ORIGINAL ARTICLE

The First 1000 Days Matter: Exploring Breastfeeding, Complementary Feeding, and Nutritional Outcomes among Young Children

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ABSTRACT

Background: Children who don't get timely, sufficient, and appropriate complementary feedings are at risk of undernutrition, even with optimal breastfeeding. Undernutrition among children under five is a significant public health issue in India. **Aim & Objective:** To evaluate breastfeeding and complementary feeding practices among mothers of children aged 6 to 23 months and to examine their association with the nutritional status of these children. **Settings and Design:** Cross sectional study was conducted among 100 children aged 6 to 23 months in the Rural Health Training Centre's rural field practice division of Dr. D. Y. Patil Medical College in Pune. **Methods and Material:** Mothers were interviewed using semi structured questionnaire of breastfeeding and complementary feeding practices and anthropometric measurement of child was taken using calibrated infantometer and Salter weighing scale. **Statistical analysis used:** Continuous variables were presented as means, standard deviation (SD) & median. Categorical variables were presented as frequencies and percentages. The chi-square test were used to determine the independence of attributes. **Results:** Out of 100 children studied 56% had given prelacteal feed, 44.90% had practiced exclusive breast feeding, 32% children were bottle fed, 54% children received complementary feeding at appropriate age, 62% children met adequate minimum meal frequency, only 23% children met minimum acceptable diet. Association between underweight and stunting with the non-initiation of complementary food at appropriate age was statistically significant. **Conclusions:** The majority of the children in this research weren't exclusively breastfed, only 54% of infants received complementary feeding at the recommended age.

KEYWORDS

Prelacteal feed, Breastfeeding practices, Complementary feeding practices, rural area, Nutritional status, 6 - 23 months old children.

INTRODUCTION

Breastfeeding is a natural and effective way to nourish an infant. (1). Neonatal mortality can be reduced by beginning breastfeeding within 1 hour of birth (2). Colostrum contributes to the protective effects of early breastfeeding. (3). Globally in 2022 for the first six months, only 44% of babies were breastfed exclusively. Few children receive complementary foods that are safe and nutritionally adequate, less than 25% of infants between the ages of 6 and 23 months in many countries meet the requirements for an age-appropriate dietary diversity and feeding frequency(4). As per the National Family Health Survey 5 factsheet for India's rural areas, 65.1% of children are exclusively breastfed for the first six months and 40.7% of children under three years were breastfed within an hour. Only 10% of 6-23-month-old breastfed children receive an appropriate diet, compared to 12% of non-breastfeeding infants in the same age range. Eleven percent of children between the ages of six and twenty-three months are getting enough food(5).

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) advise to begin breastfeeding within an hour, to be exclusive for the first six months, at six months, introduce complementary feeding while continuing to breastfeed(6). Undernutrition frequently starts between 6 and 12 months of age. Beyond the age of two, treating for impairments caused by under nutrition is incredibly difficult(7). Among children aged 6-23 months, optimal dietary habits include introducing complementary foods on time at six months, having minimum meal frequency and in sufficient portions, having a varied diet, etc(8).

Most of the reports found in the literature haven't adequately addressed the multidimensionality of feeding

procedures and how they affect child's nutritional condition.

Aim & Objective(s)

1) To evaluate breastfeeding and complementary feeding practices among mothers of children aged 6 to 23 months
2) To examine their association with the nutritional status of these children.

MATERIAL & METHODS

Study area and participants: This cross-sectional, community-based study was carried out among 100 children aged 6 to 23 months in the rural field practice area of the Rural Health Training Centre at Dr. D. Y. Patil Medical College, Pune.

Inclusion criteria: The study included children between the ages of six and twenty-three months, as well as their mothers, who lived in the field practice area under the rural health training centre Alandi, Pune.

Exclusion criteria: Children with cerebral palsy, congenital malformations affecting feeding (such as cleft lip and cleft palate) very ill children needing admission for immediate treatment, and those who refused to take part.

