

## Assessment of Breastfeeding Knowledge among Mothers in Erbil City

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### ABSTRACT

**Background and Objectives:** Breast-feeding is a very natural and normal way designed by God. Breastfeeding is feeding child human breast milk which is preferred for all infants. Although lactation is an automatic physiological process, breastfeeding is a learned behavior that is most successful in supportive environment. This study aimed to assess knowledge of mothers concerning infant and young child breastfeeding, and to use the results as baseline for nutritional intervention programs in the future.

**Subject & Methods:** A study carried out by interviewing mother at Primary Health Centers to assess mothers breastfeeding knowledge regarding breastfeeding initiation, colostrums use, exclusivity, duration and extraction of breastmilk, and find the relationship between mothers knowledge and educational levels, family type.

**Results:** (% 17.0) of mothers know that first breast feeding have to be initiated during the 1<sup>st</sup> hour of child life. (40.4%) of mothers don't know the importance of colostrums for newborn. (41.1%) of mothers don't know that child needs 6 months of exclusive breastfeeding. (46.8 %) of mothers don't agree on breast milk extraction while (35.7%) of them don't know that breast-milk can be expressed. There was relation between mother knowledge age and education level.

**Conclusions:** mothers have weak knowledge regarding early breastfeeding initiation and exclusive breastfeeding, so breastfeeding promotion, protection and support by health professions necessary for mothers in Erbil.

**Key words:** initiation, colostrums, exclusivity, extraction of breastmilk

### INTRODUCTION:

Adequate nutrition is critical to child health and development. The period from birth to two years of age is particularly important because of the rapid growth and brain development that occurs during this time. The period is often marked by growth faltering, micronutrient deficiencies, and common childhood illnesses such as diarrhea and Acute Respiratory Infections (ARI), as children transition from exclusive breastfeeding to solid foods in addition to breast milk<sup>1,2</sup>. Breast milk provides immunologic protection against death from infectious diseases, such as diarrhea, respiratory infections, otitis media,

2004 in Iraq neonatal mortality rate was 63 deaths per 1,000 live births, while infant mortality rate in 2007 was 36 deaths per 1,000 live births<sup>4, 5</sup>. In Erbil infant mortality rate was 42 deaths per 1,000 live births. Women in Iraq differed in the timing of initial breastfeeding according to governorates, particularly when considering initiation of breastfeeding within first hour. Women in Erbil were the least likely to start breastfeeding within first hour. There were wide variations between governorates in the percentage of children who are exclusively breastfed, with the least percentages in Erbil<sup>4</sup>. Infant feeding practices are constantly changing in our community, mothers are the first care giver

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and breast feeding is the natural infant feeding and the best method for increasing survival and decreasing death in newborns in addition, little is known about breastfeeding and there is no previous researches in Erbil concerning infant feeding for this reason recent study was conducted.

#### **Objectives:-**

1. Assess mother's knowledge concerning breastfeeding.
2. Assess infant and young child feeding patterns.
3. Find out the relationships between mother's socio-demographic characteristics (mother age, education, family type) and knowledge of breastfeeding.

#### **SUBJECTS & METHODS:**

A descriptive study was conducted in (13) Primary Health Centers (PHC) which contain Child Growth Monitoring Units, in Erbil City. After obtaining official permission from the Ministry of Health –Directorate of Health- Erbil.

**Samples/Purposive** (non probability) sample of 1000 (mother-child pairs):-

1. Mother lives in Erbil city and attends Child Growth Monitoring Unit at Primary Health Centers (PHC) for routine screening and vaccination of their infant.
2. Infant age (birth - <24 months), full term normal healthy (free from diseases and congenital malformation), non twins with birth weight of 2500gm or greater and youngest child in the family.

#### **Instrument**

A questionnaire structured after review of literatures to be used in data collection consisted of two parts. **Part 1** a list of (7) question covered Socio-demographic variables. **Part 2** a list of (5) close end question covered mother's knowledge concerning breastfeeding. Data of the study were ordinal according to two level scale which were scored as (1, 0) for true, false respectively.

**Pilot Study** A pilot study was conducted on (10) mother (mother-child pairs) and carried out for the period from 1<sup>st</sup> to 30<sup>th</sup>

excluded from original sample of the study. Validity and Reliability of the questionnaire were obtained by testing Content validity and internal consistency<sup>6,7</sup>.

#### **Data collection**

Data were collected by direct face to face interview between investigator and mothers' at child growth monitoring unit in primary health centers.

