

## Original Research Article

# Knowledge and attitude of antenatal women attending tertiary care hospital regarding breastfeeding

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## ABSTRACT

**Background:** Breastfeeding is the most natural way of infant feeding to satisfy nutritional, metabolic and psychological needs of the baby. Breastfeeding significantly reduces the risk of death especially from diarrhoea and pneumonia in infants as compared to formula fed babies. Breastfeeding has advantage to both the baby and the mother. Early initiation of breastfeeding lowers the mother's risk of postpartum haemorrhage and anaemia, boosts mother's immune system and reduces the incidence of diabetes and cancer.

**Methods:** All women attending Jayanagar General Hospital for ante-natal checkups during study period were interviewed personally by an investigator after obtaining an informed consent. Data regarding socio-demographic details and data on knowledge, attitude of breastfeeding were collected by using a pre-tested semi-structured questionnaire.

**Results:** The sample of the present study comprised of 204 antenatal women of whom 89.7% belonged to age group less than or equal to 30 years. Majorities 73.5% of them were Muslims. Most of the participants 87.7% were unemployed. Almost 72.54% of the participants were multipara. Almost 42.2% of the participants were of the opinion that the duration of breastfeeding is 2 years or more. 65.7% of the participants stated that complementary feeding should be started after 6 months. Knowledge about technique of expressed breast milk was poor.

**Conclusions:** Multiparous women have better knowledge than primipara regarding breastfeeding. Socio demographic characteristics such as age, parity found to be significantly associated with knowledge. There is a need for counselling primi antenatal women regarding breastfeeding associated with knowledge. There is a need for counselling primi antenatal women regarding breastfeeding.

**Keywords:** Breastfeeding, Knowledge, Attitude, Primipara, Multipara

## INTRODUCTION

Breastfeeding has been accepted as the most vital intervention for reducing infant mortality and providing optimal growth and development of children.<sup>1</sup> Breastfeeding is needed for the physiological and psychological needs of an infant.<sup>2</sup> Suboptimal breastfeeding, more so non-exclusive breastfeeding (EBF) in the first 6 months of life results in 1.4 million deaths and 10% of the disease burden in children younger than 5 years of age.<sup>3</sup> More than 15% of 24 lakhs child

deaths could be avoided in India by optimal breastfeeding practices.<sup>4</sup> Infants who are not breastfed are 6-10 times more likely to die within the 1st month of life than infants who are breastfed.<sup>5</sup> 16% of neonatal deaths could be saved if all infants were breastfed from day 1.<sup>6</sup> Optimum growth can be achieved by EBF to infants till 6 months of age as per the World Health Organization (WHO) recommendations.<sup>7</sup> Under five mortality was estimated to be 8.795 million, among these, pneumonia accounted for 18% and diarrhoea for 15%, deaths.<sup>8</sup> Breastfeeding is an unequalled method of providing ideal nutrition for the

healthy growth and development of infants. It is a fundamental right of every child. Infants suffer from malnutrition if they do not receive adequate nutrients.<sup>9</sup>

### Objectives

Objectives of the study were to assess the knowledge of antenatal women attending tertiary care regarding breastfeeding; to assess the attitude of antenatal women attending tertiary care hospital regarding breastfeeding; and to explore associations with knowledge and socio-demographic characteristics.

## METHODS

### Study area

The study was conducted at the Jayanagar General Hospital, 4<sup>th</sup> B block beside Rajiv Gandhi Health Institute, Tilak Nagar, Bengaluru, Karnataka.

### Study type

The type of the study was cross-sectional.

### Study period

The study was conducted for a period of 6 months.

### Study population

The study population consisted of women attending Jayanagar General Hospital for ante-natal checkups.

### Sampling design

The design of the study was convenient sampling.

### Sample size

Sample size was calculated by using the formula.

$$N = 4pq/d^2$$

Where p is proportion of knowledge of mothers towards breastfeeding that is 85% based on review of literature; q is 1-p, d is 5 total sample size calculated is 204 with 10% non-response rate, and total sample size taken is 224.

### Methods of data collection

All women attending Jayanagar General Hospital for ante-natal checkups during study period were interviewed personally by an investigator after obtaining an informed consent. Data regarding socio-demographic details and data on knowledge, attitude of breast feeding was collected by using a pre-tested semi-structured questionnaire through face to face interview by an investigator.

### Inclusion criteria

All women coming for ante-natal checkups during study period at Jayanagar General Hospital.

### Exclusion criteria

Ante-natal women who have not given consent; ante-natal women who were seriously sick; and ante-natal women attending Jayanagar General Hospital for reason other than ante-natal checkups were excluded.

The study does not require any investigations or interventions to be conducted on patients or other humans or animals.

## RESULTS

The sample of the present study comprised of 204 antenatal women of whom 89.7% belonged to age group less than or equal to 30 years. Majorities 73.5% of them were Muslims. Most of the participants 87.7% were unemployed. Almost 72.54% of the participants were multipara.

