Original Article

# Impact of exclusive breast feeding until six months of age on common illnesses: A prospective observational study

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## Abstract

**Objectives:** The WHO recommends exclusive breast feeding (EBF) for all infants for the first six months of life. National Family Health Survey-4 (2015-16) shows EBF rates of only 54.9%. We conducted a prospective study to assess prevalence of EBF and incidences of illnesses in infants from birth till six months of age. **Methods:** Healthy term infants born in our hospital between December 2017 and November 2018 were recruited at birth. Structured diary cards were given to mothers to record feeding patterns, occurrence and severity of illnesses. Mothers were interviewed at 6, 10, 14 and 26 weeks or contacted by telephone at 18 and 22 weeks. Data were analyzed using SPSS IBM Statistics 22. **Results:** The prevalence of EBF among 450 infants (M:F = 1.3:1) who completed the study was 47% at 6 months. 185 (69 EBF + 116 non-EBF) of 450 infants reported a total of 242 illnesses, most commonly respiratory (82.6%) followed by gastrointestinal (11.6%). Number of illnesses per infant was 0.45 and 0.6 in EBF group and non-EBF group respectively (p = 0.015). Illness incidences in EBF infants were significantly lower during all successive time intervals after 10 weeks of age. Logistic regression analysis confirmed significantly lower illness incidences in EBF infants at 10-14 weeks [OR = 0.27 (CI 0.12-0.64)] and 18-22 weeks [OR = 0.50 (CI 0.27-0.90)]. **Conclusions:** The prevalence of EBF is suboptimal in our setting, with illness incidences significantly higher in non-EBF children. Appropriate intervention strategies need to be tailored to reinforce early initiation and continuation of EBF throughout the first six months of life.

**Keywords:** Common illnesses, exclusive breast feeding, India, prospective study

## Introduction

Breast milk, the natural first food and immunization for babies is a keystone of child health and survival. It provides for all nutritional requirements during early infancy besides contributing significantly to lower morbidity and mortality from childhood infections such as pneumonia, diarrhea, otitis media and urinary tract infections.

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The WHO recommends optimum duration of exclusive breastfeeding (EBF-no other liquids or solids except vitamins, mineral supplements or medicines) for all new born infants worldwide till end of six months of age. Complementary feeds are to be started after six months of age while breast feeding is continued till two years or later.[1]

Exclusive breastfeeding has been consistently recommended by the WHO, based on empirical evidence of its protective effects on illness incidences. Primary care physicians, especially in low and middle income countries, provide comprehensive care to the mother and infant by assessing nutrition, providing anticipatory guidance and treating infections.[2]



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They thus have a critical role to play in promoting and supporting exclusive breastfeeding not only as the ideal nutrition for the infant but also as the ideal lifestyle for the mother.

Sub optimal breastfeeding practices including non-exclusive breastfeeding contribute to 11.6% of under-5 mortality.[3] Scaling up of EBF rates could potentially avert 823,000 child deaths annually.[4] Despite this knowledge and awareness, the prevalence of EBF is far from optimal. As per the WHO global data, in 2016 only 40% of infants are exclusively breast fed at 6 months.[5] The National Family Health Survey (NFHS)-4 (2015-16) reports EBF rates in India and Tamil Nadu to be 54.9% and 48.3% respectively.[6]

Differences in infection rates and incidences of illnesses in EBF and non-EBF infants could be ascribed to the protective effects of breast milk as well as to other factors that eventually lead to earlier introduction of complementary feeding. Earlier introduction of complementary feeding could be influenced significantly by changing local knowledge and attitudes towards breast feeding, baby's gender and order of birth, and mother's age and socioeconomic class.[7]

EBF rates are dynamic with wide inter and intra-regional variations. Earlier studies in our region have found very low EBF rates.[8,9] We carried out this prospective study in the Well-Baby Immunization Clinic of a tertiary care hospital to assess the current prevalence of EBF in normal babies born full-term, compare the incidence of illnesses among the EBF and non-EBF infants as well as delineate the influencing factors in our setting.

