

## Knowledge, Attitudes and Breast Feeding Practices among Indian Post-natal mothers: A Cross-sectional Survey

Jayun M Joshi<sup>1</sup>, Janki M Pandya<sup>2</sup>, Jigar K Thakkar<sup>3</sup>, Abhipsa A Patel<sup>4</sup>, Kriti B Singh<sup>5</sup>, Rina V Desai<sup>6</sup>

### Author's Affiliation:

<sup>1</sup>Associate Professor, <sup>2</sup>Assistant Professor, <sup>3</sup>Senior Resident, <sup>4</sup>3<sup>rd</sup> Year Junior Resident, <sup>5</sup>2<sup>nd</sup> Year Junior Resident, <sup>6</sup>1<sup>st</sup> Year Junior Resident, Department of Obstetrics and Gynecology, A.M.C.M.E.T Medical College & Sheth L.G. Hospital, Maninagar, Ahmedabad, Gujarat 380008, India.

### Corresponding Author:

**Janki M Pandya**, Assistant Professor, Department of Obstetrics and Gynecology, A.M.C.M.E.T Medical College & Sheth L.G. Hospital, Maninagar, Ahmedabad, Gujarat 380008, India.

E-mail: [jankihthakkar@gmail.com](mailto:jankihthakkar@gmail.com)

Received on: 05.10.2019

Accepted on: 29.01.2020

### Abstract

**Background:** Proper breast feeding practices are very effective in reducing childhood morbidity and mortality. Breast feeding is beneficial to both the infants and mothers. However, despite of its knowledge and awareness, its implementation is affected by various faiths, especially in the Indian society. The aim of this study is to assess the knowledge and attitude towards breast feeding practices among Indian postnatal mothers. **Methodology:** For this study, we conducted a cross-sectional descriptive study. We randomly selected 500 postnatal mothers from outpatient department at our hospital. Data was collected through face-to-face interview using a structured questionnaire. **Results:** Our findings revealed that a majority (88.5%) of the mothers were breast feeders. However, out of this majority only 27% of the mothers were exclusive breast feeders and only 36.9% initiated breast feeding within the first hour of birth, amongst various other results. **Conclusion:** This study emphasizes the need for breastfeeding intervention programs which must include advantages, frequency, technique, duration of breastfeeding. These programs should not only be for mothers but should also be provided for the community as a whole. It is important to provide prenatal education on exclusive breastfeeding. Group talks should be encouraged for better implementation provided the person who is conducting it has correct knowledge on breastfeeding. Prelacteal feeds, self assumptions of lack of breast milk, discarding colostrum, etc. are still practiced widely. These undesirable practices must be discouraged. We recommend strengthening of public health education through various campaigns and programs to promote and implement breast feeding.

**Keywords:** Breastfeeding; Knowledge; Education

### How to cite this article:

Jayun M Joshi, Janki M Pandya, Jigar K Thakkar, et al. Knowledge, Attitudes and Breast Feeding Practices among Indian Post-natal mothers: A Cross-sectional Survey. Indian J Matern Fetal Neonatal Med. 2020;7(1):09-14.

### Introduction

While breastfeeding may not seem the right choice for every parent, it is the best choice for every baby. A wise man once said "A newborn baby has only three demands:

1. Warmth in arms of its mother
  2. Food from her breast
  3. Security in the knowledge of her presence."
- Breastfeeding satisfies all three.

The WHO recommends that for the first six



months of life, infants should be exclusively breastfed to achieve optimal growth and development not only in infancy but also later in life and also acquire good health and immunity lifelong. Thereafter, infants should receive nutritionally adequate and hygienically safe complementary foods in addition to breastfeeding for up to two years or more with slow weaning.

Exclusive Breast Feeding (EBF) is defined as infant feeding totally on human milk without the addition of any other liquids or solids, even water. The benefits of breast-feeding are of unmatched importance to both mother and infant and these have been recognized since time immemorial. Despite strong evidences in support of EBF for the first six months of life, its prevalence has remained low worldwide and it is estimated that only about one-third of infants were exclusively breastfed for the first six months of life. Breast milk is considered as the only best food for infant.

The very first breast milk after giving birth is thick and yellow in color which contains colostrum rich in nutrients and antibodies. Discarding this part of milk is still practiced in India and results in decrease in immunity of infant.

Breast milk not only provides calories and essential proteins to the infant but also additionally contains various bioactive factors like Ig A, lactoferrin, K-casein, cytokines, growth factors, glutathione peroxides etc. which have anti-infective, antioxidant and growth promoting properties. In a full term infant, human milk decreases incidence of various acute and chronic conditions like otitis media, atopic dermatitis, asthma, GI and lower respiratory tract infections, diabetes (weak association), obesity, childhood leukemia, SIDS.

