

BREASTFEEDING AND CONTRACEPTIVE PRACTICES AMONG MOTHERS ATTENDING UNDER 5 CLINIC OF A GOVERNMENT TERTIARY CARE TEACHING HOSPITAL, KARNATAKAManjunath M¹, Jahnavi Rajagopal², Vinay M³, Shwetha H. J⁴, Raghini R⁵, Nagaraja Goud B⁶**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: INTRODUCTION: Breast feeding and contraception are important determinants of child mortality and morbidity. These practices vary in different communities due to different socio-cultural factors. Breast feeding practices influences health of the child and incidence of infections.

OBJECTIVES: 1. To determine the socio demographic characteristics among mothers attending under 5 clinic. 2. To determine the breast feeding practices among mothers. 3. To determine the association between ARI and ADD with breastfeeding. 4. To determine the contraceptive practices among the mother.

METHODOLOGY: This Cross-sectional study was conducted at a government tertiary care teaching hospital, Karnataka for a period of 6 months. The data was collected from the mothers by using a pre-tested, semi-structured questionnaire in the local language (Kannada). **RESULTS:** Of the total 2932 mothers, 46.1% mothers had breast-fed their babies within one hour of delivery, 9.2% had given pre-lacteal feeds and colostrum was not fed to 7.9% of the babies. The difference in the incidence of ARI and ADD between the children who were exclusively breastfed and the children who were not exclusively breastfed was significant. Contraception was practiced by 10.8% of the mothers. **CONCLUSION:** The immunization clinic offers an opportunity to enquire the mother about the breast feeding practices and advise about the importance of exclusive breast feeding. It also provides an opportunity for questioning and offering advice about contraception.

KEYWORDS: Breast feeding practices, under 5 clinic, contraceptive practices, Acute respiratory infection and Acute diarrheal diseases.

INTRODUCTION: Breast feeding is one of the most important determinants of child survival, birth spacing and prevention of childhood infection. The beneficial effects of breast feeding depend on time of initiation of breastfeeding, its duration and the age at which breast fed child is weaned.¹ Breast feeding practices vary among different religions and communities. In India breast feeding practices are shaped by the beliefs of the community which are further influenced by social, cultural and economic factors.

Indians have recognized breast milk as the best food for the child since antiquity, but some practices like pre-lacteal feeds, rejection of colostrum, late weaning etc., which are detrimental to the child's health continue to be practiced.² Repeated pregnancies exert a great influence on infant mortality. They cause malnutrition and anaemia in the mother, again predisposing to low birth weight which results in infant mortality.³ The Under 5 Clinic provides comprehensive services like immunization, care at illness, health education and also family planning, keeping in mind that contraception is one of the measures which protect the health of the child and the mother.

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In a developing country like India, infectious diseases such as diarrhoea and acute respiratory infections (ARI) are the main cause of mortality and morbidity in infants. There is ample evidence of a positive influence of breast feeding; especially exclusive breast feeding will reduce diarrheal diseases and ARI.⁴ Improving breastfeeding has been an important aspect of national programs implemented by our government. This study was carried out to understand the breastfeeding practices, contraceptive practices among mothers and the association between the incidence of ARI and ADD (acute diarrheal diseases) attacks in children and breastfeeding.

OBJECTIVES:

1. To determine the socio demographic characteristics among mothers attending under 5 clinics.
2. To determine the breastfeeding practices among mothers.
3. To determine the association between ARI and ADD with breastfeeding.
4. To determine the contraceptive practices among the mothers.

METHODOLOGY: This cross-sectional study was conducted at a government tertiary care teaching hospital, Mandya Institute of Medical Sciences, Mandya, Karnataka for a period of 6 months from 1st of March to 31st of August, 2013 after getting approval from the Institution Scientific Committee. The data was collected from the mothers, who came to get their child immunized in the under 5 clinic.

All the mothers who gave consent to participate in the study were administered the pre-tested, semi-structured questionnaire in the local language (Kannada) which included information regarding socio demographic characteristics, breastfeeding practices, contraceptive methods practiced and frequency of ARI or ADD in the past 6 months. Data was entered on excel sheet and analyzed using proportions and chi square test.

RESULTS: SOCIO DEMOGRAPHIC CHARACTERISTICS: In the present study 2932 mothers consented to participate in the study. The mean age and SD of the mothers who brought their children to under-5 clinic for immunization was 23 ± 3.8 . The age of the mothers ranged from 17 to 36 years. Among 2932 mothers, 1498 (51.0%) of the mothers were educated up to high school. 2371 (80.9%) of the mothers were home-makers and 2543 (86.7%) were Hindu by religion. According to modified BG Prasad classification, 1277 (43.6%) of the mothers belonged to class 4 socio economic status and 842 (28.7%) belonged to class 3 socio economic status (Table 1).

Socio demographic characteristics (n= 2932)		Number (%)
Age in years	≤20	0127 (04.4)
	21- 25	1677 (57.2)
	26- 30	0746 (25.4)
	≥ 31	0382 (13.0)
Education status	Illiterate	0169 (05.8)
	Primary	0332 (11.4)
	High school	1498 (51.0)
	PUC	0439 (15.0)
	Degree	0494 (16.8)

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Occupational status	Unemployed	2371 (80.9)
	Employed	0561(19.1)
Religion	Hindu	2543 (86.7)
	Muslim	0383 (13.1)
	Christian	0006 (00.2)
Socio economic status	Class 1	0033 (01.1)
	Class 2	0269 (09.2)
	Class 3	0842 (28.7)
	Class 4	1277 (43.6)
	Class 5	0511 (17.4)

Table 1: Socio demographic characteristics of the respondents

BREAST FEEDING PRACTICES: Among 2932, 1353 (46.1%) of the mothers initiated breastfeeding within one hour after birth, 985 (33.7%) between 1 to 4 hours after birth, 438 (14.9%) between 4 hours and 24 hours after birth and 156 (05.3%) after one day of birth. Colostrum was not fed to 132 (07.9%) babies and pre lacteal feed (PLF) was given to 269 (09.2%) babies. Honey and ghee were the commonly used as pre lacteal feed.