## Material and Methods

This prospective observational study was conducted at a tertiary care hospital, in South India from December 2017 to November 2018. Newborn babies were identified from the post-natal wards and followed up in the Well baby immunization clinic. The clinic vaccinates in accordance with the Indian Academy of Pediatrics schedule.[10]

The inclusion criteria were healthy term neonates: (a) born with birth weight more than 2.5 kg, (b) who were likely to continue their immunizations in this clinic till 6 months of age and (c) whose parents were willing to participate in the study. The exclusion criteria were neonates: (a) with co-morbidities like dysmorphic features, syndromic babies, congenital heart disease or prolonged NICU stay for any illness, (b) with birth weight of less than 2.5 kg and preterm babies, (c) whose mothers had any contraindication for breast feeding and (d) whose parents would be unable to avail of immunizations at this clinic at 6, 10, 14 weeks and 6 months.

Prior to the initiation of the study Institutional Review Board (IRB) and Ethics committee approval was obtained (IRB min no. 10931 dated 07.11.2017). Written informed consent was obtained from all participating mothers. All infants who were included in the study were examined by a doctor, and the need for exclusive breast feeding reinforced. These infants were assessed at 6, 10, 14, 18, 22 and 26 weeks either during their visit to the clinic for vaccination or by telephone calls, for feeding practices as well as incidence and nature of illnesses.

Structured diary cards were given to all mothers who were instructed to record details on feeding and intercurrent illnesses. The diary card included a table for recording time and types of feed given at each visit, and another sheet to document the number of intercurrent illnesses, along with the type, symptoms and severity of each illness. All interviews were conducted and data collected by a doctor working at the Well Baby Clinic assisted by two trained social workers. The doctor conducting the interviews trained the mother at the start of the study, and thereafter during every visit, to ensure accuracy of data recording. On a few occasions when they failed to do so, the trained social worker completed the forms based on maternal recall. A pediatrician blinded to the feeding mode, established the final diagnosis. Random check of the interview and data collection process was conducted by the pediatrician to cross validate the data collected.

Phone calls were made to all the mothers at 18 weeks and 22 weeks of age to enquire about the type of feed being given to the baby and any illnesses the baby had, and these data were confirmed with the mothers at the 26 week visit. Data was also collected about their education, occupation and family income. All information was recorded in confidential registers which was entered on to a computerized database with password protected files.

Definitions: Exclusive Breast feeding (EBF) was defined according to the WHO recommendation.[1] Illnesses were defined and graded based on severity using standard operational definitions[11–21] for respiratory illnesses- common cold, pneumonia, bronchiolitis, gastrointestinal illnesses- vomiting, diarrhea, urinary tract infections, seizures, urticaria and sepsis.

Sample size: Sample size was estimated based on the National Family Health Survey (NHFS) data 2015-16 with prevalence of EBF at 6 months as 48.3% in Tamil Nadu[6] assuming prevalence approximately similar to incidence. A sample size estimate of 400 infants was calculated, with precision of 5% and CI of 95%. Incorporating a 10% drop out rate, 450 mother infant dyads were planned to be recruited into the study for data analysis. Enrolment was planned to be continued until achievement of the calculated sample size for data analysis.

### Statistical analysis

EPIDATA software was used for data entry and analysis of data was done in SPSS IBM Statistics 22.

Descriptive statistics such as Mean (SD)/Median (IQR) were presented for all continuous variables based on normality

assumption. Similarly, all categorical variables were presented as number and percentages. Proportion test was used for the comparison of incidence of illness among EBF and non-EBF group. Penalized Logistic Regression was done to find the association of risk factors with illness response separately for each time point. All Statistical significance was measured at $P < 0.05$. All the statistical analysis was performed using STATA software Version 16.0.

## Results

600 newborn babies were identified from the post-natal wards. Of these, 96 babies did not fulfil the inclusion criteria. Two mothers refused to participate. Mothers of 502 healthy term newborns who fulfilled the inclusion criteria were included in the study. During the follow up periods at 6, 10, 14 and 26 weeks 17, 12, 12 and 11 babies respectively were lost to follow up as they relocated or took vaccination elsewhere. Thus we had 450 babies who were followed up till 6 months [Figure 1].

The baseline characteristics of the 450 children recruited and followed up for the entire six months duration of the study are depicted in Table 1. The male: female ratio of the study population was 1.3:1. Most babies were first order (60%), delivered normally (65.8%), 15% of them received pre-lacteal feeds, predominantly cow's milk and 100% received colostrum. Mean age of the mothers was 27.2 years (19-38 years). Most mothers were from joint families (68%), and from the middle income group (65.3%). The majority of mothers were educated up to college (78.7%), yet were homemakers (87.8%).

