

## **Effect of maternal factors on breast feeding pattern among women in holy Karbala**

Dr . Sulfa .A .Hussein

Suhair .M. Husoon

Suha attea

College of health and medical technology

### **Abstract**

**The aim** of the present study is to determine variables, which associate with the breast feeding.

**Background:** Maternal milk is considered the best and most important nutritional source for the infant during the first six months of life. It is a unique process that in addition to supplying the ideal nutrition for lactating infants, contributes to their healthy growth and development.

**Results:** most mothers give breast feeding and the highest rate was among age group 30-34 years. Analysis of data shows that breast feeding was higher among women who had of older age group, and older age at marriage, as well as illiterate mothers, and those who do not use contraception .

**Recommendation:** Antenatal counselling on breastfeeding and postnatal lactation support are likely to improve rates of exclusive breastfeeding as well as health.

**Key words:** breast feeding, women, contraception,

### **المستخلص**

**الهدف:** من هذه الدراسة هو تحديد العوامل التي تتعلق بالرضاعة الطبيعية المنهجية: يعتبر حليب الأم اهم واحسن مصدر غذائي للرضيع خلال السنة اشهر الاولى. تعد الرضاعة الطبيعية عملية فريدة من نوعها فبالإضافة الى كونها المجهز المثالي لغذاء الرضيع فان الرضاعة الطبيعية تساهم بتوفير نمو وتطور صحي. **النتائج:** اظهرت النتائج أن معظم الأمهات تعطي الرضاعة الطبيعية، وأعلى معدل كان من بين الفئة العمرية الأكبر سنا و الأمهات الأميات وكذلك تبين ان عدم استخدام وسائل منع الحمل و كون الأم أكبر سنا عند الزواج هي من اكثر العوامل التي تزيد معدلات الرضاعة الطبيعية عند الزواج. **التوصيات:** تقديم المشورة بشأن الرضاعة الطبيعية قبل الولادة وبعدها وذلك من خلال دعم الرضاعة و تشجيع معدلات الرضاعة الطبيعية الخاصة، فضلا عن التوعية الصحية للأمهات في كل زيارة.

### **Introduction**

Breast feeding is a practice that has been around for thousands of years and which offers well-known nutritional, immunological, cognitive, economic and social benefits. These benefits are only taken advantage of to the full when breast feeding continues for at least 2 years, being the sole means of feeding infants for their first six months of life<sup>1</sup>. Breast feeding is a meritorious practice of its innumerable benefits that are not only reflected on the infant and mother but on society as a whole. Because of its nutritive and immunological benefits, breast feeding has a protective effect against morbidity mainly during infancy<sup>2,3</sup> regular breast feeding helps the maternal uterus to regain its original size and minimizes post-partum blood loss<sup>4,5</sup>. High quality breast feeding increases the duration of post-partum amenorrhea, resulting in longer birth interval that ultimately improve maternal and infant health. Despite the many benefits of breastfeeding, recent Survey in USA have shown that exclusive breast feeding was only among 55% of infants aged 3 months<sup>6</sup>

### **Objectives**

To identify the effect of maternal factor on breast feeding pattern among women in holy Karbala.

### **Subjects and Methods**

A cross sectional descriptive study conducted in the pediatric teaching hospital and primary health center in Karbala governorate during the years 2010-2011. The sample consisted of a (200) woman at child –bearing age who attended the health center or the hospital either for vaccination or treatment of their infants and children. The sample was chosen by non- probability convenient sampling. Data collected by using a special structured questionnaire and the following variables

were included in the questionnaire: age of mother, age at marriage, no. of pregnancies and children, type of delivery, contraception and prenatal visit and the type of feeding for her last child. Analysis of data was done by the SPSS statistical system version 16 to extract frequency tables and cross tabulation for different variable. P-value of less than 0.05 was considered significant.

**Results of the study:**

Analysis of data revealed that most mothers feed their baby by breast milk and the highest rate was among age group 30-34 years (95.2) % and the lowest rate was (62.3 %) in age group 20-24 years as shown in table (1). The result was statistically not significant as p-value was  $>0.05$ . Table (2) shows that most mothers who married at older age practiced breast feeding at a higher rate, as those who married after 25 year had a percentage of (90) % breast feeding. The result was statistically highly significant as p-value was  $>0.05$ .

Table (3) shows that mothers who were delivered by normal and caesarean had almost the same rate of breast feeding. The result was statistically not significant as p-value was  $>0.05$ .

