

DIFFERENCE BETWEEN KNOWLEDGE AND ADOPTED PRACTICES OF LACTATING MOTHERS (6-8 MONTHS) FOR KEY IYCF RECOMMENDATIONS

Akanksha Dalal* and Kavita Kachhawa**

*PhD Scholar, CFTRI, Mysore

** Assistant Professor, Department of Home Science, University of Rajasthan, Jaipur

ABSTRACT

Introduction: Early initiation of breastfeeding within 0-1 hour, colostrum feeding, exclusive breastfeeding for 0-6 months and complementary feeding at 6 months of age are well known and accepted Infant and young Children feeding (IYCF) recommendations for optimum growth and development of an infant. However the inclusion of IYCF recommendations in universal breastfeeding pattern is still lacking may be due to inadequate knowledge or faulty practices.

Objective: This study intended to assess the difference between knowledge of mothers regarding IYCF recommendations and their adopted breastfeeding pattern for initial six months of lactation.

Methodology: A sample size of sixty mothers was interviewed by using a structured questionnaire to know their level of knowledge and practices followed by them regarding breastfeeding.

Results and Conclusion: The major findings of the present study revealed that prevalence for adoption of key IYCF guidelines for breastfeeding were seen as early initiation of breastfeeding (31.66%), colostrum feeding (96.66%), exclusive breastfeeding (6.66%) and timely initiation of complementary feeding (73.33%). The practice of giving prelacteal fluid was also found highly prevalent (58.33%) at the time of birth. A contrasting gap was observed in the acquired correct knowledge of mothers and its implementation on adopted practices for breastfeeding during initial 6 months of lactation which clearly indicates the need for more strengthening of social support system for lactating mothers for complete adoption of key IYCF recommendations.

Key words: 6-8 months lactation, knowledge, practices, IYCF recommendations

Introduction

The supremacy of the natural mother milk for the growth and development of child led to the adoption of the Infant and Young Child Feeding (IYCF) guidelines by WHO and UNICEF (2003) for appropriate feeding of new-born and children under two years of age. Optimal IYCF practices includes: i) Early initiation of breastfeeding within one hour of birth, ii) Exclusive or only breastfeeding for six months, iii) Initiation of complementary feeding at six months of age & iv) Continued breastfeeding with complementary feeding from six months to two years of age. Optimal IYCF practices are crucial for nutritional status, growth, development, health and ultimately the survival of infants and young children. Even the physical working of breastfeeding promotes cognitive, social and language development of an infant (Tohi 2012). Exclusive

breastfeeding is a most important and crucial milestone of the optimal IYCF practices. Exclusive breastfeeding has many benefits for the infants such as reduced mortality from common childhood illness such as diarrhea, pneumonia, urinary tract infection, gastrointestinal infection and helps in a quicker recovery during illness (Kramer *et al* 2001). Breastfeeding may also provide long term protective shield for obesity, hypertension, dyslipidemia, and type II diabetes mellitus (Kelishadi and Farajian, 2014) and leukemia ((Amitay & Boker, 2015).

In India, breastfeeding is a common and well accepted practice during lactation but its adoption varies significantly as per regions and communities. However, the practice of only breastfeeding from zero to six months of age is still very low. The National Family Health Survey (NFHS, 2015) data also reveals that only 42% of children born were breastfed within one hour of birth and 55% of infants aged less than six months were exclusively breastfed. Contrary to the recommendation that children under age six months be exclusively breastfed, many children in that age group consume other liquids, such as plain water (18%), other milk (11%), or complementary foods (10%) in addition to breast milk. Thus there is a clear indication that there is a gap between knowledge and adoption of IYCF practices. India is still lacking behind the WHO aim (2014) to increase global exclusive breastfeeding rates to at least 50% by the year 2025.

