

Prevalence and Maternal Concerns of Exclusive Breast Feeding in Libyan Women in Albaida City

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Received: 30 June 2019 / Accepted: 9 September 2019

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Doi:

Abstract: Exclusive breastfeeding (EBF) is strongly recommended by the World Health Organization, United Nation Children's Fund (UNICEF), and American Academy of Pediatrics during the first six months of life. Breastfeeding should continue up to two years for optimal growth and development while it is suggested to start supplementary foods beginning from the seventh month. The study aimed to determine the frequency and examine the affecting factors of EBF in infants who attended the pediatrics outpatient clinic in Althawra Hospital in Albaida city, Libya. A cross-sectional study was conducted in eight months period among 223 breastfeeding mothers, with infants aged 6-24 months, who attended the pediatrics Outpatient clinic. Mothers' perceptions about breastfeeding, complementary feeding practices, and demographic characteristics were collected by interviews with them. EBF periods were 1-45 weeks, Median week was 17 weeks. Six months EBF rate was 32,28%. Younger mother (≤ 20) or older (≥ 35) ages, and mothers having chronic diseases had a shorter median week of EBF. The median duration of breastfeeding was 9 months (0-24 months). The most frequent reason of the early interruption of EBF was, according to mother's perceptions, for having inadequate breast milk (50.3 %). The study indicates that the frequency of 6 months EBF (32,28%) and the median duration of breastfeeding (17 weeks) are low in Albaida. A local strategy must be developed to overcome mothers negative perceptions about EBF in the first 6 months of age.

Keywords: Exclusive breastfeeding, Infant, Nutrition

INTRODUCTION

Exclusive breastfeeding is important for healthy growth and development in young infants (WHO, 2003). It is one of the interventions that reduce infant morbidity and mortality and allows the infant to receive breast milk only with no other liquids or foods, not even water, except drops of syrups, vitamins, minerals or medicines (Pediatrics, 2005). Muslim countries are expected to support, promote, and protect breastfeeding based on religion. Infants exclusively breastfed for 6 months presented with fewer infectious episodes such as acute respiratory infection, acute otitis media, and gastroenteritis than their partially breastfed or

non-breastfed peers (James & Lessen, 2009). To enable mothers for establishing and sustaining exclusive breastfeeding for six months, WHO and UNICEF recommended early initiation of breastfeeding within the first hour of infant life. The infant only receives breast milk without any additional food or drink, not even water, and breastfeeding on demand. (Organization, 2010). In Libya, we have limited data about breastfeeding practices; hence, understanding the factors that influence EBF is essential to help in the development of strategies to promote EBF practices in Libya. The purpose of the present study is to determine EBF frequency in infants who attended a pediatric outpatient clinic in Albaida city to exam-

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ine factors affecting EBF and to determine the measures to increase EBF prevalence to 90% which is recommended by the WHO

MATERIALS AND METHODS

Albaida city is in the center of Aljabal Alakhdar, eastern part of Libya. This study had been conducted in a pediatrics outpatient clinic in Althawra Teaching Hospital over eight months period (from May 2018 to January 2019).

The study population consisted of children from this area that were enrolled in this prospective and cross-sectional study. Healthy breastfed infants without oral feeding problems, ages between 6-24 months, who attended the pediatric outpatient clinic during the eight months period were included in the study. Mothers signed written informed consent. The age, sex, birth weight, recent anthropometries of the babies, time of weaning, the type of the first food other than breast milk, the time of interrupting EBF, perceptions of mothers to interrupt EBF, and the duration of breastfeeding were noted with a standard interview questionnaire sheet which was developed and used by the researchers after reviewing the related literatures that assessed prevalence and maternal concerns about exclusive breastfeeding. Demographic features of the mother including age (≤ 20 years, 20–34 years, and ≥ 35 years old), working status (housewife or working), education level (primary, secondary, university graduate), economic level (low, middle, high), habit, existence of a chronic disease, and the number and type of deliveries were also determined.

Analytical analysis

The data obtained from the study were analyzed with SPSS 15.0. Categorical values were compared with the Chi-square test. A p-value of less than 0.05 was considered significant.

