

## Original Research Article

# Knowledge and attitude towards exclusive breast feeding among postnatal mothers in a tertiary care teaching hospital-an institution based cross sectional study

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### ABSTRACT

**Background:** Exclusive breast feeding (EBF) is termed as an optimal strategy for feeding newborns and as per WHO should start within the first one hour of delivery and must continue up to 6 months of infant's age, as the only source of nutrition and fluids for babies at that age. Unfortunately, a report estimated in 2012 that, only 35% of infants were exclusively breastfed globally. This stresses the need to educate and motivate mothers to exclusively breastfeed their babies for the first six months of life.

**Methods:** Knowledge and attitude towards EBF, of postnatal mothers admitted to a tertiary care teaching hospital was assessed using a self-administered questionnaire and their responses analysed using statistics software.

**Results:** From our study we found that, based on knowledge score, 88 (69.8%) of the respondents had good knowledge and 38 (30.2%) of the study participants were categorized as having poor knowledge. Based on the attitudinal score, 17 (14%) of the study participants were categorized as having negative attitude towards EBF and 108 (86%) were categorized as having positive attitude towards EBF.

**Conclusions:** Health care providers working in the areas of maternal and child health (MCH), should evaluate mothers' knowledge and attitude for EBF, every visit by asking questions related to EBF. IEC activities related to EBF should be promoted to disseminate knowledge regarding EBF. Breast feeding support groups should be established to help motivate mothers to exclusively breast feed their babies for the first six months of life.

**Keywords:** EBF, Lactation, Breastmilk, Colostrum

### INTRODUCTION

Exclusive breastfeeding (EBF) is the optimal strategy for feeding newborns during first six months of life.<sup>1-3,5</sup> According to WHO, EBF should start within less than one hour of delivery and must continue up to 6 months of infant's age as the only source of nutrition and fluids for babies at that age.<sup>4,6</sup> Malnutrition is either indirectly or directly, is responsible for about half of the all deaths including infants worldwide.<sup>7</sup> Good practice of EBF can prevent 13.8% of all deaths among infants aged less 2 years and 11.6% of under 5-years children deaths.<sup>8,9</sup> But

unfortunately a report estimated in 2012 that, only 35% of infants were exclusively breastfed globally.<sup>10</sup> This stresses the need to educate and motivate mothers to exclusively breastfeed their babies for the first six months of life. Breastfeeding offers tremendous health benefits to both child and mother.

Breastfeeding plays a crucial role in the general health and wellbeing of infants. However due to various misconceptions and lack of adequate knowledge among lactating mothers, babies are being deprived of these benefits. Therefore, it is imperative to bust the myths that

influence EBF in order to implement strategies and interventions to improve and enhance EBF practices among mothers having infants aged 0-6 months. A study done by Alamirew et al in 2016, among mothers attending antenatal care and immunisation clinic at Dabat primary health centre in Ethiopia, estimated 69% of them to have good knowledge but 24% of them to have negative attitude towards EBF.<sup>14</sup> However there were no similar studies from India especially South India estimating the same specifically among postnatal mothers. Hence this study was conducted aimed at determining the knowledge and attitude of postnatal mothers towards EBF, among postnatal mothers in a tertiary care teaching hospital in south India

## **METHODS**

### ***Study design and period***

Institutional based descriptive cross-sectional study was conducted among lactating mothers in the postnatal ward of Tertiary care teaching hospital in Chennai from March to May 2021.

### ***Participants***

All postnatal lactating mothers admitted to the postnatal ward of a Tertiary care teaching hospital in Chennai during March 2021 to May 2021

### ***Instruments***

Data collection instruments consisted of a sociodemographic questionnaire (age, marital status, educational status, occupation, residency, parity, gravidity, and ANC). To assess knowledge about EBF, nine knowledge questions were used (knowledge about EBF, the right time to give breast milk to a child after birth, what you do with the first milk or colostrum, right time to start complementary foods in addition to breast, foods and/or fluids recommended to give to a child under 6 months, if pre-lacteal feeding needed for an infant before starting breast milk, breast milk alone without water and other liquids being enough for an infant during the first 6 months of life, and EBF for the first 6 months being used to prevent diarrheal and respiratory diseases for the infant) and, for assessment of attitude based on Likert scale (1=strongly agree, 2=agree, 3=disagree, and 4=strongly disagree) attitude questionnaire was used.