The identified factors responsible for the low adoption of IYCF practices in India were; lack on antenatal counseling (Vinay *et al*, 2016), unawareness of benefits of breast milk (Mital *et al* 2014), inadequate knowledge about the appropriate way of breastfeeding (Chaudhary *et al* 2011) illiteracy and low socioeconomic status (Joseph *et al* 2013). Thus a lot of studies clearly depicts that there is a large gap existing between knowledge and followed practices of lactating mothers for breastfeeding due to various reasons. The reason for low adoption of IYCF practices in Indian communities may be attributed to inadequate knowledge of IYCF guidelines. Therefore there is a strong need to study the knowledge of mothers which affect the universal adoption of early initiation and continuation of exclusive breastfeeding for six months prescribed by IYCF guidelines. Keeping this view, the study was planned to assess following objectives:

1. To assess the knowledge of mothers for universal IYCF guidelines.
2. To assess the adopted breastfeeding practices of lactating mothers who have 6-8 month live infant.
3. To assess the gap between lactating mother's breastfeeding knowledge and adopted practices prescribes by IYCF guidelines.

Methodology

Subject Profile and Selection: Sixty subjects were selected by purposive sampling. Healthy lactating mothers were included who had successfully completed their initial six months of lactation and had live child aged between 6-8 months.

Study Design: Descriptive survey research design

Data Collection: A pre tested structured questionnaire was administered by direct interview to elicit information on general socio demographic variables, pregnancy and delivery profile, knowledge related to breastfeeding and adopted practices according to prescribed IYCF

guidelines and attitude towards breastfeeding. The questionnaire was developed by using IYCF Guidelines (2011) and infant latching to breast tool (1994) for assessment of breastfeeding. The study was carried out at Urban Jaipur II, Rajasthan in reference year 2015-16. Informed written *consent* was taken from all the subjects for the participation in the study.

Statistical Analysis: Percentage and difference assessment

Results:

1. Socio demographic variables:

Data from the Table no.1 revealed that all subjects were Hindu and a maximum proportion of women i.e. 86.66% was belonging to highly fertile age group (18-30 years). The majority of subjects i.e. 65% were from upper socio economic status and remaining from lower socio economic status. More than 50% of mothers were found to have college education. It was found that 80% of women were housewives.

2. Pregnancy and Delivery Profile of Selected Mothers

Data from Table no. 2 depicts that a large proportion of women i.e. 61.66% were primi, had only one child, while 31.66% were found to have two children. All deliveries were institutional and in which 71.67% of deliveries were normal and rest were cesarean. All the subjects were gone for antenatal checkups in which 86.66% of women had gone for the recommended three antenatal checkups. While during postnatal period, only 40% women had gone for one postnatal checkup. All subjects (n=60) received counseling for exclusive breastfeeding and child nutrition by doctors (n=34), nurses (n=15) and anganwadi workers (n=11).

3. Knowledge Assessment of Mothers related to IYCF practices:

Data from Table no.3 clearly revealed the level of knowledge of mothers for IYCF practices.

3.1 Initiation of breastfeeding within one hour of delivery:

The findings of the present study revealed that 60% of the mothers were aware about the initiation of breastfeeding within one hour of delivery in which 26.66% perceived 1-4 hour as the correct time for initiation of breastfeeding and only 8.33% of mothers still believes in initiation of breastfeeding on aunt's visit. All the mothers had the correct knowledge that Colostrum should be given to the newborn and 96.66% believed it must be the first feed of baby. In which 95% of mothers had knowledge about the importance of Colostrum that it promotes the growth and provide protection to the newborn.

3.2 Exclusive breastfeeding for six months of age:

Most of the mothers i.e. 98.33% women were aware of the meaning of exclusive breastfeeding or only mother milk for zero to six months of age of infant. Regarding additional feed with breast milk, 88.33% mothers were aware that nothing should be given while 10% mothers were in favor of giving substitute milk and only one of them (1.66%) reported that water should be given during 0-6 month of age of infant. It was revealed that 78.33% of mothers knew that they should continue breastfeeding with complementary feeding for at least two years of age while the rest believed they should continue only till the infant turns one year of age.