RESULTS

Mean age of the 223 infants comprising the study population was 6-24 months, 44,39% of them were girls (n= 99). Overall six months EBF frequency was 32,28%. When the factors that affected interrupting EBF were investigated, the incidence of interrupting EBF was higher among mothers with higher income (68.4%) than mothers with middle income (67.97%), and low income (65.38%) although this difference was not statistically significant ($p=0.23$) (Table 1). The median age of EBF was 17 weeks (1-45 weeks). Mothers between age 20- 34.9 years had a longer median duration of EBF ($p=0.001$) (Table 3). Regarding Mother's education level, poorly educated mothers have the shortest median duration of EBF (Fig 2). Mothers with chronic diseases (n=36)(16.1) interrupted EBF earlier than mothers without chronic diseases ($p=0.01$). These chronic diseases included diabetes mellitus, asthma, goiter, and hypertension. Mothers who interrupted EBF had a shorter median duration of breastfeeding (median: 10, range 0-24 months) than EBF group (median: 14, range 6-24 months) ($p=0.001$). Mothers who interrupted EBF were asked why they had introduced supplementary foods earlier. The most frequent answer was mother's perceptions of having inadequate breast milk (50.3%) (Table 2). The most frequent first complementary feeding given to the baby by EBF mothers was rice (29%), whereas it was a commercial infant formula (33%) among non-EBF mothers ($p=0.001$).

