

## A CROSS-SECTIONAL STUDY OF KNOWLEDGE, ATTITUDE AND PRACTICES OF EXCLUSIVE BREASTFEEDING AMONG PRIMIPAROUS MOTHERS IN A TERTIARY CARE HOSPITAL

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### Abstract

**Background:** The WHO and UNICEF recommend exclusive breastfeeding (EBF) for the first 6 months of life. Exclusive breastfeeding is defined as giving no other food or drink to the infant, not even water, except breast milk (including milk expressed or from a wet nurse) for the first 6 months of life. The breastfeeding practice confers a lot of benefits to the baby, to the mother and also to their bonding. In human beings misconceptions, wrong information, false beliefs and confusions have led to a situation where in the newborn many a times is deprived of this gift. Among the primiparous mothers, factors shown to influence or predict EBF are breastfeeding self-efficacy, breastfeeding outcome expectancy, sociocultural factors and early initiation of breastfeeding. Hence a need was felt to conduct a study among admitted patients at tertiary level hospital to analyze knowledge, attitude and practices towards breast feeding and see if any interventions can improve the shortcomings. The objectives are to assess knowledge, attitude and practices of primiparous mothers regarding exclusive breast feeding. 2.To improve the rate of breast feeding among primis. **Materials and Methods:** After approval from the Institutional Ethics Committee, a prospective, cross-sectional and a questionnaire based study was conducted by the Department Of Pediatrics among primi parous lactating mothers in postnatal ward, at a tertiary care teaching hospital, Guntur, Andhra Pradesh. The first set of questions were asked about demographics such as age, religion, education, mode of delivery, which was followed by a set of questions about the knowledge, attitude, and practices of breastfeeding. **Result:** In the present study, 71.8% of primi mothers had knowledge about colostrum feeding and the remaining 28.2% did not have knowledge. 95.4% of the population is aware that breastfeeding is beneficial to both mother and child and the remaining 4.6% are unaware. When questions were asked regarding duration of exclusive breastfeeding,73.6% of the population were aware about it and remaining 26.4% had no knowledge. Mother's attitude regarding breast feeding, 91.8% responded 'yes' to the statement 'According to me, breastfed babies are healthier and more intelligent than formula fed babies. **Conclusion:** Primiparous mothers are new to the role of motherhood, and they take their time to adjust to this role and consequently there are more misconceptions among them regarding practices of breast feeding.

## INTRODUCTION

The WHO and UNICEF recommend exclusive breastfeeding (EBF) for the first 6 months of life.<sup>[1]</sup>

Exclusive breastfeeding is defined as giving no other food or drink to the infant, not even water, except breast milk (including milk expressed or from a wet nurse) for the first 6 months of life, but allows the

infant to receive ORS (oral replacement solution), drops and syrups (vitamins, minerals and medicines).<sup>[2]</sup> The World Health Assembly (WHA) has set a global target to increase the rate of exclusive breastfeeding globally to 50% by 2025.<sup>[3]</sup> Exclusive breastfeeding is regarded as one of the most powerful tools policy makers have at their disposal to improve the health of their population and economies.<sup>[4,5]</sup>

The breast-feeding practice confers a lot of benefits to the baby, to the mother and also to their bonding. In human beings misconceptions, wrong information, false beliefs and confusions have led to a situation where in the newborn many a times is deprived of this gift. This could be seen in the initiation of breastfeeding, colostrum feeding, supplementary feeding, frequency and duration of feeding and continuation of feeding. Colostrum is the first milk produced in first 3- 4 days. It is regarded as the first vaccine, provides nutrients, immunological factors such as secretory immunoglobulin IgA, and thus protects against infections.

Primi parous mothers are less likely to practice exclusive breastfeeding for 6 months and are less likely to breastfeed for 2 years and more.<sup>[6]</sup> They may have difficulties in adjusting to the new role and less breastfeeding skills.<sup>[7]</sup> Among the primiparous mothers, factors shown to influence or predict EBF are breastfeeding self-efficacy, breastfeeding outcome expectancy, sociocultural factors and early initiation of breastfeeding.<sup>[8]</sup>

Hence a need was felt to conduct a study among admitted patients at tertiary level hospital to analyze knowledge, attitude and practices towards breast feeding and see if any interventions can improve the shortcomings.

#### Aims and Objectives

1. To assess knowledge, attitude and practices of primiparous mothers regarding exclusive breast feeding.
2. To improve the rate of breast feeding among primis.

## MATERIALS AND METHODS

After approval from the Institutional Ethics Committee, a prospective, cross-sectional and a questionnaire-based study was conducted by the Department of Pediatrics after taking Informed written consent from each participant among 110 primiparous lactating mothers in postnatal ward, at a tertiary care teaching hospital, Guntur, Andhra Pradesh.