### ***Data collection methods***

A structured self-administrated questionnaire was used to gain data from study participants. First the questionnaire was translated to Tamil language which is a local language to avoid misunderstanding of questions and to ensure quality of data collected.

## ***Data analysis***

After checking the completeness and appropriateness, the data were entered and coded into SPSS version 20.0 statistical package software for analysis. The result is presented in the form of frequencies and percentages by using tables and text

## ***Ethical consideration***

Ethical clearance was obtained from independent institutional ethics committee. The study participants were informed clearly about purpose of the study and verbal consent was obtained. They could withdraw from participating in the research study without any explanation. In addition, their names were not included in the questionnaire to maintain privacy and eliminate bias.

## **RESULTS**

### ***Sociodemographic characteristics and obstetrical history of study participants***

A total of 126 mothers were admitted to the postnatal ward of Sree Balaji medical college hospital (SBMCH) during March to May 2021. All of them were interviewed successfully in this study which makes the response rate 100%. Majority of study participants (90) were in the age groups of 20-30 (72%) and the mean age was 24. All of them (100%) were married. The 2 (1.58%) were not able to read and write, and 72 (57.1%) completed secondary school. The 57 (45.1%) were housewives and 35 (27.7%) were government employees. Majority 115 (91.2%) had four times ANC follow up. Majority (63.5%) of the respondents were urban dwellers while 36.5% lived in the semi urban areas (Table 1).

### ***Knowledge of study participants towards EBF***

From total study participants, based on knowledge score, 88 (69.8%) of the respondents were grouped as having good knowledge and 38 (30.2%) of the study participants were categorized as having poor knowledge. 103 (82%) knew about EBF and 23 (18%) do not know about EBF. Their major source of information was health institutions (65.8%). The 88 (approx70%) have good knowledge about right time to give breast milk to the child after birth.

The 57 (45.3%) of the respondents have poor knowledge to give the first milk (colostrum) to the newborn, while 69(54.7%) have good knowledge about it. Majority 82 (65.1%) knew that breast milk alone is enough for infants less than 6 months but 44 (34.9%) answered that breast milk alone is not enough for the infant under 6 months. The 78 (61.9%) the participants knew that EBF prevents diarrheal and respiratory diseases as shown in the Table 2.

**Attitude of study participants towards EBF**

From this study based on the attitudinal score, 17 (14%) of study participants were categorized as having negative attitude towards EBF and 108 (86%) were categorized as having positive attitude towards EBF. From study

participants, 17 (13.9%) of them agree to the opinion discarding colostrum (first milk). For opinion that starting complementary foods before 6 months is important, 12% (15) strongly agree, 15.9% (20) agree, 44% (55) disagree 28.1% (36) and strongly disagree as shown in the Table 3.

**Table 1: Sociodemographic characteristics of the participants.**

Characteristics	Frequency	Percent (%)
<b>Ages of respondents (Years)</b>		
<20		
20-30	90	72
31-40	34	27
>40	2	1
<b>Marital status</b>		
Married	126	100
Single	-	
Divorced	-	
Widowed	-	
<b>Educational status</b>		
Not able to read and write	2	1.5
Can read and write (informal education)	14	11
Formal (1-8)	12	9.5
Secondary school (9-10)	72	57
10 + 2 and above	26	21
<b>Occupational status</b>		
Government employee	35	27.7
Private employee	3	2.3
Daily laborer	4	3.1
Housewife	57	45.1
Housemaid	27	21.4
<b>Residency</b>		
Urban	80	63.5
Semi urban	46	36.5

**Table 2: Knowledge of study participant mothers towards exclusive breast feeding.**

Variables	Frequency	Percent (%)
<b>Do you know about exclusive breast feeding?</b>		
Yes	103	82
No	23	18
<b>Source of information</b>		
Friends	24	19.2
Mass media	19	15.0
Health institution	83	65.8
<b>Right time to give BM to a child after birth (Hours)</b>		
After giving some butter	2	1.58
Within an hour	88	69.84
After one hour	22	17.46
After 24 hours	14	11.11
<b>What do you do with the first milk or colostrum?</b>		
Discard	57	45.3
Feed immediately	69	54.7
<b>Right time to start complementary foods (Months)</b>		
3	10	7.93
4	14	11.11
5	9	7.14

Continued.