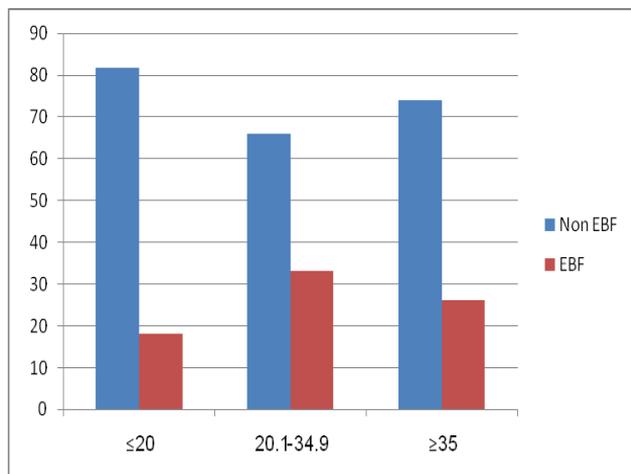


Fig (1). Mothers age (years) and EBF

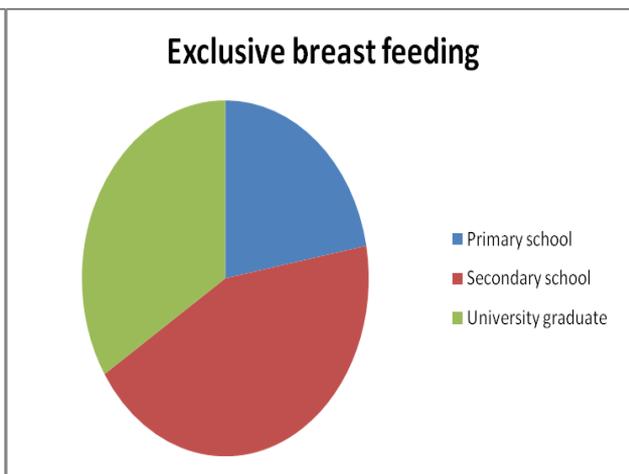


Fig (2). Mothers education level vs EBF

Table (1). Characteristics of the EBF and non-EBF babies

		Exclusively breastfed infants		P	
		No n 151 (67.7) %	Yes n 72 (32,28) %		
Gender	Boy	76 (61, 29)	48 (38.7)	0.090	
	Girl	75 (75,7)	24 (24.2)		
Mother age (yr)	≤20	9 (81.8)	2 (18.2)		
	20.1- 34.9	125 (66.1)	64 (33.9)		
	≥35	17 (73.9)	6 (26.1)		
Mother's working status	Housewife	8 (66.6)	4 (33.4)		0.93
	Employed	143 (67.7)	68 (32.3)		
Mother's education level	Primary school	13 (81.25)	3 (18.75)		0.65
	Secondary school	79 (63.2)	46 (36.8)		
	University graduate	59 (71.9)	23 (28.1)		
Mother's chronic diseases	Present	30 (76.9)	9 (23.1)	0.175	
	Absent	121 (65.7)	63(34.3)		
Economic level of the family	Low	17 (65.38)	9 (34.62)	0.23	
	Middle	121(67.97)	57(32.03)		
	High	13(68.4)	6(31.6)		
Order of child	First	68 (70.8)	28(29.2)	0.386	
	Second or more	83(65.35)	44(34.65)		

Table (2). Perceptions of non-EBF mothers about why they had interrupted EBF (n=151).

Reason	Number	%
Breast milk was inadequate	76	50.3
Infant does not suck	23	15.2
Mother's own decision	4	2,6
Infant had a health problem	5	3.3
Infant had inadequate weight gain	27	17.8
Being twin	3	1.9
Mother's health problems	7	6.6
Mother was pregnant	6	3.9
Total	151	100

Table (3). Factors affecting median week of EBF

Characteristic	n, (%) (n=223)	Median week of EBF	p
Gender	Boy Girl	17 16	
Mother's age (years)	≤19 20.1- 34.9 ≥35	14 19 15	0.001
Mother's working status	Housewife Employed	20 17	
Mother's education level	Primary school Secondary school University graduate	19 16 20	
Mather's chronic diseases	Present Absent	11 18	0.0046
Economic level	Low Middle High	24 17 17	

DISCUSSION

The reasons why mothers introduced foods earlier and the duration of breastfeeding were investigated in Libyan infants in our region, in Albaida city. In the present study sample, the frequency of six months EBF was 32%, the mean EBF was 3.6 months, and the predominant EBF (received breast milk and plain water, water-based liquids, and/or juice only (excludes other milk)) was 4.2 months for all. A previous study in Benghazi– Libya showed that

mixed feeding (breast plus artificial) was practiced by most of the mothers (61.5 to 79.2%) starting from 4 months to 24 months after birth (Shembesh, Balo, & Singh, 1997). In mothers with chronic health problems, breastfeeding for more than six months was found to be only 23.1% compared to 34.3% for infants of mothers who did not have a disease. These results suggest that chronic maternal diseases are associated with low breastfeeding rates because of social and economic inequalities which

worsen pregnancy and child-related outcomes. In some international studies, mothers with a chronic illness like diabetes and low EBF rates were found to be due to the factors including infants admission to the neonatal intensive care unit, and maternal– infant separation (Oza-Frank, Chertok, & Bartley, 2015). In another study, mothers concerns about illness or the need to take medicine were found to be one of the main reasons for the early termination of breastfeeding (Odom, Li, Scanlon, Perrine, & Grummer-Strawn, 2013). So, Health care services should especially take into account the needs of mothers with chronic diseases, and to inform about the misconceptions about breastfeeding and support them. Also in our study group, mothers aged ≤ 20 years had a shorter EBF duration than mothers aged between 20-35 years (Fig 1). The breastfeeding rate among adolescent mothers (aged < 20 years) in the US was reported to be low and has been dropping (Smith, Coley, Labbok, Cupito, & Nwokah, 2012). The stated reasons for this age group were poor breastfeeding knowledge and skills, inadequate health care, being unprepared for the demands of motherhood. When non-EBF mothers were asked why they had interrupted EBF, the most frequent reasons were the thought of not producing adequate breast milk (50.3%) and that the infant does not suck (15.2%). Compared to results from other countries, Maternal anxiety of inadequate breast milk was stated to be the main reason to stop EBF in Sri Lanka (Perera, Abeyweera, Fernando, Warnakulasuriya, & Ranathunga, 2012). In Turkey, the most frequent reason was inadequate breast milk (42.6%) (Neslihan, Rukiye, & Yıldız, 2015). In Iran, the most frequently cited reasons for mothers for discontinuing EBF were physicians recommendation (54%) and insufficient breast milk (28%) (Olang, Heidarzadeh, Strandvik, & Yngve, 2012). In the US, mothers who discontinued EBF were more likely to have experienced problems with their infant latching on or sucking or reported that a health care provider recommended formula supplementation (Taveras