In preterm infants, it decreases the incidence of necrotizing enterocolitis, retinopathy of prematurity and improves neuro-developmental outcomes. Breast milk improves significantly the Intelligence Quotient and Brain size compared to artificial feeds.

In mothers, it decreases the incidence of ovarian and breast cancer and chances of developing Type 2 diabetes mellitus later in life, helps mother lose weight post pregnancy, reduces chances of developing osteoporosis. Breast milk is easier to digest than cow's milk but the beliefs of cow's milk being more nutritious encourage mothers to use cow's milk as complementary food. However in reality it's not even digested properly. Lastly, breast-milk creates emotional bond between mother and baby. Thanks to Oxytocin.

Few misconceptions about breast milk are:

1. Biggest problem being milk not sufficient for baby.
2. Prelacteal feeds- is it important culturally/ medically?- A big No. On the other hand, they increase chances of infection.
3. Weight gain for mother- It is an absolutely wrong belief. In fact breast feeding helps the mother lose post-partum weight.
4. Discarding colostrum-another absolutely wrong practice.

The aim of our study was to find knowledge and attitudes towards breast feeding (how much people know and how much they implement). Few people have all the information but they still don't implement it. Few people don't believe in the practice of breast feeding. They need encouragement and support. Thus such concepts of "mother support groups" should be established so that not only mothers but the family is also addressed regarding the same.

In spite of these various beneficial effects of breast milk, breastfeeding rates in India are very low. Infant mortality rate (IMR) in India is 47/1000 live births with 1.4 million babies dying every year due to poor hygiene, care and infant feeding practices leading to increased susceptibility to infections in infancy. A number of factors starting from social customs and practices, education of parents and family members and support from health workers play a role in successful breastfeeding practices as recommended. Through this study we aim to assess the knowledge, attitude and practices of mothers attending our hospital regarding breast feeding and utilize this information in devising specific interventions to promote breastfeeding.

## Materials and Methods

This was a cross-sectional study carried out among post-natal mothers who attended immunization clinics and the Pediatric Out Patient Department with their children for vaccination and for the treatment of other minor illnesses at a tertiary care hospital in the month of January 2019.

Study participants were selected through a random sampling method of the database of children attending the Pediatric outpatient department. Those who met the inclusion criteria were interviewed.

### Inclusion criteria

- (a) Mothers of healthy infants,
- (b) Infants born between 37 and 42 gestation weeks,
- (c) Infants without major birth defects such as congenital heart disease, cleft lip/cleft palate and Down's syndrome and
- (d) The ones who volunteered to participate.

### Exclusion criteria

- (a) Mothers of preterm babies
- (b) Multiple gestations.

Five hundred mothers were enrolled into the present study.

### Demographic data survey instrument

The demographic form elicited information on participants' background: age, religion, residence, occupation, education, family's monthly income, type of delivery, gravidity, current breast feeding practices, exclusive breast feeding and initiation of breast feeding within an hour of birth.

### Questionnaires Data Collection

A structured questionnaire has been used to assess knowledge and attitudes towards breastfeeding among postnatal mothers in Indian population.

### Data collection procedure

After obtaining the permission from hospital authorities, all mothers were given an explanation of purpose of the study. Written informed consent was obtained from the mothers who were willing to participate in the study.

Data were collected by the researchers through face-to-face interview, in a private room at the treatment facilities where the participants were recruited. It took approximately 20 minutes to complete the structured questionnaire. Though, it was not part of the study, researchers educated the mothers about the importance of exclusive breast feeding and continuing breast feeding up to 2 years of age along with adding proper complementary food after that.

### Ethical consideration

Written consent was obtained from the participants and they were given freedom to refuse to be a part of the study. Participants' confidentiality was maintained.

## Results

Table 1 shows the demographic details of parents interviewed with 55% of their children less than six months and equal representation from both sexes. Most of their children (59%) were born vaginally. Table 2 describes the educational status of mothers. A high percentage of them (47%) were illiterate. While 51% of mothers finished their schooling, only 2% completed their college graduation.

**Table 1:** Demographic Details

Demographics		Number (Percentage)
Age of Child	<6 months	275 (55%)
	>6 months	225 (45%)
Gender of Child	Male	255 (51%)
	Female	245 (49%)
Type of delivery	Vaginal	295 (59%)
	Caesarean	205 (41%)

**Table 2:** Education Level of Mothers

Education		Number (Percentage)
Illiterate		235 (47%)
Primary and Secondary education		255 (51%)
Graduation		10 (2%)

Table 3 caters data about breastfeeding problems and consultations. Preferred counsellor for breastfeeding issues was usually a doctor (87%). Similarly 96% of times consultation during sickness was a doctor. Not enough breast milk (37%) was the main reason for discontinuing breastfeeding. Personal satisfaction about breastfeeding was very good for mothers (73%).

