

Original Research Article

**KNOWLEDGE, ATTITUDES, AND PRACTICES OF MOTHERS REGARDING
BREASTFEEDING: A CROSS SECTIONAL STUDY IN SELECTED RURAL
AREA OF MANDYA DISTRICT, KARNATAKA**

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Abstract

Background: Breastfeeding is the safest, economic and the best way to provide infants with the nutrients they need. The prevalence of exclusive and adequate breastfeeding practices is still lower in many countries. Inadequate knowledge and inappropriate practice of breastfeeding is a major issue and it may cause undesirable consequences. Objective of this study is to assess the knowledge, attitude & practices regarding breast feeding among lactating mothers having children ≤ 1 year in Keregodu PHC area and to study the determinants of breast feeding practices in the study area. **Methods:** Community based cross sectional study was conducted in the field practice area of Rural Health Training Centre, Keregodu. 104 mothers from 4 sub centres having children ≤ 1 year age group were included in the study. Semi-structured questionnaire was used to collect the information. **Results:** The study revealed that all the 104 (100%) children were breastfed. But only 33 (31.7%) had the knowledge about exclusive breast feeding. Attitude towards exclusive breastfeeding was favourable 95 (91.3%). Only 14 (13.5%) were practising demand feeding. **Conclusion:** Mothers had poor knowledge, but favourable attitude regarding exclusive breastfeeding practices. But there is a gap between attitude and practice which needs to be addressed. So pregnant women need to be made aware of benefits of breastfeeding and proper feeding techniques during antenatal period.

Keywords: Breast Feeding, Knowledge, Attitude, Practice, Rural Area

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INTRODUCTION

Breast feeding is crucial for the growth and development of the infant. Breast milk is the ideal food and it gives all the nutrients need for healthy development for new born and infants. Breast milk is readily available, economical and safe. It is the best and first food for all infants. It contributes to a lifetime of good health and who were breastfed as babies are less likely to be overweight or obese and it also reduces infant morbidity & mortality. Breastfeeding also benefits mothers in many ways. It is a natural act, but it has to be learned.^{1,2}

Malnutrition is very common and major public health problem in the developing countries especially among children. Under nutrition is associated with 45% of child deaths. About 43% of infants 0–6 months old are exclusively breastfed. Over 800 000 children's lives could be saved every year among children under 5 years, if all children 0–23 months were optimally breastfed.³

In India, only 44.6% mothers initiate breastfeeding within one hour of birth in spite of the fact that about 78.7% deliver in institutions. Further 64.9% babies are exclusively breastfed during first six months (RSOC, 2014).⁴ According to NFHS3

exclusive breast feeding is 50% and 25% initiated breast feeding within one hour.⁵

Exclusive breastfeeding for the first six months of life is the recommended way of feeding infants, followed by continued breastfeeding with appropriate complementary foods for up to two years or beyond to meet the growing needs of babies. WHO and UNICEF recommend very important criteria of breast feeding like initiation of breastfeeding within the first hour of life, exclusive breastfeeding, demand feeding and no use of bottles, teats or pacifiers.⁶ One of the most significant ways to improve infant survival rates is early, timely and exclusive breastfeeding. Malnutrition starts at the infancy itself, if the infant do not get sufficient nutrients in the early life.

Exclusive breast feeding can take care of new born nutrition and infection control. In India, the rates of early initiation, exclusive breastfeeding are far from desirable.^{9,17} A lot of factors ranging from customs, practices education of parents and support from family play an important role in successful breastfeeding practices. Through this study aim at the knowledge, attitude and practices of mothers regarding breast feeding, this information will help in devising specific interventions to promote breastfeeding rates and also we can assess the work done by health workers in this field. Breast feeding not only improves child development but also reduce health costs results in economic gains for the family.