**Table 1: Baseline characteristics of the study population**

| Variable | Frequency (*n*) | % |
|---|---|---|
| Gender | | |
| Male | 258 | 57.3 |
| Female | 192 | 42.7 |
| Mode of delivery | | |
| Normal | 296 | 65.8 |
| Instrumental | 49 | 10.9 |
| LSCS | 105 | 23.3 |
| Birth order | | |
| First | 271 | 60 |
| Second | 148 | 33 |
| Third | 31 | 7 |
| Colostrum given | | |
| Yes | 450 | 100 |
| No | 0 | 0 |
| Prelacteal feeds given | | |
| Yes | 69 | 15.3 |
| No | 381 | 84.7 |
| Type of family | | |
| Joint | 306 | 68 |
| Nuclear | 144 | 32 |
| Maternal education | | |
| Primary/higher secondary | 96 | 21.3 |
| College | 354 | 78.7 |
| Maternal occupation | | |
| Working | 55 | 12.2 |
| Home maker | 395 | 87.8 |
| Family income | | |
| <10000/month | 123 | 27.3 |
| 10000-50000/month | 294 | 65.3 |
| >50000/month | 33 | 7.3 |

The feeding pattern among the study population was assessed during their clinic visits on 6, 10, 14, and 26 weeks as well as by telephone calls during 18 and 22 weeks. Cow's milk/formula feeds were introduced as early as six weeks. At 6, 10, 14, 18 and 22 weeks the percentages of exclusively breast fed infants were 98.4%, 95.7%, 87.1%, 80.8% and 65.3% respectively and at 26 weeks only 47% of infants were on exclusive breast feeds.

Of the 212 infants exclusively breast fed throughout 6 months, 69 (32%) infants reported illnesses. Of the 238 infants not exclusively breast fed (non-EBF) for 6 months, 116 (49%) infants reported illnesses. 265 infants did not report any illness. 185 (69 + 116) out of 450 infants reported a total of 242 illnesses during the entire study duration, of which 97 and 145 illnesses were reported in EBF and non-EBF infants respectively as shown in Table 2.

The number of illnesses per infant for EBF group was 0.45 (97/212), significantly less as compared to 0.6 (145/238) for non-EBF group (p = 0.015). The most commonly reported illnesses were respiratory (82.6%) followed by gastrointestinal (11.6%) as shown in Table 2. Among the 185 infants who had illnesses, 18 infants (six-UTI, six-bronchiolitis, one-severe pneumonia, four-sepsis, one-unprovoked seizure) required hospital admission. There was no significant association of these illnesses with the infant's feeding pattern.

Due to the dynamic nature of the cohort resulting from cross-over of infants from EBF group to non-EBF group throughout the 6 month study period, comparative analyses of incidence of illnesses is presented hence for every time interval.

Of the total 242 illnesses reported during the successive time intervals 0-6, 6-10, 10-14, 14-18, 18-22 and 22-26 weeks of the 6 month study duration, 157 illnesses were reported in infants being exclusively breast fed and 85 in infants not being exclusively breast fed. Illness incidences for infants EBF from birth until the time point of contact compared with those non-EBF for each of the successive time intervals are shown in Table 3. The illness incidences were significantly lower at 10-14, 14-18, 18-22 and 22-26 weeks of age among the infants EBF with *P* values of 0.013, 0.039, 0.026 and 0.049 respectively.

Logistic regression analysis (LRA) was done to assess the influence of possible confounders like maternal education and occupation, type of family, socio-economic status, mode of delivery, birth order of the infant, gender and prelacteal feeds on the incidence of illnesses as shown in Table 4. At 10-14 weeks and 18-22 weeks, Odds ratios (ORs) were 0.27 (CI 0.12-0.64) and 0.50 (CI 0.27-0.90) respectively, in favor

