

Infant And Young Child Feeding Practices and Infections Pattern in Children Up To 24 Months Age Attending Outdoor Patient Department of a Tertiary Care Hospital of South Gujarat

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ABSTRACT

Background: Optimal infant and young child feeding practices (IYCF) are effective public health intervention to enhance child survival, nutrition and development. There is also documented evidence regarding the protective effect of optimal IYCF practices against diarrhoea and ARTI. The objective is to assess knowledge and practices regarding IYCF among study participants & to explore the association of feeding practices of mothers with the morbidities (infections) in their children.

Methodology: The present study was a hospital based cross-sectional study, carried out during September 2019 to March 2021. A total of 380 mothers of children less than two years attending OPD of Institute of child health, Nirmal hospital private limited, a tertiary care multi-specialty hospital was interviewed using pre-designed and pretested questionnaire.

Results: Feeding practices during early days of life to be reasonably good among study participants with almost 2/3rd of the study participants practicing them. Mean number of morbidity episodes requiring consultation were significantly lower in the children whose mothers practiced optimal IYCF practices.

Conclusion: Poor feeding practices in children had significant association with morbidity episodes of diarrhoea and ARTI in children.

Key words: Cross sectional study, IYCF, morbidity episodes, Tertiary care hospital

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INTRODUCTION

The World Health Organization has recognized “poor infant feeding as a risk factor for child survival.”¹ Proper feeding of infants and young children, especially from birth to two years of age, improves their survival chances. It also promotes proper growth and development during that period.² Despite all the evidence, rates of breastfeeding are low and stagnant in India, and the country is not able to reap its benefits. India is making very slow progress in improving the rates of underweight, stunting and wasting.³

There are studies suggesting that optimal breastfeeding practices, which includes exclusive breastfeeding during the first six months of life and continued breastfeeding till 24 months of age, are important for reducing the burden of pneumonia among infants and young children.⁴ The human milk protects against respiratory infection because of its numerous immunobiological components.⁴

From 6 months onwards, breastfeeding is combined with safe, age-appropriate feeding of solid, semi-solid and soft foods, which is termed complementary feeding. It helps prevent undernutrition and decrease the risk of infectious diseases e.g., diarrhoea and pneumonia.² Only about 2/5th of infants worldwide are exclusively breastfed for the first six months of life, despite the benefits.² According to global estimates, timely introduction of complementary foods at 6 to 8 months is done in only 2/3rds of children⁵. Moreover, data from national surveys indicate that the diet of this age group is only minimally acceptable in terms of food quality and frequency of feeding.⁵

Keeping this in mind and very limited studies published associating Infant and Young child feeding practices with the morbidity pattern especially infections in urban setting, a study was planned to determine the association between Infant and young child feeding practices followed by mothers and morbidity (infections particularly ARIs and diarrhoeas) pattern in their children up to 24 months age attending Outdoor Patient Department of a tertiary care private pediatric hospital of South Gujarat.

METHODOLOGY

The study was carried out in mothers of children up to 24 months age attending Outdoor Patient Department of Institute of child health, Nirmal hospital private limited, a tertiary care multi-specialty hospital in Surat after getting Institutional Ethical Committee of Nirmal Hospital private limited (Reg no: ECR/390/Inst/GJ/2013) approval. It was a hospital based cross sectional study. Each study participant was contacted once and no follow up visits were made. The study was done during the period from 1st September 2019 to 31st March 2021.

As per National Family Health Survey 4 (NFHS 4) (2015-16) findings in Gujarat, the proportion of

children under the age of 6 months, who were exclusively breast fed in urban areas was 48.7 %.⁶ Based on this reported prevalence, the sample size was drawn using the formula $n = 4pq/E^2$ with 5% allowable error and 95% confidence interval and it came out to be 400. But data could be collected from only 380 study participants because of Covid 19 pandemic situation.