3.3 Complementary Feeding:

Most of the mothers (93.33%) were aware about the fact that the infant age of six months is appropriate age of initiation of complementary feeding. The knowledge of mothers regarding the importance of complementary feeding was not adequate as 76.66% reported that complementary feeding is important because the child remains hungry while merely 38.33% women had correct knowledge that it is necessary for the growth of the infant after six months of age. In concern with the consistency of complementary feeding most of the mothers (75%) had correct knowledge that complementary feed should be soft and thin.

3.4 Feeding of breast milk:

All the mothers were aware that a child should be breastfed at night also, when asked about the position while breastfeeding, only 13.33% had correct knowledge that the can be fed sitting or laying either way. Maximum mothers i.e. 78.33% knew that a child should be fed during the illness of mother. The study also revealed that 83.33% mothers knew that the infant should not be bottle fed while 16.66% of mothers said that bottle feeding is good for infant health.

4. Adopted breastfeeding practices of mothers:

The data presented in Table no.4 reveals that actually adopted breastfeeding practices of mothers during 0-6 months of age.

4.1 Initiation of breastfeeding:

Colostrum as first feed to newborn was given by only 41.66% of mothers in which recommended early initiation of breastfeeding in 0-1 hour was reported by only 31.66% of mothers. The findings of present study also revealed that colostrum feeding within 1-5 hour was reported by 41.66% of subjects. Approximately 20% of subjects reported that the initiation of feeding was done by traditional way after their at aunt's visit. The reported reasons by mothers behind the late initiation of breastfeeding were medical problem (20%), customs/traditions (41.66%) and lack of knowledge about the correct time of initiation of breastfeeding (3.33%). The practice of giving prelacteal feeds such as *ghutti*, honey and others as first feed was found to be widely prevalent (58.33%) and this may be also a reason for the late initiation of breastfeeding.

4.2 Exclusive Breastfeeding:

Exclusive breastfeeding for 0-6 months of infants were reported by 76.66% of mothers. Among these mothers, many of them also accepted that they are giving additional feed such as top milk (86.66%) and water (6.66%) along with breastfeeding till zero to six months of age. Thus the data clearly indicates that actual adoption of exclusive breastfeeding i.e. only breast milk till six months of age is only 6.66%.

4.3 Initiation of complementary feeding:

Approximately all the subjects i.e. 98.33% of women had initiated the complementary feeding at the time of interview while only 73.33% had initiated at the right age of six months. Initiation of complementary feeding at the age four months and 7-8 months were also reported by 15 and 10% of subjects respectively.

4.4 Continuation of breastfeeding along with complementary feeding:

Majority of the mothers i.e. 96.66% reported that they are still continuing breastfeeding along with complementary feeding. A large variation was seen in the frequency of breastfeeding along with complementary feeding as 36.66% of mothers were feeding 4-6 times in a day and a similar proportion of women i.e. 21.66% were feeding 2-4 and 3-4 times in a day respectively. However it was seen that 16.66% of mothers were feeding 6-8 time in a day along with complementary feeding. It was also observed that 80% women were feeding bottle to their children.

5. Difference between knowledge and adopted breastfeeding practices of lactating mothers (6-8 months) for IYCF recommendations:

The data from Table no. 5 and Graph No. 1 clearly depicts that there is a clear difference between knowledge and adopted breastfeeding practices of lactating mothers (6-8 months).

5.1 Initiation of breastfeeding

About 60% of mothers had the knowledge that initiation of breastfeeding must be done within 0-1 hour but only 31.66% of mothers was able to initiate breastfeeding in this prescribed time. It was found that mothers had the adequate knowledge that prelacteal foods such as honey, *ghutti* etc. should not be given to the infants as first feed after birth but this knowledge was not assimilated in the actual practice. Thus the practice of giving prelacteal foods and traditional customs hinders the early initiation of breastfeeding in general practice.

