ASSESSMENT OF EXCLUSIVE BREASTFEEDING (EBF) KNOWLEDGE AND PRACTICES AMONG LACTATING MOTHERS IN SANGHAR, SINDH

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ABSTRACT

Objective: To assess the knowledge and practices regarding Exclusive Breastfeeding among lactating mothers. *Study Design:* Cross sectional study.

Place and Duration of Study: Shadadpur Institute of Medical Sciences (SIMS) Hospital, district Sanghar, Sindh Pakistan over a period of three months.

Methodology: It was a cross sectional study conducted in district Sanghar Sindh on 377 lactating mothers selected by purposive sampling. Pre-structured questionnaire was used. Data was entered and analyzed using SPSS software 20. Frequencies and percentages were computed for various variables

Results: Total 377 respondents were included in the study whose ages ranged from 20 to 40 years. It was found that 233 (61.8%) started feeding their newborn in the first half hour after delivery. A significant difference was found between knowledge about breastfeeding within the first half hour after delivery, benefits of colostrum, knowledge about pre lacteal feed, according to the teachings of Holy Quran about breastfeeding, and its benefits to mother, putting the baby to breast after delivery, difficulty in starting feeding, feeding timings, hands wash and breast cleaning. Usually mothers expressed milk for the child (*p*-value <0.001)

Conclusion: EBF practice was low in the study population in SIMS. Intervention were needed to improve the practice of EBF.

Keywords: EBF, Lactating mothers, Newborn.

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INTRODUCTION

Breastfeeding (BF) has been well known since ancient ages, and has been practiced universally. It is the best and complete nutritional source for neonates and the most effective way to ensure child health and survival¹. The WHO and the UNICEF issued four basic guidelines for breastfeeding in the developing world. These recommend that mothers should initiate breastfeeding within the first half hour after birth, they should exclusively breastfeed their infants for six months, and should continue to supplement breastfeeding for two years and beyond, and mothers should avoid bottles, teats and pacifiers, which may contribute to nipple confusion resulting in infants', reduced ability to nurse².

Children who are exclusively breastfed have

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protection from several acute and chronic infectious diseases such as, gastroenteritis, sudden infant death syndrome, otitis media, atopic dermatitis, respiratory tract infections, type 2 diabetes, asthma and obesity during childhood³. It is estimated that 1.4 million deaths and 10% of morbidities occur in the first six months of life due to non-exclusive breast-feeding (non-EBF) in under-five children.

Non- EBF also have long term impact on reduced productivity as a result of poor school performance, impaired intellectual and social development⁴. Previous studies showed that breastfed babies have improved academic performance, are more intelligent, and smarter than formula fed babies are⁵.

According to UNICEF report 2011,136.7 million babies born globally and only 32.6% of them are BF exclusively in the first six months of life in spite of the constant efforts to promote it. "Global rates of exclusive breastfeeding for

the infant less than six months of age crept from 32% in 1995 to 39% in 2010". The situation is not different for Pakistan where the exclusive breastfeeding rate raised from 26 percent in 1995 to 36 percent in 2006-20076.

In a study in Mozambique, 37% of 6 months old infants are EBF. They receive water, porridges and traditional medicines before six months of age. Majority of mothers had however heard of the recommendation to EBF for six months. Some of them expressed willingness to support EBF if informed by HCWs⁷.

A project at El-Shohada PHC, Ismailia, Egypt found about 77% mothers know the benefits of EBF. About 68% mothers follow the WHO recommendation about EBF for the first six months while 97% prefer to breastfeed on the demand by the child. In addition, 48.2% reported that the first food during weaning was milk products⁸.

In Abha City, overall mother's knowledge regarding BF was good among 55.3% and excellent among 30.7% of them. "It was unsatisfactory among 14% of the mothers. Positive attitude towards BF was reported in 62.2% of the mothers while negative or poor attitude was reported among 37.8%. Mixed BF in the first six months was practiced by 24.7% of the mothers while only 7.3% practiced EBF9.

A study in South India found that know-ledge of the participants was inadequate in areas of "time of initiation of breastfeeding (92%), colostrum feeding about (56%), and duration of exclusive breastfeeding (38%), knowledge on expressed breast milk (51%) and continuation of breastfeeding while baby is sick" ¹⁰.

