



KNOWLEDGE, ATTITUDES AND PRACTICES OF MOTHERS TOWARDS BREAST FEEDING IN ELOBEID, SUDAN

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ABSTRACT

Background: Breastfeeding is the universally accepted means of infant feeding. The World Health Organization (WHO) recommends exclusive breastfeeding for the first six months of life and thereafter continued breastfeeding until two years of age along with complementary foods. **Objective:** The objective of this study is to determine knowledge, attitudes and practices of mothers towards breastfeeding in El-Obied, Sudan. **Methodology:** This community based cross-sectional study comprised of 245 mothers. Data were collected via questionnaire and analyzed by SPSS software, version 11.5. **Results:** The study revealed that 45% of mothers have knowledge about exclusive breastfeeding until six months. 98% and 97% of mothers know breast feeding helps to stimulate uterine contraction and decrease the risk of getting breast cancer respectively. 45% of mothers know the correct time to introduce complementary feeding. 92% of mothers think that artificial feeding not useful for baby. 86% of the mothers started breast-feeding immediately. The prevalence of breastfeeding (less than 6 months) is 84%, while 70% of mothers discontinued of exclusive breastfeeding due to cracked nipples. About 49% of mothers feed their baby on demand. The study revealed that housewives mothers more likely to practice breastfeeding as compared with employe mothers ($X^2 = 22.8$, $df = 1$, $p < 0.00001$). **Conclusion:** This study concluded poor knowledge and practice to breastfeeding for the first six months.

KEYWORDS: KNOWLEDGE, ATTITUDES, PRACTICES, BREASTFEEDING, ELOBEID, SUDAN.

INTRODUCTION

Breast milk contains all the nutrients, antibodies, hormones and immune factors that a baby needs. On 18 May 2001, the World Health Organization (WHO) endorsed exclusive breastfeeding (BF) until an infant is 6 months of age.^[1] If the drive for universal BF in the first 6 months is accomplished, an estimated 1.5 million lives could be saved each year. In addition to the great nutritional and psychological values, breast milk contains antibodies that help protect the baby against many common childhood diseases. It is clean, always at the right temperature, inexpensive and nearly every mother has more than enough of this high quality food for her baby. Breastfeeding is the ideal method suited for the physiological and psychological needs of an infant.^[2,3]

In fact, breast milk has disease-fighting antibodies that can help protect infants from several types of illnesses and mothers, who breastfeed have a lower risk of some health problems, including breast cancer and type 2 diabetes.^[4]

The key to successful breastfeeding is Information, Education and Communication (IEC) strategies aimed at behavior change. In such situation, the main source of information to mothers is through family and friends, which is often inadequate.^[5, 6] The current study designed to determine the knowledge, attitudes and practices of mothers towards breastfeeding in El-Obeid, Sudan.

MATERIALS AND METHODS

Study area

El-Obeid is the capital of North Kordofan State. Its area have been estimated by 81 km² and the distance from Khartoum is about 560 km. El Obeid is connected to Khartoum by an asphalt motorway, a railway line and air-flights taking off its airport several times a week.

North Kordofan state located in central Sudan latitude 13° 20' N longitude 30° 15' E, 570 m above sea level, the semi arid area of north kordofan receive an annual precipitation of about 280 – 450 mm in the months from July to September, temperature is generally high averaging 37°c in the summer and 18°c in the winter. The

population of the City estimated by 440483 person. There are 38000 houses, 40000 families.^[7]

Study population

Mothers in El-Obeid.

Study design

Community based cross-sectional study.

Sample size

A total of 245 mothers were selected as a study subject. The sample size calculated with Cochran's formula; $n = z^2 \cdot pq/d^2$.^[8] Where, n: Calculated sample size; z: The z-value for the selected level of confidence = 1.96; p: an estimated prevalence of exclusive breast feeding in the population = 80%, i.e., 0.8. q: $(1 - p) = 20%$, i.e., 0.2; d: The maximum acceptable error = 0.05.

Sampling technique

Culster sample: El-Obied, City was divided into four equal quarters (Clusters). The samples were selected from each quarter of El-Obeid City following a process of simple random sample.

Data collection methods and tools

- Method: An interview
- Tools: A structured questionnaires

Data processing & analysis

Data were analyzed using Statistical Package for Social Sciences (SPSS) version (11.5).

Ethical consideration

Ethical permission for the study obtained prior to collect data, by contacting and receiving approval from the appropriate management authority (North Kordofan State Ministry of Health). Participants were assured of the

confidentiality of their responses and provided informed verbal consent.

RESULTS AND DISCUSSION

The study illustrated that 45% of mothers have knowledge about exclusive breastfeeding until six months (**table.1**). While in study conducted in Egypt revealed that about one-third (33.6%) of the mothers knew the proper duration of exclusive breastfeeding.^[9] Mothers should be educated about the benefits of exclusively breastfeeding until six months.