Sample–size: According to IYCF data,50% babies were initiated on complementary feeding at 6 months(9).Considering 50% prevalence, with an acceptable difference of 10%, 95% confidence level, the minimum calculated sample size was 97 using WinPepi version 11.38. However 100 participants were included.

Data Collection: After getting approval from institutional ethics committee of Dr. D. Y. Patil Medical College, Hospital and Research Centre, Pune, India, study was carried out from November 2023 to March 2024. Data was collected by one-on-one interview. After getting informed consent from mothers, they were interviewed using predesigned semi structured questionnaire based on infant young child feeding practices. An initial pilot study was carried among 20 participants following which some of the questions from predesigned semi structured questionnaire were modified. The questionnaire was divided into three sections. The first portion included questions about the mother's age, occupation, education level, and monthly household income (based on the Modified B.G. Prasad scale), children's ages and genders. A questionnaire about breastfeeding methods was included in the second section, and one about complementary feeding practices was included in the third. 24 hour recall was used to evaluate the WHO IYCF parameters for complementary feeding, which include minimum meal frequency, minimum dietary diversity, and minimum acceptable diet. The questionnaire was divided into three sections. Nutritional assessment was done by standard anthropometric measurement as per WHO guidelines. Length of child was taken using calibrated infantometer with a precision of 0.1cm, to the nearest 0.1 kg, the child's weight was recorded on a Salter weighing scale.

Data Analysis: Using WHO recommendations, nutritional status markers such as weight-for-length (WLZ), weight-for-age (WAZ), and length-for-age (LAZ) were evaluated. Children were categorized as wasted, stunted, and underweight, respectively, if their weight fell below two standard deviations (−2SD) of the WHO median for WLZ, LAZ, and WAZ (10). Continuous variables were presented as means, standard deviations (SD), medians, and interquartile ranges (IQR), while categorical variables were presented as frequencies and percentages where applicable. The normality of distributions was assessed using the Shapiro-Wilk test. The chi-square test and Fisher's exact test (where applicable) were used to determine the independence of attributes.

Operational Definitions:

Exclusive breastfeeding(11) When an infant receives only breast milk, no other liquids or solids are given, not even water, with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines.

Complementary feeding(6) When breast milk is no longer enough to meet an infant's nutritional needs, other meals and liquids are therefore required, despite the fact that nursing can last longer than two years.

A) Breastfeeding indicators(6)

Ever breastfed children: Percentage of children born in the past two years who have been breastfed.

Early initiation of breastfeeding (EIBF): The proportion of infants born during the previous 24 months who were breastfed within one hour of birth.

B) Complementary feeding indicators(6)

Minimum dietary diversity (MDD): Percentage of children 6–23 months of age who consumed foods and beverages from at least five out of eight defined food groups during the previous day. The eight defined food groups are a) breast milk b) grains, roots, tubers c) pulses, nuts d) dairy products e) eggs f) Vitamin A rich fruits and vegetables g) other fruits and vegetables h) flesh foods.

Minimum meal frequency (MMF): Children between the ages of 6 and 23 months who consumed solid, semisolid, or soft solid food in a minimum number of times (6–8 months-2 times/9–23 months-3 times/children who are not breastfeeders-4 times a day) in the preceding 24 hours.

Minimum acceptable diet (MAD): Proportion of children 6–23 months of age who consumed a minimum acceptable diet during the previous day.

RESULTS

Sociodemographic characteristics

Study was conducted on 100 children in rural area of Alandi, which included 59 females and 41 males. The mean age of the children was 13.55 months, with a standard deviation of 5.25 months with 95% CI as 12.52-14.57. Median age (IQR) was 13(9-18) months. Out of 100 children, 23 were aged 6-8 months, and 60 were aged 12-23 months. Fifty-two (52%) children were first born and 48 (48%) were of birth order two and above. Most of the mother's age was in the range of 19-25 years (52%). The mean (SD) age of the mothers was 25.86(4.21) years with95% CI being 25.03 – 26.68. Ninety eight percent mothers were literate, thirty seven percent mothers had completed secondary school while 21% mothers were undergraduates, only 6% mothers had completed postgraduate. Among the study participants majority belonged to the Hindu religion 99 % and only 1% were Muslim. Eighty six percent mothers were homemaker and 14% were working mother. Majority of the deliveries 55% were normal vaginal delivery and 45% were caesarean section. Ninety nine percent mothers had

