



ORIGINAL RESEARCH PAPER

Community Medicine

A COMMUNITY BASED CROSS SECTIONAL STUDY TO ESTIMATE THE PREVALENCE OF EXCLUSIVE BREAST FEEDING AND ASSOCIATED FACTORS AMONG THE MOTHERS IN AN URBAN SLUM IN CHENNAI Corporation.

KEY WORDS: Exclusive breastfeeding, Influencing factors, Community based cross sectional study

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ABSTRACT

Introduction: Exclusive breastfeeding is the safest and the best method to ensure infant nutrition and child survival. Exclusive breast feeding is not widely being practiced among mothers in our population. Given our limited resources, promotion of exclusive breastfeeding is an important and cost effective strategy to prevent infant and under five deaths and to ensure proper growth and development of the child.

Aim: To estimate the prevalence of practice of exclusive breast feeding among mothers of a zone of Chennai City and to study the factors that influence exclusive breastfeeding.

Methodology: A cross sectional study was conducted among 409 mothers with children aged less than one year of age was selected randomly. Appropriate statistical methods were used to find out the predictors.

Results: The prevalence of exclusive breast feeding was 48.7%. Inadequate milk secretion was found to be the most important reason for the failure of exclusive breastfeeding (24%)

AIM: To estimate the prevalence of exclusive breastfeeding among mothers in an urban slum in Chennai city and the factors influencing the practice.

BACKGROUND/INTRODUCTION:

Exclusive breast feeding is an important factor which impacts the child survival and nutritional status of infants in India. It has got a significant impact on key indicators like Infant mortality rate and Under five mortality rates in India. In a developing country like India, where infant mortality rate is quite high, the failure of exclusive breastfeeding has lead to high Infant mortality rates and Under five mortality rates. The present study tried to find out the prevalence of exclusive breastfeeding and the factors determining exclusive breast feeding practices in an urban slum in Chennai.

METHODOLOGY: This study aims to estimate the prevalence of exclusive breastfeeding practices in India. A cross sectional study was conducted among mothers with children aged less than one year of age. 410 mothers were selected through systematic random sampling. Chi-square test and logistic regression were used to find out the predictors for exclusive breast feeding practices among the mothers in an urban slum in Chennai.

Study design: Community based cross sectional study

Study population: Mothers with babies more than 6 months and less than 1 year of age

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

Study period: March 2016 to December of 2016.

Inclusion criteria: Mothers with children more than 6 months and 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 size: The prevalence of exclusive breastfeeding in urban area was 48.7% as per NFHS IV data in TamilNadu and it is considered for calculation of sample size at 95% CI (Z=1.96) and the limit of accuracy is kept at 10%. The sample size calculated was 405 however it was finalized at 450 including non response rate of 10%.

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 eligible 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 those mothers who gave their consent were included in the study.

RESULTS: All the 409 mothers who gave consent for the study were included. The age of the mothers who were surveyed was ranging between 18 to 42 years. Among them 291(71.14%) babies were delivered by normal vaginal delivery while 117(28.6%) babies were delivered by Cesarean section and one was delivered by forceps. 68% (279) the of mothers had been educated between high school and college level and 3(0.73%) mothers were illiterates. 94.1 % (385) of the mothers were home makers. Among the current children delivered, 59.1% (242) were males and 40.9% were female children. Among the 409 mothers, 21 (5.1%) were home delivery and the remaining 388 were institutional deliveries.

Table 1. Socio-demographic variables of the mothers

S.NO	factors	Exclusive Breast feeding	
		Yes (197)	No (212)
1	Age of mother	Upto 20 yrs	20
		21-25	103
		26-30	58
		31-35	14
		36 and above	2
2	Education of mother	Primary	19
		Middle	41
		High school	62
		Secondary	38
		College	35
3	Religion	Uneducated	2
		Hindu	176
		Muslim	12
		Christian	9
4	Occupation of mother	Professional	1
		Clerical	2

		Skilled	7	4
		Semiskilled	184	201
		Unskilled	3	1
5	Age at marriage	Upto 20 yrs	97	89
		21-25	86	99
		26-30	13	24
		31-35	1	0
6	Place of delivery	Institution	186	202
		Home	11	10
7	Sex of the current child	Male	114	128
		Female	83	84
8	Mode of delivery	Normal	140	151
		Caesarian	57	60
		Forceps	0	1

The prevalence of the exclusive breastfeeding in this study is found to be 48.7% (197). 51.3% (212) of mothers did not give exclusive breast feeding.