OBJECTIVES: 1. To assess the knowledge, attitude and practices regarding breast feeding among lactating mothers having children < =1 year in Keregodu PHC area, 2. To study the determinants of breast feeding practices in the study area

MATERIAL & METHODS

Study Area: A study was conducted amongst mothers having children between 0-12 months of age group in the field practice area of Rural Health Training Centre (RHTC) of Department of Community Medicine, Mandya Institute of Medical Sciences, Mandya which caters to a population of about 8632 according to Census 2011 information.

Study design: Cross sectional study

Study period: 1st August 2016 to 31st November 2016 (4months)

Sample size: 104 -47 were from Keregodu A, 26 were from Keregodu B, 12 were from Marlinganadoddi and 19 were from Kalmandidoddi.

Inclusion criteria: All lactating mothers having children \leq 1 year in the study period who gave informed consent.

Analysis: Data entered into Microsoft Excel and analysed using descriptive statistics like percentages as well as inferential statistics like chi-square test

Study tools: A pre-tested semi-structured questionnaire with a total of 35questions -which was prepared for assessing knowledge, attitude and practice of mothers on breastfeeding. Most of the questions were prepared on the questionnaire used in World Health Organization KAP survey⁶. The first set of questions asked about demographics, followed by a set of questions about the knowledge, attitude and practices of exclusive breastfeeding.

Approval: Institutional Scientific and Ethical Committees approvals were taken before the commencement of the study.

Method of data collection: After obtaining Institutional Ethical Clearance from our college, a house to house survey was conducted by the researcher herself and administered the pre-tested semi-structured questionnaire. Informed written consent was taken from each of the participants. All lactating mothers having children less than one year in 4 sub-centres under Keregodu PHC were included in the study. Those who refuse to give informed consent, mothers not available during study period and all lactating mothers having children >1 year of age were excluded from the study. The study was carried out for a period of 4 Months i.e. August 2016 to November 2016. Data entered into Microsoft Excel and analysed using descriptive statistics.

RESULTS

Total 104 lactating mothers having children \leq 1 year participated in the study. On analysis of socio demographic profiles of the mothers majority 96 (92.3%) were Hindus followed by Muslims 8 (7.7%). Half of the participants 53 (51.0%) were in the 21-25 year age group with the mean age 25.43

and standard deviation of 3.926. 94 (90.4%) were house wives. Majority 46 (44.2%) hailed from Nuclear families and rest of them were equally from joint and three generation families.

According to Modified BG Prasad Classification (Updated in April 2016) 41 (39.4%) belonged to Class 2 and 34 mothers (32.7%) belonged to socioeconomic class 3. Only 2 (1.9%) were illiterate. Among 104 children, 64 (61.5%) were male and 40 (38.5%) were female babies. 99 (95.2%) were term babies. Primiparous mothers accounted for 63 (60.6%). 3 (2.9%) had more than two children. Most of them 62 (59.6%) delivered by caesarean section. Out of 49 who delivered in private set up, 39 were caesarean section (P value 0.00). Only 12 (11.5%) used contraception before the present child and 18 (17.3%) after the present child birth.

Table 01: Distribution of study participants according to knowledge regarding breastfeeding

Characteristic	Number	Percentage
Pre-lacteal feeds are not good	34	32.7
Colostrum is essential for babies health	95	91.3
*Start breastfeeding within 1 hour after delivery	39	37.5
Give only breast milk for first 6 months	33	31.7
Burping should be done after each feed	93	89.4
*Breast feed on demand	14	13.5
Child needs vitamin syrup during first 6 months	73	70.2
Child <6months require water during summer season	57	54.8
*Breast feeding helps in mother and child bonding	100	96.2
*Breast feeding can prevent diseases affecting breast	91	87.5
*Breast feeding should be continued up to 2 years	43	41.3

Table 02: Attitude of the study participants towards breastfeeding

Characteristic	Number	Percentage
I think I should breast feed my child in the night	95	91.3
According to me breastfed babies are healthier than formula fed babies	76	73.1
*I think during breastfeeding the mother should sit comfortably	32	30.8
I think I should not feed if my child is sick	30	28.8
I think breastfeeding affect my beauty	24	23.1
I think it is better to stop breastfeeding when I start weaning	21	20.2
According to me formula feeding is more convenient than breastfeeding	8	7.7

