

## Knowledge, attitude and practice towards exclusive breastfeeding among lactating mothers: descriptive cross sectional study

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### ABSTRACT

**Background:** Exclusive breastfeeding (EBF) is the best nutrition for children during the first six months of life. However EBF remains a challenge.

**Objective:** The aim of the study was to assess Knowledge, Attitude and Practice towards EBF among lactating mothers.

**Methods:** A community based cross-sectional study was conducted among 350 mothers using a structured interviewer-administered questionnaire using 'recall since birth' method. Systematic random sampling was used to select the study participants and descriptive statistics were conducted.

**Results:** Out of 350 lactating women, maximum women belonged to the age group of 26 to 30 years (31.4%). Maximum of them were from nuclear family (71.7%). 320 lactating mother (91.4%) of study participants had information about EBF.

**Conclusion:** The majority of mothers knew about EBF and had a positive attitude towards EBF but did not know the recommended duration or that EBF is sufficient for six months. Breastfeeding counselling and health education on nutrition to the mother by health workers should be promoted.

**Keywords:** Lactating, breastfeeding, malnutrition, deaths, infants

### Introduction

Malnutrition is responsible for 60 percent of the 10.9 million deaths that occur annually among children. Well over two thirds of these deaths are directly associated with inappropriate feeding practices and occur during the first year of life. Breastfeeding is the first fundamental right of the child. <sup>[1]</sup> 'Exclusively breastfeeding' (EBF) is used to define initiating breastfeeding immediately after birth and not giving any other solid food (including water) to the infants. <sup>[2]</sup> EBF for six months is important for health of both the mother as well as the growing infant. Infants who are not exclusively breastfed are more likely to develop gastrointestinal infections the risk of mortality due to diarrhea and other infections can increase many fold in infants who are either partially breastfed or not breastfed at all. <sup>[3]</sup>

A mere 38 percent of the infants worldwide are exclusively breastfed during the first six months of life; complementary feeding is inappropriately introduced either too early or too late and often with nutritionally inadequate or unsafe foods. <sup>[4]</sup> For those who survive past infancy and childhood, a life time of challenges await them including frequent bouts of sickness

and impaired development. <sup>[5]</sup> The issue of breastfeeding is complex, relevant not only to matters of infant nutrition, but also greatly reflective of a woman's condition and position. A woman's survival, health and nutrition are all major determinants of her child's long-term welfare. Exclusive breastfeeding is associated with several health benefits. International guidelines recommend that women exclusively breastfeed their infants for the first six months of life. The American Academy of Pediatrics (AAP) states that exclusive breastfeeding should be the reference or normative module against which all alternative health, development and all other short- and long-term outcomes must be measured. <sup>[6]</sup> The World Health Organization (WHO) states that breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development. <sup>[7]</sup> Breastfeeding is an important and cost effective public health promotion initiative for both maternal and child health with the potential to prevent and improve early infant 2 in appropriate infant feeding practices provides important information, useful to program

development. This study was planned to assess Knowledge, attitude and practice towards EBF among breastfeeding mothers in lactating mothers

### Materials and Methods

This cross-sectional study was done in Jalandhar district of Punjab. Data was collected from the medical college and hospital. Ethical clearance was obtained from the independent ethics committee of PIMS medical college Jalandhar. The sample size was calculated using a single population proportion formula  $[n = \frac{[Z [1 \pm \frac{1}{2}]^2 ]}{p \times [1 - p]} / d^2]$  with the following assumptions: 52% prevalence of breastfeeding [8] 95% confidence level with 5% degree of desired precision. A total of 350 mothers were selected by systematic random sampling from households who had a child of less than two years old, thus n=350 samples.

A structured interviewer administered questionnaire adopted and other literatures was used to collect data. The collected data were checked for completeness, coded and entered in to a computer. Statistical analysis was carried out using SPSS for windows version 20.0. The data was summarized by descriptive statistics using the frequency, percentage and tables for categorical variables. The time period for this data collection was from January 2017 to October 2017. The data was collected from the postnatal ward, patient admitted in paediatric ward, from Neonatal ICU and paediatric OPD. The lactating mothers were approached while they waited to receive their postnatal care. The objectives of the study was explained and their consent taken for participation. Voluntary participation was encouraged. Through an interview method, the data was collected using three language in their local language Punjabi, Hindi and English. The time taken by the interviewer to complete one respondent was 20 minutes.

