Breastfeeding Patterns in an Urban Area in Baghdad

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ABSTRACT:

BACKGROUND:

The World Health Organization (WHO) & UNICEF, have recommended for a decade that mothers breastfeed for at least 2 years .

Recently, there has been a stress on exclusive breast feeding for the first four to six months of life .

METHODS:

By using the 'current status analysis method'. Mothers of 650 infants from 0 to 12 months of age attending a Health Center were interviewed about the current feeding

patterns of the infants and other socioeconomic variables. Month-wise prevalence of feeding patterns was determined.

RESULTS:

It was observed that breast feeding was maintained at a high level (more than 90%) throughout infancy while exclusive breast feeding showed a rapid decline.

At 1st month of age 78% , and at 4th month of age 50 % of infants were exclusively breast-fed.

CONCLUSION:

Breast feeding as such was maintained at a high level for the first 12 months of life while the practice of exclusive breast feeding was much lower.

KEY WORDS: Breast feeding, exclusive breast feeding.

INTUDUCTION:

Breast feeding remains the best food for the proper growth and development of the infant [1,2].

The incidence of illness ,or morbidity , among artificially fed infants in Third world countries is equally as dramatic as the mortality .Infants who were completely bottle fed had a 14.2 greater risk of death from diarrhea and 3.6 greater risk of death from respiratory infection .Partial breastfeeding was less protective. Formula and cows milk were equally hazardous .The greatest risk from diarrhea was in the first 2 months of life (3-5). The World Health Organization (WHO) & United Nations Children's Fund (UNICEF) ,have recommended for a decade that mothers breastfeed for at least 2 years Recently, there has been a stress on exclusive breast feeding for the first four to six months of life [6,7] . Between 1990 and 2000, the data suggest that exclusive breast-feeding levels in the developing world increased 15% overall among infants younger than 4 months (from 46% to 53%) and among infants older than 6 months (from 34% to 39%). The increase in urban areas is of special note. Urban areas are presumed to be most susceptible to the ambient health system and social and commercial pressures against breastfeeding; the support activities of the 1990s (eg, the Baby-friendly Hospital Initiative and the International Code of Marketing of Breast milk Substitutes) were developed to address these pressures.

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Given this, implementation of the Global Strategy for Infant and Young Child Feeding, which supports these proven interventions, should be effective in further increasing optimal breast-feeding practices [8, 9]. We under took this study to verify the patterns of breastfeeding & its relationship to the parents education, occupation and income, child birth order &child sex in An urban area in Baghdad.

PATINTS AND METHODS:

The study was conducted in an urban area in ALSader city (sector 11,12,55) which was served by 7th Primary Health Center .

By using the 'current status analysis method'. Mothers of 650 infants from 0 to 12 months of age attending the Health Center (during the period from 1st of April to 30th of September 2006) were interviewed about the current feeding patterns of the infants and other socioeconomic variables Statistical analysis with this method in general requires- cat least 50 births on average per month in the reference period which was taken as 13 months in the present study. Thus 50 infants of each month age group were randomly selected from 0 to 12 months of age totaling 650. Age was taken in months completed. Standard questionnaire was used to record information from the mothers. This included details regarding the parents age, education, occupation and income, child birth order, child sex , breast feeding pattern and pertained to whether being presently breast fed, exclusively breast fed or partially breast fed, taking

Semisolids, onset of breast feed after birth, pre-lacteal feeds etc. Breast feeding referred to infant receiving breast milk while exclusive breast feeding referred to infant receiving only breast milk (allowing the infant to receive vitamins, minerals, & medicines). Infant formula referred to cow's milk based formula.

RESULTS:

Breast feeding as such was maintained at a high level for the first 12 months of life while the practice of exclusive breast feeding was much lower. In the first month itself,

22% of the infants had received infant formula fed. The prevalence of exclusive breast feeding declined rapidly with infant age. The exclusive breast feeding rate at 4th month was only 50 %.

The median duration for exclusive breast feeding was 3.62 months while the median age for starting infant formula was 3.64 months and semisolids food was 6 months. The male to female ratio was 1 :1.02 .About 312 of infants were born at hospital , and 338 infants born at home (table 1,) . 110 (32.5%) children born at home received pre lacteal feeds (sugar & water), and about 10(3.2%) of hospital born infants received pre lacteal feeds (sugar & water). It was not related to the sex and birth order of the child, family type and income or education of the mother. The time interval between birth and first breast feed was less than one hour in (44.46%) of the infants, and 18.9% of infants were breast fed on the second or third day of birth. About 262(84 %) of infants born in the hospital received their first feed within one hour while only 17(5%) born at home did so. Infants born at hospital received their first feed earlier &were less likely to receive pre lacteal feed as compared to infants born at home ($p<0.01$), as shown in table 1.