**Table 3:** Breast Feeding Problems

Question		Number (%)
Personnel to discuss BF issues	Doctor	435(87%)
	Nurse	50 (10%)
	Relative	15 (3%)
Reasons for early discontinuation of breast feeding	No secretions	185 (37%)
	Baby didn't suck	65 (13%)
	2 <sup>nd</sup> consecutive pregnancy	15 (3%)
	Sick Baby	5 (1%)
	Sick Mother	15 (3%)
Personnel consulted during sickness	Didn't stop BF	215 (43%)
	Doctor	480 (96%)
	Relatives	15 (3%)
	Friends	5 (1%)

Question		Number (%)
Mother's Satisfaction about BF	Fully Satisfied	365 (73%)
	First satisfied, now not	105 (21%)
	Initially not, but later yes	10 (2%)
Duration of Burping after BF	Satisfied	20 (4%)
	5 min	215 (43%)
	15 min	95 (19%)
	30 min	20 (4%)
	Till burping	170 (34%)

**Table 4:** Knowledge of BF practices

S. No.	Variables		Frequency	Percentage
1	Timing of initiation of breast feeding (BF)	Within 1 hr	190	38%
		After 1 hr	305	61%
		Within 1 day	005	01%
2	Exclusive breast feeding (EBF)	Know	143	28.6%
		Don't know	357	71.4%
3	Colostrum	Know	210	42%
		Don't know	290	58%
4	Prelacteal feeds	Given	60	12%
		Not given	440	88%
5	Is burping required after BF?	Yes	390	78%
		No	045	09%
		Don't know	065	13%
6	Duration of BF	6 months	018	3.6%
		year	216	43.2%
		years	266	53.2%
7	Does sucking affect BF?	Yes	134	26.8%
		No	195	39%
		Don't know	171	34.2%
8	Does position of mother and baby affect BF?	Yes	268	53.6%
		No	085	17%
		Don't know	147	29.4%
9	Does healthy food affect BF?	Yes	465	93%
		No	010	02%
		Don't know	025	05%
10	Is cleaning of breasts required before BF?	Yes	200	40%
		No	217	43.4%
		Don't know	083	16.6%
11	Does BF have a role in prevention of diseases?	Yes	077	15.4%
		No	195	39%
		Don't know	228	45.6%
12	Does EBF prevent consecutive pregnancy?	Yes	130	26%
		No	050	10%
		Don't know	320	64%
13	Does BF have a role in bonding between baby and mother?	Yes	395	79%
		No	008	1.6%
		Don't know	097	19.4%

S. No.	Variables		Frequency	Percentage
14	Are formula feeds superior to breast-milk?	Yes	119	23.8%
		No	160	32%
		Don't know	221	44.2%
15	Is breast milk easier to digest than formula feeds?	Yes	422	84.4%
		No	027	5.4%
		Don't know	051	10.2%
16	Does skin to skin contact have a role in BF?	Yes	085	17%
		No	122	24.4%
		Don't know	293	58.6%
17	Dose BF affect the day to day routine of the mother?	Yes	240	48%
		No	249	49.8%
		Don't know	011	2.2%
18	Is your baby's hunger satisfied after BF?	Yes	288	57.6%
		No	066	13.2%
		Don't know	146	29.2%
19	Do family members have a role in BF?	Yes	043	8.6%
		No	210	42%
		Don't know	247	49.4%
20	Knowledge about weaning?	Yes	170	34%
		No	175	35%
		Don't know	155	31%

## Discussion

Breast feeding has several benefits for both the infants and mothers. In present study we evaluated knowledge, attitudes and breast feeding practices of postnatal mothers. Based on the findings of this study we have following recommendations-

1. **Promotion of EBF:** We still need to focus on EBF as many mothers are unaware of its benefits to both the infant and herself. Mothers need to be actively made aware of its benefits.
2. **Acceptance of EBF:** Mothers who knew benefits of BF still did not accept EBF as a whole because in rural areas the family predominates and decision of adopting or rejecting EBF is taken by other family members (example mother in law)
3. **Attention to be given in health planning:** Health care providers and decision makers should address issues and have "free health talk" including whole family to improve EBF practices in the community. This should begin right from the grass roots level.
4. **Effective breast feeding technique must be**

**included:** Even if there is knowledge on EBF, how to correctly imply it is the question to be answered. Mothers must be taught about proper positioning and attachment during breast feeding. This not only satisfies the hunger of the infant but also improves the bonding between the infant and the mother.