institutional delivery were 1% had home delivery. Fifty nine were females, 41 were males. Fifty two (52%) children were first born to the mother and 48 (48%) were of birth order two and above. Joint families (37%) were less frequent than nuclear family. As per Modified BG Prasad's socioeconomic classification most of the participants were identified as (45%) middle class.

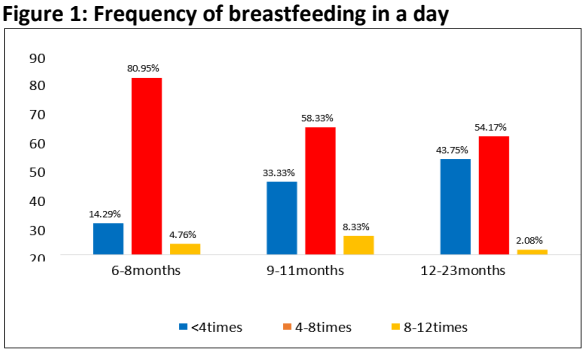
Breastfeeding practices - As per recall, 56 infants received pre-lacteal feed. Merely 51.02% of mothers initiated breastfeeding within an hour following childbirth. One mother started breastfeeding after 360 hours of delivery. *Two infants were never breastfed; reasons being Hepatitis Band HIV positive mothers respectively. Over half of the children (55.10%) had not exclusively breastfed for the first six months. Out of 59 children in the age group of 12 to 23 months, 48 continued to breastfeed. Seventeen mothers had stopped breast feeding, minimum age was 10 months and maximum age was 22 months of child. The 95% CI of mean was 12.85-16.57. Median age (IQR) was 13 (18-12) months. (Table:1)

Table 1: Breastfeeding practices

Variables	Status	n (%)	95% CI
1) Prelacteal feeding (n=100)	Yes	56 (56.00)	45.72 - 65.92
	No	44 (44.00)	34.08-54.28
2) Types prelacteal feed (n=56)	Ghutti	8 (14.29)	6.38 - 26.22
	Honey	11 (19.64)	10.23 - 32.43
	Water	3 (5.36)	1.12 - 14.87
	Animal milk	22 (39.64)	26.50 - 53.25
	Formula	12 (21.43)	11.59 - 34.44
3) Ever breastfeed (n=100)	Yes	98 (98.00)	92.96 - 99.76
	No*	2 (2.00)	0.24 - 7.04
4) Initiation of breastfeeding (n=98)	Within 1 hr	50 (51.02)	40.72 – 61.26
	1-6hr	20 (20.41)	16.36 - 34.21
	6-24hr	4 (4.08)	1.12 - 10.12
	>24hr	24 (24.49)	12.93 - 29.74
5) Exclusive breastfeed (n=98)	Yes	44 (44.90)	34.83 - 55.28
	No	54 (55.10)	44.72 - 65.17
6) Discontinuation of breastfeeding (in months) (n=98)	< 11 months	6 (6.1)	1.37 – 10.87
	12-23 months	11 (11.22)	4.97 – 17.47
	Still breastfeeding	81(82.65)	75.14 – 90.16
7) Bottle feeding (n=100)	Yes	32 (32.00)	23.02 - 42.08
	No	68 (68.00)	57.92 - 76.98

Majority of children were breastfed 4-8 times a day, 28 were breastfed less than four times a day and only 3 children were breastfed 8-12 times a day. Out of 21 currently breastfeeding children aged 6-8 months 17 were breastfeed 4-8 times a day and only 1 breastfed 8-12 times a day. Among children age group 9-11 months 7 were breastfed 4-8 times a day, one were 8-12 times a day. Among children age group 12-23 months 21 were breastfed < 4 times and 26 were breastfed 4-8 times a day.(figure 1)

