

## A Study on Knowledge, Attitude and Practice of Breastfeeding among Lactating Mothers in a Rural Tertiary Care Center, Mandya, Karnataka

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### Abstract

**Background:** Breastfeeding offers many potential health and emotional bonding for mother and baby. Studies have shown that breastfed babies are more intelligent, have better academic performance and they become smarter than formula fed babies. **Objective:** To assess the maternal knowledge, attitude and practice of breast feeding among mothers having children between 0-2 years of age. **Materials and methods:** A cross sectional questionnaire based study among 200 lactating mothers with children aged between 0-2 years, face to face interview using a pre-designed, self-administered, standardized questionnaire regarding knowledge, attitude and practices of breastfeeding was conducted. Data thus obtained was compiled and entered in MS Excel spread sheet; descriptive statistics was applied, cross tables were constructed, data was expressed in terms of frequency and percentage. **Results:** There were 200 study participants; majority of the mothers had knowledge regarding health benefits, nutritive values, immunological properties, cost effectiveness of breast milk. Timely sucking in first hour of birth was practiced only by 50% of mothers. 8% of mothers administered prelacteal feeds to their infants. 68.5% mothers practiced colostrum feeding. Out of total 114 normal vaginal deliveries 100 (87.71%) could initiate breast feed within one hour of life. All the mothers who could initiate breast feeding within 1 hour of life had normal vaginal delivered. **Conclusion:** The present study shows that participants have good knowledge attitude regarding breast feeding. We also recommend strengthening the public health education campaigns to promote breast feeding.

**Keywords:** Breastfeeding; Knowledge; Attitude and Practice.

### Introduction

Breastfeeding has been branded as an effective tool to achieve the Global Strategy for Women's, Children's and Adolescents' Health (2016–2030), which was launched alongside the Sustainable Development Goals as a roadmap for ending preventable deaths in a generation<sup>1</sup>. Breast feeding is the best way of feeding an infant, as it offers complete nutrition, prompt protection against infections, promotes growth and development of infants. The WHO recommends that for the first six months of life, infants should be exclusively breastfed to achieve optimal growth, development, and health. Thereafter,

infants should receive nutritionally adequate and safe complementary foods, while continuing to breastfeed for up to two years or more<sup>2</sup>. Exclusive Breast Feeding (EBF) is defined as infant feeding with human milk without the addition of any other liquids or solids<sup>3</sup>. According to WHO and UNICEF breast feeding is the single most effective child survival intervention which reduces both infant mortality and under 5 mortality<sup>4</sup>. Breast feeding has a major role in reducing neonatal mortality rate under Millennium Development Goals. 31% of all neonatal deaths worldwide can be prevented by breast feeding

within the first one hour of life<sup>5</sup>. Breastfeeding offers many potential health and emotional bonding for mother and baby. Studies have shown that, breastfed babies are more intelligent, have better academic performance and they become smarter than formula fed babies<sup>6</sup>.

In India, breastfeeding appears to be influenced by social, cultural, and economic factors. In 1991, Breastfeeding Promotion Network of India (BPNI) was born to protect, promote and support breastfeeding<sup>7</sup>. Further, the Government of India has undertaken National Rural Health Mission, which intends to implement Integrated Management of Neonatal and Childhood Illnesses (IMNCI) through the existing healthcare delivery system<sup>8</sup>. Poor practices and attitudes toward exclusive breastfeeding have been reported to be among the major reasons for poor health outcomes among children, particularly in developing countries. The practice of breast feeding is influenced by various social, cultural and religious beliefs, maternal infant feeding attitude has been shown to be a stronger independent predictor of breastfeeding initiation<sup>9</sup>. Maternal positive attitudes toward breastfeeding are associated with continuing to be breastfeeding longer and have a greater chance of success<sup>10</sup>. Further, maternal attitude is also a concept of interest to health professionals who support breastfeeding. Thus the present study was developed to assess, knowledge attitude and practice of breast feeding among mothers having children between 0 – 2 years of age.

## Materials and Methods

### Objective

To assess the maternal knowledge, attitude and practice of breastfeeding among mothers having children between 0-2 years of age.