*Multiple responses

Breastfeeding knowledge of the participants was assessed. 34 (32.7%) knew that pre-lacteal feeds are not good for their babies and 95 (91.3%) participants reported that colostrum is important and essential for babies health. Majority of them were not aware of the benefits of breast feeding for them. 40 (38.5%) aware that breastfeeding benefits for mothers too. 14 (13.5%) knew that baby should be breast feed on

demand, not on regular intervals. 100 (96.2%) knew breastfeeding helps in mother and child bonding. 103 (99%) knew that breast feeding is important for the health of the infants. 33(31.7%) had the correct knowledge about the duration of exclusive breast feeding. Only 32 (30.8%) knew the correct feeding position- sitting position- to feed their child. (See Table1)

21 (20.2%) believes that they should stop breast feeding when they start with other foods ie. complimentary feeding.

Regarding the breastfeeding attitude of the participants, 76 (73.1%) said breast fed babies are healthier than formula fed babies. 95 (91.3%) accepted that they have to feed the child in the night. 8(7.7%) think that formula feeding is more convenient than breast feeding. Majority of participants 95 (91.3%) intended to breastfeed exclusively their future children. (See Table 2)

Table 03: Distribution of study participants according to various breastfeeding practices

Pre-lacteal feeds	Number	Percentage
Given	14	13.5
Not given	90	86.5
Colostrum		
Given	95	91.3
Not given	9	8.7
Practice of time of starting breast feeding		
Not remembering	2	1.9
<1Hour	8	7.7
1hrs -24 hrs	44	42.3
1day-5days	38	36.5
>5days	12	11.5
Used feeding bottles to feed the child		
Yes	18	17.3
No	81	77.9
Not answered	5	4.8
Frequency of Breastfeeding		
On demand	14	13.5
At regular intervals	90	86.5
Supplementary feeding started		
Before completing 6months of age	8	7.7
After 7 months	34	32.7

Assessing the breastfeeding practice of the participants, all children 104 (100%) were being breast fed. Our study pointed out that 08 (07.7%) babies born were breast fed within first hour of life of which 05 (62.5%) were male and 03 (37.5%)

were female babies (See Table 3). 7 (6.7%) of mothers discontinued breast feeding due to various reasons. Most important reason given by the mothers was insufficient milk. Burping was practiced by 93 (89.4%). Table No.4 depicts relation between type of delivery and time of starting breast feeding.

Table 04: Distribution of the study participants according to type of delivery and time of starting breast feeding

Type of delivery	<1hour	1hour-24hours	1-5 days	>5days	Not remembering	Total	Chi square value
Vaginal	5	22	13	1	1	42	9.114 with 4 d.f; 0.058
LSCS	3	22	25	11	1	62	
Total	8	44	38	12	2	104	

Table 05: Distribution of the study participants according to the education and knowledge about exclusive breast feeding

Level of education	Do not know	<6 months	6 months	>6 months	Total	P value
Illiterate	0	2	0	0	2	Chi square value 50.444 with 12 d.f; 0.000
Primary School	0	1	1	3	5	
High School	2	1	11	12	26	
College/Pre-university	0	1	14	29	44	
Graduate and Above	1	0	7	19	27	
Illiterate	3	5	33	63	104	

Table 06: Distribution of the study participants according to religion and time of starting breast feeding

Religion	<1hour	1hour-24hours	1-5days	>5days	Not remembering	Total	P value
Hindu	7	41	35	11	2	96	Chi square value 0.484 with 4 d.f; 0.975
Muslim	1	3	3	1	0	8	
Total	8	44	38	12	2	104	

Among 90 (86.5%) mothers were not given pre-lacteal feed. Among these, 34(32.7%) mothers had the correct knowledge that pre-lacteal feeds are not good and should not be given to the child. Rest of the mothers were lacking this knowledge, but not given pre-lacteal feed. It may be due to the involvement of hospital staffs. 95 (91.3%) had the knowledge that colostrum is essential for the health of the child and the same participants had given colostrum to the child. Among 14 (13.5%) who had

given pre-lacteal feed, 09 (08.7%) discarded colostrum thinking that it is bad for the child.

