

# Knowledge, Attitude and Practices of Exclusive Breastfeeding amongst Mothers of Rural Population in Central India: A Cross Sectional Analytical Study

Priya Prata Pannair<sup>1\*</sup>, Deepti Shrivastava<sup>1</sup> and Meenal Akare Kalambe<sup>2</sup>

<sup>1</sup>Department of Obstetrics and Gynaecology, Datta Meghe Medical College, Shalinitai Meghe Hospital and Research Centre, Wanadongri, Hingna, India; <sup>2</sup>Department of Obstetrics and Gynaecology, Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences, Wardha, India

## Corresponding author:

PriyaPrataPannair, Department of Obstetrics and Gynaecology, DattaMeghe Medical College, ShalinitaiMeghe Hospital and Research Centre, Wanadongri, Hingna, India, E-mail: mentorscarepublication@gmail.com

## Abstract

**Background:** Exclusive Breast Feeding (EBF) is recommended for 6 months of age following birth by the World Health Organisation (WHO), followed by continuing of breastfeeding till 2 years of age or beyond along with complementary foods. There is still a long way to go in filling the gap regarding the Knowledge, Attitudes and Practices (KAP) on EBF amongst mothers. **Methodology:** This study was conducted to explore the KAP of EBF in mothers attending the outpatient department of Datta Meghe Medical College and Shalinitai Meghe Hospital and Research Centre, Wanadongri, Hingna, Nagpur. Information on maternal KAP on EBF was collected through structured questionnaires for a total of 284 mothers, recruited from the outpatient department of obstetrics who come for follow up during delivery and paediatric department who come with their neonates for vaccination or other reasons, during the duration of period of 1 year from June 2020 till may 2021 with infants between 0 months-12 months of age were questioned. Maternal knowledge and attitudes on various aspects of breastfeeding were determined. The knowledge and attitude scores were also calculated. **Results:** The percentage of primiparous women was 54.92% and multiparous were 45.07%. 78.16% of women lived in joint family which can be a cause in decreasing duration of exclusive breastfeeding. 72.53% mothers were unemployed which can be taken as positive factor for breastfeeding on demand. 86.97% mothers practiced exclusive breastfeeding for first 6 months, 88.38% mothers felt prelacteal feeds should not be given and 73.23% knew the importance of colostrum. 58.09% of mothers were able to initiate breastfeeding within 1 hours-4 hours of delivery. **Conclusion:** There is still a dearth in knowledge regarding exclusive breastfeeding benefits, colostrum feed, duration of breastfeeding amongst mothers for which reinforcement of knowledge is required which will change the behaviour of women towards breastfeeding.

**Keywords:** Knowledge Attitude and Practices (KAP); Primiparous mothers; Multiparous mothers; Exclusive breastfeeding

## Introduction

The WHO and UNICEF recommends Exclusive Breast Feeding (EBF) for the first 6 months of life followed by starting of complementary food from 6 months to 23 months along with breastfeeding for proper growth and development of child.

[<sup>1</sup>] Exclusive breastfeeding defines as giving no other food (semisolid, solid or liquid) to the infant, not even water, except breast milk (which also includes expressed breast milk) for the first 6 months of birth, but it allows the infant to receive Oral Replacement Solution (ORS) in case of diarrhoea or dehydration, drops and syrups (vitamins, minerals and medicines). [<sup>2</sup>] The World Health Assembly (WHA) has set a global target of increasing the rate of exclusive breastfeeding globally by 2025 to 50%. [<sup>3</sup>] Worldwide, it is seen that only 38% of infants are exclusively breastfed. [<sup>4</sup>]

As per UNICEF global databases 2015, percentage of children all over the world, put to breastfeeding within one hour of

birth is 44% only. Exclusively breastfed neonates between (0-6 months) are 39%; children who receive solid, semi-solid or soft foods in (6 months-8 months) are 65% and who continue to be breastfed at the age of 1 year are 74%. Continued breast feeding up to 2 years (20 months-24 months) are a mere 49%. [<sup>5</sup>] In India, the positive fact observed during surveys and various studies are that, though breastfeeding is nearly universally practised, very few children begin breastfeeding immediately after birth. National data from National survey family health-3 have mentioned that only 24.5% mothers initiated breastfeeding within desired one hour after the birth and almost 45% could not

