

## Mothers' Thoughts, Beliefs, and Habits in Breastfeeding in Baghdad

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### ABSTRACT:

#### BACKGROUND:

Mothers should breastfeed their children exclusively for the first six months of their children's life, if they really want to protect their children from malnutrition, diseases, obesity and its complications

#### OBJECTIVE:

is to assess breastfeeding knowledge, attitude and practice (KAP) among mothers attending outpatient clinic in Fatema Alzahra baby friendly hospital.

#### METHODS:

A cross-sectional study from 1<sup>st</sup> of January 2018 to 15<sup>th</sup> of November 2018, among mothers attending outpatient clinic in Fatema Alzahra hospital. Mothers who had one child aged two years or older at the time of the study was evaluated for their KAP in breastfeeding using direct questionnaire, which contained socio-demographic characteristics of mothers like age, educational level, number of children, mode of delivery, and employment. The questionnaire also contained questions regarding their knowledge, attitude and practices of lactation based on their customs of breastfeeding in the last child.

#### RESULTS:

Three hundred mothers enrolled in the study, 135 (45%) of them were 20 -30 years of age, 162(54%) finish the primary school, 60(20%) of them finish the high school, 237 (79%) were unemployed, 186(62%) of mothers had normal vaginal delivery, 288(96%) of mothers know that breastfeeding has benefit for children. Only seventy two (24%) of the mothers know about the exclusive breastfeeding (EBF), All of the mothers know that breastfeeding is better for their children, but 180(60%) of them know that breastfeeding prevent disease in children. And 42(14%) mothers know that breast milk is easy to digestion.

#### CONCLUSION:

Breastfeeding initiation rate was high but the EBF rate at 6<sup>th</sup> month of life was low. We found that there was a deficiency in mother's knowledge about exclusive breastfeeding, and in dealing with breast engorgement and nipple crack during early days of breastfeeding. There was a gap in mother's practice of breast milk extraction.

**KEYWORDS:** breastfeeding, exclusive breastfeeding, baby friendly hospital

### INTRODUCTION:

Breastfeeding is an important part of mother's reproductive process with valuable benefits for the health of mothers and infant's health and development. (1, 2)

World health organization (WHO) and United Nations Children's Fund (UNICEF) recommend exclusive breastfeeding for the first six months of infant's life and then to continue breastfeeding with food supplements for two years of age. (3) Breastfeeding is important in nutrition and normal development of children during the early life. (4)

One-third of children less than 6 months of age are exclusively breastfed in poor and middle income world. (5)

The World health organization and United Nations Children's Fund have set a goal to enable at least 50% of infants be breastfed exclusively for first six months of life in 2025. (6)

In order to get optimal growth, development and health in young children they should be exclusively breastfed for the first six months of life. Infants should receive clean and nutritious complementary foods, associated with breastfeed for up to two years of age. (7)

During assessing the knowledge, attitude and practices of lactating mothers regarding their child's feeding, we can find the areas which need urgent intervention strategies to correct the bad practice in breastfeeding.(8)

So we performed this study to assess breastfeeding KAP among mothers attending outpatient clinic in Fatema Alzahra hospital.

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### **METHOD:**

A cross-sectional study from 1<sup>st</sup> January 2018 to 15<sup>th</sup> November 2018, among mothers attending outpatient clinic in Fatema Alzahra hospital in Baghdad. Breastfeeding KAP of mothers who had one child aged two years or older at the time of the study was assessed using direct questionnaire, based on their practice with the last child. We prepared special questionnaire, which contained socio-demographic characteristics of mothers like age, educational level, number of children, mode of delivery, and employment. The questionnaire also contained questions regarding their knowledge, attitude and practices of lactation. We prepared the questionnaire depending on questionnaires prepared by Iraqi Ministry of Health (MOH), Iraqi Nutrition research institute,(9) and that of Wolde T,et al. (10).

The 300 Study participants were selected through a random sampling method of the database of children attending the Pediatric outpatient department. Those who met the inclusion criteria were interviewed. The study inclusion criteria were; a) mothers of healthy infants aged 2 years, b) born after 37 gestation weeks, and without congenital anomalies such as congenital heart disease, c) and the mothers volunteered to participate.