5.2 Exclusive Breastfeeding:

Regarding the exclusive breastfeeding for initial 0-6 months, it was revealed by the study that 98.33% of mothers had correct knowledge about it while only 6.66% of mothers had actually practiced it. Thus it's clear that the concept of exclusive breastfeeding is well known but not practiced in reality because the mothers feel that their baby is not fed satisfactorily from breast milk and requires top milk or water to satisfy hunger or thrust.

5.3 Frequency of breastfeeding:

A positive finding was revealed where 96.66% of women were aware of demand feeding and 98.33% were practicing it and were feeding their babies on demand. The awareness among mothers regarding breastfeeding at night was very good and all the mothers had knowledge about it and also all of them were feeding their children in night.

5.4 Position while breastfeeding:

In the present study it was revealed that most of women (83.33%) reported sitting as correct position for feeding the baby and only 13.33% were aware of that both sitting and laying are comfortable position for breastfeeding. Despite the lack of awareness, the practice for feeding baby in comfortable position was high i.e. 53.33% of women were practicing either sitting or lying position while feeding the infant.

5.5 Technique of breastfeeding:

Regarding the feeding techniques, 81.66% of women were aware that they should feed their baby firstly from one breast and then from another but only 68.33% were actually using this technique while feeding their babies. It was observed in the study that 16.66% of women

supported that bottle feeding is not right technique for feeding but on contrary, a large proportion of women (80%) was practicing bottle feeding.

5.6 Initiation of complementary feeding:

The knowledge regarding the initiation of complementary feeding was very good as 93.33% of women were aware of the correct age of initiation of complementary feeding while 73.33% of women had started the complementary feeding at the age of 6 months.

6 Attitude of mother towards breastfeeding:

Data from Table no 6 depicts the attitude of mothers for breastfeeding for their initial 6 months of lactation. A high level of motivation and positive attitude was observed in the lactating mothers. All the mothers improved their dietary pattern during pregnancy and after delivery. A very good proportion of women i.e. 86.66% included both galactogogues and milk based food items in their diet. Breastfeeding as a feeling of being proud or gift of motherhood was reported by 93.33% of mothers whereas 6.64% of mothers believed it was only a moral responsibility. Almost half of the mothers (48.33%) state that because of breastfeeding the child is only the mother's responsibility. Need of family support for continuation of breastfeeding was reported by 88.33% of mothers. Regarding breastfeeding at a public place, 85% of mothers find it problematic to feed in public and the reasons of problem were shyness (43.33%), not finding adequate place (36.66%) and negative public view (5%).

Conclusion: The findings of present study revealed that the knowledge for key IYCF guidelines among mothers was high. However a huge difference was observed for the response of correct knowledge and assimilation of the same in practice for breastfeeding. The observed reasons, responsible for this difference are listed as:

Late initiation of breastfeeding: It was found that pain during delivery (3.66%), shifting of baby to nursery for observation (1.66%) and cesarean delivery (27.33%) were main reasons for late initiation of breastfeeding followed by local customs, lack of knowledge and inadequate lactation.

Colostrum not as first feed: The traditional practice of giving prelacteal feeds is still prevalent (48.33%).

Inclusive breastfeeding for 0-6 months: Inclusion of top milk (86.66%) and water (16.66%) to the initial 6 months of lactation limited the actual adoption of exclusive breastfeeding to only 6.66%. Despite knowing the fact that bottle feeding is not good for infant health, it is still widely practiced (80%). The data from table No. 6 depicts that family support and positive social perception for breastfeeding were emerged as the need based area to be concerned for promotion of exclusive breastfeeding.

Thus there is a not only a strong need to create enough breastfeeding awareness initiatives at governmental and society level but also provide motivation, correct training and support to lactating mothers for better adoption of IYCF practices in reality.

