Original Research Article

Problems with exclusive breast feeding– A study in state referral hospital at Falkawn, Mizoram, India

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Abstract

Background: Exclusive breastfeeding is the best way to feed children below the age of 6 months. However, there are problems that hinder exclusive breastfeeding. The aim of this study is to identify problems hindering exclusive breastfeeding. **Methods:** This cross-sectional descriptive study is carried out at State Referral Hospital, Falkawn, Aizawl, Mizoram, India from 1st April to 30th June 2018, covering 200 children aged 6 months to 24 months old and their mothers on occasion of systematic visit to breastfeeding counselling centre. **Results:** Exclusive breastfeeding is practiced by 80% of the mothers in spite of the problems faced by mothers during lactation. Absence of lactogenesis and working condition of the mothers represent 45% of the reasons for not practicing exclusive breastfeeding. Mothers' condition plays an important role as post partumdepression (5%) and other medical illness (7.5%) effect exclusive breastfeeding. Mothers working in public sector (62.5%) and employees (64.5%) poorly practiced exclusive breastfeeding as compared to housewives (85.3%). Single mothers (60%) breastfeed less than married mothers (81.6%). Families with one parentas financial contributor adopted exclusive breastfeeding better (89.7% versus 59.3%, $p<0.05$) where most of the mothers are housewives (85.3%). The proportion of exclusive breastfeeding is very high among mothers with low education level (87.5%). It was observed that exclusive breastfeeding practice increases with the increase in baby's ranks (87.5% in fourth rank and above). **Conclusion:** In spite of all problems encountered, exclusive breastfeeding is practiced by 80% of the mothers, showing the effectiveness of breastfeeding counselling of mothers by breastfeeding counsellors.

Key words: Problems, Breastfeeding, Practice

Background

Exclusive breastfeeding before the age of 6 months is recommended by the World Health Organization[1] and it is a natural resource full of scientifically proven benefits [2]. The Indian Government developed the Infant and Young Child Feeding (IYCF) practices with a strong emphasis on promotion of exclusive breastfeeding for 6 months and is a priority under the government various flagship programs [3].

Many international studies have identified several socio-demographic determinants of exclusive breast-feeding. The most common factors found to be associated with exclusive breastfeeding are: education of mothers, occupations of mothers, status of the family, utilisation of antenatal care services, place of residence and access to information [4-7]. Breastfeeding has many health benefits for both mother and infant [8-9].

Breastfeeding provides infants with superior nutritional content that is capable of improving infant immunity and possible reduction in future health care spending [10-12].

The present study is intended to identify the problems with exclusive breastfeeding among the mothers who attended the breastfeeding counselling centre of State Referral Hospital, Falkawn, Mizoram, India, so that corrective actions may be taken for promotion of exclusive breast feeding.

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This study was approved by the ethical committee of State Referral Hospital, Falkawn, Mizoram.

Methods

The study is a descriptive and cross-sectional study carried out from 1st April to 30th June 2018 covering 200 children aged 6 months to 24 months old and their mothers, and focused on mother–child dyads who attended the breastfeeding counselling centre for systematic follow upat State Referral Hospital, Falkawn, Aizawl, Mizoram.

Inclusion criteria: This study includes 200 children aged 6 to 24 months attending the centre for systematic follow up as well as their mothers.

Exclusion criteria: The study excludes sick and admitted children as the data collected could be misleading.

A total of 200 dyads were taken for the study. The information collected therefore pertains to data on the mother-child dyads.

The nutritional status of the child is classified into 3 categories:

(1) Exclusive breastfeeding: which concern to the infants who feed on only breast milk from birth to 6th month of age, with no additional food except drugs and vitamins or minerals.

(2) Mixed feeding: the infants who were breastfed and also received formula milk.

(3) Formula feeding: The babies who depended only on artificial milk products and not breastfed.

A previously tested structured questionnaire was used for the study.

During the systematic examination of the babies the mothers were interviewed.

The parameters concerning the babies are represented by age in months, rank, weight, type of feeding adopted and health status.

As for mothers, socio-demographic and economic status, medical and gynaecological obstetric history as well as certain knowledge and practices were collected.

Informed consent was requested prior to the interview.

The data entered respected the anonymity and confidentiality.

Statistical Methods: The data were entered, processed and anlaysed in Microsoft Excel 2010.

