

Knowledge, attitude, and practices towards exclusive breastfeeding among lactating mothers presenting to immunization center, Holy Family Hospital, Rawalpindi, Pakistan

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Abstract

Background: Suitable nourishment at the stage of infancy and during the early years of a child is essential to ensure children's growth to their full potential. The World Health Organization (WHO) recommends exclusive breastfeeding for infants during the first six months after their birth, followed by breastfeeding in addition to complementary foods for up to two years of age or even after this period.

Objectives: To determine the knowledge, attitude, and practices of mothers related to exclusive breastfeeding.

Methods: This cross-sectional descriptive study was conducted at the immunization center, Holy Family Hospital, Rawalpindi. Women who were in the lactating phase in the past two years or already had children above two years of age were interviewed using a validated interviewer-administered questionnaire. Data were entered into SPSS version 23, and descriptive analysis was run.

Results: The majority of the respondents belonged to 26-30 years (52.8%) and were housewives (83.0%). 96.6% of participants had heard of exclusive breastfeeding, and 44.9% had heard about it from health institutions. 88.0% believed that a child should get exclusive breastfeeding for at least six months. The majority thought that exclusive breastfeeding is better than artificial milk (93.1%), it is enough for six months (89.2%), and children fed under exclusive breastfeeding are relatively healthier (95.5%). 81.8% preferred exclusive breastfeeding in the first six months, but only 67.6% of mothers practiced it.

Conclusion: Our study found that most of the population had adequate knowledge and a positive attitude towards exclusive breastfeeding. Furthermore, a much higher proportion of people were practicing exclusive breastfeeding as compared to previous years.

Keywords: Exclusive breastfeeding, lactating mothers, knowledge, attitude, practices, breastfeeding, infants.

Introduction

Suitable nourishment at the stage of infancy and during the early years of a child is essential to ensure his or her growth, well-being, and timely development to their full potential.¹ It has been agreed upon all over the world that Exclusive Breast-Feeding (EBF) is advantageous for both the mother and child, as breast milk is considered the optimum nutrition source for an infant. Not only EBF provides the child with the essential nutrients which are required for their development but also plays a great role in developing a bond between the mother and the child. This leads to reduced psychological problems among women and provides natural contraception; hence it is advantageous for both stakeholders.²

According to the recommendation by the World Health Organization (WHO), infants should be preferably exclusively breastfed for the initial six months of their life at least, followed by EBF in addition to complementary foods for up to two years of age or beyond.³ EBF can be defined as a practice in which the mother provides only breast milk as a source of nutrition to the child. This excludes all other sources of nutrition which include water, tea, herbal preparations, or food. However, an exception exists for vitamins, mineral supplements, or medicines.⁴ The significant benefit of EBF from four to six months includes reduced rates of infection due to the decreased incidence of gastrointestinal infection.⁵ Despite strong evidence supporting EBF for the first six months of life, its prevalence has remained low worldwide⁶, and it is estimated that only about one-third of infants were exclusively breastfed for the first six months of life.⁷

With a boost in education levels and technological advancement in past years, awareness among the public has increased. Hence, we would like to see the trend of EBF being followed by women, in general, in recent times. This will be important to assess the need for interventions, such as educational drives, to increase awareness in the country about the advantages of EBF.

Materials and Methods

This cross-sectional descriptive study was conducted at the immunization center, Holy Family Hospital, Rawalpindi, from March 2018 to March 2019.

Women who were in the lactating phase in the past two years or already had children above two years of

age were interviewed. All those women were excluded who were unable to recall correctly or were suffering from diseases that affect the breast. Data was collected using a comprehensive, pre-tested, and structured interviewer-administered questionnaire, which sought such information as age, educational status, occupation, initiation of breastfeeding, and knowledge and practice of exclusive breastfeeding. Exclusive breastfeeding in this study refers to giving the infant only breast milk for six months without any fluids except liquid medicines. Knowledge of exclusive breastfeeding was assessed through such questions as the duration of exclusive breastfeeding, feeding the infant with only breast milk for six months; exclusive breastfeeding protects the infant against infections. Consent was taken from every woman, and the study was approved by the Institutional research forum's ethical review board. A minimum sample size of 160 participants was calculated using an estimated proportion of 41.5%, 95% confidence level, and 80% power of the test.

We checked the collected data manually for completeness and consistency, and then it was coded and entered into SPSS version 23 for analysis. Descriptive statistics were used to summarize the participants' sociodemographic characteristics and the prevalence of exclusive breastfeeding.

Results

A total of 185 questionnaire-based interviews were taken, and of these, only 176 were considered eligible for the subsequent analysis giving a response rate of 95.1%.

The baseline social and demographic characteristics of the patients are given in Table I.

Majority of the respondents belonged to the age group 26-30 years (52.8%). The majority of women were housewives (83.0%) and had education from 1-8 years (30.1%).

Similarly, the majority of husbands (31.8%) had studied for up to 1-8 years. Women who had gone to university/college comprised only 13.1% of the total. Monthly income fell between 15,000 to 30,000 Rs in 78.4% of households, and 86.9% of women had three or less than three children.