Table No. 1: Socio Demographic Profile of Selected Mothers (n=60)

S. No.	Socio Demographic Variables	Percentage (Number)
1.	Age	
	18-25	41.66(25)
	25-30	45(27)
	30-35	13.33(8)
	35-40	1.66(1)
2.	Religion	
	Hindu	100(60)
3.	Education	
	Illiterate	5(3)
	Primary school	13.33(8)
	Middle School	10(6)
	High School	1.66(1)
	Intermediate or post high school	10(6)
	Graduate or Postgraduate	51.66(31)
	Profession or Honors	6.66(4)
4.	Occupation	
	Profession	6.66(4)
	Semi-profession	11.66 (7)
	Skilled worker	1.66(1)
	Unemployed	80(48)
5.	Income Group	
	≥32050	31.66(19)
	16020-32049	5(3)
	12020-16019	30(18)
	8010-12019	15(9)
	4810-8009	18.33(11)
6.	Socio Economic Status	
	24-29	33.33(20)
	15-24	31.66(19)
	11-15	1.66(1)
	6-10	33.33(20)
7.	Category	
	General	60(36)
	OBC	8.33(5)
	SC	30(18)
	ST	1.66(1)
8.	Type Of Family	
	Nuclear	73.33(44)
	Joint	26.66(16)
9.	Size of Family	
	0-4	65(39)
	8-12	5(3)
	4-8	25(15)
	>12	5(3)

Figures in parenthesis are Number of sample/sample size

Table 2: Pregnancy and Delivery Profile of Selected Mothers (n=60)

S. No.	Pregnancy Profile	Percentage (Numbers)
1	No Of Children In Family	
	1	61.66(37)
	2	31.66(19)
	3	1.66(1)
	>3	5(3)
2	Place Of Delivery	
	Hospital	100 (60)
3	Type Of Delivery	
	Normal	71.67(43)
	Cesarean	28.33(17)
4	Antenatal Checkups	
	1	1.66(1)
	2	11.66(7)
	3	86.66(52)
5	Postnatal Checkups	
	0	60(36)
	1	40(24)
6.	Counseling	
	Yes	100 (60)
7.	Resource Person For Counseling	
	Doctor	56.66(34)
	Nurse	25(15)
	Anganwadi Worker	18.33(11)

Figures in parenthesis are Number of sample/sample size

Table 3: Knowledge of Mothers related to breastfeeding

S. No	Particulars	Percentage (Number)
1.	Initiation of breast feeding	
	0-1 hour	60(36)
	1-4 hour	26.66 (16)
	4-8 hour	5(3)
	On aunt's visit	8.33 (5)
2.	Colostrum	
	Given to infant	100 (60)
	Discard	0 (0)
3.	Impact of Colostrum feeding on newborn	
	Promote growth	95 (57)
	Stops growth	1.66(1)
	Doesn't effect	3.33(2)
4	Additional feed with breast milk for initial 6 months	
	Water	1.66(1)
	Substitute milk	10 (6)
	Nothing	88.33 (53)
5	Exclusive breastfeeding (only mother's milk)	
	for initial 6 months of lactation	98.33 (59)
	for 3-4 months of lactation	1.66(1)
6	Continuation of breastfeeding	
	At least 2 years	78.33(47)
	Till 1 year	21.66(13)
	Complementary Feeding	
7	Complementary feeding should be done	
	For more growth of child	38.33(23)
	Because the child remains hungry	76.66(46)
	For mother's ease to leave breastfeeding	1.66(1)
8	What is the right age for complementary feeding?	
	6 months	93.33(56)
	1 year	6.66(4)
9	Complementary feed should be	
	Thin	13.33(8)
	Soft	15(9)
	Soft and thin	75(45)
10	Right Position of mother while feeding in night	
	Sitting	83.33(50)
	Laying	3.33(2)
	Sitting/laying anyway	13.33(8)
11	Bottle-feeding	
	Yes	16.66(10)
	No	83.33(50)

