-39 years	60	39.47	15	50	7	38.89	82	41	
More than 40	72	47.37	5	16.66	3	16.67	80	40	
	152	100	30	100	18	100	200	100	

**Chi - square 21.403** 

P-value 0.000263

The results of table (4) indicated that there is significant relationship between age of mothers and practices regarding newborn jaundice.

Table (5) Association between believes of mother's with newborn jaundice of mother's with their age

Ages	Yes 3		Uncer	Uncertain 2		No 1		Total	
			2						
	F	%	F	%	F	%	F	%	
29 or less	10	6.57	7	50	13	33.33	30	15	
30-39 years	52	34.22	2	14.28	6	15.39	60	30	
More than 40	90	59.21	5	35.72	20	51.28	110	55	
	152	100	14	100	39	100	200	100	

Chi-Square 36.805

P-value 0.000309

Table (5) indicated that there is significant relationship between ages of mothers and believes regarding newborn jaundice.

Table (6) Association between mother's practices and their educational level

<b>Education level</b>	pract	ices					Total	Total	
	Yes		unce	rtain	No	No			
	3	3		2		1			
	F	%	F	%	F	%	F	%	
Illiterate	44	33.43	16	38.09	6	23.07	66	33	
Read& writ	44	33.43	20	47.62	15	57.69	79	39.5	
Primary school	18	13.64	3	7.14	1	3.85	22	11	
Secondary & school	24	18	2	4.77	3	11.54	29	14.5	
Institutes & college	2	1.5	1	2.38	1	3.85	4	2	
Total	132	100	42	100	26	100	200	100	

Chi-square= 16.5

Df=8

P = 1248

There is no significant relationship between levels of mother's education with their Practice at  $p \le 0.5$ 

Table (7) A association between believes of mother's regarding newborn jaundice with their Level education

<b>Education level</b>	Belie	ves					Total			
	Alwa	Always 3		etimes	Neve	er				
	3			2		1				
	F	%	F	%	F	%	F	%		
Illiterate	13	8.28	3	9.91	1	10	17	8.5		
Read& writ	33	21.01	7	21	3	30	43	21.5		
Primary school	53	33.76	4	12	2	20	59	29.5		
Secondary & school	44	28.03	14	42	3	30	61	30.5		
Institutes & college	14	8.92	5	15	1	10	20	10		
Total	157	100	33	100	10	100	200	100		

Chi-square 7.967

Df = 8

P: Value = 0.436

No significant relationship between level of mother's education with their believes presented in table (7)

Table (8) Association between mothers believes and occupation regarding newborn baby

Mothers occupation	sample	Means of score	Deviation	Df	Expected t-test	Critical t-test
employed	34	16.5	0.75	198	2.61	1.96
Unemployed	166	18.48	4.53			

#### P < 0.05

Table 8 showed that there were significant relationship between occupation of mothers with their attitude regarding newborn jaundice.

Table (9) Association between mothers practices and occupation regarding newborn jaundice

Mothers	Sample	Means of	Deviation	Df	Expected	Critical
occupation		score			t-test	t-test
Employed	34	13.5	0.75	198	1.024	1.96
Unemployed	166	12.85	3.056			

### P < 0.05

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

Table (10) Association between mother's practice with resident area regarding newborn baby

Residential	sample	Means of	Deviation	Df	Expected	Critical
area		score			t-test	t-test
Urban	80	11.97	144.25	198	0.602	1.96
Rural	120	13.63	185.81			

p < 0.05

Table 10 showed that there no significant relationship between residential area of mothers with their practice regarding newborn jaundice.

Table (11) Association between mothers believes and their residential area regarding newborn jaundice

Mother's Residential	sample	Means of score	Deviation	Df	Expected T-test	Critical
Urban	80	20.02	1.41	198	49.06	1.96
Rural	120	6.33	2.28			

p<0.05

Table (11) show that there significant relationship between believes of mothers with their mother's residential area.

### **DISCUSSION:**

### Part 1: demographic characteristics of mother's toward newborn jaundice

In regard to table (1) demographic characteristics of mother's shows that most of mother's age were more than 40 years which presents (42%). This results agree with study done by (5) who found that in his study assessment of mother's practices regard physiology jaundice who mentioned that (85%) of the sample are age more than 45 years, but the present disagree with (6) who found that the mean age in her study mother's attitude toward jaundice the mean age was 29 years. With regard to the level of mother's education, the highest percentage were read & write (32%). this results disagree with (5) who found that (60%) of the mother's graduated from primary school. Also the present study found that (83%) of mother's were unemployed, this results supported by (7) who that in his study regarding mother's attitude and practices toward colostrums (70%) were unemployed. In respect to residential area most of mother's were from urban areas (60%). This results also agree with (7) who found that (75%) were from urban area. But the study supported by (8) who found that (44%) were from urban area his study was about assessment of mother's practices and attitude regarding premature baby.