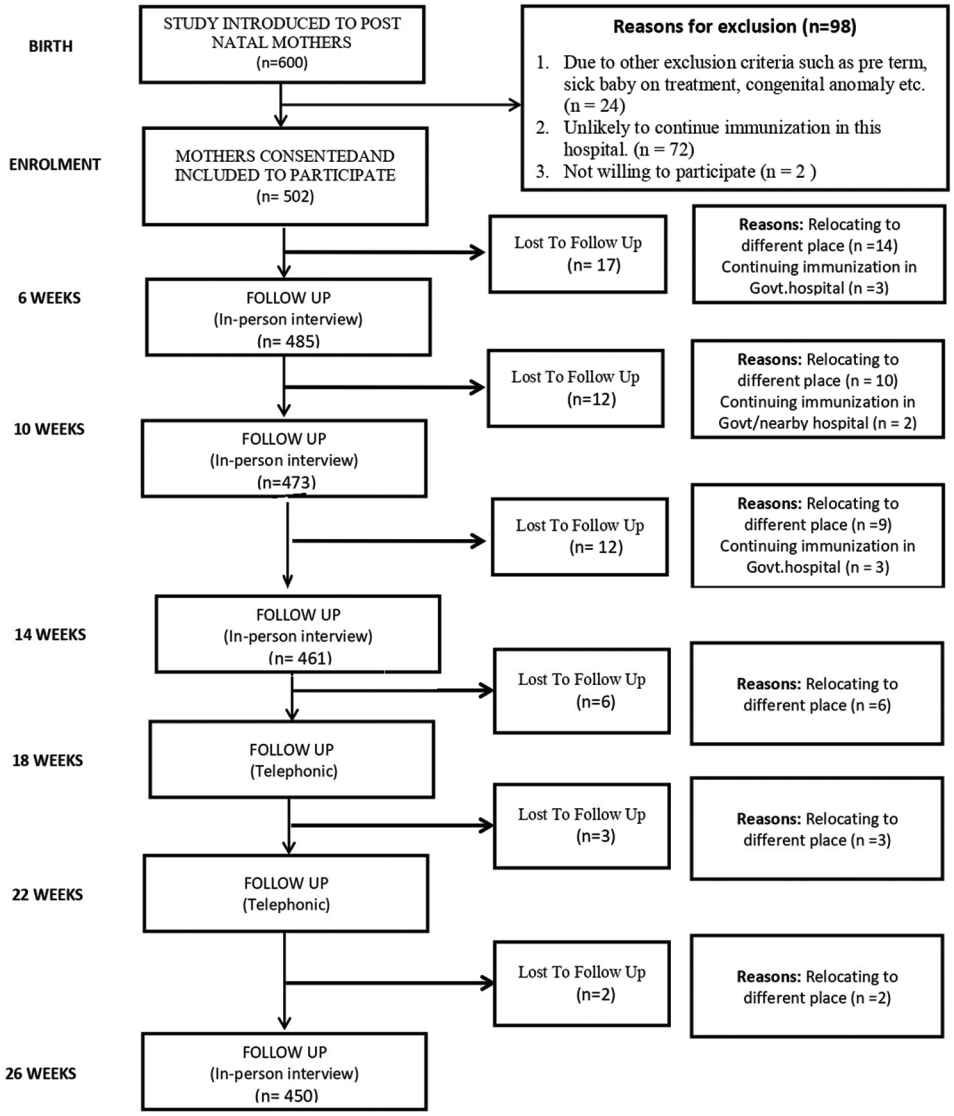


**Figure 1 :** Flowchart of participants

**Table 2: Type and incidence of illnesses reported in EBF‖ vs non-EBF¶ infants during each time interval**

| Type of illness | Type of feeding | 0-6 Weeks (69 EBF/116nEBF) | 6-10 weeks (69 EBF/116nEBF) | 10-14 weeks (69 EBF/116nEBF) | 14-18 Weeks (69 EBF/116nEBF) | 18-22 Weeks (69 EBF/116nEBF) | 22-26 Weeks (69EBF/116nEBF) | Total |
|---|---|---|---|---|---|---|---|---|
| RTI* | EBF | 21 | 5 | 17 | 11 | 11 | 13 | 78 |
| | n-EBF | 14 | 5 | 16 | 24 | 36 | 27 | 122 |
| GIT† | EBF | 2 | 1 | 3 | 2 | 2 | 3 | 13 |
| | n-EBF | 0 | 0 | 2 | 7 | 1 | 5 | 15 |
| UTI‡ | EBF | 1 | 0 | 0 | 0 | 1 | 1 | 3 |
| | n-EBF | 0 | 0 | 1 | 0 | 2 | 0 | 3 |
| Misc§ | EBF | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| | n-EBF | 1 | 0 | 0 | 2 | 1 | 1 | 5 |
| Total | EBF/nEBF | 26/15 | 7/5 | 20/19 | 13/33 | 14/40 | 17/33 | 97/145 |