Table (1) relationship between age of mothers and breast feeding

Age group	Breast feeding		Total
	No	Yes	
15-19	8 (21.6)%	29 (78.4)%	37 100%
20-24	26 (37.7)%	43 (62.3)%	69 100%
25-29	11 (26.2)%	31 (73.8)%	42 100%
30-34	1 (4.8)%	20 (95.2)%	21 100%
35- 40	10 (32.3)%	21 (67.7)%	31 100%
Total	56 (28)%	144 (72)%	200 100%
X <sup>2</sup> =9.927			p-value>0.05
			NS*

\*not significant

Table (2) relationship between age at marriage and breast feeding

Age at marriage	Breast feeding		Total
	No	Yes	
<15	11 (42.3)%	29 (57.7)%	26 100%
15-19	28 (26.9)%	76 (73.1)%	104 100%
20-24	15 (30)%	35 (70)%	50 100%
>25	2 (10)%	18 (90)%	20 100%
Total	56 (28)%	144 (72)%	200 100%
X <sup>2</sup> =13.933			p-value<0.05
			HS*

\*high significant

Table (3) relationship between types of delivery and breast feeding

Type of delivery	Breast feeding		Total
	No	Yes	
Normal	38 (28.4)%	96 (71.6)%	134 100%
Caesarean	18 (27.3)%	48 (72.7)%	66 100%
Total	56 (28)%	144 (72)%	200 100%
X <sup>2</sup> =0.026			p-value>0.05
			NS*

\*no significant

Table (4) shows that illiterate mothers have higher rate of breast feeding followed by women with secondary education. The result was statistically not significant as p-value was >0.05.

Table (5) shows that mothers who do not use contraceptive breast feed their baby at higher rate (84.4%), while mothers who are contraceptive users are less willing to breast feed their babies (49.3%). The result was statistically highly significant as p-value was >0.05.

Table (6) shows that most mothers(75%) who have less than five prenatal visits tended to breast feed their babies while those who had 5-9 visit had a lower rate of breast feeding (68.5)%. The result was statistically not significant as p-value was >0.05.

Table (4) relationship between education and breast feeding

Education levels	Breast feeding		Total
	No	Yes	
Illiterate	12 (20.7)%	64 (79.3)%	58 100%
Primary	27 (36)%	48 (64)%	75 100%
Secondary	11 (23.9)%	35 (76.1)%	46 100%
Institute & college	6 (28.6)%	15 (71.4)%	12 100%
Total	58 28%	144 72%	200 100%
X <sup>2</sup> =5.054			p-value>0.05 NS*

\*no significant

Table (5) relationship between contraception and breast feeding

Contraception	Breast feeding		Total
	No	Yes	
Yes	20 (15.5)%	109 (84.4)%	129 100%
No	36 (50.7)%	35 (49.3)%	71 100%
Total	56 (28)%	144 (72)%	200 100%
X <sup>2</sup> =29.146			p-value<0.05 HS*

\*high significant

Table (6) relationship between prenatal visit (during pregnancy) and breast feeding

Prenatal visit (No.)	Breast feeding		Total
	No	Yes	
<5	27 (25)%	81 (75)%	108 100%
5-9	29 (31.5)%	63 (68.5)%	92 100%
Total	56 (28)%	144 (72)%	200 100%
X <sup>2</sup> =0.750			p-value>0.05 NS*

\*no significant

## **Discussion**

The superiority of breastfeeding is unchallenged. Its benefits to both child and mother have been widely documented<sup>7, 8</sup>. In the current study the rate of breast feeding was 72%, this rate is much lower than the recommendation of the American Academy of Pediatrics Section on Breastfeeding that mothers must breastfeed exclusively for approximately the first 6 months after their child's birth and continue breastfeeding for at least the first year of their child's life.<sup>9</sup> This rate of breast feeding is lower than the rate of Myanmar women which was 94.4%<sup>10</sup> and close to rates of Ethiopian women<sup>11</sup> which was 68.2% but higher than that of Irish and American women<sup>12,13</sup>. The study shows that older mothers tend to breastfeed their babies more frequently than younger women, a practice that might be related to differences in life experiences and advancement in the life cycle, and lack of parenting skills on behalf of younger mothers.<sup>14,15</sup>. This finding agrees with another study conducted in Australia<sup>16</sup>. These findings contradict the findings in Myanmar that the older mothers were less likely to breastfeed longer than younger mothers<sup>10</sup>. The results revealed a higher rate of BF among women who married at older age which disagrees with the findings of researchers in Bangladesh that rate and duration of breast feeding increases with younger age at marriage.<sup>17</sup>. No significant statistical difference was found between mothers delivered normally or by caesarian section but in Aboriginal mothers in Perth the rate was higher in mothers delivered normally<sup>18</sup>. Educational level of mothers did not have great effect on rate of BF but there was a little higher tendency of illiterate women to breast feed their babies than higher education which is a factor that play a role in the adoption of modern ideas and which usually lead to the abandonment of traditional practices regarding childcare.

This finding agrees with findings of other researchers who found higher rate among women of less than 9 years of education<sup>17,19</sup>, in Italy they found positive association with a higher level of maternal education<sup>20</sup>. The positive association between breastfeeding initiation and high educational level is typical of western countries, while the opposite may be true for developing countries<sup>21</sup>.

Researchers had found a significant statistical association between combined oral contraceptives and the decline in milk volume<sup>22</sup>. These findings might explain the results of higher breast feeding rate among non-contraceptive users in the current study sample.

The key to successful breastfeeding is likely to be Information, Education and Communication (IEC) strategies aimed at behaviour change<sup>23</sup>, but in the current study pre- natal visits to the primary health center did not increase the rate of breast feeding but on the contrary it was lower which indicate the absence of health education and guidance in our health facilities or weak performance. This finding disagrees with that of Australian researchers who found a high effect of attending the antenatal care on breast feeding<sup>16</sup>.

