Original Article

Awareness of Libyan Mothers About Child Feeding Practices in Benghazi, Libya

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ABSTRACT

Objective: The study aimed to assess the infant and child feeding practices and some aspects of knowledge and attitudes of mothers attending immunization clinics at maternal and child health care clinics (MCH) in Benghazi about breastfeeding and weaning. **Methods**: A cross-sectional descriptive study undertaken at child clinics in Benghazi, Libya 2007 -2008. Eleven clinics were chosen by use of simple random sampling. A total of 577 mothers were interviewed. **Results**: 89.0% of mothers were breastfed their baby and 11.0% were used bottle fed at birth, 44.3% initiate breastfeeding at 1sth half an hour after birth, only 25.2% exclusively breastfed (EBF) their babies for the first 4-6 months, and 38.0% of mothers continue breast feeding up to 24 months. More than eighty percent of women thought that breastfeeding at birth, and they had good knowledge and satisfactory attitude toward breastfeeding, but the study reported that more than half of mothers-initiated breast feeding late and poor practice of exclusively breastfed for 4-6 months. Training program for doctors and nurses and implantation of baby friendly hospitals initiatives.

Keywords: Maternal, Child, Healthcare, Clinics, Breastfed.

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INTRODUCTION

The benefits of breastfeeding for child and mother in terms of nutrition, immunological protection, antiinfective, biochemical, ant allergic, contraceptive effect and emotional satisfaction of both mother and child have been widely documented [1,2,3,4]. Baby-Friendly Hospital Initiative (BFHI), launched in 1991, is an effort by UNICEF and the World Health Organization to ensure that all maternities, whether free standing or in a hospital, become centers of breastfeeding support [1,2]. The breast milk alone is adequate to support growth of the infant up to the end of the six months of life. So, one can say that breastfeeding is the most reliable method for providing complete nutritional requirements for the growth and development of infants. Higher rate and duration of breastfeeding is associated with reduced health care and other costs for the family, the health care system, and society in general. It is also linked with a reduction in environmental costs as breastfeeding does not include packaging or transport costs, or produce wasteful by-products created by



both the production and use of artificial feeding [5,6]. On the other hand, the bottle-feeding increases the risk of diarrheal diseases, otitis media and iron deficiency anemia in children and failure to thrive [7]. Recent clinical trials showed that even in HIV mothers still breastfeeding is the best choice for a child [8]. The World Cancer Research Fund (WCRF) has published that breastfeeding protects against pre-menopausal and post-menopausal breast cancer [9]. There is also evidence that being breastfed probably protects babies from becoming overweight or obese in later life [9].

The present study aimed to find out the infant and child feeding practices of mothers attending immunization clinics in MCH at Benghazi 2007 -2008. Moreover, to assess some aspects of knowledge and attitudes of the mothers towards breast feeding and weaning at Benghazi.

METHODS

A cross-sectional descriptive study was carried out at child clinics in Benghazi, Libya during year of 2007 -2008. Out of thirty-seven clinics provide MCH care at Benghazi, eleven clinics were chosen by use of simple random sampling. Mothers who had more than one living child and who attended the clinic between 2nd of September 2007 to 30 of March 2008 were included. milk production, 4.5 % infant refuse the breast milk, and 4.5% pregnancy (Tab. II).

The study reported significant relation between maternal current age and the time of initiation of breastfeeding (x122 =74.5 & p=0.001). The present Feeding practices were enquired about the last-born child. A total of 577 of mothers were interviewed in the 6 months duration.

The information was collected using a structured, closed ended interview questionnaire containing 30 items. Broadly, the questionnaire included questions on general socio-demographic aspects, and feeding practices and knowledge and attitude of the mothers toward child feeding. The questionnaire was coded and data was entered to SPSS software and then statistical analysis was undertaken by use of chi square, and a p=0.05 or more considered significant.

RESULTS

Characteristics of nursing mothers attending child health care clinic at Benghazi 2007 are shown in the table 1. The study reported that nearly one half (48.0%) of the mothers were between age group 25–35 years of age. More than one quarter of the mothers and fathers had university and higher level of education (32.3 %, &30.5 % respectively). Nearly half (47.0%) of the mothers their family income between 150– 400 LD, and 22.5% of the mothers were working as professional. The study reported that about 68.8 % of mothers had 1-5 children and 75.9 % of mothers had normal vaginal delivery, while about 21.6 % of them delivered with CS (Table 1).