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start breastfeeding within first 24 hours of birth due to various reasons which included ICU admission of neonate or illness of mother or reasons like anticancer drugs, anti tuberculosis drugs or antipsychotic drugs. As many as 57% women, including those who were highly educated and lived in urban areas also practiced prelacteal feeding which is still practised in large in India. Percentage of exclusively breastfed infants at 6 months of age were 46.4%. At age 6 months-8 months, only 53% children were given timely complementary feedings (breast milk and complementary food) and increased to 74% at age 9 months-11 months.<sup>[6]</sup>Poor infant feeding practices directly or indirectly contribute to under nutrition, prone to various infections like necrotising enterocolitis, diarrhoea, respiratory problems, otitis media, lower intellectual quotient, obesity and hypertension in future.<sup>[7]</sup>The breast feeding and complementary feeding practices depends on the traditions, customs, knowledge, beliefs and socio-cultural practices of a certain community. By assessing the knowledge, attitude and practices of lactating mothers regarding their feeding practises, their attitude towards breastfeeding and the importance of nutritional value can be obtained so that there will be more awareness amongst mothers so as to keep malnutrition at bay. In 1991, Breastfeeding Promotion Network of India (BPNI) was developed to protect, promote and support breastfeeding.<sup>[8]</sup> Later, the Government of India has undertaken National Rural Health Mission, which has implemented the Integrated Management of Neonatal and Childhood Illnesses (IMNCI) through the existing healthcare delivery system.<sup>[9]</sup> It is being seen that the breastfeeding has declined worldwide in recent years, as a result of urbanization and maternal employment. Studies in India have also shown a decline in breastfeeding trends, especially in urban population.<sup>[10]</sup>

There is also a thought about primiparas as a vulnerable group because of wrong social taboos and insufficient knowledge which leads to decreased chances to achieve EBF.<sup>[11]</sup>Primiparous mothers are less likely to practice exclusive breastfeeding through to 6 months and less likely to breastfeed for 2 years and more due to lack of knowledge, insufficient support to look after baby and various social inhibitions.<sup>[12]</sup>They also face difficulties in adjusting to the new role of being a mother and less breastfeeding skills.<sup>[13]</sup>Many studies conducted earlier have shown that the multi parity is associated with longer exclusive breastfeeding due to previous breastfeeding experience.<sup>[14-18]</sup>In contrast; some studies have shown that parity has no significant influence on duration of breastfeeding.<sup>[19]</sup>The current study intends to throw light on the various aspects of breastfeeding amongst all the genres of mothers and their different opinions which they have regarding breastfeeding, to correct their knowledge about it and to guide them in proper way so as to improve the nutrition of kids.

## Materials and Methods

The study was a hospital based descriptive study with cross sectional design conducted at DattaMeghe Medical College and Shalinitai Meghe Hospital and Research Centre, Wanadongri, Hingna, Nagpur for a duration of 1 year from June 2020 till May 2021 on 284 mothers with kids in the age group of 0 months-12 months attending Outpatient department of obstetrics and

paediatrics for various reasons. The lactating mothers were approached while they waited to receive their postnatal care, to introduce the objectives of the study to them and seek their consent to participate.

### Inclusion criteria

1. Primipara and multiparous women with infants between 0 months-12 months of age.
2. Voluntarily giving consent for participation.

### Exclusion criteria

1. Any acute or chronic illness like cancer, hepatitis B/ hepatitis C, HIV/AIDS, those on ART treatment or on antipsychotics.
2. Child having cleft lip/ palate, down's syndrome or congenital heart disease.
3. Mothers with preterm babies or multiple gestations.
4. Not willing to participate.

**The demographic data collected were :**Age, place of residence, employment, education,type of delivery, number of previous deliveries, history of preterm birth, ICU admission post-delivery, baby having any major illness which restricted them from giving breast milk, current breast feeding practices, period of exclusive breast feeding given to child, pre lacteals given and time of initiation of breast feeding after delivery.

The data were collected and the response were analysed to obtain a result.

