

# Knowledge and Awareness among Mothers Regarding Exclusive Breastfeeding in Holy Karbala City / Iraq

Maytham Salim Al-Nasrawii<sup>1</sup>, Ali Neamah Hasan Al-Aaragi<sup>2</sup>, Ali Abd Al-Latif G. Mohammed<sup>2</sup>

<sup>1</sup> Lecturer, <sup>2</sup> Assist lecturer, Community Health Department, Technical Institute of Karbala, AL-Furat Al-Awsat Technical University, Karbala/Iraq

## Abstract

**Background:** World Health Organization (WHO) and United Nations Children’s Fund (UNICEF) “Exclusive breastfeeding (EBF)” is explained as “the infant receives only breast milk, no other liquids or solids. Its recommended for the first 6 months of life, and then complementary feeding should be started. EBF helps to reduce child morbidity and mortality from several diseases such as diarrhea, respiratory and / or ear infections and other infectious diseases, shielding lactation women from breast and ovarian cancer. In addition to offers societal economic and environmental benefits, The objective of this study was to assess the knowledge and awareness of exclusive breast feeding among mothers with a child < 2 years of age.

**Method:** A descriptive cross-sectional study was carried out in Health Directorate of Holy Karbala city. The study consist of (487) mothers how attendant to six Primary Health Care center (PHC). The collected data was done by direct interview with mothers and using a questionnaire form that designed based on the study objectives according to WHO criteria. Data were analyzed by SPSS “ Statistical Package for the Social Sciences”, the descriptive statistics included numbers (N) and percentage (%), and the inferential statistical test was done by using Chi-Square test ( $\chi^2$ ), P-value (Probability of chance ) was equal or less than 0.05 considered as statistically significant to find for any association between the results variables.

**Result:** A total of 487 participants were included in the study and the rate of response was 92.7%. The highest percentage (66.3%) of study sample were full in the age group (21-30) years, and more than three quarters were lived in urban area. Nearly half of the study sample 47% had primary education and 60% those housewives, and the main source of information being family and friends (84.4%). As an overall assessment, 61.8% of the study sample had good knowledge and awareness about exclusive breastfeeding, with highly significant differences to education level ,occupation residence of the mother.

**Conclusion:** Over half of the subjects had good knowledge and awareness of exclusive Breastfeeding. And, on the other hand, there was a very significant difference between education level, occupation and mother’s residence with a level of knowledge.

**Keywords:** *knowledge, Awareness, Exclusive breastfeeding, Karbala city.*

## Background

Breast milk has the full nutritional requirements for health advancement that a baby needs. Additionally, it is safe and contains antibodies that help protect infants and boost immunity<sup>(1)</sup>. Consequently, breastfeeding contributes to reduced infant morbidity and mortality due to diarrhea, respiratory or ear infections and other infectious diseases<sup>(2-4)</sup>, and for mothers, breast and ovarian cancer risk is reduced<sup>(5)</sup>. In addition, breastfeeding offers

societal economic and environmental benefits<sup>(6)</sup>. WHO recommends that children be exclusively breastfed for the first six months of life to achieve optimum growth, development, and health. Children should then obtain complementary foods that are nutritionally adequate and healthy when continuing to the breast for up to two years or more<sup>(1)</sup>. According to WHO and UNICEF “exclusive breastfeeding” is explained as “the infant receives only breast milk, no other liquids or solids are given – not even water – with the exception of oral rehydration

solution, or drops/syrups of vitamins, minerals or medicines”. Its recommended for the first 6 months of life, and then complementary feeding should be started. Whereas, breastfeeding should continue for 2 years age or beyond (7,8).

The aim of this study was to assess the knowledge and awareness towards exclusive breast feeding among mothers had a child aged < 2 years and find out any association between mothers and knowledge and awareness and some demographic characteristics.