A pretested semi-structured questionnaire<sup>9</sup> with a total of 30 questions was prepared for assessing knowledge, attitude, and practice of mothers. Most of the questions prepared were based on the questionnaire used in the World Health Organization KAP survey and in a study by Thomas et al.<sup>[10-12]</sup>

#### Inclusion Criteria

The study participants were the primis delivered at Government General Hospital, Guntur during the

study period of two months either by cesarean or by vaginal delivery with live babies.

#### Exclusion Criteria

1. Multiparous women
2. All retro positive women
3. Women with IUDs, stillbirths
4. Not willing to answer to the queries.

## RESULTS

#### Sociodemographic Features

**Age wise distribution of population:** In the present study, most of the primi mothers belong to age group 22 –25(35.4%) followed by the age group of 18-21 (22.73%) which is followed by the age group 30-33 (20%).2.7% of the population belong to the age group 34-37 and 0.9% each belong to the age groups 38-41 and 42-45 respectively.

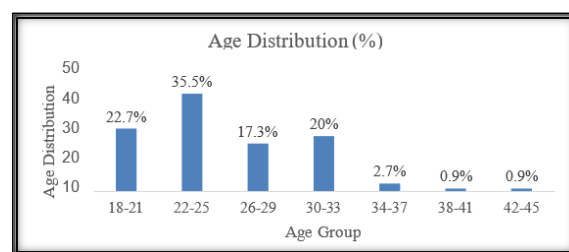


Figure 1: Age Distribution

#### Distribution of population according to religion:

Majority of the study population (66%) practice hinduism, 21% are Christians and 13% are muslim.

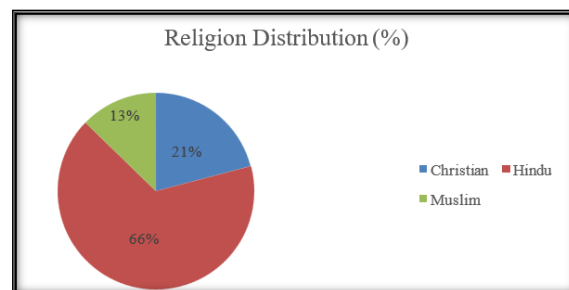
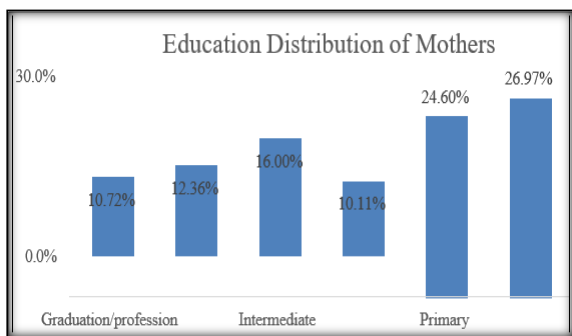


Figure 2: Religion Distribution

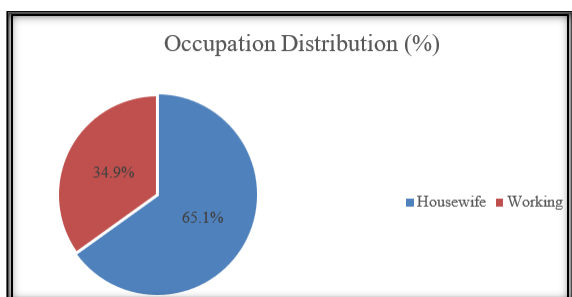
#### Education wise distribution of the population:

Most of the study population have completed their secondary education (26.97%) followed by 24.6% who completed their primary education 16% had passed intermediate,12.36% were illiterate, 10.72% were graduates and 10.11% passed middle school.



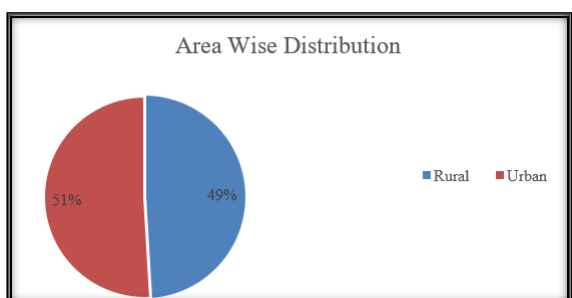
**Figure 3: Education Distribution of Mother**

**Occupation wise distribution:** 34.9% of the population is working and 65.1% are housewives.



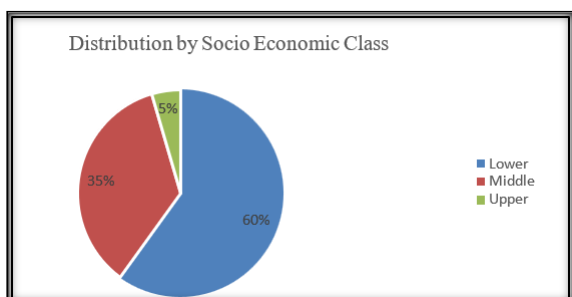
**Figure 4: Occupation Distribution**

**Area wise distribution of population:** 51% of the study subjects belong to urban areas and the remaining 49% belong to rural areas.