59 (56.7%) mothers received advice on breastfeeding from family members especially from mothers during antenatal period and only 14 (13.5%) received advice from health care workers. (As seen in Fig:01)

Fig 01: Source of breastfeeding information as received by the study participants during their antenatal period/postnatal period

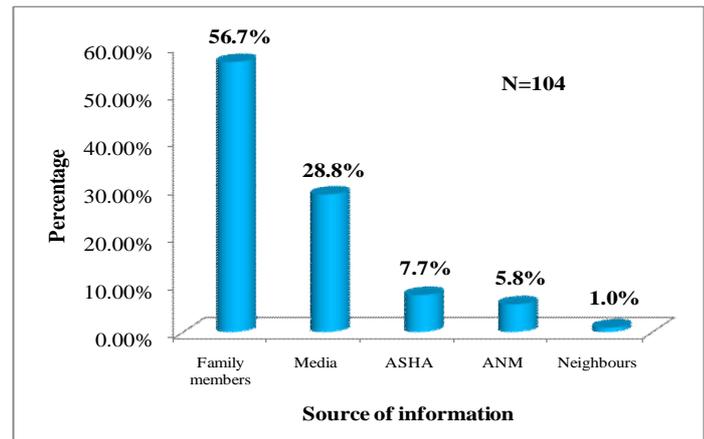


Fig 02: Reasons for bottle-feeding as given by the study participants

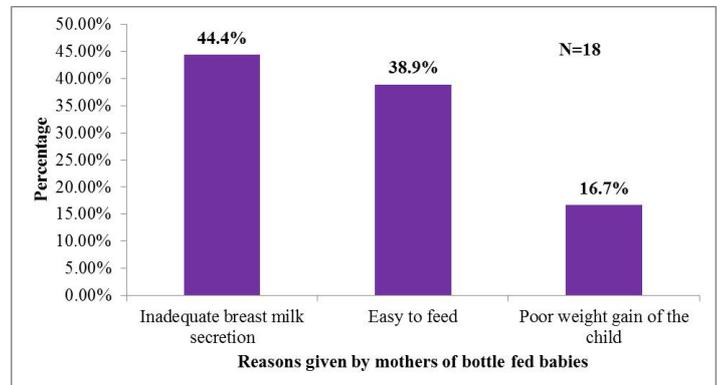


Figure 2 shows the reasons for bottle-feeding, where most of the mothers inferred that the main reason for giving bottle feed is because of inadequate breast milk 8 (44.4%). Other reasons were—easy to feed 7(38.9%) and poor weight gain of the child 3(16.7%)

Our study found education of mothers and knowledge about exclusive breast feeding to be statistically significant. (P<0.001) (See Table 6) The knowledge of exclusive breast feeding was seen increasing with educational status of mother .It was

seen in mothers who were graduated 07(25.9%), college education/pre-university education 14(31.8%), high school educated 11(42.3%) and primary school 1(3.03%).

Our study finding with regard to demand feeding practices and religion was as follows. Of the total mothers, 96 (92.3%) who were Hindus by religion only 14(13.5%) practiced demand feeding of 08 (07.7%) mothers who were Muslims by religion, no one practiced demand feeding. However this difference was not found to be statistically significant. ($p > 0.05$). Also data was further analysed for early initiation of breast feeding and religion of the mother the difference was not found to be statistically significant. 07 (87.5%) mothers of Hindu religion and 01 (12.5%) of Muslim mothers started breast feeding within one hour of delivery. (See Table 6)

Practice of demand feeding by type of family. The study shows that 5 (17.2%) of mothers belonging to joint family practiced demand feeding whereas only 6 (13.0%) from Nuclear family practiced demand feeding however this difference was not found to be statistically significant ($p > 0.05$)

The practice of demand feeding is seen increasing with educational status of mother. Demand feeding practice is seen more in mothers who were educated minimum secondary. Illiterate mothers were not practiced demand feeding and this difference was not found to be statistically significant. ($p > 0.05$)

In our study the number of siblings of children did not have any effect on practice of demand feeding. 08 (12.7%) of children having no sibling were fed on demand whereas 8 (13.2) % having one sibling had demand feeding and 1(33.3%) of children with three or more siblings were on demand feeding.