The figures and tables were obtained on Microsoft Excel and Word. The Chi - 2 test was used for comparing percentages.

The significance level and to define a statistically significant difference is $P<0.05$.

Results

A total of 200 children with their mothers were recruited in the study. The majority of the children are in 6 to 12 months age group (fig 1) and the average age is 8.5 ± 2 months.

One in ten (10%) children was born premature and low birth weight.

Nearly 9% of the children have health problems.

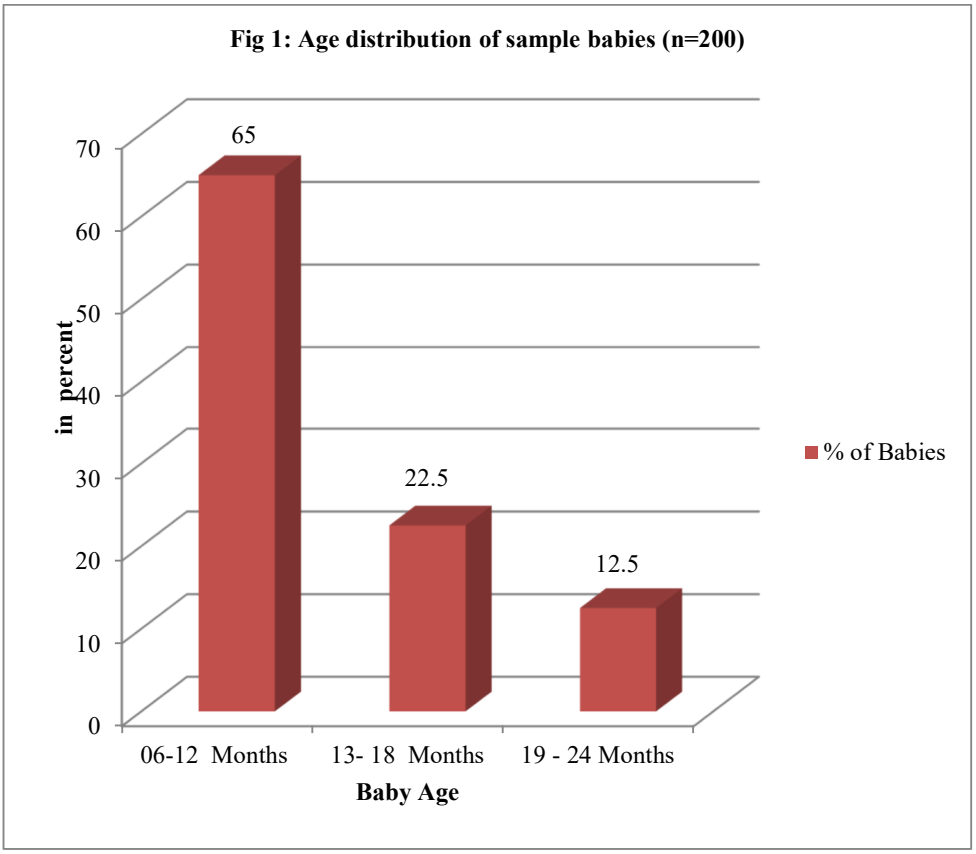


Figure 2 indicated that exclusive breastfeeding is practiced by more than three fourth of the mothers (80%). Lack of breast milk secretion at the time of initiating the first feed is the main reason for not practicing exclusive breastfeeding (fig 3).