Figure 1: Frequency of breastfeeding in a day



Complementary feeding practices

Table:2 denotes fifty four (54%) children began receiving complementary feeds at approximately 6 months of age. fifty-four combination of multiple foods, dal water 43 (43%), rice water 46 (46%) were preferred for the initiation of complementary feeding.(figure:2) Sixty two percent children were met adequate minimum meal frequency (95% CI, 51.75% - 71.52%) and only 27% (95% CI, 18.61% - 36.80%) children had adequate minimum dietary diversity (who fulfil criteria for minimum dietary diversity) as per 24-hour recall method. More than three forth (79) of mothers added salt to their child's meal. Forty nine (62.03%) mothers added salt and forty two (67.74%) mothers added sugar in their children's meal 12-23 months. Thirty mothers added salt and twenty mothers added sugar in their children's (age group of 6-11months) meal. Before feeding, every mother cleaned their hands and eating utensils. Out of hundred children, 11 were underweight, 9 were wasting, and 24 were stunted.

Table 2: Complementary feeding practices

Variables	Status	n(%)	95%CI
1) Initiation of complementary feeding at appropriate age (n=100)	Yes	54 (54.00)	43.74 - 64.02
	No	46 (46.00)	35.98 – 56.26
2) Reason for early introduction of complementary feeding (n=5)	Felt that it was appropriate age to start	1 (20.00)	0.51 - 71.64

Variables	Status	n(%)	95%CI
	Advice of other	1 (20.00)	0.51 - 71.64
	Not enough breast milk	1 (20.00)	0.51 - 71.64
	Any other reason	2 (40.00)	5.27 - 85.34
3) Reason for delayed complementary feeding (n=41)	Breast milk alone is enough	26 (63.41)	46.94 - 77.88
	Advice of others as they felt child would become sick if fed other foods	8 (19.51)	8.82 - 34.87
	Any other reason	7 (17.07)	7.15 - 32.06
4)Types of food given while introduction of complementary food (n=100)	Dal Water	43 (43.00)	33.14 - 53.29
	Rice Water	46 (46.00)	35.98 - 56.26
	Cerelac	9 (9.00)	4.20 - 16.40
	Nachanisatva	8 (8.00)	3.52 - 15.16
	Cowmilk	3 (3.00)	0.62 - 8.52
	Mashed rice	7 (7.00)	2.86 - 13.89
	Water	22 (22.00)	14.33 - 31.39
5) Appropriate Consistency (n=100)	Yes	64 (64.00)	53.79 - 73.36
	No	36 (36.00)	26.64 - 46.21

Figure 2: Appropriate breastfeeding and complementary feeding practices

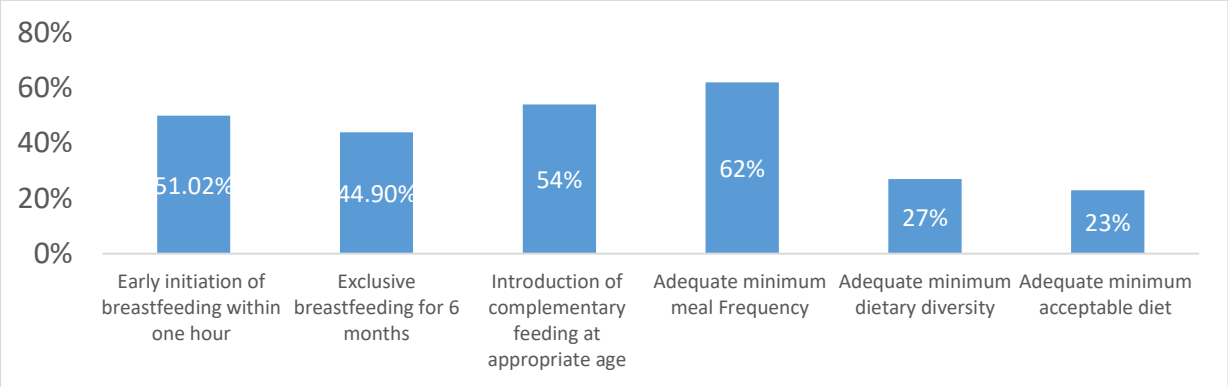


Table 3: The association of breastfeeding practices with undernutrition of children