## **Recommendations:**

- Antenatal counselling on breastfeeding and postnatal lactation support are likely to improve rates of exclusive breastfeeding as well as health education to mothers in each visit.
- Combined oral contraceptives should not be initiated before six weeks postpartum, and then only when lactation is well established and the infant's nutritional status is well monitored.
- Contraception for lactating mothers should depend on Abstinence, barrier methods such as condoms, and progesterone-only contraception such as depomedroxy-progesterone acetate (Depo-Provera) are possible choices immediately postpartum.
- .pacifiers should not be given to infants as they have more harm to the infants than benefits

## **References:**

1. Roberto G. Ghaves, Joel A. Lamounier ,CibeleC .factors associated with duration of breast feeding . Journal of pediatric vol.8.p 241-46 (2007).
2. World health organization .the optimal duration of exclusive breast feeding Saudi medical journal vol22, p 726-729(2001).

3. Shrine shawky and bahaaA.Ablkail .maternal factors associated with duration of breast feeding in Jeddah , Saudi Arabia ,pediatric and prenatal epidemiology vol,17 ,p 91-96 (2006).
4. HeingMJ,Dewey KG, health effect of breast feeding for mothers: a critical review nutrition academy press, p 24-25, 161-171, 197-200(1991).
5. Karen sullivan .breast feeding in natural health care for children published in the UK (publishers) p75-97 (2008).
6. Ruowei Li, Fein SB., Jian Chen, Grummer-Strawn M. Why Mothers Stop Breastfeeding: Mothers' Self-reported Reasons for Stopping During the First Year. *PEDIATRICS* Vol. 122, pp. S69-S76 (2008).
7. Breastfeeding practice. Facts for action for health professionals. Baby and Mother Friendly Hospital Initiative. Cairo, Egypt, Ministry of Health and Population, 1993.
8. American Academy of Pediatrics. Breastfeeding and the use of human milk. Work Group on Breastfeeding. *Pediatrics*, 1997, 6:1035–39.
9. American Academy of Pediatrics, Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics*.;115 (2):496 –506, 2005
10. Sandar M. Influence of maternal factors on duration of breast feeding. A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts. Faculty of graduate students Mahidol University. 2006
11. TewodrosA, JemalH, DerejeH. Determinants of exclusive breastfeeding practices in Ethiopia. *Ethiop.J.Health Dev.* 2009;23(1).
12. Smith PH; Avery M; Gizlice MZ. Trends and correlates of breastfeeding in North Carolina. Results from the North Carolina Pregnancy Risk Assessment Monitoring System (PRAMS),1997-2001. State Center for Health Statistics Study No. 142 – PRAMS Survey on Breastfeeding. 2002.
13. Roslyn C. Tarrant; Katherine M. Younger; Margaret Sheridan-Pereira. Factors Associated with Duration of Breastfeeding in Ireland: Potential Areas for Improvement. Dublin Institute of Technology ARROW@DIT Articles School of Biological Sciences. 2011.
14. U O Uchendu, A N Ikefuna I J Emodi. Factors associated with exclusive breastfeeding among mothers seen at the University of Nigeria Teaching Hospital. *SA journal of child health*, 2009 Vol. 3 NO. 1
15. Violet Naanyu. Young Mothers, first parenthood and Exclusive Breastfeeding in Kenya. *African Journal of Reproductive Health* Vol 12 No 3 December 2008.
16. Forster DA; McLachlan HL; and Lumley J. Factors associated with breastfeeding at six months postpartum in a group of Australian women. *International Breastfeeding Journal* 2006, 1:18 doi: 10.1186/1746-4358-1-18.
17. ShamimaAker and. MizanurRahman.Duration of Breastfeeding and Its Correlates in Bangladesh. *J health population nutrition*, 2010 Dec;28(6):595-601
18. Binnes C; Gilchrist D; Gracy M. Factors associated with the initiation of breast-feeding byAboriginal mothers in Perth. *Public Health Nutrition* j: 7(7), 857–861
19. FenglianXu, Colin Binns, Su Zheng MB, Yan Wang MN, Yun Zhao. and Andy Lee . Determinants of exclusive breastfeeding duration in Xinjiang, PR China. *Asia Pac J ClinNutr* 2007;16 (2):316-321.
20. E Riva, G Banderali, C Agostoni, M Silano, G Radaelli and M Giovannini. Factors associated with initiation and duration of breastfeeding in Italy. *ActaPediatr*2009, 88: 411±5.
21. Kocturk T, Zetterstroöm R. The promotion of breastfeeding and maternal attitudes. *ActaPaediatrScand* 1999; 78: 817–23
22. Truitt ST, Fraser AB, Grimes DA, Gallo MF, Schulz KF. Combined hormonal versus nonhormonal versus progestin-only contraception in lactation. *Cochrane Syst Rev.* 2003;(2):CD003988.
23. Chaturvedi P, Banait N: Knowledge and attitude regarding breast-feeding, in mothers attending antenatal clinics. *Indian J Pediatr* 2000, **67**:259-262