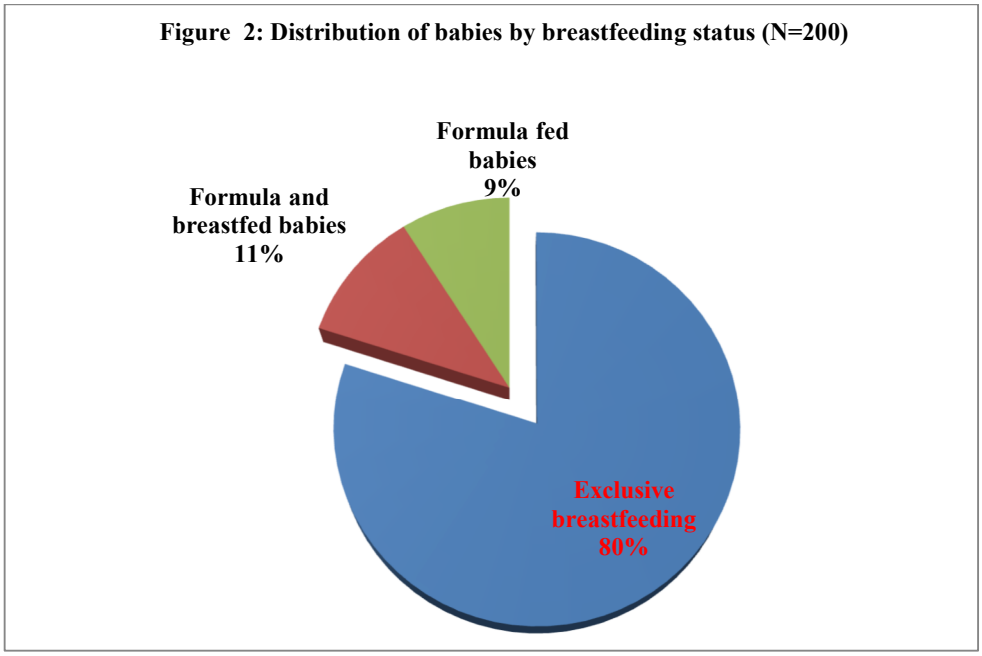
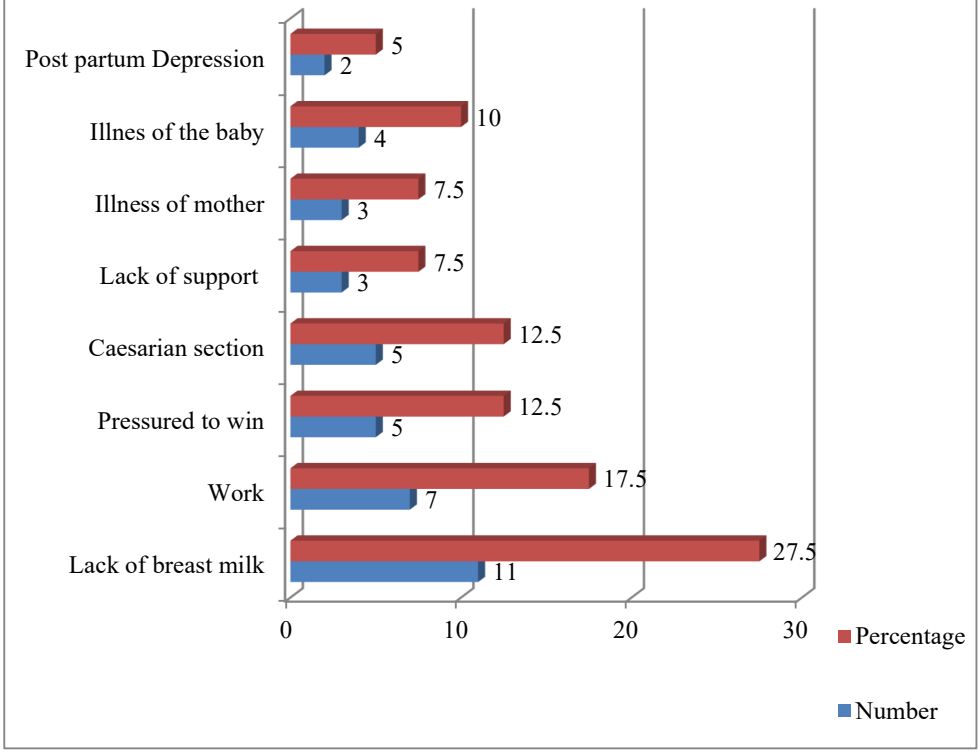


Fig 3: Distribution of reasons for not practicing exclusive breastfeeding (n=40)



All the respondent mothers were trained by the breastfeeding counsellor immediately after the delivery. Mothers with Primary level education are more likely to adopt exclusive breastfeeding followed by graduates and higher educated mothers (Table 1).

Table-1: Distribution of breastfeeding status by mothers level of education (n=200).

Level of Education	Breastfeeding Status				
	Exclusive		Mixed feeding/Formula feeding		P Value
	N	%	N	%	
Primary (upto class IV)	56	100 %	O	0%	P <0.05
Middle School(Class V toVIII)	49	74.2%	17	25.7%	
High School and Higher Secondary School (Class IX to XII)	40	68.8%	19	31%	
Graduate and above	15	78.9%	4	21.05%	

As shown by table 2, exclusive breastfeeding is found to be much higher among married mothers when compared with mothers who are single.