Variables	Stunting < -2SD	Significance	Wasting < -2SD	Significance	Underweight < -2SD	Significance
1) Initiation of breastfeeding within one hour						
No (n=48)	13 (27.08)	$\chi^2(1)=0.68$, P= 0.408,	5 (10.42)	Fisher's exact, p= 0.738,	8 (16.67)	$\chi^2(1)=2.80$, p=0.094,
Yes (n=50)	10 (20.00)	OR= 1.49	4 (8.00)	OR= 1.34	3 (6.00)	OR=3.13
2) Exclusive breastfeeding						
No (n=54)	18 (33.33)	$\chi^2(1)= 6.52$,	8 (14.81)	Fisher's exact,	9 (16.67)	$\chi^2(1)= 2.46$,
Yes (n=44)	5 (11.36)	p=0.011, OR=3.90	1 (2.27)	p= 0.039, OR=7.48	2 (4.55)	P=0.117, OR=4.20
3) Bottle feeding						
Yes (n=32)	16 (50.00)	$\chi^2(1)=17.44$, p= 0.001,	8 (25.00)	Fisher's exact	9 (28.13)	$\chi^2(1)=11.64$, p =0.001,
No(n=68)	8 (11.76)	OR=7.50	1 (1.47)	p = 0.001, OR=22.33	2 (2.94)	OR= 12.91

Note = 2 children were never breastfed so these child excluded in association between early initiation of breastfeeding, exclusive breastfeeding and undernutrition. Out of these 2 children one child was stunted and one child was normal.

Table 4: The association of complementary feeding practices with undernutrition of children

Variables	Stunting < -2SD	Significance	Wasting < -2SD	Significance	Underweight < -2SD	Significance
1) Introduction of complementary feeding at appropriate age						
No (n=46)	16 (34.78)	$\chi^2(1)= 5.43$, P= 0.020,	5 (10.87)	Fisher's exact, p= 0.729,	9 (19.57)	$\chi^2(1)= 6.38$, p=0.011,

Variables	Stunting < -2SD	Significance	Wasting < -2SD	Significance	Underweight < -2SD	Significance
Yes (n=54)	8 (14.81)	OR=3.07	4 (7.41)	OR=1.52	2 (3.70)	OR= 6.32
2) Minimum meal Frequency						
No (n=38)	16 (42.11)	$\chi^2(1)=9.42$, p= 0.002,	6 (15.79)	$\chi^2(1)=2.24$, p=0.134,	8 (21.05)	$\chi^2(1)=4.78$, p= 0.029,
Yes (n=62)	8 (12.90)	OR=4.90	3 (4.84)	OR= 3.69	3 (4.84)	OR= 5.24
3) Minimum dietary diversity						
No (n=73)	23 (31.51)	$\chi^2(1)=8.35$, p=0.003, OR=11.69	8 (10.96)	$\chi^2(1)=0.54$, p=0.464, OR=3.20	9 (12.33)	$\chi^2(1)=0.11$, p= 0.735, OR= 1.76
Yes (n=27)	1 (3.70)		1 (3.70)		2 (7.41)	
4) Minimum acceptable diet						
No (n=77)	20 (25.97)	$\chi^2(1)=0.71$, p= 0.398,	7 (9.09)	$\chi^2(1)=0.001$, p=1.000,	2 (8.70)	$\chi^2(1)=0.001$, p =0.982,
Yes (n=23)	4 (17.39)	OR=1.67	2 (8.70)	OR=1.05	9 (11.69)	OR=1.39

Association between feeding practices and nutritional status of children aged 6-23 months

Our study found association between underweight with non-initiation of complementary feeding at appropriate age, inadequate minimum meal frequency, bottle feeding was statistically significant. Association of stunting with the non-initiation of complementary food at appropriate age, nonexclusive breastfeeding up to 6months, inadequate minimum meal frequency, inadequate minimum dietary diversity, bottle feeding was statistically significant. Wasting was significantly associated with nonexclusive breastfeeding up to 6 months, bottle feeding given in Table: 3, 4.