Figure 1. Exclusive breast feeding and Reasons for not giving exclusive breast feeding

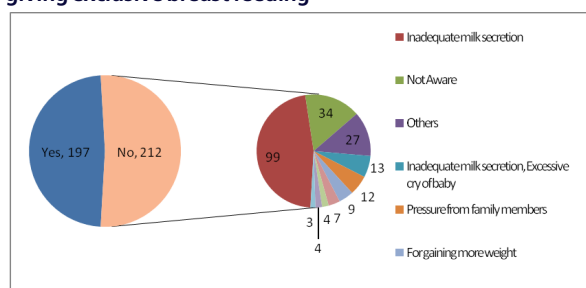


Table 2: Reasons for not giving Exclusive Breast feeding

Reasons	Frequency (212)	Percentage (100)
	212	100
Inadequate milk secretion	99	24.2
Not Aware	34	8.3
Others(including Conceived again 2, No reason 15)	18	4.4
Inadequate milk secretion, Excessive cry of baby	13	3.2
Pressure from family members	12	2.9
For gaining more weight	9	2.2
Excessive cry of baby	7	1.7
Maternal illness	4	1.0
Inadequate milk secretion, For gaining more weight	4	1.0
For gaining more weight	3	0.7
Inadequate milk secretion Insufficient weight gain	2	0.5
Insufficient weight gain	2	0.5
Breast related problem	1	0.2
Peer Pressure, Pressure from family members	1	0.2
Inadequate milk secretion, Excessive cry of baby, Baby not gaining more weight	1	0.2
Excessive cry of baby, Breast related problem	1	0.2
Working women	1	0.2

Among the 212 mothers who did not give exclusive breastfeeding 24.2% (99) mothers felt that there was inadequate milk secretion for feeding the baby. Lack of awareness about the exclusive breastfeeding was attributed as the reason for the not practicing exclusive breastfeeding among 8.3% (34) of the mothers. Excessive cry of the baby also was one of the significant reasons for failure of exclusive breastfeeding among mothers.

DISCUSSION: The prevalence of exclusive breastfeeding in this

study was 48.7% which is consistent with NFHS 4 data where the prevalence of exclusive breastfeeding was found to be 48.1%. Nearly 57% of the mothers in the age group of 26-30 years did not give exclusive breastfeeding as compared to other age groups where approximately 50% of the mothers did not give exclusive breast feeding. The prevalence of exclusive breastfeeding appears to be better among the extreme categories (21-25 years and > 36 years), it was poor among the 26-35 years category. About 60% of the mothers in the primary and college category had not given exclusive breastfeeding while the prevalence of exclusive breastfeeding was around 50% in all other categories. The prevalence of exclusive breastfeeding appears to be slightly higher in the illiterate and primary education category when compared to the middle, high and secondary school category. 62.5% of the mothers in the Christian Community did not give exclusive breast feeding while the prevalence of exclusive breastfeeding was around 50% of mothers in Hindu and Muslim community. Though 94% of the mothers in the study population were homemakers and not employed, only 48% gave exclusive breast feeding to their children. The mothers in the unskilled and skilled category seem to practice exclusive breastfeeding better than the semiskilled and clerical category.

The prevalence of exclusive breast feeding was same in both the institutional and home delivery categories and it was at 52%. The place of delivery did not have any impact on the practice of exclusive breast feeding. Irrespective of the sex of the child, the prevalence of exclusive breastfeeding was only around 50% in the study population. The mode of delivery did not have any significant impact on the prevalence of exclusive breast feeding as it was only 51% among both the normal and caesarean delivery category.

Though there are multiple reasons for not practicing exclusive breast feeding, inadequate milk secretion, lack of awareness and excessive cry of the baby are the three important reasons for the failure of exclusive breastfeeding among mothers in the study population. There is a general perception that the breast milk which is secreted normally is insufficient for the baby and this insufficient milk secretion is believed to be the reason for the excessive cry of the baby. These two factors along with lack awareness and pressure from family members had resulted in most mothers initiating artificial feeds on their own. All these factors had played a major role in the failure of exclusive breastfeeding among the mothers in the study population.

In spite of the enormous efforts taken to create awareness about the benefits of exclusive breastfeeding by the Government, Private sector and the NGO's the practice of exclusive breastfeeding is significant lower than the expected levels. And in spite of the higher levels of awareness about the importance of exclusive breastfeeding among the mothers, exclusive breastfeeding is still not being practiced widely among the mothers in our population. Further studies are needed to be done and a detailed analysis should be done to ascertain the reasons for the failure of exclusive breastfeeding and necessary steps have to be taken to improve the practice of exclusive breast feeding to the maximum level so that the infants have good nutrition and better survival.

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