**Figure 5: Area Wise Distribution**

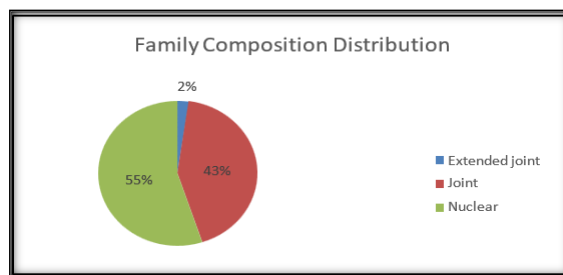
**Distribution according to socioeconomic class:** Majority of the subjects come from Lower class families (60%) followed by Middle- and upper- class families 35% and 5% respectively.



**Figure 6: Socio Economic Distribution**

**Distribution of the population according to family composition:** In our study, 55% belong to nuclear

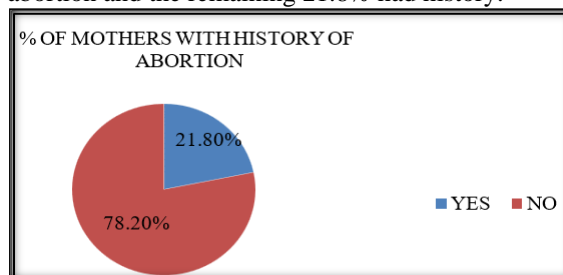
families, 43% belong to joint families and the remaining 2% belong to extended joint families.



**Figure 7: Family Composition Distribution**

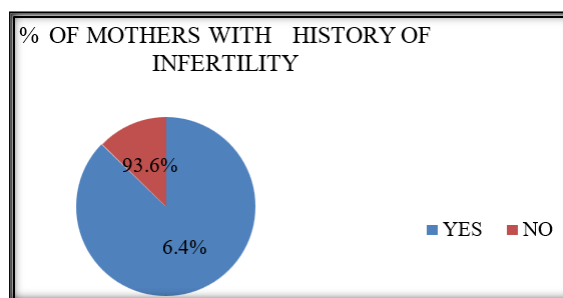
## 2. Pregnancy and Delivery Details

**History of Abortions:** 78.20% had no history of abortion and the remaining 21.8% had history.



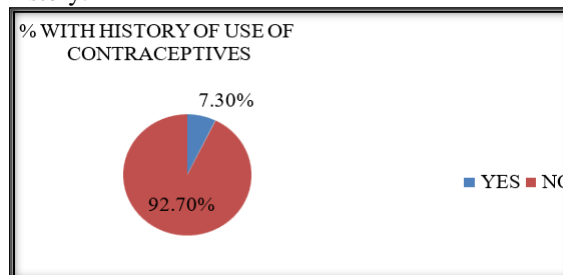
**Figure 8: Percentage Mothers with History of Abortion**

**History of infertility:** In the present study 93.6% of primi mothers had no history of infertility and the remaining 6.4% had history.



**Figure 9: Percentage of Mothers with History of Infertility**

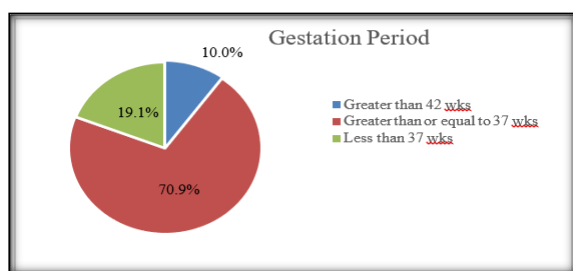
**History of use of contraceptives:** In the present study 92.7% of primi mothers had no history of use of contraceptives and the remaining 7.30% had history.



**Figure 10: Percentage with history of Contraceptive**

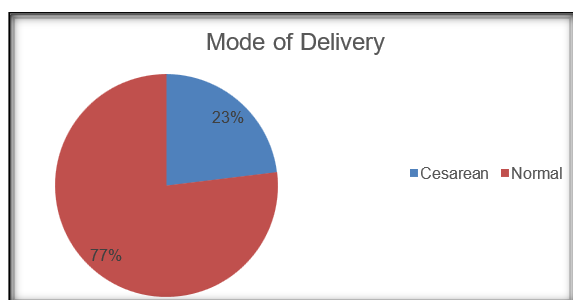
**Gestational age:** In the present study, majority of the mothers delivered at the gestational age of greater than or equal to 37 weeks (70.9%) followed by 19.1% of mothers who delivered at less than 37 weeks and

the remaining 10% delivered at greater than 42 weeks.