The age of the infant was also an important factor determining exclusive breast feeding (Table 2). However, birth order and sex of the infant , did not emerge as significant factors (p value >0.05) as shown in (table 3 , 4). The prevalence of exclusive breast feeding was significantly lower in family with lower income, as compared to those with higher income (p value <0.01) as shown in table 5, .The prevalence of exclusive breast feeding was significantly lower in illiterate mothers, as compared to those with higher education, (p value <0.05) , as shown in table 6, .

Table 1 : Shows the place of birth .

Place of birth	No. of infants	No. of infants received breast feeding in 1st hour
Hospital	312	262(84%)
Home	338	17(5%)
Total	650	289(44.46%)

Table 2: Feeding patterns of infants

Age in moths	No. of breastfed	No. of exclusively breastfed	No. of infant formula fed	No. of infants on additional food
0	45 (90%)	39 (78%)	11 (22%)	0
1	49 (98%)	35 (70%)	15 (30%)	0
2	45 (90%)	31 (62%)	19 (38%)	0
3	43 (86%)	26(52%)	24(48%)	0
4	43 (86%)	25 (50%)	25 (50%)	14 (28%)
5	44 (88%)	7(14%)	31 (62%)	18 (36%)
6	47 (94%)	8(16%)	36 (72%)	27 (54%)
7	43 (86%)		33 (66%)	36 (72%)
8	42 (84%)		36 (72%)	39 (78%)
9	45 (90%)		35 (70%)	43 (86%)
10	45 (90%)		38 ((76%)	45 (90%)
11	43 (86%)		36 (72%)	46 (92%)
12	40 (80%)		37 (74%)	48 (96%)

Table 3: The relationship between child sex & the patterns of exclusive breast feeding in the 1st 6 months of life:

Child sex	No. of infants	No. of exclusively breastfed infants
male	173	83(47.97%)
female	177	88(49.7%)
total	350	171

Table 4: The relationship between child birth order & the patterns of exclusive breast feeding in the 1st 6 months of life

Birth order of child	No. of infants	No. of exclusively breastfed infants
1st	76	33(43.4%)
2nd	136	66(48.5%)
3rd	92	50(54.34%)
4th & more	46	22(47.8%)
total	350	171

Table 5: The relationship between family income & the patterns of exclusive breast feeding in the 1st 6 months of life

Family income	No. of infants	No. of exclusively breastfed infants
100000 ID	56	15(26.78%)
200000 ID	189	104(55%)
300000 ID& More	105	59(56.1%)
total	350	171

Table 6: The relationship between mother education and exclusive breast feeding patterns in the 1st 6 months of life.

Mother education	No. of infants	No. of exclusively breastfed infants
Illiterate	45	12(26.66%)
Primary school	229	114(49.78%)
Middle secondary school	76	45(59.2%)
total	350	171

DISCUSSION:

The exclusive breast feeding rate at 4th month of age was 50 % which is much lower than the recommendation of universal exclusive breast feeding for 4 to 6 months of age. Our results was consistent with Chhabra Pragti., Grover Vijay L., Aggarwal O.P & also with results of Bhatanagar C R , Nagaraj M C ,Banapuranh , S. Kesaree N [11,12] . About 84 % of infants born in the hospital received their first feed within one hour while only 5.3% born at home did so. The interval between birth and first feed was significantly related to the place of delivery, with children born in hospitals reporting a much higher rate (p value<0.01) . This observation shows that the 'Baby Friendly Hospital Initiative'(BFHI) has made some impact on the promotion of early breast feeding. Infants born at home were more likely to receive pre lacteal feeds (sugar & water) as compared to hospital born children (p value <0.01) . This has to be discouraged while educating about early feeding. As majority of deliveries are conducted at home by midwife, early initiation of breast feeding needs emphasis in the midwife training. The prevalence of exclusive breast feeding was significantly lower in illiterate mothers , as compared to those with higher education, (p value <0.01) , our results were consistent with many studies in the developed countries [8,9,10,13,14,15] But contrast with other studies in the developing countries [11,12] .

The prevalence of exclusive breast feeding was significantly lower in family with lower income, as compared to those with higher income (p value <0.01) , these results were consistent with many studies in the developed countries [8,9,10,13,14,15].

Breast feeding as such was maintained at a high level for the first 12 months of life while the practice of exclusive breast feeding (E.B.F) was much lower. In the first month itself, 22% of the infants had received infant formula fed.

The prevalence of exclusive breast feeding declined rapidly with infant age. The exclusive breast feeding rate at 4th month was only 50 %.these results were higher than the results of Iraqi ministry of Health , Exclusive breast feeding International Survey 1998 when they found that E.B.F in <1month of age was 40 % and at 4th month of age 13% , [16] . At 6th month of age we found that the E.B.F was 8% , our results were less than the results of Iraqi ministry of Health and UNICEF, Multiple indicators clusters survey (MICS), at 2002 , when they found that the E.B.F at 6th month of age was 30% and the results of MICS at 2006 when they found that the E.B.F at 6th month of age was 25.1 % .This was because many of mothers started complementary feeding earlier than 6th month of age[17,18] .