According to demographic and health survey 2006-07 Pakistan, 5718 children aged 0 to 23 months were selected for study. Only 26.3% of mothers initiated breastfeeding within the first hour after birth, 97.6% had ever breastfed, 92.5% were currently breastfeeding, and 62.7% were currently bottle feeding". The likelihood of not initiating breastfeeding within first hour after birth was higher for mothers who had not visited the antenatal clinic (OR 1.54)," no post-natal visits

(OR 1.45), working mother (OR 1.76) delivery at facility based center (OR 1.95), richer households (OR 1.77), birth order >5 (OR 1.67), and formally married women (OR 2.31). Another study recommended that there is need for promotion of breastfeeding practices in the community¹¹.

According to PDHS 2012-13 prevalence of EBF is 37.1% in Pakistan, which needs to be improved. The current study is conducted to assess the knowledge and practices of lactating mothers, so as to take appropriate steps in areas as identified source of deficiency to developing attitude and practice of EBF.

METHODOLOGY

It was a cross sectional study, conducted in Shadadpur Institute of Medical Sciences (SIMS) hospital, district Sanghar, Sindh Pakistan over a period of three months. By purposive sampling, 377 mother Child pairs of less than six month of age were included, attending the postnatal wards, Children wards or OPDs in SIMS, Sanghar Sindh. Mothers with history of complicated delivery and who were not allowed to feed her baby by medical professional and children with congenital anomalies were excluded.

Structured questionnaire was used to collect the data, which was translated in the National language Urdu and was pilot tested prior to the administration.

Ethical approval was taken from Review Committee/Board of Health Services Academy, Islamabad. The Data was collected after detailed written permission for research was taken from the executive district officer (EDO) of SIMS hospital. Strict confidentiality was assured to avoid reporting bias. Data was used solely for the purpose of the study.

RESULTS

This study was conducted in SIMS Sanghar to assess the knowledge and practices of exclusive breastfeeding among lactating women. Out of total 233(61.8%) mothers started breastfeeding their newborn in first half hour after delivery. Age of lactating mothers ranges from 20 to 40

years. Most women 269 (71.4%) were less than 30 years. Majority participant lactating mothers included in this study were Sindhi about 247 (65.5%), followed by Urdu speaking as 67 (17.8%). and Few were Punjabi 45 (11.9%), and Saraiki about 12(3.2%), and a very small of number Pakhtoon 6 (1.6%). Majority of the participants of this study were uneducated (318; 84.4%)

had no baby girl while 37 (9.8%) had no baby boy. About 277 (73.5%) and 299 (79.3%) reported two or less than two baby girls and boys respectively. 68 (18%) and 41 (10.9%) had three or more than three baby girls and boys respectively. Majority mothers delivered their babies normally 266 (70.6%), followed by C-Section as 94 (24.9%) and by Episiotomy as 17 (4.5%). Most of the lactating

Table-I: Knowledge about breastfeeding.

Variables	Total n (%)	EBF		
		No n (%)	Yes n (%)	
Is baby breast-fed within one l	hou of birth?			
No	278 (73.7)	115 (30.5)	163 (43.2)	
Yes	29 (7.7)	70 (18.6)	99 (26.3)	
Do you start breastfeeding the	baby within first half hour of birth	1?		
No	152 (40.3)	42 (11.1)	110 (29.2)	
Yes	225 (32.6)	102 (27.1)	123 (32.6)	
Do you know what exclusive h	breastfeeding is?			
No	278 (73.7)	111 (29.4)	167 (44.3)	
Yes	99 (26.3)	33 (8.8)	66 (17.5)	
Do you know benefits of colos				
No	290 (76.9)	123 (32.6)	169 (44.3)	
Yes	87 (23.1)	21 (5.6)	66 (17.5)	
Do you know about provision	of pre lacteal feed?		,	
No	136 (36.1)	32 (8.5)	104 (27.6)	
Yes	241 (63.9)	112 (29.7)	129 (34.2)	
Is water, gutty, honey preferal		7		
No	80 (21.2)	19 (5)	61 (16.2)	
Yes	297 (78.8)	125 (33.2)	172 (45.6)	
Is there any requirement of given	ving water, formula or other supple		ou are breastfeeding your baby?	
No	35 (9.3)	13 (3.4)	22 (5.8)	
Yes	342 (90.7)	211 (56)	131 (34.7)	
Is it necessary to continue brea	\ /			
No	73 (19.4)	28 (7.4)	45 (11.9)	
Yes	304 (80.6)	188 (49.9)	116 (30.8)	
Do you know breastfeeding pe		. /		
No	106 (28.1)	31 (8.2)	75 (19.9)	
Yes	271 (71.9)	113 (30)	158 (41.9)	
Are there benefits of breastfee		\ /	. /	
No	168 (44.6)	94 (24.9)	74 (19.6)	
Yes	209 (55.4)	159 (42.2)	50 (13.3)	
			. ,	
Do you know BF is natural bir	tii Spacing?			
Do you know BF is natural bir	237 (62.9)	104 (27.6)	133 (35.3)	