As shown in table 2, feeding practices of mothers included in the current study revealed that 89.0% breastfed their baby at birth, only 25.2% exclusively breastfed their babies for the first 4-6 months, 44.3% initiate breastfeeding at 1sth half an hour after birth, 61.8 % fed on demand, 44% of mothers gave baby formula 4-6 months, 51.9% use bottle for feeding complementary food and milk substitutes. The study revealed that 32.5 % of babies received pre-lacteal feeding, 47.5 % of the mothers continued to breastfeed for 12-24 months. There were many reasons for mothers not to continue breastfeeding, 30.0% bottle fed, 26.7% insufficient study reported that the younger maternal age associated with proper initiation of breastfeeding, 47.1% of mothers aged 25-34 years-initiated breastfeeding as early as first an hour as compared to 28% of older women \geq 45 years age who do so.



The study reported no significant relation between maternal current age and duration of breastfeeding to 24 months (x122 =11.6 & P=0.77).

Table 1: Socio-demographic characteristics of mothersattending baby clinic at Benghazi, Libya

Characteristic s of mothers	No.	%
Current age:		
1. 15 -	124	21.5
2. 25 -	276	48.0
3. 35 -	172	29.8
4. ≥45	5	0.7
Mother's Education:		
1. Illiterate	18	3.1
2. Read & write	20	3.5
3.Primary school	88	15.3
4.Preparatory	100	17.3
5.Secondarey school	164	285
6.University & higher	187	32.3
Father 's education:		
1.Illiterate	16	2.8
2.Read & write	16	2.8
3.Primary school	78	13.5
4.Preparatory	111	19.2
5.Secondary school	180	31.2
6.University & higher	176	30.5
Family income (LD)*		
1.≤150	218	32.8
2. 151 – 400	271	47.0
3.>400	56	9.7
4. Not fixed	32	5.5
Mother's employment		
Professional	130	22.5
Semiprofessional	57	9.9
Skilled	32	7.1
Unskilled	181	29.9
Clerical	107	22.1
Not working	70	12.1
Parity/ deliveries		
1.Primigravida	85	14.7
2.1-5	421	73.0
> 5	71	12.03
Total	577	100.0

The present study reported significant relation between maternal education and duration of breastfeeding (x^{2}_{24} =36.3 &P=0.04). 5% of mothers educated to university level continued breastfeeding to 24 months as compared to no one of illiterate mothers continued breastfeeding to 24 months (Figure 2). The study reported that 23.6% introduced complementary food at birth. Moreover, the current study reported that a slightly higher than half (56.1%) of mothers started complementary feeding between 4 – 6 months.

About the type of the complementary food, the study revealed that 40.0% gave semisolid and fluids with breast milk, while 27.8 % gave baby formula by bottle feeding, semisolid food and fluids, and 51.9% gave with bottle (Tab. 3).

The study reported that 71.4% of mothers were not educated about breastfeeding or child feeding during pregnancy. The study reported that 28.9 % of mothers knew that breastfeeding good for child growth and development, 23.4 % reported that it gives the child protection from diseases (Tab. 4).

As the knowledge of the mothers about initiation of breastfeeding is concerned, the current study revealed that 59.9% of the mothers agreed that initiation of the breastfeeding within first half an hour after birth. The present study reported significant relation between knowledge of mothers about pre-lacteal feed and source of knowledge where ($\chi 2=145 \& P=0.001$). 28 (26.7%) and 67 (40%) of the lactating women who's their source of knowledge about pre-lacteal feed were mothers and grand-mothers respectively, and 25 (65%) of them their doctors were source of knowledge about pre-lacteal feed. The present study reported significant relation between knowledge of mothers about initiation of breastfeeding and source of knowledge where $\chi 2 = 86.5 \& P = 0.001$. The present study revealed that 90.1% of mothers who were initiated breastfeeding within an hour 65% of them their source of knowledge were doctors as compared to 38% of those their source of knowledge were grandmothers.



