Reasons for Increased Bottle Feeding practicing Among a Sample of Iraqi Mothers of less than 2 years old children from Baghdad

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Abstract :

Objective: To assess the breast and bottle feeding practices in a sample of Iraqi mothers.

Method: Across-section study was carried out between September 2006 and April 2008 in 3 Public Health Centers and teaching hospital in Baghdad city. Mothers were interview to collect information on the Breast or Bottle Feeding practice and the causes of using Feeding.

Results: 2008 mothers were included in this study and 28 of them used Bottle Feeding which consisted 63.8% which statistically significant .we found that the caused that lead to increase the percentage of bottle feeding were:

1-Inadequate breast milk 72.4%.

2- After Caesarian Section 8.6%.

3- Physician advice 3.5%.

4- Personal decision 2.8%.

5- Other causes 1.9%.

6- Using drugs 0.8%.

Conclusion: prevalence of bottle feeding was high in our population due to insufficient knowledge about breast milk in general.

Introduction:

The benefits of breast-feeding (*BF*) for both child and mother in terms of nutrition, immunological protection, anti-infective, biochemical, anti-allergic and contraceptive effects, and emotional satisfaction have been widely documented. Although in Iraq, *BF* is almost universal and regarded as the normally to feed infants and young children as most the population are Muslims and mothers followed the Koran, which instructs them to breast-feed their children for two years, beside the promotion of breast-feeding and baby-friendly Hospital Initiative program began in Iraq since 1993. However, this pattern has gradually been replaced by artificial feeding especially in the last few years. This study aimed to identify the prevalence of under 2 years children different feeding patterns and to determine the reasons of the preference of practicing bottle feeding among these mothers.

Subjects and methods:

A cross sectional study was conducted on a convenient sample of 2008 mothers having at least one apparently normal child under 2 years old attending 3 PHC centers and one teaching hospital in Baghdad city. These mothers were interviewed and asked about the age of the child (in months), the sex of the child, the current type of their children feeding and the cause of practicing bottle feeding if they do so. Feeding methods studied were either the use of breast milk as a method of feeding (exclusive breastfeeding or partial breastfeeding) versus bottle feeding as giving breast milk substitution (baby formula or fresh cow milk)from a bottle with a teat. Any mother had any factor for contraindication of breastfeeding or her child had chronic illness, cleft palate or any disease make breastfeeding contraindication were excluded from the study. Data entry was performed using SPSS (11) with means, standard deviations, percents, Student's-t, ANOVA, and Chi squared tests were computed whenever applicable. Statistical significant in this study is defined as $P<0.05$.

Results:

Out of the 2008 interviewed mothers 1281 (63.8%) were using bottle feeding for their children whom age ranged between 0 and 24 months. Comparing children of mothers practicing breast feeding with those using bottle feeding a statistically significant difference ($t= 2.59$, $P=0.01$) was found between the mean age of children on breast milk and those on bottle feeding, while no statistical significant association ($\chi^2=0.13$, $P=0.72$) was found between the type of feeding and the sex distribution of the children in our sample (Table 1).

More than 2/3 of the mothers (72.4%) relay on the complaint of inadequate breast milk to practice bottle feeding, then delivery by Caesarian section (18.6%) was the second reason to do so (Table 2).

Fifty percent (1004) of our sample were infants of less than 6 months old, about 2/3 of them (625) were on bottle feeding whereas they should be on full exclusive breast feeding. Analysis for the reason of being so at this specific age group showed that 444 (71.6%) of them their mothers gave the complaint of inadequate breast milk as a reason and more than one fifth (134) used bottle feeding because they delivered by Caesarian section. The association of the reason of practicing bottle feeding and age group categories was highly statistically significant after excluding the 10 cases of women giving the use of drugs as a reason for the validity of the test (Table 3).

Further analysis for the 1281 children of the women using bottle feeding revealed no significant relation between the reason for using bottle feeding and the gender of the child, but a highly significant difference was found between the mean ages of the children at each reason category given (Table 4).

Table (1): Prevalence of different infant feeding patters among the study sample:

Variable \ Type of Feeding	Bottle Feeding	Breast Feeding
Number (%)	1281 (63.8%)	727(36.2%)
Mean age ± Standard deviation*	6.99 ± 5.2 months	7.58 ± 4.28 months
Male; Female ratio	1.24:1	1.29:1

* Statistically significant Difference.