The data was collected using two questionnaires: Lactating mothers profile: this questionnaire included general profile of the lactating mother where in information pertaining to personal details of the subject such as name, age, address, contact number, occupation, family income, type of family; nuclear or joint,

educational status, lactation period and parity was included.

Breastfeeding KAP questionnaire: this questionnaire included close ended questions to assess the knowledge, attitude and practices pertaining to breastfeeding. Items for the knowledge, attitude and practice of EBF scales of the questionnaire were adapted from the Food and Agriculture Organization of the United Nations (FAO) guidelines for assessing nutrition-related knowledge, attitudes and practices (KAP) manual. This FAO questionnaire has been field tested in several countries to ensure validity, readability, ease of administration and is less burdensome on respondents. Thus the questionnaire contained 8 questions to assess knowledge.

A knowledge score was generated for each mother based on the number of correctly answered questions. These included questions such as, importance of exclusive breastfeeding and colostrums, importance of consumption of galactogogues and knowledge on EBF. The second part of the questionnaire included a 3 point Likert scale to assess the attitude of the lactating mother towards breastfeeding, breastfeeding on demand and importance of breastfeeding over infant formulas. This 3 point Likert scale provided options such as agree, unsure and disagree. This scale helped in identifying the attitude of the lactating mother capturing the positives and negative attitudes towards breastfeeding. The final part of the questionnaire included a total of 5 questions on breastfeeding practices such as the duration of feeding, providing prelacteal feeds, along with nutritional practices such as consumption of traditional galactogogues by the mother for milk production.

### Results

Out of 350 lactating women, maximum women belonged to the age group of 26 to 30 years (31.4%) maximum of them were from nuclear family (71.7%). Educational characteristics reveal that more than 50% of the population (58.3%) were graduates followed by a total of 10% and 31.7% who had either completed their 10th or 12 standards respectively. The census percentage of

female literacy rate of punjab is 70.73%, which is less than kerala. A total of 25.1% of the population were professionals. These included professions such as teachers, clerks, housemaids etc. followed by those lactating women who were housewives (26.2%). Average monthly income of family of lactating women was highest (57.4%) in

the category of >10,000 with the least percent of lactating women falling in <10,000 INR category 42.8%. It was observed that 71% of the population visited the antenatal centres at a frequency of 1 to 3 visits per week followed by 29% those who visited 4-6times. (Table 1)

**Table 1: Sociodemographic Characteristics**

Characteristics		Frequency	Percentage
<b>Maternal age (years)</b>	<20	75	21.4
	21-25	95	27.1
	26-30	120	31.4
	>30	35	10
<b>Maternal marital status</b>	Married	300	85.7
	Single	24	6.8
	Divorced	10	2.8
	Widowed	16	4.5
<b>Maternal religion</b>	Orthodox	200	51.4
	Protestant	100	28.7
	Muslim	35	10
	Other Christian	15	4.3
<b>Maternal ethnicity</b>	Hindu	180	51.4
	Sikh	90	25.7
	Muslim	30	6.5
	Other	50	14.2
<b>Maternal occupation</b>	Housewife	92	26.2
	Govt's employee	88	25.1
	Daily labourer	122	34.8
	Merchant	43	12.2
	Student	5	1.4
<b>Antenatal Visit</b>	1 to 3	250	71
	4 to 6	100	29
<b>Maternal education</b>	Can't read	70	20
	Read and write	75	21.4
	1-8 yr	75	21.4
	9-12 yr	95	27.1
	University/college	35	10
<b>Average monthly income</b>	<Rs.10,000	150	42.8
	>RS.10,000	200	57.4
<b>Number of children</b>	1	10	2.8
	Between 1 to 6	340	97.1