Enrolled mothers were explained regarding the questions used in the questionnaire. The study was carried out after explaining details regarding study to them by giving them PIS (Patient Information Sheet). Written informed consent was taken from the mothers willing to participate in the study. All the mothers of children up to 24 months attending Outdoor Patient Department of Nirmal Hospital, Surat and willing to participate were included in our study. The participants were selected by using non-probability consecutive sampling method from the OPD of the hospital. A predesigned, structured questionnaire was used for data collection. The questionnaire was divided into three parts. Part 1 had various variables related to socio demographic profile of study participants. The second part contained questions pertaining to the knowledge and practice of Infant and young child feeding, while the third section had questions related to the children/s morbidity episodes. The questionnaire was pre-validated by taking the peer reviews for various variables to be included and it was followed by pilot testing in intended study participants. The questionnaire was also translated into local language for use in some of the study participants and Interviews were conducted by using face to face interview method.

Data was entered in Microsoft Office Excel 2010, and was analyzed using Statistical Package for the Social Sciences (SPSS) version 23.0 and open epi software. Appropriate descriptive statistics (Frequencies, proportions and percentages for qualitative data and Mean, Standard Deviation etc. for quantitative data) was applied for data collected. Necessary test of significance like chi square test, t test etc. were applied to explore association between relevant variables.

RESULTS

Total 380 mothers were interviewed to know regarding their IYCF practices in their children. Majority of the mothers (45.2%) belonged to the age group of 26 to 30 years of age. Mothers were asked regarding the age of their child. It was observed that 62 children (16.3%) were below 6 months of age. While, 30.2% and 31.3% children belonged to the age group of 6 to 12 months and 12 to 18 months respectively. Mean age of mothers was 26.6 years. While mean age of children was 12.2 months.

Also, it was observed that 178 (46.8%) mothers had higher secondary or more education. About 40 % of the mothers had secondary education. Only 11 (3%) of the mothers were illiterate.

Table 1: Distribution of study participants regarding knowledge of feeding practices in child

Aspects of feeding in child	Correct Knowledge (%)	Incorrect Knowledge (%)
Timing of initiation of Breast feeding after birth	251 (66.1)	129 (33.9)
Pre-lacteal feeding	288 (75.7)	92 (24.3)
Colostrum feeding	309 (81.3)	71 (18.7)
Exclusive breast feeding for first six months	272 (71.5)	108 (28.5)
Timing of initiation of complementary foods	282 (74.2)	98 (25.8)
Continued breast feeding in children of 12-23 months	191 (50.2)	189 (49.8)
Mode of feeding of meal by spoon and katori	307 (80.7)	73 (19.3)

Almost half (183) of the study participants belonged to socio economic class II as per modified BG Prasad classification.¹⁹ It was seen that; 153 study participants belong to nuclear family and majority (331) of the mothers of study participants were housewives. Also, 90 % of the children in our study were born in the private facilities.

Table 1 denotes the distribution of study participants regarding knowledge of various feeding practices in their children. It was observed that 66 % of mothers had correct knowledge regarding timing of initiation of breast feeding after birth. About one fourth of the mother responded that pre-lacteal feeds should be given to child before breast feeding. More than 80 % of mothers had correct knowledge regarding importance of colostrum feeding to the child. It was also seen that 71.5 % of the mothers had correct knowledge regarding exclusive breast feeding for first six months. Almost three fourth of the mothers had correct knowledge regarding timing of initiation of complementary foods after 6 months of age. Just over half of mothers responded that breast feeding should be continued in children of 12-23 months. Almost 20 % of mothers had incorrect knowledge regarding mode of feeding in child. They mentioned bottle feeding should be used in child.