Table (2): Reasons of using of using Bottle feeding as pattern

Reason for bottle feeding	Number	Percent
Inadequate breast milk	928	72.4
After Caesarian section	238	18.6
Physician Advice	45	3.5
Personal decision	36	2.8
Other causes	24	1.9
Using drugs	10	0.8
Total	1281	100

Table (3): Prevalence of bottle feeding and reasons for it according to age groups

Age groups / Variable	0-6 months		6.1-12 Months		> 12.1 Months		Signify-cance
	No.	%	No.	%	No.	%	
Type of feeding							
• Breast feeding	379	37.7	246	34.7	102	34.5	$X^2 = 2.1$ P = 0.35
• Bottle feeding	625	62.3	462	65.3	194	65.5	
Total (2008)	1004	100	708	100	296	100	
Reason of bottle feeding:							
• Inadequate breast milk	444	71.6	344	75.3	140	72.2	$X^2 = 37.$ P = 0.00
• After Caesarian Section	134	21.6	75	16.4	29	14.9	
• Physician Advice	19	3.1	17	3.7	9	4.6	
• Personal decision	17	2.7	16	3.5	3	1.5	
• Other causes	6	1.0	5	1.1	13	6.7	
Total (1271)	620	100	457	100	194	100	

Table (4): Characteristics of children taking bottle feeding according to reason

Reason for bottle feeding:	No.	Male : Female ratio	Mean age ± Standard deviation
Inadequate breast milk	928	1.32:1	7.63±4.85
After Caesarian Section	238	1.05:1	6.85±4.59
Physician Advice	45	1.14:1	8.49±5.12
Personal decision	36	1.00:1	7.14±3.61
Other causes	24	1.18:1	12.13±5.79
Using Drugs	10	0.67:1	8.10±5.07
Total	1281	χ^2=0.13, P=0.72	F=5.84 , P=0.000

Discussion:

Breast feeding has innumerable benefits that not only reflected on infants and mothers but on society as a whole.[1] International health agencies such as the World Health Organization (W H O),United Nation Children Fun (UNICEF) and American Academy Of Pediatrics recommend exclusive breast feeding during the first 6 month of life.[2] The promotion and support of breast feeding is a global priority[3]. A vast scientific literature demonstrates substantial health, social, and economic benefits associated with appropriate breast feeding, including lower infant mortality and morbidity from diarrhea and other infectious diseases [4]. Breast feeding promotes maternal-infant bonding and attachment and provides the child a sense of security[5]. Our study designed

to examine the most important factors that affect or interfere with breast feeding.

The study show that breast feeding was lower than bottle feeding, which is similar to recent study don in Al-Kuwait[6]. Also it is similar to another study don in Saudia Arabia[7].While in England and Scotland show increase in percentage of breast feeding, due to increase in education of mothers about the benefit of breast feeding[8]. There was no statistical significant association between the type of feeding and sex distribution of children in our study which is similar to recent studies in Greece[9].The most common maternal reason for increase bottle feeding was inadequate breast feeding, these women think that breast milk alone is not enough or it is inadequate which is similar to most of studies done world wide[10]. The second important cause that lead to increase incidence of bottle feeding was caesarian section because most of these mothers belief that it is very difficult for them to nurse their baby which is similar to Kingdom and Jeddah study[11]. But it defer from result obtain in Riyadh[12]. Some of the mothers who used bottle feeding do so according to doctor device these orders usually com from non specialist doctor who had inadequate knowledge about breast feeding .the most common drug used by nursing mother and lead to shifting to bottle feeding was contraceptive which is similar to Jeddah study[11]. Other causes that lead to stop breast feeding were multiple like diseases such as Typhoid fever, T.B, or some psychological disease.

Recommendation:

1) Health educations one of the most important aspect in promoting breast feeding, and involvement of other sectors of the community such as education, medical and paramedical colleges, media and religious sectors.

2) The Ministry Of Health need to do hard work in order to involve most of un -specialist doctors who are working in medical fields in multiple conference to discus the recent studies about the benefit and adequacy of breast milk .

3) The Ministry Of Commerce need to be involved to limit the high number of milk formula trades in Iraq.

4) Engorge early breast feeding after caesarian section and make this under observation of obstatriation.