We exclude mothers whose infants were born with congenital anomalies and those whose infants were admitted to the neonatal intensive care unit because of prematurity, birth asphyxia or respiratory distress syndrome.

Ethical Considerations: A permission letter obtained from AL Rusafa Health Center Office which is involved in the study.

Data was analyzed using Statistical Package for Social Science 18.0. Descriptive statistics such as (frequency, percentage) were used in order to describe the data. Significance was defined as P value  $\leq 0.05$ .

### **RESULTS:**

Three hundred mothers participated in the study, 81(27%) of them were below 20 years of age, 135 (45%) of them were 20-30 years old, and 84 (28%) of them were >30 years old.

Regarding their educational status, 12(4%) of them were illiterate, 162(54%) finish the primary school, 60(20%) of them finish the high school, 42(14%) finish diploma, and 24(8%) receive the bachelor degree.

Sixty three (21%) of them were employee and 237 (79%) were housewives.

Thirty six (12%) of them have only one child, 72(24%) of them have two, 108(36%) of them have three children, 54(18%) have 4 children, and 30(10%) of them have 5 and more children.

It was found that 186(62%) of mothers had normal vaginal delivery (NVD), 114 (38%) of them had cesarean section CS. Of those who gave birth by NVD, 14% of them at home, 10% of them at midwife home, 68% in the governmental hospital, and 8% in private hospital. Those who had CS 16% of them gave birth at private hospital and 84% in governmental hospital.

Participant's Knowledge about BF:

Two hundred eighty eight (96%) of mothers know that breastfeeding has benefits for children, but only 258(86%) of them do know that breastfeeding is also has benefits to them.

One hundred sixty eight (56%) of mothers do not know if that breastfeeding can protect them against postpartum hemorrhage, 102(34%) of mothers do not know if that breastfeeding can protect them against breast, uterine and ovarian cancer. Table 1.

Only seventy two (24%) of the mothers know about the exclusive breastfeeding. Those mothers who knew about the EBF, 63(21%) of them hear the information from the health worker in governmental hospital. Only 10 (3.3%) of them know the real duration of the exclusive breastfeeding, the others 62 (20.7%) do not know the duration.

The last child breastfeeding practice: 97(32.3%) of mothers start breastfeeding within one hour after delivery (all of them had NVD at governmental hospital, baby friendly hospital), 192(64%) of mothers breastfed after hours, and 11(3.7%) of mothers breastfed after days, because were sick at the time of delivery and had CS.

All of the mothers 100% know that BF is better for their children, but 284 (94.7%) of them know that BF prevents disease in children, and 42(14%) mothers know that breast milk is easy to digestion. Table 1.

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**Table 1: Participant's Knowledge about BF**

Variable		Frequency	%
Can breastfeeding protect you against breast, uterine and ovarian cancer	yes	198	66
	No	102	34
Can breastfeeding protect you against postpartum hemorrhage	Yes	132	44
	No	168	56
Ever heard about EBF?	YES	72	24
	NO	228	76
Source of information about EBF?	Health worker	63	21
	Friends	8	2.7
	Mass media	1	0.3
	Total	72	24
Do you know when to start BF after delivery?	hour	97	32.3
	More than hour	192	64
	After one day	11	3.7
For how long is EBF needed?	<6 month	34	11.3
	About 6 months	10	3.3
	Beyond 6 months	28	9.3
	Total	72	24
Dose BF prevent pregnancy?	yes	96	32
	No	204	68
Dose breastfeeding prevent disease in children	Yes	284	94.7
	No	16	5.3
Is breast milk easy to digestion	Yes	42	14
	No	258	86

Participant's attitude about BF: Two hundred twenty two (74%) mothers think that they should continue breast feeding, If they have nipple crack or breast engorgement , but only 114(38%) of them think that will improve nipple crack healing, 234(78%) of mothers continue on breastfeeding if they were sick. Two hundred eighty two (94%) of mothers will continue on breastfeeding if the child is sick, and 180(90%) of mothers will continue to offer the child the

same amount of feeding.

If mother became pregnant, 84(28%) of mothers will stop breastfeeding. About 284(94.7%) of mothers think BF is better than artificial feeding, 282(94%) of mothers think that bottle feeding can cause problems to children, 267(89%) of mothers think that cow milk has lesser vitamins than breast milk. About 157(52.3%) mothers thought that, babies should receive food supplement after 4<sup>th</sup> month of life. Table 2.

