



A community based cross sectional study to estimate the prevalence of prelacteal feeds among mothers in a zone of Chennai Corporation.

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ABSTRACT

Introduction: Prelacteal feeding is a seriously underestimated problem and has got significant impact on the survival of the newborn. In India, the practice of prelacteal feeds has lead to high Neonatal and Infant mortality rates. The factors leading to such practice need to be identified. Aim: To estimate the prevalence of practice of prelacteal feeding among mothers of a zone in Chennai City and study the factors influencing them.

Methodology: A cross sectional study was conducted among 450 mothers with children aged less than one year of age to find out the predictors for prelacteal feeding practices among them.

Results: The prevalence of the prelacteal feeds was 17.3%. Among the prelacteal feeds, sugar water was most commonly used prelacteal feeds (50%). The difference in practice of prelacteal feeds among mothers who delivered by cesarean section and normal delivery was found to be statistically significant. (P value 0.02).

KEYWORDS

Prelacteal feeds, Early initiation of breast feeding, risk factors, Community based study

BACKGROUND/INTRODUCTION:

Prelacteal feeding is one key factor which impacts the practice of early initiation of breast feeding among mothers in India. It is a seriously underestimated problem and has got significant impact on the survival of the newborn. In a developing country like India, where infant mortality rate is quite high, the practice of prelacteal feeds has lead to high Neonatal and Infant mortality rates. The present study tried to find out the prevalence of prelacteal feeds and factors determining prelacteal feeding practices in an urban area in Chennai.

METHODOLOGY: This study aims to estimate the prevalence of prelacteal feeding practices in India. A cross sectional study was conducted among mothers with children aged less than one year of age. 450 mothers were selected through systematic random sampling. Chi-square test and logistic regression were used to find out the predictors for prelacteal feeding practices among the mothers in an urban area in Chennai.

Study design: Community based cross sectional study

Study population: Mothers with babies less than 1 year of age

Study area: Mothers living in an urban area in a zone IX in Chennai Corporation

Study period: February 2015 to September of 2015.

Inclusion criteria: Mothers with children less than 1 year of age with term delivery without any abnormality

Exclusion criteria: Preterm babies, low birth weight babies, IUGR, babies with birth asphyxia, neurological disorders, cleft lip, cleft palate and babies with any other form of feeding difficulties.

Sampling method:

Sampling was done by simple random sampling method. The study was done in Chennai corporation area limits. Out of the ten zones in Chennai Corporation, Zone IX was selected randomly by lottery method. Among the 18 divisions in the Zone IX, 5 divisions were selected randomly by lottery method. In each division 90 mothers were selected by systematic random sampling technique and interviewed using interviewer administered structured questionnaire.

Ethical Committee clearance: The study is conducted after getting approval from institutional ethical committee. Only mothers who gave consent only were included for the study.

RESULTS:

The mean age of the mothers who were surveyed was 24.24 and ranging between 18 to 40 years. Among the 450 deliveries 273(60.7%) babies were delivered by normal vaginal delivery while 176 (39.1%) babies were delivered by Cesarean section and on was delivered by forceps. 60% the of mothers had completed middle and high school education and 7.1% were illiterates. 96.1 % of the mothers were home makers. 51.8% mothers belonged to the lower socioeconomic class as per Modified Kuppusamy scale. Among the current children delivered, 51.6% were females and 48.4% were male children. Among the 450 deliveries, only one delivery was home delivery and the remaining 449 were institutional deliveries.

Table 1. Socio-demographic variables of the mothers

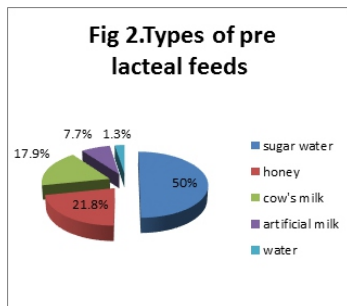
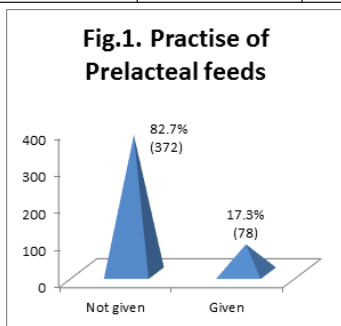
S.NO	factors	Pre lacteal feeds		
		Yes (78)	No (372)	
1	Age of mother	Upto 20 yrs	8	51
		21-25	45	206
		26-30	20	98
		31-35	5	13
		36 and above	0	4
2	Education of mother	Primary	7	48
		Middle	23	116
		High school	27	104
		Secondary	5	44
		College	10	34
	Uneducated	6	26	
3	Religion	Hindu	41	260
		Muslim	35	86
		Christian	2	26
4	Occupation of mother	Unskilled	2	5
		Semiskilled	75	361
		Skilled	1	6
5	Social class	Upper	0	2
		Upper middle	15	46
		Lower middle	32	122
		Upper lower	31	202
6	Age at marriage	Upto 20 yrs	36	200

		21-25	35	139
		26-30	6	31
		31-35	1	1
		36 and above	0	1
7	Place of delivery	Institution	78	371
		Home	0	1

The prevalence of the prelacteal feeds in the study is found to be 17.3%. A variety of prelacteal feeds were used by the mothers were sugar water, honey, cow's milk, formula feeds and water. Among the prelacteal feeds, sugar water was most commonly used prelacteal feeds (50%).

Table 2: Distribution of other factors in pre lacteal practice

S.N	factors	Prelacteal feeds		
			Yes(78)	No(372)
1	Awareness about advantages of breast feeding & methods	yes	65	339
		no	13	33
2	Birth companion present	yes	1	9
		no	9	363
3	Family support	yes	77	369
		No	1	3
4	Person initiated breastfeeding	Doctor	5	15
		Paramedical staff	18	130
		Mother	29	122
		Others	26	105



The practice of prelacteal feeds among mothers who delivered by cesarean section was 24.4% (43 out of 176) and 12.8% (35 out of 274) among mothers who delivered by normal delivery. This difference was found to be statistically significant. (P value 0.02). Awareness about the methods and advantages of breast feeding had a stastically significant outcome in the practice of prelacteal feeds.(p value 0.03).

The practice of prelacteal feeds among mothers who initiated breast feeding within one hour after delivery was 14.3% (38 out of 266) and 24.4% (40 out of 184) among mothers who initiated breast feeding one hour after the time of delivery. This difference was found to be statistically significant. (p value 0.04).

DISCUSSION: The prevalence rate of 17.7% is high. The rates among mothers who delivered by caesarean section was almost twice as in normal delivery. If the objective of Baby Friendly initiative to start breast feeding practice within 1 hour of delivery in normal delivery and 4 hours in caesarian delivery is fully achieved,

then the chance for pre lacteal feed will come down drastically. It is observed that sugar water feed is the commonest pre lacteal feed indicating the cultural practice available in the part of the region. The reasons towards such practice needs to be explored further to eradicate them. One other favorable finding is that the awareness level had a positive impact on the levels thereby indicating that continuous sustained efforts through appropriate IEC activities would bring down the prevalence of pre lacteal feeding practice.

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