

# KNOWLEDGE ABOUT BREASTFEEDING AMONG POSTNATAL MOTHERS IN A TERTIARY CARE HOSPITAL

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## Abstract

**Background:** Breastfeeding is essential in an infant's nutrition and growth. There are various misconceptions and cultural beliefs regarding breastfeeding which can hinder the breastfeeding and its continuation by the mothers. **Objective:** To describe the current level of knowledge and about breastfeeding among postnatal mothers in a tertiary care hospital. **Methods:** A Hospital based cross sectional study was carried out in the postnatal ward of Obstetric department of the Saveetha medical college and hospital between June 2021 to August 2021. Data were collected through interview using a semi-structured questionnaire. Data were entered into Microsoft excel and descriptive analysis was done. **Results:** A very small percentage of postnatal mothers are knowledgeable about early breastfeeding, exclusive breastfeeding, burping, breastfeeding on demand, and the importance of avoiding prelacteal feeding. However, more than 50% of postnatal mothers understand the importance of colostrum for health, recognize that breastfeeding fosters bonding, and are aware of the benefits of breastfeeding. They are also informed about whether mothers with conditions like TB or HIV can breastfeed.

**Keywords:** Breastfeeding, Knowledge, Postnatal Mothers, World Health Organization, Neonates.

## INTRODUCTION

Breastfeeding is considered as the first immunization to the newborn as it is natural with optimal nutrients and protective factors against infections.[1] Exclusive breastfeeding for 6 months has many benefits to the growing infant as it provides calories, proteins, and bio active factors such as IgA, lactoferrin and growth factors which have anti-infective, antioxidant, and growth-promoting properties.[2] Breastfeeding reduces diarrhea and respiratory illness among children and helps in reducing hospitalizations and reducing infant mortality. Breast milk also improves intelligence quotient and brain size among those who are breastfed compared to those on artificial feeds. [3,4] Worldwide around 40% of children below six months are breastfed exclusively [5]. In India around 64.9% [6] are exclusively breastfed. The Target of 2025 is to increase exclusive breastfeeding rates by 50% globally and 69% in India [3] In India about 2.4 million children die each year, of which two-thirds are associated with infant feeding practices which are inappropriate. [7]

According to the WHO recommendations, three factors are needed to reduce infant mortality rates, namely initiation of breastfeeding within 1 h of birth, practicing exclusive breastfeeding for 6 months, and proper supplementation at 6 months. However because of misconceptions among mothers it has been extremely difficult to

execute the same at the community level.[8] Factors such as increase in the number of working mothers, easily available and aggressively promoted formula-based artificial feeds, social pressures, and illness among the lactating mothers have further reduced breastfeeding rates.[9] The knowledge and practice of exclusive breastfeeding has been influenced by cultural, demographic, social, and psycho social factors.[8,10] In India, the rates of early initiation, exclusive breastfeeding are far from desirable and further KAP studies about breastfeeding are limited among Indian mothers.[11]

## **METHODOLOGY**

### **Study design:**

This is a community based cross-sectional study.

### **Study area and population:**

Postnatal ward of Saveetha medical college

### **Study duration:**

The study was carried out from June 2021 to August 2021.

### **Sampling method:**

Convenient sampling was done.

### **Sample size:**

The sample size for the study was determined using previous studies and a convenient sample size was selected. Therefore, the sample size selected for this study is 100.

### **Inclusion criteria:**

Postnatal mothers who delivered recently in the hospital or those mothers who have been readmitted for baby sake or for their own illness.

### **Exclusion criteria:**

Mothers not willing to participate in the study were excluded.

### **Study tool and data collection method:**

A semi-structured pretested questionnaire was used to interview the subjects in this study. The questionnaire was prepared in the local language and was back translated to validate it before it was used in the actual study. Demographic details of the individuals were recorded down, whether the postnatal mothers knew the basic information about breastfeeding and with various hypothetical scenarios to know whether they had the awareness, if not they were also educated based on the necessary ones by the interviewer themselves about the particular scenarios.

