

## Prevalence of exclusive breastfeeding among rural women in Kancheepuram District, Tamil Nadu

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### Abstract

**Introduction:** Exclusive breastfeeding implies that, the infant receives only breast milk for the first six months of life after birth. In rural areas in our community, many mothers are unaware of the importance of exclusive breastfeeding. Hence the study was carried out to find the prevalence of exclusive breastfeeding and to create awareness about the importance of exclusive breastfeeding in rural area of Tamil Nadu.

**Materials and Methods:** The descriptive cross sectional study was carried out among 250 women having children between the age group of 6 months to 3 years attending Rural Health training centre of a private medical college. Convenient sampling technique was followed, and a semi-structured questionnaire was used to collect socio demographic details and breastfeeding practices.

**Results:** The prevalence of exclusive breastfeeding was found to be 38.8% and only 33% of children were breastfed within one hour after birth. The major reason given by the mothers for bottle feeding their infants was that of their misconception that, bottle feeding is more nutritious than breast milk. Health education to all the mothers was given explaining the importance of exclusive breastfeeding.

**Conclusion:** The prevalence of exclusive breastfeeding was found to be low in our study area. Through health education camps and awareness creation programs, health education has to be provided to all mothers and their family members about the importance of exclusive breastfeeding.

**Keywords:** weaning, formula feeding, infections.

### Introduction

Breastfeeding is an unparalleled way of providing ideal food for healthy growth and development of infants. It is the natural first food for the babies. It provides all the necessary nutrients required by the infant for the first 6 months of life and up to half of nutritional requirements during the second half of first year. It also has important health implications for the mothers. According to WHO, exclusive breastfeeding is the optimal way of feeding infants less than 6 months of age, after which, they must receive complementary foods along with breastfeeding up to 2 years of age.<sup>(1)</sup>

According to National Family Health Survey- 4, which were released in 2016, the prevalence of exclusive breastfeeding in India was 55% and in Tamil Nadu, it was 48.3 %. Children under 3 years of age, breastfed within one hour of birth was found to be 41.6% in India and 54.7% in Tamil Nadu.<sup>(2)</sup> Universal (90%) coverage of breastfeeding can prevent 13% of deaths of children under 5 years of age.<sup>(3)</sup>

The awareness and importance of exclusive breastfeeding is unknown to many mothers in our community. Once the baby starts to cry continuously or if they feel that their milk is insufficient they go in for formula feeding their baby. Once the baby tastes the formula feed and also feels less effort in sucking from bottles, they don't breastfeed thereafter. So both the mother and the child get more prone to be affected by various morbidities. For infants, not being breastfed is associated with an increased incidence of infectious

morbidity, including otitis media, gastroenteritis, and pneumonia, as well as elevated risks of childhood obesity, type 1 and type 2 diabetes, leukemia, and sudden infant death syndrome (SIDS). For mothers, there is an increased risk of ovarian cancer and premenopausal breast cancer.<sup>(4)</sup>

Based on the above background the study was carried out in a rural area of Kancheepuram district with the following objectives:

1. To find out the prevalence of exclusive breastfeeding among rural women in rural area of Kancheepuram district.
2. To create awareness about exclusive breastfeeding among study population and also to find out the reasons for mothers to bottle feed their infants.

### Methodology

**Study design:** This was community based descriptive cross sectional study carried out in a rural area of Kancheepuram district of Tamil Nadu.

**Study area and population:** The study was done among women having children aged 6 months to 3 years attending as outpatients in rural health training centre, Padappai, which is the field practice area of a private medical college.

**Study Period:** The study was carried out between June, 2016 to August, 2016.

**Sample Size and Sampling Technique:** A study done by Shankar et al in Salem in Tamil Nadu found the prevalence of exclusive breastfeeding to be 34% (5).

So, taking the prevalence of exclusive breastfeeding as 34% with a precision of 16% of P at 95% Confidence Interval, the sample size calculated using the formula  $[4PQ/L^2]$ , was found to be 239, which was rounded off to 250. The sampling technique followed was convenient sampling. All women having children in the age group of 6 months to 3 years and attending the outpatient department of rural health training centre in Padappai, which is attached to a private medical college, were included in the study.

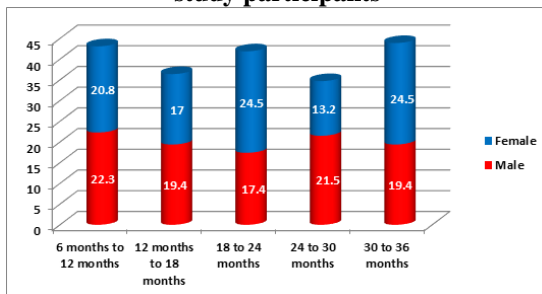
**Ethical approval and Informed Consent:** Ethical clearance was obtained from the Institutional Ethical Committee and informed consent was obtained from each and every participant.