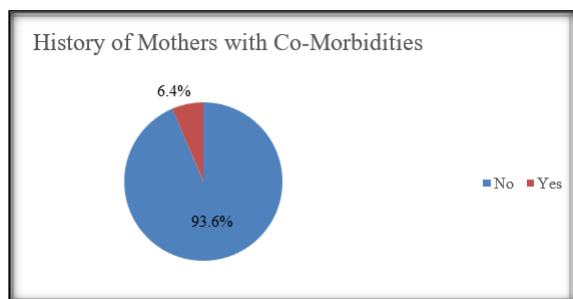
**Figure 11: Gestation Period Distribution**

**Mode of Delivery:** In the present study 23% of mothers delivered through c-section and the remaining 77% underwent normal vaginal delivery.



**Figure 12: Mode of delivery**

**History of Associated Co-Morbidities:** In the present study, 93.6% of mothers had no history of co morbidities and the remaining 6.4% had history.



**Figure 13: History of Mothers with Co-Morbidities**

#### Knowledge of mothers regarding breastfeeding

In the present study when questions related to knowledge regarding breastfeeding were asked to the primis, 94.5% of them agreed that breastfeeding helps in mother child bonding and the remaining 5.5% responded negatively.

In the present study, 71.8% of primi mothers had knowledge about colostrum feeding and the remaining 28.2% did not have knowledge.

72.7% of the population had knowledge about practice of prelacteal feeds and 27.3% did not have knowledge.

80% of the population had knowledge about demand feeding and 20% did not have knowledge. 90.9% of the study population knows about the ideal position of breastfeeding.

90.9% of the population know about ideal position of breastfeeding and the remaining 9.1% had no knowledge.

95.4% of the population is aware that breastfeeding is beneficial to both mother and child and the remaining 4.6% are unaware.

#### [Table 2]

When questions were asked regarding duration of exclusive breastfeeding, 73.6% of the population were aware about it and remaining 26.4% had no knowledge.

80.9% of the population knows that breastfeeding should be continued up to 2 years and the rest 19.1% had no idea.

The responses to the question "Should breastfeeding be continued when

#### [Table 3]

When questions regarding whether breastfeeding should be continued or not in certain conditions were asked to the primis, 49% said that it should be continued when the mother is sick and the remaining 51% answered negatively.

85.5% of the population believed that breastfeeding should be continued during menstruation and the remaining 14.5% answered negatively.

85.5% of the population believed that breastfeeding should be continued when the baby has fever or cold and the remaining 14.5% answered negatively.

70.9% of the population are aware that breastfeeding should be continued when the baby has diarrhoea and the remaining 29.1% are unaware.

69.1% of the population are aware breastfeeding should be continued when the baby has vomiting and the remaining 30.9% are unaware

#### Mother's Attitude Regarding Breastfeeding

96.4% responded 'yes' to the statement 'I think I should breastfeed my child also in the night' and 3.6% responded 'No'

91.8% responded 'yes' to the statement 'According to me, breastfed babies are healthier and more intelligent than formula fed babies' and 8.2% responded 'No'.

97.3% responded 'yes' to the statement 'I think during breast feeding, I should sit comfortably' and 2.7% responded 'No'.

18.2% responded 'yes' to the statement 'I think I should not feed if my child is sick' and 81.8% responded 'No'.

17.3% responded 'yes' to the statement 'According to me formula feeding is more comfortable than EBF and 82.7% responded 'No'

**Time of initiation of breastfeeding:** When questions regarding the time of initiation of breastfeeding were asked, 53.6% started within 1 hour, 32.7% started after 1 hour but less than 24 hours and 13.6% started after 24 hours.

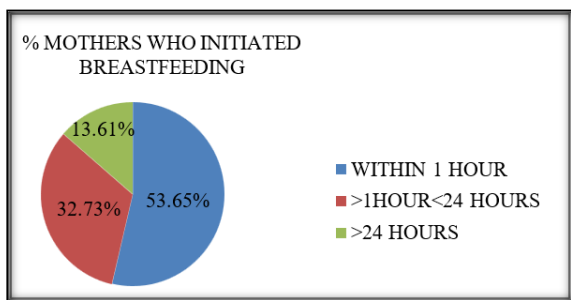


Figure 14: Percentage Mothers who initiated Breastfeeding.