#### **Date analysis**

The Statistical Package for Social Sciences software (SPSS, version 15) was used for data processing and statistical analysis, P-value was HS : at  $P < 0.01$ .

#### **RESULT:**

Highest percentage (36%) of mothers were from age group 20-24 years old. Majority of mothers were illiterate (28%). (56.6%) of the families were nuclear family, (43%) were extended families and (6%) were other type of families (figures 1, 2 and 3).

Table 1 shows that (4.1%) of children were exclusively breastfed and (24.3%) were on mixture and complementary feeding.

Table 2 indicates that mothers had deficient knowledge concerning initiation of first breastfeeding, (17.5%) of mothers knew that mother have to initiate first breastfeeding during first hour after delivery. (16.5%) of mothers knew that it is nutrient and essential for newborns growth, acts like a vaccine and protects against disease. Majority of mothers knew that child need 6 months of exclusive breastfeeding, and prolonged breastfeeding for 2 year of duration. Highest percentage of mothers didn't know that breast milk can be extracted and stored in the refrigerator. Table (3) indicates that there is high significant relation between mother's knowledge and (mother's age, education and family type).

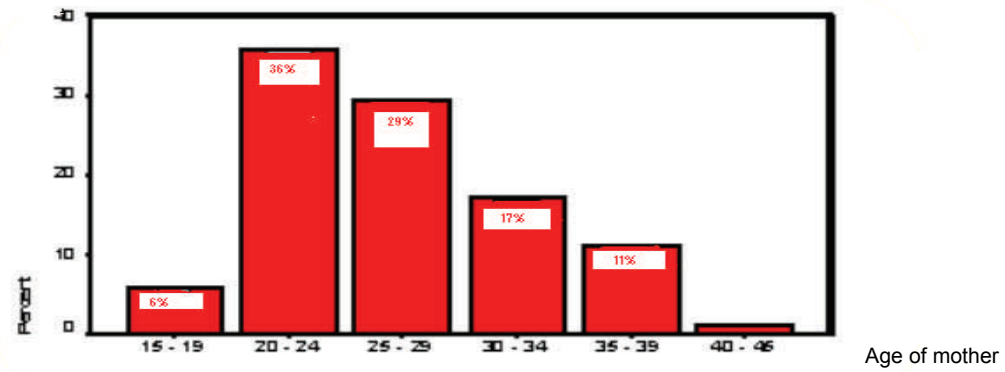


Figure 1: Distribution of mother's with regarding to their age

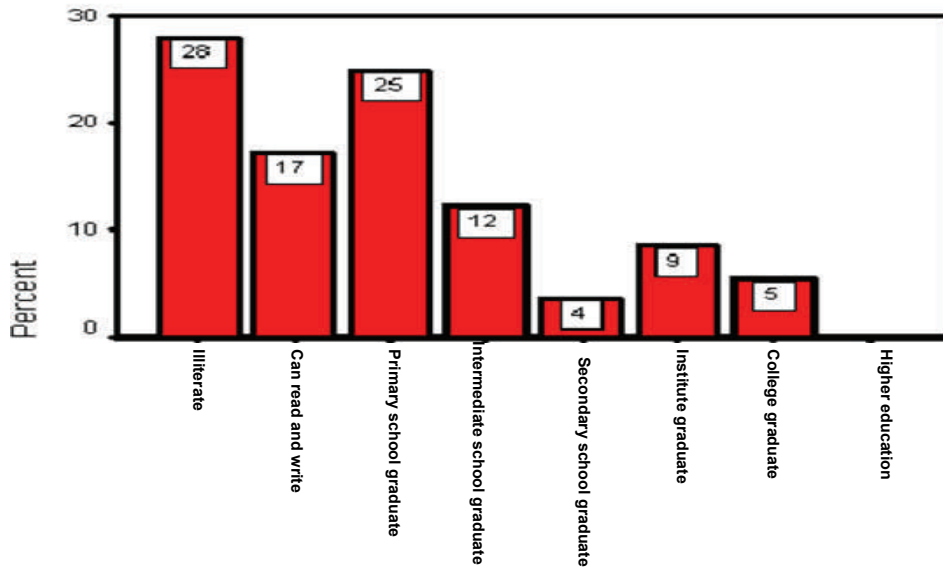


Figure 2: Distribution of mothers according to their educational level.

