

Research Article

Study of infant feeding practices in first six months of life at tertiary care center in Maharashtra

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Abstract: Infant feeding practices of a community are governed by its traditions, beliefs and knowledge. Exclusive breastfeeding (EBF) is not practiced by many mothers in the first six months of life. Appropriate feeding practices are fundamental to growth, development and nutrition of infant. In present study we have assessed knowledge of mothers about infant feeding, actual practices followed by mothers and factors influencing these practices. The present hospital based cross-sectional descriptive study was started from June 2015. In results the Practice of giving prelacteal feed is common among mothers. 48% of mothers were aware of EBF and 60% mothers have practiced exclusive breastfeeding for their babies. Significant association was observed between maternal literacy and practice of EBF.

Keywords: Exclusive breastfeeding (EBF), Prelacteal

INTRODUCTION

The Indian demographic and health surveys have shown a declining trend in child mortality rates. However, the current rates remain still high, which necessitates concrete efforts to increase the coverage of known cost effective and low cost interventions to enable India to attain Millennium Development Goal (MDG) target of reducing child mortality by two third [1]. Breastfeeding has role in prevention of future diabetes, hypertension, heart disease and cancers [2].

Appropriate feeding practices are fundamental to survival, growth, development, health and nutrition of infants and children and to the well being of mothers. Exclusive breastfeeding in the first six months of life is effective in the prevention of diarrhea, pneumonia, and neonatal sepsis [3]. Breast feeding alone has been shown to decrease the child mortality by 13 %. Approx 22% of newborns can be saved if mother starts breastfeeding within one hour of birth which can be estimated as about one million babies per year globally [4]. In spite of all the evidences, only 46% of mothers are practicing exclusive breastfeeding in first 6 months of life [2].

The Infant Milk Substitute, feeding bottles and infant foods (regulation of production, supply and distribution) act 1992, Amendment Act 2003 (IMS Act) clearly prohibits all forms of promotions and advertisement of infant milk substitutes, feeding bottles

and infant foods. Still bottle feeding is practiced by many mothers.

Infant feeding practices of a community are governed by its traditions, customs, knowledge and beliefs. In present study we have assessed knowledge of mothers, source of knowledge and what they have actually practiced.

MATERIAL AND METHODS

Present hospital based cross sectional descriptive study was conducted at pediatric OPD, Govt. Medical College, and Akola. Data collection started from 1st June 2015. First 200 mothers having infants were included in study after informed verbal consent. Those who denied were excluded. Babies of HIV positive mothers and those who were seriously ill were excluded. In case of twins, first of the twin was included Data collection was done with the help of Pretested, preformed semi structured questionnaire. Assessment of correct practice and correct knowledge regarding breast feeding practices was done by doctors. A Data analysis was done by appropriate statistical methods.

RESULTS:

Table 1-Baseline data of infants and mothers (n=200)

Infants Age (months)	Number (%)
0-3	044 (22)
4-6	044 (22)
7-9	056 (28)
10-12	056 (28)
Total	200 (100)
Sex (infants)	
Male	106 (53)
Female	094 (47)
Residential area	
Urban	092 (46)
Rural	108 (54)
Religion	
Hindu	096 (48)
Muslim	054 (27)
Buddhist	048 (24)
Others(Jain, Christian)	002 (01)
Socioeconomic status	
Above poverty line	062 (31)
Below poverty line	138 (69)
Birth order	
First	80 (40)
Second	66 (33)
Third and above	54 (27)
Literacy of mother	
Illiterate	034 (17)
SSC and below	124 (62)
Above SSC	042 (21)
Age of mothers	
Less than 25 yrs	104 (52)
25- 35 yrs	090 (45)
More than 35 yrs	006 (03)
Occupation of mothers	
Housewife	132 (66)
Working	068 (34)

Table 1-Majority of mothers belonged to below poverty line (69%) and 17% were illiterate . 52% mothers were below 25 years of age. 46% mothers were residing in urban area. Most women belonged to Hindu religion (48%) followed by Muslim (27%). About 34% were working females and rest 66% were housewives.

Table 2-Source of breast feeding related knowledge in mothers (n=200)

Source	Numbers (%)
School	62 (31)
Health personnel	60 (30)
Family	36 (18)
Media	04 (02)
No knowledge	38 (19)

Table 2 shows that school education (31%) and health personnel (30%) were the main source of knowledge.

Table 3- Knowledge and practice of breastfeeding initiation in mothers

Time	Correct Knowledge	Correct Practice
0 – 30 min	18 (09)	36 (18)
30 min – 2 hrs	86 (43)	94 (47)
2 hrs – 6 hrs	20 (10)	18 (09)
More than 6 hrs	28 (14)	04 (02)

Table 3 shows that around 65% of mothers had started BF within 2 hours of birth. Only 2% of mothers had not given BF within 6 hours of life. 24% of mothers were not aware of time of initiation of breastfeeding.