**Knowledge of respondents about breastfeeding**

Duration and feeding style about EBF among the respondents has assessed based on the WHO recommendations. Out of 350 participants 320 (91.4%) lactating mother had information about EBF in which their main source of information were health professionals (57.4%). Concerning the initiation, majority 150(42.8%) replied breast milk should be started immediately after birth. Majority 180(51.4%) of mothers replied frequent sucking help for milk production though significant portion of mothers 20(5.7%) have no

idea about the relationship between sucking and milk production. Regarding the duration of EBF, less than 6 month 150 (42.8%) and some mother consider EBF can be given more than 6 month 145 (41.4%) and some mothers 55 (15.7%) mentioned up to 6 month. About half of mothers 150(42.8%) said there is adequate breast milk if the child is satisfied. Out of total mother interviewed 150(42.8%) said that EBF for 6 month prevent their child from diarrhea, most of the lactating mother didn't know {230(75.7%)} that it can be used as a contraceptive (Table 2).

**Table 2: Knowledge of respondents about breastfeeding**

Variable		Frequency	Percentage
<b>Ever heard about EBF?</b>	Yes	320	91.4
	No	30	8.5
<b>Source of information about EBF?</b>	Health institution	200	57.4
	Friends	50	14.2
	Mass media	50	14.2
	Other	50	14.2
<b>When should breastfeeding after delivery started?</b>	Immediately	150	42.8
	2-24 hrs	100	28.7
	After 24 hrs	100	28.7
<b>Do frequent sucking help for milk production?</b>	Yes	180	51.4
	No	150	42.8
	No idea	20	5.7
<b>For how long is EBF needed?</b>	<6 months	150	42.8
	About 6 months	55	15.7
	Beyond 6 months	145	41.4
<b>How did you know when there is adequate breast milk?</b>	If the baby is satisfied	150	42.8
	If the baby slept after feeding	170	48.5
	Other	30	8.5
<b>Does EBF for 6 month prevent child from diarrhea</b>	Yes	150	42.8
	No	100	28.7
	Don't know	100	28.7
<b>Does EBF prevent pregnancy?</b>	Yes	70	20
	No	50	14.2
	Don't know	230	75.7

**Attitude of respondents towards EBF**

In the study participants out of 350, 200 (57.4%) of mother consider first 6 month mother milk should be given. Majority of the mothers 200 (57.4) said they don't know that EBF is better than artificial feeding. About 150 (42.8%) of

mother agreed that only EBF is enough up to 6 month, 200 (57.4%) disagree for that. A high proportion 250 (71.4%) of mother believed colostrum should be discarded. A proportion 150(42.8%) of studied mothers didn't feel

comfort when they give extra foods other than breast, 100(28.7%) mothers agreed with that child on EBF is healthier than who is not (table 3).

### Exclusive breastfeeding practices among respondents

In this study all mothers breastfed their child. Most of the mother 200 (57.4%) had initiated breastfeeding between 2 and 24 hrs, while

50(1.2%) of mothers initiated breastfeeding 24hr after delivery. Above half 150 (42.8%) of mothers were feeding breast on demand, majority of them 300(85.7%) had given prelacteal food for their new born baby. Plain water was given for about 120(34.2%) of babies before breastfeeding was initiated and, while 200(57.4%) gave additional cow milk in (table 4).

**Table 3: Attitude of respondents towards EBF**

Variable		Frequency	Percentage
<b>What do you prefer to feed your baby for the first 6 months?</b>	Breast milk only	200	57.4
	Breast and other food items	150	42.8
<b>Do you think that EBF is better than artificial feeding</b>	Yes	100	28.7
	No	50	14.2
	Don't know	200	57.4
<b>Do you ever believe that the first milk (colostrum) should be discarded?</b>	Yes	250	71.4
	No	100	28.7
<b>Do you agree that only EBF is enough for child upto 6 months?</b>	Agree	150	42.8
	Disagree	200	57.4
<b>How did you feel when you give extra food other than breast to your child?</b>	Didn't feel comfort	150	42.8
	Comfortable with it	200	57.4
<b>Why you are not comfortable with extra feeding other than breast?</b>	Not sufficient to meet child's demand	150	42.8
	It's not necessary for child	150	42.8
	Complain feeling of pain	100	28.7
<b>Do you agree that child less than 6 month who is exclusively breastfed is healthier than child who takes additional food?</b>	Yes	100	28.7
	No	150	42.8
	I don't know	100	28.7