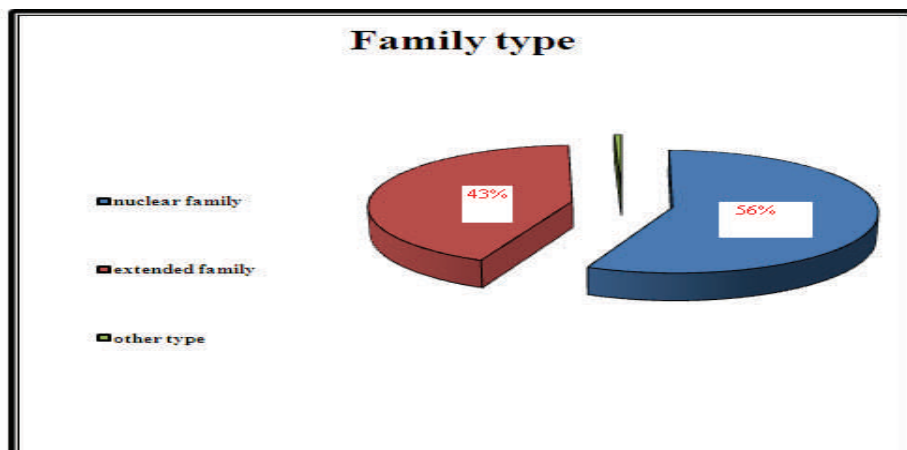


Figure 3: Distribution of Family types

**Table 1:** Distribution of children in regard to their type of feeding

Type of Feeding	Frequency	Percent
Exclusive breastfeeding	41	4.1
Predominantly breastfeeding	51	5.1
Partial breast feeding	134	13.4
Formula feeding	26	2.6
Mixture feeding	228	22.8
Breast and complementary feeding	249	24.9
Formula and complementary feeding	28	2.8
Mixture and complementary feeding	243	24.3
<b>Total</b>	<b>1000</b>	<b>100</b>

**Table 2:** Assessment of Mother's Knowledge's Concerning Infant and Young child Feeding

Knowledge Items		Frequency	Percent	Mean	Std. D.	RS	Assessment
<b>Breast-Feeding Initiation</b>	Don't know	140	14.8	0.18	0.38	18	Deficient
	>24 hours	240	25.4				
	>1 hour	400	42.3				
	0-1 hour	166	17.5				
	Total	946	100				
<b>benefits of colostrums for newborn</b>	Don't know	382	40.4	0.16	0.37	16	Deficient
	It is good	408	43.1				
	It is nutrient and essential for newborns growth , acts like a vaccine and protects against disease	156	16.5				
	Total	946	100				
<b>Duration of exclusive breastfeeding</b>	Don't know and Less than 6 months	217	22.9	0.59	0.49	59	Efficient
	more than 6 moths	172	18.2				
	6 months	557	58.9				
	Total	946	100				
<b>Duration of each breastfeeding</b>	Don't know	10	1.1	0.8	0.4	80	Efficient
	12 months	153	16.2				
	2 years	740	78.2				
	beyond 2 years	43	4.5				
	Total	946	100				
<b>Extraction of breast-milk</b>	No	443	46.8	0.17	0.38	17	Deficient
	Don't know	338	35.7				
	Yes	165	17.4				
	Total	946	100				

**Table 3:** Association between Knowledge's and Demographic variables.

Crosstab Causes Correlation ship's	Contingency Coefficient	Approx. Sig.	Evaluation
Age of Mother * Knowledge	0.166	0.000	HS
Mother education * Knowledge	0.279	0.000	HS
Family Type * Knowledge	0.175	0.00	HS

**DISCUSSION:**

Majority of mothers were between (20-34) years old which is expected as the reproductive age in between (25-35) years (figure 1). (Table 3) there was high significant relation between mothers ages and mothers knowledge, this was in disagreement with what found by other authors<sup>8</sup>. (Figure 2) indicate that the majority of mothers who participated in the study were of low educational level and mother education had a great impact on mothers knowledge of infant and young child feeding (table 3). Mothers who were institute or college graduate had good knowledge that was in agreement with a study carried out to assess the knowledge and actual practices of mothers regarding breastfeeding and found that mothers did not have adequate knowledge about the appropriate way of breastfeeding as 14.9% knew that they have to initiate breast feed within 1/2 hour of birth, 5.7% had idea on prelacteal feed, 3.4% had idea on importance of colostrums 6.3% knew the meaning of exclusive breast feeding, Only 26 (14.9%) mothers knew the benefits of breastfeeding completely one side at a time. 57% mothers knew they have to continue breast feeding till 2 years, few mothers were willing to breast feed their male babies even for 3 years, very few mothers (4.5%) knew that expressed breast milk could be used for their babies<sup>9</sup>. It had been found that majority of mothers were a member of nuclear family .In contrast to what mentioned by other author who conducted a study in Saudi Arabia