**Table 2: Participant's attitude about breastfeeding (BF)**

Variable		Frequency	%
If you became pregnant, you stop breastfeeding	yes	84	28
	no	96	32
	Do not know	120	40
Do you think that BF is better than artificial feeding?	yes	284	94.7
	no	16	5.3
Do you believe that the first milk colostrum should be discarded?	yes	24	8
	No	276	92
Do you agree that only BF is enough for child up to 6 months?	Agree	143	47.7
	disagree	157	52.3

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Mother's attitude about breast milk extraction, If only 24(8%) of mothers will extract their breast milk, table: 3.  
they leave their child for a long period 108(36%) of mothers will feed their children bottle feeding,

**Table 3: mother attitude about breast milk extraction**

If you leave your baby for a long period of time	No. of mothers
You feed him bottle feed	108(36%)
You extract your milk and give him on need	24 (8%)
Take the baby with you	168(56%)
Total	300(100%)

Participant's practice in Breastfeeding their last baby: About 276(92%) of mothers breastfeed their children, 24(8%) of mothers do not breast feed their children, {12 of them because of CS, mother's work in 3 cases, and because her milk is not enough in 9 cases}.

One hundred forty six (48.3%) of mothers breastfed their infants on demand, ninety six (32%) of infants received pre lacteal feeds. At 6<sup>th</sup> month of child's age, Only 63(21%) of mothers breastfed their children exclusive breastfeeding, 153(51%) mothers continue on mixed feeding,

84(28%) of mothers stop breast feeding before 6 months of age, {the most common causes of stop breastfeeding were, child sickness 36(12%), insufficient milk 30(10%), child refusal breastfeeding 18(6%)}. Only 105(35%) mothers continue on mixed feeding for 1 – 2 years. table 4.

About 108(36%) mothers had nipple crack or breast engorgement, {33(11%) of them stop breast feeding because of that, but 75(25%) of mothers with nipple crack or breast engorgement continue to breastfed their babies}. table 4.

**Table 4: Breastfeeding practices among participants**

Variable		Frequency	%
Have you breastfeed your last child?	yes	276	92
How frequently did you breastfed your last child	'On demand	146	48.3
	"Regularly	68	22.7
	Randomly	87	29
What was given to your last baby before breast milk after delivery?	Water and sugar	39	13
	Formula	48	16
	*others	9	3
	Nothing	204	68
What was given to your last child starting from birth to 6 month?	Breast milk only (exclusive BF)	63	21
	Formula	84	28
	Breast milk with Formula	153	51
When did you start food supplement to your infant	4 <sup>th</sup> month of age	157	52.3
	6 <sup>th</sup> month of age	143	47.7
mothers had nipple crack or breast engorgement	yes	108	36
	no	192	64

\*Juice, traditional feed (modhgha), and plain water. "Every 2 hours.that is as often as the child wants, day and night.

High Exclusive breast-feeding rate was found to be related with mother's education finish the primary school, with mother's age group 20-30 years old at birth, mother's unemployment, with NVD, mother's increasing parity, and place of birth at governmental hospital. Table 5.

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Table 5: relation of high Exclusive breast-feeding rate to Mother's criteria

Mother's criteria	P value
Low mother's education level	$P < 0.0001$
mother's age group 20-30 years	$p < 0.001$
mother's unemployment	$p < 0.04$
Normal vaginal delivery	$P < 0.02$
mother's increasing parity	$P < 0.04$
place of birth at governmental hospital	$p < 0.03$

### DISCUSSION:

Participant's Knowledge about EBF: 24% of the mothers know about the exclusive breastfeeding, this means that there is a gap in mother knowledge about the EBF, which is a very important practice in continuation of breastfeeding. Our result is lower than, Iraqi study by MOH, Iraqi Nutrition research institute. 2013 when they found that the EBF was (40%), (9), Wolde T, et al, Ethiopia, (90.9%), (10), and Tadele N, et al, 2016, they found that (93.6 %) of mothers knew about EBF. (11)

Only 97(32.3 %) of the participants complied with the WHO recommendations of starting breastfeeding within one hour of delivery (2,3, 6). They started breastfeeding one hour after normal vaginal delivery at governmental hospital (baby friendly hospital), where the hospital encourage the breastfeeding within one hour of delivery. We think that baby friendly hospital had an impact on early initiation of breastfeeding.