This study showed that 98% of mothers know breast feeding helps to stimulate uterine contraction, (**table.1**) this knowledge considered high when compared with 88% know this fact in similar study conducted in Abha City Saudi Arabia, 2014.^[10]

As shown in (**table. 1**) 97% of respondents know that mother who practiced breastfeeding has a low risk of getting breast cancer, this knowledge is high as compared with 47.7% know this fact in similar study conducted in Abha City Saudi Arabia.^[10]

This study illustrated that 54% of mothers believe the time to introduce complementary feeding after four months, (**table.1**) this knowledge is wrong and in contradiction with WHO guidelines which recommended that mothers should practise exclusive breastfeeding from birth to 6 months of age and introduce complementary foods at 6 months of age (180 days) while continuing to breastfeed.^[11] While 45% of mothers know the correct time to introduce complementary feeding (after six months), (**table.1**) this finding is lower as compared with 86.8% of the mothers were having knowledge that exclusive breast feeding should be given upto 6 months.^[12]

Table 1: Knowledge of mothers towards breast-feeding

Definition of exclusive breast feeding	Frequency	Percentage
Yes	110	45%
No	135	55%
Breastfeeding helps to stimulate uterine contraction		
Yes	240	98.00%
No	5	2.00%
Mother who practiced breastfeeding has a low risk of getting breast cancer		
Yes	238	97.00%
No	7	3.00%
Benefits of burp		
Throw out the air accumulated in stomach	238	97.00%
Adding more of milk	6	2.50%
Others	1	0.50%
Time to introduce complementary feeding		
After two months	2	1.00%
After four months	132	54.00%
After six months	110	45.00%

In this study, 99% of mothers marks breastfeeding as favorite method to feed baby (**table. 2**). In a study

conducted El-Minia Governorate, Egypt the majority of the mothers had good knowledge about the advantages of

breastfeeding for child, 97.9% and 81.4% of the mothers knew that breast milk protects child from diseases as well as increases the intelligence of child, respectively.^[9] While 92% of mothers think that artificial feeding not useful to their babies (**table. 2**), this positive attitude considered high when compared with 73% of mothers think that artificial feeding not useful to their babies in similar study conducted in Southwestern Ethiopia.^[13]

This study revealed that 67% of mothers dislike breastfeeding due to shy to practice breastfeeding in public places (**table.2**), this percentage considered high as compared with 19.9% of women not breastfeed in public, in similar study carried out in the United Kingdom.^[14] This is negative attitude of mothers, should be changed. It is not possible to stay home all the time, and you can feel free to feed your baby while out, through wear your confidence! Some tips for breastfeeding in public.

Table 2: Attitudes of mothers towards breast-feeding

Breast feeding is a favorite way to feed baby	Frequency	Percentage
Yes	242	99.00%
No	3	1.00%
Opinion of mothers towards artificial feeding		
Useful	20	8.00%
Not useful	225	92.00%
Reasons that make mothers dislike breast feeding		
Shy to practice breast feeding in public places	164	67.00%
Waste of time	81	33.00%

As regards breast-feeding, 86% of the mothers started breast-feeding immediately, (**table.3**) this percentage considered high when compared with similar study conducted in Iraq which revealed that 73.1% of women started breast feeding immediately^[15] and also were higher when compared with 84% of mothers initiated breastfeeding immediately after delivery in study carried out in El-Minia Governorate, Egypt.^[9] Current study revealed that the prevalence of breastfeeding was 84%, (**table.3**) this prevalence considered high as compared with 32.8% of women practice breastfeeding in similar study conducted in Malaysia.^[16] Also considered high rate when compared with 24.7% of women practice breast feeding in Saudi Arabia.^[10] while 15% practice

mixed infant feeding. These rates were in consistence with those reported in Malaysia, which found 14.5% of mothers practice mixed infant feeding.^[16] This study showed that factors associated with discontinued of exclusive breastfeeding were mothers' cracked nipples (70%), working status (10%) and insufficient breast milk (20%), (**table.3**). In similar study conducted in Malaysia 48% of mothers discontinued of exclusive breastfeeding due to insufficient breast milk.^[16] Frequency of breast feeding per day in this study were 10% every hour, 13% every two hours, 28% every three hours and 49% feed their baby on demand (**table 3**). The latter finding also reported in similar study in Iraq which found that 64.6% of mothers breastfed on demand.^[15]

Table 3: Practices of mothers towards breast-feeding

Time of breastfeeding initiating	Frequency	Percentage
Immediately	211	86.00%
Two hours	22	9.00%
Three hours	2	1.00%
Others	10	4.00%
Types of feeding		
Breast feeding	206	84.00%
Artificial feeding	2	1.00%
Both types	37	15.00%
Reasons that make mothers discontinued breast-feeding		
Cracked nipple	172	70.00%
Working conditions	24	10.00%
Insufficient breast milk	49	20.00%
Organizing of baby feeding frequency		
Every hour	24	10.00%
Every two hours	32	13.00%
Every three hours	69	28.00%
Given on demand	120	49.00%
Plan of employe mothers to continue breast-feeding		
Feeding baby before and after return from the work	194	79.10%
Expressing breastmilk in a bottle to feed baby later	51	20.90%

The current study showed that, there is statistical association between type of feeding and occupation of mothers, which revealed that housewives mothers more likely to practice breastfeeding as compared with employe mothers ($X^2 = 22.8$, $df = 1$, $p < 0.00001$) (table. 4).

Table.4: The association between the types of feeding practiced by mothers and their occupations.
n=245

Occupation	Type of feeding				Total	
	Breast feeding		Artificial			
Employe	52	21%	26	11%	78	32%
Housewife	152	62%	15	6%	167	68%
Total	204	83%	41	17%	245	100%

($X^2 = 22.8$, $df = 1$, $p < 0.00001$)

CONCLUSION

This study concluded poor knowledge and practice to breastfeeding for the first six months. So health education interventions needed.

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