The mothers were asked regarding the feeding practices for their child in early days of life as described in Table 2. 117 (30.8%) mothers reported that they fed pre-lacteals in their child. 25.3% of the mothers reported that they did not give colostrum to their child. When the practice of exclusive breastfeeding in the child was asked to the mothers, 56.3% of the mothers reported that they practiced exclusive breastfeeding in their child for six months. It was seen that 149 (39.2 %) mothers have reported that they started breastfeeding their babies within one hour of birth. Just over 25 % of the mothers started breastfeeding their child same day but after one hour of birth. Around 80 % of mothers reported that they initiated complementary feeding at the age of 6 to 8 months in their children. And majority of them used the recommended spoon and katori as a mode of feeding. In mothers, who did not exclusively breast feed their children, it was observed that 60 (57.6%) mothers reported the use of formula feed for the children, while 44 (42.4%) mothers did not use formula feed in their children. They reported the use of buffalo or cow milk for their child feeding.

Mothers of children above six months were asked

regarding the variety of foods they feed to their children and average frequency of feeding throughout the day as shown in Table 3.

Table 2: Distribution of study participants according to feeding practices in early days of life

Variables	Participants (%)
Pre-lacteal feeding	
Yes	117 (30.8)
No	263 (69.2)
Colostrum given	
Yes	284 (74.7)
No	96 (25.3)
Exclusive Breast Feeding	
Yes	214 (56.3)
No	104 (27.3)
Not applicable*	62 (16.4)
Timing of initiation of Breast feeding	
Within one hour	149 (39.2)
Same day, after one hour	97 (25.5)
In two to three days	101 (26.7)
After 3 days	24 (6.3)
Breast Feeding not given	7 (1.8)
Do not know	2 (0.5)
Age of starting Complementary feeding (n = 318 *)	
< 6 months	44 (13.8)
6 - 8 months	252 (79.2)
> 8 months	22 (7)
Mode of Feeding (n = 318 *)	
Bottle feeding	78 (24.5)
Spoon and katori	240 (75.5)
Use of formula feeds in non-exclusively breast-fed children (n=104)	
Formula feeds used	60 (57.6)
Animal milk (buffalo or cow) used	44 (42.4)

*As 62 children were <6 months of age, the question regarding Exclusive Breast Feeding was not applicable for them and were not asked about complementary feeding and mode of feeding.

Table 3: Distribution of children >6 months according to Minimum Dietary Diversity (MDD), Minimum Meal Frequency (MMF) and Minimum Acceptable Diet (MAD) (n=318)

Variables	Participants (%)
Minimum Dietary Diversity	
Yes	199 (62.5)
No	119 (37.5)
Minimum Meal Frequency	
Yes	153 (48.1)
No	165 (51.9)
Minimum Acceptable Diet	
Yes	141 (44.3)
No	177 (55.7)

Table 4: Socio demographic variables associated with feeding practices in mothers