Figures in parenthesis are Number of sample/sample size

Table 4: Practices of Mothers related to breastfeeding

S. No	Particulars	Percentage (Number)
1.	Initiation of breast feeding	
	0-1 hour	31.66(19)
	1-5 hour	41.66 (25)
	>1 day	6.66 (4)
	On Aunt's visit	20 (12)
2.	Colostrum	
	Given to infant	100 (60)
	Discarded	0
3.	Exclusive breastfeeding	
	For 0-6 months	76.66 (46)
	For 0-4 months	15 (9)
	For 0-1 month	3.33(2)
	For >6 months	5 (3)
4.	Other feed along with breastfeeding	
	Water	6.66 (4)
	top milk	86.66 (52)
5.	Initiation of complementary feeding	
	Yes	98.33 (59)
	No	1.66(1)
6.	Age of initiation of complementary feeding	
	After 6 months	73.33 (44)
	After 4 months	15 (9)
	After 7-8 months	10 (6)
7.	Continuation of Breastfeeding along with complementary feeding	
	Yes	96.66 (58)
	No	1.66(1)
8.	Position while breastfeeding	
	Sitting	25 (15)
	Laying	21.66 (13)
	Sitting/ laying	53.33 (32)
9.	Wrong practices	
	Bottle	80 (48)
	Pacifier	33.33(20)

Figures in parenthesis are Number of sample/sample size

Table 5: Difference between reported knowledge and adopted practices of breastfeeding by mothers

S. No.	Particulars	Knowledge	Practice	Difference (Practice-knowledge)
1.	First feed after birth			
	Honey	1.66 (1)	6.66 (4)	+3
	Ghutti	1.66 (1)	41.66 (25)	+24
	Mother's milk	96.66 (58)	41.66 (25)	-23
	Other	0 (0)	10 (6)	+6
2.	Initiation of breastfeeding			
	0-1 hour	60 (36)	31.66 (19)	-17
	1-5 hour	26.66 (16)	41.66 (25)	+9
	>1 day	5(3)	6.66 (4)	-1
	On Aunt's visit	8.33 (5)	20 (12)	+7
3.	Colostrum feeding			
	Yes	100 (60)	100 (60)	0
4.	Exclusive breastfeeding			
	0-6 months	98.33 (59)	6.66 (1)	-58
	0-4 months	1.66(1)	15 (9)	8
	0-1 month	-	3.33(2)	2
	>6 months	-	5(3)	3
5.	Frequency of breastfeeding			
	2 times	1.66(1)	-	-1
	8-10 times	1.66(1)	1.66(1)	0
	On demand	96.66 (58)	98.33 (59)	+1
6.	Breastfeeding at night			
	Yes	100 (60)	100 (60)	0
7.	Position while breastfeeding			
	Sitting	83.33 (50)	25 (15)	-35
	Laying	3.33(2)	21.66 (13)	+11
	Sitting/ laying	13.33 (8)	53.33 (32)	+24
8.	Do you use bottle feeding?			
	Yes	16.66 (10)	80 (48)	+38
	No	83.33 (50)	20 (12)	-38
9.	Age for initiation of complementary feeding			
	After 6 months	93.33 (56)	73.33 (44)	12
	After 4 months	-	15 (9)	-9
	After 7-8 months	6.66(4)	10 (6)	-2

Figures in parenthesis are Number of sample/sample size

(Note: '+' shows that practice is more than the knowledge and '-' shows that practice is not as good as the knowledge.)

Figure 1: Difference between reported knowledge and adopted practices of breastfeeding by mothers.