As shown in Table II, almost all the participants (96.6%) had heard of exclusive breastfeeding, and a significant portion had heard about it from health institutions (44.9%). More than three-quarters of the participants (88.0%) believed that exclusive

breastfeeding should be continued for six months or beyond. Around 38.3% of the participants felt that breastfeeding should begin between thirty minutes and twenty-four hours after delivery. It was also widely known that exclusive breastfeeding prevented diarrhea in children (85.2%), prevented pregnancy (59.1%), and frequent sucking helped in milk production (88.1%).

The attitude of the mother is shown in Table III. Most of the women believed that exclusive breastfeeding is better than artificial milk (93.1%), it is enough for six months (89.2%), and children fed under exclusive breastfeeding are relatively healthier (95.5%). 81.8% prefer to feed their baby breast milk only in the first six months. However, 51.7% believed that they should discard colostrum. While giving extra food, 39.8% of the participants were uncomfortable, out of which the majority thought that it is unnecessary for the child.

As shown in Table IV, 91.5% of the participants breastfed their last child, but only 67.6% of the mothers exclusively breastfed their children. Adding further, for the mothers who did not exclusively breastfeed their children, 23.9% fed their children formula milk. Among the women who did not exclusively breastfeed their child, 19.8% of the total believed that it wasn't sufficient for their children. Initiation of breastfeeding was done between 30 minutes and 24 hours in 48.0% of the participants, and 63.8% of women fed their children on demand. Before initiation of feed, 82.9% gave supplementation, and 72.2% of the total participants gave 'ghutti' to their new-born child. Giving supplementary food other than exclusive breastfeeding was a personal decision in 18.2% of the females.

Table I: Socio-demographic characteristics of the participants (n=176)

Sociodemographic features	Options	n	%
Maternal Age (years)	<20	3	1.7
	21-25	49	27.8
	26-30	93	52.8
	31 and above	31	17.6
Religion	Islam	175	99.4
	Christianity	1	0.6
Occupation	Housewife	146	83.0
	Govt. employee	17	9.7
	Student	2	1.1
	Daily laborer	11	6.3
Level of education	Cannot read	43	24.4
	Can read and write only	39	22.2
	Have studied 1-8 years	53	30.1
	Have studied up to 9-12 years	18	10.2
	Has been to college/university	23	13.1
No of children	<3	153	86.9
	>3	23	13.1
Monthly income (Rupees)	15-30 k	138	78.4
	30-50k	28	15.9
	50-100k	9	5.1
	>100k	1	0.6
Husband Education	Cannot read	37	21.0
	Can read and write	34	19.3
	Have studied for 1-8 years	56	31.8
	Have studied for 9-12 years	27	15.3
	Has been to college/university	22	12.5

Table II: Knowledge of the respondents regarding exclusive breastfeeding (n=176)

Knowledge	Options	n	%
Did you ever hear about exclusive breastfeeding?	Yes	170	96.6
	No	6	3.4
What was your source of information for exclusive breastfeeding?	Educational or Health Related Institute	79	44.9
	Family and friends	28	15.9
	Social media, internet or television	41	23.3
	Other	28	15.9
When should breastfeeding be started after delivery?	Immediately	49	28.0
	Within 30 minutes	31	17.7
	Between 30 minutes and 24 hours	67	38.3
	After 24 hours	28	16.0
What is the optimal time period for exclusive breastfeeding?	<6 months	21	11.9
	About six months	81	46.0
	Beyond six months	74	42.0
How did you know you have done adequate breastfeeding?	When the baby seems satisfied if the baby slept right after feeding	108	61.4
	Other	60	34.1
		8	4.5
Does exclusive breastfeeding for six months prevent diarrhea?	Yes	150	85.2
	No	7	4.0
	Don't know	19	10.8
Can exclusive breastfeeding act as contraception and avoid pregnancy?	Yes	104	59.1
	No	29	16.5
	Don't know	43	24.4
Is milk production increased if frequent sucking is enabled?	Yes	155	88.1
	No	5	2.8
	Don't know	16	9.1

Table III: Attitude of the participants regarding exclusive breastfeeding (n=176)

Attitude	Options	n	%
What is the preferred feed for your baby during the first 6 months?	Only breast milk	144	81.8
	Breast milk in addition to other edible items	32	18.2
Do you think that exclusive breastfeeding is superior to artificial milk?	Yes	162	93.1
	No	4	2.3
	Don't know	8	4.6
Do you believe that the first milk (colostrum) should be discarded?	Yes	91	51.7
	No	85	48.3
Do you agree that exclusive breastfeeding is enough for six months?	Yes	157	89.2
	No	19	10.8
How did you feel when you gave extra food other than breast milk?	Not comfortable	70	39.8
	Comfortable	106	60.2
Why are you not comfortable with extra food other than breast milk?	Don't know	106	60.2
	Insufficient for child's demands	22	12.5
	Unnecessary for child	33	18.8
Do you agree that a child less than six months on exclusive breastfeeding is relatively healthier than a child who is given supplements during the first six months?	Complaint of pain	15	8.5
	Yes	168	95.5
	No	5	2.8
	Don't know	3	1.7