### Methods

We obtained the ethical and administrative approval on study from the research ethics committee in Karbala Health Directorate. After that, a verbal consent was taken from each mother prior to interview. A cross-sectional study was conducted to achieve the aim of the study. A total of 487 mothers of infants aged (1-24 months) was selected by simple random sampling and direct interviewed during the Period of the study with a response rate of 92.7% . The sample consist of, the

mothers who attended six of primary health care (PHC) from Karbala City. Data collected by direct interview with mothers and using a questionnaire form that designed based on the study objectives. The collected data were analyzed by SPSS. The descriptive statistics included numbers (N) and percentage (%) and the inferential statistical test was done by Chi-Square test , P-value was equal or less than 0.05 considered as statistically significant used to test for any relationship between variables with the results.

### Results

Table (1) displayed mother age distribution, the highest percentage (66.3%) was in the age group (21-30) years. Regard to the distribution the type of delivery, this table shows that (80 %) of the study sample was vaginal delivery; on the other hand, the distribution of residence, education level and the occupation of the respondents, the majority of readings were (76 %), (47 %) and (63 %) in the urban area, primary school and housewife respectively.

**Table (1): The distribution of studied sample according to the demographic characteristics.**

The demographic characteristic N0.	Total ( N=487)	
	%	
Age of mother	<=20	76 15.6
	21-30	323 66.3
	31-40	82 16.8
	>40	6 1.2
Type of delivery	Vaginal delivery	386 79.3
	caesarean section	101 20.7
Residence	Urban	370 76
	Rural	117 24
Education level of mother	Primary school	229 47
	Secondary school	92 18.9
	Institute	109 22.4
	Collage or more	57 11.7
Occupation of Mother	Housewife	309 63.4
	Other occupation's	178 36.6

As in the field of the knowledge domain, table 2 showed (94%) of mother answered correctly about definition of (EBF), concerning the time of initiation the breastfeeding (92%) of study sample had correct answer, while over (80%) of the participates answered correctly about EBF can be reduce diarrheal, respiratory diseases, decrease hemorrhagic after delivery and helps mothers

to get back to their weight before pregnancy quicker. (78.9%), (67.1) and (41.7%) of studied sample answered correctly about exclusive breastfeeding prevent pregnancy for at least one year after delivery, colostrum is the first vaccine for newborn and reduce incidence of (breast and ovarian cancer for mothers), respectively.

**Table (2): knowledge Domain of study sample.**

Knowledge Domain about EBF	Yes		NO		I Don't know	
	NO.	%	NO.	%	NO.	%
EBF is giving breast milk for a minimum of 6 months.	458	94	14	2.9	15	3.1
Must be initiation of breastfeeding immediately at first hour after delivery.	448	92	18	3.7	21	4.3
EBF reduce diarrheal and respiratory diseases.	419	86	15	3.1	53	10.9
EBF decrease hemorrhagic after delivery.	409	84	27	5.5	51	10.5
BF Helps mothers return more rapidly to their pre-pregnancy weight.	404	83	23	4.7	60	12.3
EBF prevent pregnancy for at least one year after delivery.	384	78.9	13	2.7	90	18.5
Colostrum (breast milk for first 3 days) is considers the first vaccine for newborn.	327	67.1	36	7.4	124	25.5
EBF reduce incidence of breast and ovarian cancer for mothers.	203	41.7	177	36.3	107	22

Figure (1) illustrates the knowledge score toward exclusive breastfeeding, more than half of participants (61.8%) had a good and acceptable knowledge score and the rest (40 %) had a poor score.



Figure (1): The knowledge score of EBF.

According to the relationship of knowledge among lactating mothers and the demographic characteristic, not significant with the age of mother (P.value > 0.05), while the association was found to be statistically significant for each of (Type of delivery, Residence, Education level of mother and Mothers occupation) (P.value < 0.05) as shown in table (3).

Table (3): The distribution of studied samples according to association of the demographic characteristics with knowledge score.