*Respiratory Tract Infection (RTI) -cough/common cold, bronchiolitis, pneumonia; †Gastro Intestinal Tract infection (GIT)- vomiting, diarrhoea; ‡Urinary Tract Infection (UTI)-cystitis, pyelonephritis. §Misc-fever/sepsis/seizures/urticaria. ‖EBF denotes exclusive breastfeeding throughout the 6 month study duration. ¶nEBF denotes non-exclusive breastfeeding at any point during the 6 month study duration

of infants being exclusively breast fed, independent of other potential confounders. Moreover, at 14-18 and 22-26 weeks CI's upper ranges were just outside 1 with ORs of 0.55 (CI 0.27-1.13) and 0.57 (CI 0.30-1.08) respectively. Consequently, the Forest Plot [Figure 2] showed markedly lower infection rates among the infants being exclusively breast fed after 10 weeks of age. Apart from the above, significantly lower ORs for infection rates at 14-18 weeks were seen with lower birth orders

[first-0.32 (CI 0.12-0.87) and second-0.33 (CI 0.11- 0.95)] and for middle income group [0.49 (CI 0.25- 0.98)].

## Discussion

In our prospective cohort, EBF rates declined from 100% at birth to 47% at 6 months of age. High EBF rates reported in the initial period gradually declined to about 80% at 18 weeks, followed by precipitous drops to 65% and 47% at 22 and 26 weeks respectively.

Nevertheless, the EBF prevalence of 47% at 6 months of age in our hospital based prospective study is much higher than prevalence of 11.4% and 1.1% at 6 months[8,9] and 63.7% at 3 months[8] and 22.1% at 4 months[9] reported in earlier community based prospective studies conducted in Vellore region; and is comparable to that reported in a prospective study from South India-41.7%,[22] but much lower than another from North India-62%.[23]

In our cohort, though 78.7% of the mothers were college graduates, only 12.2% of them were working. It is likely that this enabled a majority of the mothers to exclusively breast feed their infants till 6 months of age. However, in spite of high rates of maternal education, periodic motivation at each immunization

**Table 3: Incidences of illnesses at each visit in infants exclusively breastfed and in infants non exclusively breast fed respectively during each time interval**

| Time | Incidences among EBF* | % | Incidences among n-EBF† | % | *P* |
|---|---|---|---|---|---|
| 0-6 weeks | 41/443 | 9.2 | 0/7 | 0 | 0.399 |
| 6-10 weeks | 12/431 | 2.78 | 0/19 | 0 | 0.461 |
| 10-14 weeks | 29/392 | 7.39 | 10/58 | 17.24 | 0.013 |
| 14-18 weeks | 31/364 | 8.79 | 15/86 | 16.27 | 0.039 |
| 18-22 weeks | 27/294 | 9.52 | 27/156 | 16.66 | 0.026 |
| 22-26 weeks | 17/212 | 8.01 | 33/238 | 13.86 | 0.049 |

*EBF in table denotes infants exclusively breast fed from birth until the time-point of contact. †n-EBF in table denotes all infants in the cohort other than those defined EBF as above

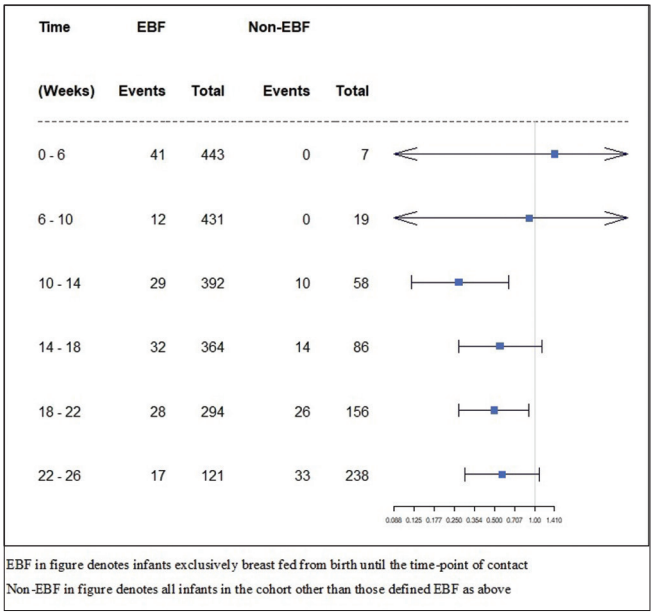


**Figure 2:** Forest plot for the risk of illnesses at each time point derived by multivariate logistic regression analysis