Almost 35% initiated breastfeeding within an hour of delivery. Less than one fourth of the participants stated that colostrum helps in proper growth of the children. 28.9% had knowledge that colostrum helps in fighting against infection. There were many women (15.9%) who lacked knowledge about colostrum. 46.1% of participants opined that pre lacteal feed should not be given to the baby. One quarter of the mothers were exclusive breast feeders.

**Table 1: Distribution of antenatal women attending tertiary care hospital according to age.**

Age (years)	Frequency	Percent
Less than or equal to 30	183	89.7
31 to 40	21	10.3
Total	204	100.0

**Table 2: Distribution of antenatal women attending tertiary care hospital according to education.**

Education	Frequency	Percent
More than high school	135	66.2
Less than or equal to high school	69	33.8
Total	204	100

**Table 3: Distribution of ante natal women attending tertiary care hospital according to religion.**

Religion	Frequency	Percent
Hindu	54	26.5
Muslim	150	73.5
Total	204	100.0

**Table 4: Distribution of antenatal women attending tertiary care hospital according to the occupation.**

Occupation	Frequency	Percent
Employed	25	12.3
Unemployed	179	87.7
Total	204	100.0

**Table 5: Distribution of antenatal women attending tertiary care hospital according to the parity.**

Parity	Frequency	Percent
Primipara	56	27.5
Multipara	148	72.54
Total	204	100.0

**Table 6: Knowledge of antenatal women attending tertiary care hospital regarding time of initiation of breastfeeding.**

Time of initiation of breast feeding (hour)	Frequency	Percent
Within 1	72	35.3
1-6	39	19.1
6- 24	54	26.47
No idea	39	19.1
Total	204	100.0

Almost 42.2% of the participants were of the opinion that the duration of breastfeeding is 2 years or more. 65.7% of the participants stated that complementary feeding should be started after 6 months. Knowledge about technique of expressed breast milk was poor. Almost 65.7% of the participants stated that complementary feeding should be

started after 6 months. Correct knowledge about storage of expressed breast milk was present in 14.2%.

**Table 7: Knowledge of antenatal women attending tertiary care hospital regarding exclusive breast feeding.**

Exclusive breast feeding (months)	Frequency	Percent
Less than 6	36	17.6
6	108	52.9
More than 6	47	23.0
No idea	13	6.37
Total	204	100.0

**Table 8: Knowledge of antenatal women attending tertiary care hospital regarding expressed breast milk.**

Expressed breast milk	Frequency	Percent
Yes	51	25.0
No	153	74.5
Total	204	99.5

**Table 9: Knowledge grade of the antenatal women attending tertiary care hospital regarding breastfeeding.**

Knowledge score	Grade	Frequency	Percent
0-3	Poor	54	24.5
4-7	Average	94	42.7
More than 8	Good	56	25.5

**Table 10: Association between religion and prelacteal feed.**

Pre lacteal feed	Religion (%)			Chi square value	P value
	Hindu	Muslim	Total		
Should be given to baby	5 (4.5)	105 (95.4)	110 (53.9)	58.960	0.000
Should not be given to baby	49 (52.1)	45 (47.8)	94 (46.07)		
Total	54 (26.4)	150 (73.5)	204 (100)		

## DISCUSSION

### *Age of the antenatal women attending tertiary care hospital*

In the current study, nearly 91.17% of the subjects belonged to the age group less than or equal to 30 years which is similar to a study conducted by Mangalgi and Sudheendra in the year 2017 where it was found that 80% of the subjects belonged to the age group less than or equal to 30 years whereas a study conducted by Dixit et al from Uttar Pradesh reported that 43.6% of the study subjects belonged to the age group less than or equal to 25 years.<sup>10,11</sup>

### *Occupation of the antenatal women attending tertiary care hospital*

In the current study, nearly 87.7% of the subjects were unemployed, which is comparable to the cross sectional study conducted by Sultania et al in the year 2019, where it was found that 91% of their study sample were unemployed, also a study conducted by Nishimura et al from South India, Mysore, revealed that 97.5% of the study subjects were unemployed, which is in contrast to a study conducted by Mohit et al wherein, 54.2% of the study subjects were unemployed.<sup>12,13</sup>

### ***Parity of the antenatal women attending tertiary care hospital***

In the current study, nearly 27.5% of the study subjects were primipara, which is comparable to the study conducted by Sultania et al from Banaras, India, in which 25% of the study subjects were primipara, where as a study by Nishimura et al reported that 53.8% of the study subjects were primipara.<sup>12,22</sup>

### ***Religion of the antenatal women attending tertiary care hospital***

In the current study, nearly 73.5% of the study population belong to the Muslim religion. But in contrast, study conducted by Ghure et al, Indore, Madhya Pradesh, India in the year 2018 revealed that 95.4% of the study population were Hindu.<sup>14</sup> The study conducted by Sultania et al from Banaras, India revealed that 24% of the subjects were Muslims which was contrasting to the present findings.<sup>12</sup> The high Muslim patients in the current study is due the fact that the hospital is located in the predominant Muslim locality of Bangalore.