## Results

Amongst the mothers who were taken in participation 54.92% were primiparous and 45.07% were multiparous. Majority of mothers were of 21-25 age group (50.70%) followed by 26 years-30 years. (26.76%).78.16% of mothers belonged to joint family due to which they had restrictions for breastfeeding.59.15% of mothers were educated till secondary school followed by 13.38% who were educated till higher secondary which helped the mothers have adequate understanding of importance of breastfeeding. 72.53% mothers were unemployed, which could help them stay with their baby so that appropriate breastfeeding on demand could be given. The proportion of mothers undergoing caesarean section and normal vaginal deliveries was almost same being 52.81% normal deliveries and 47.18% caesarean section.61.61% women had babies less than 6 months of age and 38.38% had babies more than 6 months of age. Regarding questions related to knowledge of mothers about various aspects of breastfeeding, the response was satisfactory as majority of mothers did not carry any wrong taboo about breastfeeding.91.54% of mothers knew the importance of exclusive breastfeeding and 73.23% knew the importance of colostrum milk to baby. Nutritional advantage of colostrum was known by 77.81% of mothers and 76.05% started complementary feeds only after 6 months.89.78% mothers knew about the immunological benefits of breast milk.42. 25% of women did not know about the benefits of breastfeeding to mother in view of contraceptive benefits, weight control and prevention of obesity, diabetes and cancer in future, on which

they were sensitised. General attitude towards breastfeeding showed that even though majority of mothers did not give prelacteal feeds to baby, still 11.61% that is 33 women had given prelacteals to babies. Duration of breastfeeding attitude up to 6 months was 46.83% followed by up to 12 months was 33.45%.91.19% women stated that breastfeeding can be done during menses and they did not show any social taboo on not breastfeeding babies during menses.86.97%mothers told that breastfeeding should be continued during maternal illness and it does not affect the baby, other women were sensitised about the same, whereas, 90.14% women stated that breastfeeding should be continued during baby’s illness as it provides active antibodies to fight infection. Apart from common knowledge and attitude which women have, the practice which they actually followed was noted. Exclusive breastfeeding was done by 247 women for 1<sup>st</sup> 6 months which was appreciable, 155 women were still breastfeeding their babies.165 mothers started breastfeeding between 1 hours-4 hours, initial 1 hour was delayed due to various reasons as episiotomy pain or due to delay in operation, whereas, only 39 mothers were able to start breastfeeding within 1 hour [Tables 1-4].

**Table 1: Describes the demographic data of the mothers will includes the following. N=284 mothers were enrolled in the present study.**

Sr. no	Variables	N=284	Percentage (%)
1	<b>Parity</b>		
	Primiparous	156	54.92%
	Multiparous	128	45.07%
	<b>Age</b>		
2	<20 years	28	9.85%
	21-25 years	144	50.70%
	26-30 years	76	26.76%
	>30 years	36	12.67%
3	<b>Education</b>		
	Illiterate	18	6.33%
	Primary school	37	13.02%
	Secondary	168	59.19%
	Higher secondary	38	13.38%
	Graduate	17	5.98%
	Post Graduate	6	2.11%
4	<b>Occupation</b>		
	Employed	78	27.46%
	Unemployed	206	72.53%
5	<b>Type of family</b>		
	Nuclear	62	21.83%
	Joint	222	78.16%
6	<b>Type of delivery</b>		
	Vaginal	150	52.81%
	caesarean	134	47.18%
7	<b>Age of initiation of complementary feed</b>		
	6 months	56	19.71%
	< 6 months	46	16.16%
	>6 months	182	64.08%
8	<b>Age of child</b>		
	<6 months	175	61.61%
	>6 months	109	38.38%

**Table 2: Describes the knowledge questions asked to mothers and their response.**

Sr. no	Knowledge questions	N=284	Percentage (%)
1	<b>Knowledge about exclusive breastfeeding</b>		
	Response		
	yes	260	91.54%
	no	24	8.45%
2	<b>Knowledge about colostrum feeding</b>		
	Response		
	good	208	73.23%
	bad	21	7.39%
	Don't know	55	19.36%
3	<b>Is colostrum nutritionally beneficial</b>		
	Response		
	yes	221	77.81%
	no	63	22.18%
4	<b>Knowledge about age of starting Complementary feed</b>		
	Response		
	3-6 months	68	23.94%
	>6 months	216	76.05%
5	<b>Does exclusive breastfeeding improve immunity</b>		
	Response		
	yes	255	89.78%
	no	29	10.21%
6	<b>Benefits of breastfeeding in mother</b>		
	Response		
	knows	164	57.74%
	Don't know	120	42.25%