DISCUSSION

Breastfeeding practices

a) Initiation of breastfeeding

Study done by Saxena et al., Prasad et al., study reported 99.8%, 97.25% children have been breastfed, this was similar to our study finding(12,13). Bagchi et al., found that one was adopted so breastfeeding history not known and the other two were never breastfed(14). Chakraborty et al., Bala et al., reported 47.9%, 46% initiated breast feeding within an hour in their study which was similar to our study finding(15,16). A study found that 21.1% of the infants received their first breastfeeding within an hour after delivery which was lower in proportion than our study finding(14). Study done by Prasad et al., Garti et al., Walter et al., reported 66.1%, 80.4%, 78% initiated breast feeding within an hour this was higher in proportion than our study finding(13,17,18).Prelacteal feed causes delays in initiation of breastfeeding. In rural areas of India, there is still a ritual for giving newborns prelacteal food, such as honey. Our study's noteworthy conclusion is that the most preferred pre-lactation feeding choice was animal milk, formula milk. Most of the participant told that due to inadequate secretion of breast milk and caesarean section, formula or animal milk was given for first 3 days. The most commonly consumed pre-lacteal feeds, according to earlier research, are ghutti and honey. Study done by Randhawa et al., found that prelacteal feeds were given to 50.81% of the children, this was consistent to our study finding. Also according to above study most common prelacteal feed given was honey(19).Prasad et al., study reported that prelacteal feed given too lower than our study finding these differences may be due to these study carried out in urban area of India and our study conducted among rural area of India(13).

b) Exclusive breastfeeding up to 6 months

NFHS-5factsheet for rural Maharashtra shows that exclusive breastfeeding54.3%(5). Findings from a study showed 45.67% of children were exclusively breastfed, which was consistent with our study finding (19). Study done by Prasad et al., Chakraborty et al., Dutta et al., Patil et al., found higher proportion of children exclusively breast fed for 6 months compared to our study finding(13,15,20,21). Ghane et al., Aripin Ahmad et al., study found 40.32%, 39% children exclusively breastfed(22,23).

c) **Continued breastfeeding**

Various studies found 85.1%, 84.5%, 82.6% children were still nursing which was similar to our study(13,24,25) (Table 1). Bala et al., conducted cross-sectional study among mothers of infants 1 month to 2 year reported majority of42.7% were breastfed 8-12 times a day, 25.3% children were breastfed <4times, 32% were 4-8 times a day(16). In our study majority of 61.73%children were breastfed 4-8times a day as our study conducted among 6-23 months old children.

Bottle feeding practices

Bottle feeding is a risk factor for the malnutrition-infection cycle(26). In our study bottle feeding done by 32%, this was similar to another study. (12). Study done by Jain et al., found26% of mothers were practicing bottle feeding which was lower in proportion than our study(27).

Complementary feeding Practices

Varghese et al., study noticed 50.3%were initiated complementary feeding at six month, delayed in 48% and 1.7% started earlier, which was similar to our study finding(28). Other studies showed that 50% of the mothers had introduced complementary feed to the child at appropriate age this was consistent with our study findings as well(12,23). Our study identified the low proportion of timely initiation compared to this study(13,25). Various misbeliefs and misconceptions exist among mothers regarding initiation of complementary feeding. Reason for delayed complementary feeding as found in study by Patil et al., were child not accepting complementary feeding and the