In the present study, 90.9% of the primis gave colostrum in the first three days and the remaining 9.1% did not. 36.4% of the population has given prelacteal feeds and the remaining 63.6% did not.

Table 1: Knowledge of mothers regarding breastfeeding.

SL NO.	QUESTION	Frequency (N=110)		Percentage	
		Yes	No	Yes	No
1	Do you know that breastfeeding helps in mother and child bonding?	104	6	94.5	5.5
2	Do you have knowledge about colostrum feeding?	79	31	71.8	28.2
3	Do you have knowledge about practice of prelacteal feeds?	80	30	72.7	27.3
4	Do you have knowledge about demand feeds?	88	22	80	20
5	Do you know the ideal position of breastfeeding?	100	10	90.9	9.1
6	Do you know about duration benefits of breastfeeding to baby and the mother?	105	5	95.4	4.6

Table 2: Knowledge of mothers regarding breastfeeding

SL NO.	Question	Frequency (N=110)		Percentage	
		Yes	No	Yes	No
1	Do you know about the duration of exclusive breastfeeding?	81	29	73.6	26.4
2	Should breastfeeding be continued up to 2 years?	89	21	80.9	19.1

Table 3: knowledge of mothers regarding breastfeeding

SL. NO.	QUESTION	Frequency (N=110)		Percentage	
		Yes	No	Yes	No
1	Mother is sick?	54	56	49.1	50.9
2	Mother is menstruating?	94	16	85.5	14.5
3	Baby has fever/cold?	94	16	85.5	14.5
4	Baby has diarrhea?	78	32	70.9	29.1
5	Baby has vomiting?	76	34	69.1	30.9

Table 4: mother's attitude regarding breastfeeding

SL NO	QUESTION	Frequency (N=110)		Percentage	
		Yes	No	Yes	No
1	I think I should breastfeed my child also in the night	106	4	96.4	3.6
2	According to me, breastfed babies are healthier and more intelligent than formula fed babies	101	9	91.8	8.2
3	I think during breast feeding, I should sit comfortably	107	3	97.3	2.7
4	I think I should not feed if my child is sick	20	90	18.2	81.8
5	According to me formula feeding is more comfortable than EBF	19	91	17.3	82.7

Table 5: early infant feeding practices

SL NO.	QUESTION	Frequency (N=110)		Percentage	
		Yes	No	Yes	No
1	Has given colostrum in the first three days	100	10	90.9	9.1
2	Has given prelacteal feeds	40	70	36.4	63.6

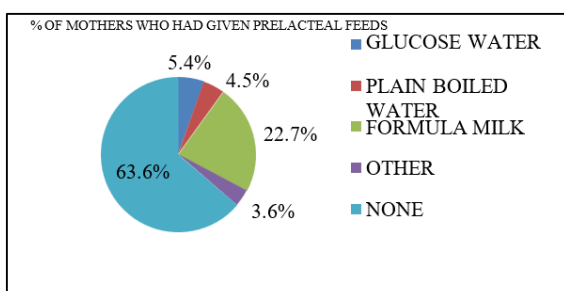


Figure 15: Percentage Mothers who had given Prelacteal feeds.

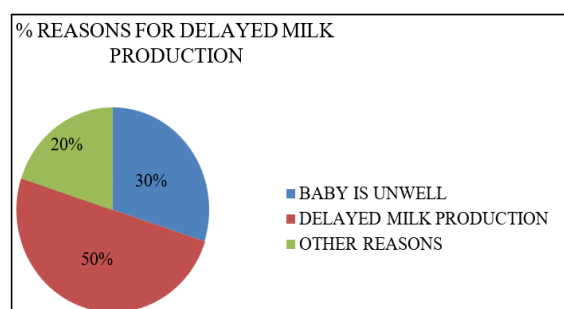


Figure 16: Percentage reasons for delayed milk production

**Prelacteal feeds given:** In the present study, 22.7% of the study population had given formula milk, 5.4% had given glucose water, 4.5% had given plain boiled water and 3.6% had given other prelacteal feeds.

**Reasons for giving prelacteal feeds:** In the present study, 50% of the population gave prelacteal feeds due to delayed milk production, 30% gave because the baby is unwell and the remaining 20% gave due to other reasons.

## DISCUSSION

In the present study, most of the primi mothers belong to age group 22 – 25 (35.4%) followed by the age group of 18-21 (22.73%) which is followed by the age group 30-33 (20%). 2.7% of the population belong to the age group 34-37 and 0.9% each belong to the age groups 38-41 and 42- 45 respectively.