et al., 2004). Physicians and other health professionals have an important role to play in encouraging and supporting mothers to maintain breastfeeding. More than 95% of women are biologically capable of producing a sufficient quantity of milk or are able to accomplish adequate infant weight gain through breastfeeding alone. Anyhow, when a mother perceives that she is not providing an adequate quality or quantity of milk to her infant, she is likely to stop breastfeeding regardless of the infant's age (Odom et al., 2013).

CONCLUSION

In our study group, EBF rates and duration of breastfeeding was found to be low among breastfeeding mothers who attended outpatient pediatric clinics. Children were unnecessarily introduced to supplementary foods earlier although mothers breast milk was adequate. The study indicated that the frequency of 6 months EBF (32.28%) and the median duration of breastfeeding (9 months) are low in our region, in Albaida city. We must develop a local strategy to overcome mothers' negative perceptions about EBF by increasing interviews with them about breastfeeding. It is essential to educate new mothers and prospective mothers about infant feeding. We believe that many health problems can be prevented by minimizing mistakes made in infant nutrition.

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معدل انتشار الرضاعة الطبيعية الحصرية ومخاوف الأمهات بشأنها لدى النساء الليبيات في مدينة البيضاء

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تاريخ الاستلام: 30 يونيو 2019 / تاريخ القبول: 9 سبتمبر 2019

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المستخلص: توصي منظمة الصحة العالمية وصندوق الأمم المتحدة للطفولة (اليونيسيف) والأكاديمية الأمريكية لطب الأطفال بوجود استمرار الرضاعة الطبيعية الحصرية خلال الأشهر الستة الأولى من العمر وأن تستمر لمدة عامين لتحقيق النمو الأمثل، في حين تقترح بدء الأطعمة التكميلية من الشهر السابع. تهدف الدراسة إلى تحديد وتيرة وفحص العوامل المؤثرة في الرضاعة الطبيعية الحصرية عند الرضع الذين تم قبولهم في عيادة الأطفال الخارجية في مستشفى الثورة في مدينة البيضاء - ليبيا. أجريت دراسة مستعرضة في فترة ثمانية أشهر بين 223 من الأمهات المرضعات مع أطفالهن الذين تتراوح أعمارهم بين 6-24 شهرا من بين الذين حضروا إلى العيادة الخارجية للأطفال وجمعت تصورات الأمهات حول الرضاعة الطبيعية وممارسات التغذية التكميلية والخصائص الديموغرافية عن طريق إجراء مقابلات مع الأمهات. فترة الرضاعة الطبيعية الحصرية بمعدل 1-45 أسبوعاً والأسبوع الوسيط 17 أسبوعاً وكان معدل الرضاعة الطبيعية الحصرية لمدة 6 شهور 32 % . كان الأسبوع الوسيط للرضاعة الطبيعية الحصرية أقل لدى الأمهات الأصغر سناً من 20 أو الأكبر من 35 والأمهات اللاتي يعانين من أمراض مزمنة كما كان متوسط مدة الرضاعة الطبيعية هو 9 أشهر وكان السبب الأكثر شيوعاً للانقطاع المبكر عن الرضاعة الطبيعية الحصرية هو تصورات الأم عن عدم كفاية حليب الأم (50%). تشير الدراسة إلى أن معدل الرضاعة الطبيعية الحصرية (32 %) لمدة 6 أشهر ومتوسط مدة الرضاعة الطبيعية 17 أسبوعاً منخفض في البيضاء لذلك يجب تطوير إستراتيجية محلية للتغلب على تصورات الأمهات السلبية تجاه الرضاعة الطبيعية الحصرية في الأشهر الستة الأولى من عمر الرضيع.

الكلمات المفتاحية: الرضاعة الطبيعية؛ الحصرية؛ رضيع؛ تغذية.