

## Assessment of Knowledge, Attitude and Practices of Lactating Mothers Regarding Exclusive Breastfeeding at THQ Hospital Charsadda (A Cross Sectional Study)

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### ABSTRACT

**Background:** World Health Organization (WHO) advocates exclusive infant feeding and define it as “no alternative food or drink, not even water, except breast milk (including milk expressed or from a wet nurse) for six months of life, however permits Oral Rehydration Solution (ORS), drops and syrups (vitamins, minerals & medicines). This study was conducted to assess knowledge, attitudes and practices (KAP) of lactating mothers regarding exclusive breastfeeding (EBF) & factors influencing the KAP of lactating mothers towards EBF.

**Methods:** Study was conducted from November 2021 to March 2022. Totaling 384 participants, the data were selected through interview based structured questionnaire and analyzed through SPSS 24. Descriptive statistics were applied for demographic variables and Fisher's Exact Test for statistical significance among categorical variables where P value of <0.05 is considered as significant.

**Results:** In 384 lactating mothers, only (30.5%) feed their babies exclusively. And (34.4%) initiated breastfeeding within an hour after the delivery. Lactating mother had average knowledge (mean score: 52.9) and attitude about EBF (mean score: 58.3). Monthly income, background (rural and urban), were significantly associated with knowledge of EBF ( $p < 0.05$ ; CI=95%). Education & Monthly income of the mothers were also significant to the EBF attitude.

**Conclusion:** The majority of the mothers had average knowledge and attitude toward EBF. The EBF practices were suboptimal than recommended.

**Recommendations:** Effective community health education is key to increasing EBF. Media campaigns and research into social and cultural motivators can further enhance EBF practices.

**Keywords:** Breast Feeding, Exclusive Breast Feeding (EBF), Knowledge, Attitude, Practices.

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### INTRODUCTION

Exclusive infant feeding (Also known as EBF) is defined by the World Health Organization (WHO) as "no other food or drink, not even water, except breast milk (including milk expressed or from a wet nurse) for the first six months of life, but allowing the child to receive ORS, drops, and syrups" (vitamins, minerals & medicines).<sup>1</sup> Breastfeeding is unmodified what's more, free from germs and involves total supplements needed for children.<sup>2</sup> It has an accurate temperature, is handily processed and absorbed, promptly delivered and accessible.<sup>3</sup> There are numerous immunological and nutritious benefits of breastfeeding within the first hour and the reduction of neonatal mortality rate.<sup>4</sup> Millennium Development Goals (MDG4) is i.e. 31 deaths per 1000 live births and globally the mortality rate of under-five has

declined to 53%, but it is still far from gaining the Millennium Development Goals.<sup>4</sup> In South Asian country's death rate is yet high in children whose age is less than five years, i.e. 51 deaths per 1,000 live births in 2015. Before reaching their 5th birthday in this region, one out of 19 children died.<sup>5</sup> Infants in underdeveloped countries who are not breastfed face a six-fold higher risk of dying from infectious diseases than those who are breastfed during the first months of life. Breastfeeding women had a lower risk of breast cancer and postpartum hemorrhage.<sup>6</sup> On the earth Pakistan being seven.<sup>7</sup> The most crowded country, has a high newborn child death rate. As per the United Nation Child Emergency Fund (UNICEF) reports (2006) that exclusive breastfeeding in Pakistan is only 16% while the baby mortality of Pakistan remains 76/1000 of live births.<sup>8</sup>

This study was the first to evaluate lactating mothers' understanding, attitudes, and behaviors towards exclusive breastfeeding, aiming to identify the influencing factors.

### MATERIALS AND METHODS

This was descriptive cross-sectional study, carried out from November 2021 to March 2022 at Tehsil Headquarter (THQ) hospital Shabqadar, Charsadda Khyber Pakhtunkhwa. Using convenient sampling technique, 384 lactating mothers were recruited as sample for collection of data on the basis of inclusion and exclusion criteria. Sample size was calculated on sample calculating tool Open-epi with anticipated frequency of 50% and confidence interval 95%. All lactating mothers were selected from OPD included in the study having babies less than a year and excluded those mothers whose babies need intensive care and mothers with any co-morbidity like hepatitis, HIV or AIDS etc.