The present study reported that 83.4% thought that breastfeeding is important, and 75% thought that breastfeeding should be continued for 24 months or more. More than one third (41.7%) mentioned that the reason for choosing continuing breastfeeding for two years was the Holly–Quran, 37.7% mentioned that good for child health and 11% said that breast milk not enough and child need supplements. Regarding the mothers' Source of knowledge about child feeding, 23.1% their own experience, 48.8% their mothers and grandmothers, only 14.6 % doctors, 9.9% mentioned media, neighbors, and relatives.

DISCUSSION

Although of continuous documented evidence for short and long-term benefits of exclusive breastfeeding, the present study reported that only one quarter (25.3%) of mothers exclusively breastfed their newborn during the first six months. A similar result by Radwan H., in Gulf countries reported 25% of the infants were exclusively breastfed (13).

In Cuba, where 56 hospitals and maternity facilities are baby-friendly, the rate of exclusive breastfeeding at four months almost tripled in six years - from 25 per cent in 1990 to 72 per cent in 1996. In the first two years of BFHI implementation at the Central Hospital of Libreville in Gabon, cases of neonatal diarrhea reduced by 15 per cent, diarrheal dehydration declined by 14 per cent and mortality declined by 8 per cent. In China, which now has more than 6,000 Baby-Friendly Hospitals, exclusive breastfeeding in rural areas raised from 29 per cent in 1992 to 68 percent in 1994; in urban areas, the increase was from 10 per cent to 48 percent (2).

Although exclusive breastfeeding provides the best start, after six months and as long as breastfeeding continues, with introduction of the complementary food at 6-8 months (2). Complementary feeding practices must be improved. Too often, complementary foods are introduced too soon or too late<3months or>10 months) (2,14).

The present study reported that slightly more than half (56.1%) of mothers started complementary feeding at 4-6 months, 23.6 % gave complementary food at birth, and 18.4% of them gave complementary feeding after 6 months. At United Arab Emirates only 24 % had complementary feeding at 4-6 months (13). Moreover, the present study found that 27.8% gave milk substitutes and semisolid food at 4-6 months. The present study found that 51.9% of infants were bottle fed, and 32.5% had per-lacteal feeding. The present study reported that 44.3% initiated breastfeeding within first half an hour, slightly higher than half (54.9%) of mothers breastfed on demand, and slightly less than half (47.5%) continued breastfeeding up to 12 months and 38 % continued bf up to 24 months.

The present study revealed that the most important reasons of bottle use, 30 % no breast feeding and on bottle feeding since birth, 26.7 % inadequate lactation, and 24.1% breastfeeding failure. In Philippine, the risk of development of diarrhea by feeding method for infants aged 0-2 months were reported only 1% in breastfed child as compared to 17% of the formula fed child had diarrhea (13). In Saudi Arabia, mixed feeding rates had been reported to range from 16.5% in a national survey (1995) to 59.4% in 1998 (8,14). In Saudi Arab, bottle-feeding was introduced early and 76.1% of mothers began bottle-feeding within first 3 months of life (15).

Regarding the source of mothers' knowledge about child feeding, the present study reported that 48.8% of them their main source of information about breastfeeding from their mothers and grandmothers. While, only 14% of knowledge from health care professionals and 9.9% of knowledge from media, neighbors and relatives.



Health education during pregnancy is an important way to improve the practice of the expectant mothers toward early initiation and exclusive breastfeeding (16). The study reported that slightly higher than quarter (28.6%) of mothers received education about breastfeeding or child feeding during pregnancy a similar percentage were reported at Saudi Arabia (15,16).

CONCLUSION

Although the study revealed that majority of mothers prefer breastfeeding as the first start still exclusive breastfeeding practice is low. The present study reported that the mixed feeding and bottle feeding were dominant feeding practices in all children ages. Mothers and grand- mothers were the major source of their knowledge and the medical professional had little impact on mothers' feeding practices. We recommend that continuous training program for medical staff and health education program for future and expectant mothers and use all methods for education and implement the baby friendly hospital initiative to support, promote and protect breastfeeding practice in Libya.

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Declaration of interests

We declare no competing interests.

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