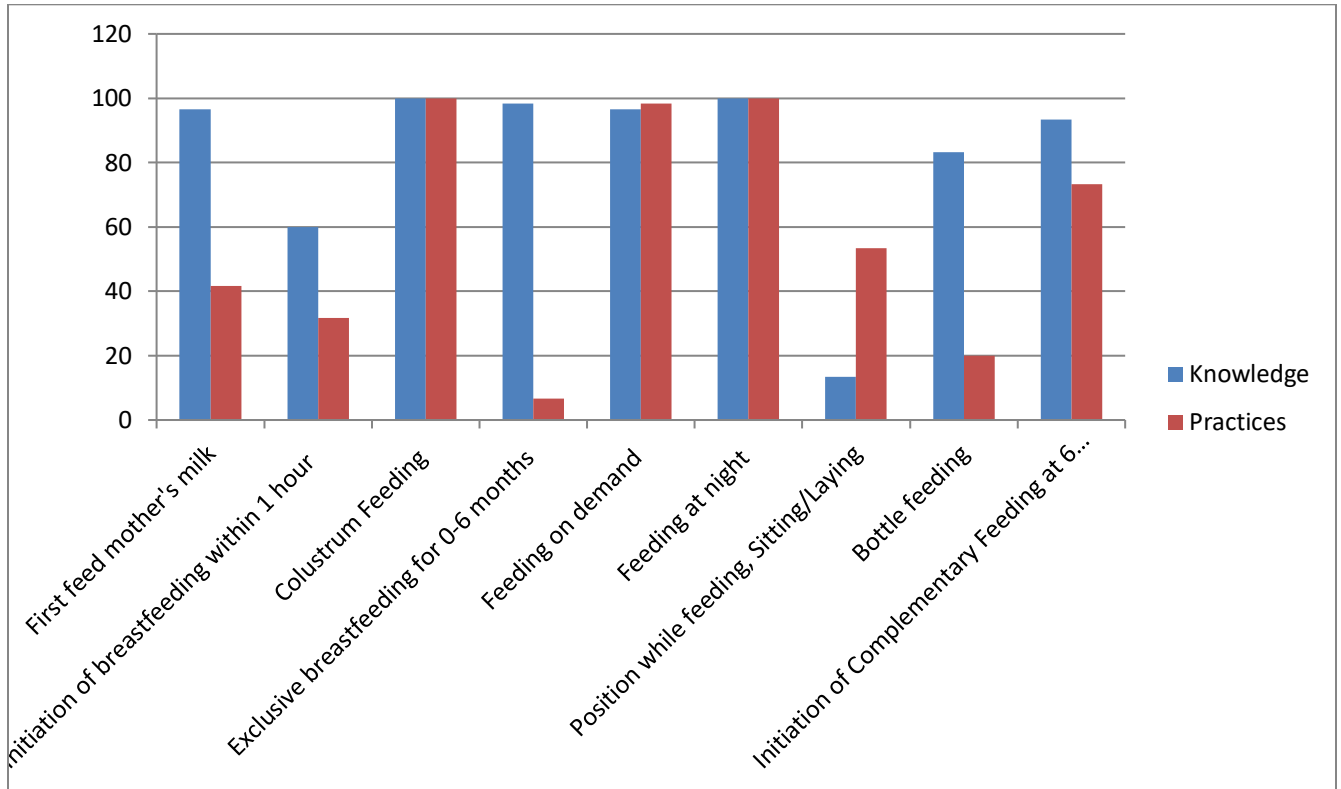


Table .6: Attitude assessment of mothers towards breastfeeding for their initial 6 months of lactation

S. No.	Particulars	Percentage (number)
Modification in diet during pregnancy and lactation		
1.	Change in food habits during pregnancy or after delivery	
	Yes	100(60)
2.	Performed changes	
	Less spicy food	21.66 (13)
	Balanced diet	23.33 (14)
	Tasty food	6.66 (4)
	All of the above	48.33 (29)
3.	Inclusion of specific foods in diet	
	Galactogogues	8.33 (5)
	Milk based food	5 (3)
	All of the above	86.66 (52)
Personal views of mother towards breastfeeding		
4.	For self: Breastfeeding	
	Possible for 6 months (exclusive breastfeeding)	88.33 (53)
	Mother's pride	93.33 (56)
	Moral responsibility	6.66 (4)
	Only mother responsibility	48.33 (29)
	Delays in household chores	18.33 (11)
	Remains priority	68.33 (41)
	Can't attend friends/family	5 (3)
	Problem during feeding?	
	Yes	3.33(2)
	No	96.66 (58)
	Affects daily schedule	8.33 (5)
	Troublesome in night	0(0)
	Require family support	88.33 (53)
	Problematic at public place	85 (51)
	Reasons of problem	
	Feel shy	43.33 (26)
	Not finding adequate place	36.66(22)
	Public view	5 (3)
	5	Physical appearance of mother due to breastfeeding
Remains good		21.66 (13)
Vanishes		20 (12)
Doesn't effect		58.33 (35)