### Part 11: Mother's practices toward newborn jaundice

Present study shows that (75%) of mother's not expose the child to the sunlight, while (66.5%) of them expose their child to the Florence. Also the table shows that (93%) of the mother's did not bath the child, this results disagree with the study done by (60%) of mother's expose the child to the sunlight and bathing the child well which present (75%), while the results agree with (8) who found that in his study about the practice of mother's regarding care of newborn jaundice which present (55%) of mother's not expose the child to the sunlight. Also the present study shows that (83%) of the samples not check the color of sclera of the eyes and (70%) of them monitor the color of urine, this results dis agree with (6 and 7) who found that majority of mother's checking the color of sclera and monitor the color of urine. Also the present study shows that (64.5%) of mother's not monitor the color of stool and (90%) of them continuous the breast feeding of child during newborn baby, this results disagree with the study done by (5) who found that (70%) of mother's monitor the color of stool and agree with the results of them to continuous the breast feeding which is present (85%) of mother's continuous breast feeding.

## Part III: Mother's believes toward newborn jaundice

Regarding the mother's attitude, present study shows that (100%) of mother's used Bead yellow on mummy restrain, put the ring on mummy restrain and avoid the baby to wear yellow cloths, also the majority of mother's ((76.5%) of mother's use the necklace of seven garlic ,(68%) of the sample avoid eating bananas, while (81.5%) of them put lentils in piece of cloth to the mummy restrain . Also the present study shows that (83%) of mother's did not avoid to eat pomegranates, (90%) of them avoid using yellow color tools and supplies in baby room. With my experiences in the hospital when training the student in the maternal and child Babylon hospital, with my communication with the mother's they explain to me how to treat newborn jaundice without brought the newborn to the hospital and before to be appear on the newborn like used Bead yellow and put the ring on mummy restrain with my opinions I think this is believes of mother's in Iraq community specially in Babylon community (10) indicated that this believes related to the Babylon century and Hammurabi

# Part V1: Mother's demographic characteristics and its association with practices.

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

The finding indicated that there were significant relationship between practices and their age at  $p \le 0.5$ , this result disagree with (11) which indicated that there were no significant difference between the age of mother's with their practices.

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

The finding reveled that there was no statistical significant association between mother's practices and their level of education at  $p \le 0.5$ , the present study disagree with the (12) who reported that there is relationship between mother's practices and their level of education, but this results and this results in line with (13) revealed that a positive relationship between mother's knowledge and their level of education.

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

The finding revealed that there is no significant relationship between occupations of mother's with practice at

 $p \le 0.5$ , this result are in line with (13) reveled that there is no significant association between practice of mother's and occupation of mother's

### E. 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 this results agree with the study done by (14) who

found that there are no significant relationship between mother's practices and residential area.

# Part VII. Mother's demographic Characteristics and its association with their believes

### A. Association between mother's believes with their age

The present study shows that there is significant relationship between age of mother's and her believes regarding treatment of newborn jaundice at  $p \le 0.5$ , this finding disagree with the study done by (14) who found that there is no significant relation between mother's age with their believes.

### B. Association between mothers believes and their level of education

The finding indicated there is significant relationship between mother's believes and level of education at  $p \le 0.5$ , this results agree with study done by (14) who found that there is significant relationship between level of education and there believes

## C. Association between believes of mothers with their occupation

The finding indicated that there is significant relationship between mother's believes with occupation at  $p \le 0.5$ , this results disagree with (15) who found that there is no significant relationship between mother's occupation and their believes.

### D. Association between mothers believes and their residential area

The finding indicated that there is significant relationship between residential area with their believes at p  $\leq$  0.5, this results disagree with the study done by (13) who found that there is no significant relationship between mother's believes with residential area.

### **CONCLUSION:**

High percentage of mother's were read & write. The majority of mother's were unemployed. All studied mother's used Bead yellow and put the ring on mummy restrain Majority of mother's use the necklace of seven garlic. High percent of mother's not expose the child to the sunlight.

Majority of the mother's not check the color of sclera of the eyes. There were association between age of mothers' with their practices and believes. There is no significant association between mothers' practice and believes with treatment of newborn jaundice.

### **RECOMMENDATION:**

- 1. Health education programmer should be done for mothers regarding newborn jaundice.
- 2. Mass media should play a role to educated the community about newborn jaundice
- 3. Home visit by health visitors to educate the mothers regarding home treatment of newborn jaundice.

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