Majority of the study population (66%) practice hinduism, 21% are Christians and 13% are Muslim which can be compared with a study done by Harshitha et al in which there are 71% hindus, 27% Muslims and 2% Christians.<sup>[13]</sup>

34.9% of the population is working and 65.1% are housewives which can be compared with study done by Siti Mariam Muda et al in which there were 62.2% working mothers.<sup>[14]</sup>

51% of the study subjects belong to urban areas and the remaining 49% belong to rural areas.

In our study Majority of the subjects come from lower class families (60%) followed by middle and upper-class families 30% and 5% respectively.

In our study, 55% belong to nuclear families, 43% belong to joint families and the remaining 2% belong to extended joint families which can be compared with a study done by Abhay Kumar Choudhary et al where 59.5% population belonged to nuclear families and 40.5% belonged to joint families.<sup>[15]</sup>

78.2% of the participants had no history of abortion and the remaining 21.8% had history which can be compared with a study done by Harshitha et al in which 6.75% presented with history of abortions.<sup>[13]</sup>

In the present study 93.6% of primi mothers had no history of infertility and the remaining 6.4% had history which can be compared with study done by Harshitha et al in which 13.5% mothers had history of infertility and 86.5% had no history.<sup>[13]</sup>

In the present study 92.7% of primi mothers had no history of use of contraceptives and the remaining 7.30% had history which can be compared with study done by Harshitha et al in which 97% mothers had no history of use of contraceptives.<sup>[13]</sup>

In the present study 23% of mothers delivered through c-section and the remaining 77% underwent normal vaginal delivery which can be compared with a study done by Ariba beg et al where 38.4% mothers had normal delivery and 61.6% had c section. 16. This difference is might be due to difference in sample size.

In the present study, majority of the mothers delivered at the gestational age of greater than or equal to 37 weeks (70.9%) followed by 19.1% of mothers who delivered at less than 37 weeks and the remaining 10% delivered at greater than 42 weeks which can be compared with study done by Harshitha et al in which 94% of mothers delivered at the gestational age of greater than or equal to 37 weeks, 5% of mothers who delivered at less than 37 weeks and the remaining 1% delivered at greater than 42 weeks.<sup>[13]</sup>

In the present study when questions related to knowledge regarding breastfeeding were asked to the primis, 94.5% of them agreed that breastfeeding helps in mother child bonding which can be compared with a study done by Abroo Bashir et al in which 87.9% of mothers agreed with the question.<sup>[17]</sup>

In the present study, 80.9% of the population knows that breastfeeding should be continued up to 2 years and the rest 19.1% had no idea which can be compared with a study done by Abroo Bashir et al in which 83.3% had knowledge about the question.<sup>[17]</sup>

In the present study, 71.8% of primi mothers had knowledge about colostrum feeding and the remaining 28.2% did not have knowledge which can be compared with a study done by Abroo Bashir et al in which 80.6% of the mothers had knowledge.<sup>[17]</sup>

In our study 72.7% primi had knowledge about prelacteal feeding, the results can be compared to a study done by Maheshwari Ekambaram et al where 74% mothers had knowledge regarding prelacteal feeding. In our study, 80% had knowledge about demand feeds whereas in the above study only 45% had knowledge.<sup>[18]</sup>

When questions were asked regarding duration of exclusive breastfeeding, 73.6% of the population were aware about it and remaining 26.4% had no knowledge.

In the present study, 49.1% believed that breast feeding should be continued when the mother is sick, 85.5% agreed that that breastfeeding should be continued when mother is menstruating, 85.5% agreed that breastfeeding should be continued when the baby had fever or cold, 70.9% agreed that it should be continued when the baby has diarrhoea and 69.1% agreed that it should be continued when the baby has vomiting.

The above results can be compared with a study done by Maheshwari Ekambaram et al where 50% believed that breast feeding should be continued when the mother is sick, 90 % agreed that that breastfeeding should be continued when mother is menstruating, 80% agreed that breastfeeding should be continued when the baby had fever or cold, 62% agreed that it should be continued when the baby has diarrhoea and 59% agreed that it should be continued when the baby has vomiting.<sup>[18]</sup>

In the present study 96.4% mothers believed that they should breastfeed also in the night which is similar to a study done by Katole Nt et al et al where 97% had believed the same.<sup>[19]</sup>

In the present study, 91.8% of mothers are aware that breastfed babies are healthier than formula fed babies which can be compared to a study done by Siti Mariam Muda et al where 81.1% were aware of the same.<sup>[14]</sup>

In the present study, 81.8% of the mothers responded negatively to the statement 'I think I should not feed if my child is sick.'