Figures in parenthesis are Number of sample/sample size

Table 7: Adoption of breastfeeding practices according to IYCN recommendations (2011)

S. No.	Practices according to IYCN guidelines	Percentage (Number)
1.	Initiation of breastfeeding within one hour of birth	31.66 (19)
2.	Exclusive breastfeeding for 6 months	6.66(4)
3.	Initiation of complementary feeding at 6 months	73.33 (44)

Figures in parenthesis are Number of sample/sample size

References

1. WHO. Global Strategy on Infant and Young Child Feeding, World Health Organization, Geneva, Switzerland, 2003, 5-6.
2. Tohi, W. (2012). "Health benefits of breastfeeding are real - Here's the scientific proof" Natural News, May 2012. URL: http://www.naturalnews.com/036013_breastfeeding_scientific_evidence.html#ixzz4C659Lccg
3. Kramer M. Promotion of Breastfeeding Intervention Trial (PROBIT): A randomized trial in the Republic of Belarus. Journal of the American Medical Association, 2001; 285(4), 413-420.
4. Kelishadi R and Farajian S. The Protective effects of Breastfeeding on Chronic Non-communicable diseases in adulthood: A review of evidence. Adv Biomed Res, 2014; 3:3.
5. Amitay E L, Keinan Boker L. Breastfeeding and Childhood Leukemia Incidence: A Meta-analysis and Systematic Review. JAMA pediatrics, 2015; 169 (6): e151025.
6. NFHS. National Family Health Survey-4. 2015–16. Available from: <http://www.nfhsindia.org>. Accessed on 29th November 2019.
7. WHO/UNICEF. Global nutrition targets 2025: breastfeeding policy brief (WHO/NMH/NHD/14.7). Geneva: World Health Organization; 2014. Accessed on 29th November 2019.
8. Vinay B S, Sandeep M, Sridhar P V. Assessment of knowledge, attitude and practice of breast feeding among postnatal mothers at Mandya Institute of Medical Sciences, Mandya, India, International Journal of Contemporary Pediatrics, 2016; May;3(2):504-508 .

9. Premlata M, Hooja N, Bansal A, Salvi A, Fatima A, Makkar. Knowledge, attitude and practice of breastfeeding at a tertiary care center in Rajasthan, *Scholars Acad J Biosci*, 2014; 2(10), 714-718.
 10. Chaudhary R N, Shah T, Raja S. Knowledge and practice of mothers regarding breast feeding: a hospital based study. *Health Renaissance*, 2011; 9, 194–200.
 11. Joseph N, Unnikrishnan B, Naik V A, Mahantshetti N S, Mallapur M D, Kotian S M, Nelliyan M. Infant rearing practices in south India: A longitudinal study. *J Family Med Prim Care*, 2013; 2, 37-43.
 12. Infant and Young Child Feeding (IYCF) programming guide, Nutrition Section, Programmes, UNICEF, New York, May 2011, 27-29.
-
13. Jenson D, Wallace S, Kelsay P. LATCH: A breastfeeding charting system and documentation tool. *JOGNN*, 1994, 23(1), 29-30.
 14. Kuppuswamy B. Kuppuswamy socioeconomic status scale- A revision of economic parameters for 2012. *International Journal of Research & development of Health*, 2012; 1(1), 2-4.
-