Table-2: Distribution of breastfeeding status by Marital Status of mothers (N=200)

Marital Status	Breastfeeding Status						PValue
	Exclusive		Mixed Feeding/ Formula feeding		Total		
	n	%	N	%	N	%	
Married	151	81.6	34	18.4	185	100	<0.05
Un-married	9	60	6	40	15	100	

Table 3 shows most housewives (85.3%) practiced exclusive breastfeeding as most fathers are only financial contributor to the family. Housewives followed by self-employed mothers (82.3%) practiced more exclusive breastfeeding than the other employed mothers (62.5% Govt. Servant and 64.5% employees).

When both the parents are employed their children received less exclusive breastfeeding (59.3% and P<0.05).

Table-3: Distribution of breastfeeding depending on the socio-economic status (n=200).

Socio- Economic status	Breastfeeding Status				
	Exclusive		Mixed or Formula feeds		P-Value
Profession of the mothers	**N**	**%**	**N**	**%**	
House wife	116	85.3%	20	14.7%	<0.05
Govt. Servant	10	62.5%	6	37.5%	
Employee	20	64.5%	11	35.48%	
Self-employed	14	82.3%	3	17.64%	
Total	**160**	**80%**	**40**	**20%**	
Financial contribution in the family	**N**	**%**	**N**	**%**	
Both parents	38	59.3%	26	40.6%	
Only one parent	122	89.&%	14	10.3%	
Total	**160**	**80%**	**40**	**20%**	

It is observed that the percentage of exclusive breastfeeding increases with the increase in babies rank (Table 4).

Table-4: Distribution of Breastfeeding Status according to rank of babies (n=200).

Baby's rank	Breastfeeding Status				
	Exclusive		Mixed or Formula feeds		P Value
	N	%	N	%	
First Child	52	72.2%	20	38.5%	<0.05
Second Child	36	80%	9	18%	
Third child	30	85.7%	5	14.2%	
Fourth child and above	42	87.5%	6	12.5%	

Discussion

In this study, most sample babies are in good health even though 10% of these children were born premature and low birth weight. These babies are almost exclusively breastfed by their mothers. In fact, previous studies have confirmed that exclusive breastfeeding of children contribute greatly to the reduction of infant morbidity and mortality [13-14].

This feeding method contribute to the Millennium Development Goals (MDGs) related to child health and Sustainable development Goals (SDGs). The result shows that 160 (80%) mothers breastfed their children exclusively, a proportion roughly similar to the finding of studies conducted in Ethiopia [15-16].

Similar studies conducted in Southern part of India however found barely 47.9% exclusively breastfed their children for a period of six months [17]. NFHS 3 Survey on exclusive breastfeeding in India documented that 46% of babies are exclusively breastfed for the first six months of life [18].

The higher proportion of exclusive breastfeeding practice much above the national average found under the present study may be attributed to the high literacy rate of females in this region (89.27 % as per Census of India 2011)[19]. In fact, none of the mothers recruited for this study are illiterate. Reasons for not practicing exclusive breastfeeding by 40 (20 %) mothers varies and mostly relate to factors like lack of lactation, working condition of the mothers, caesarean section, pressured to wean, and post-partum psychological disorder.

The rank of the baby seemed to influence the breastfeeding status as the percentage of exclusive breastfeeding is higher in the 4th ranked and above (87.5%0 compared to 1st ranked children (72.2%) which may be due to lack of confidence in the primi mothers to feed their first-born child[20]. Similar study in Ethiopia and Madagascar found that the rank of the baby influence the breastfeeding status, as most of the primi mothers have difficulty in lactating [21,22].

The mental status of the mothers before and after delivery played an important role as postpartum depression, anxiety and the fear of becoming parents hinder exclusive breastfeeding which is the reason for not exclusive breastfeeding in 5% of the mothers of non-exclusively breastfed. Other studies found that postpartum depression and anxiety are important factors hindering exclusive breastfeeding [23,24]. In his study, Krouse (2002) emphasised that successful breastfeeding depends not only on physiological factors but also on the mothers social and psychological condition [25]. As the mothers' mental status are important for practicing exclusive breastfeeding, lactating mothers should have good moral support in the delivery centres, by the families attheir homes as lack of support is one of the reason for not exclusive breastfeeding (n=3,7.5%).