5. **Superstitious beliefs:** These are common in country like India and need to be addressed. For Example:
- (A) BF leads to weight gain
  - (B) BF is not enough to satisfy the demands of the baby and for its development.
  - (C) Honey or sweet water should be the first feed given to the baby (prelacteal feeds)
  - (D) Discarding colostrum as it is considered impure and nutrition less.
  - (E) Ignoring burping after BF.

## Conclusion

There is still a big gap between the actual and desired BF practices in India which shall not only need awareness but the right implementation and dusting off the undesired cultural practices.

Our study investigated and reviewed EBF among mothers with children <6 months and >6 months age with almost equal representation from both sexes. Most children in this study were born vaginally (59%). A high percentage of mothers in this study were illiterate (47%). 87% of the mothers preferred doctors as counsellors to discuss BF issues.

Most of the mothers stopped BF early and the most common reason for stopping BF was not enough breast milk. During illness, 96% consulted doctors.

Out of all the mothers in this study, 73% of them were fully satisfied about their BF but only 4% of them believed in burping for 30mins after BF. In contrast to the ideal time of starting BF within 1 hour of birth, most of them (61%) started BF after 1 hour. Most of the mothers (71.4%) didn't know about EBF. 58% mothers knew what colostrum was and what its importance was. Most of the mothers breast fed for 2 years duration (53.2%). 53.6% knew that position of mother and baby affected BF. 45.6% did not believe that BF affects breast diseases. 79% believed that BF improves bonding. 84.4% knew

that breast milk was easier to digest than formula feeds. 58.6% did not know that skin to skin contact is important. Majority of them did not also know weaning.

Thus various areas need to be worked upon to promote EBF in Indian population for proper growth and development of the infants.

## References

1. Divya Karnawat, B S Karnawat, Avadhesh Joshi, G. Kalsi Kohli Knowledge, attitude & practices about infant feeding among mothers of urban & rural areas of Ajmer district J. Med. Res 2015;1(3):90-94.
2. Karnawat BS, Singh RN, Gupta BD, et al. Knowledge and attitudes of hospital employees regarding infant feeding practices. Indian Pediatr 1987;24:939-48.
3. Kumar D, Agarwal N, Swami HM. Sociodemographic correlates of breastfeeding in urban slums of Chandigarh. Indian J Med. Sci 2006;60:461-66.
4. Yadav RJ and Singh P. Knowledge attitude and practices of mothers about breast feeding in Bihar. Indian J Community Med 2004;29(3):130-31.
5. Ben Slama F, Ayari I, Buzini F, et al. Exclusive breastfeeding and mixed feeding- knowledge, attitudes and practices of premarous mothers. East Mediterr Health J 2010;16(6):630-35.
6. Taneja DK, Saha R, Dabas P, et al. Study of infant feeding practices and the underlying factors in a rural areas of Delhi. Indian J Community Med 2003;28:107-11.
7. Medhi GK and Mahauta J. Breastfeeding weaning practices and nutritional status of infants of tea gardens of Assam. Indian Pediatr 2004;41:1277-78.
8. Yesildal N, Aytar G, Kocabay K, et al. Breastfeeding practices in Duzce Turkey. J Hum Lact 2012;24:393-400.
9. WHO. Exclusive breastfeeding for six months best for babies everywhere', World Health Organization 2011 (Cited 2014 July 21). Available from: <http://www.who.int>.
10. WHO. The WHO Global Data Bank on Infant and Young Child Feeding. WHO Nutrition for Health and Development, a. 2009 (Cited 2014 July 21) Available from: <http://www.who.int>.
11. Dennis CL. Breastfeeding initiation and duration: A 1990-2000 literature review. J ObstetGynecol Neonatal Nurs 2002;31:12-32.

12. Li R, Darling N, Maurice E, et al. Breastfeeding rates in the United States by characteristics of the child, mother or family: The 2002 National Immunization Survey. *Pediatrics* 2005;115: 31-7.
  13. Agampodi SB, Agampodi TC, Piyaseeli UK. Breastfeeding practices in a public health field practice area in Sri Lanka: A survival analysis. *Int Breastfeed J* 2007;11:13.
  14. Cai X, Wardlaw T, Brown DW. Global trends in exclusive breastfeeding. *Int Breastfeed J* 2012;28:12.
  15. Gupta A. BPNI: 10 years of its work. *J Indian Med Assoc* 2002;100:512-5.
  16. NRHM. National Rural Health Mission (2005-2012) Mission document, 2006. New Delhi: MoHFW, Government of India, New Delhi; Ministry of Health and Family Welfare (MoHFW).
-