Table 4: Exclusive breastfeeding practices among respondents

Variable		Frequency	Percentage
Have you breastfeed your last child?	Yes	200	57.4
	No		
When did you start breastfeeding after delivering your last child?	Immediately	100	28.7
	Between 2 and 24 hrs	200	57.4
	After 24 hrs	50	
How frequently did you breastfed your last child?	On demand	150	42.8
	Regularly	150	42.8
	Randomly	50	14.2
Have you given your last baby anything before initiating breastfeeding?	No	50	14.2
	Yes	300	85.7
What was given to your last baby before breast milk after delivery?	Plain water	120	34.2
	Cow milk	200	57.4
	Butter	30	8.5
What was given to your last child starting from birth to 6 month?	Cow and breast milk	200	57.4
	Breast milk only	30	8.5
	Formula	100	28.7
	Other	20	5.7

### Discussion

Global movements towards protecting, encouraging and supporting breast milk as a part of optimal feeding practices among infants has been emphasized since many years however there is incongruence between what is recommended and what is practiced in reality. Therefore, the present study aimed at identifying the KAP of breastfeeding among lactating mothers with children less than 2 years of age. EBF is estimated to prevent approximately one-tenth of child deaths and could play an important role in meeting India's Millennium Development Goal 8 of reducing child mortality. WHO recommends exclusive breastfeeding upto 6 months, in the current study the importance to exclusive breastfeeding was given by 91.4% of lactating women; however only 15.7% were knowledgeable about practising EBF up to 6months whereas 42.8 % felt it should be practised for less than 6 months. A study in Ambo Ethiopia found 90.8 % of mothers were knowledgeable about EBF<sup>[8]</sup> and a Nigerian study

showed the majority (88.0 %) of the respondents had heard about EBF.<sup>[9]</sup> However a study undertaken in Punjab reports 42.8% rate of EBF whereas findings from another study are similar which report exclusive breastfeeding for the recommended duration and early initiation of breastfeeding to be poor in Indian scenario.<sup>[10]</sup> In the present study 41.4% of lactating mothers felt the need to continue breastfeeding even after 6 months which highlights the unawareness related to initiation of supplementary feeds through weaning at age 6 months.

The benefits of breast feeding were largely accepted by majority of lactating mothers, wherein 78% felt it improved immunity, 250 (71.4%)% had knowledge about colostrums but mother believe that it should be discarded ,not beneficial for the child and A proportion 150(42.8%) of studied mothers didn't feel comfort when they give extra foods other than breast, some mother 100 (28.7%) agreed with that child on EBF is healthier than who is not. In

this study even though only 42.8 % believed that EBF is enough up to 6 months, the majority of mothers (57.4 %) preferred to feed their child breast milk only and a study in Debre Birhan Ethiopia which found 97.5 % of mothers had a positive attitude towards EBF. <sup>[11]</sup> The findings of this study showed a higher number of mothers with a favourable attitude towards EBF than in Southern Ethiopia (56.7 % of mothers had a favourable attitude towards EBF) <sup>[12]</sup> and in Nigeria (50 % of women had a positive attitude towards breastfeeding).

In the present study a total of 57.4% lactating mothers provided breast milk as the first feed for the child. 57.4 % gave pre lacteal feeds, this finding is high from the other studies, in one of the studies and a study reported almost double i.e. 32% prelacteal feeds given to infants in Kerala, <sup>[13]</sup> Providing the infant with pre-lacteal feeds is a custom practised in most of the rural sections of India. Pre lacteal feeds mostly as honey or sugar water happen to be the most common feeds seen in the present study as well as reported in the study conducted by Mandal et al. 2007. <sup>[14]</sup> It is believed that pre lacteal feeds act as laxatives in clearing the meconium. Sadly, the mothers are not aware that the pre-lacteal feeds that could be a source of contamination. It was observed that the initiation of breastfeeding within one hour was undertaken by 42.8% of lactating women which is almost double as compared to the national average of 23.4%.(NFHS-3). <sup>[15]</sup>

Lactating mothers although they have heard about EBF, but not aware about the technique of EBF, Sadly still the lactating mother following the prelacteal feed, and they know that chances of infection is at peak but of their old belief still they are promoting this habit of prelacteal feed, although they know the importance of colostrums but still they discard it.

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