The mothers who practiced exclusive breastfeeding were 2134 (72.8%). 2448 (43.5%) mothers practiced demand feeding. The babies which were breast fed for more than one year was 1401 (47.8%). The mothers were enquired about the incidence of ARI and ADD in their children during the past 6 months. There was a difference in the incidence of ARI and ADD between the children who were exclusively breastfed and the children who were not exclusively breastfed which was found to be statistically significant (table 2, 3).

Breastfeeding	ARI		Chi- square	p value
	Yes (n= 639)	No (n=2293)		
Exclusively Breastfed	418 (19.6%)	1716 (80.4%)	22.394	<0.0001
Non exclusively breastfed	221 (27.7%)	577 (72.3%)		

Table 2: Incidence of ARI among the exclusively breast-fed children and the non-exclusively breast-fed children

Breastfeeding	ADD		Chi-square	p value
	Yes (n= 778)	No (n= 2154)		
Exclusively Breastfed	503 (23.6%)	1631 (76.4%)	14.31	0.00007750
Non exclusively breastfed	233 (29.2%)	565 (70.8%)		

Table 3: Incidence of ADD among the exclusively breast-fed children and the non-exclusively breast-fed children

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CONTRACEPTIVE PRACTICES: Contraception was practiced by only 317 (10.8%) mothers. Of the 317 couples, 168 (53.0%) couples used temporary methods and 149 (47.0%) used permanent methods of contraceptive. The different methods used are condoms by 43 (13.6%), copper- t by 71 (22.4%), contraceptive pills by 54 (17.0%) and tubectomy by 149 (47.0%) women.

DISCUSSION: The World breast feeding trends initiative report for India 2012 states that, only 40.5% initiate breastfeeding within one hour after delivery⁵. In a study conducted by Madhu K, et al. on breast feeding practices in rural area found that 44.0% of mothers initiated breast feeding within 30 minutes.⁶ In a study conducted by Yadavannavar only 23.3 % of the mothers initiated breast feeding within 4 hours after birth.⁷ In our study 46.1% of the mothers initiated breast feeding within 1 hour after birth which is slightly higher than the national average.

The higher proportion of early breastfeeding could be because the data was collected from the mothers attending the under-five clinic. The practice of administering pre-lacteal feeds is rooted in religious and cultural beliefs and hence is difficult to drive out from the Indian communities. In the study conducted by Madhu K et al, and honey and ghee were the most common pre lacteal feeds which were similar to our study findings.⁶ This study has shown that colostrum was discarded by 7.9% and pre-lacteal feeds was given to 9.2% of the babies which was less compared to a study conducted at Gujarat which was founded that 89.5% of mothers gave colostrum and 34.2% of mothers gave pre-lacteal feeds.⁸

The WBTi 2012 report for India states that 46.8% of the mothers practiced exclusive breast feeding⁵. In a study conducted by Radhakrishnan S in Tamil Nadu only 34% of the mothers practiced exclusive breast feeding for 6 months.⁹ In our study 72.8% of the mothers practiced exclusive breast feeding which was much higher than the national average and other studies. The percentage of mothers who continued to breast feed their child beyond 1 year of age was 47.8%. In the study conducted by Madhu et al, 7.5% mothers continued to breastfeed their children beyond 9 months. This discrepancy could again be because the study wasn't community based. Mothers who visit the under-five clinic could be more likely to continue breastfeeding beyond one year of age.

Exclusive breast feeding protects the child from malnutrition, infection and helps the overall development of the child. Prolonged exclusive breastfeeding was associated with reduced infectious episodes and fewer admissions in a prospective study conducted by Ladomenou.¹⁰ In our study the incidence of ADD and ARI were significantly lower in children who were exclusively breastfed.

The percentage of women using any modern method of contraception according to NFHS3 was 49%¹¹. Percentages of women using contraception in our study was much lower 10.8%. The most commonly used method of contraception was permanent method-Tubectomy which was similar to the findings observed in NFHS3 where 37% of the married women had undergone tubectomy. This could be because most of these mothers hadn't completed their families and the low contraceptive usage rate could represent the unmet need for spacing.

CONCLUSION: The early and exclusive breastfeeding rates are 46.1% and 72.8% respectively. The incidence of ARI and ADD is proportionately increased in non- exclusive breastfeed infants. The contraceptive usage rate among mothers is 10.8%.

RECOMMENDATIONS: Despite breastfeeding's numerous recognized advantages, and several initiatives taken so far to promote breastfeeding, early and exclusive breastfeeding rates are still low.

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Though the percentage of women who gave pre lacteal feeds to their children was lower than other studies and the percentage of women who exclusively breastfed their children was higher, there is more scope for improvement in these areas. The contraceptive usage rate among the mothers who attended the clinic was much lower than the national average and the unmet need for spacing methods is high. The immunization clinic offers an opportunity to enquire the mother about the breast feeding practices and advise her about the same at the same time questioning and offering advice about contraception.

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