**Table 3: Describes the general attitude of women regarding different breastfeeding practises.**

Sr. no	Attitude questions	N=284	Percentage (%)
1	<b>Attitude on prelacteal feeds</b>		
	To be given	33	11.61%
	Not to be given	251	88.38%
2	<b>Duration of breastfeeding attitude</b>		
	Upto 6 months	133	46.83%
	Upto 12 months	95	33.45%
	Upto 24 months	56	19.71%
3	<b>Continuation of breastfeeding during menses</b>		
	Response		
	good	259	91.19%
	bad	25	8.80%
4	<b>Continuation of breastfeeding during maternal illness</b>		
	Response		
	good	247	86.97%
	bad	37	13.02%
5	<b>Continuation of breastfeeding during baby’s illness</b>		
	Response		
	good	256	90.14%
	bad	28	9.85%

**Table 4: Describes the common practices adopted by the mothers in breastfeeding.**

Sr. no.	Practices question	N=284	Percentage (%)
1	<b>Practice of exclusive breastfeeding</b>		
	Response		
	yes	247	86.97%
	no	37	13.02%

2	<b>Current breastfeeding practices</b>		
	yes	155	54.57%
	no	129	45.42%
3	<b>Practice of initiation</b>		
	<1 hour	39	13.73%
	1–4 hours	165	58.09%
	In 24 hours	57	20.07%
	>24 hours	23	8.09%

## Discussion

This study was a cross sectional study to find the knowledge, attitude and practice of breast feeding amongst the mothers of 0 months to 12 months of age in a rural hospital in hingna, Nagpur. In present study, the proportion of mothers having satisfactory knowledge (73.23%) of colostrum was more than having unsatisfactory knowledge (27%) which was similar to findings observed by Choudhary et al. and Sharanya et al.<sup>[20,21]</sup> A study done by Choudhar et al. found that 82.2% mother had good knowledge regarding colostrum feeding and 32.5% had no knowledge about colostrum feeding. Study done by Sharanya et al. found that 82.7% knew that colostrum feeding should be given to the child, the findings similar to present study.<sup>[21]</sup> Maximum number of mothers (90.14%) were having knowledge regarding continuation of breast-feeding during baby's illness, 86.97% of mothers knew about continuation of breastfeeding during maternal illness and 91.19% knew about breastfeeding being not contraindicated even during menses. Compared to our study, in the study done by Rajesh et al it was found that though 86% of mothers had knowledge on exclusive breast feeding only 64% of them were able to practice it for up to six months which was higher than present study where it was 46.83%.<sup>[22]</sup> In contrast to present stud, Yadavannavar et al. found that, 81.19% mothers had no knowledge regarding exclusive breast feeding and only 13.36% of mother's practised exclusive breast feeding up to 4 months.<sup>[23]</sup> In study done by Maiti et al. <sup>[24]</sup> and Sriram et al.<sup>[25]</sup> it was found that 96% mothers had knowledge of exclusive breast feeding but only 68.67% mothers practiced it. 6.97% mothers had knowledge of exclusive breastfeeding. In study done by Maiti et al. it was found that 52.78% had knowledge about initiation of breast feeding within 0.5 hours-1 hours of birth.

According to Infant and Young Child Feeding (IYCF, 2006) guidelines, Government of India recommends that initiation of breastfeeding should begin immediately after birth, preferably within one hour.<sup>[26]</sup> There was seen a delay in initiation of breastfeeding due to various reasons including delay in shifting the mothers from labour room, babies were in neonatal ICU, caesarean sections to name a few. In our study initiation was done within 1 hour in only 13.73% and within 1 hour-4 hours in 58.09% mothers. The data in various studies in India shows that initiation rates vary from 16% to 54.5%.<sup>[27]</sup> A number of studies on breastfeeding practices in India were reported.<sup>[28-30]</sup> Related studies by Puri et al.<sup>[31]</sup>, Quazi et al.<sup>[32]</sup>, Thow et al.<sup>[33]</sup> and Uddin et al.<sup>[34]</sup> was reviewed. These findings indicate that the doctors, nurses and relatives along with mothers should be sensitised for early initiation of breastfeeding.

## Conclusion

This study throws light on the mother's knowledge about breast feeding and what they actually practice. Even though majority of the mothers are sensitised regarding duration of breastfeeding, not to give prelacteals, when to start complementary feeds and the advantages of colostrum and breast milk, more knowledge is to be provided through camps and sensitisation programmes as well as by social workers and Anganwadi workers so as to have maximum benefit for mother and baby.

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