References:

1- American Academy of Pediatric Policy Statement. " Breast milk and the use of human milk". Pediatrics 2005:115:496-506.

2- Kramer MS, Kakumar R," Optimal duration of exclusive breast feeding". Cochrane Database of Sys. Rey, 2007, issue-4. John Wiley &Sons DOI:10.1002 / 1465/858. CD003517.

3- Yngve A, Sjostrom M. "Breast feeding in countries of the European Union and EFTA"; current and proposed recommendation rational, prevalence, duration and trends .public Health Nutr.2001;4(2B);631-45.

4- WHO/UNICEF. "The Innocent Declaration on the protection, promotion and support of Breast feeding". Geneva; WHO/UNICEF, 1990.

5- Woolridge N, Phil D, Baum JD. "Recent advance in breast feeding" .Acta Pediatric J Japan 1993; 35;1-12.

6- Hamdiya AS Al-Fadi , Gamal M Masoud, "Breast – Feeding among Children less than Two years old in Ahmadi Region". Kuwait medical Journal 2002, 34(4) : 281 -285.

7- Fouzia A. Al-Hreasby, MD, Hani M. Tamim PHD. "Pattern of breast feeding practice during the first 6 months of life in Saudi Arabia. Saudi Med J 2008; vol.29(3) 427-431.

8- World Health Organization. Available from : URL: http://www.who.int/reproductive-health/ publications/ RHR_01_12/ RHR_01_12_chap3_4.en.html

9- Pechlivani F, Vassilakou T, Sarafidou J, Zachou T, Anastasiou CA, Sidossis LS. "Prevalence and determinates of exclusive breastfeeding during hospital stay in the area of Athens", Greece. Acta Paediatr 2005 ; 94:928-934.

10- Marsha Walker. "Core curriculum for lactation consultant practice". 1st edition. USA: Jones and Pattle publisher and international consultant association; 2002.

11- Shawky S, Abalkhail BA. "Maternal factors associated with the duration of breastfeeding in Jeddah", Saudi Arabia. Pediatr Perinat Epidemiol 2003; 17:91-96.

12- Al-Jassir MS, El-Bashir BM, Moizuddin SK. "Surveillance of infant feeding practice in Riyadh City". Ann Saudi Med 2004; 24:136-140.

اسباب زيادة الرضاعة الصناعية بين نموذج من امهات عراقيات اعمارهم اقل من سنتين في بغداد

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الملخص :

تمهيد: اثبتت التجارب العلمية الكثيرة ان الرضاعة الطبيعية فوائد علمية عديدة لايمكن احصائها بسهولة وعلى الرغم من ذلك فان هناك زيادة في نسبة الرضاعة الصناعية.

الاهداف: لمعرفة اسباب زيادة الرضاعة الصناعية ومحاولة الحد منها.

الطرق: تمت دراسة عينة مكونة من (2008) رضيع تتراوح اعمارهم ما بين يوم واحد وسنتين وقد استثني من ذلك الاطفال اللذين لا يستطيعون اخذ الرضاعة الطبيعية لاسباب طبية هي نادرة جداً. تم تقسيم العينة الى مجموعتين احدهما تستعمل الرضاعة الطبيعية والاخرى تستعمل الرضاعة الصناعية، وخضعت الامهات اللواتي يستعملن الرضاعة الصناعية الى مجموعة اسئلة لمعرفة السبب وراء ترك الرضاعة الطبيعية واللجوء الى الرضاعة الصناعية.

النتائج: من المجموع الكلي البالغ (2008) كان هناك (1281) ام تستعمل الرضاعة الصناعية اي نسبة (63.8%) وهي ذات قيمة احصائية ايجابية وكانت الاسباب الموجهة لترك الرضاعة الطبيعية وحسب النسب الاتية:

1. عدم كفاية الحليب (72.4%)
2. بسبب العمليات القيصيرية (18.6%)
3. نصيحة طبية (3.5%)
4. قرار شخصي (2.8%)
5. اسباب اخرى مثل بعض الامراض (1.9%)
6. استعمال بعض الادوية (0.8%)

الاستنتاجات: اظهرت الدراسة وجود زيادة في نسبة الرضاعة الصناعية في بعض الدول الاسلامية ومنها العراق بينما هناك زيادة في الدول الاوربية وكان السبب الرئيسي هو قلة وعي الامهات باهمية وفائدة حليب الام.