Sustained EBF up to six months without any supplement was reported by only 21 % of participants. This figure is better than what has been reported by Kumar, et al. study when they found that the EBF was 10.4% (8) , but lesser than Vijayalakshmi, et al, study in India (38%) (12), from an Egyptian study (32.2%), (13), and it were lower than the result of Iraqi Nutrition research institute. 2013, when they found the EBF rate 31%. (9)

In an international comparison of rates of BF practices during the first 6<sup>th</sup> months of infant's life, the initiation rate was (Korea, 95.6%; USA, 81.1%; the Netherlands, 81.0%; Germany, 96.0%; Italy, 91.0%; Ethiopia ), but , after 6 months, EBF practice rates decrease rapidly (Korea, 25.6%; USA, 51.8%; the Netherlands, 37.0%; Germany, 48.0%; Italy, 47.0% ; Ethiopia was 59.3%). (14-15)

Participant's attitude about BF ; 94.7% of mothers think that Breastfeeding protects child from diseases, our result was consistent with Mohammed F.S. et al.

Egypt 2014 when they found that 97.7% of mothers knew that. (13)

All of the mothers said that BF is better than bottle feeding to baby and 92% of mothers think that colostrum should not be discarded; this was consistent with de Oliveira, Camelo, 2017 Cambodia (16), and Mohammed, et al, Egypt 2014 (13).

Two hundred eighty two (94%) of mothers will continue on breastfeeding if the child is sick, and 180(90%) of mothers will continue to offer the child the same amount of feeding, this was consistent with Mohammed, et al, Egypt 2014 (13). About 234(78%) of mothers continue on breastfeeding if they were sick, our result was inconsistent with Mohammed, et al, Egypt 2014 (13), when they found that 83.4% of mothers will stop BF if they were sick.

Participant's practice about BF; It was found that 84(28%) mothers stop breast feeding before 6 months of age , (the most common cause of stop breastfeeding were, \*child sickness 34 (11.3% ), (most cases the doctors ordered medicated milk and stop breastfeeding ) , \*insufficient milk 31(10.3%) , we cannot told whether it was real insufficient milk or it was false perception of mothers, and \*child refusal breastfeeding 19 (6.4%), (child refuse BF after the mother introduce the cow milk formula , what is known in our society as helping the mother in nursing the child .

The feeling that breast milk was insufficient is a common problem worldwide and the mother's response is to give the infant supplements from a very early age, this result was consistent with other studies, (17, 18, 19).

Juice, traditional feed (modhgha), and plain water, sugar and water, and formula were given to newborn as pre lacteal feed in 32% of newborn in our study, this was consistent with Khanal, et al , (20) {when a total of 225 (30.6%) mothers reported giving pre lacteal feeds to their infants, where the most popular pre lacteal food was formula milk (41.7%), followed

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by cow or buffalo milk (26.6%), and sugar/glucose water (12.4%)}, and with Temesgen, et al 2018, with pre lacteal rate of 25.29 %. (21)

About 108(36%) mothers have nipple crack or breast engorgement, in early days of breastfeeding, 33(11%) of them stop feeding, the other continues to feed. Our result was consistent with Karaçam, 2018, when they found that nipple crack, wound, and bleeding consisting (26.1%) of factors that interfere with EBF. (22)

### CONCLUSION:

Breastfeeding initiation rate was high but the EBF rate at 6<sup>th</sup> month of infant's life was low. We found that there was a deficiency in mother's knowledge about exclusive breastfeeding, and in dealing with nipple crack and breast engorgement during early days of breastfeeding. There was a gap in mother's practice of breast milk extraction.

### RECOMMENDATIONS:

Give an important attention on exclusive breastfeeding in dealing with mothers and pregnant (especially who are young primipara and those who had caesarean section delivery) to make them aware of the importance of exclusive breastfeeding. Give an attention to people in the society in order to let all people know the benefit of breastfeeding in order to support mothers to continue breastfeeding.

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