Variable	Feeding practices			Unadjusted OR (95% CI)	p value
	Colostrum feeding				
	Yes (%)	No (%)	Total		
Gender					
Boy	182(74.3)	63(25.7)	245	0.93 (0.57- 1.51)	0.785
Girl	102(75.6)	33(24.4)	135		
Socio economicclass					
I	74 (78.7)	20(21.3)	94	3.71 (1.40 – 9.76)	0.006
II	137 (74.9)	46 (25.1)	183	2.98 (1.21- 7.32)	0.013
III	62 (76.5)	19 (23.5)	81	3.26 (1.22 – 8.70)	0.015
IV & V	11 (50)	11 (50)	22	1	
Place Of Delivery					
Private	260(76.7)	79(23.3)	339	2.331 (1.17-4.55)	0.011
Government	24 (58.5)	17(41.5)	41	1	
Type of family					
Nuclear	119(77.8)	34(22.2)	153	1.32 (0.81-2.13)	0.26
Joint	165(72.7)	62(27.3)	227	1	
Working status of mother					
Not working	243(73.4)	88(26.6)	331	0.53 (0.243-1.194)	0.123
working	41(83.7)	8(16.3)	49	1	
Education ofmother					
Higher secondary or more	135 (75.8)	43 (24.2)	178	1.12(0.70 – 1.78)	0.64
Up to secondary	149 (73.7)	53 (26.3)	202	1	
	Pre-Lacteal Feeding				
	Yes (%)	No (%)	Total		
Gender					
Boy	83 (33.9)	162 (66.1)	245	1.52 (0.95-2.44)	0.079
Girl	34 (25.2)	101 (74.8)	135	1	
Socio economicclass					
I	39 (41.5)	55 (58.5)	94	1.24 (0.47 – 3.39)	0.65
II	56 (30.6)	127 (69.4)	183	0.77 (0.31 – 1.94)	0.58
III	14 (17.3)	67 (82.7)	81	0.37 (0.13 – 1.09)	0.85
IV & V	8 (36.3)	14 (63.7)	22	1	
Place of delivery					
Private	106 (31.3)	233 (68.7)	339	1.24 (0.60 – 2.57)	0.56
Government	11 (26.8)	30 (73.2)	41	1	
Type of family					
Nuclear	41 (26.8)	112 (73.2)	153	0.73 (0.46 – 1.14)	0.16
Joint	76 (33.5)	151 (66.5)	227	1	
Working status of mother					
Not working	100 (30.2)	231 (69.8)	331	0.82 (0.43 – 1.57)	0.526
working	17 (34.7)	32 (65.3)	49	1	
Education ofmother					
Higher secondary or more	67 (37.6)	111 (62.4)	178	1.835 (1.181 – 2.851)	0.006
Up to secondary	50 (24.8)	152 (75.2)	202	1	
	Exclusive breast feeding (n=318)				
	Yes (%)	No (%)	Total		
Gender					
Boy	140 (66.6)	70 (33.4)	210	0.92 (0.56 – 1.51)	0.74
Girl	74 (68.5)	34 (31.5)	108	1	
Socio economicclass					
I	55 (67.9)	26 (32.1)	81	0.82 (0.26 – 2.52)	0.72
II	95 (62.9)	56 (37.1)	151	0.65 (0.22-1.93)	0.44
III	51(75)	17 (25)	68	1.15 (0.36-3.71)	0.81
IV & V	13 (72.2)	5 (27.8)	18	1	
Place of delivery					
Private	186 (66.4)	94 (33.6)	280	0.71 (0.33-1.52)	0.37
Government	28 (73.6)	10 (26.4)	38	1	
Type of family					
Nuclear	96 (69.5)	42 (30.5)	138	1.20 (0.75-1.93)	0.45
Joint	118 (66.5)	62 (33.5)	180	1	
Working status of mother					
Not working	185 (68.1)	87 (31.9)	272	1.25(0.65-2.39)	0.50
working	29 (63.1)	17 (36.9)	46	1	
Education of mother					
Higher secondary or more	96 (67.1)	47 (32.9)	143	0.98 (0.62- 1.58)	0.95
Up to secondary	118 (67.4)	57 (32.6)	175	1	

Table 4 Continue...