Children born in a baby-friendly health facility are more likely to be breastfed for a longer time, particularly if the hospital shows high compliance with UNICEF guidelines.

Therefore, the BFHI should be continued but should be extended to include monitoring for compliance, to promote the full effect of the BFHI. Our results showed that 90 % of mothers in our study start breastfeeding & at 6th month of age still there was 94% of infants were breastfed, while other studies showed that only 57% of United States mothers started breastfeeding & at 6th month of age only 20% of infants were breastfed at 2005, in Britain 63% of mothers started breastfeeding & at 6th month of age only 21% of infants were breastfed at 2005 [19, 20]

CONCLUSTION:

Breast feeding as such was maintained at a high level for the first 12 months of life while the practice of exclusive breast feeding was much lower. . The median duration for exclusive breast feeding was 3.62 months while the median age for starting infant formula was 3.64 months and semisolids food was 6 months. Mothers' education level remains the strongest factor of influence on breastfeeding from birth to 4 months, and its impact increases with baby's age, followed by Family income, family type and parents' working situation. The practice of exclusive breast feeding has to be promoted by educating mothers during pregnancy and lactation &also by emphasis in the midwife training , it is important that newborns be breastfed at birth and exclusively breastfed during their first 4 to 6 months of life.

REFERENCES:

1. William C. Heird. Feeding of infants & children: In Richard E. Behrman, Robert M. Kliegman, and Hal B. Jenson. Nelson Textbook of Pediatrics. 17th edition. W.B. Sanders Company. 2004; 157-161.
2. Neil McIntosh &Ben Stenson. The new born: In For far &Arnil's Champill textbook of pediatrics. 6th ed. Churchil Livingstone. 2003; 193-194.
3. Ruth A Lawrence. Breastfeeding in modern medicine: In Breastfeeding, 3rd Ed, 1989; 1-27.
4. Victora CG, Smith PG, Vaughan J P et al. Evidence for protection by breastfeeding against infant deaths from infectious diseases in Brazil, 1987.Lancet 2 : 319.
5. Watkins C J, Leeder S R, Corkhill R T. The relationship between breast and artificial feeding and respiratory illness in the 1st year of life. J Epidemiol Community Health, 1979; 33: 180-182.
6. WHO. Contemporary patterns of breastfeeding. Report on the WHO collaborative study on breastfeeding, Geneva, 1981, WHO.
7. World Health Organization, Division of Family Health. The prevalence and duration of breast feeding. Critical review of available information. World Health Stat Qtr 1982; 35:92-112.
8. Terreri N, Clark D, Blanc A, Wardlaw T, Labbok MH. Trends in exclusive breastfeeding: findings from the 1990s.J Hum Lac, 2006; 22:272-6.
9. Ackermann-Liebrich U, Dratva J, Merten S. Do baby-friendly hospitals influence breastfeeding duration on a national level?. Pediatrics .2005; 116:702-8.
10. Girard M, Dubois L. Social determinants of initiation, duration and exclusivity of breastfeeding at the population level: the results of the Longitudinal Study of Child Development in Quebec (ELDEQ 1998-2002).Can J Public Health. 2003; 94:300-5.
11. Chhabra Pragti. , Grover Vijay L. & Aggarwal O.P. et al. Breast Feeding Patterns in an Urban Ressettlement Colony of Delhi. Location: SNDT Churchgate. Indian J Pediatrics .1998; 65: 867-872
12. Bhatanagar C R, Nagaraj M C, Banapuranh &S, Kesaree N. Breast feeding practices in villages of Central Karnataka. India Pediatric .1996; 33: 477-479.
13. Martinez G A, Stahl D A .The recent trend in milk feeding among WIC infants .Am J Pub Health .1982; 72: 68-70.
14. Ryan A S and Martienz G A. Breastfeeding and the working mother .Pediatrics, 1989; 83: 524-28.
15. Wright AL, Holberg C, Taussig L M et al. Infant feeding practices among middle –class Anglos &Hispanics, Pediatrics .1988; 82:496-503.
16. Iraqi ministry of Health. Exclusive breast feeding International Survey .1998.not published.
17. Iraqi ministry of Health and UNICEF. Multiple indicators cluster survey. 2002.
18. Iraqi ministry of Health and UNICEF. Multiple indicators cluster survey. 2006.
19. Prevalence of breastfeeding in the United States. The 2001 national immunization survey. Pediatrics. 2003 May, 111(5 part 2):1198-1201.
20. Baby milk action, Cambridge, England. Center for Breastfeeding information Available at www.breastfeeding.com,Schaumburg, IL.2005.