Categories	Knowledge of mother				P-value	
	Poor		Good & Accepted			
	No.	%	No.	%		
Age groups	<=20	34	18.3	42	14	0.209
	21-30	125	67.2	198	65.8	
	31-40	24	12.9	58	19.3	
	>40	3	1.6	3	1.0	
Type of delivery	Vaginal delivery	137	73.7	249	82.7	0.016
	caesarean section	49	26.3	52	17.3	
Education level	Primary school	48	25.8	181	60.1	0.001
	Secondary school	39	21	53	17.6	
	Institute	61	32.8	48	15.9	
	Collage or more	38	20.4	19	6.3	
Occupation	Housewife	97	52.2	212	70.4	0.001
	Other occupation's	89	47.8	89	29.6	
Total		186	100	301	100	

Figure (2), show the main source of information about EBF. The most efficient source of information was family and friends (84.4%), while the internet, posters and booklets, workshops, local satellite channels, and school curriculum were less than (50%) .

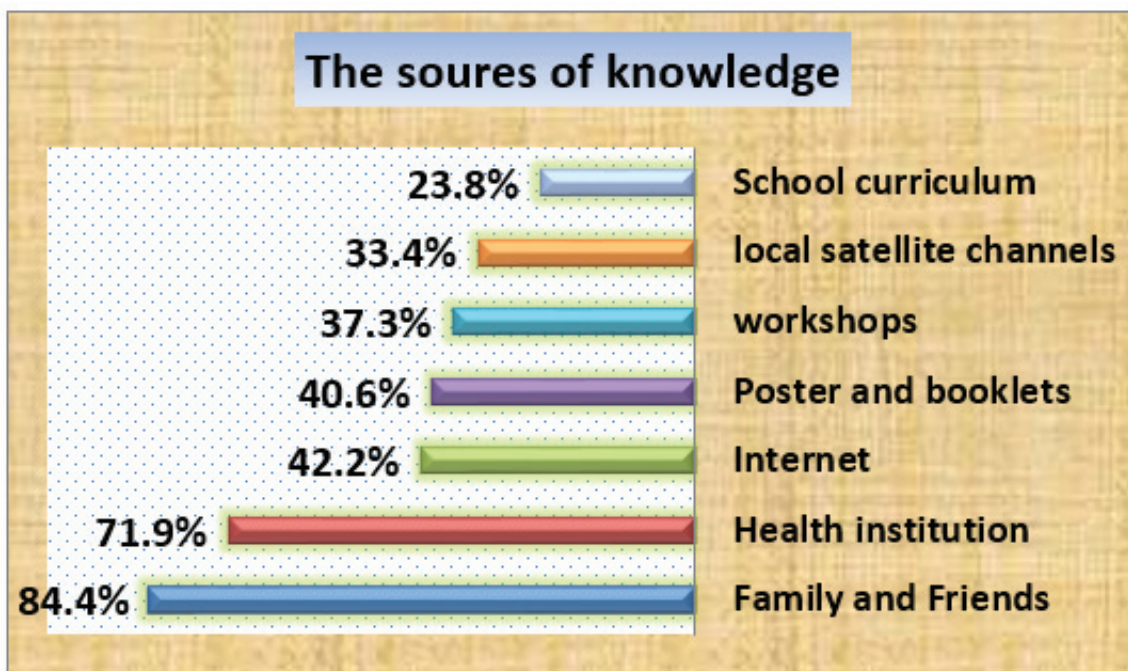


Figure (2): Distribution the sources of information of study sample.

### Discussion

It is very important for all members of the community to understand the importance of EBF for every mother and her baby, for that we assess the knowledge and awareness towards exclusive breast feeding among mothers had a child aged < 2 years in Karbala city.

In table (1) that illustrate the distribution the mother demographic characteristics, 66.3% were in the age group (21-30) years, it's the same percentage in age group by Adrawa, A. P et al in Adjumani district 89.9% and Alamirew, M.W. et al in Ethiopia 66.9% (8,9).