Variable	Feeding practices			Unadjusted OR (95% CI)	p value
	Minimum Dietary Diversity (n=318)				
	Yes (%)	No (%)	Total		
Gender					
Boy	129 (61.4)	81 (38.6)	210	0.86 (0.53-1.40)	0.55
Girl	70 (64.8)	38 (35.2)	108	1	
Socio economicclass					
I	69 (85.1)	12 (14.9)	81	9.04(2.92- 27.93)	0.000002
II	80 (52.9)	71 (47.9)	151	1.77 (0.65-4.81)	0.26
III	43 (63.2)	25 (36.8)	68	2.70 (0.93-7.86)	0.062
IV & V	7 (38.9)	11 (61.1)	18	1	
Place of delivery					
Private	180 (64.2)	100 (35.8)	280	1.8 (0.91-3.55)	0.08
Government	19 (50)	19 (50)	38	1	
Type of family					
Joint	124 (68.9)	56 (31.1)	180	1.86 (1.17-2.94)	0.0079
Nuclear	75 (54.3)	63 (45.7)	138	1	
Working status of mother					
Not working	176 (64.7)	96 (35.3)	272	1.83(0.97-3.43)	0.06
working	23 (50)	23 (50)	46	1	
Education of the mother					
Higher secondary or more	108 (75.5)	35 (24.5)	143	2.848 (1.757-4.617)	0.0001
Up to secondary	91 (52)	84 (48)	175	1	
	Minimum Meal Frequency (n=318)				
	Yes (%)	No (%)	Total		
Gender					
Boy	105 (50)	105 (50)	210	1.25 (0.78-1.99)	0.35
Girl	48 (44.4)	60 (55.6)	108	1	
Socio economicclass					
I	37 (45.6)	44 (54.4)	81	1.32 (0.46-3.75)	0.6
II	80 (52.9)	71 (47.1)	151	1.77 (0.65-4.81)	0.26
III	29 (42.6)	39 (57.4)	68	1.17(0.40-3.38)	0.77
IV & V	7 (38.9)	11 (61.1)	18	1	
Place of delivery					
Private	139 (49.6)	141 (50.4)	280	1.69 (0.84-3.4)	0.14
Government	14 (36.8)	24 (63.2)	38	1	
Type of family					
Nuclear	71 (51.4)	67 (48.6)	138	1.27(0.81-1.96)	0.29
Joint	82 (45.5)	98 (54.5)	180	1	
Working status of mother					
Not working	135 (49.6)	137 (50.4)	272	1.53(0.81-2.90)	0.19
working	18 (39.1)	28 (60.9)	46	1	
Education of the mother					
Higher secondary or more	79 (55.2)	64 (44.8)	143	1.685 (1.079 - 2.631)	0.02
Up to secondary	74 (42.2)	101 (57.8)	175	1	

OR= Odds Ratio

It was observed that 199 mothers (62.5%) fed their child with minimum dietary diversity i.e., they fed their child of meals from four or more food groups from a total of seven food groups, such as, dairy products, legumes and nuts, flesh foods, eggs, vitamin A-rich fruits and vegetables, cereals and tubers, and other fruits and vegetables. Also, more than half of the mothers of children more than 6 months (165) reported minimum meal frequency in their child to be insufficient i.e., proportion of breast-fed and non-breast-fed children aged 6–23 months who receive solid, semisolid, or soft foods (but also including milk feeds for non-breast-fed children) the minimum number of times or more. 141 (44.3%) of the mothers were providing their children with minimum acceptable diet i.e., at least the MDD as well as at least the MMF.

Table 4 denotes various socio demographic variables

like gender of child, socio economic class, education of mother, working status of mother, type of family, place of delivery etc., which were tested to check the association with feeding practices in children. Significant association was observed between socio economic class and place of delivery of new-borns with the practice of feeding colostrum to the new-borns, with upper socio-economic classes and mothers with the place of delivery in private hospitals having significantly better practice of feeding colostrum to their new-borns. Significant association was observed between education of mother with the practice of giving pre-lacteal feeding to the new-borns. Significant association was observed between type of family and education of mother with the practice of providing Minimum Dietary Diversity in the meals of their children with the women belonging to a joint family and having higher education have better prac-

tice of providing MDD to their children. Significant association was observed between education of mother with the practice of providing Minimum Meal Frequency in the meals of their children, with women with higher education providing Minimum Meal Frequency in the diet of their children. No association was observed between any variable and exclusive breast-feeding practice among mothers.