and remaining participants were unemployed (351; 93.1%). About half (185; 49.1%) of the participant mothers had nuclear type of family system while rest (192; 50.9%) lived in extended family system. Lactating mothers had family size; minimum as one and maximum nine children. About 253 (67.1%) mothers had three or less than three children, while 124 (32.9%) reported four or more than four children. 32 (8.5%) participants

mothers 231 (61.3%) had no help for child care. Out of 38.7%, 84 (22.3%) had full time help while remaining 62 (16.4%) had part time help for child care at their homes. Out of total 176 (46.7%) mothers had previous disease history, rest 201 (53.3%) had normal and healthy past.

Knowledge of lactating mothers regarding EBF and EBF practice

Out of total only 225 (32.6%) of the participant lactating mothers started breastfeeding with in half hour of delivery. While only 29 (7.7%) knew that it should be started as early as possible. Out of total 99 (26.3%) knew about exclusive breastfeeding while benefits of colostrum were known to 87 (23.1%) of the

should be continued for the two years of child age. Out of total 271 (71.9%) knew the teachings of Holly Quran about breastfeeding practices and duration. About 209 (55.4%) considered that breastfeeding is beneficial for the mother and about 140 (37.1%) knew that it is the natural method of birth spacing. Overall knowledge

Table-II: Practices among lactating mothers and EBF practice.

Variables	1		BF
	Total n (%)	Non n (%)	Yes n (%)
Ask for baby to be put to bre	east while you were inside the labor r	oom?	• •
No	186 (49.3)	91 (24.1)	95 (25.2)
Yes	191 (50.7)	53 (14.1)	138 (36.6)
Any trouble with starting br	eastfeeding in the early hours after de	elivery?	
No	161 (42.7)	101 (26.8)	60 (15.9)
Yes	216 (57.3)	173 (45.9)	43 (11.4)
How many times do you bre	east feed your baby in a day?	,	
When need	161 (42.7)	50 (13.3)	111 (29.4)
When baby cries	102 (27.1)	51 (13.5)	51 (13.5)
When baby awoke	114 (30.2)	43 (11.4)	71 (18.8)
Do you feed your child accor	rding to set feed timings?	, ,	`
No	278 (73.7)	110 (29.2)	168 (44.6)
Yes	99 (26.3)	34 (9)	65 (17.2)
Do you feed your baby from	both breasts at each feed time?		
No	74 (19.6)	21 (5.6)	53 (14.1)
Yes	303 (80.4)	123 (32.6)	180 (47.7)
Ensure proper feeding positi	ioning?	,	
No	103 (27.3)	49 (13)	54 (14.3)
Yes	274 (72.7)	95 (25.2)	179 (47.5)
Practice about cleaning of ha	ands and breast before feeding?		,
No	164 (43.5)	49 (13)	115 (30.5)
Yes	213 (56.5)	95 (25.2)	118 (31.3)
Do you add some fluid in di	et of your baby less than six month of	f age?	
No	28 (7.4)	7 (1.9)	21(5.6)
Yes	349 (92.6)	137 (36.3)	212 (56.2)
If the baby is suffering from	diarrhea, do you stop breastfeeding?	, ,	
No	138 (36.6)	46 (12.2)	92 (24.4)
Yes	239 (63.4)	98 (26)	141 (37.4)
If you had a CS, did you stai	t breastfeeding the baby within 24 ho	ours?	
No	244 (64.7)	102 (27.1)	142 (37.7)
Yes	133 (35.3)	42 (11.1)	91 (24.1)
Milk expression practices wl	nen going outside to home?	<u> </u>	,
No	148 (39.3)	71 (18.8)	77 (20.4)
Yes	229 (60.7)	73 (19.4)	156 (41.4)
If using mixed feed, is it Free	sh milk or formula feed?	<u> </u>	,
No	79 (21)	31 (8.2)	48 (12.7)
Yes	298 (79)	113 (30)	185 (49.1)
		` /	\ /

mothers. Around 241 (63.9%) knew about pre lacteal feeds, 297 (78.8) considered that water, gutty and honey are pre lacteal foods. According to only 35 (9.3%) mothers there was no need of water, formula milk or any food supplement in the first six months of life. While 304 (80.6%) reported that breastfeeding is necessary and

about breastfeedingwas found to be low in the studied population.