### **Informed consent:**

Informed oral consent in the local language i.e. Tamil and Hindi were obtained from the participants involved in this study before administering the questionnaire

**Statistical analysis:** The data were analysed using Microsoft Excel. The descriptive statistics were depicted using frequency tables and graphs. Factors associated with the study variables were analysed by calculating the significance using Chi-square and P value.

## RESULT

The study population included 100 postnatal mothers in total who were subjected to one to one interview using a validated questionnaire. The socio demographic of the participants are included in table 1. Out of the 100 participants in the study, 36 % of the mothers age was less than 25 years, 31% of them were between the age 25-29 and the remaining 33% belonged to the age group between 30- 35. About 12% of the postnatal mothers have finished primary schooling, 52% have finished secondary schooling, 28% have finished higher secondary, the highest being about 6% of the postnatal mothers who have finished their undergraduates and least being 2% who has finished his postgraduates. Most of them belonged to Nuclear type of family (67%) and the remaining being jointfamilies (33%). Regarding the sex of the babies of the postnatal mothers in the study population female babies (63%) were more in number when compared to the male babies (37). Majority of the babies were 1<sup>st</sup> born (51%) when compared to the 2<sup>nd</sup> born (44%) and the 3<sup>rd</sup> born (5%).

**Table 1: Sociodemographic characteristics**

Parameters	n (%)
<b>Age of postnatal mothers:</b>	
<25 years	36(36%)
25-29 years	31(31%)
30-35 years	33(33%)
<b>Participants educational qualifications:</b>	
Primary	12(12%)
Secondary	52(52%)
Higher secondary	28(28%)
Undergraduate	6(6%)
Postgraduate	2(2%)
<b>Family type:</b>	
Nuclear family	67(67%)
Joint family	33(33%)
<b>Gender of the baby:</b>	
Male baby	37
Female baby	63
<b>Birth order of the baby:</b>	
1st born	51
2nd born	44
3rd born	5

With regards to knowledge and practice of breastfeeding below are the tables which are interpreted information gathered from the participants through a validated questionnaire given to them. These further give us an insight into the knowledge, awareness and the practices followed among the participants.

### **Knowledge about breastfeeding:**

This table helps us understand the knowledge possessed by the participants about the various aspects of breastfeeding. Common questions being about the first feed, duration of breastfeed, exclusive feeding, extended feeding, frequency of the feeds and the benefits of feeding to the mother, baby and the family on the whole. Questions related to colostrum and its colour and if they would feed colostrum. Regarding time of initiation of breastfeeding 30 % of the postnatal mothers said should be within 1 hour. While 59 % said it can be initiated within 3 hours and rest (11%) said it can be initiated within 24 hours. Majority of the mothers said they knew about breastfeeding from

family and friends (45 %and 27%) With respect to duration of exclusive breastfeeding majority of the postnatal mothers said it to be up to 6 months (78%).Regarding the duration of breastfeeding majority saidit to be up to 2 years (63%).

Regarding colostrum majority said it is the milk secreted during initial 3-4 days after delivery(68%) 55% of the mothers said they will feed colostrum and 65 % said colour of colostrum isyellow .When asked about how long to breastfeed the baby 65 % of the mothers said it should be between 6 months to 2 years or more. When asked about exclusive breastfeeding majority said it giving breast milk with vitamins or supplements (71% together) Majority of the postnatal mothers felt that breastfeeding helps in promoting mother and baby bonding (64%) and helps in improving the babies immunity (68%).When asked about frequency of feeds 91% of the postnatal mothers said should be on demand. About the benefit ofbreastfeeding to the mother most of the postnatal mothers (68%) felt it prevents ovarian and breast cancer and helps as a natural contraceptive.