A structure questionnaire was designed which was translated into Urdu language for the better understanding of the study participants and content validity was checked by the experts, content validity Index (CVI) was 0.94. A pilot study was also carried out on questionnaire on 20 subjects for reliability, the Cronbach alpha value was 0.78. The data were acquired through a face-to-face interview using the structured questionnaire. The first part of the questionnaire consisted of demographic variables (income, age, religion, employment, background, and education) and the second part containing questions regarding the practices of lactating mother regarding exclusive breast feeding, third part containing questions regarding knowledge while the fourth part contained the attitude questions. Mothers' attitudes toward breast feeding were assessed using the Lowa Infants Feeding attitude scale (IIFAS).

Using IBM SPSS version 24, data were analyzed. Descriptive statistics were applied for demographic variables and inferential statistics i.e. Fisher Exact Test was used to find out relationship between

Table 1. Knowledge categories (poor, average and good) according to age, monthly income, background, employment and education of participants

Age of the mothers	Knowledge Category of the Participants				Total	Fisher's Exact Test. p <.05)
	Poor	Average	Good			
less than 19	3	55	2	60	p=0.129	
20 to 25	8	139	8	156		
26 to 30	0	77	3	80		
more than 31	0	84	4	88		
Total	11	356	17	384		
Monthly Income of the mothers	15000- 20000	7	119	0	126	p=0.006
	20001 - 25000	2	69	5	76	
	25001-30000	0	44	2	46	
	Above 30000	2	124	10	136	
	Total	11	356	17	384	
Background of the mothers	Rural	11	324	10	345	
	Urban	0	32	7	39	

knowledge, attitude and practices of EBF and with demographic variables. Results were summarized in following tables.

### RESULTS

A total of 384 breast feeding mothers were recruited. Total 4 groups of mothers were made having age less than 19 to age greater than 30. All participants were Muslim. The rural and urban mothers were 39 (10.2%) and 345 (89.8%) respectively. Employed mothers were only 98 (25.5%) while unemployed mothers were 286 (74.5%). The lactating mothers were also divided into 5 groups on the basis of education as illiterate, primary school education, middle school education, matric and higher education. On the basis of types of delivery, the mothers were divided into two groups, mothers who had normal delivery, 309 (80.5%), and C-section mothers, 75 (19.5%).

Fisher Exact is used to see association among categorical variables. The Test showed significant relationship between knowledge about EBF and monthly income of mothers (p=0.006), background of mothers (p=0.001), and employment of mothers (p=0.037) while found insignificant with age of mothers (p=0.129), and education of mothers (p=0.089), it was summarized in table 1.

Using Fisher Exact Test, relationship was significant between attitude score of mothers towards EBF and monthly income of mothers (p=0.015), but insignificant relation with employment of mothers (p=0.78), and education of mothers (p=0.572), showed in table 2.

Using Fisher's Exact Test, (one or more cells counts less than 5 in our data) there was significant result between practices score of mothers towards EBF and employment of mothers (p=0.004), and education of mothers (p=0.001). But we found that there was no significant relation between practices score of mothers towards EBF and age of mothers (p=0.484), and background of mothers (p=0.226), summarized in table 3.

	Total	11	356	17	384	p=0.001
Employment of the mothers	Employed	0	91	7	98	p=0.037
	Unemployed	11	265	10	286	
	Total	11	356	17	384	
Education of the mothers	Illiterate	7	202	1	210	p=0.089
	Primary	3	67	1	71	
	Middle	1	31	2	34	
	Matric	0	32	1	33	
	Above	0	30	6	36	
	Total	11	362	11	384	

Table 2. Attitude categories (poor, average and good) according to monthly income, employment and education of participants.

Monthly income of the mothers	Attitude Category of the Participants				Total	Fisher's Exact Test. p <.05)
	Salary (PKR)	Poor	Average	Good		
15000-20000		3	121	2	126	p=.015
20001-25000		5	66	5	76	
25001-30000		0	40	6	46	
Above 30000		9	101	26	136	
Total		17	328	39	384	
Employment of the mothers	Employed	4	88	6	98	p=0.78
	Unemployed	13	260	13	286	
	Total	17	348	19	384	
Education of the mothers	Illiterate	10	197	3	210	p=0.572
	Primary	5	62	4	71	
	Middle	1	30	3	34	
	Matric	1	28	4	33	
	Above	0	31	5	36	
	Total	17	348	19	384	