**Table 4: Penalised logistic regression for incidences of illnesses vs feeding pattern to assess the influence of possible confounders**

| Variables OR (95% CI) | Time (in weeks) | | | | | |
|---|---|---|---|---|---|---|
| | 0-6 weeks | 6-10 weeks | 10-14 weeks | 14-18 weeks | 18-22 weeks | 22-26 weeks |
| Group | | | | | | |
| EBF† | 1.41 (0.08, 25.11) | 0.91 (0.05, 17.41) | 0.27* (0.12, 0.64) | 0.55 (0.27, 1.13) | 0.50* (0.27, 0.90) | 0.57 (0.30, 1.08) |
| Gender | | | | | | |
| Male | 1.55 (0.76, 3.16) | 2.13 (0.62, 7.29) | 0.78 (0.39, 1.57) | 0.86 (0.46, 1.62) | 0.91 (0.51, 1.63) | 0.87 (0.47, 1.61) |
| Mode of delivery | | | | | | |
| Instrumental | 0.64 (0.16, 2.53) | 1.15 (0.17, 7.69) | 0.48 (0.09, 2.73) | 1.18 (0.42, 3.29) | 0.80 (0.27, 2.36) | 1.36 (0.49, 3.76) |
| LSCS | 1.13 (0.50, 2.54) | 0.24 (0.04, 1.58) | 2.73 (1.26, 5.89) | 0.56 (0.23, 1.37) | 1.10 (0.54, 2.25) | 1.33 (0.63, 2.83) |
| Birth order | | | | | | |
| First | 2.30 (0.41, 12.99) | 0.38 (0.05, 2.81) | 1.24 (0.37, 4.18) | 0.32* (0.12, 0.87) | 0.78 (0.28, 2.14) | 0.63 (0.20, 1.97) |
| Second | 2.02 (0.35, 11.57) | 1.26 (0.20, 7.84) | 0.71 (0.20, 2.52) | 0.33* (0.11, 0.95) | 0.78 (0.28, 2.19) | 0.87 (0.28, 2.74) |
| Prelacteal feeds | | | | | | |
| Yes | 1.57 (0.64, 3.85) | 4.17 (1.04, 16.71) | 1.21 (0.49, 3.00) | 1.75 (0.73, 4.17) | 1.76 (0.82, 3.78) | 0.36 (0.11, 1.18) |
| Type of family | | | | | | |
| Nuclear | 1.56 (0.78, 3.14) | 0.80 (0.23, 2.79) | 1.37 (0.66, 2.84) | 0.55 (0.25, 1.18) | 0.79 (0.42, 1.50) | 0.91 (0.46, 1.80) |
| Maternal education | | | | | | |
| Primary/HS | 1.41 (0.60, 3.32) | 1.47 (0.42, 5.13) | 3.70 (1.58, 8.65) | 0.58 (0.24, 1.42) | 1.70 (0.84, 3.47) | 0.62 (0.27, 1.46) |
| Maternal occupation | | | | | | |
| Home Maker | 1.56 (0.47, 5.20) | 0.91 (0.15, 5.51) | 1.48 (0.37, 5.97) | 0.68 (0.26, 1.74) | 0.68 (0.28, 1.64) | 2.57 (0.68, 9.68) |
| Family income | | | | | | |
| Rs. 10000-Rs. 50000/month | 0.81 (0.37, 1.78) | 1.01 (0.29, 3.50) | 0.62 (0.29, 1.36) | 0.49* (0.25, 0.98) | 0.70 (0.37, 1.33) | 0.95 (0.46, 1.93) |
| >Rs. 50000/month | 1.58 (0.46, 5.51) | 1.88 (0.25, 14.16) | 0.91 (0.20, 4.14) | 0.23 (0.04, 1.38) | 0.75 (0.21, 2.68) | 0.97 (0.22, 4.19) |

*Statistically significant, †EBF in table denotes infants exclusively breast fed from birth until the time-point of contact

visit and adequate social support, the EBF rates registered a steep decline, especially after 4 months of age.