**Table 2: Knowledge about Breastfeeding**

Parameters	N(%)
<b>Initiation of breastfeeding within how many hours of birth</b>	
Within 1 hour	30(30%)
1-3 hours	59(59%)
3-24 hours	11(11%)
<b>How did you know about breast feed?</b>	
Books	8(8%)
Family	42(42%)
Friends	27(27%)
Teachers	6(6%)
Media	17(17%)
<b>Duration of exclusive breastfeeding</b>	
<=3 months	18(18%)
Upto 6 months	60(60%)
>6 months	22(22%)
<b>What can be given in exclusive breast feed?</b>	
Breast milk + extra nutrition supplement	32(32%)
Breast milk + vitamin drops	39(39%)
Only breast milk	29(29%)
<b>What is colostrum?</b>	
Milk secreted during initial 3-4 days after delivery	68(68%)
Milk secreted during late stage of breast feed	10(10%)
Milk secreted during middle stage of breast feed	22(22%)
<b>Will you give colostrum to your baby?</b>	
Yes	55(55%)
No	23(23%)
Not sure	22(22%)
<b>What is the colour of colostrum?</b>	
White	24(24%)
Green	2(2%)
Yellow	62(62%)
Dont know	12(12%)
<b>How long should the baby be breastfed?</b>	
< 6months	35(35%)
For 6 months to 2 years	33(33%)
For a 2 year or more	32(32%)
<b>What is the consistency of breast feed?</b>	
Thick	51(51%)

Watery	49(49%)
<b>How does breastfeeding benefit the family?</b>	
Bonding b/w mother and baby increases	64(64%)
Mother is prevented from acquiring diseases such as breast cancer	3(3%)
Baby is provided with important nutrients which helps prevent infections	29(29%)
All the above	4(4%)
<b>Frequency of feeding?</b>	
Every half an hour	6(6%)
Every 1 hour	1(1%)
Every 2 hours	2(2%)
Whenever the baby cries	91(91%)
When mom wants to feed the baby	0(0%)
<b>What are the benefits of breastfeeding for the child?</b>	
Helps healthy wt. Gain	8(8%)
Builds strong immune system	68(68%)
Increases IQ	2(2%)
Rich in fat	22(22%)
<b>What are the benefits of breastfeeding in a mother?</b>	
Protection against pregnancy during lactational amenorrhea	29(29%)
Reduces risk of breast and ovary cancer	6(6%)
All the above	65(65%)
<b>What do you mean by effective suckling</b>	
Hear gulping sounds of milk being swallowed	9(9%)
Pauses suckling in between swallowing	22(22%)
Baby's cheeks are full	17(17%)
Baby suckles slowly	3(3%)
All of the above	49(49%)

### Awareness about breastfeeding:

This table further gives us an insight into the level of awareness that the participants have about various other aspects other than the usual practices and norms. Majority of the postnatal mothers felt that babies born to TB (75%) and HIV infected mothers (73%) should not breastfeed. Majority of the postnatal mothers didn't know if mother with high fever (72%) and mothers with breast cancer can breastfeed or not (66%)

**Table 3: Awareness about Breastfeeding**

Parameters	N (%)
<b>Can a tuberculosis infected mother breastfeed?</b>	
Yes	4(4%)
No	75(75%)
Don't know	21(21%)
<b>Can a HIV infected mother breastfeed?</b>	
Yes	0(0%)
No	73(73%)
Don't know	27(17%)
<b>Can a mother with breast cancer breastfeed?</b>	
Yes	7(7%)
No	27(27%)
Don't know	66(66%)
<b>Can a mother with high fever breastfeed?</b>	
Yes	4(4%)
No	24(24%)
Don't know	72(72%)

**Practices in breastfeeding:**

**Table 4: Promoting Practice of Breastfeeding**

Parameters	N (%)
<b>Will you continue breast feed even after 6 months</b>	
No	22(22%)
Yes	21(21%)
Not sure	57(57%)
<b>Do you wait till your baby burps after feed before laying it to rest?</b>	
Yes	91(91%)
No	9(9%)
<b>What is the right position of the mother during feeding?</b>	
a)leaning on her baby	9(9%)
b)sit/lie down with her back well supported	77(77%)
c)both a) and b)	8(8%)
d)none of the above	6(6%)
<b>Right position of the baby while feeding?</b>	
Only the neck and shoulder should be supported	9(9%)
Head and body supported such a way that the neck cantwist	0(0%)
Body turned opposite to mom	26(26%)
Baby's nose at the level of nipple	65(65%)
<b>Would you encourage other women to breastfeed?</b>	
Yes	100(100%)
No	0 (0%)