Table 3: Practices categories (poor and good) according to age, background, employment and education of participants

Age of the mothers	Practices Category of the Participants			Total	Fisher's Exact Test. p <.05)
	Age (Years)	Poor	Good		
less than 19		58	2	60	p=0.484
20 to 25		143	13	156	
26 to 30		73	7	80	
more than 31		79	9	88	
Total		353	31	384	
Background of the mothers	Background	Poor	Good	Total	p=0.226
	Rural	319	26	345	
	Urban	34	5	39	
	Total	353	31	384	
Employment of the mother	Employment	83	15	98	p=0.004
	Unemployment	270	16	286	
	Total	353	31	384	
Education of the mothers	Illiterate	202	8	210	p=.001
	Primary	66	5	71	

	Middle	27	7	34
	Matric	28	5	33
	Above	26	10	36
	Total	353	31	384

**DISCUSSION**

Worldwide efforts to promote and encourage breast milk as part of ideal baby feeding practices have been highlighted for many years, yet there is a disconnect between what is practiced in reality and what is recommended. There was no correlation between EBF knowledge and age in the current investigation as the Fisher Exact Test indicate insignificant result ( $p=0.129$ ). Likewise, another study conducted by Jahanzeb Khan et al, Peshawar also reported that only 8.02% participants have a good knowledge regarding EBF and age is not significant with the knowledge.<sup>9</sup> Strong relationship was found between knowledge about EBF and monthly income of mothers ( $p=0.006$ ), background of mothers ( $p=0.001$ ). For six month or longer feeding not intention of feeding of the mothers, while in hospital a baby consuming formula feeding, mother who are not attending antenatal and birth education gathering, anxiety, depression, lack of knowledge of the health care provide, especially maternity nurses and midwives, not encouraging actions, unreliable advice, least antenatal support for breast feeding these are the factors that are negative associated with EBF knowledge.<sup>10,11</sup> The attitude toward the EBF feeding in the current study was average. Total attitude mean score were 58.39. The Fisher Exact Test showed a significant value of 0.015 as  $p<0.05$  which mean that there was an association noted between the attitude level of the participants and their monthly income. A similar study cross sectional study conducted in Saudi Arabia reported 62.2% participants had positive attitude EBF.<sup>12</sup> In our study it was found that only (30.5%) lactating mother feed their babies exclusively. This trend was seen similarly in another study conducted by Tabish Hazir *et al.*, in 2011 also reported that only (26.3%) lactating mother fed their babies exclusively.<sup>13</sup> A recent study by Jahanzeb Kahn *et al.*, in Peshawar similarly discovered a marginally lower (24.07%) EBF rate among breastfeeding women.<sup>9</sup> According to the current study, 34.4% of mothers started breastfeeding right away after delivery. However, a 2015 study in India by Sunil Kumar and colleagues found that 37.2% of women started feeding their infants within an hour.<sup>14</sup> Another study in reported 82.5% lactating mother initiate breast feeding within hour.<sup>15</sup> Another study conducted by Mehwish Safdar *et al.*, in 2017 reported that education is significantly associated with exclusive breast feeding.<sup>2</sup> Most common reason for the delay is family restriction. For lactating mothers there was some form of academic education, but did not translate into their EBF practice. Lack of attention, insufficient EBF

knowledge, and lack of time for feeding were the reason for low EBF.

Community-level health education is crucial for optimal EBF, promoting exclusive breastfeeding rates. Media can educate mothers on recommended practices, and research should identify factors promoting EBF, such as social norms, cultural influences, and maternal intentions.

Limitation of this study was that the results of this study cannot be applied to the broader community because the study subjects were selected from a very small hospital population. Community-level health education is crucial for optimal EBF, promoting exclusive breastfeeding rates. Media can educate mothers on recommended practices, and research should identify factors promoting EBF, such as social norms, cultural influences, and maternal intentions.

**CONCLUSION**

In this study, lactating mother had average knowledge (mean score: 52.9) and attitude about EBF (mean score: 58.3). MI of the mother, background and education showed a significantly association with the knowledge of the EBF. MI of the mothers was significantly associated with the mother attitude toward EBF. Due to education, social acceptance and economic reason there are lacunae in the practices. Mother education has a positive impact on the practices. Counselling by health care providers had a good influence on the attitude of mothers. The Result showed that EBF ration is suboptimal.

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