DISCUSSION

In the present study 102 (98%) of the mothers who participated were literate but their knowledge about early breastfeeding was poor 39 (37.5%). This is not compatible with the study finding observed in the study conducted by Chinnasami B et al⁸. Although the first hour feeding rates was less most of the babies 44 (42.3%) were breastfed with in the first

24hrs (Table 02) .This finding matches well with the study done by Shaili V⁸ and Harnagle R et al¹⁰. Our study depicted that 95 (91.3%) respondents fed colostrum to the child as observed in the study by Kumar A et al¹¹.

There should be active support for establishing and sustaining appropriate breastfeeding practices. So preparation of mothers with adequate information before they give birth is very important. However in our study we found that only 14 (13.5%) of the women received advice on breastfeeding during antenatal period from healthcare workers. 56.7% got advice from family members, which may not be sufficient (Fig01). This result is not compatible with the study done by Jain U, where majority of mothers (57.89%) got information about exclusive breast feeding from doctors¹².Support and counselling should be available routinely during ante-natal care for the preparation of mothers for giving birth and to help them to initiate early and exclusive breastfeeding.

In our study colostrum was given by 91.3% mothers. Colostrum has been considered bad by 8.7% of mothers and 13.5% have given prelacteal feeds like sugar, honey etc. This finding was similar to the results found in the study done by Tiwari V et al¹³. CS section was more among mothers aged more than 30 years (P value .001).

WHO strongly recommends 6 months of exclusive breastfeeding for infants .But, in our study only 33 (31.7%) knew that exclusive breastfeeding should be given for 6 month. These findings well match with the study done by Maheswari E et al¹⁴ al and Sunil K et al¹⁵. Lack of knowledge is the main reason for this practice than poverty .This inadequate practice can make the child prone for diarrhoea and other diseases. 63 (60.6%) believe that exclusive breastfeeding to be more than six months, and this is a major reason for malnutrition among children¹⁶. So the importance of timely and adequate introduction of supplementary feeds needs to be stressed among mothers. Similarly, 43 (41.3%) mothers in the current study felt that they should continue breastfeeding till the age of 2 years. This percentage is less than what was observed in the study by Vijayalakshmi P et al¹⁷

It was observed that only 14 (13.5%) lactating mothers fed their babies on demand, this was low in comparison to Sunil K et al¹⁵ and Madhu K et al where 84% mothers practiced demand feeding to the babies¹⁸.

In our study mothers aged between 21 to 25 years were practising exclusive breast feeding compared to other ages. Early breastfeeding and demand feeding were practised more by mothers who educated higher secondary or above (Table 03) as observed in the study by Debadeep K et al¹⁹ and low birth weight babies were less among these educated mothers (Table 04) and mothers belongs to middle and high socio economic status(Fig 03).

CONCLUSION: It is evident from above results that there is lack of knowledge and faulty practices among mothers in infant feeding. Poor knowledge of mothers about exclusive breastfeeding is a matter of great concern, because these practices substantially going to affect the health of the child. So there is a need for the urgent intervention to implement local educational programs for women of child-bearing age. The information regarding the advantages of breast feeding should be emphasized because most of the malpractices can be prevented by proper and timely education. Practices such as late initiation of breast feeding and early/ late weaning should be discouraged. For this there should be proper counselling and preparation of breast feeding for women during the antenatal period itself. There should be proper support for lactating mothers from family and community. It will help them to initiate early breast feeding and also to avoid malpractices due to ignorance. We also recommend strengthening of the community-based health education programs to promote exclusive breast feeding. Proper training should be given to the health workers-especially ASHA, ANM etc.

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