Table 4-Variou feeding practices observed in study

Feeding practice	Correct knowledge (%)	Correct practice (%)
Use of Prolacteals	044 (22)	048 (24)
Regarding colostrums	166 (83)	154 (77)
EBF(Till 6 months)	096 (48)	120 (60)
BF during illness	094 (47)	112 (56)
Bottle feed	156 (78)	128 (64)

Table 4 shows that 83% women were aware about the importance of colostrums and 77% of babies were fed with colostrum. Knowledge regarding use of prolacteal was poor .Only 22% of mothers had correct knowledge and a large number (76%) had used prolacteals. 47% females were aware that BF should be continued during illness and about 56% mothers had given BF during maternal illness. Correct practice of exclusive BF was done by 60% of mothers. 78% of mothers were aware that bottle-feed should not be given and 64% had never used bottles.

Table 5: Knowledge and practice about weaning timing

Complementary feeding	Knowledge (%)	Practice (%)
0 – 4 month	006 (03)	020 (10)
4 – 6 month	018 (09)	060 (30)
6 – 9 month	172 (86)	108 (54)
9 – 12 month	004 (02)	012 (06)

Table 5 shows that 40% of mothers had started complementary feeds before six months. Unfortunately 10% of mothers had started complementary feeding before the age of 4 months. 6% of mothers had started complementary feeding after the 9th month.

Table 6: Relation of exclusive breastfeeding with education and parity

	EBF (%)	Non-EBF (%)	Total (%)
Illiterate	12 ()	22 ()	034 ()
Less than SSC	77 ()	47 ()	124 ()
More than SSC	31 ()	11 ()	042 ()
Total	120 (60)	80 (40)	200 (100)
$X^2 = 12.42$, d.f.=2, p value = 0.00222945 – highly significant			
With one child	48 ()	32 ()	080 ()
With two children	40 ()	26 ()	066 ()
More than 3 child alive	32 ()	22 ()	054 ()
Total	120 (60)	80 (40)	200 (100)
$X^2 = 0.244$, d.f.=2, p value = 0.988839 (not significant)			

Table 6 shows that significant association was seen between literacy and practice of EBF. However birth order was not significantly associated with practice of EBF.

DISCUSSION

In global nutrition target 2025 WHO mentioned only 38% of infants aged 0 – 6 months are practicing EBF globally [5]. It targets to increase this rate of EBF to at least 50%. EBF was known to 48% of our study population and correct practice of EBF was done by 60% of mothers. Similar study by Bagul *et al.*; [6] at Nagpur mentioned rate of EBF to be around 52%. In another study by Kotiratnam K [7] at Khammam mentioned a good rate of knowledge about EBF (85%). Madhu *et al.*; [8] in a study in Kengeri, rural Bangalore mentioned 40% of their study population did EBF until 6 months.

In our study majority of mothers had poor knowledge about prelacteals and preferred to feed newborns with prelacteals. Observation similar to Sharma *et al.*; [9], in a study by Chatterjee *et al.*; [10] 54.5% of newborns received prelacteal feeds. Honey is given as a part of blessing ceremony in many parts of India. Majority of our females (77%) had fed newborns with colostrums. In a study by Devang Rawal *et al.*; [11] at Bhavnagar, Gujarat, practice of colostrums feeding was in 36.9% of infants.

In present study 40% of mothers had started complementary feeding before 6 months. Similar observation noted by Pant *et al.*; [12] at Baroda district in their study about 44 % of respondents had avoided BF during illness. Kulkarni *et al.*; [13] in a study at Urban community at Mumbai mentioned maternal illness as the most common reason for discontinuation of breast feeding before 6 month. The practice of EBF was more common in literate mothers in present study. A statically significant association was seen between EBF and maternal literacy in present study.

. In a. Similar study at Nagpur, Bagul *et al.*; [6] noted 84% of literate mothers had practiced EBF and only 24% of illiterate mothers had done EBF practice to babies. Chowdhary *et al.*; [14] mentioned a contrary observation and found no significant association between literacy status of mothers and BF practices adopted. Health personnel and family members were the main source of information for our mothers. Similar observation noted by Roy *et al.*; [15] in a study at Kolkata. 34.22% of respondents were informed about EBF practices by health personnel in their study.

CONCLUSION

Inappropriate feeding practices are common in mothers visiting pediatric OPD at GMC Akola. Increasing the female literacy rate could lead to adherence to correct breastfeeding practices. Knowledge regarding advantages and duration of EBF needs to be provided to the community more intensely by every possible source like schools, through health personnel and media. Especially mothers should be counseled during ANC and PNC period. All these things will help to improve breast feeding practices in infants.

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