Variables	Frequency	Percent (%)
6	82	65.07
7 or above	11	8.731
<b>Foods or fluids recommended to under 6 months'</b>		
Only breast milk	77	61.5
Breast milk and/or water or sugar	37	29.4
Infant formula	9	7.3
Others	3	1.8
<b>Is pre-lacteal feeding needed?</b>		
Yes	24	19.5
No	96	76.1
I do not know	6	4.4
<b>BM alone is enough for infant &lt;6 months of life</b>		
Yes	82	65.1
No	33	25.8
I do not know	11	9.1
<b>EBF prevents diarrheal and respiratory diseases</b>		
Yes	78	61.9
No	21	16.2
I do not know	27	21.9
<b>Knowledge score</b>		
Good	88	69.8
Poor	38	30.2

Table 3: Attitude of study participant mothers towards EBF.

Variables	Frequency	Percent (%)
<b>Giving BM for a newborn immediately within an hour is important</b>		
Agree	42	33.3
Strongly agree	33	26.1
Disagree	13	10.3
Strongly disagree	38	30.1
<b>Discarding the first milk or colostrum is important</b>		
Strongly agree	18	14.3
Agree	29	23.4
Disagree	43	33.9
Strongly disagree	36	28.4
<b>Only BM may not be sufficient for 3 months' child</b>		
Strongly agree	18	14.6
Agree	28	22.6
Disagree	49	39.1
Strongly disagree	31	23.7
<b>Starting complementary foods before 6 months is important</b>		
Strongly agree	15	12
Agree	20	15.9
Disagree	55	44
Strongly disagree	36	28.1
<b>Attitudinal score</b>		
Positive	108	86
Negative	17	14

## DISCUSSION

Good knowledge and positive attitude of mothers is pivotal in successful practice of EBF. Though there are several studies assessing knowledge and attitude of

mothers towards EBF from several countries, there is paucity of data from India. Hence this study was conducted to throw light on the same.

This study shows that mothers who have good knowledge towards EBF are 69.8% which is higher in comparison with certain Middle East countries (55%) and sub-Saharan Africa.<sup>7</sup> Variations in socioeconomic, cultural practices of the population and differences in health care delivery system may explain the difference noticed.

In our study, the knowledge about time of initiation of breast feeding is 70% which is marginally in comparison with sub-Saharan Africa where it is 73.3%.<sup>6,11</sup>

Knowledge about colostrum in our study is 54.7% (having good knowledge). This is lesser in a study reported from Ethiopia where it was reported to be 60.2%.<sup>10</sup> This difference might be due to the difference in socio cultural practices and false myths prevailing regarding colostrum.

In our study based 76% of the participant mothers had a positive attitude. The finding is slightly greater than reports done in East Africa which was 71.1%.<sup>11</sup> However, the finding was less than a study result made in west Africa, which is 84.7%.<sup>13</sup>

In our study, 66.4% of the participant mothers reported their source of information about EBF was health care institutions. This is more than the study conducted in Mizan Aman town which was 62.7%.<sup>10</sup>

From our study, we come to know that, though only little over 50% of the participant mothers had good knowledge about EBF which is appalling, more than 75% of the participant mothers have a positive attitude which is reassuring. This emphasizes the need to disseminate knowledge about EBF among lactating mothers at every available opportunity to strengthen the practice of EBF

### Limitations

The sample size studied is not sufficient enough to generalize the result to the entire population.

### CONCLUSION

As per our study, though the knowledge of EBF is less than three-quarters among our study participants, it is heartening to note that, positive attitude towards EBF is more than 3/4<sup>th</sup>. Based on this finding, health care workers who work in the areas of maternal and child health should give appropriate information about EBF to postnatal mothers and expectant mothers who attend antenatal clinics ANC to increase their knowledge about EBF. In addition, health care providers should evaluate mothers' knowledge and attitude for EBF, at every visit by asking questions related to EBF, and should patiently listen to the concerns voiced by the mothers and dispel all their doubts with regards to EBF. IEC activities related to EBF should be strengthened. Breast feeding support groups should be established to help motivate mothers to

Exclusively breastfeed their babies for the first six months of life.

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