Practices among lactating mothers and EBF practice

Just after birth of newborn about half 191 (50.7%) demand to put the baby on mother

breast. More than half 216 (57.3%) experienced trouble in starting feeding immediately after delivery. 161 (42.7%) mentioned that they fed the child when baby needs and demand, 102 (27.1%) fed when baby cries while remaining 102 (27.1%) fed when the child awoke after getting sleep. About 99 (26.3%) lactating mothers set feeding time for their child. 303 (80.4%) fed to child from both sides of breast, 274 (72.7%) ensure proper positioning during feeding, and 213 (56.5%) clean their hands and breast before feeding to child. Majority 349 (92.6%) gave some other fluid to babies under six months of age along with breast milk. Majority of women 239 (92.6%) stop breastfeeding when child suffer from diarrhea. Large proportion of mothers 229 (60.7%) extract breast milk for child when they go outside from home for long time.

DISCUSSION

According to the results of this study only 225 (32.6%) of the participants exclusively breast fed theirbabies. The result contrasts with the results of the study conducted by Haque MM which showed that most of the respondents (90%) in Dhaka practiced exclusive breast-feeding¹². Results of this study was also less than the study of Nigeria according to which 82.3% lactating mothers were practicing exclusive breastfeeding⁹.

According to the results of this study out of total 26.3% know about exclusive breastfeeding while benefits of colostrum was known to 23.1% of the mothers. Their results are much better than ours.Results of Kigali, showed that 74.4% of the mothers have correct knowledge about the EBF¹³. Another research conducted by Ogbonna C, and Daboer J in Nigeria shows that 82.3% was able to define correctly exclusive breastfeeding. According to another study of Nigeria 87.0% of the mothers had good knowledge of exclusive breastfeeding but only fifty three percent 53.6% were practicing exclusive breastfeeding¹⁴.

In present study knowledge was inadequate about breastfeeding within first half hour after delivery, benefits of colostrum, knowledge about pre lacteal feed, teachings of Holy book about breastfeeding, and its benefits to mother. Ekambaram *et al* mentioned slightly similar results i.e. knowledge of the mothers was inadequate in areas of time of initiation of breastfeeding (92%), colostrum feeding (56%), duration of exclusive breastfeeding (38%), and knowledge on expressed breast milk (51%)¹⁰.

Results of this study showed that about 55.4% considered that breastfeeding is beneficial for the mother. Again the results contrast by the study of Bollela V who reported that 77% of total population know the benefits of breastfeeding to their child, AbionaTCmentioned that 96.5% were knowledgeable about the benefits of breastfeeding¹⁵.

About 42.7% mentioned that they fed the child when baby needs and demand, 27.1% fed when baby cries while remaining 27.1% fed when the child awoke after getting sleep. Bollela V reported that 97% prefer breastfed on the demand of her child⁸.

56.5% of the respondents reported that they clean their hands and breast before feeding to child. The practice of breast cleaning is much better in a study done in Brazil that 70.1% of the mothers wash their breasts before breastfeeding their children⁸.

Unemployed lactating mothers practiced more EBF than employed mothers. In a study done in Ethiopia find out the same results that house wife women were more likely exclusively breast feed their child compared to those employed¹⁶. A study conducted by Kim TD and et all in Vietnam showed that 26-30 age group intended to have more positive attitude about EBF than other age groups. The lower education participants and the famer both intended to higher self-reported EBF more than the higher education participants and others jobs¹⁷.

CONCLUSION

It was found that out of total 233(61.8%) started feeding to newborn in first half hour after delivery. Significant difference was found

between knowledge about breastfeeding within first half hour after delivery, benefits of colostrum, knowledge about pre lacteal feed, teachings of Holy book about breastfeeding, and its benefits to mother, putting the baby on chest after delivery, trouble in starting feeding, feeding times, hands and breast cleaning, expressed milk for child.

CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any author.

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