**Study Tool:** A semi-structured questionnaire was used for data collection by face to face interview. The questionnaire included the socio-demographic details, duration of exclusive breastfeeding, initiation of breastfeeding and reasons for bottle-feeding. They were enquired and noted.

**Results**

Among the study population, female children (57.6%) were predominantly higher when compared with male children (42.4%). Female children were highest in the age group of 18 to 24 months (24.5%) and 30 to 36 months (24.5%). [Graph 1]

**Graph 1: Age and sex-wise wise distribution of study participants**



The prevalence of exclusive breastfeeding in our study population was found to be 38.8%. The duration of exclusive breastfeeding was less than one month among 12% of our study population. [Table 1]

**Table 1: Duration of exclusive breastfeeding among study population**

Duration	Frequency (n = 250)	Percentage
<1 month	30	12
1 – 2 months	23	9.2
2-3 months	25	10
3-4 months	27	10.8
4-5 months	48	19.2
≥ 6 months	97	38.8

Only 33% of the study population were breastfed within 1 hour after birth and nearly 16% of the study

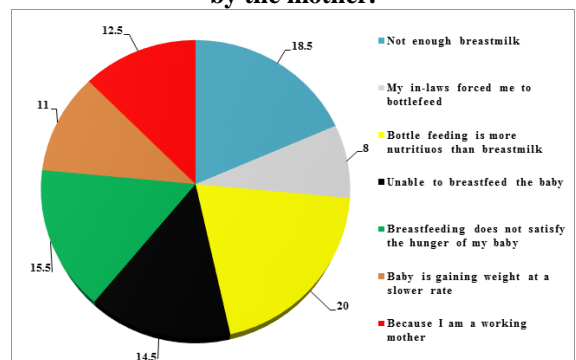
population were not breastfed even after 12 hours after birth. [Table 2]

**Table 2: Duration of Initiation of Breast feeding**

Duration	Frequency (n = 250)	Percentage
< 1 hour	82	32.8
1 – 3 hours	53	21.2
3 – 6 hours	45	18
6 – 12 hours	30	12
> 12 hours	40	16

Participating mothers were enquired on the common reason for which they adopted bottle feeding for their children for which, they told some interesting and varied reasons. The most common reason given by them was that of their misconception that, bottle feeding is more nutritious than breast milk (20%) and that their milk secretion is not sufficient (18.5%). Interestingly, 8% of mothers told that, their mother-in-law were responsible for them to adopt bottle-feeding. Other reasons given by them were, unable to breastfeed the baby due to cracked/sore nipple (14.5%), breastfeeding does not satisfy the hunger of my baby and he keeps on crying (15.5%), baby is gaining weight a slower rate (11%) and their employment elsewhere (12.5%). [Chart 1]

**Chart 1: Reasons for bottle-feeding the baby given by the mother.**



Health education was given to all of our study population. They were briefed on the importance of exclusive breastfeeding and its various advantages. The disadvantages of formula feeds were explained to them. They were educated about the ideal age to start weaning and proper weaning diet. Advantages of breastfeeding as a whole to both mother and her children were explained in detail.

**Discussion**

Due to urbanization and modernization and rampant advertising of formula feeds, the practice of exclusive breastfeeding is slowly disappearing from our community. Our study done in rural area of

Kancheepuram district, showed the prevalence of exclusive breastfeeding to be 38.8%. Similar results were found in a study done by S. Radhakrishnan et al in Salem (34%) and by Joshi PC et al in Bangladesh (36%).<sup>(5,6)</sup> This shows that the values are lower than our national prevalence of exclusive breastfeeding which is nearly 55%.

Only 33% of the children were breastfed within 1 hour after birth. According to NFHS - 4 surveys in 2015-16, nationally 41.6% of infants were breastfed 1 hour after birth. Also in our study, 16% of the children were not breastfed even after 24 hours after birth. This clearly shows the lack of awareness about importance of early initiation of breastfeeding among mothers.

Myths and misconceptions about breastfeeding practices are practiced all over our country. The participating mothers were enquired about the reasons for not adopting exclusive breastfeeding. The most common reason and misconception was that formula feeding is more nutritious than breast milk. Due to peer pressure by family members, media and advertising seen in various medical shops about formula feeds, mothers have been led to believe that formula feeding is more nutritious and increases the weight of the baby when compared to breast milk. Among the participating mothers, 8% were forced to adopt bottle feeding by her mother-in-law. This is another major barrier in our community and common notion that the mother must obey her in-laws at any cost.

## Conclusion

This study clearly shows that the practice of exclusive breastfeeding is low in our community. Through intense health education campaigns, the importance of exclusive breastfeeding have to be made aware to all women of child-bearing age group. Health education must also be targeted to members of the family including husband and in-laws, so that breastfeeding as a whole can become a success, reducing both infant and maternal morbidity.

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