### ***Education of the antenatal women attending tertiary care hospital***

In the current study, nearly 66% of the study population received education till more than high school. A study conducted by Rudrappa et al from Mysore reported that 30% of the study subjects received education till primary school whereas 24% of the study population received education till secondary school.<sup>21</sup> The study conducted by Sultania from Banaras, India revealed that 13% of the study subjects were literate up to high school which was in contrast to the present findings.<sup>12</sup> This is mainly because the current study is conducted in Karnataka where the literacy of the female is high as compared to Banaras which is in Uttar Pradesh.

### ***Time of initiation of breastfeeding***

In the current study, nearly 35.3% of the study population knew about initiating breastfeeding within an hour. The study conducted by Dhanlakshmi et al from Mysore revealed that the knowledge regarding early initiation of breastfeeding were poor among 70% mothers.<sup>15</sup> A study conducted by Chaudhary et al revealed that 10% of the study subjects knew about the initiation of breastfeeding within an hour.<sup>16</sup>

### ***Exclusive breastfeeding***

In the current study, nearly 52.9% of the study population knew about exclusive breastfeeding which is similar to the study conducted by Choudhary et al in the year 2015 where it was found that 59.1% knew about exclusive breastfeeding where as a study conducted by Das et al, Eastern India reported that 80% of the study subjects had the knowledge of exclusive breastfeeding.<sup>16,17</sup> There is a

significant difference between knowledge of exclusive breastfeeding mainly because the study conducted by Das et al were done in the rural areas of Eastern India where the prevalence of exclusive breastfeeding is more as compare to the urban areas.

### ***Initiation of complementary feeding***

In the current study, nearly 65.7% of the study population knew about the initiation of complementary feeding at the age of six months, which is similar to the study conducted by Hasnain et al, where it was found that the knowledge of initiation of complementary feeding is 54% whereas a study conducted by Choudhary et al found that the knowledge of initiation of complementary feeding is 62.3%.<sup>16,18</sup>

### ***Prelacteal feed***

In the current study, it was found that 54% mentioned that pre lacteal feed should be given which was in contrast to the study conducted by Roy et al where it was found that 40.1% reported that pre-lacteal feed should not be given to newborn babies.<sup>19</sup>

A study conducted by Sultania where it was found that 27% of the study population reported that pre lacteal feed should be given to new born babies.<sup>12</sup> The prevalence of Pre lacteal feed is low in the study conducted by Sultania et al. This is mainly the study conducted in Banaras where the Hindu population is predominant and the pre lacteal feed is mainly prominent in Muslims.

### ***Duration of breastfeeding***

In the current study, it was found that 42.2% of them knew that duration of breastfeeding is for 2 years and more which was in contrast to the study conducted by Choudhary et al in the year 2015 where it was found that 62.1% of the study subjects knew that duration of breastfeeding is 2 year or more.<sup>16</sup> A study conducted by Chandrashekhar, Udupi, Karnataka reported that 78.3% of the study subjects subscribed to the view that breastfeeding should be continued beyond 1 year.<sup>20</sup>

### ***Knowledge grade of the antenatal women attending tertiary care hospital***

In the current study, 42.7% and 24.5% of the study subjects secured 'average' and 'poor' grade respectively, while 25.5% secured 'good' grade. This is comparable to the study conducted by Girish and Gandhimathi in the year 2015 at Elite Mission Hospital, Kerala where it was found that 32% of the study population secured good grade whereas 46% and 22% of the subjects secured average and poor grade where as a study conducted by Ghure et al from Madhya Pradesh, India reported that 81.1% of the study subjects had good knowledge.<sup>14,21</sup>

### **Association between knowledge grade and other variables**

There is no significant association between knowledge grade and the demographic characteristic such as education, occupation and religion. There is, however, a significant association between age, parity and knowledge. These results are comparable to the study conducted by Choudhary et al at a tertiary care centre in Bhopal.<sup>16</sup> A study conducted by Mohit et al reported that education, religion, occupation were significantly associated with knowledge which is in contrast to the present findings.<sup>13</sup>

### **Association between religion and prelacteal feed**

Current study found a significant association between religion and pre lacteal feed. The current study is comparable to the study conducted by Patel et al in the year 2013 where it was found that pre lacteal feed is closely associated with religion.<sup>24</sup> A study conducted by Roy et al reported that pre lacteal feed is associated with age, socioeconomic status and place of delivery which was as in contrast to the present findings.<sup>23</sup>

### **Limitations**

The study is a hospital based one and is limited to one tertiary hospital of government setting and the results cannot be generalized.

### **CONCLUSION**

Multiparous women have better knowledge than primipara regarding breastfeeding. Socio demographic characteristics such as age, parity found to be significantly associated with knowledge. There is a need for counselling primi antenatal women regarding breastfeeding.

So, when planning further implementation initiatives related to NiV prevention in hospitals, these findings and perceptions must be taken into account by working together to identify and control of the disease, which become public health importance in Bangladesh.

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