The association was tested for mean difference in number of episodes of Diarrhoea and ARTI episodes requiring consultation with various feeding. It was observed that mean number of diarrhoea episodes were significantly lower in the children who were exclusively breast fed, children having Minimum Die-

tary Diversity in their meals. children who were currently breast fed and children whose mode of feeding was spoon and katori than the children who were not exclusively breast fed, children not having Minimum Dietary Diversity in their meals, children who were not currently breast fed respectively and children whose mode of feeding was bottle feeding. Similarly, mean number of ARTI episodes were significantly lower in the children who were exclusively breast fed, children who were currently breast fed and children whose mode of feeding was spoon and katori than the children who were not exclusively breast fed, children who were not currently breast fed and children whose mode of feeding was bottle feeding respectively.

Table 5: Mean difference in number of morbidity episodes (Diarrhea and ARTI) requiring consultation with various feeding practices in children more than 6 months*

Morbidity	Mean difference in no. of morbidity episodes requiring consultation		p value
	Exclusive Breast Feeding (EBF) (n=214)	No EBF (n=104)	
Diarrhea	2.2 (2.3)	3.7 (3.1)	< 0.001
ARTI	4.7 (2.6)	6.14 (4.1)	< 0.001
	Minimum Dietary Diversity (MDD) (n=199)	No MDD (n=109)	
Diarrhea	2.4 (2.5)	3.5 (3.4)	< 0.01
ARTI	5.1 (2.8)	5.7 (3.2)	0.08
	Minimum Meal Frequency (MMF) (n=153)	No MMF (n=165)	
Diarrhea	2.9 (2.5)	2.7 (2.8)	0.5
ARTI	5.2 (3.7)	5.2 (3.1)	0.99
	Currently breast fed (n= 212)	Currently not breast fed (n = 106)	
Diarrhea	2.5 (2.2)	4.1 (2.9)	0.00001
ARTI	4.6 (3.9)	6.4 (3.1)	0.00001
	Feeding by Spoon and Katori (n=240)	Bottle feeding (n= 78)	
Diarrhea	2.5 (2.5)	3.9 (2.7)	0.0001
ARTI	4.7 (2.8)	7.7 (4.1)	0.0001

*Values in tables are mean number of morbidity episodes (standard deviation (SD))

DISCUSSION

In our study, When the study participants were asked regarding the timing of initiation of breast feeding. Only 39.2 % of the mothers reported to have initiated breast feeding within one hour of birth. One fourth (25.5%) mother said that they initiated breast feeding same day, but after one hour of birth. Breast feeding was initiated two to three days after birth by 26.7 % of mothers. There were 7 mothers who never initiated breastfeeding. When reasons were asked to these mothers regarding the delay of breast feeding, multiple responses like Caesarean sections, no breast milk secretion, mother weak, child unable to suck, inverted nipples, child admitted in NICU were quoted as the reasons

for delay in breast feeding. Our findings are very similar to the findings of NFHS 5 in Gujarat, in which it is reported that only 38 percent started breast-feeding in the first hour of life.⁷ Similar finding were observed by Khan et al in their study done in mothers attending UHC in Delhi, where it was reported that 37.2 % of the mothers did early initiation of breast feeding in their child.⁸ Over 30 % of mothers reported using pre-lacteal feeds for their new-borns in our

study. As per NFHS 5 findings of Gujarat, 17 percent of children are given something other than breast-milk during the first three days.⁷ Similar to current study, findings were observed in study done by Jayarama and Ramaiah, where they reported that 32.3 % of mothers used pre-lacteals feeds for their newborns.⁹

In the current study, almost three fourth mothers (74.7%) reported feeding colostrum to their newborns. In various studies like the studies done by Tiwari et al¹⁰, Mehlawat et al¹¹ and Patel et al¹², the proportion of mothers feeding colostrum to their child was 61.7%, 94.1% and 91.2 % respectively. While, among 318 eligible children (age over six months), 214 (67.3%) mothers responded that they exclusively breast fed their child for the first six months of life. This finding is very similar to the findings of NFHS 5 in Gujarat, which says, only 65 percent of children under 6 months are exclusively breastfed, as the World Health Organization (WHO) recommends.⁷