second most frequent reason was that breast milk was enough(21). Similarly by Mehlawat et al., study stated that due to sufficient breastmilk, reason given by the mothers for delayed initiation of complementary feeding found consistent with study our finding(29). Study carried out by Olatona et al., found appropriate consistency of food was given to 56.8% children, which was lower in proportion than our study findings(30). Chhabra et al., found 60.6% of children had met adequate minimum meal frequency, this was consistent with our study finding(26) whereas study done by Saxena et al., reported 52.72% children had met adequate minimum meal frequency(12). Varghese et al., noticed 72.3% children had met adequate minimum meal frequency which was comparable higher than our study findings(28). Another study conducted at Myanmar found only 25% children met adequate minimum dietary diversity this was consistent to our study finding(24). Chakraborty et al., Ahmad et al., study found that 30.30% , 42.6%, children met adequate minimum dietary diversity(15,31). One of the study findings reported 33.47% children had met minimum acceptable diet, this finding was higher compared to our study result(12).Varghese et al., noticed lower proportion of children had met adequate minimum acceptable diet(28).

Relationship between feeding practices and children's nutritional status

The current study did not show statistical significant association between the initiation of breastfeeding after first hour of delivery, inadequate minimum acceptable diet and undernutrition. These findings were similar to the various other studies.(18,23).On contrary Al Faudet al., study found significant association between delayed initiation breastfeeding with wasting and underweight(32).

Study done by Ghane et al., Al Faud et al., Khobragade et al., revealed significant association between stunting and non-exclusive breastfeeding this finding was consistent with our study finding(22,32,33). On contrary other studies reported there were no association between non-exclusive breastfeeding and stunting(15,23). Ghane et al., conducted study among under five children study which showed significant statistical association between wasting and nonexclusively breastfeeding, similar finding found in our study(22). However other studies conducted among children aged 6-23 months and among under five children reported no statistical significant association between non-exclusive breastfeeding and wasting(23,32,33). Contrary to our study, a study conducted by Bagchi et al., Ghane and Kumar et al., reported association between non-exclusive breast feeding and underweight which was statistically significant (14,22). According to WHO guidelines, infants should start getting complementary foods at six months of age in addition to breast milk. Non-initiation of timely complementary feeding leads to growth faltering, which indicates the onset of undernutrition(4).Our study suggested that introduction of complementary feeding at inappropriate age was significantly associated with stunting. This finding was similar with study conducted by Dhami et al.,(34). On contrary a study conducted Chakraborty et al., and through multivariable logistic regressions by Garti et al., found that no significant association between non timely initiation of complementary feeding with stunting and underweight(15,17).Study conducted by Chhabra et al., found statistical significant association between bottle feeding and wasting(26).On contrary there was no significant association between bottle feeding and undernutrition found in other studies(35).Study conducted by Chakraborty et al., found bottle feeding were significantly associated with underweight, this was consistent to our study finding(15). Bottle feeding was not significantly associated with stunting in other studies(15,17). Many other studies found association between stunting with minimum meal frequency which was not statistically significant and not similar to our study finding(15,17,23). Study done by Chakraborty et al., found significant association of minimum meal frequency with underweight. This was consistent with our study finding(15).

CONCLUSION

Conclusion A variety of IEC initiatives and scientific messaging should work to improve public perception of prelacteal procedures. The majority of the children in this research weren't exclusively breastfed, only 54% of infants received complementary feeding at the recommended age. Common misconceptions include providing pre-lacteal feeding and starting breastfeeding later than necessary. Furthermore, some women were unaware of the appropriate age to introduce complementary foods.

RECOMMENDATION

There is still a need to raise awareness about breastfeeding and complementary feeding practices. Children are the backbone of any country, improving their overall health would help us build a healthy one. In India, better IYCF practices could lead to an increase in child survival and better nutritional outcomes. Appropriate feeding practices is low and effort should be made to appropriate feeding practices.

LIMITATION OF THE STUDY

The study only takes into consideration feeding for the entire 24 hours; therefore it might not fully reflect the children's prior experiences. It covered a population of rural centres of Dr. D. Y. Patil Medical College and Hospital.

AUTHORS CONTRIBUTION

All authors have contributed equally.

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Nil

CONFLICT OF INTEREST

There are no conflicts of interest.

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Declaration of Generative AI and AI Assisted Technologies in the Writing Process

The authors haven't used any generative AI/AI assisted technologies in the writing process.

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