In the present study, 17.3% of the mothers responded 'yes' to the statement 'According to me formula feeding is more comfortable than EBF'. This can be compared to a similar study by K Bala et al done by where 26.9% agreed to the statement.<sup>[20]</sup>

When questions regarding the time of initiation of breastfeeding were asked, 53.6% started within 1 hour, 32.7% started after 1 hour but less than 24 hours and 13.6% started after 24 hours which can be compared with a similar study by K Bala et al where 51.6% initiated after 1 hour and 5.4% initiated after 24 hours.<sup>[20]</sup>

In the present study, 90.9% of the primis gave colostrum in the first three days and the remaining 9.1% did not which can be compared with a similar study done by Ariba Beg et al.<sup>[16]</sup>

In the present study 36.4% of the population had given prelacteal feeds and the remaining 63.6% did not. 22.7% of the study population had given formula milk, 5.4% had given glucose water, 4.5% had given plain boiled water and 3.6% had given other prelacteal feeds.

When asked about the reasons for giving prelacteal feeds, 50% of mothers could not breastfeed due to delayed milk production, 30% because the baby was unwell and the remaining 20% due to other reasons.

## CONCLUSION

Breastfeeding is an unequalled way of providing ideal food for the growth and development of the newborn. It is also an integral part of the reproductive process with important implications on health of mothers. As a global public health recommendation, infants should be exclusively breastfed for the first 6 months of life to achieve optimal growth, development and health. Therefore, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues up to 2 years of age. Primiparous mothers are new to the role of motherhood, and they take their time to adjust to this role and consequently there are more misconceptions among them regarding practices of breastfeeding.

- In the present study, there were participants ranging from 18 years up to 42 years. Majority of mothers belong to age group 22 – 25 (35.4%) followed by the age group of 18-21 (22.73%)
- It is observed that majority of the participants practiced Hinduism 66%.
- It is observed that 51% of the population belonged to urban areas and 49% belonged to rural areas.

- It is observed that 60% of subjects belonged to lower class.
- It is observed that 65.1% of the population are housewives.
- It is observed that in our study, 55% belong to nuclear families, 43% belong to joint families.
- It is observed that 78.2% of the participants had no history of abortion.
- It is observed that in the present study 93.6% of primi mothers had no history of infertility.
- It is observed that in the present study 92.7% of primi mothers had no history of use of contraceptives.
- It is observed that the majority (71%) delivered at the gestational age greater than or equal to 37 weeks.
- 77% of mothers had normal vaginal deliveries.
- It is observed that 94.5% of the population agreed that breastfeeding helps in mother child bonding.
- It is observed that, 71.8% of primi mothers had knowledge about colostrum feeding.
- It is observed that 72.7% of the population had knowledge about prelacteal feeds.
- It is observed that 80% of the population had knowledge about demand feeding.
- It is observed that 73.6% know about the duration of exclusive breastfeeding.
- It is observed that 80.9% of the population knows that breastfeeding should be continued up to 2 years.
- It is observed that when questions regarding whether breastfeeding should be continued or not in certain conditions were asked to the primis, 49% said that it should be continued when the mother is sick, 85.5% of the population believed that breastfeeding should be continued during menstruation, 85.5% of the population believed that breastfeeding should be continued when the baby has fever or cold, 70.9% of the population are aware breastfeeding should be continued when the baby has diarrhea, 69.1% of the population are aware breastfeeding should be continued when the baby has vomiting.
- It is observed that 96.4% responded 'yes' to the statement 'I think I should breastfeed my child also in the night'.
- It is observed that 91.8% responded 'yes' to the statement 'According to me, breast fed babies are healthier and more intelligent than formula fed babies.'
- It is observed that 97.3% responded 'yes' to the statement 'I think during breast feeding, I should sit comfortably'.
- It is observed that 18.2% responded 'yes' to the statement 'I think I should not feed if my child is sick'.
- It is observed that 17.3% responded 'yes' to the statement 'According to me formula feeding is more comfortable than EBF.'
- It is observed that when questions regarding the time of initiation of breastfeeding were asked, 53.6% started within 1 hour,

- It is observed that 90.9% of the primis gave colostrum in the first three days.
- It is observed that 36.4% of the population has given prelacteal feeds.
- It is observed that,22.7% of the study population had given formula milk,5.4% had given glucose water,4.5% had given plain boiled water and 3.6% had given other prelacteal feeds.

Thus, it can be concluded that proper education and information regarding knowledge, attitude and practices should be inculcated in post-natal mothers to improve breastfeeding rates and provide the infant with nutritious diet. They should also be made aware of how breastfeeding has a positive impact on their health as well in regard to prevention of further pregnancy, protection from breast cancer and Type 2 diabetes etc. Therefore, efforts to improve breastfeeding need to be updated using all necessary tools including mass media to have the desired impact.