### Source of data

*Study Place:* Study was conducted in rural teaching hospital Adichunchanagiri institute of medical sciences, Mandya district, Karnataka.

*Study Duration:* September 2020 - October 2020

*Study Subjects:* Mothers with children aged between 0-2 years attending paediatric out-patient department and in-patient department.

*Study Design:* Cross sectional, questionnaire based study in the setting of medical college and hospital predominantly catering the health needs of the rural population.

### Inclusion criteria:

All the mothers with children aged between 0-2 years visiting the pediatric out-patient department and in-patient department in Adichunchanagiri institute of medical sciences, B.G. Nagara, who gave consent, were included in the study.

### Exclusion criteria:

- Not willing to participate in study.
- Galactosemia.
- Mother suffering from cancer, active tuberculosis or psychoses.

### Method of Data Collection:

Informed consent was taken from mothers of children aged between 0-2 years visiting paediatric out-patient and in-patient department of Adichunchanagiri Institute of Medical Sciences. A face to face interview using a pre-designed, self-administered, standardized questionnaire regarding knowledge, attitude and practices of breastfeeding was conducted. The questionnaire, included data about maternal age, parity, type of delivery, place of delivery, education, employment, socioeconomic status, religion, residence, gender of the child, vinitiation and duration of exclusive breastfeeding and weaning practices. Health education was given to all the mothers regarding the advantages of breastfeeding.

### Statistical Analysis:

Data thus obtained was compiled and entered in MS Excel spread sheet; descriptive statistics was applied, cross tables were constructed, data was expressed in terms of frequency and percentage.

## Results

A total of 200 mothers were willing to participate in the study, majority of the mothers 180 (90%) had babies less than 1 month of age, followed by 1-2 months of age 8 (4%). We had total of 108 (54%) male babies and 92 (48%) female babies. Most of the mothers 176 (88%) belonged to 20-30 year age group category which is followed by <20 years 16 (8%). 160 (80%) participants belonged to Hindu religion and 40 (20%) participants were Muslims. 80 (40%) participants had education till high school, 64 (32%) had post high school diploma, 28 (14%) were graduates. 45 (22.5%) were employed, 155 (77.5%) were home makers. Majority of the cases 104 (52%) belonged to class III BG Prasad socio economic classification which is followed by class II 56 (28%). 96 (48%) participants were primipara, 184 participants had regular antenatal visits, 108 (54%) received antenatal counseling regarding breast feeding, 114(57%) cases were normal vaginal delivery, 76 (38%) were caesarean section and 10 were instrumental delivery.

**Table 1:** Maternal Knowledge Regarding Breastfeeding (Multiple Responses).

Knowledge	No. of Cases	Percentage
Child remains healthy	188	94%
More nutritious and hygienic	104	52%
Gives natural immunity	150	75%
Helps in preventing further conception	56	28%
Skin to skin contact and its advantages	18	9%
It is pure and cost nothing	150	75%
Improves growth and development	144	72%
Prevents from allergy	12	6%
Feeding of twin babies	-	0%
Fore milk and Hind milk	122	61%
Milk Bank	0	0%
Surrogate Mothers and Wet Nursing	2	1%
Breast Shield/Nipple Shield	26	13%

From table 1, majority of the mothers had knowledge regarding health benefits, nutritive values, immunological properties and cost effectiveness of breast milk. Few were aware of lactation amenorrhea, nipple shield, skin to skin contact and wet nursing. None of them were aware of twin feeding and milk bank. From table 2, majority of mothers found that breast milk is best milk, very few found that breast feeding is old fashioned.

**Table 2:** Maternal Attitude towards Breastfeeding (Multiple Responses).

Attitude	No. of Cases	Percentage
Breastfeeding leads to loss of figure	88	44%
Breastfeeding is old fashioned	12	6%
Breastmilk is the best milk	196	98%
Breastmilk is pure and cost nothing	150	75%
Breastfeeding fosters close bond between mother and child	102	51%
Breastfeeding in public is embarrassing	112	56%
Breastfeeding prevents going to work	170	85%

It was noticed that timely sucking in first hour of birth was practiced only by 50% of mothers. 8% of mothers administered prelacteal feeds to their infants. 68.5% mothers practiced colostrum feeding. Only 3.5% of mothers gave bottle feeding. 54% of mothers followed on demand feeding while 46% of mothers followed scheduled feeding (Table 3).