Regarding the distribution the type of delivery, more than three quarters of the sample 79.3% had vaginal delivery “ Normal delivery “ that similar to AL-Abedi, N. et al in AL-Najaf City 74% (10), on the other hands regarding residency, education level and occupation of the participates, most of the results 76%, 47%, and 63% were from urban area, had primary school and housewife, respectively, that also agreed with AL-Abedi, N. et al (2016) and Joshi, S. in Navi Mumbai, Where they recorded their results as 28.7%, 30% and 94%, 70% for primary school and housewife (10,11).

Concerning to knowledge of mother about exclusive breastfeeding, table 2 showed that differences of answered as correctly about the questions, 94% of mothers answered correctly about the definition breast milk and 92% having good awareness towards initiation of exclusive breastfeeding this was similar to other reported study in Navi Mumbai (11) and Sana'a City (2018) by Dallak, A. et al (12). This table also indicates that more than three-quarters of participants were fully aware of exclusive breastfeeding through, decrease hemorrhagic after delivery, helps mothers return to their pre-pregnancy weight and prevent pregnancy for at least one year after delivery. While there was defect ( incorrect answers 58.3 %) of study sample knowledge towards reducing the death rate from the breast and ovarian cancer. As overall assessment, figure (2) reveal 61.8% of the objects had good knowledge, its agreement with the study done by AL-Abedi, N. et al 71% (2016) and Mbada, et al., (2013) “ they reported that overall assessment was good “ (13).

Result in (Table3) refers to an important relationship between mother's awareness and occupational status that is could be due to, housewives are more committed

to breastfeeding than female employees, its disagrees with Maryam, et al.,(2014); Mahmud, (2011); Al-Asadi, (2011), all of them stated that a non-significant difference among mother's occupations and the knowledge level (14),(15),(16).

For the educational level, there was a highly significant relationship with EBF, its match with the study done by Al-Hially (17), (2010), who reported that there is a significant relationship between mother's education and awareness for breastfeeding, this might be that the "educated mother has better knowledge about breastfeeding more than an uneducated mother".

Mentions that there was a significant correlation between knowledge and delivery type, this can be because natural births are more likely to produce breast milk than cesareans, this result was similar to AL-Abedi, N. et al (10). On the other hand, there was a non-significant relationship with Age groups, its disagree with AL-Azzawi, et al.,(2010), who stated that was a significant indicator between age of the mother and knowledge about EBF (18).

Finally, figure (2) reveals the source of information of the study sample about EBF, the study indicates that the highest percentage 84.4% of participates in this study were received education about exclusive breastfeeding was from family and friends, "Since the majority of participated mothers had primary education, these low educational levels make them incapable to understand and comprehend the educational information in pamphlets, posters, and advanced media. So, they need to be educated about breastfeeding directly from family, friends or health workers, this means that the family plays an important role in successful breastfeeding", its approved with the result do it by Dallak, et al.,(2016), who reported that "the majority of the study sample educated by family and friends for exclusive breastfeeding" (12).

### Conclusions

There is an urgent necessity to provide accurate prenatal education that focuses on methods and long-term benefits for breastfeeding because mothers don't have inadequate awareness of exclusive breastfeeding from where (initiation, colostrum benefits, and breast and ovarian cancer incidence reduction). The study found a highly significant relationship between mother's knowledge and that residence, education level and occupation.

**Recommendation:** In spite of good mother Knowledge toward of EBF, but health education programs for breastfeeding promotion should be well planned and address the factors which reinforce and enable breastfeeding and health team members should be properly trained in breastfeeding essentials and communication skills with the mothers especially in this critical period (child aged < 2 years) in Karbala city.

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**Conflict of Interest:** None to declare.

**Ethical Clearance:** All experimental protocols were approved under the Community Health Department and all experiments were carried out in accordance with approved guidelines.

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