## REFERENCES

1. Evidence for nutrition actions (eLENA) [internet]. Vol. 1; 2017. Who. World health. Organization. Available from: [http://www.who.int/elena/titles/exclusive\\_breastfeeding/en/](http://www.who.int/elena/titles/exclusive_breastfeeding/en/) [cited 23/7/23]
2. WHO. Exclusive breastfeeding [internet]. WHO. World Health Organization; 2017 [cited 23/7/23].
3. WHO. WHA global nutrition targets 2025: breastfeeding policy brief [internet] [cited 23/7/23].
4. Victora CG, Bahl R, Barros AJD, França GVA, Horton S, Krasevec J, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet*. 2016;387(10017):475-90. doi: 10.1016/S0140-6736(15)01024-7, PMID 26869575.
5. Jackson KM, Nazar AM. Breastfeeding, the immune response, and long-term health. *J Am Osteopath Assoc*. 2006 Apr 1;106(4):203-7. PMID 16627775.
6. Hackman NM, Schaefer EW, Beiler JS, Rose CM, Paul IM. Breastfeeding outcome comparison by parity. *Breastfeed Med*. 2015;10(3):156-62. doi: 10.1089/bfm.2014.0119, PMID 25549051.
7. Y, Afyanti Y. Negotiating motherhood: the difficulties and challenges of rural first-time mothers in Parung, west Java. *Makara J Heal Res*. 2010;6:29-34.
8. Minas AG, Ganga-Limando M, Quan L, Shafie M, Rani N, Ramli K. Socialcognitive predictors of exclusive breastfeeding among primiparous mothers in Addis Ababa, Ethiopia. *PLOS ONE*. 2016;11(10):e0164128. doi: 10.1371/journal.pone.0164128, PMID 27723797.
9. Kumar A. Awareness and attitude regarding breastfeeding and immunization practices among primigravida attending a tertiary care hospital in southern India. *J Clin Diagn Res*. 2015;9:LC01-5. doi: 10.7860/JCDR/2015/11892.5616.
10. World Health Organization. Exclusive breastfeeding [cited Nov 17 2017]. Available from: [http://www.who.int/nutrition/topics/exclusive\\_breastfeeding/en/](http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/).
11. WHO. Evidence for the A ten steps to successful breastfeeding. Available from. Available from: [http://www.apps.who.int/iris/bitstream/10665/43633/1/9241591544\\_eng.pdf](http://www.apps.who.int/iris/bitstream/10665/43633/1/9241591544_eng.pdf). [last accessed on Jan 25 2018].
12. Thomas S, Poomima S, Vinay M. Knowledge, attitudes, and practices of mothers regarding breastfeeding: A cross sectional study in selected rural area of Mandya District, Karnataka. *Natl J Res. Community Med*. 2017;6:151-7.
13. Srinivas K. A study of knowledge, attitude and practices of breast feeding among primi para in a tertiary Care Hospital.
14. Muda SM, Mahamad Zanudin NQAZ, Mustapa Kamal Basha MA. Knowledge, attitude and practice of exclusive breastfeeding among primipara at baby friendly hospital (BFHI). *J Islam Masyarakat Kontemporeri*. 2022 Apr 30;23(1):104-15. doi: 10.37231/jimk.2022.23.1.652.
15. Choudhary AK, Bankwar V, Choudhary A. Knowledge regarding breastfeeding and factors associated with its practice among postnatal mothers in central India. *Int J Med Sci Public Health*. 2015 Jul 1;4(7):973-6. doi: 10.5455/ijmsph.2015.10022015201.
16. Beg A, Satapathy S, Beig MA. Knowledge, attitude and practice of breastfeeding among mothers in Nadia district. *Age (in completed Years)*. 2022;1(20):30
17. Bashir A, Mansoor S, Naikoo MY. Knowledge, attitude, and practices of postnatal mothers regarding breastfeeding: A cross-sectional study. *Int J Med Sci Public Health*. 2018 Sep 1;7(11):725. doi: 10.5455/ijmsph.2018.0309301062018.
18. Ekambaram M, Bhat B, Ahamed MA. Knowledge, attitude and practice of breastfeeding among postnatal mothers. *Curr Pediatr Res*. 2010 Jan;14(2):119-24.
19. Nt K, Js K, Jagadish M, Joshi A. Knowledge, attitude and practice towards exclusive breastfeeding among rural mothers of central India. *NVEO-natural volatiles & essential oils Journal| NVEO*. 2021 Nov 7:696-704.
20. Bala K, Sahni B, Bavoria S, Narangyal A. Knowledge, attitude, and breast-feeding practices of postnatal mothers in Jammu: A community hospital based cross sectional study. *J Fam Med Prim Care*. 2020 Jul;9(7):3433-7. doi: 10.4103/jfmpc.jfmpc\_333\_20, PMID 33102309.