**Table 3:** Practices Regarding Breastfeeding.

Most of the mothers (58.5%) preferred to feed the babies in sitting position, 67.5% of mothers burped their babies after feeds, 51.5% of mothers emptied one breast followed by other. 46.5% mothers knew breast and hand hygiene (Table 4).

**Table 4:** Breastfeeding Technique (Multiple Responses).

Breastfeeding Technique	No. of Mothers	Percentage
Mostly lying down	83	41.5%
Mostly sitting down	117	58.5%
Nipple and most of areola inside the mouth	111	55.5%
Burping after feeds	135	67.5%
Knows placing the fingers between gums and areola to release suction	67	33.5%
Complete emptying of one breast followed by other	103	51.5%
Complete emptying of both breasts	97	48.5%
Knows about cleanliness of breast and hand washing before feeds	93	46.5%

Out of total 114 normal vaginal deliveries 100 (87.71%) could initiate breast feed within one hour of life. All the mothers who could initiate breast feeding within 1 hour of life had normal vaginal delivery (Table 5).

**Table 5:** Association of First Breastfeed with Type of Delivery.

How soon the baby was breastfed after delivery	Type of delivery			Total
	Normal Vaginal	Caesarean Section	Instrumental	
<1hour	100	-	-	100 (50%)
1-4 hours	6	68	5	79 (39.5%)
4-12 hours	1	1	1	3 (1.5%)
12-24 hours	2	1	-	3 (1.5%)
2-3 days	2	2	1	5 (2.5%)
>4 days	3	4	3	10 (5%)
<b>Total</b>	<b>114</b>	<b>76</b>	<b>10</b>	<b>200 (100%)</b>

## Discussion

Breastfeeding offers many potential health and emotional bonding for mother and baby. It is the most complete form of nutrition available to infants. Studies have shown that breast fed babies are more intelligent, improves their academic performance and they become smarter than formula fed babies.<sup>6</sup>

In our study, we found that 75% of mothers had knowledge regarding immune benefits and cost benefits of breast milk, similar studies done by Vinay BS et al<sup>11</sup> found 88.4% and Vijayalakshmi P<sup>12</sup> et al found 95% of the mothers to have knowledge regarding immune benefits of breast milk, Vinay BS et al<sup>11</sup> found 94.9% and Vijayalakshmi P<sup>12</sup> et al found 87.7% of mothers to know cost benefits of breast milk. In our study 98% of mother

Practices	No. of Cases	Percentage
Initiation of Breastfeeding		
<1 Hr	100	50%
1-4 Hr	79	39.5%
4-12 Hr	3	1.5%
12-24 Hr	3	1.5%
2-3 Days	5	2.5%
>4 Days	10	5%
Prelacteal Feeds		
Given	16	8%
Not Given	184	92%
Colostrum Feeding		
Fed	137	68.5%
Not Fed	63	31.5%
Bottle feeding Given		
Yes	7	3.5%
No	193	96.5%

agreed that mothers milk is the best milk, in a study done by Vinay BS et al<sup>11</sup> 87% of mothers agreed that mothers milk is the best milk.

In our study that 51% of mother found that breast feeding increases the bond between mother and babies, in study done by Vinay BS et al<sup>11</sup> 94.9% of mothers and study done by Vijayalakshmi P<sup>12</sup> 73.8% of mothers found that breast feeding increases the bond between mother and babies.

50% of the mothers in our study initiated breast feeding within one hour of birth. Similar results were found in study done by Bala K et al<sup>13</sup>, where 51.6% of mothers initiated feeds within 1hour of birth. While study done by Rudrappa et al<sup>14</sup> and Menon et al<sup>15</sup> 28.5% and 82.5% of mothers respectively initiated feeds within 1hour of birth.

### Conclusion

The present study shows that participants have good knowledge attitude regarding breast feeding. It is important to provide antenatal education to mothers on breast feeding. We also recommend strengthening the public health education campaigns to promote breast feeding.

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