When asked will they continue breastfeeding beyond 6 months majority of the mothers said they don't know (57%) and depends on family situation at that time. Majority felt that sitting or lying down position with back supported is the most preferred position (77%). Regarding the position of the baby while feeding majority felt that baby nose should be at the level of nipple (65%). When asked about will you encourage breastfeeding all the postnatal mothers said they will.

**DISCUSSION**

According to the recent Millennium Development Goals (MDGs), exclusive breastfeeding (EBF) for six months is considered as one of the most effective interventions to achieve Millennium Development Goals (MDG-4), Park (2015). [12,13]

According to Infant and Young Child Feeding (IYCF, 2006) [13,17] guidelines, Government of India recommends that initiation of breastfeeding should begin immediately after birth, preferably within one hour. But, only 30% of the mothers stated that they had initiated breastfeeding within an hour. Most common reasons for delay in initiation of breastfeeding as cited by the mothers were; delay in shifting the mothers from labour room, babies were in neonatal ICU, Caesarean section and family restriction. These findings are similar to the studies conducted from different parts of the world ranging from 6.3% to 31%. [16] However, NFHS 3(2005- 06) [15] reveals that initiation rates from various studies in India varies from 16 to 54.5%. These findings indicate health care professionals especially the nursing team have to be made aware about the importance of initiating early breastfeeding even in C section deliveries. In the present study, 78% of the mothers were aware of EBF. This finding is consistent with previous results that lactating mothers from developing countries have good knowledge of EBF. Similarly, 43% mothers in the current study felt that they

should continue breastfeeding till the age of 2 years beyond 6 months. A number of studies also enlightened that there are psychological benefits for both mother and infant as the act of breastfeeding is a time of physical contact and closeness which nurtures the bond between the two which is said by 64 % of the mothers in our study also. There is also lack of awareness about correct positioning and attachment which needs to be improved by use of lactation consultants and antenatal counselling about breastfeeding and peer support. Maternal education has been described as one of the strongest determinants of the practice of EBF and improving the education of the mother by lactation counselling will go a long way in achieving this goal.

The mothers in the present study had adequate knowledge toward breast feeding however there was lack of knowledge about whether breastfeeding can be continued in maternal conditions like TB, HIV and Fever.

## CONCLUSION

The present study concludes that the mothers have a very good knowledge and positive toward breast feeding. Our findings also show that the level of exclusive breastfeeding was low among Indian mothers and the practice of breastfeeding is not as much as what is expected in spite of the higher level of knowledge.

It is important to provide prenatal education to mothers and on breastfeeding; strengthening the public health education campaigns to promote breast feeding; motivating mothers to practice breastfeeding according to the right knowledge they have received from various sources and strengthening programs to promote EBF and to choose breast feeding over formula feeding to achieve the goal of exclusive and extended breastfeeding

## Disclosures

**Human subjects:** All authors have confirmed that this study involves human participants and Oral consent was taken from them prior to presenting the questionnaire. Relevant ethical clearance was obtained from IRB Board, Saveetha Medical College.

**Conflicts of interest:** In compliance with the ICMJE uniform disclosure form, all authors declare the following: **Payment/services info:** All authors have declared that no financial support was received from any organization for the submitted work. **Financial relationships:** All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. **Other relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

**Contributions:** Dr. Asha A and Dr. Kumutha J: Conceived the idea

**Dr. T. Priya Vadhana Sahayam:** Collected the data

**Dr. Asha A, Dr. Varun Muddasani, Dr. T. Priya Vadhana Sahayam, Dr. Kumutha J:** Data analysis, Prepared the manuscript, proof reading and final draft preparation

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