in a nuclear family gave colostrum more than mothers who lived with an extended family and he recorded that in a nuclear family the father have a great role influencing mother's decision making regarding type of child feeding for this reason it is important to involve both parents in nutritional intervention programs. Mothers lived in extended families influenced significantly by others (like grand mothers) in newborn feeding or they feel embarrassed of breastfeeding<sup>10</sup>. Table (2) shows that only 166 (17.5%) of mothers knew that mother have to initiate first breast-feeding during 1<sup>st</sup> hour after delivery. Although mothers had efficient knowledge of exclusive breastfeeding but they had poor practices of exclusive breastfeeding (table 1). Being a Muslim society most of mothers knew that child needed continued breastfeeding for 2 year of duration but only 165 (17.4%) of mother knew that breast -milk can be extracted and fed to baby.

**CONCLUSION :**

Results reveal that mothers have deficient knowledge concerning breastfeeding initiation, benefits of colostrums and milk extraction. While have efficient knowledge regarding exclusivity of breastfeeding and duration of breastfeeding. The study found that is high significant relation between mother's knowledge and (mother age, education and family type).

**RECOMMENDATIONS:**

Health education programs for breast-feeding promotion should be well planned and address the factors which reinforce and enable breast-feeding. Health education by the media and the community should be used. Health team members should be properly trained in breast-feeding essentials and in communication skills. They should be well motivated to carry out their responsibilities in the promotion, protection and support of breast-feeding.

**REFERENCES:**

1. Food Agriculture Organization (FAO) (Somalia Food Security Analysis Unit) ,Somali Knowledge Attitude Practices Study (KAPS) Infant and Young Child Feeding and Health Seeking Practices, FCND Discussion paper No.146. 2007; Accessed February 4 , 2009 at <http://www.fsasomali.org>.
2. U.S. Agency for International Development (USAID) ,Infant and Young Child Feeding Update. Calverton, Maryland, USA, ORC Macro, 2006, Accessed May 12 ,2008 at :<http://www.measur DHS.com>.
3. Littleton L, Englebretson J, Maternal, New natal, and women's health Nursing, ), Lactation and Nursing Support , Canada, Thomson learning, 2002, p957-1116.
4. United Nations Children's Fund , Ministry of Health- Iraq, Multiple Indicator Cluster Survey volum 1: page-19 final report Monitoring the Situation of Children and Women. Implementing agencies: Central Organization for Statistics and Information Technology, Kurdistan Regional Statistics Office, 2006. Accessed February1,2008 at [www.childinfo.org](http://www.childinfo.org).
5. United Nation Children's Fund ,Statistical Tables, J The State of the Worlds Children Maternal and Newborn Health , NewYork,NY ,10017, USA, 2009. Accessed January 4, 2008 at <http://unicef.org>
6. Cozby P, Methods in Behavioral Research, Boston, McGrawHill; 2005. 9<sup>th</sup> ed, p.139.
7. Polit D, and Beck CH, Nursing Research Generating and Assessing Evidence for Nursing Practice, Philadelphia, Lippincott Williams and Wilkins, 2008. 8<sup>th</sup> ed p.463- 90,571,750.
8. Baisch M ,Fox R ,Goldberg B ,Breast-feeding attitudes and practices among adolescents. J Adolesc Health Care. 1989; 10(1): 41- 5.
9. Malla K, Malla T, Manandhar D, Knowledge attitude and practices of mothers regarding breast feeding: A hospital based study.[Online] Journal of Nepal Pediatric Society, 2007; (1):9-15. Accessed March 19 ,2008, at <http://www.popline.org/docs/324072>.
10. Al-Jassir M ,El-Bashir B ,Moizuddin S ,Abu-Nayan A ,Infant feeding in Saudi Arabia: mothers' attitudes and practices, [Online] East Mediterr Health J. ,2006,12(1/2):6-13, Accessed March 3, 2009. at [javascript:PopUpMAEnu2 Set \(Menue 17037217 \)](http://www.popline.org/docs/324072).