It was observed in our study, that adequacy of dietary diversity i.e., feeding the child meals from four or more food groups from a total of seven food groups was reported by 62.5 % of study participants,

whose children were over six months of age, while minimum meal frequency was satisfactory in 48 % of the participants. Minimum acceptable diet could be seen in 44.3 % of the study participants. As per NFHS 5 report of Gujarat, over one-fifth (23%) of children age 6-23 months are fed the recommended minimum number of times per day and even fewer (16%) are fed from the appropriate number of food groups.⁷ But, in study done by Das et al in West Bengal, much contrasting findings were observed, where MDD was seen in 83.3%, while MAD was seen in 87.5% of the study participants.¹³

In our study, we tested association of various socio demographic variables with feeding practices in their children. Significant association was observed between socio economic class and education of mother with the practice of giving pre-lacteal feeding to the new-borns. Also, significant association was observed between socio economic class and place of delivery of new-borns with the practice of feeding colostrum to the new-borns. In a study done in a hospital in Karachi, Pakistan, Ambreen Afzal et al found that higher the mother's education status (p value 0.000) was associated with the correct feeding practices almost 50%. Mothers working status was also found to be affecting the feeding practices (p-value 0.002) as mothers who were house wives had corrected feeding practices 39.3% than those mothers who were employed.¹⁴ We could observe significant association between socio economic class, type of family, working status of mother and education of mother with the practice of providing Minimum Dietary Diversity in the meals of their children. Significant association was observed between education of mother with the practice of providing Minimum Meal Frequency in the meals of their children, with the higher educated mothers practicing providing Minimum Meal Frequency in the meals of their children significantly higher compared to mothers who have had lower education levels. Patel et al did secondary analysis of National Family Health Survey 2005- 2006, in which they noted that determinants of not meeting minimum dietary diversity and minimum acceptable diet were: no maternal education, lower maternal Body Mass Index (BMI) (<18.5 kg/m²), lower wealth index, less frequent (<7) antenatal clinic visits, lack of post-natal visits and poor exposure to media.¹⁵ While Na et al in the study done in Pakistan noted that fewer antenatal care visits predicted the odds of achieving minimum meal frequency while younger maternal age and household poverty predicted the odds of achieving MDD and minimum acceptable diet.¹⁶

It is well documented that optimal feeding practices protect against diarrhea and ARTIs in children. In our study, it was seen that mean number of diarrhea episodes were significantly lower in the children who were exclusively breast fed, children having Minimum Dietary Diversity in their meals, while mean number of ARTI episodes were significantly lower in the children who were exclusively breast fed and

children who were currently breast fed. Ogbo et al in their national level household surveys in Nigeria observed that prevalence of diarrhea was higher among children whose mothers did not initiate breast feeding within the first hour of birth, infants who were not exclusively breastfed, and infants who were prematurely introduced to complementary foods.¹⁷ Tromp et al in their study denoted that Breastfeeding for 6 months or longer was significantly associated with a reduced risk of LRTI up to 4 years of age (adjusted OR: 0.71; 95% CI: 0.51– 0.98).¹⁸

The study was not without limitations. We could not attend the desired sample size, as the study was conducted during the Covid 19 pandemic period. The study was carried out at a tertiary care center and it included children from health-conscious mothers, coming to the center. This hospital is private tertiary care center, which caters to a particular section of society. Selection bias due to center-based nature of study limits its representativeness.

CONCLUSION

To conclude, poor feeding practices in children were found to have significant association with morbidity episodes of diarrhea and ARTI in children. This study can be a useful resource for Pediatric Tertiary care centers for educating the mothers and helping them realize that cultural beliefs and practices should not hinder a child's right to proper nutrition. Trained health care staff, including doctors, nurses should impart proper education and counselling regarding Infant Young Child feeding practices at every chance they get to meet mothers or would-be mother. Relevant policy initiatives to improve IYCF practice among mothers can go a long way in decreasing under five mortalities in India.

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