Other studies in this field have stressed the importance of support to breastfeeding mothers in pre and postnatal period [11,21]. The study found that single mothers practiced less exclusive breastfeeding (60%) when compared to married mothers (81.6%),which suggests the importance of having a supportive family as most of the single mothers are bread earners of the family which forced them to leave their children and go for work.

A study conducted in Karnataka, India concluded that for successful feeding mothers need active support, care and privacy during pregnancy and following birth, not only of their families and communities but also of the entire health system [26]. The study observed that more impressive breast-feeding practice among housewives and self-employed was due to the fact that housewives are more available for their children and similarly, self-employed mothers have the freedom to arrange breastfeeding schedule as required.

It was found that all mothers with primary level education practiced exclusive breastfeeding as the reason may be that most of them were from rural areas who followed the instructions of breastfeeding counsellors' advice without much questioning, moreover, they belong to low socio-economic status and most of them have only one financial contributor to the family which led them to practice exclusive breastfeeding. In addition, most mothers with higher secondary, graduates and post graduates level education are employed in urban areas and have less time for their babies to breastfeed unless their working place is a baby friendly atmosphere.

The study shows that higher educated mothers practices exclusive breastfeeding (78.9% and $P<0.05$) more than the middle school and higher secondary school degree holders. The reason appears to be that higher educated mothers understand the advantages of exclusive breastfeeding better and followed the breastfeeding counsellors' instructions at the time of nursing after deliveries. It had been noticed that none of the public sectors are baby friendly. Some studies found that

mothers of low intellectual levels do not practice breastfeeding [17,18]. In spite of regular follow up after the delivery, it had been found that some mothers do not follow the instructions of the breastfeeding counsellors which shows the intellectual levels play a role in exclusive breastfeeding.

The study also found two extremes in the practice of breastfeeding that pertain to the educational status of the mothers i.e the proportion of mothers practicing exclusive breastfeeding is much higher among mothers with low level educational as per National Family Health Survey in India [18] and study in Madagascar [22] and highly educated mothers (from graduation to post graduation) who have gainful occupation than among mothers with middle, high and higher secondary level (74.2% and 68.8%) education indicating the importance of education level of the mothers and most of them are forced to return to their work for earning livelihood after the delivery which is similar to other study done in Dhaka [27].

In this study, grandmothers and mother–in–laws played dual roles in prevailing breastfeeding practices reported by the respondents as they were forced to win (n=5,12.5%). For instance, some grandmothers felt that early introduction of complementary feeding and would be better than breast milk only, which is also similar to other study done in Nigeria [28].

The baby's rank also influences the adoption of exclusive breastfeeding. House wives and self employed (85.3% and 82.3%) mothers practiced exclusive breastfeeding more when compared to mothers in Govt. Servant and mothers employed else where (62.5% and 64.5%).

Conclusion

The study found problems with the practice of exclusive breastfeeding largely associated with socio-economic parameters and conditions of the mothers during and post-delivery.

Despite of all the problems faced, exclusive breastfeeding is practiced by 80% of the mothers, which showed the effectiveness of breast-feeding counselling done at the time of delivery and subsequent follow up of mother and baby in breastfeeding counselling centre.

Thus, information and education of population regarding exclusive breastfeeding and encouraging the public sectors for creating baby friendly environment in the work place should be stressed.

The efficacy of breast-feeding counselling is evident; hence, there should be counselling centres available for mothers who are pregnant and lactating in every hospital in the state to promote exclusive breastfeeding.

Recent expansion of Maternity benefit programme pan India by the Government of India to provide cash incentives to pregnant and lactating women (not in regular employment) for the wage loss to enable them to take adequate rest before and after delivery is expected to promote status of exclusive breastfeeding in the country.

The scheme, however, covers only the first two live births.

Future Perspective: In order to get a keener insight into the reality of problems with exclusive breast feeding, further probing of data to cover factors like age of the mothers, time of starting lactation at birth, mothers' view regarding exclusive breastfeeding, frequency of illness in exclusively breastfed children comparing with the non exclusively breastfed, and myths regarding exclusively breastfeeding, etc. may be suggested for future direction of the research.

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