Table IV: Practices of the participants regarding exclusive breastfeeding (n=176)

Practices	Options	n	%
Have you breastfed your last child?	Yes	161	91.5
	No	15	8.5
How long after the birth of your last child did you initiate breastfeeding?	Immediately	46	26.3
	between 30 minutes-24 hours	84	48.
	after 24 hours	45	25.7
What was the frequency with which you breastfeed your last child?	On-demand	111	63.8
	Regularly	58	33.3
	Randomly	5	2.9
Before the initiation of breastfeeding have you given anything to your child orally?	Yes	146	82.9
	No	30	17.1
What item did you give, or someone gave to your child before the initiation of breast milk?	Nothing	30	17.0
	Ghutti	127	72.2
	Water	4	2.3
	Cow milk	15	8.5
Did you exclusively breastfeed your child	No	57	32.4
	Yes	119	67.6
Reason for not exclusively breastfeeding?	N/A	119	67.6
	Decreased breast milk secretion	12	6.8
	Breast milk only insufficient for infant	35	19.8
	Infant becomes thirsty	1	0.6
	Lack of time	2	1.1
	Maternal Illness	6	3.4
	Breast problem	1	0.6
Who influenced you to give other feedings?	N/A	121	68.8
	Husband	2	1.1
	My mother	6	3.4
	Mother-in-law	7	4.0
	health worker	8	4.5
	Personal decision	32	18.2
	During the first six months of birth, what oral intake did you give to your child?	Cow and breast milk	12
	Breast milk only	119	67.6
	Formula/Packet milk	42	23.9
	Other	3	1.7

Discussion

Our results show that most infants (67.6%) were exclusively breastfed. This is in contrast to studies in other countries, where exclusive breastfeeding was less common. In Saudi Arabia, EBF was practiced by only a few participants during the first six months after childbirth, 8.3% ($n = 32$) of the 384 participants.⁸ In a study in Congo, EBF was reportedly higher during the maternity stay of the mothers but by six months this figure fell staggeringly low, 87.5 % ($n=375$) to only 2.8 % ($n = 12$).⁹ This could be because of the difference in the occupation of the mothers. As

working women could not spare the time for breastfeeding after their maternity leave was over, they switched to other feeding methods. On the other hand, 83% of the mothers in our study were housewives, suggesting that the mother's occupation and the time available to her might play a significant role in this matter. This is further corroborated by a study conducted on working ladies in 2017 in Faisalabad. It showed that their profession significantly affected their practice of EBF. According to the study, the prevalence of exclusive breastfeeding was 166 (41.5%). EBF practice was significantly less in doctors and bankers as compared to nurses and teachers.¹⁰

A study done in Nigeria complements our results and reports better knowledge among women due to the small information-based intervention done by the local hospital. The majority (88.0 %) of the participants in this study had previously heard about exclusive breastfeeding. Adding further, greater than 50% of the women had a positive attitude toward exclusive breastfeeding.¹¹

A North Indian study showed that women living in rural areas had inadequate knowledge and below-standard practices regarding EBF. Out of the 77 mothers, 30% and 10% exclusively breastfed their infants till four and six months of age, respectively.¹² Our study, however, showed much better knowledge and practices in comparison. This could be attributed to the fact that our research was conducted in an urban setting. The level of exposure to health facilities and the general level of awareness in rural areas lacks considerably compared to urban areas.

A comparative study between the trends of breastfeeding in 1995 and 2010 showed that countries, in general, are improving their EBF trends, with significant improvements in Central Africa and West Africa (12% in 1995 to 28% in 2010), while modest improvements are seen in South Asia (40% in 1995 to 45% in 2010).¹³

A study conducted in Pakistan in 2002 indicated that 62% of mothers started supplementary feeding before five months. In contradiction to international studies, it was more common amongst educated women living in urban areas.¹⁴ In Pakistan, trends of EBF have varied over the years, from 22.8% in 1990-91 to 37.1% in 2006-07.¹⁵ Overall, Pakistan was still considered to be unsatisfactory in terms of breastfeeding. A study conducted in Pediatrics Department, AKU, Karachi, concluded that 54% of women in their area were following proper EBF guidelines, which was much higher than the overall prevalence in Pakistan, reported being 38%.¹⁶ Now in our study, we can see that the number of participants practicing exclusive breastfeeding is even higher at 67.6%. Thus, we can say that there is a significant improvement in the trends in our country as well.

This study was conducted at just one center and in the urban setting and the government sector; thus, the participants mostly belonged to a particular portion of the general population. A much broader study with a broader target would be better able to more accurately detect the actual trends that are prevalent in this region.

Conclusion

Our study concludes that a majority of the population had adequate knowledge and a positive attitude toward EBF. Furthermore, a much higher proportion of participants were practicing EBF compared with previous years.

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