In our study, we have analyzed overall illness rates during the entire 6 month period, as well as during specified successive time intervals. During the entire 6 month period, significantly less EBF group infants [69/212 (32%)] reported having had an illness compared to non-EBF group infants [116/238 (49%)]. The number of illnesses per infant was also significantly lower in EBF (0.45) compared to non-EBF (0.60) group. An earlier Nigerian study had also reported significantly lower number of illnesses per infant in EBF (0.1) versus those given EBF only till four months (1.4).[24]

Due to the dynamic crossover nature of the cohort, we have recorded and compared the incidences of illnesses in the EBF and non-EBF group across every successive (0-6, 6-10, 10-14, 14-18, 18-22 and 22-26) time interval in the 6 month period. We found that the illness incidences were significantly lower at every interval after 10 weeks of age among infants being exclusively breasted fed, confirmed by LRA. Our analyses have clearly established that EBF independent of other potential confounders significantly reduces illness incidences in infants during the first 6 months of life. We have also shown that a higher birth order and lower socioeconomic status could independently influence illness incidences adversely.

It could be theoretically argued that EBF may have been discontinued, and complementary feeds started in infants who had developed illnesses; and hence more illnesses were likely reported in the non-EBF group. However, evidence from most Asian studies including a systematic review has overwhelmingly shown that during illnesses, breast feeding is continued by the majority of mothers even while feeding restrictions on complementary feeds are imposed.[25]

Only a few studies in Asia have prospectively compared infection rates in EBF and non-EBF infants, independent of potential confounders. A study done in rural West Bengal, India had found corroborating evidence of increased risk of diarrhea in non-EBF infants.[26] The Multicentric multinational study (MAL-ED) including Vellore in India had shown significantly reduced risk of diarrhea at 0–2 months, 3–5 months; and ALRI at 3–5 months.[27] A study in the Maldives had shown a significantly reduced risk of acquiring ARTIs when the infants were predominantly breastfed for 3 months and 6 months and diarrhea even when partially breastfed for 6 months.[28] A Bangladeshi study had reported that infants who were EBF for six months had a significantly lower 7-day prevalence of diarrhea than those non-EBF.[29]

In a study conducted in urban Kerala in 2012-13, the relative risk of developing ARTI (Acute Respiratory Tract Infection) in Non-EBF compared to EBF infants was 2.46. The Odds ratio of ARTI in Non EBF during the 61$^{st}$ to 180$^{th}$ day of life was 3.863.[30]

Our study has major strengths. It was a prospective study where illnesses were recorded at regular and monthly intervals, unlike cross sectional studies, and more frequently than some earlier cohort studies. This is likely to have significantly reduced recall bias.[9] We used a structured questionnaire that included feeding pattern and severity of illnesses for several illnesses, reviewed at every visit by a doctor. We have not only compared the incidences of illnesses in the EBF and non-EBF groups across all time intervals in the 6 month period but have also, by LRA, simultaneously analyzed the impact of each of the several potential confounders in influencing illness rates.

Our study has limitations. The study was conducted in a hospital setting and hence is likely to have positively influenced EBF rates. However this is unlikely to have had a bearing on illness incidence rates. Our study cohort may not be truly representative of the community since the infants were being recruited and followed up for 6 months in a single tertiary care center. The sample size though based on prevalence of EBF was sufficient to detect significantly lower illness rates across several time periods in the EBF group, which was confirmed by LRA. Illness incidences were recorded by telephone calls at 18 and 22 weeks. However, telephone calls were used to assess illnesses for both groups at those time points, hence a reporting bias is not expected.

## Conclusions and Key Messages

In India where the majority of the population resides in rural and semi urban areas, comprehensive healthcare for the mother and infant is provided by the primary health care physician. This paper is extremely relevant in this scenario.

Although there is evidence from western countries that exclusive breastfeeding decreased the rate of infections in infancy, there are few prospective studies from the Indian subcontinent documenting decreased infection rates in exclusive breastfed infants. This study provides empirical evidence of the protective effect of exclusive breastfeeding on illness incidences in the low and middle income setting from India.

Our analyses clearly show that longer duration of EBF and later introduction of complementary feeding during the first 6 months of age in infants is independently associated with a correspondingly lower risk of illness incidence.

Unfortunately, EBF prevalence rates in our study also show an accelerating decline during the later phase of the first 6 months, despite counselling measures undertaken during every immunization visit.

The study thus underscores the critical need to develop pragmatic intervention strategies to augment and sustain EBF rates throughout the first 6 months of life, with special emphasis on the later phase.

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## Conflicts of interest

There are no conflicts of interest.

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